CMD 25-H12.1-Ref10

Date: 2026-01-12

Reference from
NexGen Energy Ltd.

In the matter of

NexGen Energy Ltd.

Licence application to prepare a site for and construct its Rook 1 uranium mine and mill project

Commission Public Hearing
Part 2

February 9-12, 2026

Référence de
NexGen Energy Ltd

À l'égard de

NexGen Energy Ltd.

Demande de permis concernant la préparation de l'emplacement et la construction de son projet de mine et d'usine de concentration d'uranium Rook I

Audience publique de la Commission
Partie 2

Les 9 - 12 février 2026

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Canada

Volume 1: Rook I Project Environmental Impact Statement Technical Support Documents (TSDs)

Part 1

- TSD VII, Mine Waste Alternatives Assessment Report
- TSD VIII, Accidents and Malfunctions Report
- TSD IX, Transportation Risk Assessment Report
- TSD X, Vibration Effects Analysis Report
- TSD XI, Light Effects Analysis Report
- TSD XII, Net-Zero Framework
- TSD XIII, Upstream Greenhouse Gas Emissions and Carbon Intensity Discussion
- TSD XIV, Groundwater Flow and Solute Transport Modelling Report

Part 2

- **TSD XV, Tailings Source Term Derivation Report**
- **TSD XVI, Tailings Geochemical Characterization Report**
- **TSD XVII, Waste Rock and Underground Wall Rock Source Term Predictions Report**
- **TSD XVIII, Site-Wide Water Balance and Water Quality Modelling Report**
- **TSD XIX, Conceptual Diffuser Design Report**
- **TSD XX, Downstream Use and Impact Study for Proposed Treated Sewage Discharge Report**
- **TSD XXII, Climate Adaptation Framework**

Rook I Project

Environmental Impact Statement

TSD XV: Tailings Source Term Derivation Report

GOLDER
MEMBER OF WSP

TAILINGS SOURCE TERM DERIVATION TECHNICAL SUPPORT DOCUMENT FOR THE ROOK I PROJECT

Prepared for:

NexGen Energy Ltd.

Prepared by:

Golder Associates Ltd.

March 2022

Executive Summary

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would include an underground mine and surface facilities to support the extraction and processing of uranium ore from the Arrow deposit. This technical support document to the Environmental Impact Statement (EIS) details the methods and assumptions used to generate source term predictions for backfilled composite tailings and/or process wastes that will be disposed in the underground workings.

The source term derivation process included the development of conceptual models that represent the anticipated hydrological, geochemical, and radiological processes that will influence mass loading rates from tailings and process wastes disposed in the mine stopes and underground tailings management facility (UGTMF). Two solute mass transfer mechanisms are anticipated to occur post-closure when the workings are backfilled and the mine is flooded: advective mass transfer and diffusive mass transfer.

Source term models were developed for the primary stopes, secondary stopes, and UGTMF. The individual source terms consist of both advective and diffusive mass transfer components that are simulated using an engineering modelling approach. This approach is supported by a purposely designed characterization program with empirical laboratory measurements of key mass transfer processes.

Given the complexity of the physical and chemical processes that determine the magnitude and rate of advective and diffusive mass transfer from the underground mine stopes and UGTMF, simplifying assumptions were used in the source term models to reduce the necessary parameters and/or variables to those that can be measured using applicable laboratory tests. Additional bounding arguments were made to establish a conservative case for the mine stopes and UGTMF source terms that intentionally overestimate the mass loading from these disposal areas. Specifically, source terms were developed assuming that mass transfer rates of constituents from the tailings and process wastes are constant over time, and leaching rates and leachate qualities are equivalent to peak values measured during the laboratory measurements.

Key findings from the source term predictions for underground disposal of tailings and process wastes are:

- All tailings and process wastes produced from the Project will be mixed in various ratios on the surface to produce two types of composite materials: cemented paste backfill (CPB) and cemented paste tailings (CPT). These composite wastes consist of a combination of neutralized leached residue, process wastes, and cement binder. The CPB and CPT materials are characterized by a low hydraulic conductivity and primarily consist of acid-leach resistant minerals from the ore and gypsum. The materials are classified as non-potentially acid generating and have alkaline leachable fractions of solutes and radionuclides. The CPB will be disposed in the primary and secondary mine stopes and used for plugging and capping of the disposal chambers of the UGTMF. The CPT will be disposed in the UGTMF.
- Estimated porewater chemistries for the primary and secondary stopes are very similar, since CPB forms the dominant material type that will be disposed in these workings. Drainage chemistries for the UGTMF are different due to the inclusion of the process wastes and lower binder contents.
- Estimated porewater chemistries for the underground mine stopes and UGTMF are generally characterized by highly alkaline drainage (i.e., pH greater than 10), sulphate-calcium-sodium dominated ion composition, and elevated metals and radionuclides.

- Alkalinity and pH are predicted to be higher for the underground mine stopes compared to the UGTMF. This relationship is due to the higher binder content needed for the high-strength CPB in the stopes, compared to the lower strength CPT that will be used to backfill the UGTMF.
- Elevated metal concentrations for the underground mine stopes and UGTMF are noted for aluminum, arsenic, cadmium, chromium, copper, iron, lead, molybdenum, selenium, silver, uranium, and zinc. These metals are elevated due to their presence in the neutralized leached residue and process wastes, as well as their solubility under alkaline drainage conditions. The estimated concentrations are higher in the UGTMF compared to the primary and secondary stopes, except for aluminum, molybdenum, and selenium. The highest concentrations for aluminum, molybdenum, and selenium are estimated for the upper cases of the primary and secondary stopes, which are characterized by the highest alkalinity and pH values.
- Elevated concentrations of radium-226 are predicted in the estimated drainage chemistry for the backfilled stopes and UGTMF. Estimated concentrations for lead-210, polonium-210, radium-226, and radium-228 are slightly higher in the primary and secondary stope source terms compared to the UGTMF source terms.
- Estimated diffusivity values are similar for primary and secondary stopes since CPB forms the dominant material type that will be disposed in these mine workings. Observed diffusivity values for the UGTMF are generally much higher due to the inclusion of the process wastes and lower binder contents. One exception to this observation is uranium, which has a higher observed diffusivity for the primary and secondary stopes
- The highest observed diffusivity values are estimated for aluminum, antimony, barium, beryllium, iron, lead, magnesium, manganese, mercury, nitrate, nitrite, phosphate, polonium-210, radium-226, tin, uranium, vanadium, and zinc. In the case of aluminum, antimony, beryllium, cadmium, copper, iron, manganese, radium-226, tin, and zinc, the observed diffusivity values are more than two orders of magnitude higher in the UGTMF compared to those of the primary and secondary stopes.
- Validation of the source term predictions is not possible due to a lack of suitable analogue sites or publicly available analogue data. As a result, the source terms were developed to be conservative to account for input uncertainties. It is expected that the source terms will be further refined and modified as additional characterization, testing, and monitoring data become available.

The underground mine stopes and UGTMF source terms were incorporated in the groundwater solute transport model for the Project. The groundwater solute model simulates the flow of groundwater around and through the mine stopes and UGTMF and, combined with the source terms, calculates the mass loading from the tailings materials to the groundwater system to support the effects assessment for hydrogeology (EIS Section 8, Hydrogeology).

Abbreviations and Units of Measure

Abbreviation	Definition
CPB	cemented paste backfill
CPT	cemented paste tailings
EIS	Environmental Impact Statement
Golder	Golder Associates Ltd.
LEAF	Leaching Environmental Assessment Framework
MTP	modified triaxial permeability
NexGen	NexGen Energy Ltd.
OPC	ordinary Portland cement
Project	Rook I Project
SFE	shake flask extraction
U_3O_8	triuranium octoxide
UGTMF	underground tailings management facility

Unit	Definition
%	percent
°C	degrees Celsius
Bq/g	becquerels per gram
Bq/L	becquerels per litre
d	day
kg/m^3 dw	kilograms per cubic metre dry weight
km	kilometre
L	litre
m	metre
m^2	square metre
m/s	metres per second
m^2/s	square metres per second
m^3	cubic metre
mg/kg	milligrams per kilogram
mg/L	milligrams per litre
mg/m^2/s	milligrams per square metre per second
MPa	megapascal
pH	potential of hydrogen; measure of the acidity or alkalinity of a solution on a scale of 0 to 14
s	second
wt.%	weight percent

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1 INTRODUCTION

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would be located approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon (Figure 1-1). The Project would reside within Treaty 8 territory and the Métis Homeland. At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, along the upper Clearwater River system. Patterson Lake is at the interface of the Boreal Shield and Boreal Plain ecozones. Access to the Project would be from an existing road off Highway 955 (Figure 1-2), with on-site worker accommodation serviced by fly-in/fly-out access.

The Project would include the following key facilities to support the extraction and processing of uranium from the Arrow deposit for transportation off site (Figure 1-3):

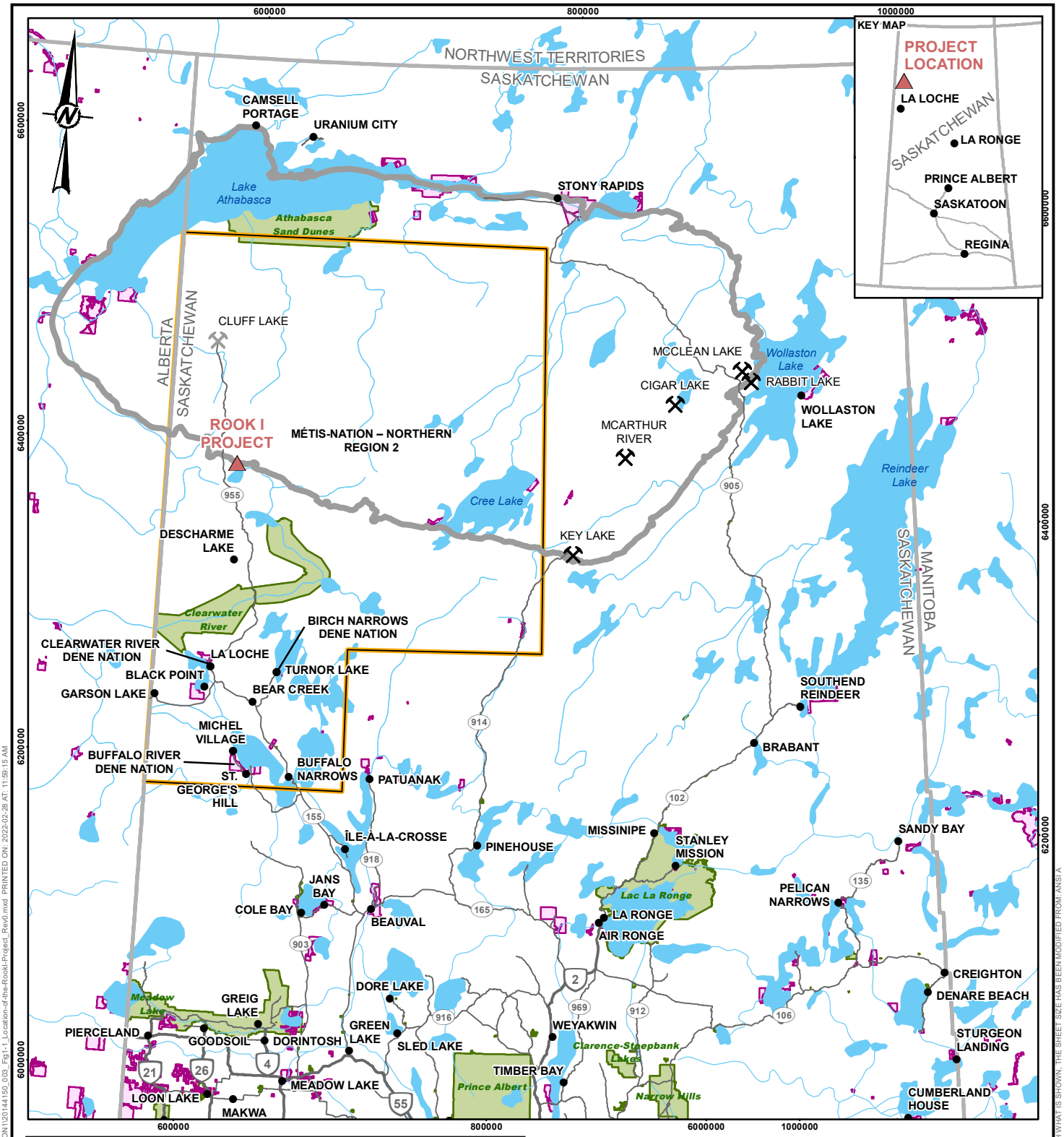
- underground mine development;
- process plant buildings, including uranium concentrate packaging facilities;
- paste tailings distribution system;
- underground tailings management facility (UGTMF);
- potentially acid generating waste rock storage area;
- non-potentially acid generating waste rock storage area;
- special waste rock[1] and ore storage stockpiles;
- surface and underground water management infrastructure, including water management ponds, effluent treatment plant, and sewage treatment plant;
- conventional waste management facilities and fuel storage facilities;
- ancillary infrastructure, including maintenance shop, warehouse, administration building, and camp;
- airstrip and associated infrastructure; and
- access road to Project and site roads.

Predicted water qualities or solute mass loadings, also referred to as source terms, were developed for the underground disposal of tailings (neutralized leach residue) and process wastes (gypsum precipitates and effluent precipitates) at the Project site. This technical support document to the Environmental Impact Statement (EIS) details the source term development for the underground mine workings, which include the mine stopes (primary and secondary stopes) and UGTMF. This document includes a description of the backfilled composite tailings and/or process wastes that will be disposed underground, the source term development framework (i.e., the approach, inputs, assumptions, and methods), and results. The geotechnical, geochemical, and radiological properties of the tailings, process waste, binder, and composite materials that form the basis of the

[1] Special waste rock is mine rock that is mineralized with insufficient grade to be considered ore (i.e., greater than 0.03% of triuranium octoxide [U_3O_8] and less than 0.26% U_3O_8). All special waste would be temporarily stored in the special waste rock stockpile.

source term calculations, are reported in a Technical Support Document (TSD) XVI Tailings Geochemical Characterization Report and should be read in conjunction with this report.

The underground mine stopes and UGTMF source terms were incorporated in the groundwater solute transport model for the Project and support the effects assessment for hydrogeology (EIS Section 8, Hydrogeology).



LEGEND

- POPULATED PLACE
- URANIUM MINING FACILITY (ACTIVE)
- URANIUM MINING FACILITY (DECOMMISSIONED)
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN BOUNDARY
- INDIAN RESERVE
- PROVINCIAL PARKS
- WATERBODY
- PROJECT LOCATION
- MÉTIS NATION-SASKATCHEWAN NORTHERN REGION 2

0 100 200
1:3,500,000 KILOMETRES

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. PARKS OBTAINED FROM IHS MARKIT CANADA ULC.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT: NexGen Energy Ltd. — **ROOK I PROJECT**

TITLE: **LOCATION OF THE ROOK I PROJECT**

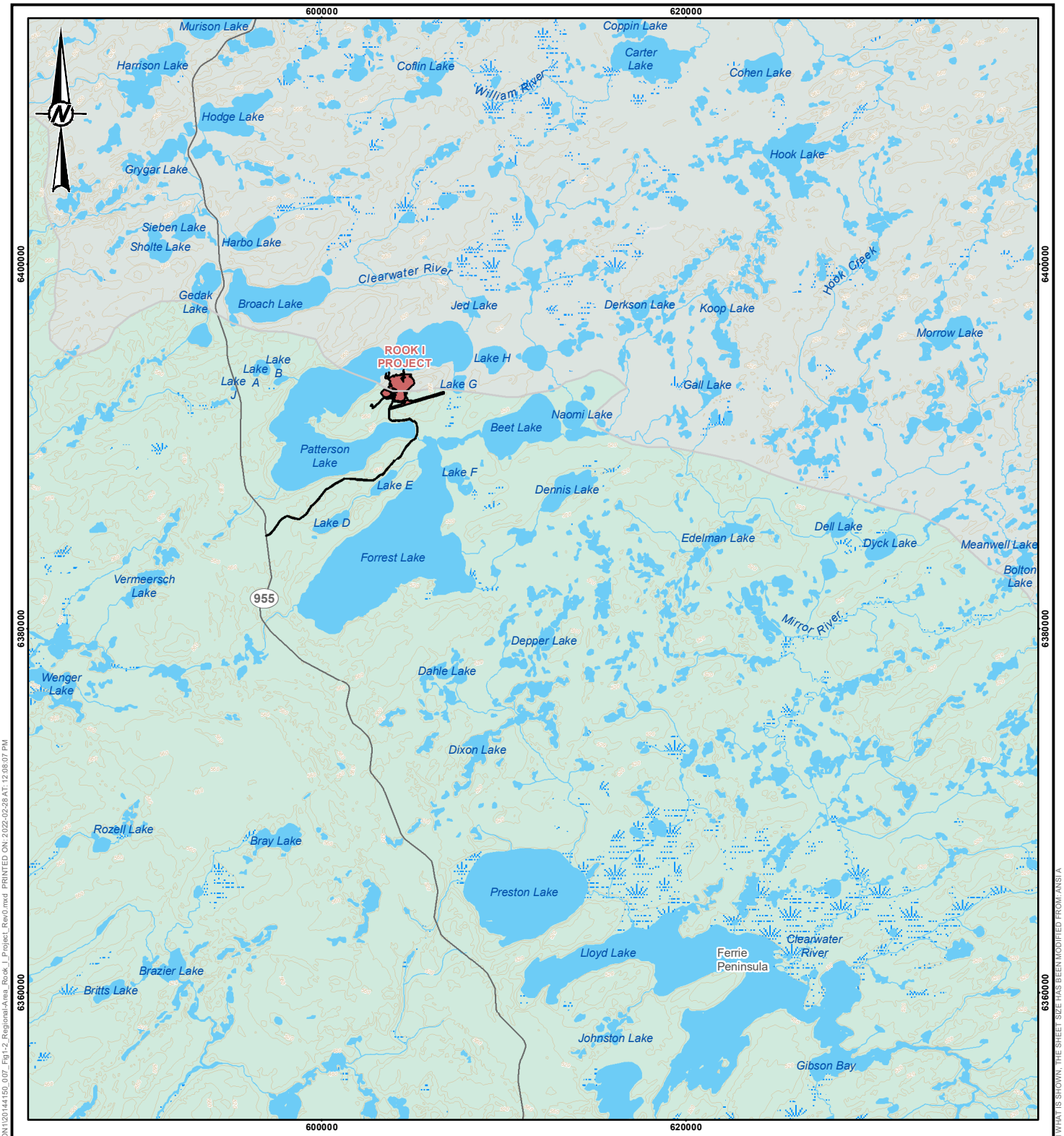
CONSULTANT: GOLDER, MEMBER OF WSP

PROJECT	20144150		PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

PATH: I:\CLIENTS\NexGen\20144150\Mapping\Products\General\EIS_FIGURES_SECTION1\20144150_003_Fig1-1_Location-of-the-Rook1-Project_Rev0.mxd PRINTED ON: 2022-02-28 AT: 11:59:15 AM



LEGEND

- ELEVATION CONTOUR (20 m INTERVAL)
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN
- WATERBODY
- WETLAND
- WOODED AREA
- PROPOSED PROJECT FOOTPRINT

0 5 10
1:300,000 KILOMETRES

REFERENCE(S)
1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021.
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT
NexGen Energy Ltd.

ROOK I PROJECT

TITLE

REGIONAL AREA OF THE ROOK I PROJECT

CONSULTANT
GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

25mm

0

PATH: I:\CLIENTS\NexGen\20144150\Mapping\Products\General\EIS_FIGURES_SECTION1\20144150_007_Fig1-2_RegionalArea_Rook_I_Project_Rev0.mxd PRINTED ON: 2022-02-28 AT 12:08:07 PM

603000 604000 605000 606000 607000

6394000 6393000 6392000 6391000

Patterson Lake

Treated Effluent Pipe and Diffuser

Fresh Water Intake Pipe and Pumphouse

Underground Mine Access

Contact Water Pond #1

Treated Sewage Pipe and Outfall

Sewage Treatment Plant (STP)

Mine Terrace

PAG Runoff Collection Area

Process Plant

Ore Storage Stockpile

Effluent Treatment Plant (ETP)

Monitoring Ponds

Potentially Acid Generating (PAG) Waste Rock Storage Area

Fuel Storage Area

Mill Terrace

Special Waste Rock Stockpile

Camp

Contact Water Pond #2

Non-Potentially Acid Generating (NPAG) Waste Rock Storage Area

Communication Tower

West Bermed Runoff Collection Area

Omni-Directional Approach Lighting (ODAL) Corridor

Airstrip

Domestic/Industrial Waste Management Area

Explosives Magazine Storage

Batch Plant Sand and Aggregate Storage Area

Omni-Directional Approach Lighting (ODAL) Corridor

Gatehouse

Patterson Lake

530 540 550 560 570 580 590

LEGEND

- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WETLAND
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND

0 0.5 1

1:15,500 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

LAYOUT OF INFRASTRUCTURE AND FACILITIES FOR THE ROOK I PROJECT

CONSULTANT

GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JV	2020-03-13	SCALE AS SHOWN	REV. 0
GIS	NO	2022-03-18		
CHECK	JMC	2022-03-18	**FIGURE 1-3**	
REVIEW	MM	2022-03-18		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

0 25mm

PATH: I:\CLIENTS\NexGen\20144150\Mapping\Products\General\EIS_FIGURES_SECTION1\20144150_011_Fig1-3_Layout-of-Infrastructure-and-Facilities_Rook_I_Project_Rev0.mxd PRINTED ON: 2022-03-19 AT: 10:46:38 AM

1.1 Study Objectives

The study objective was to develop source terms for the mine stopes and UGTMF that estimate short-term (i.e., Operations) and longer-term (i.e., post-closure) mass loadings and water qualities from the backfilled composite tailings and process wastes.

The estimated source terms are incorporated in the groundwater solute transport model (EIS Section 8) to evaluate the combined mass loading effects from waste products associated with the Project (i.e., tailings and waste rock) to downgradient surface water receptors (EIS Section 10, Surface Water Quality and Sediment Quality).

1.2 Scope of Work

Geochemical source terms were derived for three underground disposal areas that will host backfilled composite tailings and/or process wastes produced from the Project. These underground disposal areas include primary mine stopes, secondary mine stopes, and the proposed UGTMF. The following approach was followed in the development of the source terms:

1) Develop conceptual models for geochemical and radiological processes that will influence mass loading rates from backfilled composite tailings and/or process wastes in the mine stopes and UGTMF.

2) Develop source term models for the mine stopes and UGTMF using simplifying assumptions and bounding arguments.

3) Derive source term estimates for the mine stopes and UGTMF using geotechnical, geochemical, and radiological data from the tailings and process waste characterization program.

2 BACKGROUND INFORMATION

2.1 Tailings and Process Waste Disposal

All tailings and process wastes produced from the Project during Operations will be mixed in the paste plant in specified ratios and disposed in the underground workings (NexGen 2021a). Two types of composite materials will be generated from the paste plant: cemented paste backfill (CPB) and cemented paste tailings (CPT). The CPB will consist of neutralized leach residue, water, and binder that are mixed in various ratios to meet strength requirements for disposal in the primary and secondary mine stopes and UGTMF. The CPT will consist of a mixture of neutralized leach residue, gypsum precipitate, effluent precipitate, and binder for disposal in the UGTMF. The binder to create the CPB is planned to consist of a 1:1 ratio of ordinary Portland cement (OPC) and slag, whereas the binder to create the CPT is planned to consist entirely of OPC. The CPB and CPT will be pumped from the paste plant to the underground via boreholes drilled during the initial years of mine production. The CPB and CPT disposal locations and associated strength requirements are summarized in Table 2-1.

A combination of transverse and longitudinal longhole stoping will be used to extract the uranium ore, and the transverse stoping will be completed using primary and secondary stopes (NexGen 2021a). An average transverse stope will be 12 metres (m) wide by 12 m long by 30 m high and an average longitudinal stope will be 24 m long by 5 m wide by 30 m high. Once extraction is complete, the mining stopes will be filled with CPB at a planned rate of 40 to 60 dry tonnes per hour. The mine plan also indicates that sill pillars will occur between the 500 to 530 Levels and 620 to 650 Levels (NexGen 2021a). Once these sill pillars are recovered, they will be

backfilled with CPB. The secondary stopes may be filled with CPT in the event that UGTMF chambers are not available for deposition.

The transverse approach will also be applied to the UGTMF, and CPT is planned to be deposited in the UGTMF chambers at a rate of 28 to 55 dry tonnes per hour (NexGen 2021a). The UGTMF is proposed to consist of 97 chambers that are 25 m wide by 25 m long by 60 m high. A new chamber will not be constructed until the adjacent chamber is backfilled and cured to maintain stability. An approximate 15 m wide pillar will separate each chamber (NexGen 2021a). A CPB plug will be placed at the base of the chamber and a CPB cap will be placed within the upper 2 m with the purpose of preventing seepage during the curing process. It is assumed that the UGTMF will be composed of 85 percent (%) CPT-filled chambers and 15% CPB-filled caps and plugs. The UGTMF chambers may be filled with CPB when mining stopes are not available for deposition. The general layout of the UGTMF feasibility study design is provided in Figure 2-1.

Table 2-1: Cemented Paste Backfill and Cemented Paste Tailings Disposal Locations and Strength Requirements

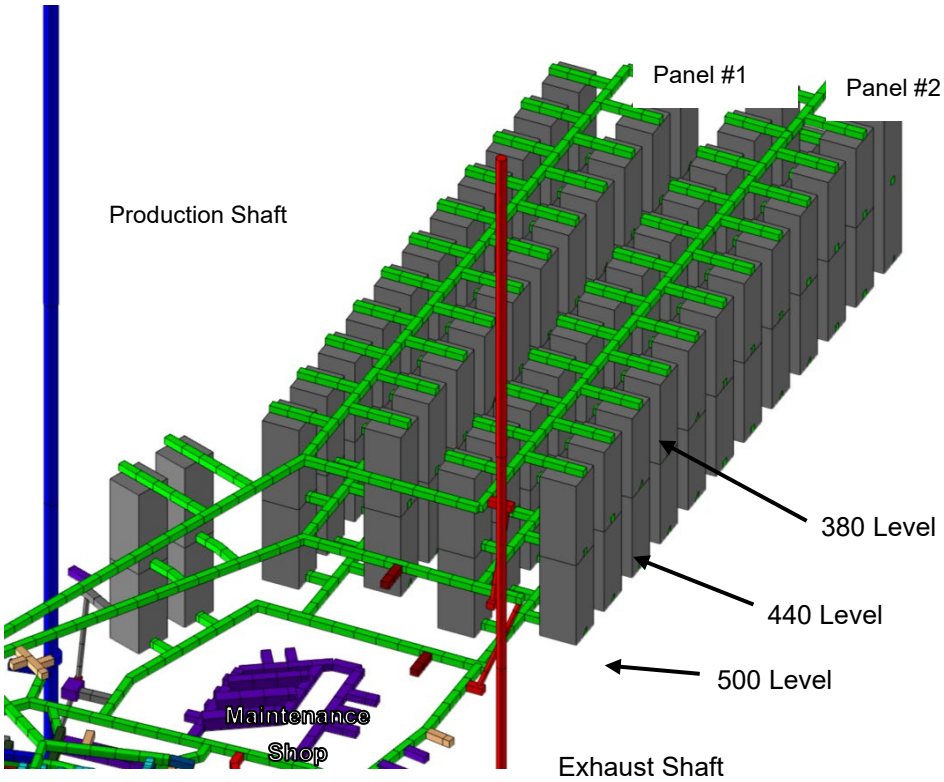
Underground Working		Target Strength (MPa)	Backfill Material
Primary stope		1.0	CPB
Secondary stope		0.5	CPB (and CPT during upset conditions[a])
Sill pillar		1.5	CPB
UGTMF	Cap and plug	1.5	CPB
	Chamber	0.2	CPT (and CPB during upset conditions[a])

Source: NexGen 2021a.

a) At the time of source term development, upset conditions were assumed to occur for 10% of Operations.

CPB = cemented paste backfill; CPT = cemented paste tailings; UGTMF = underground tailings management facility; MPa = megapascal.

Figure 2-1: Isometric View of the Underground Tailings Management Facility Feasibility Study Design



Source: NexGen 2021b.

2.2 Tailings and Process Waste Characterization

An ongoing tailings, process waste, binder, and composite material characterization program is being conducted under the direction of NexGen in support of the EIS and feasibility assessment. The characterization program began in 2019 and is focused on the geotechnical, geochemical, and radiological properties of backfilled composite tailings and process wastes that will be disposed underground. The characterization program evolved with the planning and design of the Project over this period and focused on the tailings and process wastes that were most representative of the selected waste disposal strategy and facility designs. The characterization program and its results to the end of 2020 are reported in TSD XVI.

The analytical data from the characterization program provide the basic material properties for the mine stopes and UGTMF source term derivation. It is noted that CPB and CPT are waste streams that will be composed of varying proportions of the representative composite samples from the characterization program. Of the composite materials developed for the geochemical characterization program, HHC-S and HLC-S were chosen to best represent CPB; HPLC, HPHC, HHGPLC, and HHGPHC were chosen to best represent CPT (Table 2-2). These samples were chosen to best represent the envelope of strength requirements and geochemical characteristics for the disposal of CPB and CPT in the underground workings. The material recipes for the representative samples from the characterization program are summarized in Table 2-3 (TSD XVI) and are the same material recipes that underpin the paste plant design. These cemented materials were cured for 28 days. Table 2-4 summarizes whether the analytical tests were conducted on competent or crushed samples.

Table 2-2: Characterization Program Samples Chosen to be Representative of Cemented Paste Backfill and Cemented Paste Tailings

Backfill Material	Representative Samples from Characterization Program	Description	Rationale
CPB	HHC-S	High-grade neutralized leach residue with a high OPC/slag binder content	Includes materials from the characterization program that were created using representative CPB components (i.e., neutralized leach residue and OPC/slag binder)
	HLC-S	High-grade neutralized leach residue with a low OPC/slag binder content	
CPT	HPLC	High-grade neutralized leach residue and effluent precipitates with a low OPC binder content	Includes materials from the characterization program that were created using representative CPT components (i.e., neutralized leach residue, process wastes, and OPC binder)
	HPHC	High-grade neutralized leach residue and effluent precipitates with a high OPC binder content	
	HHGPLC	High-grade neutralized leach residue, high-uranium gypsum precipitates and effluent precipitates with a low OPC binder content	
	HHGPHC	High-grade neutralized leach residue, high-uranium gypsum precipitates and effluent precipitates with a high OPC binder content	

CPB = cemented paste backfill; CPT = cemented paste tailings; OPC = ordinary Portland cement.

Table 2-3: Composition of Materials Chosen to Represent Cemented Paste Backfill and Cemented Paste Tailings

Backfill Material	Representative Samples from Characterization Program[a]	High-Grade Neutralized Leach Residue (%)	Gypsum (%)	Precipitates (%)	OPC (%)	Slag (%)	Water (%)
CPB	HLC-S	57.5	0	0	1.25	1.25	40
	HHC-S	44	0	0	8	8	40
CPT	HPLC	41	0	16.5	2.5	0	40
	HPHC	31.4	0	12.6	16	0	40
	HHGPLC	30.9	14.2	12.4	2.5	0	40
	HHGPHC	23.7	10.9	9.5	16	0	40

Source: TSD XVI.

a) Composite sample definitions are provided in Table 2-2.

CPB = cemented paste backfill; CPT = cemented paste tailings; OPC = ordinary Portland cement.

Table 2-4: Sample Type Used for Analytical Testing for All Cemented Paste Backfill and Cemented Paste Tailings Materials

Test	Competent Sample	Crushed Sample
Moisture Content	✓	-
Triaxial Permeability Test	✓	-
Mineralogy	-	✓
Acid Base Accounting	-	✓
Bulk Metals	-	✓
Whole Rock Oxides	-	✓

Table 2-4: Sample Type Used for Analytical Testing for All Cemented Paste Backfill and Cemented Paste Tailings Materials

Test	Competent Sample	Crushed Sample
Shake Flask Extraction	-	✓
Modified Triaxial Permeability Test	✓	-
Leaching Environmental Assessment Framework Test	✓	-

✓ = sample type used; - = sample type not used.

2.2.1 Cemented Paste Backfill Characteristics

Geotechnical, geochemical, and radiological properties of representative CPB materials are detailed in TSD XVI. A summary of the key characteristics of representative CPB materials is provided below and selected average results from the characterization program are summarized in Table 2-5.

- The hydraulic conductivity of CPB materials is influenced by the amount of binder in the material and ranges from the order of 10^{-08} metres per second (m/ in the case of low binder variants to 10^{-10} metres per second (m/s) in the case of the high binder variants. A detailed summary of the hydraulic conductivity properties of the bedrock surrounding the stopes and UGTMF is described in Section 8 (Subsection 8.3.4). Hydraulic conductivity estimates in the bedrock can range from the order of 10^{-11} to 10^{-06} m/s, depending on the geological unit.
- The CPB materials are primarily composed of acid-leach resistant minerals (chamosite, kaolinite, muscovite, and quartz) that make up 96 weight percent (wt.%) to 100 wt.% of the solid component of the material. The low binder variants contain a small proportion of gypsum (2 wt.% to 4 wt.%). No carbonate or cementitious minerals were detected.
- Average total sulphur content of the representative CPB materials ranges from 0.85 wt.% to 0.95 wt.% and is dominated by sulphate. All CPB samples contain a neutralization potential ratio (NPR) greater than 2 and are classified as NPAG. The neutralization potential increases with higher binder content.
- The CPB materials contain enriched solid-phase concentrations of arsenic, bismuth, lead, molybdenum, selenium, silver, sulphur, and uranium. Constituents with a high leachability potential for representative CPB materials identified from the short-term leach testing include aluminum, antimony, chloride, cadmium, iron, molybdenum, selenium, sulphate, lead-210, and radium-226. The high sulphate leachability potential in the CPB materials is likely sourced from the process water that comprises 40% of the material.
- The lower binder variant of the CPB materials contained the highest average radioactivity (i.e., gross alpha activity 4,825 becquerels per gram [Bq/g] and gross beta activity 1,500 Bq/g) compared to the higher binder variant (i.e., gross alpha activity 2,900 Bq/g and gross beta activity 1,020 Bq/g). Radioactivity and radiochemical speciation analysis indicate that some radioactivity is mobilized during short-term leach testing with gross alpha activity of 105 to 148 becquerels per litre (Bq/L) and gross beta activity of 43 Bq/L to 53 Bq/L in the shake flask extraction (SFE) leachate. Radionuclide species with the highest leachable concentrations in CPB leachates were radium-226 (i.e., 48 Bq/L to 64 Bq/L) and lead-210 (i.e., 2.0 Bq/L to 17 Bq/L).

- Elemental liberation rates from CPB materials under advective mass transfer conditions indicate that the initial porewater quality is alkaline (i.e., potential of hydrogen [pH] 9.4 to 11) and remains alkaline (i.e., pH 10) after 10 pore volume replacements (Figure 2-2). All metal liberation rates, except for barium, are indicated to follow ordered rate kinetics (i.e., flushing) with the highest concentrations recorded in the first two pore volume replacements and decrease by an order of magnitude at five pore volume replacements (Figure 2-3). Recorded barium liberation rates indicate a slightly increasing trend in concentrations suggesting potential mineral (i.e., primary and secondary) controls.
- Diffusive mass flux values for representative CPB materials are greatest during the initial leaching period and most constituents follow ordered rate kinetics (i.e., flushing). Mass flux values are influenced by the percentage of binder in the sample and lower binder (i.e., or lower strength) variants generally exhibit greater diffusive mass flux values compared to higher binder variants (Figure 2-4).

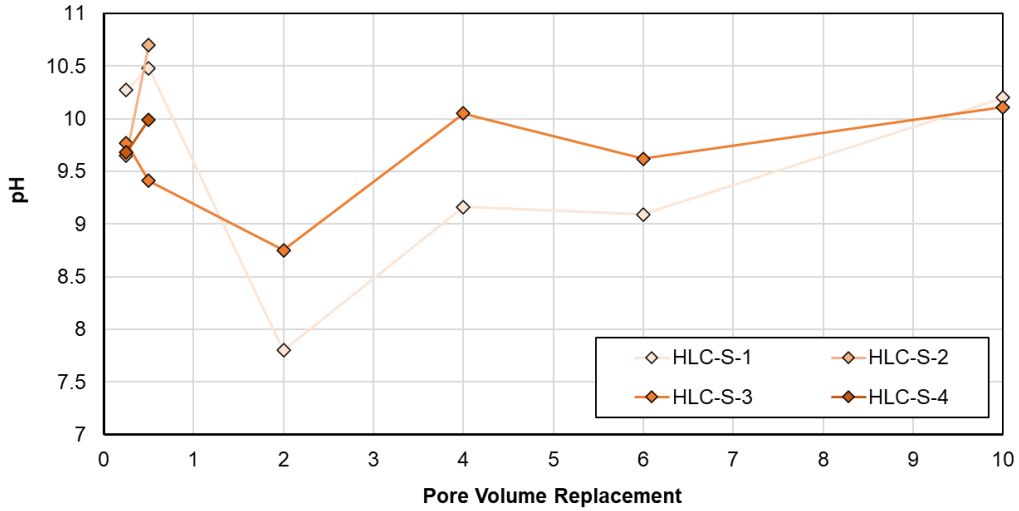
Table 2-5: Selected Average Geotechnical, Geochemical, and Radiological Properties of Representative Cemented Paste Backfill Materials

Characteristic	Parameter	Units	HLC-S[(a)]	HHC-S[(a)]
Geotechnical	Hydraulic conductivity	m/s	4.4×10^{-08}	3.5×10^{-10}
	Porosity	ratio	0.65	0.61
Geochemical (SFE)	pH	pH units	10	12
	Sulphate	mg/L	3,075	543
	Uranium	mg/L	0.0020	0.033
Geochemical (MTP first pore volume)	pH	pH units	10	n/a
	Aluminum	mg/L	0.53	n/a
	Uranium	mg/L	0.0056	n/a
Geochemical (LEAF mass flux – first three leach events)	Sulphate	$mg/m^2/s$	0.38	0.18
	Uranium	$mg/m^2/s$	0.000070	0.000063
Radiological (SFE)	Lead-210	Bq/L	2.0	17
	Radium-226	Bq/L	64	48

a) Composite sample definitions are provided in Table 2-2.

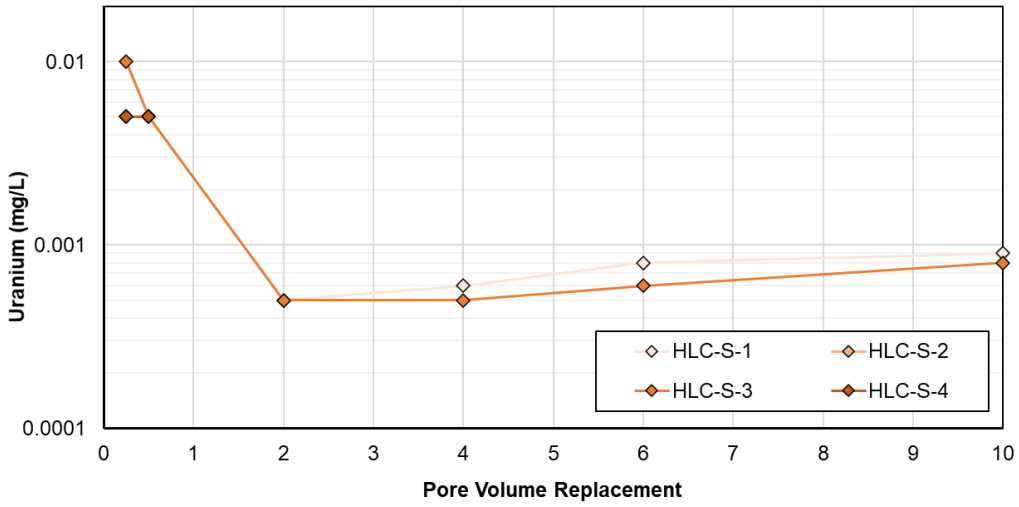
n/a = not applicable; MTP = modified triaxial permeability; LEAF = Leaching Environmental Assessment Framework; Bq/L = becquerels per litre; SFE = shake flask extraction.

Figure 2-2: pH versus Pore Volume Replacement for Low Binder Cemented Paste Backfill Material



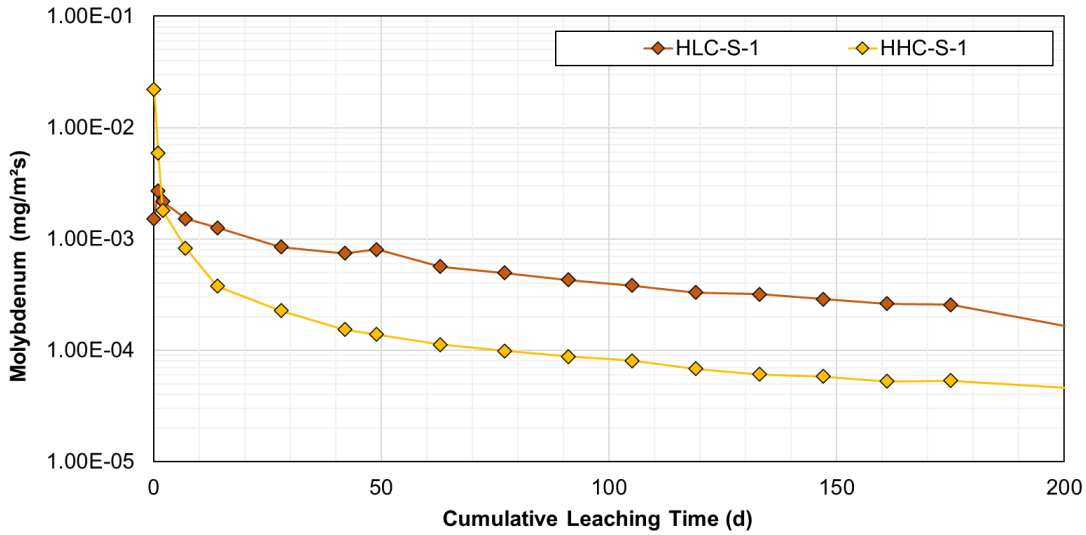
Note: Composite sample definitions are provided in Table 2-2.

Figure 2-3: Uranium Concentration versus Pore Volume Replacement for Low Binder Cemented Paste Backfill Material



Note: Composite sample definitions are provided in Table 2-2.

Figure 2-4: Mass Flux versus Cumulative Leaching Time for Representative Cemented Paste Backfill Materials



Note: Composite sample definitions are provided in Table 2-2.

2.2.2 Cemented Paste Tailings Characteristics

Geotechnical, geochemical, and radiological properties of representative CPT materials are detailed in TSD XVI. A summary of the key characteristics is provided below and selected average results from the characterization program are summarized in Table 2-6.

- The hydraulic conductivity of CPT is influenced by the amount of binder in the material and ranges from 10^{-08} m/s to 10^{-10} m/s. A detailed summary of the hydraulic conductivity properties of the bedrock surrounding the stopes and UGTMF is described in Section 8 (Subsection 8.3.4). Hydraulic conductivity estimates in the bedrock can range from the order of 10^{-11} to 10^{-06} m/s, depending on the geological unit.
- Representative CPT materials are primarily composed of acid-leach resistant minerals (i.e., clinochlore, muscovite, and gypsum) that make up 39 wt.%to 74 wt.% of the solid component of the material. The CPT materials also contain a relatively high proportion of gypsum (i.e., 9 wt.%to 54 wt.%). Carbonate (i.e., calcite) and cementitious (i.e., ettringite) minerals are also detected, likely due to the presence of the gypsum and effluent precipitates and a higher percentage of OPC binder. Detected calcite content ranges from 0 wt.% to 11 wt.% and the ettringite content ranges from 0 wt.% to 27 wt.%.
- Average total sulphur content of the representative CPT materials ranges from 3.4 wt.% to 9.2 wt.% and is dominated by sulphate. The CPT contains a higher total sulphur content compared to CPB because the CPT material contains process wastes that are almost entirely composed of calcium sulphate minerals. The high binder CPT materials contain a high neutralization potential and are classified as NPAG. The low binder CPT materials contain a neutralization potential at least an order of magnitude lower than the representative high binder materials and have an uncertain or PAG classification.

- The representative CPT materials contain enriched solid-phase concentrations of arsenic, bismuth, copper, lead, molybdenum, selenium, sulphur, and uranium. Constituents with a high leachability potential for representative CPT materials identified from the short-term leach testing include aluminum, arsenic, chromium, lead, molybdenum, selenium, silver, strontium, sulphate, and thallium.
- Similar to CPB, the lower binder variant of the CPT materials contained the highest average radioactivity (i.e., gross alpha activity 3,075 Bq/g and gross beta activity 1,075 Bq/g) compared to the higher binder variant (i.e., gross alpha activity 1,725 Bq/g and gross beta activity 548 Bq/g). Radioactivity and radiochemical speciation analysis indicate that some radioactivity is mobilized during short-term leach testing with gross alpha activity of 40 Bq/L to 60 Bq/L and gross beta activity of 13 Bq/L to 36 Bq/L in the SFE leachate. Radionuclide species with the highest leachable concentrations in CPT leachates were radium-226 (i.e., 6.9 Bq/L to 17 Bq/L) and radium-228 (i.e., 2.1 Bq/L to 3.4 Bq/L).
- Elemental liberation rates from CPT materials under advective mass transfer conditions indicate that the initial porewater quality is circumneutral to alkaline (i.e., pH 7.4 to 11) and remains slightly alkaline (i.e., pH 7.5 to 9) after 30 pore volume replacements (Figure 2-5). The metal liberation rates follow ordered rate kinetics (i.e., flushing) with the highest concentrations recorded in the first two pore volume replacements and decrease, in most cases, by several orders of magnitude at five pore volume replacements (Figure 2-6, for example).
- Diffusive mass flux values for representative CPT materials are greatest during the initial leaching period. Mass flux values are influenced more by the percentage of binder in the sample than the composition of the material. Lower binder (i.e., or lower strength) materials generally exhibit greater diffusive mass flux values (Figure 2-7), with a few exceptions (e.g., barium and lead).

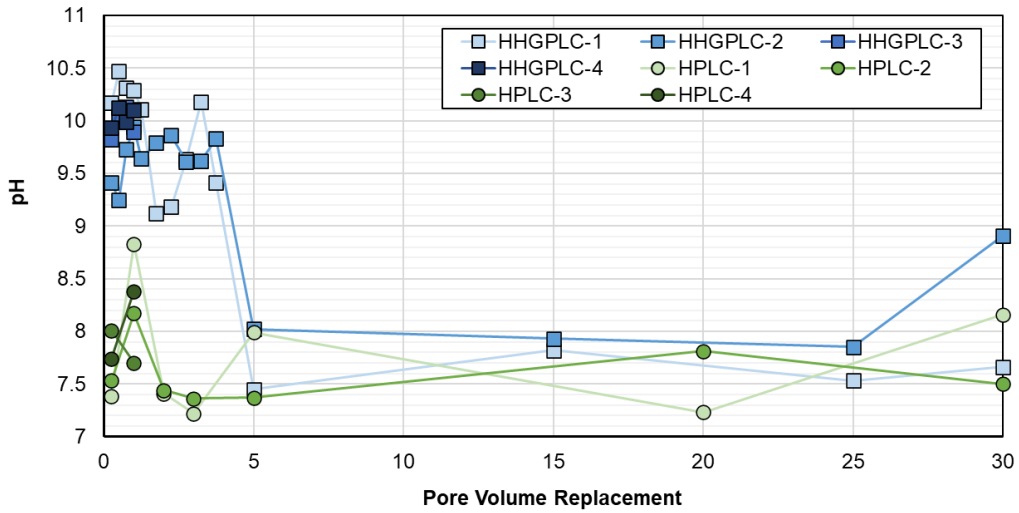
Table 2-6: Selected Average Geotechnical, Geochemical, and Radiological Properties of Representative Cemented Paste Tailings Materials

Characteristic	Parameter	Units	HPLC[(a)]	HPHC[(a)]	HHGPLC[(a)]	HHGPHC[(a)]
Geotechnical	Hydraulic conductivity	m/s	1.0×10^{-08}	7.2×10^{-10}	3.2×10^{-08}	2.8×10^{-09}
	Porosity	ratio	0.60	0.61	0.71	0.69
Geochemical (SFE)	pH	pH units	8.8	12	10	12
	Sulphate	mg/L	1,690	1,610	2,180	1,950
	Uranium	mg/L	0.069	0.020	0.014	0.012
Geochemical (MTP first pore volume)	pH	pH units	8.0	n/a	10	n/a
	Aluminum	mg/L	0.99	n/a	1.0	n/a
	Uranium	mg/L	0.40	n/a	0.038	n/a
Geochemical (LEAF mass flux – first three leach events)	Sulphate	$mg/m^2/s$	0.81	0.0027	1.6	0.45
	Uranium	$mg/m^2/s$	0.000084	0.000072	0.00026	0.000032
Radiological (SFE)	Lead-210	Bq/L	0.40	8.0	0.40	4.0
	Radium-226	Bq/L	17	7.2	11	6.9

a) Composite sample definitions are provided in Table 2-2.

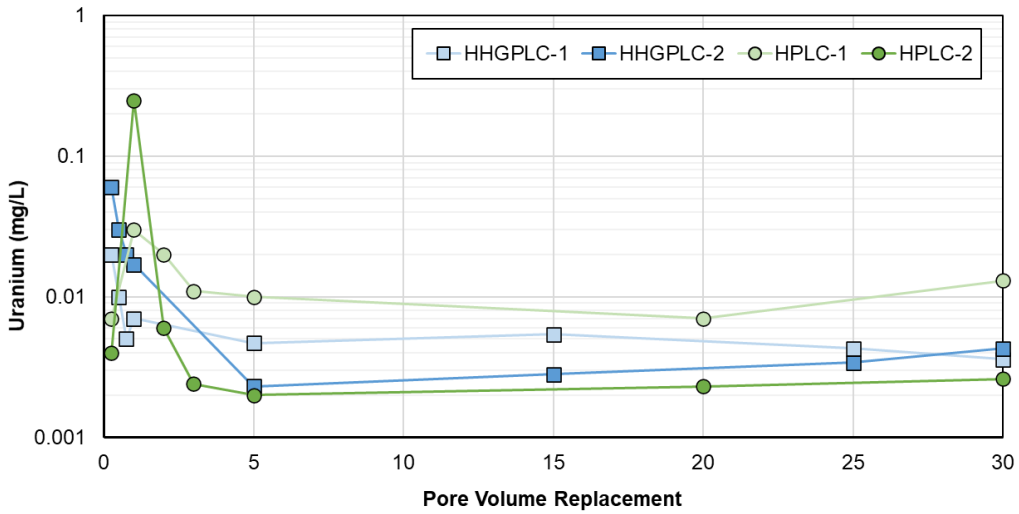
n/a = not applicable; MTP = modified triaxial permeability; LEAF = Leaching Environmental Assessment Framework; Bq/L = becquerels per litre; SFE = shake flask extraction.

Figure 2-5: pH versus Pore Volume Replacement for Low Binder Cemented Paste Tailings Material



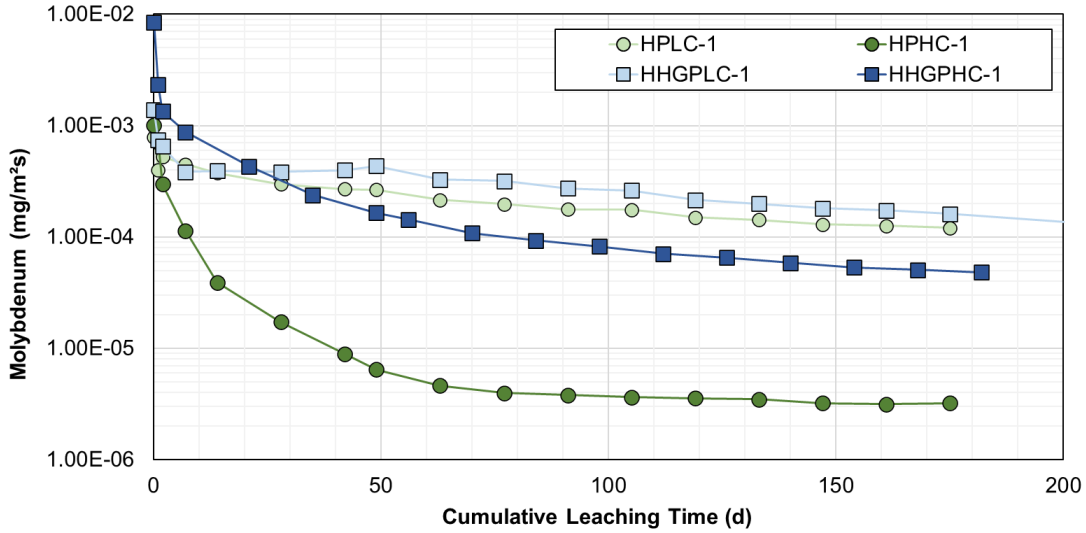
Note: Composite sample definitions are provided in Table 2-2.

Figure 2-6: Uranium Concentration versus Pore Volume Replacement for Low Binder Cemented Paste Tailings Material



Note: Composite sample definitions are provided in Table 2-2. Uranium was chosen as an example to illustrate the metal liberation trends that were observed in the CPT.

Figure 2-7: Mass Flux versus Cumulative Leaching Time for Representative Cemented Paste Tailings Materials



Note: Composite sample definitions are provided in Table 2-2.

3 SOURCE TERM DERIVATION

3.1 Conceptual Model for the Underground Disposal Areas

Data analysis and interpretation from studies completed in support of the EIS and feasibility assessment for the Project were used to develop conceptual models representative of processes that will affect solute mass loading rates from backfilled CPB and CPT in the mine stopes and UGTMF.

The release of solutes from CPB and CPT during Operations is expected to be limited since the paste composition is designed to not release water after deposition (NexGen 2021a). Additionally, groundwater reporting to the underground mine would be pumped to the surface and treated during Operations. As such, the underground mine will be under hydraulic containment and release of mining-affected groundwater from potential underground sources to the surrounding environment will not occur (EIS Section 8).

Upon completion of mining and backfilling, the underground will be re-flooded and groundwater pressures will return to natural hydrostatic conditions (EIS Section 8). The backfilled CPB and CPT will be inundated, and two mass transfer mechanisms will be established that will determine the mass loading rates from these materials to the surrounding groundwater:

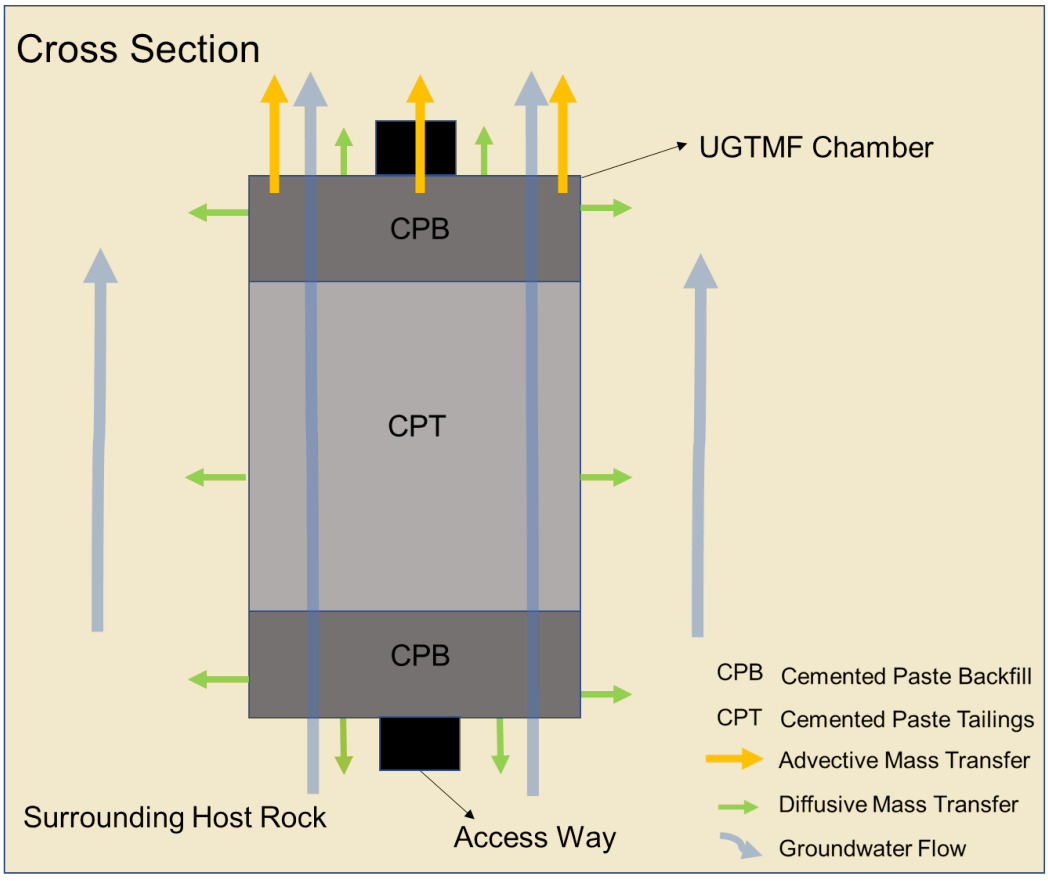
- leaching of solutes from CPB and CPT as groundwater moves through the material under regional groundwater flow gradients (i.e., advective mass transfer); and
- leaching of solutes from CPB and CPT due to concentration differences between the material surface, the material porewater, and the surrounding groundwater (i.e., diffusive mass transfer).

The amount and rate at which constituents are released from CPB and CPT under advective and diffusive mass transfer mechanisms are governed by the physical properties of the CPB/CPT, surrounding host rock, and the interaction with percolating groundwater.

Conceptual models for advective and diffusive mass transfer aim to describe the main physical and chemical/radiological processes associated with the backfilled mine stopes and UGTMF. These conceptual models form the basis for the mine stopes and UGTMF source term derivation. Conceptual figures illustrating the general direction of advective and diffusive mass transfer in a UGTMF chamber are provided in Figure 3-1 and Figure 3-2.

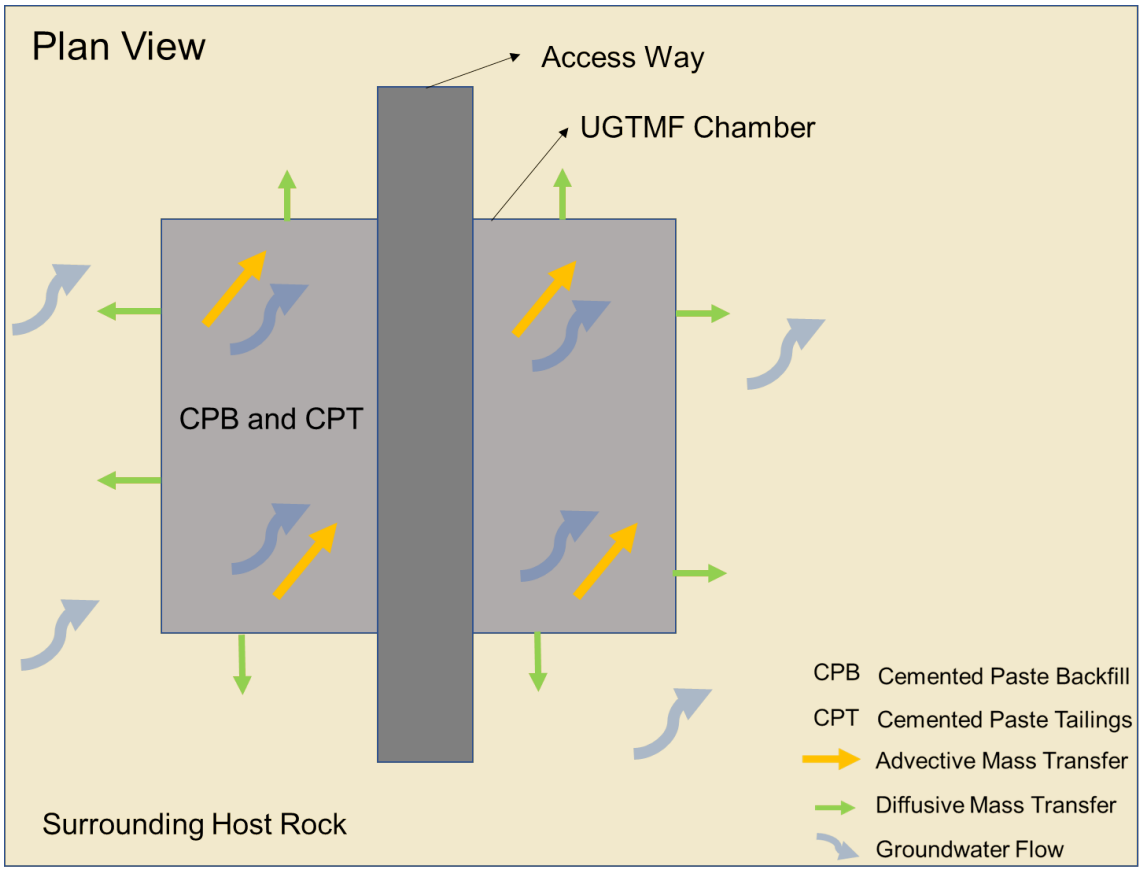
Daughter products formed by the radioactive decay of uranium-238, including thorium-230, radium-226, lead-210, and polonium-210, are present in the CPB and CPT. These radionuclides are subject to both advective and diffusive mass transfer mechanisms, and ongoing radioactive decay (i.e., ingrowth) is expected to occur during transport through the CPB and CPT. Half-life periods for these decay series range from tens of thousands of years in the case of uranium-238 and thorium-230 to relative short periods such as 138 days in the case of polonium-210.

Figure 3-1: Schematic Representation of a Cross Section View of an Underground Tailings Management Facility Chamber



Note: post-closure groundwater flow would be vertical (Section 8)

Figure 3-2: Schematic Representation of a Plan View of an Underground Tailings Management Facility Chamber



Note: post-closure groundwater flow direction is expected to be vertical (EIS Section 8)

3.1.1 Advective Mass Transfer

The CPB and CPT will be in direct hydraulic connection with the surrounding groundwater when the mine re-floods and mass transfer from these materials will be subject to regional groundwater flow gradients. Initially, groundwater will flow into the CPB and CPT and mix with existing dissolved constituents in the pore space. Once the CPB and CPT materials are saturated, porewater will flow from the backfilled materials in the downgradient direction from the mine stopes and UGTMF at rates determined by the surrounding paleoweathered basement, basement bedrock, fault zones and shear zones.

After the pore space in the CPB and CPT is replaced with percolating groundwater, the water will continue to interact with the material matrix. Chemical reactions will take place that transform primary minerals into dissolved solutes and secondary minerals. These chemical reactions are expected to attenuate following ordered rate kinetics, resulting in a decrease in mass transfer over time.

Minerals are the ultimate source of solutes in the CPB and CPT, and their solubility determines the rate of mass release. Both CPB and CPT consist of neutralized leach residue, which consists mostly of quartz and aluminosilicate minerals (i.e., chamosite, clinochlore, and muscovite). These aluminosilicate minerals represent the most chemically resistant minerals that remain after acid leaching in the uranium extraction process and

have low solubilities. The CPT will also contain process wastes that consist of calcium sulphate minerals (i.e., anhydrite and gypsum), which are more soluble than the aluminosilicate minerals. The CPB and CPT will contain different binder types. Higher proportions of binder are associated with the formation of cementitious minerals such as alite, belite, tricalcium aluminate, and ettringite.

In addition to the initial mineralogical composition of the material, the magnitude and rate of mass release from CPB and CPT will also be determined by the following:

- the quality of the pre-existing porewater;
- the mass of soluble components associated with the pore space, particularly residual OPC binder and soluble fractions of the process wastes; and
- the rate at which groundwater flows into the backfilled mine stopes and UGTMF; this rate is determined by the hydraulic conductivity of CPB and CPT and the groundwater flow gradient.

3.1.1.1 Key Chemical Reactions

Key chemical reactions that will take place as groundwater percolates through the CPB and CPT include the following:

- **Dissolution and precipitation reactions:** Dissolution of primary minerals is expected to result in soluble chemical species as free ions or complexes with a ligand. The precipitation of secondary minerals will depend on concentration of ions in solution, pH, and mineral saturation indices.
- **Oxidation and reduction reactions:** A redox differential is expected between the percolating groundwater and the CPB and CPT porewater where the groundwater will have a more reduced redox potential. Changes in redox can lead to mineral precipitation, elemental sorption, mineral dissolution, and elemental desorption.
- **Hydrolysis:** Hydrolysis reactions are important weathering processes for silicate minerals that take place over geological time frames due to the slow kinetics of these reactions.
- **Hydration reactions:** Hydration reactions combine substances with water and are expected to be associated with gypsum precipitates and OPC binder in the composite materials.
- **Ion exchange and adsorption:** Ion exchange is a mechanism through which dissolved chemical species may be removed from solution. Ion exchange can occur with constituents in solution that exchange with weakly held ions, or ions adsorbed to positively or negatively charged surfaces. Iron and aluminum oxyhydroxide minerals have high unit mass ion exchange capacities. Surface charges on kaolinite and oxyhydroxides can vary from negative to positive depending on pH. At alkaline pH (e.g., as in column test leachate), the minerals have more negative surface charges that increase their capacity to sorb metal cations.
- **Radioactive decay and ingrowth:** Radionuclides may decay, or be created by ingrowth, as groundwater percolates through the CPB and CPT. Ingrowth can produce a daughter element whose geochemical characteristics differ markedly from the mother element. These changes in geochemical characteristics will affect the mobility of the daughter element.

3.1.2 Diffusive Mass Transfer

Diffusion will occur when the mine re-floods and the CPB and CPT are in direct hydraulic connection with the surrounding groundwater. Concentration gradients will be established between the surrounding groundwater and CPB and CPT. These concentration gradients will result in diffusive mass transfer between the CPB, CPT and the surrounding groundwater.

The magnitude and rate of diffusive mass transfer from the backfilled CPB and CPT will be determined by:

- **Concentration differential:** Diffusion rates will be determined by the magnitude of the concentration differential between the CPB, CPT and the surrounding groundwater. Concentrations associated with the CPB and CPT are defined by the porewater quality of the materials, the soluble constituents on the surface of the wastes, and the primary minerals exposed on the surface of the wastes.
- **Diffusion coefficient:** Each constituent is associated with a unique diffusion coefficient that affects the diffusion rate.
- **Hydraulic contact area:** Groundwater flow in the surrounding crystalline basement rock is associated with fractures. Where these fractures connect with the underground mine stopes and UGTMF, a hydraulic connection between the surrounding groundwater and the CPB and CPT is created. The density of the fracture network determines the surface area exposure of the CPB and CPT to the groundwater, which determines the quantum of mass transfer taking place.

3.2 Source Term Derivation Approach

The main objective of the mine stopes and UGTMF source terms is to predict the mass loading rate or leachate quality determined by advective and diffusive mass transfer processes at post-closure. To achieve this objective, a modelling approach was used that is supported by a geochemical characterization program with empirical laboratory measurements of key mass transfer processes. The approach followed in the geochemical source term derivation is consistent with guidelines provided by Mine Environment Neutral Drainage (MEND 2009) and International Network for Acid Prevention (INAP 2009).

Three source term models were developed to represent each of the underground disposal areas that will host CPB and CPT, including primary stopes, secondary stopes, and UGTMF. Each source term model also includes separate components for advective and diffusive mass transfer, and accounts for different material types and strength requirements for each disposal area. The geochemical characterization program included the development and compositing of representative CPB and CPT samples, and characterization methods (i.e., kinetic testing methods) that were designed to support this source term derivation approach.

Given the complexity of the physical and chemical processes that determine the magnitude and rate of advective and diffusive mass transfer from the underground mine stopes and UGTMF (Section 3.1, Conceptual Model for the Underground Disposal Areas), simplifying assumptions and bounding arguments were used in the source term models to reduce the number of parameters/variables to those that can be measured using laboratory tests.

The general assumptions that form the basis of the source term models and their underlying advective and diffusive mass transfer mechanisms are summarized below:

- Groundwater flow through the CPB and CPT is assumed to be saturated matrix flow, based on the expected homogenous nature of the materials. This type of flow maximizes the interaction between minerals in the waste and the percolating groundwater, and the consequent leaching of solutes. Should cracks form in the CPB and CPT before flooding of the mine, it will reduce the interaction between the percolating groundwater and the minerals in the wastes, and result in a lower mass flux compared to the matrix flow assumption.
- Source terms were developed to represent a range of binder conditions (low to high cement/slag) and process wastes to account for potential variability in operating conditions. The low and high cement/slag binder materials, plus the ratio of process wastes for CPT materials, form an envelope of potential operating conditions. It is assumed that variability in actual operating conditions will result in CPB and CPT compositions that fall within this envelope of binder and process wastes.
- Concentrations of nitrogen species were based on data from composite materials developed in pilot scale testing. Nitrogen species loading from residual blasting products on the ore chemistry and process plant circuit chemistry is unknown and not considered as part of the source term derivation. This assumption is therefore not conservative, and care should be taken in interpreting nitrogen species loading from the tailings. The effect of nitrogen loading from residual blasting products on the mine water system was further assessed and quantified in TSD XVIII, Site-Wide Water Balance and Water Quality Modelling Report.
- In developing input data for source term calculations, reported concentrations for certain constituents were below the analytical detection limit. In such instances the actual value was assumed to be equal to one-half the detection limit (TSD XVI).
- Advective mass transfer rates are approximated by laboratory-measured porewater qualities as a function of pore volume replacements over time. Samples of equivalent pore volumes were taken at multiple pore volume replacement intervals during modified triaxial permeability (MTP) tests of representative CPB and CPT materials.
- Diffusive mass transfer from the CPB and CPT is approximated by laboratory-measured mass transfer rates (i.e., release rates) of inorganic solutes under diffusion-controlled release conditions. The Leaching Environmental Assessment Framework (LEAF) test method provides intrinsic material parameters for release of inorganic solutes under mass transfer controlled leaching conditions and was conducted using representative samples of CPB and CPT.

3.3 Methods

The numerical modelling approach for each of the source terms is summarized in Table 3-1. As noted in Section 3.2, Source term Derivation Approach, a base case and upper case were modelled for each component based on the replicate variability of the materials. The numerical derivation of each mass transfer component is summarized in the following subsections.

Table 3-1: Numerical Model Approach for the Primary Stopes, Secondary Stopes, and Underground Tailings Management Facility

Source		Advective Mass Transport	Diffusive Mass Transport
Primary stopes	Stope	• Derivation of initial porewater quality using MTP and SFE test results of CPB representative materials • Binder content considered in selection of representative materials	• Calculation of initial observed diffusivity using LEAF test results of CPB representative materials • Binder content considered in selection of representative materials
	Sill pillar		
Secondary stopes	Stope		
	Sill pillar		
UGTMF	Cap and plug		
	Chambers	• Derivation of initial porewater quality using MTP and SFE test results of CPT representative materials • Binder and process waste content considered in selection of representative materials	• Calculation of initial observed diffusivity using LEAF test results of CPT representative materials • Binder and process waste content considered in selection of representative materials

UGTMF = underground tailings management facility; MTP = modified triaxial permeability; CPB = cemented paste backfill; CPT = cemented paste tailings; LEAF = Leaching Environmental Assessment Framework; SFE = shake flask extraction.

3.3.1 Numerical Derivation of Advection Mass Transfer Components

The rate and volume of groundwater flow through CPB and CPT in the underground mine stopes and UGTMF were predicted in the groundwater solute transport model (EIS Section 8). As such, concentrations (i.e., mass per unit volume) defining the quality of water exiting the CPB and CPT were provided as inputs to the solute transport model, and were combined with predicted flow rates (i.e., volume per unit time) to calculate mass loads.

The MTP test results for representative CPB and CPT materials provide an approximation of the porewater qualities that will move downgradient as groundwater percolates through the materials. This MTP data forms the basis for the calculation of source qualities for the underground mine stopes and UGTMF. At the time of this source term derivation, MTP testing was only conducted on low binder versions of the CPT and CPB materials (HLC-S, HPLC, and HHGPLC), and analyses were limited to pH and trace metals due to the small volumes of water recovered from the materials.

The following approach was used to calculate porewater concentrations for the underground mine stopes and UGTMF source terms:

- Porewater qualities for low and high binder versions of CPB and CPT were calculated using a combination of MTP and SFE test results.
- Base case and upper case porewater qualities were differentiated for CPB and CPT.
- Source terms calculations reflected the material types and uses proposed for underground mine stopes and UGTMF (see Table 2-1).

3.3.1.1 Calculation of Porewater Qualities for Low Binder and High Binder Cemented Paste Backfill and Cemented Paste Tailings

Average trace metal MTP concentrations were used to calculate porewater qualities for low binder versions of CPB and CPT. Low binder materials have a higher hydraulic conductivity compared to the high binder samples, resulting in more conservative (i.e., higher) advective mass transfer rates. Data used in the calculations consisted of data collected up to and including one pore volume replacement.

Since major ion and radionuclide concentrations could not be measured in the MTP tests because of low sample volumes, these concentrations were calculated by adjusting the short-term leach test (i.e., SFE) results to represent the solid:liquid ratios by volume in the MTP test conditions. The SFE mass loads for representative low binder CPB and CPT materials were adjusted using the MTP sample mass and sample pore volume according to the following equations:

$$SFE\ Mass\ Load\ \left(\frac{mg}{kg}\right) = \frac{SFE\ concentration\ \left(\frac{mg}{L}\right) \times SFE\ leachate\ volume\ (L)}{SFE\ mass\ of\ material\ (kg)}$$

$$Concentration\ \left(\frac{mg}{L}\right) = \frac{SFE\ mass\ load\ \left(\frac{mg}{kg}\right) \times MTP\ mass\ of\ material\ (kg)}{MTP\ sample\ pore\ volume\ (L)}$$

Major ion, trace metal, and radionuclide concentrations for high binder versions of the CPB and CPT were then calculated assuming the concentration ratio of high binder to low binder is equal to the ratios observed in the SFE test results.

3.3.1.2 Base Case and Upper Case Source term Calculations

After the predicted qualities for low and high binder versions of CPB and CPT were developed, the representative materials for CPB and CPT were proportioned to develop a base case and upper case quality for each material type. The predicted concentrations were proportioned according to the specifics outlined in Table 3-2. For the upper case scenarios, the highest pH was chosen.

Table 3-2: Methods for Cemented Paste Backfill and Cemented Paste Tailings Porewater Quality Calculations

Material	Case	Method[(a)]
CPB	Base	HHC-S and HLC-S solutions were mixed in a 1:5.7 ratio, based on the binder strength needed in the primary stopes. pH was calculated by mixing HHC-S and HLC-S SFE solutions in a 1:5.7 ratio in PHREEQC.
CPB	Upper	Maximum concentration between HHC-S and HLC-S was chosen for each constituent. pH was the maximum pH recorded for HHC-S and HLC-S SFE solutions.
CPT	Base	Maximum concentration between HHGPLC and HPLC was chosen for each constituent. Low binder materials were chosen for base case based on binder strength required in the UGTMF. Maximum concentration was chosen because ratio between HHGPLC and HPLC is unknown at this time. pH was median of HHGPLC MTP values.
CPT	Upper	Maximum concentration among HHGPLC, HPLC, HHGPHC, and HPHC was chosen for each constituent. pH was the maximum pH recorded for HHGPLC, HPLC, HHGPHC, and HPHC SFE solutions.

a) Composite sample definitions are provided in Table 2-2.

CPB = cemented paste backfill; CPT = cemented paste tailings; UGTMF = underground tailings management facility; SFE = shake flask extraction; MTP = modified triaxial permeability.

3.3.1.3 Stope and Underground Tailings Management Facility Material Compositions

Source terms were calculated for the underground mine stopes and UGTMF considering the material types and ratios that will be deposited in each area. The methods followed in the source term calculations are summarized in Table 3-3. As noted in Section 2.1, Tailings and Process Waste Disposal, the UGTMF was assumed to consist of 85% CPT-filled chambers and 15% CPB-filled plugs and caps. It was also assumed that upset conditions may occur for a total of 10% of Operations where a UGTMF chamber is not available, and CPT is therefore disposed in the secondary stopes.

Table 3-3: Methods for Advective Mass Transfer Source term Components

Facility Source term	Method
Primary stope base case	Equal to CPB base case
Primary stope upper case	Equal to CPB upper case
Secondary stope base case	Mixed solution composed of 90% CPB base case and 10% CPT base case
Secondary stope upper case	Mixed solution composed of 90% CPB upper case and 10% CPT upper case
UGTMF base case	Mixed solution composed of 15% CPB base case and 85% CPT base case
UGTMF upper case	Mixed solution composed of 15% CPB upper case and 85% CPT upper case

UGTMF = underground tailings management facility; CPB = cemented paste backfill; CPT = cemented paste tailings.

3.3.2 Numerical Derivation of Diffusion Mass Transfer Components

Based on the LEAF test method (USEPA 2017), an observed diffusivity was calculated in units of square metres per second (m^2/s) to represent the diffusion coefficient for each constituent. The diffusion coefficient was used directly in the solute transport model (Section 8) to develop a mass loading from diffusive mass transfer for each constituent of concern. According to the LEAF test method, observed diffusivity was calculated according to the following equation:

$$Observed\ diffusivity\ for\ interval\ i = \pi \left[\frac{C_i \times V_i}{A \times 2 \times \rho \times C_o \times \left(\sqrt{t_i} - \sqrt{t_{i-1}}\right)} \right]^2$$

where:

C_i is the constituent concentration in the eluate for leaching interval i (mg/L);

V_i is the eluate volume in interval i (L);

A is the external geometric surface area exposed to the eluent (m^2);

ρ is the sample density (kg/m^3 dw);

C_0 is the initial leachable content (mg/kg);

t_i is the cumulative time at the end of the current leaching interval (s); and

t_{i-1} is the cumulative time at the end of the previous leaching interval (s).

The observed diffusivity (i.e., diffusivity coefficient) was calculated for each leach event of the representative CPB and CPT materials. Since observed diffusivity is dependent on the initial leachable concentration of the material and varies slightly over the course of the testing period, the median value of all leach periods was calculated for low and high binder CPB and CPT materials.

Similar to the advective mass transfer component, source terms were calculated by considering the material types that will be deposited in each area. Median and maximum CPB values were used to develop the mine stope base case and upper case source terms, respectively. Median and maximum CPT values were used to develop the UGTMF base case and upper case source terms, respectively (Table 3-4).

Table 3-4: Methods for Diffusive Mass Transfer Source term Components

Facility Source term	Method[(a)]
Primary stope base case	Median value between HLC-S and HHC-S materials
Primary stope upper case	Maximum value between HLC-S and HHC-S materials
Secondary stope base case	Equal to primary stope base case
Secondary stope upper case	Equal to primary stope upper case
UGTMF base case	Median value among HPLC, HPHC, HGPLC and HGPHC materials
UGTMF upper case	Maximum value among HPLC, HPHC, HGPLC and HGPHC materials

a) Composite sample definitions are provided in Table 2-2.

3.4 Conservatism

Bounding arguments were made to the derivation approach to establish a conservative case for the mine stopes and UGTMF source terms to intentionally overestimate the mass loading from these disposal areas. The bounding arguments were chosen to specifically address the uncertainties associated with input parameters, such as the kinetics of mineral weathering and flow of water within the wastes, as well as the lack of analogue sites and data where this tailings disposal strategy was implemented. The bounding arguments and their associated conservatism are summarized below:

- CPB and CPT materials were constituted using the neutralized leached residue from tailings produced from high-grade triuranium octoxide (U_3O_8) variants of the Rook I ore grade distribution (NexGen 2021a), and therefore represent a conservative material composition for uranium and associated daughter elements.
- Laboratory-measured mass transfer rates and concentrations are conservative.
  - Concentrations measured in the MTP tests for representative CPB and CPT materials represent conservative mass transfer rates compared to site conditions because deionized water was used as an eluent in the test. The deionized water contains a lower total dissolved solids and ionic strength compared to the groundwater, which will result in higher dissolution rates and greater mass release rates.
  - Diffusive mass transfer is a function of the concentration differential between the surface of the CPB, CPT, and the surrounding groundwater. Since the LEAF tests were conducted with deionized water (i.e., low ionic strength), a greater concentration gradient was created which results in the measurement of conservative mass transfer rates.
- Advective and diffusive mass release is assumed to be constant over time and initial mass transfer rates were used.
  - The composition of CPB and CPT represent a finite mass of potential leachable solutes and radionuclides when they are deposited underground. After flooding, the initial mass transfer rates

from the materials are expected to be the highest and then decline over time as solutes are released through mass transfer processes following typical ordered rate kinetics (i.e., decaying source terms).

  - Results from kinetic laboratory tests (i.e., MTP and LEAF) support this assumption and indicate that the greatest mass transfer rates occur within the initial measurements and decrease over time. The LEAF test mass transfer rates decrease over time following ordered rate kinetics, whereas results from MTP tests indicate a significant (i.e., order of magnitude) decrease in mass transfer rates after the first two pore volume replacements (TSD XVI). Figure 3-3 provides a schematic representation of these observations.

  - Assuming that mass transfer rates will be constant over time and at rates equivalent to the highest transfer rates, (e.g., see source term envelope in Figure 3-3) the source term predictions are conservative and represent an overestimation of future solute mass loading.

- Secondary mineral and ion exchange controls on advective mass transfer rates were ignored.

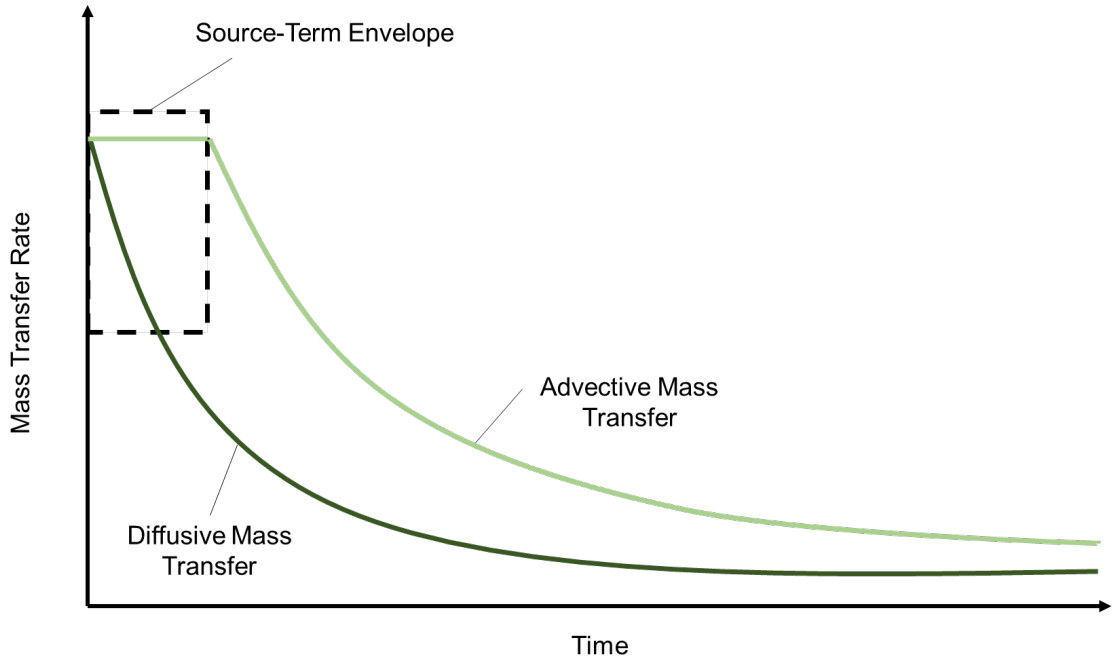
  - The formation of secondary minerals in the CPB and CPT can reduce mass transfer rates and porewater concentrations for elements associated with these minerals. Secondary minerals can co-precipitate and provide ion exchange sites that absorb metals and radionuclides from solution. The potential for secondary minerals to form as groundwater percolates through the CPB, and CPT was assessed using geochemical speciation modelling (Section 3.4.1, Evaluation of Secondary Mineral Controls).

  - Geochemical speciation modelling indicates the potential for several secondary minerals to form and control the concentration of metals and radionuclides in solution. Ignoring the effect of secondary mineral controls on the advective mass transfer rates is therefore conservative and represents an overestimation of future solute mass loading.

- A range of composite materials were tested in the characterization program that represent the variability in composition of CPB and CPT materials. For each composite material tested, four replicate samples were also analyzed to represent the variability in each of the representative materials. To express this variability, a best estimate, or base case, and a reasonable upper bound estimate, or upper case, were developed. The base case estimates were developed using average or median statistics and the upper case estimates were developed using maximum statistics.

Applying the above bounding arguments (which applies to both the base case and upper case) results in overestimation of the source terms and their respective mass transfer rates. These bounding arguments are reasonably conservative and aim to account for the many uncertainties and limitations associated with predicting site-specific, future behaviour of the CPB and CPT in the stopes and UGTMF. The sensitivity of these bounding arguments and the associated conservatism is assessed in the groundwater solute transport model (EIS Section 8).

Figure 3-3: Approach to Conservatism in Source Term Development



3.4.1 Evaluation of Secondary Mineral Controls

The potential for secondary minerals to form as groundwater percolates through the CPB and CPT was assessed using geochemical speciation modelling. Secondary minerals can co-precipitate and provide ion exchange sites that absorb metals and radionuclides from solution. The main objective of this assessment was to confirm the conservatism of the bounding argument (Section 3.4, Conservatism) that ignoring these controls will result in conservative source term predictions.

The predicted porewater qualities (i.e., base and upper cases) for the CPB and CPT were equilibrated using the geochemical speciation and equilibration model PHREEQC version 3.3.5 (Parkhurst and Appelo 1999). Due to the high ionic strength and alkalinity of the estimated porewater qualities, the ThermoChimie database (SIT.DAT) was chosen for the simulation. The ThermoChimie database provides an accurate and consistent set of data specifically chosen for use in modelling the behaviour of radionuclides in mine wastes, engineered barriers, and both near surface and deeper repositories (Duro et al. 2012). In instances where the ThermoChimie database lacked thermodynamic data for expected mineral phases, other databases such as the Lawrence Livermore National Laboratory (LLNL.DAT), MINTEQ.V4.DAT, WATEQ4F.DAT, and CEMDATA.DAT were used to supplement the thermodynamic data. The thermodynamic data added to the ThermoChimie database from other databases are shown in Table 3-5.

Table 3-5: Thermodynamic Data Added to the ThermoChimie Database

Database	Thermodynamic Data
LLNL.DAT	Element master species, species and mineral phases were added for beryllium, nitrite, titanium, vanadium, and thallium
MINTEQ.V4.DAT	Nickel molybdate ($NiMoO_4$) and ferric arsenate ($FeAsO_4$)
WATEQ4F.DAT	Surface complexation species
CEMDATA.DAT	Thaumasite and Kuzel's salt

The geochemical modelling was conducted by bringing the aqueous solutions to thermodynamic equilibrium and assessing chemical speciation and mineral solubility as follows:

- Non-electrically neutral input solutions were adjusted to neutrality through the addition of chloride, when anion deficient, or sodium, when cation deficient. Both are ions that are generally highly mobile and form highly soluble salts and, therefore, are unlikely to be associated with reactions involving the fate and transport of the key metals, metalloids, and complexes.
- Input oxygen partial pressure was controlled by fixing the oxidation-reduction potential (redox). To evaluate the sensitivity of mineral solubility to redox, a range of oxidation-reduction potential values were assigned, including -250 millivolts (mV), 0 mV, +250 mV, or +500 mV. This range of oxidation-reduction potential values were assumed to represent the oxidized nature of the CPB and CPT and anticipated reducing groundwater conditions at depth.
- The pH values of the solutions were calculated as an outcome of the equilibration.
- Temperature sensitivity was not evaluated, and solutions were assumed to be at 25°C to be consistent with thermodynamic data for minerals in the thermodynamic databases.

Key results of the geochemical speciation modelling are summarized below:

- Potential secondary mineral phases that can control the concentration of uranium in the porewater solutions of CPB and CPT includes calcium diuranate ($CaU_2O_7 \cdot 3H_2O$), uraninite (UO_2), and becquerelite ($Ca[UO_2]_6O_4[OH]_6 \cdot 8H_2O$). The potential for these secondary mineral phases to control uranium concentrations is a function of the solution redox, pH, and type of material. The precipitation of these secondary mineral phases will reduce the concentration of uranium in the simulated porewater solutions.
- Potential secondary mineral controls were also identified for aluminum, barium, calcium, iron, lead, manganese, molybdenum, nickel, nitrogen species, sulphur, and uranium. These secondary mineral phases include Friedel's salt ($Ca_2Al[OH]_6[Cl,OH] \cdot 2H_2O$), lead molybdate ($PbMoO_4$), manganese dioxide ($MnO_2$), manganite ($MnO[OH]$), monosulphoaluminate ($Ca_4Al_2[SO_4][OH]_{12} \cdot 6H_2O$), calcium arsenate ($(Ca[ASO_4])^-$ and nickel hydroxide ($Ni[OH]_2$). As with uranium, the potential for these secondary mineral phases to control the concentrations of the respective metals in solution is a function of the solution redox, pH, and type of material. In all cases, the precipitation of these secondary minerals will result in a reduction in the concentration of the respective metals.

The geochemical speciation modelling of estimated porewater qualities for the advective mass transfer components of the mine stopes and UGTMF source terms indicate the potential for secondary mineral phases to precipitate from solution and reduce the concentration of the elements (i.e., constituting the mineral phases) in the porewater solutions. Ignoring these controls in the source term derivation process is therefore a conservative bounding argument.

4 RESULTS

4.1 Primary Stopes Source Terms

Derived source terms for the primary stopes are provided in Table 4-1 and consist of estimated porewater quality in units of mg/L (unless indicated otherwise) and calculated diffusivity in units of m^2/s.

Table 4-1: Primary Stopes Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
pH	pH units	11	12	n/a	n/a	n/a
Alkalinity, as $CaCO_3$	mg/L	970	4,176	m^2/s	1.7×10^{-10}	1.8×10^{-10}
Ammonia, as N	mg/L	3.3	3.5	m^2/s	3.5×10^{-10}	3.5×10^{-10}
Chloride	mg/L	716	754	m^2/s	8.2×10^{-11}	1.6×10^{-10}
Fluoride	mg/L	5.8	6.5	m^2/s	1.9×10^{-10}	2.5×10^{-10}
Nitrite, as N[(a)]	mg/L	0.025	0.026	m^2/s	9.2×10^{-09}	9.2×10^{-09}
Nitrate, as N[(a)]	mg/L	0.020	0.020	m^2/s	1.5×10^{-07}	2.8×10^{-07}
Phosphate, as P	mg/L	0.027	0.028	m^2/s	3.6×10^{-08}	3.6×10^{-08}
Aluminum	mg/L	3.6	27	m^2/s	1.0×10^{-09}	1.5×10^{-09}
Antimony	mg/L	0.0085	0.01	m^2/s	1.5×10^{-09}	2.9×10^{-09}
Arsenic	mg/L	0.49	0.74	m^2/s	1.8×10^{-10}	3.4×10^{-10}
Barium	mg/L	0.030	0.059	m^2/s	7.8×10^{-10}	1.5×10^{-09}
Beryllium	mg/L	0.005	0.005	m^2/s	6.5×10^{-11}	9.0×10^{-11}
Boron	mg/L	0.44	0.50	m^2/s	2.4×10^{-10}	3.5×10^{-10}
Cadmium	mg/L	0.0029	0.0045	m^2/s	1.7×10^{-11}	3.1×10^{-11}
Calcium	mg/L	2,139	2,490	m^2/s	2.3×10^{-09}	4.5×10^{-09}
Chromium	mg/L	0.042	0.14	m^2/s	2.4×10^{-11}	4.3×10^{-11}
Cobalt	mg/L	0.0061	0.0125	m^2/s	3.7×10^{-11}	5.3×10^{-11}
Copper	mg/L	0.13	0.19	m^2/s	1.4×10^{-10}	1.6×10^{-10}
Iron	mg/L	0.11	1.6	m^2/s	1.1×10^{-09}	2.1×10^{-09}
Lead	mg/L	0.11	0.77	m^2/s	1.4×10^{-09}	2.8×10^{-09}
Lead-210	Bq/L	19	75	m^2/s	3.3×10^{-10}	3.3×10^{-10}
Magnesium	mg/L	1.6	1.8	m^2/s	6.3×10^{-10}	9.9×10^{-10}
Manganese	mg/L	0.025	0.025	m^2/s	6.8×10^{-11}	9.4×10^{-11}
Mercury	mg/L	0.0000038	0.000012	m^2/s	3.5×10^{-09}	4.5×10^{-09}
Molybdenum	mg/L	230	598	m^2/s	9.1×10^{-10}	1.8×10^{-09}
Nickel	mg/L	0.005	0.035	m^2/s	2.6×10^{-10}	4.4×10^{-10}
Polonium-210	Bq/L	3.5	4.2	m^2/s	2.9×10^{-09}	2.9×10^{-09}
Potassium	mg/L	103	389	m^2/s	1.9×10^{-10}	3.6×10^{-10}
Radium-226	Bq/L	276	288	m^2/s	2.9×10^{-10}	5.3×10^{-10}
Radium-228	Bq/L	6.6	19	m^2/s	1.8×10^{-10}	1.8×10^{-10}

Table 4-1: Primary Stopes Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
Selenium	mg/L	1.1	1.6	m^2/s	1.2×10^{-10}	1.3×10^{-10}
Silver	mg/L	0.0096	0.0195	m^2/s	7.0×10^{-12}	1.3×10^{-11}
Sodium	mg/L	3,048	3,267	m^2/s	7.7×10^{-11}	1.5×10^{-10}
Strontium	mg/L	2.9	3.4	m^2/s	4.4×10^{-10}	8.1×10^{-10}
Sulphate	mg/L	12,091	13,837	m^2/s	5.0×10^{-11}	8.7×10^{-11}
Thallium	mg/L	0.0104	0.0125	m^2/s	1.3×10^{-09}	2.1×10^{-09}
Tin	mg/L	0.005	0.005	m^2/s	6.5×10^{-11}	9.0×10^{-11}
Titanium	mg/L	0.399	1.13	m^2/s	6.8×10^{-10}	1.4×10^{-09}
Uranium	mg/L	0.017	0.123	m^2/s	9.9×10^{-08}	2.0×10^{-07}
Vanadium	mg/L	0.037	0.050	m^2/s	3.0×10^{-09}	5.9×10^{-09}
Zinc	mg/L	0.034	0.053	m^2/s	4.6×10^{-10}	8.2×10^{-10}

a) Data used in the source term derivation of nitrogen species for advection and diffusion components are based on materials that do not reflect the effects of residual blasting products on the ore chemistry and process plant circuit chemistry. The effect of nitrogen loading from residual blasting products on the mine water system was further assessed and quantified in the site-wide water balance/water quality model (TSD XVIII).

Bq/L = becquerels per litre; n/a = not applicable; N = nitrogen; P = phosphorus; $CaCO_3$ = calcium carbonate.

4.2 Secondary Stopes Source Terms

Derived source terms for the secondary stopes are provided in Table 4-2 and consist of estimated porewater quality in units of milligrams per litre (mg/L; unless indicated otherwise) and calculated diffusivity in units of m^2/s.

Table 4-2: Secondary Stope Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
pH	pH units	11	12	n/a	n/a	n/a
Alkalinity, as $CaCO_3$	mg/L	897	4,220	m^2/s	1.7×10^{-10}	1.8×10^{-10}
Ammonia, as N	mg/L	3.2	3.4	m^2/s	3.5×10^{-10}	3.5×10^{-10}
Chloride	mg/L	666	699	m^2/s	8.2×10^{-11}	1.6×10^{-10}
Fluoride	mg/L	5.5	6.2	m^2/s	1.9×10^{-10}	2.5×10^{-10}
Nitrite, as N[(a)]	mg/L	0.025	0.025	m^2/s	9.2×10^{-09}	9.2×10^{-09}
Nitrate, as N[(a)]	mg/L	0.021	0.021	m^2/s	1.5×10^{-07}	2.8×10^{-07}
Phosphate, as P	mg/L	0.027	0.028	m^2/s	3.6×10^{-08}	3.6×10^{-08}
Aluminum	mg/L	3.3	24	m^2/s	1.0×10^{-09}	1.5×10^{-09}
Antimony	mg/L	0.0088	0.0102	m^2/s	1.5×10^{-09}	2.9×10^{-09}
Arsenic	mg/L	0.64	1.1	m^2/s	1.8×10^{-10}	3.4×10^{-10}
Barium	mg/L	0.033	0.072	m^2/s	7.8×10^{-10}	1.5×10^{-09}
Beryllium	mg/L	0.005	0.005	m^2/s	6.5×10^{-11}	9.0×10^{-11}
Boron	mg/L	0.45	0.54	m^2/s	2.4×10^{-10}	3.5×10^{-10}
Cadmium	mg/L	0.0027	0.0045	m^2/s	1.7×10^{-11}	3.1×10^{-11}
Calcium	mg/L	2251	2566	m^2/s	2.3×10^{-09}	4.5×10^{-09}
Chromium	mg/L	0.04	0.23	m^2/s	2.4×10^{-11}	4.3×10^{-11}
Cobalt	mg/L	0.006	0.0174	m^2/s	3.7×10^{-11}	5.3×10^{-11}
Copper	mg/L	0.14	0.21	m^2/s	1.4×10^{-10}	1.6×10^{-10}
Iron	mg/L	0.108	1.6	m^2/s	1.1×10^{-09}	2.1×10^{-09}

Table 4-2: Secondary Stope Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
Lead	mg/L	0.10	1.4	m^2/s	1.4×10^{-09}	2.8×10^{-09}
Lead-210	Bq/L	17	72	m^2/s	3.3×10^{-10}	3.3×10^{-10}
Magnesium	mg/L	1.8	2.0	m^2/s	6.3×10^{-10}	9.9×10^{-10}
Manganese	mg/L	0.024	0.053	m^2/s	6.8×10^{-11}	9.4×10^{-11}
Mercury	mg/L	0.0000063	0.000016	m^2/s	3.5×10^{-09}	4.5×10^{-09}
Molybdenum	mg/L	218	558	m^2/s	9.1×10^{-10}	1.8×10^{-09}
Nickel	mg/L	0.007	0.068	m^2/s	2.6×10^{-10}	4.4×10^{-10}
Polonium-210	Bq/L	3.3	3.9	m^2/s	2.9×10^{-09}	2.9×10^{-09}
Potassium	mg/L	104	468	m^2/s	1.9×10^{-10}	3.6×10^{-10}
Radium-226	Bq/L	257	268	m^2/s	2.9×10^{-10}	5.3×10^{-10}
Radium-228	Bq/L	7.1	18	m^2/s	1.8×10^{-10}	1.8×10^{-10}
Selenium	mg/L	1.0	1.5	m^2/s	1.2×10^{-10}	1.3×10^{-10}
Silver	mg/L	0.0089	0.0184	m^2/s	7.0×10^{-12}	1.3×10^{-11}
Sodium	mg/L	2893	3205	m^2/s	7.7×10^{-11}	1.5×10^{-10}
Strontium	mg/L	2.8	4.0	m^2/s	4.4×10^{-10}	8.1×10^{-10}
Sulphate	mg/L	11,764	13,336	m^2/s	5.0×10^{-11}	8.7×10^{-11}
Thallium	mg/L	0.0102	0.0147	m^2/s	1.3×10^{-09}	2.1×10^{-09}
Tin	mg/L	0.005	0.005	m^2/s	6.5×10^{-11}	9.0×10^{-11}
Titanium	mg/L	0.388	1.07	m^2/s	6.8×10^{-10}	1.4×10^{-09}
Uranium	mg/L	0.017	0.123	m^2/s	9.9×10^{-08}	2.0×10^{-07}
Vanadium	mg/L	0.057	0.069	m^2/s	3.0×10^{-09}	5.9×10^{-09}
Zinc	mg/L	0.040	0.114	m^2/s	4.6×10^{-10}	8.2×10^{-10}

a) Data used in the source term derivation of nitrogen species for advection and diffusion components are based on materials that do not reflect the effects of residual blasting products on the ore chemistry and process plant circuit chemistry. The effect of nitrogen loading from residual blasting products on the mine water system was further assessed and quantified in the site-wide water balance/water quality model (TSD XVIII).

Bq/L = becquerels per litre; n/a = not applicable; N = nitrogen; P = phosphorus; $CaCO_3$ = calcium carbonate.

4.3 Underground Tailings Management Facility Source Terms

Derived source terms for the UGTMF are provided in Table 4-3 and consist of estimated porewater quality in units of mg/L (unless indicated otherwise) and calculated diffusivity in units of m^2/s.

Table 4-3: Underground Tailings Management Facility Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
pH	pH units	10	12	n/a	n/a	n/a
Alkalinity, as $CaCO_3$	mg/L	349	4,549	m^2/s	8.4×10^{-10}	1.5×10^{-09}
Ammonia, as N	mg/L	2.6	2.6	m^2/s	2.2×10^{-10}	2.4×10^{-10}
Chloride	mg/L	287	293	m^2/s	1.3×10^{-10}	3.3×10^{-10}
Fluoride	mg/L	3.7	3.8	m^2/s	6.9×10^{-09}	9.4×10^{-09}
Nitrite, as N[(a)]	mg/L	0.024	0.024	m^2/s	1.4×10^{-08}	1.4×10^{-08}
Nitrate, as N[(a)]	mg/L	0.023	0.023	m^2/s	1.7×10^{-07}	3.7×10^{-07}
Phosphate, as P	mg/L	0.026	0.026	m^2/s	1.7×10^{-08}	1.7×10^{-08}
Aluminum	mg/L	1.4	5.3	m^2/s	2.6×10^{-06}	1.4×10^{-04}

Table 4-3: Underground Tailings Management Facility Source Terms

Constituent	Units	Advection (Porewater Quality)		Units	Diffusivity	
		Base Case	Upper Case		Base Case	Upper Case
Antimony	mg/L	0.0104	0.0117	m^2/s	7.6×10^{-08}	1.2×10^{-07}
Arsenic	mg/L	1.7	4.1	m^2/s	2.0×10^{-10}	8.2×10^{-08}
Barium	mg/L	0.051	0.172	m^2/s	2.0×10^{-09}	2.2×10^{-08}
Beryllium	mg/L	0.004	0.004	m^2/s	5.0×10^{-09}	1.4×10^{-08}
Boron	mg/L	0.55	0.80	m^2/s	1.3×10^{-09}	3.5×10^{-09}
Cadmium	mg/L	0.0013	0.0046	m^2/s	5.2×10^{-10}	1.5×10^{-09}
Calcium	mg/L	3,085	3,138	m^2/s	7.6×10^{-10}	1.2×10^{-09}
Chromium	mg/L	0.025	0.88	m^2/s	8.6×10^{-11}	2.5×10^{-10}
Cobalt	mg/L	0.005	0.0544	m^2/s	1.2×10^{-09}	6.7×10^{-09}
Copper	mg/L	0.23	0.39	m^2/s	9.8×10^{-10}	2.2×10^{-09}
Iron	mg/L	0.089	1.1	m^2/s	9.0×10^{-08}	3.9×10^{-07}
Lead	mg/L	0.04	5.8	m^2/s	6.1×10^{-09}	2.6×10^{-08}
Lead-210	Bq/L	4.6	47	m^2/s	3.9×10^{-09}	6.5×10^{-09}
Magnesium	mg/L	3.1	3.2	m^2/s	8.7×10^{-09}	1.6×10^{-08}
Manganese	mg/L	0.020	0.264	m^2/s	5.9×10^{-09}	1.4×10^{-08}
Mercury	mg/L	0.000026	0.000045	m^2/s	2.4×10^{-09}	1.3×10^{-08}
Molybdenum	mg/L	133	263	m^2/s	1.2×10^{-09}	3.3×10^{-09}
Nickel	mg/L	0.02	0.311	m^2/s	5.4×10^{-10}	4.7×10^{-09}
Polonium-210	Bq/L	2.0	2.3	m^2/s	5.2×10^{-08}	9.2×10^{-08}
Potassium	mg/L	109	1,058	m^2/s	2.8×10^{-10}	1.3×10^{-09}
Radium-226	Bq/L	116	118	m^2/s	6.9×10^{-09}	2.1×10^{-08}
Radium-228	Bq/L	11	18	m^2/s	1.2×10^{-10}	1.2×10^{-10}
Selenium	mg/L	0.45	0.55	m^2/s	1.2×10^{-10}	1.2×10^{-09}
Silver	mg/L	0.0031	0.010	m^2/s	5.2×10^{-11}	1.4×10^{-10}
Sodium	mg/L	1,728	2,745	m^2/s	2.1×10^{-10}	1.1×10^{-09}
Strontium	mg/L	1.7	8.7	m^2/s	5.7×10^{-10}	7.5×10^{-10}
Sulphate	mg/L	9,315	9,577	m^2/s	3.5×10^{-10}	7.4×10^{-10}
Thallium	mg/L	0.0092	0.0312	m^2/s	1.2×10^{-09}	3.2×10^{-09}
Tin	mg/L	0.004	0.004	m^2/s	4.2×10^{-09}	1.4×10^{-08}
Titanium	mg/L	0.308	0.632	m^2/s	9.3×10^{-10}	2.4×10^{-09}
Uranium	mg/L	0.024	0.126	m^2/s	4.2×10^{-09}	2.3×10^{-08}
Vanadium	mg/L	0.21	0.21	m^2/s	5.8×10^{-10}	1.2×10^{-08}
Zinc	mg/L	0.089	0.573	m^2/s	8.2×10^{-09}	3.7×10^{-08}

a) Data used in the source term derivation of nitrogen species for advection and diffusion components are based on materials that do not reflect the effects of residual blasting products on the ore chemistry and process plant circuit chemistry. The effect of nitrogen loading from residual blasting products on the mine water system was further assessed and quantified in the site-wide water balance/water quality model (TSD XVIII).

Bq/L = becquerels per litre; n/a = not applicable; N = nitrogen; P = phosphorus; $CaCO_3$ = calcium carbonate.

4.4 Discussion

The derived source terms for the primary stopes, secondary stopes, and UGTMF are discussed in the context of the two mass transfer components. Key results of the advection source term components for the three disposal areas are summarized below:

- Estimated drainage chemistries for the primary and secondary stopes are very similar since CPB forms the dominant material type that will be disposed in these mine workings. Drainage chemistry for the UGTMF is different due to the inclusion of the process wastes and lower binder content.
- Estimated drainage chemistries for the underground mine stopes and UGTMF are generally characterized by highly alkaline drainage (i.e., pH greater than 10), sulphate-calcium-sodium ion dominated water, and elevated concentrations of metals and radionuclides.
- Alkalinity and pH are predicted to be higher for the underground mine stopes compared to the UGTMF. This relationship is due to the higher binder content needed for the high-strength CPB in the stopes, compared to the lower strength CPT that will be used to backfill the UGTMF.
- Elevated metal concentrations for the underground mine stopes and UGTMF are noted for aluminum, arsenic, cadmium, chromium, copper, iron, lead, molybdenum, selenium, silver, uranium, and zinc. These metals are elevated due to their presence in the neutralized leached residue and process wastes, as well as their solubility under alkaline drainage conditions. For most of these metals, the estimated concentrations are higher in the UGTMF compared to those of the primary and secondary stopes, except for aluminum, molybdenum, and selenium. The highest concentrations for aluminum, molybdenum, and selenium are estimated for the upper cases of the primary and secondary stopes, which have the highest alkalinity and pH values.
- Elevated concentrations of radium-226 are predicted in the estimated drainage chemistry for underground mine stopes and UGTMF. Estimated concentrations for lead-210, polonium-210, radium-226, and radium-228 are slightly higher in the primary and secondary source terms compared to the UGTMF source terms.

Key results of the diffusion components for all three disposal areas are summarized below:

- Estimated observed diffusivity values are similar for primary and secondary stopes since CPB forms the dominant material type that will be disposed in these mine workings. Observed diffusivity values for the UGTMF are generally much higher due to the inclusion of the process wastes and lower binder content. One exception to this observation is uranium, which has a higher observed diffusivity for the primary and secondary stopes.
- The highest observed diffusivity values are estimated for aluminum, antimony, barium, beryllium, iron, lead, magnesium, manganese, mercury, nitrate, nitrite, phosphate, polonium-210, radium-226, tin, uranium, vanadium, and zinc. In the case of aluminum, antimony, beryllium, cadmium, copper, iron, manganese, radium-226, tin, and zinc, the observed diffusivity values are more than two orders of magnitude higher in the UGTMF compared to those of the primary and secondary stopes.

5 SOURCE TERM UNCERTAINTIES AND VALIDATION

Predicted geochemical source terms are inherently uncertain, and the source terms derived for the mine stopes and UGTMF are subject to uncertainties. In general, results from predictive source term models should be considered as indicating long-term trends instead of providing absolute values (INAP 2009).

Key sources of uncertainty for the mine stopes and UGTMF source terms include the quality and relevance of input data, the representation of hydrogeochemical processes in the conceptual model, the limitations of the chosen modelling methods, and the estimation of mineral weathering rates. To reduce the effect of these uncertainties, conservative bounding arguments (e.g., constant source terms and initial mass transfer rates) were intentionally used in the source term derivation. These bounding arguments result in an overestimation of mass transfer rates and water quality predictions, and are expected to be sufficiently conservative to account for the uncertainties.

Furthermore, the proposed long-term disposal of tailings and process wastes in underground workings is a new concept in the Canadian uranium mining industry. Although the use of uranium tailings in CPB technology is not a new concept, the combination of process waste with cemented backfill and the use of an underground disposal strategy is new and unprecedented.

A literature review of published national and international documentation was conducted to find potential analogue sites where this type of uranium tailings and process waste management strategy was used. The literature review specifically targeted publicly available information on the geotechnical, geochemical, and radiological properties of CPB/CPT, disposal methods, and monitored drainage chemistry.

The literature review was conducted using Golder's internal literature database and external databases. Key components to the literature review included the following:

- Golder's technical literature tool, which is a component of an EBSCO information services subscription, was used to search for academic journal articles. The tool links to Golder's external journal subscriptions plus over 10,000 external databases that include various content providers (e.g., ScienceDirect and JSTOR). The tool also includes access to subscription databases such as Environment Complete, Sustainability Reference Center, and Energy & Power Source Complete. For any results in which Golder did not have full text access, a general search on Google and Google Scholar was conducted.
- A web-based search was also conducted for relevant articles and reports published by multinational organizations. These organizations include the Canadian Nuclear Safety Commission, International Atomic Energy Agency, South Africa Water Research Commission, and United States Department of Energy.
- Specific searches were conducted for publicly available data for known active and legacy uranium mines located in Australia (McArthur Basin), Canada (Athabasca Basin, and Bancroft and Elliot Lake areas), Germany (Erzgebirge Ore Mountain), Kazakhstan (Chu-Sarysu, Northern), Namibia (Rössing Mine) and South Africa (Witwatersrand Gold Basin).

The literature review was initially conducted using broad keywords (e.g., CPB, CPT, uranium, and UGTMF) to gain a general understanding of the relevant publicly available literature. Scientific journal articles and technical documents that matched the keyword searches were thoroughly reviewed and assessed for their applicability to the Project. The search was then refined to search for specific locations where CPB and/or CPT may be

produced and disposed underground. This general approach was conducted for each of the three main search tools listed above.

Results from the literature search reinforced the notion that cemented tailings technology from uranium mine sites is not a new technology and studies have been conducted to examine the applicability of storing cemented uranium tailings underground. Academic articles were available that documented the geotechnical properties of cemented backfill (i.e., material strength and hydraulic conductivity) produced from uranium tailings. For example, uniaxial compressive strength results for CPB samples are generally consistent with results for the tailings characterization program conducted for the Project (i.e., 0.5 to 1.5 megapascals using 4% to 6% OPC binder [Panchal et al. 2018]). Literature related to the disposal of CPT plus process wastes in underground mine workings were limited and an appropriate analogue site and or data was not found.

The literature search did not find documentation for water quality predictions or measured data related to leachable concentrations of constituents from CPB or CPT material produced from uranium tailings. Documents that did comment on geochemical properties were restricted to results related to the cemented material pH or the mineralogical characteristics of cemented material. No publicly available information was found that indicates that current uranium mining operations plan to cement and store their tailings and process wastes underground. Research on specific mines in Canada (e.g., Denison, Gunnar Mill, and Madawaska) documented the use of CPB, but water quality data and/or predictions were not available. The Jabiluka Uranium Mining Project in Australia also proposed to store cemented tailings underground; however, it was ultimately determined that this site would not be mined. Validation of the underground tailings and process waste source terms using suitable analogue sites or data is therefore not possible at this stage of the Project.

6 KEY FINDINGS

This technical support document to the EIS presents the methods and assumptions used to generate source term predictions for the disposal of tailings and process wastes in the underground mine stopes and UGTMF. Key findings from source term development are as follows:

- CPB and CPT will be disposed in the underground workings and these composite wastes consist of a combination of neutralized leach residue, process wastes, and cement binder. The geotechnical, geochemical, and radiological properties of these materials were determined through an extensive characterization process.
- The CPB and CPT materials primarily consist of the acid resistant minerals from the ore, have low hydraulic conductivity, are classified as non-potentially acid generating, and have alkaline leachable fractions of solutes and radionuclides. The CPB will be disposed in the primary and secondary mine stopes and used for plugging and capping of the disposal chambers of the UGTMF. The CPT will be disposed in the UGTMF.
- The release of solutes from CPB and CPT during Operations is not expected since no residual water is expected to be generated from the backfilled materials. Post-closure re-flooding of the mine will inundate the CPB and CPT disposal areas and two mass transfer mechanisms (i.e., advection and diffusion) will result in the release of constituents to the surrounding groundwater.
- Source term models were developed for the primary stopes, secondary stopes, and UGTMF. Individual source terms consist of two mass transfer components that are simulated using an engineering modelling approach supported by a purposely designed characterization program with empirical laboratory

measurements of key mass transfer processes. Source terms were developed to represent a range of binder strengths to account for an envelope of potential operating conditions.

- Given the complexity of the physical and chemical processes that determine the magnitude and rate of advective and diffusive mass transfer from the underground mine stopes and UGTMF, simplifying assumptions were used in the source term models to reduce the necessary parameters and/or variables to those that can be measured using applicable laboratory tests. Additional bounding arguments were made to establish a conservative case for the mine stopes and UGTMF source terms that intentionally overestimate the mass loading from these disposal areas. Specifically, source terms were developed assuming that mass transfer rates of constituents from the underground workings will be constant over time and leaching rates and leachate qualities are equivalent to peak values measured from the characterization program.
- The advection source term components for the underground mine stopes and UGTMF indicate that the drainage chemistries for the primary and secondary stopes are very similar due to the same CPB material and different to the UGTMF due to the inclusion of the process wastes and lower binder contents in the CPT.
- Estimated drainage chemistries are characterized by highly alkaline drainage (i.e., pH greater than 10), sulphate-calcium-sodium dominated water, and elevated metals and radionuclides. Elevated metal concentrations are noted for aluminum, arsenic, cadmium, chromium, copper, iron, lead, molybdenum, selenium, silver, uranium, zinc, radium-226, and lead-210.
- Estimated observed diffusivity values are similar for primary and secondary stopes and higher for UGTMF due to the inclusion of the process wastes and lower binder contents. One exception to this observation is uranium, which has a higher observed diffusivity for the primary and secondary stopes. The highest observed diffusivity values are noted for aluminum, antimony, barium, beryllium, iron, lead, magnesium, manganese, mercury, nitrate, nitrite, phosphate, polonium-210, radium-226, tin, uranium, vanadium, and zinc.
- Validation of the source term predictions are not possible due to a lack of suitable analogue sites or publicly available analogue data. As a result, the source terms were developed to be sufficiently conservative to account for input uncertainties as understood at the time of modelling. It is expected that further refinement and modification of the source terms will be conducted as further characterization, testing, and monitoring data become available.
- The source term predictions were used as input data in the groundwater solute transport model to evaluate the combined solute mass loading from waste disposal facilities (i.e., underground workings and waste rock disposal areas) to downgradient receptors. The reader is referred to the hydrogeology section of the EIS (Section 8) for more information on the application of these source term predictions.

CLOSING

Golder is pleased to submit this report to NexGen in support of the environmental assessment for the Rook I Project. For details on the limitations and use of information presented in this report, please refer to the Study Limitations section following this page. If you have any questions or require additional details related to this study, please contact the undersigned.

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Number C0230

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Discipline	Sk. Reg. No.	Signature
Geochemistry	58994	

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Rook I Project

Environmental Impact Statement

TSD XVI: Tailings Geochemical Characterization Report

GOLDER
MEMBER OF WSP

TAILINGS GEOCHEMICAL CHARACTERIZATION TECHNICAL SUPPORT DOCUMENT FOR THE ROOK I PROJECT

Prepared for:

NexGen Energy Ltd.

Prepared by:

Golder Associates Ltd.

March 2022

Executive Summary

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would include an underground mine and surface facilities to support the extraction and processing of uranium ore from the Arrow deposit. This technical support document to the Environmental Impact Statement details the geochemical characterization program of tailings, process wastes, binder, and cemented composite materials produced from pilot scale metallurgical testing of ore from the Arrow deposit.

The objectives of the geochemical characterization program were to:

- determine the geotechnical, geochemical, and radiological properties of tailings (neutralized leach residue), process wastes (gypsum precipitates and effluent precipitates), binder, and composite tailings materials; and
- evaluate the temporal geochemical and radiological leaching behavior of the individual and composite materials.

The characterization program was conducted for 17 different materials, including neutralized leach residue, process water, non-cemented process waste, binder, and cemented composite materials. The program was conducted using a range of standard and modified geotechnical, geochemical, and radiological test methods. The geochemical tests included a combination of static (one time) and kinetic (long-term) tests.

Key geotechnical findings from the characterization program are as follows:

- Neutralized leach residue and process waste samples are characterized by a higher hydraulic conductivity compared to cemented composite materials. The average leach residue and process waste hydraulic conductivity values are in the order of 10^{-07} m/s, and values for the cemented composite materials range from the order of 10^{-10} to 10^{-08} m/s.
- Composite materials with a high binder content are characterized by a hydraulic conductivity at least an order of magnitude lower than their corresponding low binder content materials.

Key geochemical findings from the characterization program are as follows:

- Neutralized leach residue consists mainly of acid-resistant minerals (e.g., quartz and aluminosilicates), and minerals detected in the gypsum precipitates and effluent precipitates are exclusively calcium sulphate minerals (e.g., gypsum and anhydrite). The mineralogy of the composite materials is representative of their individual components, with the addition of some carbonate and cementitious minerals (e.g., calcite and ettringite). No sulphide minerals were detected in the individual or composite materials.
- Neutralized leach residue and process waste samples are classified as potentially acid generating (PAG) due to their acidic pore water pH and low neutralization potential (NP). The composite materials generally contain an acid generation potential classification of uncertain or non-potentially acid generating (NPAG). High binder composite materials have a more basic paste pH due to the stored alkalinity in the material pore space from the addition of the cement binder.

- Leachable concentrations of major ions and dissolved metals are primarily driven by the mineralogical composition of the material. For example, leachable sulphate concentrations are highest in the effluent precipitate samples and aluminum concentrations are highest in the composite samples. Leachable dissolved metal concentrations are also influenced by the material pore water pH. For example, leachable lead concentrations are highest in the neutralized leach residue samples, which have an acidic pore water pH.
- The pore water pH of the composite materials is alkaline and generally remains alkaline for at least five pore volume replacements. Leachate pH values are influenced primarily by the amount of binder in the material, rather than the type of binder used. Leachable metal concentrations are also greatest when they are initially flushed and decrease as a function of pore volume replacement.
- Diffusive mass flux rates of all composite materials are highest during the initial leaching period and are generally two orders of magnitude greater than long-term mass flux rates. Diffusivity values for the composite materials vary over time according to the leach period and the remaining leachable concentration of the constituent.

Key radiological findings from the characterization program are as follows:

- The highest radioactivity values are measured in the composite samples with a low binder content. Radioactivity values from the short-term leach test indicate that some radioactivity is mobilized during the leaching event.
- Radionuclide species with the highest leachable concentrations in all samples are radium-226 and lead-210. The neutralized leach residue samples contain the highest leachable radionuclide concentrations.
- Leaching of radioactive species from the gypsum precipitates and effluent precipitates is lower compared to the neutralized leach residue and composite materials. Leachable concentrations of radionuclide species are also affected by binder content, where lead-210 concentrations are generally higher in the high binder samples and radium-226 concentrations are generally higher in the low binder samples.

Results from the characterization program were used in the consideration of management alternatives for tailings and process wastes, including the design of underground tailings and process waste disposal facilities. Results were also used in the development of geochemical source terms for selected disposal strategies. This geochemical characterization study ultimately supports the effects assessment for hydrogeology (EIS Section 8, Hydrogeology).

Abbreviations and Units of Measure

Abbreviation	Definition
1-D	one dimensional
3-D	three dimensional
ABA	acid base accounting
AP	acid potential
ASTM	American Society for Testing and Materials
$CaCO_3$	calcium carbonate
CPB	cemented paste backfill
CPT	cemented paste tailings
Golder	Golder Associates Ltd.
HCT	humidity cell test
HGNLR	high-grade neutralized leach residue
HUGP	high-uranium gypsum precipitates
LEAF	Leaching Environmental Assessment Framework
LUGP	low-uranium gypsum precipitates
MEND	Mine Environment Neutral Drainage
MGNLR	medium-grade neutralized leach residue
MTP	modified triaxial permeability
NexGen	NexGen Energy Ltd.
NPAG	non-potentially acid generating
NP	neutralization potential
NPR	neutralization potential ratio
OPC	ordinary Portland cement
PAG	potentially acid generating
Project	Rook I Project
QA/QC	quality assurance and quality control
SFE	shake flask extraction
SRC	Saskatchewan Research Council
TIC	total inorganic carbon
XRD	X-Ray Diffraction

Unit	Definition
%	percent
±	plus or minus
°C	degrees Celsius
µm	micron
Bq	becquerel
Bq/g	becquerels per gram
Bq/L	becquerels per litre
cm	centimetre
cm^3	cubic centimetre
g	gram
h	hour
kg	kilogram
kV	kilovolt

Unit	Definition
L	litre
m	metre
m/s	metres per second
m^2	square metre
m^2/s	square metres per second
meq/L	milliequivalents per litre
mg	milligram
mg/kg/wk	milligrams per kilogram per week
mg/L	milligrams per litre
$mg/m^2/s$	milligrams per square metre per second
mL	millilitre
mL/cm^3	millilitres per cubic centimetre
nA	nano ampere
s	second
t	tonne
wk	week
wt.%	weight percent

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1 INTRODUCTION

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would be located approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon (Figure 1-1). The Project would reside within Treaty 8 territory and the Métis Homeland. At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, along the upper Clearwater River system. Patterson Lake is at the interface of the Boreal Shield and Boreal Plain ecozones. Access to the Project would be from an existing road off Highway 955 (Figure 1-2), with on-site worker accommodation serviced by fly-in/fly-out access.

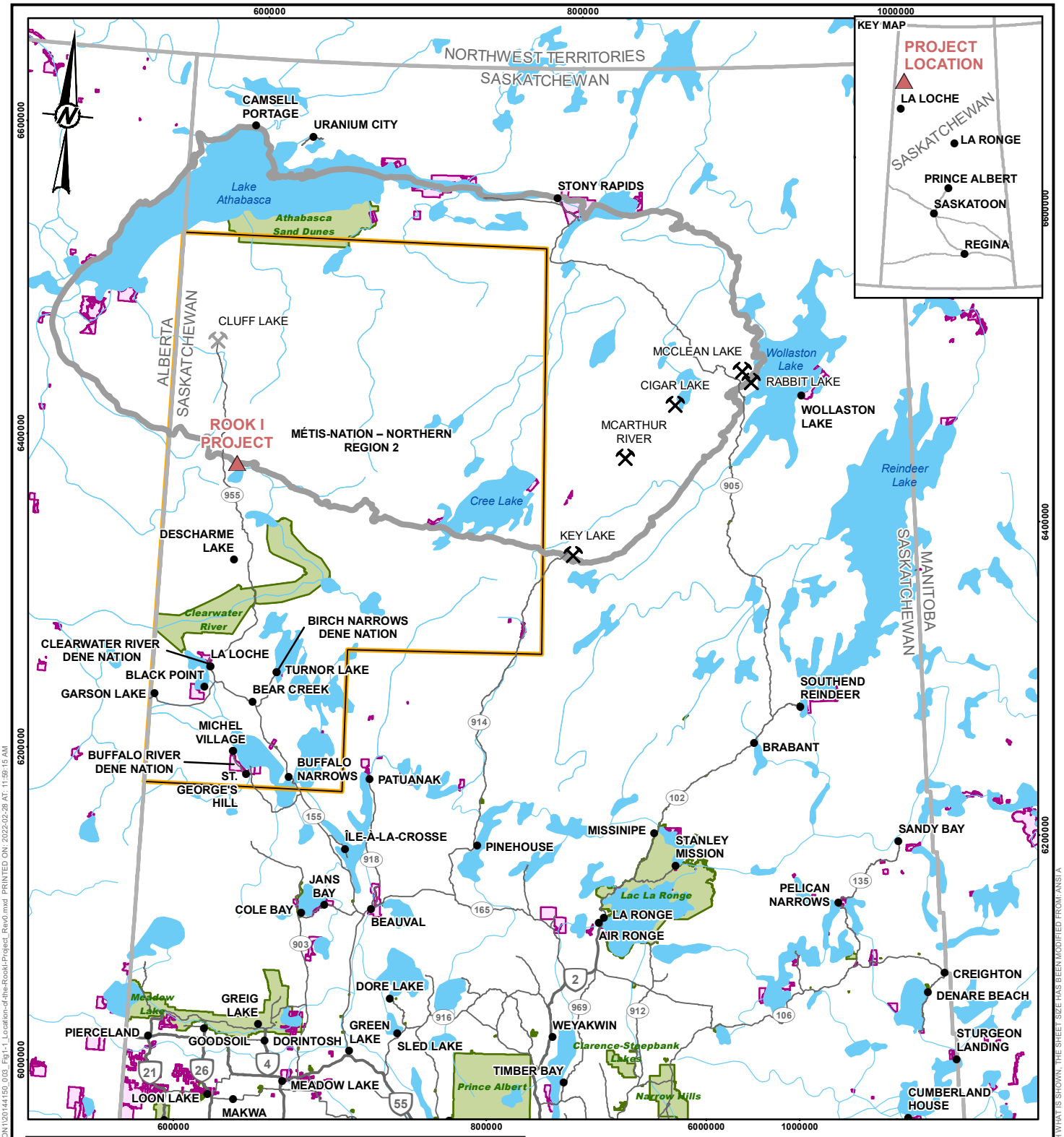
The Project would include the following key facilities to support the extraction and processing of uranium from the Arrow deposit for transportation off site (Figure 1-3):

- underground mine development;
- process plant buildings, including uranium concentrate packaging facilities;
- paste tailings distribution system;
- underground tailings management facility;
- potentially acid generating (PAG) waste rock storage area;
- non-potentially acid generating (NPAG) waste rock storage area;
- special waste rock[1] and ore storage stockpiles;
- surface and underground water management infrastructure, including water management ponds, effluent treatment plant, and sewage treatment plant;
- conventional waste management facilities and fuel storage facilities;
- ancillary infrastructure, including maintenance shop, warehouse, administration building, and camp;
- airstrip and associated infrastructure; and
- access road to Project and site roads.

Environmental baseline studies have been undertaken to gather information on the current conditions for the biophysical, cultural, and socio-economic environment around and in relation to the Project. These include air quality, acoustic and light, geology and soils, hydrogeology, hydrology, surface water quality, aquatic resources, vegetation, wildlife, cultural studies, and socio-economic factors.

This technical support document to the Environmental Impact Statement details the geochemical characterization program of tailings, process wastes, binder and composite materials from pilot scale metallurgical testing of ore from the Arrow deposit. Results from the geochemical characterization program were used in the development of predictive geochemical source terms for selected disposal strategies, which is reported in a separate Technical Support Document (TSD XVI, Tailings Source Term Derivation Report). The geochemical characterization program specifically supports the effects assessment for the hydrogeology component (EIS Section 8).

[1] Special waste rock is mine rock that is mineralized with insufficient grade to be considered ore (i.e., greater than 0.03% of triuranium octoxide [U_3O_8] and less than 0.26% U_3O_8). All special waste would be temporarily stored in the special waste rock stockpile.



LEGEND

- POPULATED PLACE
- URANIUM MINING FACILITY (ACTIVE)
- URANIUM MINING FACILITY (DECOMMISSIONED)
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN BOUNDARY
- INDIAN RESERVE
- PROVINCIAL PARKS
- WATERBODY
- PROJECT LOCATION
- MÉTIS NATION-SASKATCHEWAN NORTHERN REGION 2

0 100 200
1:3,500,000 KILOMETRES

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. PARKS OBTAINED FROM IHS MARKIT CANADA ULC.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT: NexGen Energy Ltd. — ROOK I PROJECT

TITLE: LOCATION OF THE ROOK I PROJECT

CONSULTANT: GOLDER, MEMBER OF WSP

PROJECT	20144150		PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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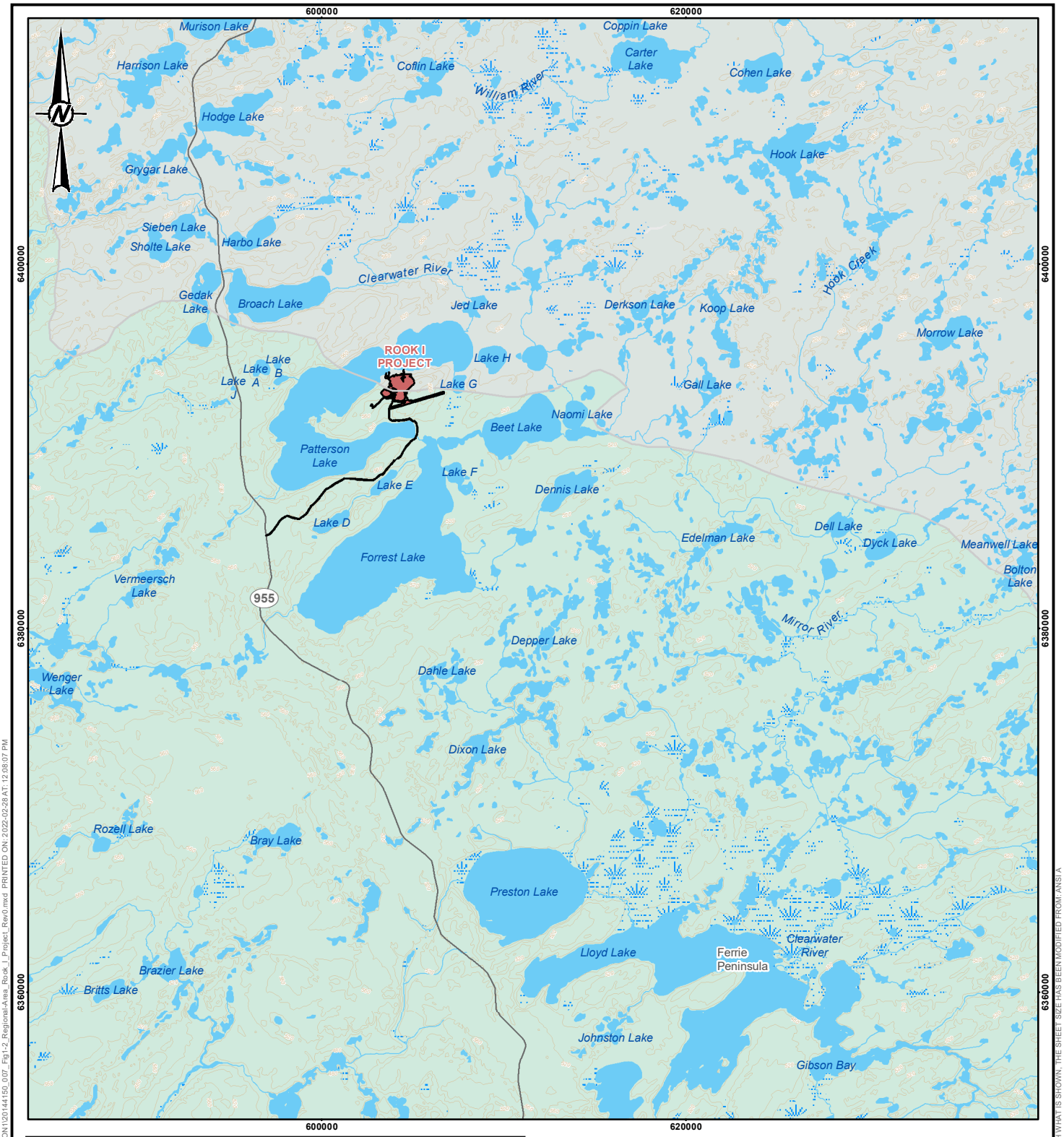

LEGEND

- ELEVATION CONTOUR (20 m INTERVAL)
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN
- WATERBODY
- WETLAND
- WOODED AREA
- PROPOSED PROJECT FOOTPRINT

0 5 10
1:300,000 KILOMETRES

REFERENCE(S)
1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021.
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT
NexGen Energy Ltd.

ROOK I PROJECT

TITLE

REGIONAL AREA OF THE ROOK I PROJECT

CONSULTANT
GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-2

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

25mm

0

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603000 604000 605000 606000 607000

6394000 6393000 6392000 6391000

Patterson Lake

Treated Effluent Pipe and Diffuser

Fresh Water Intake Pipe and Pumphouse

Underground Mine Access

Contact Water Pond #1

Treated Sewage Pipe and Outfall

Sewage Treatment Plant (STP)

Mine Terrace

PAG Runoff Collection Area

Process Plant

Ore Storage Stockpile

Effluent Treatment Plant (ETP)

Monitoring Ponds

Potentially Acid Generating (PAG) Waste Rock Storage Area

Mill Terrace

Fuel Storage Area

Special Waste Rock Stockpile

Camp

Contact Water Pond #2

Non-Potentially Acid Generating (NPAG) Waste Rock Storage Area

Communication Tower

West Bermed Runoff Collection Area

Omni-Directional Approach Lighting (ODAL) Corridor

Domestic/Industrial Waste Management Area

Airstrip

Explosives Magazine Storage

Batch Plant Sand and Aggregate Storage Area

Omni-Directional Approach Lighting (ODAL) Corridor

Gatehouse

Patterson Lake

LEGEND

- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WETLAND
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND

0 0.5 1

1:15,500 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

LAYOUT OF INFRASTRUCTURE AND FACILITIES FOR THE ROOK I PROJECT

CONSULTANT

GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JV	2020-03-13	SCALE AS SHOWN	REV. 0
GIS	NO	2022-03-18		
CHECK	JMC	2022-03-18	**FIGURE 1-3**	
REVIEW	MM	2022-03-18		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

0 25mm

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2 STUDY OBJECTIVES

The characterization program of tailings, process wastes, binder and cemented composite materials was conducted using a range of standard and modified geotechnical, geochemical, and radiological test methods.

The objectives of the characterization program were as follows:

- determine the geotechnical, geochemical, and radiological properties of individual and cemented composite tailings materials, process wastes and binders; and
- evaluate the temporal geochemical and radiological leaching behavior of the materials.

Results from the characterization program were used in the following Project components:

- consideration of management alternatives for tailings and process wastes, including the design of underground tailings and process waste disposal facilities; and
- development of geochemical source terms for the underground disposal of tailings and process wastes at the Project site.

3 CHARACTERIZATION PROGRAM

3.1 Approach

The characterization program began in 2019 and evolved with the Project design. Initially, a wide range of tailings and process waste samples were produced and characterized to allow for optimal flexibility during Project development. As the Project design progressed, the characterization program focused more strongly on the tailings and process waste materials that were most representative of the final waste management strategy and disposal facility design.

Results from the program were used to develop a range of composite materials that were later refined to represent the two general types of backfill materials described in the current mine plan. These backfill materials include cemented paste backfill (CPB) and cemented paste tailings (CPT). The CPB will consist of a mixture of neutralized leach residue, water, and binder and will be used to backfill the primary and secondary mine stopes. The CPB would contain different proportions of neutralized leach residue, water, and binder to achieve various targeted geotechnical strengths. The CPT would contain neutralized leach residue, water, process wastes, and binder and will be deposited in the underground tailings management facility chambers that have lower geotechnical strength requirements.

The selection of geotechnical, geochemical, and radiological test methods also evolved with the Project design and was adjusted to represent key mass transfer mechanisms associated with the disposal of CPB and CPT in an underground environment.

3.2 Sources and Description of Tailings and Process Waste Samples

All tailings and process waste samples, including composite samples, were prepared by the Saskatchewan Research Council (SRC) Analytical Laboratories. A metallurgical test program was conducted in 2018 and 2019 by the SRC using drill core samples from the Arrow deposit (NexGen 2021). The program included a bench test program, a pilot plant program, and paste backfill testing. The paste backfill testing program was conducted at SRC in 2019 under the supervision of Paterson & Cooke. The paste backfill program included geotechnical

and geochemical tests to characterize material properties of the tailings and process waste streams to design backfill CPT recipes. A detailed description of the metallurgical test program and associated results is provided by NexGen (2021).

The tailings and process waste materials produced from the metallurgical test program included the following:

- neutralized leach residue produced from processed high- and medium-grade triuranium octoxide (U_3O_8) drill core samples;
- gypsum precipitates (high and low uranium versions), produced as a product of solvent extraction pilot;
- effluent precipitates from the effluent treatment pilot plant, consisting of a mixture of both first- and second-stage precipitate filter cake;
- cement binder consisting of either ordinary Portland cement (OPC) or a 1:1 OPC and cement slag mixture; and
- process water associated with the high-grade and medium-grade neutralized leach residues.

These individual materials were used in the paste backfill testing program to produce composite materials to prove suitability of neutralized leach residue for paste production and to develop composite material designs. The targeted proportions of the various composite samples for the characterization program are summarized in Table 3-1. The composite sample recipes are equivalent for the samples used in the static geochemical tests and kinetic geochemical tests. A total of eight composite samples that were cured for 28 days were developed for the characterization program and four sample cylinders were produced per sample type.

Table 3-1: Mix Blend Ratios for Composite Samples

Sample Number	High Grade Neutralized Leach Residue (%)	Gypsum (%)	Precipitates (%)	OPC (%)	Slag (%)	Water (%)
1	57.5	0	0	2.5	0	40
2	44	0	0	16	0	40
3	57.5	0	0	1.25	1.25	40
4	44	0	0	8	8	40
5	41	0	16.5	2.5	0	40
6	31.4	0	12.6	16	0	40
7	30.9	14.2	12.4	2.5	0	40
8	23.7	10.9	9.5	16	0	40

OPC = ordinary Portland cement.

A description of the individual and composite materials included in the characterization program is provided in Table 3-2. Sample identifiers presented in Table 3-2 are used throughout the remainder of the text. Four replicate samples were analyzed for all materials, except the OPC and OPC / slag binder samples, where only one sample was analyzed for each. The geochemical analytical testing was completed by the SRC, while geotechnical and selected geochemical tests were conducted by SNC-Lavalin in Saskatoon.

Table 3-2: Materials Included in the Characterization Program

Sample Number	Sample ID	Sample Composition	Sample Type	Sample Description
n/a	MGNLR	Individual material	Neutralized leach residue tailings	Medium-grade neutralized leach residue
	HGNLR			High-grade neutralized leach residue
	MG-PW		Process water	Process water produced from medium-grade neutralized leach residue
	HG-PW			Process water produced from high-grade neutralized leach residue
	LUGP		Non-cemented process waste	Low-uranium gypsum precipitate containing <300 ppm uranium
	HUGP			High-uranium gypsum precipitate containing >300 ppm uranium
	MPPT			Effluent precipitates (mixture of first- and second-stage precipitate filter cake)
	OPC		Reagent	Binder material consisting of OPC
	OPC/SLAG			Binder material consisting of a 1:1 (w/w) OPC and slag mixture
1	HLC	Composite material	CPB	High-grade neutralized leach residue with a low OPC binder content
2	HHC			High-grade neutralized leach residue with a high OPC binder content
3	HLC-S			High-grade neutralized leach residue with a low OPC / slag binder content
4	HHC-S			High-grade neutralized leach residue with a high OPC / slag binder content
5	HPLC		CPT	High-grade neutralized leach residue and effluent precipitates with a low OPC binder content
6	HPHC			High-grade neutralized leach residue and effluent precipitates with a high OPC binder content
7	HHGPLC			High-grade neutralized leach residue, high-uranium gypsum precipitates and effluent precipitates with a low OPC binder content
8	HHGPHC			High-grade neutralized leach residue, high-uranium gypsum precipitates and effluent precipitates with a high OPC binder content

>= greater than; <= less than; n/a = not applicable; ppm = parts per million; OPC = ordinary Portland cement; CPB = cemented paste backfill; CPT = cemented paste tailings; w/w = weight per unit weight.

4 METHODS

The selection of geotechnical, geochemical, and radiological test methods varied as the Project design evolved. The selected test methods aimed to provide relevant geotechnical, geochemical and radiological properties of a range of waste materials to support material design and selection, to support the design of waste management facilities and to support the development of geochemical source terms.

The selected test methods focus on those material properties that specifically influences the mobilization of contaminants from the waste materials. Furthermore, the material properties were further used in the development specialized kinetic tests aimed at empirical measurement of key mass transfer rates used on the geochemical source terms.

4.1 Geotechnical Testing

Geotechnical test methods were chosen to provide physical properties of materials that determines the pore water volume of material and the rate at which water can move through the waste material. Table 4-1 provides a description of the selected geotechnical test methods and Table 4-2 summarizes testing completed for each of the individual and composite materials. The American Society for Testing and Materials (ASTM) methods used for the geotechnical tests are referenced at the end of this document.

Table 4-1: Geotechnical Test Description and Methods

Test	Purpose	Method
Specific Gravity	Determine the ratio of solid particle unit weight to the unit weight of water. Values used in calculations of void ratios, degree of saturation, and material density. Material density used in calculation of mass loading rates from short-term leach tests and kinetic tests.	ASTM D854-14 Standard Test Methods for Specific Gravity of Soil Solids by Water Pycnometer
Particle Size Distribution	Quantitative determination of the distribution of particle size of the fine-grained portion of soils. Particle size distribution was used to evaluate the reactivity of materials (<2 mm fraction) and the specific reactive surface area of the material.	ASTM D7928-12 Standard Test Method for Particle Size Distribution of Fine-Grained Soils using the sedimentation (hydrometer) analysis
Porosity	Measurement of the volume of open space within a material. The porosity of the materials was used in the development of the modified triaxial permeability tests to define pore water volumes.	Calculated value
Moisture Content	Determination of the water content by mass of material. The moisture content of the material was used to evaluate the potential for each material to store water in its pore space.	ASTM D2216-10 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
Consolidation	Determination of consolidation in gypsum precipitates. The consolidation testing was used to evaluate the potential for the cemented paste tailings and process wastes to undergo differential settlement and cause cracking and/or fracturing	ASTM D2435 Standard Test Methods for One-Dimensional Consolidation Properties of Soils Using Incremental Loading
Triaxial Permeability Test	Measurement of hydraulic conductivity of water-saturated porous materials. The hydraulic conductivity of the materials determines the rate of water movement through the material and was used in the development of the modified triaxial permeability tests and the groundwater solute transport model.	ASTM D5084 Standard Test Methods for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter

< = less than; ASTM = American Society for Testing and Materials.

Table 4-2: Geotechnical Testing Completed for Individual and Composite Waste Samples

Sample ID	Specific Gravity	Particle Size Distribution	Moisture Content	Porosity	Consolidation	Triaxial Permeability Test
MGNLR	✓	✓	✓	×	×	✓
HGNLR	✓	✓	✓	×	×	✓
LUGP	✓	×	✓	×	✓	✓
HUGP	✓	×	✓	×	✓	✓
MPPT	✓	×	✓	×	×	✓
OPC	✓	×	×	×	×	×
OPC / SLAG	✓	×	×	×	×	×
HLC	×	×	✓	✓	×	✓
HHC	×	×	✓	✓	×	✓
HPLC	×	×	✓	✓	×	✓
HPHC	×	×	✓	✓	×	✓
HHGPLC	✓	×	✓	✓	×	✓
HHGPHC	×	×	✓	✓	×	✓
HLC-S	×	×	✓	✓	×	✓
HHC-S	×	×	✓	✓	×	✓

✓ = yes; × = no.

4.2 Geochemical Testing

The selected geochemical tests consisted of a series of static and kinetic tests. Static tests are designed to assess the general physical and geochemical characteristics of a material, whereas kinetic tests are designed to evaluate mineral reactivity over time. Most of the geochemical tests conducted for the characterization program are standard tests that are typically employed in geochemical characterization programs (MEND 2009; INAP 2009). In some cases, the tests were modified to better reflect Project-specific conditions. For example, modified triaxial permeability (MTP) tests were conducted to better understand leachate chemistry of the cemented materials that could not undergo a traditional humidity cell test (HCT) due to their low hydraulic conductivity. The shake flask extraction (SFE), MTP, and Leaching Environmental Assessment Framework (LEAF) tests were directly used in the source term calculations for the underground disposal of tailings (TSD XV)

The static and kinetic tests conducted as part of the characterization program are summarized in Table 4-3, and detailed descriptions are provided for selected tests in subsequent subsections. The acid base accounting (ABA) methods are described in further detail in the subsequent subsection due to the detailed nature of the test. The MTP and LEAF tests are also described in further detail in subsequent subsections to elaborate on these non-standard testing procedures for source term development. The individual and composite materials analyzed for each static and kinetic test are summarized in Table 4-4.

The SFE leachate results were analyzed to identify soluble metals that could be readily leached from the test materials. The results were also compared to bulk metal concentrations to identify constituents that required further consideration as part of the characterization program and source term development.

Sulphide-sulphur and neutralization potential depletion calculations were also completed for the HCTs to assess mineral weathering rates within the neutralized leach residue material. The calculations were completed under the assumption that sulphate, calcium, and magnesium concentration trends are a direct result of sulphide oxidation and carbonate mineral neutralization.

Table 4-3: Geochemical Test Descriptions and Methods

Test	Type	Purpose	Method
Mineralogy	Static	Identify potential mineral sources of acid generation, acid neutralization, and metal leaching.	Quantitative Evaluation of Minerals by Scanning Electron Microscopy for the gypsum precipitates. Operating conditions were set to 15 kV and 10 nA beam current and data were collected in Particle Mineral Analysis mode with 5 µm point spacing. Quantitative Rietveld XRD for all other samples. Samples were irradiated with copper K(alpha) radiation (λ=1.54056Å).
ABA	Static	Develop estimates of the potential for acid generation based on the balance between acid producing and acid neutralizing minerals.	Detailed in Section 4.2.1, Acid Base Accounting.
Bulk metals	Static	Determine the total amount of metals in the solid phase of samples.	Aqua regia digestion with ICP-MS analysis.
Whole rock oxides	Static	Determine the concentrations of major oxide species.	X-Ray fluorescence lithium metaborate fusion.
SFE	Static	Develop initial estimates of metal leaching from a crushed sample when mixed in distilled water.	MEND 2009 Manual with a 3:1 liquid to solid ratio. Cations determined by ICP-MS analysis.
Process Water Quality	Static	Determine quality of process water produced from high-grade and medium-grade neutralized leach residue.	Cations determined by ICP-MS analysis.
MTP test	Kinetic	Evaluate pore water quality evolution as a function of pore water replacement.	Detailed in Section 4.2.3, Leaching Environmental Assessment Framework Test.
HCT	Kinetic	Assess acid generation and metal leaching reaction rates under aerobic weathering conditions.	ASTM D5744-99 Standard Test Method for Accelerated Weathering of Solid Materials Using a Modified Humidity Cell. Cells were initiated in August 2019 and continue to run at the time of writing. pH, conductivity, calcium, magnesium, and sulphate analyzed weekly and trace metals analyzed every four weeks.
LEAF test	Kinetic	Assess mass release of inorganic analytes under diffusion-controlled mass release conditions.	LEAF Method 1315 Mass Transfer Rates of Constituents in Monolithic or Compacted Granular Materials Using a Semi-Dynamic Tank Leaching Procedure. High binder samples conducted using equipment for monolithic samples. Low binder samples conducted using equipment for compacted granular samples.

ICP-MS = Inductively Coupled Plasma-Mass Spectrometry; LEAF = Leaching Environmental Assessment Framework; HCT = humidity cell test; MTP = modified triaxial permeability; ABA = acid base accounting; SFE = shake flask extraction; XRD = X-Ray Diffraction; ASTM = American Society for Testing and Materials; nA = nano ampere.

Table 4-4: Geochemical Testing Completed for Individual and Composite Waste Streams

Sample ID	Mineralogy	ABA	Bulk Metals	Whole Rock Oxides	SFE	Process Water	MTP	HCT	LEAF
MGNLR	✓	✓	✓	✓	✓	✓	×	✓	×
HGNLR	✓	✓	✓	✓	✓	✓	×	✓	×
LUGP	✓	✓	✓	✓	✓	×	×	×	×
HUGP	✓	✓	✓	✓	✓	×	×	×	×
MPPT	✓	✓	✓	✓	✓	×	×	×	×
OPC	×	✓	✓	✓	✓	×	×	×	×
OPC / SLAG	×	✓	✓	✓	✓	×	×	×	×
HLC	✓	✓	✓	✓	✓	×	✓	×	✓
HHC	✓	✓	✓	✓	✓	×	×	×	✓
HPLC	✓	✓	✓	✓	✓	×	✓	×	✓
HPHC	✓	✓	✓	✓	✓	×	×	×	✓

Table 4-4: Geochemical Testing Completed for Individual and Composite Waste Streams

Sample ID	Mineralogy	ABA	Bulk Metals	Whole Rock Oxides	SFE	Process Water	MTP	HCT	LEAF
HHGPLC	✓	✓	✓	✓	✓	×	✓	×	✓
HHGPHC	✓	✓	✓	✓	✓	×	×	×	✓
HLC-S	✓	✓	✓	✓	✓	×	✓	×	✓
HHC-S	✓	✓	✓	✓	✓	×	×	×	✓

ABA = acid base accounting; MTP = modified triaxial permeability; SFE = shake flask extraction; HCT = humidity cell test; LEAF = Leaching Environmental Assessment Framework; ✓ = yes; × = no.

4.2.1 Acid Base Accounting

Acid base accounting was performed to evaluate the acid generation potential of the materials. The parameters measured and calculated during the analysis are summarized in Table 4-5. Analysis was conducted according to the methods provided in Mine Environment Neutral Drainage (MEND 2009).

Table 4-5: Acid Base Accounting Analytical Parameters and Calculations

Parameter	Acronym	Method
Paste pH	n/a	pH of a slurry of solid sample and deionized water
Total sulphur	S	Leco furnace
Sulphate-sulphur	SO_4	React with hydrochloric acid to remove acid-soluble sulphate minerals and measure residue by Leco furnace
Sulphide-sulphur	$S[S^{2}]$	$S[S^{2}]$ = total sulphur - sulphate sulphur
Total inorganic carbon	TIC	Leco furnace
Modified Sobek bulk neutralization potential	Bulk NP	React with hydrochloric acid at 20°C for 24 hours followed by reverse titration
Carbonate neutralization potential	CO_3-NP	Mass carbon (mg) x 8.34 / Weight of sample (g)
Acid potential	AP	$S[S^{2-}]$ x 31.25
Neutralization potential ratio	NPR	NPR = NP/AP

n/a = not applicable.

Paste pH results are used to assess the stored acidity generated from the dissolution of soluble minerals present in a sample.

The three sulphur species assessed in this program include sulphide-sulphur, sulphate-sulphur, and total sulphur. Acid potential (AP) represents the bulk amount of acidity a sample can produce and was calculated assuming that all sulphide minerals are pyrite.

The modified Sobek bulk neutralization potential (NP) represents the amount of acidity that a sample can potentially consume or neutralize. The bulk NP was measured by acidifying the sample with hydrochloric acid and then performing a reverse titration. The carbonate NP is a calculated value that represents the bulk amount of acidity that a sample can potentially consume through the dissolution of carbonate minerals and was calculated from the total inorganic carbon (TIC) concentration. The ratio of carbonate NP to bulk NP was calculated for each sample to qualitatively evaluate the mineralogical sources of NP.

The ratio of NP to AP, referred to as the neutralization potential ratio (NPR), was used to classify the acid generation potential of each sample. In this report, bulk NP was used to calculate NPR. The guidelines for interpretation of NPR are presented in Table 4-6 and are based on criteria outlined in MEND (2009).

Table 4-6: Acid Generation Potential Criteria

Acid Generation Potential	Classification Criterion	Description
PAG	NPR <1	Likely to generate acidity unless sulphide minerals are non-reactive
Uncertain	1 ≤ NPR <2	Neither clearly acid generating nor acid consuming
NPAG	NPR ≥ 2	Acid consuming; low acid generation potential

<= less than; ≤ = less than or equal to; ≥ = greater than or equal to; NPAG = non-potentially acid generating; PAG = potentially acid generating; NPR = neutralization potential ratio.

4.2.2 Modified Triaxial Permeability Test

The MTP testing was conducted to obtain an estimate of pore water quality and examine how pH and metal concentration changes as a function of pore volume replacement. Low binder samples were initially better suited for this test due to their higher hydraulic conductivity resulting in higher advective flow during the test. MTP testing of high binder variants of the same materials are ongoing at the time of writing.

The MTP analytical approach is fundamentally based on ASTM D5084 – *Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using Flexible Wall Permeameter*. The permeameter apparatus was adjusted to capture the permeate using a one-directional flow approach. The permeameter apparatus was also flushed with deionized water at the lowest possible flow rate to obtain enough samples at the smallest increment that would provide sufficient volume for analysis. The sampling procedure was developed to collect samples over ranges of pore volume replacements as follows:

- 0 and 1 pore volume replacement(s);
- 2 and 5 pore volume replacements; and
- 5 pore volume replacements and greater.

Four replicate samples were submitted for 0 to 1 pore volume replacements and two replicate samples were submitted for all other intervals. The pore volume samples were analyzed for pH by electrode and dissolved trace metals by ICP-MS. Major ions were not analyzed due to the limited volume of leachate produced. The MTP procedure was conducted by SNC-Lavalin and chemical analysis of the samples occurred at the SRC laboratory.

4.2.3 Leaching Environmental Assessment Framework Test

The LEAF test method 1315 (USEPA 2017) is designed to provide mass transfer rates of inorganic analytes contained in a monolithic (3-D) or compacted granular (1-D) material under diffusion-controlled release conditions. The method requires continuous leaching of water-saturated monolithic or compacted granular material in a tank filled with reagent water with a periodic renewal of the water. The sample vessel and sample dimensions are chosen such that the sample is fully emersed in reagent water and the samples are in contact with the reagent water at a liquid to surface area ratio of 9 ± 1 mL/cm^2. The leaching solution is replaced with new reagent water for at least nine pre-determined intervals.

The low binder composite samples were set-up according to the dimensions specified for compacted granular materials and the high binder samples were set-up according to the dimensions specified for monolithic materials. At the end of each leach interval, the sample was freely drained, and the eluent solution was analyzed for the following parameters:

- General chemistry: pH, acidity, alkalinity, conductivity, hardness and total dissolved solids.
- Major ions: Ammonia, chloride, fluoride, nitrate, nitrite, phosphate and sulphate.
- Trace metals: Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, strontium, thallium, tin, titanium, uranium, vanadium and zinc.
- Radioactivity and radionuclides: Gross alpha activity, gross beta activity, lead-210, polonium-210, radium-226 and radium-228.

The concentration results were used to calculate mean interval flux in units of mg/m^2 per leaching interval and observed diffusivity in units of m^2/s per leaching interval, according to the standard equations provided in USEPA (2017).

4.3 Radiological Testing

Two types of radiological tests were conducted on solid and leachate samples: measurement of radioactivity and measurement of radiochemical speciation of radionuclides. Radiological parameters that were measured on various solid and leachate samples are summarized in Table 4-7.

Table 4-7: Radiological Test Descriptions

Measurement	Parameters	Method	Samples Analyzed
Radioactivity	Gross alpha activity, gross beta activity	Gas Flow Proportional Counting	Solid sample before SFE testing Residue solid sample after SFE testing SFE leachate LEAF test eluent Residue solid sample after LEAF testing Process water from high- and medium-grade leach residues
Radiochemical Speciation (Liquids)	Lead-210, Polonium-210, Radium-226, Radium-228	Beta Counting of the Bismuth-210; Successor Product (Lead-210); Alpha Spectroscopy (Polonium-210 and Radium-226); Gas Flow Proportional Counting (Radium-228)	SFE leachate LEAF test eluent Process water from high- and medium-grade leach residues
Radiochemical Speciation (Solids)	Potassium-40, Radium-226, Thorium-230, Thorium-232, Uranium-234, Uranium-235, Uranium-238	Alpha Spectroscopy (Radium-226), Calculation (Thorium-232 and uranium species)	Solid sample before SFE testing Residue solid sample after SFE testing

SFE = shake flask extraction; LEAF = Leaching Environmental Assessment Framework.

4.4 Quality Assurance and Quality Control

A quality assurance and quality control (QA/QC) framework was developed for the characterization program and was applied to all analytical results. The QA/QC program focused on the sample preparation procedures and

analytical tests. Table 4-8 provides a summary of the QA/QC framework for the tailings characterization program.

The representativity of the ore samples used to generate the composite medium- and high-grade metallurgical pilot test samples are indicated to be representative of the range of ore grade in the Arrow deposit (i.e., extraction NexGen 2018). Equivalency assessment of metallurgical test procedures to project process design (extraction rates, waste volumes and characteristics, process methodology, chemical use) was also provided by NexGen (2018).

Table 4-8: Quality Assurance and Quality Control Framework

Activity	QA Aspect	Requirements
Sample preparation	Splitting and compositing of samples	Use standard methods and equipment
		Document all procedures with emphasis on any deviations from standard methods
		Use unique sample numbers for each sample and duplicate
		Create four sample replicates of each tailings, tailings composite, and process waste sample
Analytical testing	Analytical method	Use standard methods and equipment
		Testing of four replicate samples to determine precision/repeatability and sample homogeneity
		Follow laboratory QC program for all analytical apparatus
		Provide laboratory QA/QC report including results of reference materials, control samples, duplicates, sample spikes, and ISO/IEC 17025 accreditation

QA = quality assurance; QC = quality control; ISO/IEC = International Organization for Standardization/International Electrotechnical Commission.

Analytical results were reviewed within two weeks of receipt and results were imported into the master database only if applicable QA/QC criteria were met (Table 4-9). Descriptive statistics were performed on all samples to calculate mean and median values among replicate samples and trend analyses were used to evaluate variability over time. Results that were considered outliers were flagged in the master database and discussed with the laboratory.

Table 4-9: Quality Assurance and Quality Control Criteria

Test Type	QA/QC Framework	Acceptable Limits
All water chemistry	Charge balance error is within acceptable limits	±10%
ABA	Sulphate-sulphur and sulphide-sulphur results are less than or equal to total sulphur results	±10%
	NP does not exceed maximum value indicated by fizz rating acid strength and volume guidelines in MEND	MEND (2009)
Bulk Metals	Relative percent difference for uranium among replicates is within acceptable limits (for purposes of examining sample homogeneity)	10%
Whole rock	Sum of oxides and loss on ignition is within acceptable limits	98% to 103%
LEAF	Liquid to surface area ratio is maintained at 9 ± 1 mL/cm^2	9 ± 1 mL/cm^2
	Sample remains intact through testing	Assessed on a case-by-case basis

QA/QC = quality assurance and quality control; ABA = acid base accounting; NP = neutralization potential; MEND = Mine Environment Neutral Drainage; HCT = Humidity Cell Test; LEAF = Leaching Environmental Assessment Framework; ± = plus or minus.

4.4.1 Laboratory Internal Quality Assurance and Quality Control

Saskatchewan Research Council Analytical is accredited by the Canadian Association for Laboratory Accreditation for specific tests listed in the scope of accreditation approvals. All procedures, facilities, and methods conform to ISO/IEC 17025:2017, the internationally recognized standard. Details on SRC accreditation and internal QA/QC processes are provided in Appendix A, SRC Certificates.

Quality control was maintained for all analytical apparatus at SRC with certified reference material used to track analytical drift, data accuracy, and precision. Independent of the QA/QC samples of Golder Associates Ltd. (Golder), standards were inserted into sample batches at regular intervals by SRC. Standards used include LS4/MA1B, SY3, BL-2a, BL-4a, BL-5, and SRCUO2 (1.59% uranium concentrate), a standard produced in-house at the laboratory. In addition, samples were regularly analyzed in duplicate.

All quality control results were within specified limits and all processes performed at the laboratory were subject to an audit program, which was performed by approved trained professionals.

5 RESULTS

5.1 Quality Assurance and Quality Control Assessment

5.1.1 Laboratory Internal Quality Assurance and Quality Control Results

All analytical data complied with the QA/QC criteria outlined in Table 4-9, except for the data points noted below.

The following samples were flagged as part of the QA/QC process and removed from the master database:

- Results for all parameters (pH, sulphate, calcium, magnesium) analyzed in HCT samples HGNLR-2-9 and MGNLR-2-9 were considered outliers within their own set of replicate samples. It was suspected these samples may have been mislabelled (HGNLR-2-9 was labelled MGNLR-2-9 and vice versa) and were subsequently removed from the master database. The removal of these samples did not affect the evaluation of kinetic trends since there were sufficient data points for regression analyses of trends.

The following samples were flagged as part of the QA/QC process, but were not removed from the master database for reasons provided below:

- The sum of whole rock oxides and loss on ignition was less than 98% in the following samples: LUGP 1-4, HUGP 1-4, MPPT 1-4, HPHC 3-4, HHGPLC 1-4, and HHGPHC 1-4. The higher loss on ignition is related to the higher moisture content of these materials which are in turn associated with the inclusion of gypsum and/or anhydrite in the materials. These samples remained in the database because the higher loss on ignition is a result of material properties as opposed to analytical error.
- The charge balance error exceeded acceptable limits for the samples listed in Table 5-1. The HCT and LEAF test samples remained in the database because the charge balance was thought to be mainly a result of the low ion concentration in these samples (less than 1 meq/L).
- The OPC binder replicate samples contained an NP value that exceeded the maximum value indicated by fizz rating. These two samples were not removed from the master dataset because the carbonate NP value did not exceed the maximum value indicated by fizz rating and was deemed acceptable.

- The liquid to surface area ratio was not maintained at 9 ± 1 mL/cm^2 in the following LEAF test samples: HPLC-1-L-1, HPLC-2-L-1, HPLC-3-L-1, HPLC-4-L-1, HHGPLC-1-L-1, HHGPLC-2-L-1, HHGPLC-3-L-1, HHGPLC-4-L-1, HHGPLC-4-L-4, HHGPHC-4-L-11, HLC-S-L-1, HLC-S-2-L-1, HLC-S-3-L-1, and HLC-S-4-L-1. This deviation was deemed to be an inherent limitation of the test for the low binder samples at the first leach event due to the challenges encountered at test initiation related to sample swelling and flaking. The samples remained in the master database and the non-compliance was considered in the interpretation of the data.

Table 5-1: Leachate Solutions with Charge Balance Exceeding Acceptable Limits

Test	Sample IDs
SFE	■ HHC-S-1, HHC-S-2, HHC-S-3, HHC-S-4 ■ OPC / SLAG
HCT	■ MGNLR-3-8, MGNLR-4-12, MGNLR-4-16, MGNLR-4-20, MGNLR-4-24 ■ HGNLR-1-40, HGNLR-2-40, HGNLR-3-40, HGNLR-1-44, HGNLR-2-48, HGNLR-1-52, HGNLR-2-52, HGNLR-3-52, HGNLR-4-52, HGNLR-1-56, HGNLR-2-56, HGNLR-3-56, HGNLR-4-56, HGNLR-1-60, HGNLR-2-60, HGNLR-3-60, HGNLR-4-60, HGNLR-1-64, HGNLR-2-64, HGNLR-3-64, HGNLR-4-64
LEAF	■ HPHC-2-L-1, HPHC-3-L-1, HPHC-1-L-14, HPHC-2-L-14, HPHC-3-L-14, HPHC-4-L-14, HPHC-4-L-15, HPHC-1-L-16, HPHC-2-L-16, HPHC-3-L-16, HPHC-4-L-16, HPHC-3-L-17, HPHC-4-L-17 ■ HLC-1-L-4 ■ HHC-S-2-L-1, HHC-S-3-L-10, HHC-S-1-L-14, HHC-S-2-L-14, HHC-S-4-L-21, HHC-S-2-L-24 ■ HHC-2-L-2, HHC-1-L-14, HHC-2-L-14, HHC-3-L-14, HHC-4-L-14, HHC-1-L-16, HHC-2-L-16, HHC-3-L-16, HHC-4-L-16, HHC-3-L-17, HHC-4-L-17

SFE = shake flask extraction; HCT = humidity test control; LEAF = Leaching Environmental Assessment Framework.

5.1.2 Kinetic Test Program Quality Assurance and Quality Control Observations

In addition to the QA/QC compliance assessment, certain aspects of the HCT and LEAF tests methods were adjusted during testing and are noted as follows:

- During the initial HCT leach cycle, it was noted that the MGNLR material was draining at a slow rate and complete drainage would not occur within the time frame specified according to ASTM D5744-99. Therefore, the airflow was changed on all humidity cells to circulate above the samples. Leachate from the MGNLR material was collected at the time specified in the ASTM D5744-99 protocol, and although the volume was lower than specified in the protocol, it was sufficient for the requested analyses.
- The low binder LEAF test samples were initially prepared according to the monolithic sample (i.e., 3-D) protocol outlined in USEPA (2017). After approximately 15 minutes of submersion, the low cement samples flaked and failed (Figure 5-1). As such, these samples were subsequently prepared according to the alternative compacted granular method (i.e., 1-D) outlined in USEPA (2017).
- Sample swelling of low-binder, compacted granular samples was observed in the LEAF tests approximately one hour after submersion in the eluent water (Figure 5-2). The HLC material demonstrated minimal swelling, whereas HPLC and HHGPLC samples demonstrated cracking on the sample surface and swelling beyond the top of the contained cylinder. Despite the swelling and cracking, these samples remained in their containers and were tested as per standard protocol. Results were reviewed in detail, and it was determined that the swelling affects the results in a conservative way since cracking and swelling increases the diffusivity rates by creating more exposed surface area.

Figure 5-1: Leaching Environmental Assessment Framework Low Binder Content Sample Failure

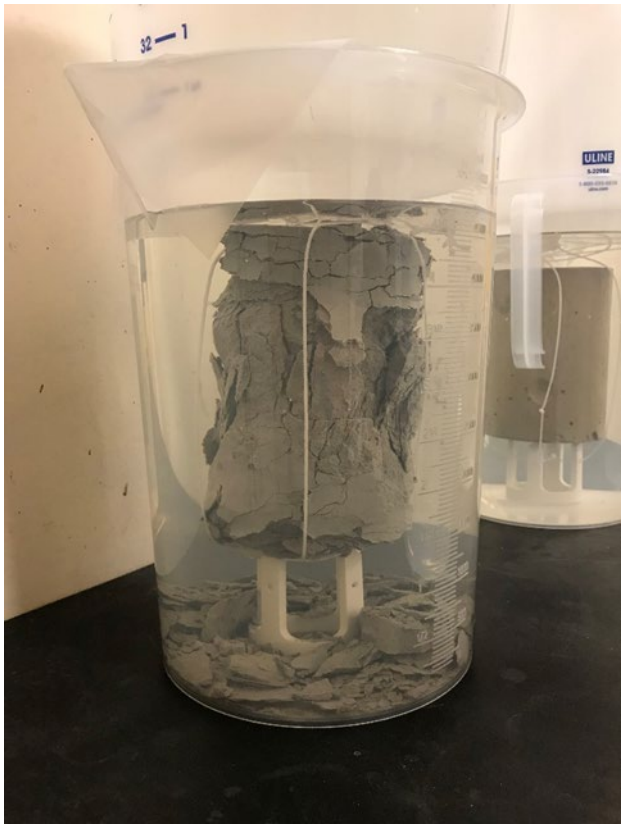

Figure 5-2: Leaching Environmental Assessment Framework Compacted Granular (1-Dimensional) Sample Swelling

5.2 Geotechnical Test Results

Geotechnical test results are presented in Appendix B, Geotechnical Test Results, and selected results are summarized as average values in Table 5-2.

Table 5-2: Summary Table of Average Results for Selected Geotechnical Tests

Sample ID	Specific Gravity	Moisture Content (%)	Porosity	Hydraulic Conductivity (m/s)
MGNLR	2.7	25	n/a	7.7×10^{-09}
HGNLR	2.7	28	n/a	1.2×10^{-07}
LUGP	2.5	45	n/a	4.2×10^{-07}
HUGP	2.3	65	n/a	4.2×10^{-07}
MPPT	3.2	146	n/a	1.6×10^{-07}
OPC	3.6	n/a	n/a	n/a
OPC / SLAG	2.9	n/a	n/a	n/a
HLC	n/a	64	0.63	2.6×10^{-08}
HHC	n/a	52	0.58	5.7×10^{-09}
HPLC	n/a	50	0.60	1.0×10^{-08}
HPHC	n/a	51	0.61	7.2×10^{-10}
HHGPLC	3.0	71	0.71	3.2×10^{-08}
HHGPHC	n/a	66	0.69	2.8×10^{-09}
HLC-S	n/a	65	0.65	4.4×10^{-08}
HHC-S	n/a	54	0.61	3.5×10^{-10}

n/a = not applicable, test not conducted.

Specific gravity was measured for all individual materials and one composite material (HHGPLC). The gypsum precipitate samples had the lowest specific gravity and the OPC binder sample had the highest value (Table 5-2). The specific gravity values were not consistent among the LUGP, HUGP, and MPPT samples, although Quantitative Rietveld X-Ray Diffraction (XRD) results suggest that these three materials are composed of 100% gypsum. The mineralogical composition of MPPT and the potential rationale for this difference is described in more detail in Section 5.3.1.1, Mineralogy.

Porosity values for all composite tailings materials were generally the same or greater in the low binder samples compared to corresponding high binder samples. Porosity ranged from 0.60 to 0.71 in the low binder samples and 0.58 to 0.69 in the high binder samples. The highest porosity value was found for HHGPLC and the lowest for HHC.

Moisture content was determined for all individual and composite materials (no binder materials). Key results are summarized as follows:

- Moisture content was lowest in the leach residue samples and greatest in the MPPT samples. Average moisture content ranged between 25% and 28% for the leach residue samples, 45% to 65% for the gypsum precipitates, and 146% for the effluent precipitates. Moisture content was also greater in the high-uranium gypsum precipitates (HUGP) compared to the low-uranium gypsum precipitates (LUGP).

- Moisture content in all effluent precipitate (MPPT) replicate samples was greater than 100%. These values suggest that this material can absorb greater than 100% of its mass in water, which is typical of high gypsum content material.
- Moisture content was the same or greater in the low binder samples compared to the corresponding high binder sample. Moisture content ranged from 50% to 71% in the low binder samples and 51% to 66% in the high binder samples. The greatest values occurred in the HHGPLC and HHGPHC samples, and the lowest values in the HPLC and HPHC samples.

Hydraulic conductivity values were determined for all individual and composite waste materials using triaxial permeability testing. Key results are summarized as follows:

- Generally, the hydraulic conductivity of the individual materials was higher than those of the composite samples. The average hydraulic conductivity of the leach residue samples ranged from 7.7×10^{-09} metres per second (m/s) to 1.2×10^{-07} m/s, and the average value for the composite samples ranged from 3.5×10^{-10} m/s to 4.4×10^{-08} m/s (Table 5-2).
- The neutralized leach residue in the composite samples was HGNLR only (no MGNLR). The hydraulic conductivities of all composite samples were therefore at least one order of magnitude lower than the HGNLR component. The hydraulic conductivity range of HGNLR and composite samples are comparable with hydraulic conductivity ranges for unconsolidated and consolidated tailings materials at comparable uranium mine sites in the Athabasca Basin.
- Within the composite samples, the hydraulic conductivity of the high binder material was one to two orders of magnitude lower than the corresponding low binder material (Table 5-2). Of the low binder composite materials, average hydraulic conductivity ranged from 1.0×10^{-08} m/s to 4.4×10^{-08} m/s. The average hydraulic conductivities among the high binder composite samples ranged from 3.5×10^{-10} m/s to 5.7×10^{-09} m/s.

Particle size distribution was analyzed for the two neutralized leach residue samples; average values are summarized in Table 5-3. The distribution was similar between the two material types; the dominant particle size was silt, followed by sand and clay.

Table 5-3: Average Particle Size Distribution Results

Sample ID	% Cobble	% Gravel	% Sand	% Silt	% Clay
MGNLR	0	0	33	58	8.6
HGNLR	0	0	36	60	4.5

5.3 Static Geochemical Tests

Static geochemical test results are discussed in the following sections. Full datasets for all static tests are presented in Appendix C, Static Test Results, and relevant figures are presented in Appendix D, Static Test Figures. In some cases, an average test value of the four replicate samples for a material is presented and discussed.

5.3.1.1 Mineralogy

Mineralogy results are presented in Appendix C, Table C-1, and key results are summarized below:

- The uranium extraction process resulted in leached residue that consisted of acid-resistant minerals. Mineral composition in leach residue samples (MGNLR and HGNLR) was similar and primarily consisted of muscovite (48 weight percent [wt.%] to 53 wt.%) and quartz (27 wt.% to 36 wt.%). The remaining detected mineral phases were clinochlore (4.9 wt.% to 10 wt.%), chamosite (7.5 wt.% to 11 wt.%), and gypsum (2.1 wt.% to 6.2 wt.%).
- Mineral phases detected in the gypsum and effluent precipitates were calcium sulphate minerals most likely related to slaked lime (calcium oxide) addition during processing and treatment. The LUGP samples consisted of gypsum (93 wt.%) and bassanite (6.7 wt.% to 7.5 wt.%), and the HUGP samples consisted of gypsum (99 wt.% to 100 wt.%) and anhydrite (0 wt.% to 1.4 wt.%).
- Quantitative Evaluation of Minerals by Scanning Electron Microscopy results of the MPPT indicate that these samples were composed of three major calcium sulphate groups that accounted for at least 93% of the samples by mass. These groups included gypsum, aluminum-bearing gypsum with unknown stoichiometry, and aluminum-bearing calcium sulphate with depleted calcium concentrations. The remainder of the samples were composed of an aluminum sulphate mineral with a nominal formula of $Al_2(SO_4)_3 \times 17H_2O$ that may also contain iron and/or calcium. No ferrihydrite was detected in the XRD or Quantitative Evaluation of Minerals by Scanning Electron Microscopy data for the MPPT.
- Muscovite and quartz were detected in all composite samples, and proportions ranged from 12 wt.% to 58 wt.% and 10 wt.% to 43 wt.%, respectively. Other mineral phases included gypsum (0 wt.% to 54 wt.%), ettringite (0 to 27 wt.%), clinochlore (0 wt.% to 22 wt.%), chamosite (0 wt.% to 18 wt.%), calcite (0 wt.% to 11 wt.%), kaolinite (0 wt.% to 9 wt.%), and portlandite (0 wt.% to 6 wt.%). The low binder samples contained greater proportions of gypsum, and the high binder samples contained greater proportions of calcium minerals (calcite and portlandite). No primary molybdenum mineral was detected.

Due to the amorphous nature of the OPC and OPC / slag binders, these samples were not submitted for XRD analysis. The OPC binder composition was provided by Lafarge Cement, and its composition included amorphous calcium silicates and calcium aluminates, including tricalcium silicate (60.8%), dicalcium silicate (11.6%), tricalcium aluminate (4.6%), and tetracalcium aluminoferrite (10.9%) (report certificate is provided in Appendix C, Table C-1).

5.3.1.2 Acid Base Accounting

Selected average ABA results are presented in Table 5-4. The complete dataset and figures are presented in Appendix C, Table C-2 and Appendix D, Figure D1-1 to Figure D1-4, respectively. Where relevant, average values represent an average of the four replicate samples analyzed for a specific material.

Table 5-4: Summary Table of Selected Average Acid Base Accounting Results

Sample ID	Paste pH	Total Sulphur	Sulphate Sulphur	Sulphide Sulphur	TIC	NP[(a)]	AP[(b)]	NPR[(c)]
	pH units	wt.% S			wt.%	t $CaCO_3$/1000 t		ratio
MGNLR	4.3	0.31	0.064	0.24	<0.01	2.4	7.6	0.32
HGNLR	5.3	0.64	0.40	0.24	<0.01	3.4	7.3	0.46

Table 5-4: Summary Table of Selected Average Acid Base Accounting Results

Sample ID	Paste pH	Total Sulphur	Sulphate Sulphur	Sulphide Sulphur	TIC	NP[a]	AP[b]	NPR[c]
	pH units	wt.% S			wt.%	t $CaCO_3$/1000 t		ratio
LUGP	5.7	19	18	0.83	<0.01	2.9	26	0.13
HUGP	9.0	19	18	1.1	<0.01	2.8	34	0.14
MPPT	7.5	12	12	0.49	<0.01	1.3	15	0.062
OPC	12	1.7	1.3	0.39	1.4	1090	12	89
OPC / SLAG	12	1.5	0.63	0.87	0.13	600	27	22
HLC	9.5	0.75	0.57	0.18	0.26	47	5.7	8.3
HHC	12	0.73	0.74	0.013	0.69	<0.5	0.40	1.3
HPLC	8.7	5.0	4.0	1.00	0.24	<0.5	31	0.0080
HPHC	12	3.4	3.3	0.072	0.70	277	2.2	168
HHGPLC	10	9.2	7.7	1.5	0.18	46	47	0.99
HHGPHC	12	5.8	5.5	0.35	0.74	254	11	52
HLC-S	9.9	0.85	0.71	0.15	0.083	33	4.5	7.4
HHC-S	12	0.95	0.89	0.060	0.56	207	1.9	112

a) Determined from modified Sobek method (MEND 2009).

b) Sulphide-sulphur (%) x 31.25.

c) NP / AP.

<= less than; TIC = total inorganic carbon; wt.% = weight percent; S = sulphur; AP = acid potential; NP = neutralization potential; NPR = neutralization potential ratio; $CaCO_3$ = calcium carbonate.

Results are summarized as follows:

- Average total sulphur content was greatest in the LUGP and HUGP samples (19 wt.%), followed by the MPPT samples (12 wt.%). Total sulphur content in the composite samples was greatest in the samples containing precipitates. Values were greatest in HHGPLC (9.2 wt.%), followed by HHGPHC (5.8 wt.%), HPLC (5.0 wt.%), HPHC (3.4 wt.%), HHC-S (0.95 wt.%), HLC-S (0.85 wt.%), HLC (0.75 wt.%), and HHC (0.73 wt.%).
- Total sulphur and sulphide-sulphur values did not plot on a 1:1 line, and results suggest that sulphur speciation in all samples is dominated by sulphate-sulphur (Figure D1-1). This is consistent with the detection of sulphate minerals (gypsum and anhydrite) in the mineralogy data.
- Sulphide-sulphur was generally present at values less than 1 wt.%. The greatest average values were noted in HHGPLC (1.5 wt.%), HUGP (1.1 wt.%), and HPLC (1.0 wt.%). Sulphide mineral content was either absent or below the analytical detection limit.
- Average NP values were relatively low in the leach residue and precipitate samples (1.3 t to 3.4 t calcium carbonate [$CaCO_3$]/1,000 t) and high in the OPC and OPC / slag binder materials (1,090 t $CaCO_3$/1,000 t and 600 t $CaCO_3$/1,000 t, respectively). The NP values among the composite materials were variable, and the highest values were noted in the samples with a high binder content (HPHC, HHGPHC, and HHC-S). The NP values were generally below the detection limit for the HHC and HPLC samples.

- The leach residue and precipitate samples contained a greater AP than NP and were therefore classified as PAG. The binder samples contained a greater NP to AP ratio of 2:1 and were classified as NPAG. The acid rock drainage classification for the composite samples was variable. The HHC, HPLC, and HHGPLC samples were classified as PAG/uncertain and HLC, HPHC, HHGPHC, HLC-S, and HHC-S were classified as NPAG (Figure D1-2).
- Paste pH values ranged from acidic to basic among all materials. Values for HGNLR and MGNLR were acidic, and average values for the precipitate materials ranged from acidic to basic (Table 5-4). The paste pH values for the OPC and OPC / slag binder materials were basic (pH 12). Average values for the composite materials ranged from 8.7 to 12 and were reflective of the amount of binder added (a higher cement content corresponds to higher pH).
- In the comparison of paste pH to NPR (Figure D1-3), the leach residue samples were classified as acid generating due to their acidic paste pH values and low NPR values (less than 1). The HUGP, LUGP, and MPPT samples were also classified as PAG due to their low NPR values. Most of the composite materials were classified as uncertain or NPAG due to their basic paste pH values (corresponding to stored alkalinity in the pore space) and relatively high NPR values (greater than 1).
- Total inorganic carbon content was relatively low in all materials. Leach residue and precipitate materials had TIC values less than 0.01 wt.%. Values were detectable in the composite materials and the samples with a high binder content had greater TIC values (Table 5-4). The carbonate NP values were less than the modified Sobek NP values in all materials except HHC and HPLC (Figure D1-4). This relationship indicates that these two materials may contain carbonate minerals that do not contribute to net neutrality.

5.3.1.3 Bulk Metals

Bulk metal results are tabulated in Appendix C, Table C-3, and are compared to the average abundance of elements in the Earth's crust to identify materials and constituents that may require further review with respect to environmental significance. Table 5-5 lists elements with enrichment factors greater than 5 and 10 times the average crustal abundances provided by Price (1997).

Element concentrations that were greater than 10 times crustal abundance in most individual and all composite samples were arsenic, bismuth, copper, lead, molybdenum, selenium, sulphur, and uranium. Antimony and silver were also present in concentrations greater than 10 times crustal abundance in some of the composite samples. Calcium, cobalt, tin, yttrium, and zinc concentrations were greater than 10 times crustal abundance in the individual materials, but not in the composite materials.

The OPC material was characterized by a greater enrichment of trace metals compared to the OPC / slag binder that included antimony, arsenic, molybdenum, tin, and zinc. The OPC / slag binder material contained a greater enrichment of bismuth and uranium.

Table 5-5: Metals Exceeding Five Times and Ten Times Price Crustal Abundance

Sample ID	Element Concentrations Greater than 5X and Less than 10X Crustal Abundance	Element Concentrations Greater than 10X Crustal Abundance
MGNLR	copper, sulphur	arsenic, bismuth, lead, molybdenum, selenium, silver, uranium
HGNLR	copper	antimony, arsenic, bismuth, lead, molybdenum, selenium, silver, sulphur, uranium
LUGP	arsenic, calcium	antimony, bismuth, sulphur, uranium
HUGP	antimony, bismuth, uranium	antimony, bismuth, sulphur, uranium
MPPT	cobalt, lead	antimony, arsenic, bismuth, copper, molybdenum, sulphur, uranium, yttrium
OPC	none	antimony, arsenic, calcium, molybdenum, sulphur, tin, zinc
SLAG	calcium, uranium	bismuth, sulphur
HLC	copper	antimony, arsenic, bismuth, lead, molybdenum, selenium, silver, sulphur, uranium
HHC	copper	antimony, arsenic, bismuth, lead, molybdenum, selenium, sulphur, uranium
HPLC	none	antimony, arsenic, bismuth, copper, lead, molybdenum, selenium, sulphur, uranium
HPHC	none	arsenic, bismuth, copper, lead, molybdenum, selenium, sulphur, uranium
HHGPLC	copper	arsenic, bismuth, lead, molybdenum, selenium, sulphur, uranium
HHGPHC	copper	arsenic, bismuth, lead, molybdenum, selenium, sulphur, uranium
HLC-S	copper	arsenic, bismuth, lead, molybdenum, selenium, silver, sulphur, uranium
HHC-S	copper	arsenic, bismuth, lead, molybdenum, selenium, silver, sulphur, uranium

5X = five times; 10X = ten times.

5.3.1.4 Whole Rock Oxides

Whole rock oxide results are tabulated in Appendix C, Table C-4, and selected results are summarized in Table 5-6. Major oxide components in the leach residue samples and composite waste samples were silicon dioxide (SiO_2) and aluminum oxide. These components are consistent with the mineralogical analyses indicating a dominant aluminum-silicate mineral assemblage. Samples with a high binder content also contained a greater proportion of calcium oxide. The gypsum and effluent precipitate materials consisted primarily of calcium oxide (19 to 36 wt.%).

Table 5-6: Major and Minor Oxide Components of Individual and Composite Waste Materials

Sample ID	Major Oxide Components (>10 wt.%)	Minor Oxide Components (>1 wt.% and <10 wt.%)
MGNLR	SiO_2, Al_2O_3	Fe_2O_3, K_2O, MgO
HGNLR	SiO_2, Al_2O_3	Fe_2O_3, K_2O, MgO
LUGP	CaO	None
HUGP	CaO	None
MPPT	CaO	Al_2O_3, Fe_2O_3, MgO, SiO_2
OPC	CaO, SiO_2	Al_2O_3, Fe_2O_3, MgO,
SLAG	CaO, SiO_2, Al_2O_3	MgO
HLC	SiO_2, Al_2O_3	CaO, Fe_2O_3, K_2O, MgO

Table 5-6: Major and Minor Oxide Components of Individual and Composite Waste Materials

Sample ID	Major Oxide Components (>10 wt.%)	Minor Oxide Components (>1 wt.% and <10 wt.%)
HHC	SiO_2, Al_2O_3, CaO	Fe_2O_3, K_2O, MgO
HPLC	SiO_2, Al_2O_3	CaO, Fe_2O_3, K_2O, MgO
HPHC	SiO_2, Al_2O_3, CaO	Fe_2O_3, K_2O, MgO
HHGPLC	SiO_2, Al_2O_3, CaO	Fe_2O_3, K_2O, MgO
HHGPHC	SiO_2, CaO	Al_2O_3, Fe_2O_3, K_2O, MgO
HLC-S	SiO_2, Al_2O_3	CaO, Fe_2O_3, K_2O, MgO, titanium dioxide
HHC-S	SiO_2, Al_2O_3, CaO	Fe_2O_3, K_2O, MgO

>= greater than; <= less than; wt.% = weight percent, Al_2O_3 = aluminum oxide; CaO = calcium oxide; K_2O = potassium oxide; MgO = magnesium oxide; SiO_2 = silicon dioxide; Fe_2O_3 = iron oxide.

5.3.1.5 Shake Flask Extraction Leach Test

Tabulated SFE leach test results are presented in Table 5-7 and detailed in Appendix C, Table C-5, and plots of selected SFE results are presented in Appendix D, Figure D2-1 to Figure D2-41.

Constituents with a high leachability potential identified from the bulk metal and SFE tests were chloride, fluoride, nitrite, sulphate, aluminum, arsenic, cadmium, chromium, copper, iron, lead, molybdenum, nickel, selenium, silver, uranium, zinc, radium-226, and lead-210.

Table 5-7: Average Shake Flask Extraction Leachate Concentrations for Selected Constituents

Sample ID	pH	Sulphate	Aluminum	Arsenic	Copper	Chromium	Molybdenum	Nickel	Lead	Selenium	Uranium	Lead-210	Radium-226
	pH units	mg/L										Bg/L	
MGNLR	4.8	160	0.040	0.0060	0.081	<0.0005	0.00030	0.081	3.2	0.088	0.19	275	345
HGNLR	5.6	1,123	0.025	0.0092	0.029	<0.0005	0.0062	0.13	3.2	0.064	3.7	240	86
LUGP	5.7	1,755	<0.00050	0.00093	0.0095	0.0013	0.14	0.011	0.015	0.0014	2.0	0.90	0.58
HUGP	7.4	2,218	<0.00050	0.0060	<0.00020	0.00046	0.54	0.0046	<0.0001	0.0032	0.59	<0.80	0.53
MPPT	6.6	3,850	0.066	0.045	<0.0020	<0.005	15	<0.0010	<0.001	0.017	0.012	<0.80	0.28
OPC	12	580	0.0070	<0.001	<0.0020	0.29	0.19	<0.0010	<0.001	0.0050	0.0080	<0.80	0.20
OPC / SLAG	12	3,300	0.087	0.00020	<0.00020	0.020	0.017	0.00020	<0.0001	0.038	<0.0001	<0.80	0.30
HLC	9.4	900	0.013	0.092	0.00038	0.00065	2.1	0.00020	0.0018	0.11	0.0076	0.55	83
HHC	12	145	0.018	0.040	0.00045	0.029	6.3	0.00020	0.39	0.035	0.015	43	108
HPLC	8.8	1,690	2.0	0.14	0.0018	0.0075	3.8	0.00028	0.0016	0.059	0.069	<0.80	17
HPHC	12	1,610	0.0090	0.34	0.0046	0.44	14	0.0028	0.098	0.035	0.020	8.0	7.2
HHGPLC	10	2,180	3.6	0.25	0.0064	0.033	4.3	0.00083	0.00065	0.19	0.014	<0.80	11
HHGPHC	12	1,950	0.012	0.15	0.0036	0.27	6.8	0.0040	0.047	0.017	0.012	4.0	6.9
HLC-S	10	3,075	0.12	0.16	0.0028	<0.0050	8.1	0.00075	0.0025	0.54	0.0020	2.0	64
HHC-S	12	543	4.7	0.067	0.0023	0.014	28	<0.0010	0.13	0.094	0.033	17	48

Bg/L = becquerels per litre; <= less than.

Average results for selected constituents are summarized in Table 5-7. Key results from the SFE leach testing are summarized as follows:

- Leachate pH values were acidic in the leach residue samples and ranged from acidic to circumneutral in the process waste samples. The pH values for the OPC and OPC / slag binder samples were highly alkaline (pH 12) due to the presence of amorphous calcium oxide minerals. The pH values in the composite samples were basic due to the presence of binder and the samples with a high binder content contained a higher pH than the samples with a low binder content.
- Sulphate concentrations were variable among the individual and composite materials. The highest average concentrations were measured in the MPPT material, followed by the OPC / slag binder. The HUGP, LUGP, and HGNLR materials also contained elevated sulphate concentrations among the individual waste materials. The composite material with the highest average sulphate concentration was HLC-S, followed by HHGPLC, HHGPHC, HPLC, HPHC, HLC, HHC-S, and HHC.
- Elevated aluminum concentrations were generally associated with the composite materials. Concentrations among the individual waste materials were highest in the OPC / slag binder, followed by the MPPT material. The highest average concentrations in the composite samples were measured in HHC-S and HHGPLC and these concentrations were more than one order of magnitude greater than the individual materials. Sample HPLC also contained elevated aluminum concentrations, though this material did not contain the OPC / slag binder or effluent precipitates.
- Elevated arsenic concentrations were associated with the composite materials, and concentrations in the composite materials were generally higher than in the individual materials. Among the individual tailings and process waste materials, the highest arsenic concentrations were associated with MPPT. Among the composite materials, the highest arsenic concentrations were measured in HPHC, followed by HHGPLC, HLC-S, HHGPHC, and HPLC.
- Elevated chromium concentrations were associated with the OPC binder and the composite materials. The concentration measured in the OPC binder was one to three orders of magnitude greater than the concentrations in the other individual materials. The highest average chromium concentrations in the composite samples were measured in HPHC and HHGPHC, and these concentrations were similar to the OPC binder concentration. Composite samples with a high binder content contained a higher chromium concentration compared to the composite samples with a low binder content.
- Elevated copper concentrations were associated with the leach residue samples. Individual material types HUGP, MPPT, OPC, and OPC / slag contained leachable copper concentrations below the analytical detection limit. Composite samples with the highest average copper concentration were HHGPLC, followed by HPHC, HHGPHC, HLC-S, HHC-S, and HPLC. Samples HHC and HLC contained the lowest copper concentrations, despite containing a higher proportion of leach residue.
- Elevated lead concentrations were associated with the leach residue samples. Individual material types HUGP, MPPT, OPC, and OPC / slag contained leachable lead concentrations below the analytical detection limit. Lead concentrations were greater in the high binder samples compared to the low binder samples. The highest average lead concentrations were measured in HHC, followed by HHC-S, HPHC, and HHGPHC. These concentrations were at least one order of magnitude lower than the concentrations noted in the individual leach residue samples.

- Elevated molybdenum concentrations were associated with MPPT and composite materials. Molybdenum concentrations in the individual materials were notably lower than concentrations for MPPT and all composite materials. The highest average molybdenum concentration was measured in a sample that does not contain MPPT. The greatest average concentrations were measured in HHC-S, followed by HPHC, HLC-S, HHGPHC, HHC, HHGPLC, HPLC, and HLC.
- Elevated nickel concentrations were associated with the leach residue samples. Nickel concentrations in the individual materials were greatest in HGNLR, followed by MGNLR, LUGP, and HUGP. The average HGNLR concentration was at least two orders of magnitude greater than the average concentrations in the composite materials. The composite samples with the highest average nickel concentrations were HHGPHC, followed by HPHC, HHGPLC, HLC-S, HPLC, HHC, and HLC.
- Elevated selenium concentrations were associated with the low binder composite materials, and these concentrations were notably greater than the average concentrations measured in the individual materials. The highest average selenium concentrations in the individual materials were measured in MGNLR, followed by HGNLR, OPC / slag, MPPT, OPC, HUGP, and LUGP. The highest average selenium concentrations in the composite materials were measured in HLC-S, followed by HHGPLC, HLC, HHC-S, HPLC, HHC, HPHC, and HHGPHC.
- Elevated uranium concentrations were associated with HGNLR and LUGP. Uranium concentrations in these two individual materials were approximately two to three orders of magnitude higher than concentrations measured in the composite materials. The composite materials with the highest average uranium concentrations were HPLC, followed by HHC-S, HPHC, HHC, HHGPLC, HHGPHC, HLC, and HLC-S.
- Elevated radium-226 concentrations were associated with the leach residue materials and composite materials containing only leach residue and binder. The precipitate and binder materials contained relatively low radium-226 concentrations. The composite materials with the greatest average radium-226 concentrations were HHC, followed by HLC, HLC-S, HHC-S, HPLC, HHGPLC, HPHC, and HHGPHC.

5.3.1.6 Process Water Quality

Chemical analysis results for process water produced from MGNLR and HGNLR are presented in Appendix C, Table C-6, and key results are summarized below:

- Process water from MGNLR was slightly acidic (average pH 6.4), and the average sulphate concentration was 1,143 mg/L. Average concentrations of the constituents identified from elemental and short-term leaching testing were 0.031 mg/L aluminum, 0.080 mg/L arsenic, 0.0096 mg/L copper, 0.0040 mg/L lead, 1.4 mg/L molybdenum, 0.038 mg/L nickel, 0.045 mg/L selenium, 1.2 mg/L uranium, and 25 Bq/L radium-226.
- Process water from HGNLR was acidic (average pH 5.3) and the average sulphate concentration was 1,758 mg/L. Average concentrations of the constituents identified from elemental and short-term leaching testing were 0.54 mg/L aluminum, 0.012 mg/L arsenic, 0.019 mg/L copper, 0.23 mg/L lead, 0.013 mg/L molybdenum, 0.15 mg/L nickel, 0.022 mg/L selenium, 4.5 mg/L uranium, and 103 Bq/L radium-226.

Generally, concentrations of constituents were similar or higher in the process water samples compared to the corresponding SFE neutralized leach residue results. One exception was the lead concentration, which was approximately one to three orders of magnitude higher in the neutralized leach residue SFE leachate than in the process water.

5.4 Kinetic Geochemical Test Results

Three kinetic tests were completed as part of the geochemical characterization program: MTP tests, HCTs, and LEAF tests. The HCTs were conducted on the HGNLR and MGNLR samples, MTP tests were conducted on low binder composite samples, and LEAF testing was completed on all composite materials.

Results presented in the subsequent subsections include trends for constituents that were identified to contain high leachable concentrations from the SFE testing (Section 5.3.1.5, Shake Flask Extraction Leach Test). Full analytical results for the kinetic tests are provided in Appendix E, Kinetic Test Results, and figures for all constituents are provided in Appendix F, Kinetic Test Figures.

Due to the ongoing nature of the HCT and LEAF kinetic tests, results presented in this report include data available to 16 October 2020.

5.4.1.1 Modified Triaxial Permeability Test

Low binder composite tailings materials were selected for MTP testing to obtain an estimate of pore water quality and examine changes in pH and metal/metalloid concentration as a function of pore volume replacement. Results are provided in Appendix E, Table E-1, and figures are provided in Appendix F, Figure F1-1 to Figure F1-26. Key results are summarized as follows:

- pH trends varied among the composite materials. Initial values in the HHGPLC samples were basic (pH 9.8) and decreased between four and five pore volumes. Values stabilized after five pore volume replacements and remained circumneutral (pH 7.9). Initial pH values in the HPLC samples were circumneutral (pH 7.7) and fluctuated between 7.2 and 8.8 for the remainder of the test period. Initial pH values in HLC S samples were basic (pH 10) and decreased between 0.5 and two pore volumes to 8.3. Values gradually increased after two pore volume replacements and were basic (pH 9.7) for the remainder of the test period. The HLC pH values fluctuated between circumneutral and basic (pH 7.4 and 9.6) throughout the test period.
- Aluminum concentrations decreased as a function of pore volume replacement for all materials. Concentrations in samples collected from zero to one pore volume replacement were highest in HHGPLC (1.0 mg/L) and HPLC (0.99 mg/L) and lowest in HLC-S (0.53 mg/L) and HLC (0.14 mg/L). Concentrations decreased in all samples between two to five pore volumes and generally stabilized after five pore volume replacements. The stable concentrations were higher in HHGPLC (0.43 mg/L) and HPLC (0.45 mg/L) compared to HLC-S (0.27 mg/L) and HLC (0.022 mg/L).
- Arsenic concentrations decreased as a function of pore volume replacement for all materials. Concentrations in samples collected to one pore volume replacement were highest in HHGPLC (1.6 mg/L) and HPLC (1.8 mg/L) and lowest in HLC-S (0.56 mg/L). Concentrations decreased between two to five pore volumes for all samples and continued to gradually decrease after five pore volume replacements for all materials. Average concentrations after five pore volume replacements were higher in HLC-S (0.019 mg/L) compared to HHGPLC (0.0084 mg/L) and HPLC (0.015 mg/L).

- Chromium concentrations decreased as a function of pore volume replacement except for HLC-S samples, which were below detection limit throughout testing. Concentrations in samples collected to one pore volume were greatest in HPLC (0.0068 mg/L) and HLC (0.0061 mg/L) and were generally below the detection limit (0.05 mg/L) for HHGPLC samples. Concentrations decreased between two to five pore volumes and stabilized after five pore volume replacements. Stable concentrations were greatest in HPLC samples (0.0026 mg/L), followed by HHGPLC (0.0020 mg/L) and HLC (0.0018 mg/L).
- Copper concentrations generally decreased as a function of pore volume replacement for all materials. Concentrations in samples collected to one pore volume replacement were highest in HHGPLC (0.26 mg/L), followed by HLC-S (0.12 mg/L), HLC (0.093), and HPLC (0.034 mg/L). Concentrations decreased between two to five pore volumes and gradually decreased after five pore volume replacements for all materials. Average concentrations after five pore volume replacements were greatest in HLC-S (0.0054 mg/L) and HLC (0.0030 mg/L) and lowest in HHGPLC (0.026 mg/L) and HPLC (0.00090 mg/L).
- Lead concentrations generally decreased as a function of pore volume replacement for all materials. Concentrations in samples collected to one pore volume replacement were greatest in HHGPLC (0.031 mg/L) and HPLC (0.036 mg/L) and lowest in HLC (0.025 mg/L) and HLC-S (0.011 mg/L). Concentrations decreased between two to five pore volumes and generally stabilized after five pore volume replacements in all materials. Stable concentrations were highest in HLC (0.0019 mg/L) and HLC-S (0.0029 mg/L) compared to HHGPLC (0.00090 mg/L) and HPLC (0.00072 mg/L).
- Molybdenum concentrations generally decreased as a function of pore volume replacement for all materials. Concentrations in samples collected to one pore volume replacement were greatest in HLC-S (166 mg/L), followed by HHGPLC (117 mg/L), HPLC (40 mg/L), and HLC (15 mg/L). Concentrations generally decreased between two to five pore volumes and stabilized after five pore volume replacements in all samples. Stable concentrations were greatest in the HLC-S (7.4 mg/L) and HLC (7.2 mg/L) compared to HHGPLC (4.5 mg/L) and HPLC (6.4 mg/L).
- Nickel concentrations generally decreased as a function of pore volume replacement for all materials. Concentrations in samples collected to one pore volume replacement were greatest in HHGPLC (0.030 mg/L) and HLC (0.030 mg/L), followed by HPLC (0.022 mg/L). HLC-S samples were generally below the detection limit (0.01 mg/L). Concentrations fluctuated between two to five pore volumes and continued to fluctuate slightly after five pore volume replacements. Average concentrations after five pore volume replacements were highest in HHGPLC (0.022 mg/L), followed by HLC (0.019 mg/L), HLC-S (0.0042 mg/L), and HPLC (0.0011 mg/L).
- Selenium concentration trends varied among the material types as a function of pore volume replacement. Maximum concentrations were measured in samples collected to one pore volume replacement and the highest concentrations were measured in HLC-S (1.3 mg/L) and HLC (0.46 mg/L) compared to HHGPLC (0.24 mg/L) and HPLC (0.33 mg/L). Concentrations decreased between two to five pore volumes for HHGPLC, HLC-S, and HPLC and increased for HLC samples. Concentrations stabilized after five pore volume replacements for HHGPLC and HPLC and increased for HLC and HLC-S samples. Average concentrations after five pore volumes replacements were greatest in HLC-S (0.44 mg/L) and HLC (0.43 mg/L) compared to HHGPLC (0.016 mg/L) and HPLC (0.051 mg/L).

- Uranium concentrations decreased as a function of pore volume replacement for HHGPLC, HPLC, and HLC-S and increased in HLC samples. Concentrations in samples collected to one pore volume replacement were greatest in HHGPLC (0.040 mg/L) and HPLC (0.040 mg/L) and lower in HLC (0.016 mg/L). The HLC-S sample results were below the detection limit (0.01 mg/L). Concentrations decreased between two to five pore volumes for HHGPLC, HLC-S, and HPLC and increased for HLC. Concentrations generally stabilized after five pore volume replacements for HHGPLC, HLC-S, and HPLC. Average concentrations after five pore volume replacements were highest in HLC (0.61 mg/L), followed by HPLC (0.0062 mg/L), HHGPLC (0.0040 mg/L), and HLC-S (0.00078 mg/L).

5.4.1.2 Humidity Cell Test

Neutralized leach residue (HGNLR and MGNLR) was selected for HCT to examine long-term rates of acid generation, acid neutralization, and metal leaching. Four HCTs were constructed for both HGNLR and MGNLR replicate samples. Data presented in this report includes results up to and including week 64. Results are described as weekly mass loading rates.

The HCT dataset is presented in Appendix E, Table E-2 to Table E-9, and selected results are plotted in Appendix F, Figure F2-1 to Figure F2-29. To evaluate the long-term acid generation potential of the leach residue samples, sulphide and NP depletion calculations were also performed consistent with Price (1997) and MEND (2009). Results from these calculations are presented in Table E-10.

Key results are summarized below:

- The week one leachate was acidic for all HGNLR (average pH 5.4) and MGNLR (average pH 4.3) samples. A slight but steady decline in pH was observed for both materials over the 64-week leaching period. The pH values at week 64 ranged from 4.5 to 4.7 for the HGNLR samples and 3.9 to 4.0 for the MGNLR samples.
- Maximum sulphate mass loading rates occurred during week one (average HGNLR 1,973 mg/kg/wk, average MGNLR 1,182 mg/kg/wk). The HGNLR samples demonstrated a distinct decrease in loading rates after week one, while the MGNLR samples demonstrated a decrease to week five, followed by fluctuating rates to week 25. Both materials showed stabilizing trends after approximately week 25. The HGNLR mass loading rates after week 25 ranged from 5.1 mg/kg/wk to 55 mg/kg/wk (average 20 mg/kg/wk) and the MGNLR mass loading rates ranged from 1.3 mg/kg/wk to 67 mg/kg/wk (average 24 mg/kg/wk).
- Average aluminum mass loading rates generally increased over the 64-week leaching period for both materials. The average HGNLR mass loading rate at week one was 0.072 mg/kg/wk and increased to 0.31 mg/kg/wk by week 64. The average MGNLR mass loading rate at week one was 0.21 mg/kg/wk and the average rate increased slightly to 0.26 mg/kg/wk by week 64.
- Average HGNLR arsenic loading rates ranged from 0.0020 mg/kg/wk to 0.025 mg/kg/wk and average MGNLR loading rates ranged from 0.0017 mg/kg/wk to 0.011 mg/kg/wk. Maximum average loading rates were observed at week one for both material types (0.025 mg/kg/wk HGNLR, 0.011 mg/kg/wk MGNLR) and loading rates for all cells demonstrated an overall stable trend after week 28.

- Average HGNLR copper loading rates ranged from 0.082 mg/kg/wk to 0.31 mg/kg/wk and average MGNLR loading rates ranged from 0.14 mg/kg/wk to 3.0 mg/kg/wk over the 64-week leaching period. The mass loading rates slightly increased over time for the HGNLR samples and notably increased over time for the MGNLR samples.
- Average HGNLR lead loading rates ranged from 2.5 mg/kg/wk to 6.7 mg/kg/wk and average MGNLR loading rates ranged from 2.4 mg/kg/wk to 6.5 mg/kg/wk over the 64-week leaching period. Loading rates demonstrated an overall increasing trend for both materials.
- Average HGNLR molybdenum loading rates ranged from 0.00028 to 0.0077 mg/kg/wk and average MGNLR rates ranged from 0.000037 mg/kg/wk to 0.025 mg/kg/wk over the 64-week leaching period. The loading rates for both materials have yet to demonstrate a stabilizing trend.
- Average HGNLR nickel loading rates ranged from 0.083 mg/kg/wk to 1.9 mg/kg/wk and average MGNLR rates ranged from 0.050 to 1.1 mg/kg/wk. Maximum loading rates were observed at week one for both materials and rates generally decreased to week 28. Loading rates after week 28 demonstrated an overall stable trend for both materials.
- Average HGNLR selenium loading rates ranged from 0.021 mg/kg/wk to 0.28 mg/kg/wk and average MGNLR rates ranged from 0.025 mg/kg/wk to 0.25 mg/kg/wk over the 64-week leaching period. Maximum loading rates were observed during week one and both materials demonstrated a stable trend after week four.
- Average HGNLR uranium loading rates ranged from 3.7 mg/kg/wk to 10 mg/kg/wk and average MGNLR rates ranged from 0.18 mg/kg/wk to 1.8 mg/kg/wk over the 64-week leaching period. The HGLNR loading rates were generally stable after week 44, while the MGNLR loading rates demonstrated a slight increasing trend.

The depletion calculations conducted for the HCTs predict that sulphide-sulphur was depleted in the HGNLR cells between weeks six and eight, and the NP was depleted between weeks one and four. By week 64, 19% of the NP remained in the MGNLR cells and the estimated time to sulphide depletion is one to two years. The faster depletion rate of NP compared to the sulphide-sulphur depletion rate supports the PAG classification of these leach residue materials.

5.4.1.3 Leaching Environmental Assessment Framework Test

Composite materials were selected for LEAF testing to assess mass release of inorganic analytes under diffusion-controlled mass release conditions. Interval mass flux and diffusivity values were calculated at each leaching interval for all samples. Interval mass release values were highest under the initial leaching condition and stabilized over time, while the diffusivity values varied as a function of the leaching interval time.

The LEAF test mass interval flux results are presented in Appendix E, Table E-11 to Table E-18, and the diffusivity results are presented in Table E-19 to Table E-26. Selected interval mass flux and diffusivity time series plots are presented in Appendix F, Figure F3-1 to Figure F3-37, and Figure F4-1 to Figure F4-36, respectively. To ease interpretation, only the first replicate of each material is illustrated in each time series figure. Since preparation of materials for LEAF testing occurred at different times, the current cumulative leaching time varies among the different material types.

Key interval mass flux results are summarized below:

- The pH values among the low binder content materials ranged from 6.2 to 9.1 and values among the high binder materials ranged from 7.1 to 12. The pH values generally demonstrated a stable trend for all materials after 28 days (6 leach events).
- Aluminum interval flux values ranged from 6.6×10^{-07} to 1.4×10^{-02} mg/m^2/s. Values were highest for HHC (average 2.6×10^{-04} mg/m^2/s) and HHC-S (average 5.4×10^{-04} mg/m^2/s) and lowest for HLC (average 2.6×10^{-05} mg/m^2/s) and HLC-S (average 2.5×10^{-05} mg/m^2/s).
- Arsenic interval flux values ranged from 5.8×10^{-08} to 1.4×10^{-04} mg/m^2/s and mass flux values were generally higher in the low binder materials. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Copper interval flux values ranged from 8.3×10^{-09} to 3.9×10^{-05} mg/m^2/s and no distinct differences were noted between the high and low binder materials. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Lead interval flux values ranged from 1.3×10^{-08} to 1.6×10^{-04} mg/m^2/s and values were generally higher in materials with a high binder content. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Molybdenum interval flux values ranged from 3.2×10^{-06} to 2.8×10^{-02} mg/m^2/s and values were generally higher in materials with a low binder content. The long-term flux values for sample HPHC were notably lower than the other materials.
- Nickel interval flux values ranged from 1.9×10^{-09} to 1.2×10^{-05} mg/m^2/s and no distinct differences were noted between the high and low binder materials. Long-term trends indicate that values have not yet stabilized for HHGPLC and HHC.
- Selenium interval flux values ranged from 6.6 x 10^{-08} to 2.2 x 10^{-04} mg/m^2/s and values were higher in materials with a low binder content. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Uranium interval flux values ranged from 3.1×10^{-07} to 1.2×10^{-03} mg/m^2/s and values were higher in materials with a low binder content. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Radium-226 interval flux values ranged from 4.8×10^{-12} to 8.0×10^{-09} mg/m^2/s and no distinct differences were noted between the high and low binder materials. A stable trend was observed for most materials after approximately 63 days (9 leach events).

Key diffusivity results are summarized as follows:

- Aluminum diffusivity values ranged from 4.9×10^{-12} to 3.2×10^{-03} m^2/s and values in the high binder materials were orders of magnitude greater than the low binder materials. Long-term diffusivity trends varied among the materials and HHGPHC demonstrated a distinct increasing long-term trend.

- Arsenic diffusivity values ranged from 5.6×10^{-14} to 1.1×10^{-08} m^2/s and values in the low binder materials were generally greater than the high binder materials. A stable trend was observed for most materials after approximately 63 days (9 leach events).
- Copper diffusivity values ranged from 1.1×10^{-12} to 3.6×10^{-06} m^2/s and no distinct differences were noted between high and low binder materials. Most materials demonstrated a slightly fluctuating long-term trend.
- Lead diffusivity values ranged from 3.6×10^{-14} to 1.4×10^{-05} m^2/s and values were generally greater in the low binder materials compared to the high binder materials. The low binder materials demonstrated a slightly fluctuating long-term trend, while a stable trend was observed for most high binder materials after approximately 150 days (15 leach events).
- Molybdenum diffusivity values ranged from 1.1×10^{-13} to 9.3×10^{-09} m^2/s and values in the low binder materials were higher than the high binder materials. Overall, a stable trend was observed for most materials after approximately 63 days (9 leach events).
- Nickel diffusivity values ranged from 7.2×10^{-13} to 1.8×10^{-07} m^2/s and the low binder materials were generally higher than the high binder materials. Similar to the interval flux values, long-term trends indicate that values have not yet stabilized for HHGPLC and HHC.
- Selenium diffusivity values ranged from 1.0×10^{-11} to 5.0×10^{-09} m^2/s and no distinct differences occurred between the high and low binder materials. Most materials demonstrated a slightly fluctuating long-term trend.
- Uranium diffusivity values ranged from 1.3×10^{-10} to 2.0×10^{-06} m^2/s and values for most low binder materials were generally greater than the high binder material values. Most materials demonstrated a slightly fluctuating long-term trend.
- Radium-226 diffusivity values ranged from 2.0×10^{-12} to 2.3×10^{-09} m^2/s and no distinct differences were noted between the high and low binder materials. Most materials demonstrated a slightly fluctuating long-term trend.

5.5 Radiological Test Results

Radiological results from the SFE tests are presented in Appendix C, Static Test Results, Table C-5, results from the process water samples are presented in Table C-7, and results from the LEAF tests are presented in Appendix E, Kinetic Test Results, Table E-11 to Table E-26.

Averaged results from the SFE radioactivity tests are summarized in Table 5-8. Key results are summarized as follows:

- Among the individual tailings and process waste samples, radioactivity was greatest in HGNLR, followed by MPPT.
- The highest radioactivity values were measured in the composite leach residue samples with a low binder content (HLC-S and HLC). The lowest values were measured in the HHGPHC samples.
- Radioactivity values of leachate samples indicate that some radioactivity is mobilized during the leaching event. For the composite samples, radioactivity in the solids generally decreased after the SFE leach

testing. The low binder samples demonstrated a greater decrease in radioactivity values compared to the high binder samples.

- Leaching of radioactive elements from the MPPT, LUGP, and HUGP materials was proportionally lower compared to that of the leached residues.

Table 5-8: Selected Average Results from Radioactivity Testing

Sample ID	Gross Alpha Activity (solid sample before SFE)	Gross Alpha Activity (solid sample after SFE)	Gross Alpha Activity (SFE leachate sample)	Gross Beta Activity (solid sample before SFE)	Gross Beta Activity (solid sample after SFE)	Gross Beta Activity (SFE leachate sample)
	Bq/g	Bq/g	Bq/L	Bq/g	Bq/g	Bq/L
MGNLR	1,300	1,325	550	583	568	390
HGNLR	3,125	3,275	265	1,500	1,500	388
LUGP	8.6	7.6	50	25	24	13
HUGP	18	15	16	13	13	4.6
MPPT	830	920	2.5	140	155	2.0
OPC	<0.49	0.74	<2.5	0.34	0.22	10
OPC / SLAG	2.5	1.7	<4.3	0.90	0.96	<3.3
HLC	4,725	4,050	210	1,525	1,400	57
HHC	3,750	3,475	288	1,300	1,200	128
HPLC	3,075	3,175	44	1,075	1,125	13
HPHC	2,650	1,950	60	855	700	36
HHGPLC	3,000	2,325	40	853	815	14
HHGPHC	1,725	1,525	48	548	545	24
HLC-S	4,825	4,050	148	1,500	1,475	43
HHC-S	2,900	2,800	105	1,020	1,125	53

Bq/g = becquerels per gram; Bq/L = becquerels per litre; <= less than; SFE = shake flask extraction.

Averaged results from the SFE radiochemical speciation assessment for solid samples are summarized in Table 5-9. Key results are summarized as follows:

- Radionuclide species with the highest solid-phase concentrations in all samples were radium-226 and thorium-230.
- Radionuclide concentrations slightly increased or decreased in the solid samples after the SFE testing. Distinct leaching trends were not apparent for these samples.

Table 5-9: Average Results from Shake Flask Extraction Radiochemical Speciation Tests for Solid Samples

Sample ID	Potassium-40		Radium-226		Thorium-230		Thorium-232		Uranium-234		Uranium-235		Uranium-238	
	Bq/g[(a)]													
MGNLR	1.5	1.6	205	185	63	60	0.066	0.073	3.1	2.9	0.16	0.15	3.1	2.9
HGNLR	1.1	1.3	438	395	230	215	0.13	0.12	33	28	1.7	1.4	33	28
LUGP	0.048	0.028	0.048	0.055	11	13	0.0030	0.0035	2.1	2.0	0.10	0.10	2.1	2.0

Table 5-9: Average Results from Shake Flask Extraction Radiochemical Speciation Tests for Solid Samples

Sample ID	Potassium-40		Radium-226		Thorium-230		Thorium-232		Uranium-234		Uranium-235		Uranium-238	
	Bq/g[a]													
HUGP	0.020	0.028	0.20	0.16	13	13	0.0050	0.0060	8.1	8.7	0.41	0.43	8.1	8.7
MPPT	0.10	0.039	11	12	1525	1600	0.45	0.55	25	27	1.2	1.3	25	27
OPC	<0.04	0.14	0.040	0.040	0.020	0.020	0.010	0.0090	0.024	0.026	0.0010	0.0010	0.024	0.026
OPC / SLAG	0.10	0.10	0.10	0.10	<0.5	<0.5	0.052	0.047	0.12	0.11	0.0061	0.0053	0.12	0.11
HLC	2.0	1.9	380	373	213	208	0.11	0.12	29	29	1.4	1.5	29	29
HHC	1.8	1.9	290	270	175	165	0.086	0.18	23	46	1.2	2.3	23	46
HPLC	1.0	1.3	293	310	560	578	0.24	0.27	28	32	1.4	1.6	28	32
HPHC	1.1	1.5	173	175	373	348	0.17	0.16	23	20	1.1	0.99	23	20
HHGPLC	1.8	1.0	185	188	405	380	0.18	0.17	26	23	1.3	1.1	26	23
HHGPHC	1.3	0.88	150	134	278	288	0.13	0.14	17	16	0.86	0.81	17	16
HLC-S	1.5	1.5	390	405	213	215	0.12	0.12	31	36	1.6	1.8	31	36
HHC-S	0.73	2.0	253	308	150	175	0.11	0.095	23	39	1.2	2.0	23	39

a) Values to the left of the constituent represent concentrations in samples before SFE testing, and values to right represent concentrations after testing.
Bq/g = becquerels per gram; <= less than; SFE = shake flask extraction.

Averaged results from the SFE and process water radiochemical speciation assessment for leachate and process water samples are provided in Table 5-10. Key results are summarized as follows:

- Radionuclide species with the greatest concentrations in the process water samples and SFE leachate were radium-226 and lead-210.
- Neutralized leach residue samples (MGNLR and HGNLR) contained a greater measured concentration of leachable radionuclides compared to the composite samples.
- Average radium-226 concentrations are greatest in the MGNLR material, followed by the high-grade process water and the HHC composite sample.
- Average lead-210 concentrations were greatest in the MGNLR and HGNLR samples and concentrations are at least one order of magnitude lower in the composite samples.

Table 5-10: Selected Average Results from Leachate Radiochemical Speciation Tests

Sample ID	Lead-210	Polonium-210	Radium-226	Radium-228
	Bq/L			
MG-PW	1.2	1.0	25	0.48
HG-PW	27	3.9	103	2.5
MGNLR (SFE)	275	23	345	3.8
HGNLR (SFE)	240	7.4	86	1.5
LUGP (SFE)	0.90	0.10	0.58	0.75
HUGP (SFE)	0.40	0.10	0.53	1.0
MPPT (SFE)	0.40	0.10	0.28	1.0

Table 5-10: Selected Average Results from Leachate Radiochemical Speciation Tests

Sample ID	Lead-210	Polonium-210	Radium-226	Radium-228
	Bq/L			
OPC (SFE)	<0.8	<0.2	0.20	<2
OPC / SLAG (SFE)	<0.8	<0.2	0.30	<3
HLC (SFE)	0.55	0.20	83	1.9
HHC (SFE)	43	1.8	108	4.5
HPLC (SFE)	0.40	0.33	17	2.1
HPHC (SFE)	8.0	0.38	7.2	3.4
HHGPLC (SFE)	0.40	0.13	11	3.4
HHGPHC (SFE)	4.0	0.18	6.9	2.5
HLC-S (SFE)	2.0	0.75	64	1.0
HHC-S (SFE)	17	0.93	48	4.1

Bq/L = becquerels per litre; <= less than; SFE = shake flask extraction.

6 KEY FINDINGS

Key findings from the geotechnical, geochemical, and radiological characterization of neutralized leach reside, process waste, binder, and composite materials are described below.

Analytical data complied with the QA/QC criteria established for the characterization program, except for a small number of data points. These data points were addressed on an individual basis and did not affect the data interpretation or trend analysis. Adjustments were made to the HCT procedures to accommodate slow draining of the leach residues. The low binder LEAF test samples were also converted from a 3-D assessment to a 1-D assessment (as prescribed by the method) due to swelling and flaking during hydration.

Key findings from the geotechnical tests are as follows:

- Neutralized leach residue samples contained the lowest moisture content (25% to 28%) and the gypsum and effluent precipitates contained the highest moisture content (45% to 146%). Moisture content was the same or greater in the low binder samples compared to the corresponding high binder sample.
- The hydraulic conductivity of the individual materials (7.7×10^{-09} m/s to 1.2×10^{-07} m/s) was higher than that of the composite samples (3.5×10^{-10} m/s to 4.4×10^{-08} m/s). Binder content influenced the hydraulic conductivity of the composite materials and the hydraulic conductivity of the high binder material (3.5×10^{-10} m/s to 5.7×10^{-09} m/s) was one to two orders of magnitude lower than the corresponding low binder material (1.0×10^{-08} m/s to 4.4×10^{-08} m/s).

Key findings from the static geochemical tests are as follows:

- Neutralized leach residue consisted of acid resistant minerals, including muscovite (48 wt.% to 53 wt.%), quartz (27 wt.% to 36 wt.%), clinochlore (4.9 wt.% to 10 wt.%), chamosite (7.5 wt.% to 11 wt.%), and gypsum (2.1 wt.% to 6.2 wt.%). The gypsum and effluent precipitates consisted of calcium sulphate minerals, including gypsum (93 wt.%), bassanite (6.7 wt.% to 7.5 wt.%), and anhydrite (0 wt.% to 1.4 wt.%).

- The mineralogy of the composite samples reflected the mineralogy of the individual waste components with the addition of minerals that are likely associated with cement binders. The composite samples consisted of muscovite (12 wt.% to 58 wt.%), quartz (10 wt.% to 43 wt.%), gypsum (0 wt.% to 54 wt.%), ettringite (0 wt.% to 27 wt.%), clinochlore (0 wt.% to 22 wt.%), chamosite (0 wt.% to 18 wt.%), calcite (0 wt.% to 11 wt.%), kaolinite (0 wt.% to 9 wt.%), and portlandite (0 wt.% to 6 wt.%).
- The total sulphur content in all materials tested was dominated by sulphate-sulphur. Sulphide-sulphur was generally present at values less than 1 wt.% and was consistent with no detected sulphide minerals in the XRD analysis. Acid potential values ranged from 0.4 t to 47 t $CaCO_3$/1,000 t equivalent.
- Average NP values were relatively low in the neutralized leach residue and precipitate samples (1.3 t to 3.4 t $CaCO_3$/1,000 t) and notably higher in most of the composite samples due to the addition of the high NP binder materials (1,090 t $CaCO_3$/1,000 t and 600 t $CaCO_3$/1,000 t, respectively). High binder composites had a higher NP compared to the corresponding low binder version.
- Based on internationally accepted acid generation potential criteria, the neutralized leached residue, gypsum precipitates, and effluent precipitates were classified as PAG. Most of the composite materials were classified as uncertain or NPAG due to their basic paste pH values (corresponding to stored alkalinity in the pore space) and relatively high NPR values (greater than one).
- Major and minor oxide components of the materials were consistent with the primary mineralogy. Metal concentrations with enrichment factors greater than five times crustal abundance in most individual waste samples and all composite samples were arsenic, bismuth, copper, lead, molybdenum, selenium, sulphur, and uranium. Antimony and silver were also present in concentrations greater than five times crustal abundance in some of the composite samples. Calcium, cobalt, tin, yttrium, and zinc concentrations were greater than five times crustal abundance in the individual waste samples.
- The leachability of dissolved constituents from the individual and composite materials was determined by the mineralogy of the material and the binder content. More specifically, the binder materials were highly alkaline, which affects the solubility of certain metals and metalloids. Constituents with a high leachability potential identified from the bulk metal and SFE tests were chloride, fluoride, nitrite, sulphate, aluminum, arsenic, cadmium, chromium, copper, iron, lead, lead-210, molybdenum, nickel, radium-226, selenium, silver, uranium, and zinc.

Key findings from the short-term leach testing are as follows:

- High binder versions of composite samples contained higher pH values compared to the corresponding low binder versions.
- The highest sulphate liberation rates were associated with the gypsum and effluent precipitates due to the dominant gypsum composition of the materials.
- Composite samples contained the highest aluminium liberation rates. Elevated copper, lead, nickel, selenium, and uranium concentrations were associated with the neutralized leach residue, whereas chromium was associated with the OPC and cement/slag binders. Elevated molybdenum leachate concentrations were associated with the gypsum and effluent precipitates.

Key findings from the MTP tests (pore water quality evaluation) are as follows:

- The initial pore water pH of the composite samples was alkaline (pH 7.4 to 10) and higher pH levels were associated with the high binder materials. The pH values of subsequent pore volume replacements remained alkaline and varied among the composite samples.
- Metal concentrations were highest in the initial pore volume samples (0 to 1 pore volume replacements).
- Metal liberation rates for aluminium, arsenic, chromium, copper, lead, molybdenum, nickel, and uranium decreased as a function of pore volume replaced. The rates decreased by one to several orders of magnitude over a period of 5 pore volume replacements.

Key findings from the HCT tests are as follows:

- The week one leachate was acidic for all HGNLR (average pH 5.4) and MGNLR (average pH 4.3) samples and declined over the 64-week leaching period from 4.5 to 4.7 for the HGNLR samples and 3.9 to 4.0 for the MGNLR samples.
- Maximum sulphate mass loading rates occurred during week one (average HGNLR 1,973 mg/kg/wk, average MGNLR 1,182 mg/kg/wk). Sulphate mass loading decreases over time following ordered rate kinetics and showed stabilizing trends after approximately week 25. The average HGNLR mass loading rate after week 25 was 20 mg/kg/wk) and the average MGNLR mass loading rate 24 mg/kg/wk.
- Metal mass loading rates for arsenic, nickel and selenium followed order rate kinetics evident in initial high concentrations that decrease over time to lower long-term rates. aluminium, copper, lead, molybdenum and uranium mass loading rates follow non-order rate kinetics with either increasing trends or fluctuating trends over the leaching period of 64 weeks.
- The depletion calculations conducted for the HCTs predict that sulphide-sulphur was depleted in the HGNLR cells between weeks six and eight, and the NP was depleted between weeks one and four, supporting the PAG classification of these leach residue materials.

Key findings from the LEAF tests are as follows:

- The interval mass flux values were highest under initial leaching conditions and stabilized over time, while the diffusivity values varied as a function of the leaching interval time.
- Interval mass flux values indicated diffusion-based ordered rate kinetics for most constituents.
- Aluminum diffusivity values ranged from 4.9×10^{-12} to 3.2×10^{-3} m^2/s and values in the high binder materials were orders of magnitude greater than those for the low binder materials. The diffusivity values for arsenic, lead, molybdenum, and uranium were greater in the low binder samples compared to the high binder samples of the same composite material. Diffusivity values for selenium, copper, and radium-226 did not show differentiation between low and high binder versions of composite materials.

Key findings from the radiological tests are as follows:

- Of the composite materials tested, the HHC-S samples contained the highest radioactivity (gross alpha activity 288 Bq/L and gross beta activity 128 Bq/L). Radioactivity levels of the composite materials were affected by binder content and the high binder samples contained a higher leachable radioactivity.

- Radioactivity and radiochemical speciation analysis indicate that some radioactivity was mobilized during short-term leach testing. For the composite samples, radioactivity in the solids generally decreased after the SFE leach testing. The low binder samples demonstrated a greater decrease in radioactivity values compared to the high binder samples.
- Radionuclide species with the highest leachable concentrations in all samples were radium-226 and lead-210. Average radium-226 concentrations were greatest in the MGNLR samples (345 Bq/L) and average lead-210 concentrations were also greatest in the MGNLR samples (275 Bq/L).

CLOSING

Golder is pleased to submit this report to NexGen in support of the environmental assessment for the Rook I Project. For details on the limitations and use of information presented in this report, please refer to the Study Limitations section following this page. If you have any questions or require additional details related to this study, please contact the undersigned.

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SR/NB/rd

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APPENDIX A

SRC Certificates

Canadian Association for Laboratory Accreditation Inc.

CALA

Certificate of Accreditation

SRC Environmental Analytical Laboratories
Saskatchewan Research Council
143-111 Research Drive
Saskatoon, Saskatchewan

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

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Accreditation No.:	A2472
Issued On:	March 1, 2018
Accreditation Date:	January 3, 2005
Expiry Date:	August 29, 2020

Andrew M. Adams
President & CEO

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Standards Council of Canada
Conseil canadien des normes

CERTIFICAT D'ACCRÉDITATION

Saskatchewan Research Council
GEOANALYTICAL LABORATORIES
Galleria Building, 125 – 15 Innovation Blvd., Saskatoon, SK S7N 2X8

having been assessed by the Standards Council of Canada (SCC) and found to conform with the requirements of ISO/IEC 17025:2005 and the conditions for accreditation established by SCC is hereby recognized as an

ayant fait l'objet d'une évaluation du Conseil canadien des normes (CCN), et ayant été trouvé conforme aux exigences énoncées dans ISO/IEC 17025:2005 et aux conditions d'accréditation établies par le CCN, est de ce fait reconnu comme étant un

ACCREDITED TESTING LABORATORY

LABORATOIRE D'ESSAIS ACCRÉDITÉ

for the specific tests or types of tests listed in the scope of accreditation approved by SCC and found on the SCC website at www.scc.ca.

pour les essais ou types d'essais énumérés dans la portée d'accréditation approuvée par le CCN et figurant dans le site Web du CCN au www.ccn.ca.

Accredited laboratory number: / Numéro de laboratoire accrédité : 537

SCC file number: / Dossier du CCN n° : 15675

Initial accreditation date: / Date de la première accréditation : 2004-04-14

pp. Chantal Guay

Vice-President – Accreditation Services / Vice-présidente – Services d'accréditation

Issued on: / Délivré le : 2017-06-23

The validity of this certificate, including the date of last re-accreditation and its expiry can be confirmed by the accompanying Scope of Accreditation document in the Directory of Accredited Laboratories on the SCC website at www.scc.ca.

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. The accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF communiqué dated April 2017).

Pour vérifier la validité du présent certificat, y compris la date de la dernière réaccréditation et la date d'expiration du certificat, consulter la portée d'accréditation qui se trouve dans le répertoire des laboratoires accrédités dans le site Web du CCN au www.ccn.ca.

Ce laboratoire est accrédité conformément à la Norme internationale reconnue ISO/IEC 17025:2005. Cette accréditation démontre la compétence technique d'un organisme pour une portée définie et l'exploitation d'un système de management de la qualité de laboratoire (cf. communiqué conjoint ISO-ILAC-IAF date de avril 2017).

Canada

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SRC Environmental Analytical Laboratories
Quality Assurance Program

Introduction

As one of the most modern, well-equipped laboratory complexes in Canada, SRC Environmental Analytical Laboratories (SRC Analytical) provides a wide range of commercial analytical services. SRC Analytical maintains an extensive *Quality Assurance Program* designed to ensure the reliability of analytical data. Key components of the Quality Assurance program are:

- Accreditation by Canadian Association for Laboratory Accreditation (CALA).
- Participation in interlaboratory performance assessment programs.
- Routine quality control practices.
- Computerized sample management.

Accreditation by CALA

SRC Analytical is accredited by the Canadian Association for Laboratory Accreditation (CALA), for specific environmental tests listed in the scope of accreditation approved by CALA. Accreditation ensures that procedures, facilities, and methods conform to ISO/IEC 17025:2017, the internationally recognized standard. The accreditation program consists of a biennial on-site assessment which assesses the accredited methods as well as the quality management system.

Proficiency Testing and Interlaboratory Performance Assessment

Proficiency Testing helps to ensure the accuracy of results through interlaboratory comparisons and is a mandatory requirement of accreditation. SRC Analytical participates in several proficiency testing and interlaboratory performance assessment programs including:

- Proficiency Testing Canada (PTC)
- Environment Canada's Ecosystems Interlaboratory Quality Assurance program.
- ASTM's proficiency studies
- International Atomic Energy Agency programs.
- Commercially available programs such as those supplied by Environmental Resource Associates (ERA)

Quality Control

SRC Analytical employs a variety of techniques, such as the analysis of reference materials, control samples, duplicates, and spike recovery to ensure the validity of analytical results. If a problem is identified, the samples are repeated or other corrective action is taken to demonstrate that the analytical results are acceptable. If this is not possible, then the client is notified.

Computerized Sample Management

A computerized Laboratory Information Management System (LIMS) uniquely identifies samples, specifies the required analyses, monitors workflow, and stores the analytical results. All analytical data generated is the property of the client and is not released to a third party except at the written request of the client. The LIMS also prepares analytical reports and invoices.

Quality Assurance Department

Quality Assurance staff at SRC Analytical manages all aspects of the quality system. This includes reviews of quality control data, method validation, and quality audits. For further information, contact the SRC Analytical Laboratory.

Quality Assurance Supervisor

January 28, 2020
Date

SRC GEOANALYTICAL LABORATORIES

Reference Material Report for CAR218

By Clare Deugau
Saskatchewan Research Council
Mining & Minerals
Geoanalytical Laboratories

17 January 2018

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ICP1 Total Digestion

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: ICP1 U Exploration Package Total Digestion

Analyte	Det Limit	Unit	Value	Lower Limi	Upper Lim
Ag	0.2	ppm	3.2	2.4	3.9
Al2O3	0.01	wt %	13.6	13.2	14.0
Ba	1	ppm	99	95	103
Be	0.2	ppm	8.4	7.9	8.9
CaO	0.01	wt %	0.43	0.41	0.45
Cd	1	ppm	1	<1	3
Ce	1	ppm	59	55	64
Co	1	ppm	146	136	155
Cr	1	ppm	162	141	183
Cu	1	ppm	380	364	395
Dy	0.2	ppm	25.6	22.6	28.6
Er	0.2	ppm	11.2	10.4	11.9
Eu	0.2	ppm	1.8	1.7	2.0
Fe2O3	0.01	wt %	3.48	3.36	3.61
Ga	1	ppm	35	31	38
Gd	1	ppm	13	11	14
Hf	1	ppm	6	3	8
Ho	1	ppm	3	2	5
K2O	0.01	wt %	2.88	2.76	3.00
La	1	ppm	35	31	38
Li	1	ppm	217	207	227
MgO	0.01	wt %	2.32	2.23	2.41
MnO	0.01	wt %	0.04	0.03	0.06
Mo	1	ppm	632	612	652
Na2O	0.01	wt %	0.06	0.04	0.07
Nb	1	ppm	17	15	19
Nd	1	ppm	32	31	33
Ni	1	ppm	2105	1931	2278
P2O5	0.01	wt %	0.12	0.11	0.14
Pb	1	ppm	256	245	267
Pr	1	ppm	6	4	9
Sc	1	ppm	11	10	12
Sm	1	ppm	7	4	9
Sn	1	ppm	4	<1	7
Sr	1	ppm	118	112	123
Ta	1	ppm	1	<1	3
Tb	1	ppm	1	<1	2
Th	1	ppm	34	30	39
TiO2	0.01	wt %	0.64	0.61	0.68
U	2	ppm	3014	2908	3120
V	1	ppm	968	931	1005
W	1	ppm	8	5	11
Y	1	ppm	128	121	134
Yb	0.1	ppm	8.2	7.6	8.7
Zn	1	ppm	62	58	66
Zr	1	ppm	245	229	262

ICP1 Partial Digestion

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: ICP1 U Exploration Package Partial Digestion

Analyte	Det Limit	Unit	Value	Lower Lim	Upper Lim
Ag	0.2	ppm	2.9	2.7	3.2
As	1	ppm	3130	2999	3260
Bi	1	ppm	97	92	102
Co	1	ppm	140	134	147
Cu	1	ppm	363	348	378
Ge	1	ppm	1	<1	2
Hg	1	ppm	1	<1	2
Mo	1	ppm	578	557	598
Ni	1	ppm	1992	1900	2085
Pb	1	ppm	199	185	214
Sb	1	ppm	3	2	5
Se	1	ppm	13	10	17
Te	1	ppm	1	<1	2
U	1	ppm	3007	2878	3136
V	1	ppm	283	260	305
Zn	1	ppm	48	44	51

ICPMS Total Digestion

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: ICP-MS Package Total Digestion

Analyte	Det Limit	Unit	Value	Lower Lim	Upper Lim
Ag	0.02	ppm	2.91	2.41	3.40
Be	0.1	ppm	9.4	7.5	11.2
Bi	0.1	ppm	119	108	130
Cd	0.1	ppm	0.1	<0.1	0.2
Co	0.02	ppm	148	129	167
Cs	0.1	ppm	1.8	1.6	2.1
Cu	0.1	ppm	379	352	406
Dy	0.02	ppm	24.2	19.5	28.9
Er	0.02	ppm	9.98	8.53	11.43
Eu	0.02	ppm	1.77	1.47	2.06
Ga	0.1	ppm	36.6	33.3	39.9
Gd	0.1	ppm	12.5	10.5	14.6
Hf	0.1	ppm	7.1	5.7	8.6
Ho	0.02	ppm	4.57	4.13	5.01
Mo	0.01	ppm	656	600	713
Nb	0.1	ppm	13.5	11.5	15.4
Nd	0.1	ppm	26.6	21.0	32.1
Ni	0.1	ppm	2073	1891	2256
Pb204	0.001	ppm	0.508	0.458	0.558
Pb206	0.001	ppm	179	169	189
Pb207	0.001	ppm	17.2	15.9	18.6
Pb208	0.001	ppm	26.6	23.5	29.8
PbSUM	0.001	ppm	223	212	235
Pr	0.1	ppm	7.3	6.2	8.5
Rb	0.1	ppm	70.3	63.3	77.2
Sc	0.1	ppm	12.1	9.6	14.5
Sm	0.1	ppm	7.7	6.3	9.1
Sn	0.02	ppm	2.46	1.67	3.25
Ta	0.02	ppm	1.43	1.22	1.63
Tb	0.02	ppm	3.51	3.03	3.99
Th	0.02	ppm	34.2	29.6	38.7
U	0.02	ppm	2999	2677	3320
V	0.1	ppm	961	913	1009
W	0.1	ppm	9.2	5.6	12.8
Y	0.1	ppm	127	113	140
Yb	0.02	ppm	7.25	6.57	7.93
Zn	1	ppm	60	53	67

ICPMS Partial Digestion

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: ICP MS Package Partial Digestion

Analyte	Det Limit	Unit	Value	Lower Limi	Upper Limi
Ag	0.01	ppm	2.66	2.09	3.23
As	0.01	ppm	3236	3021	3451
Be	0.01	ppm	3.68	3.30	4.07
Bi	0.01	ppm	104	83.8	125
Cd	0.01	ppm	0.05	<0.01	0.14
Co	0.01	ppm	138	126	149
Cs	0.01	ppm	0.44	0.38	0.50
Cu	0.01	ppm	356	339	373
Dy	0.01	ppm	19.3	17.7	21.0
Er	0.01	ppm	8.45	7.73	9.18
Eu	0.01	ppm	1.33	1.20	1.46
Ga	0.01	ppm	7.68	6.76	8.60
Gd	0.01	ppm	10.41	9.23	11.59
Ge	0.01	ppm	0.08	0.06	0.11
Hf	0.01	ppm	1.00	0.79	1.22
Hg	0.01	ppm	0.84	0.74	0.93
Ho	0.01	ppm	3.77	3.49	4.06
Mo	0.01	ppm	589	553	625
Nb	0.01	ppm	0.02	<0.01	0.05
Nd	0.01	ppm	13.1	12.0	14.1
Ni	0.01	ppm	1896	1782	2010
Pb204	0.001	ppm	0.438	0.402	0.474
Pb206	0.001	ppm	154	146	162
Pb207	0.001	ppm	16.1	15.1	17.1
Pb208	0.001	ppm	25.4	23.2	27.6
PbSUM	0.001	ppm	196	185	207
Pr	0.01	ppm	2.67	2.42	2.91
Rb	0.01	ppm	6.95	6.19	7.70
Sb	0.01	ppm	2.34	1.50	3.17
Sc	0.1	ppm	4.41	4.05	4.77
Se	0.1	ppm	11.46	9.30	13.61
Sm	0.01	ppm	5.47	5.05	5.90
Sn	0.01	ppm	0.35	0.26	0.45
Ta	0.01	ppm	0.01	<0.01	0.02
Tb	0.01	ppm	3.04	2.51	3.57
Te	0.01	ppm	0.28	0.12	0.44
Th	0.01	ppm	21.2	19.4	23.0
U	0.01	ppm	2891	2728	3054
V	0.1	ppm	272	249	295
W	0.1	ppm	0.1	<0.1	0.2
Y	0.01	ppm	92.9	85.7	100.1
Yb	0.01	ppm	5.50	5.05	5.96
Zn	0.1	ppm	43.7	40.4	47.1
Zr	0.01	ppm	40.0	31.9	48.0

ICP Total Digestion (MS Package)

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: ICP (MS Package) Total Digestion

Analyte	Det Limit	Unit	Value	Lower Limi	Upper Lim
Al2O3	0.01	wt %	13.6	13.2	14.0
Ba	1	ppm	99	95	103
CaO	0.01	wt %	0.43	0.41	0.45
Ce	1	ppm	59	55	64
Cr	1	ppm	162	141	183
Fe2O3	0.01	wt %	3.48	3.06	3.61
K2O	0.002	wt %	2.88	2.76	3.00
La	1	ppm	35	31	38
Li	1	ppm	217	207	227
MgO	0.002	wt %	2.32	2.23	2.41
MnO	0.001	wt %	0.046	0.040	0.052
Na2O	0.01	wt %	0.06	0.04	0.07
P2O5	0.002	wt %	0.128	0.117	0.139
Sr	1	ppm	118	112	123
TiO2	0.002	wt %	0.64	0.61	0.68
V	0.1	ppm	968	931	1005
Zr	1	ppm	245	229	262

Aqua Regia Digestion

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS: Aqua Regia Digestion

Analyte	Det Limit	Unit	Value	Lower Limi	Upper Limi
Ag	0.2	ppm	3.0	2.6	3.4
Al2O3	0.01	wt %	6.83	6.39	7.27
As	1	ppm	3360	3135	3584
Ba	1	ppm	58	54	61
Be	0.5	ppm	5.2	4.7	5.6
Bi	1	ppm	102	95	109
CaO	0.01	wt %	0.42	0.40	0.45
Cd	1	ppm	2	1	3
Co	1	ppm	132	123	142
Cr	1	ppm	97	90	104
Cu	1	ppm	375	356	395
Fe2O3	0.01	wt %	3.15	2.99	3.31
Hg	1	ppm	1	<1	2
K2O	0.01	wt %	1.01	0.93	1.09
La	1	ppm	13	12	15
MgO	0.01	wt %	1.84	1.75	1.93
MnO	0.002	wt %	0.042	0.040	0.045
Mo	1	ppm	568	535	600
Na2O	0.01	wt %	0.03	0.02	0.04
Ni	1	ppm	2039	1915	2163
P2O5	0.002	wt %	0.097	0.090	0.103
Pb	1	ppm	203	191	215
S	10	ppm	2959	2780	3138
Sb	1	ppm	4	2	6
Sc	1	ppm	6	4	7
Se	1	ppm	16	12	19
Sn		ppm	1	<1	2
Sr	1	ppm	59	53	64
TiO2	0.01	wt %	0.01	<0.01	0.02
U, ICP	1	ppm	2909	2747	3070
V	1	ppm	565	521	609
W	1	ppm	1	<1	2
Y	1	ppm	97	92	103
Zn	1	ppm	53	49	57
Zr	1	ppm	1	<1	2

Other Packages

Standard Information

CAR218 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CAR218 STD QC LIMITS

Analyte	Det Limit	Unit	Value	Lower Limi	Upper Lim
U3O8	0.001	wt %	0.351	0.346	0.356
LOI	0.1	wt %	5.6	5.0	6.2

SRC GEOANALYTICAL LABORATORIES

Quality Control Data Limits

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10 June 2009

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1. ASR109 Standard Information

Standard Information

ASR109 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR109 STD QC LIMITS: ICP U Exploration Package Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.1	0.2	ppm	0.4	<0.1
As	0.2	0.6	ppm	1.0	0.2
Bi	0.2	0.7	ppm	1.0	0.4
Co	0.1	0.7	ppm	1.0	0.4
Cu	0.1	4.6	ppm	4.9	4.3
Ge	0.2	0.2	ppm	0.5	<0.2
Hg	0.2	0.3	ppm	0.7	<0.2
Mo	0.1	2.6	ppm	2.9	2.3
Ni	0.1	12.7	ppm	13.9	11.5
Pb	0.02	1.06	ppm	1.26	0.86
Sb	0.2	0.2	ppm	0.5	<0.2
Se	0.2	0.2	ppm	0.5	<0.2
Te	0.2	0.2	ppm	0.5	<0.2
U	0.5	1.0	ppm	1.5	0.5
V	0.1	1.6	ppm	1.9	1.3
Zn	0.1	0.9	ppm	1.2	0.6

ASR109 STD QC LIMITS: Other Packages - Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
U,Fl	0.02	0.18	ppm	0.22	0.14

ASR109 Standard Information continued

Standard Information

ASR109 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR109 STD QC LIMITS: ICP U Exploration Package Total Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.2
Al2O3	0.01	0.49	%	0.54	0.44
Ba	1	18	ppm	21	15
Be	0.2	0.2	ppm	0.4	<0.2
CaO	0.01	0.01	%	0.03	<0.01
Cd	0.2	0.2	ppm	0.4	<0.2
Ce	1	14	ppm	17	11
Co	1	1	ppm	2	<1
Cr	1	503	ppm	563	443
Cu	1	4	ppm	6	2
Dy	0.2	0.3	ppm	0.5	<0.2
Er	0.2	0.3	ppm	0.5	<0.2
Eu	0.2	0.2	ppm	0.4	<0.2
Fe2O3	0.01	0.54	%	0.59	0.49
Ga	1	1	ppm	2	<1
Gd	0.5	1.2	ppm	1.8	0.6
Hf	0.5	1.3	ppm	2.3	<0.5
Ho	0.4	0.4	ppm	0.7	<0.4
K2O	0.002	0.044	%	0.049	0.039
La	1	7	ppm	10	4
Li	1	9	ppm	11	7
MgO	0.001	0.027	%	0.033	0.021
MnO	0.001	0.004	%	0.006	0.002
Mo	1	3	ppm	5	1
NaO2	0.01	0.01	%	0.03	<0.01
Nb	1	1	ppm	2	<1
Nd	1	5	ppm	7	3
Ni	1	12	ppm	15	9
P2O5	0.002	0.013	%	0.016	0.010
Pb	1	2	ppm	4	<2
Pr	1	1	ppm	2	<1
Sc	1	1	ppm	1.5	<1
Sm	0.5	1	ppm	1.5	0.5
Sn	1	1	ppm	2	<1
Sr	1	41	ppm	44	38
Ta	1	1	ppm	2	<1
Tb	0.3	0.3	ppm	0.8	<0.3
Th	1	2	ppm	4	<1
TiO2	0.001	0.028	%	0.034	0.022
U	2	2	ppm	4	<2
V	1	4	ppm	6	2
W	1	1	ppm	2	<1
Y	1	2	ppm	2	<1
Yb	0.1	0.2	ppm	0.4	<0.1
Zn	1	1	ppm	3	<1
Zr	1	44	ppm	54	34

ASR109 Standard Information continued

Standard Information

ASR109 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR109 STD QC LIMITS: ICPMS SST Package Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.01	0.01	ppm	0.02	<0.01
As	0.01	0.45	ppm	0.55	0.35
Be	0.01	0.01	ppm	0.02	<0.01
Bi	0.01	0.02	ppm	0.04	<0.01
Cd	0.01	0.02	ppm	0.04	<0.1
Co	0.01	0.76	ppm	0.86	0.66
Cs	0.01	0.02	ppm	0.04	<0.01
Cu	0.01	4.50	ppm	4.80	4.20
Dy	0.01	0.13	ppm	0.15	0.11
Er	0.01	0.07	ppm	0.09	0.05
Eu	0.01	0.04	ppm	0.06	0.02
Ga	0.01	0.20	ppm	0.23	0.17
Gd	0.01	0.24	ppm	0.28	0.2
Ge	0.01	0.02	ppm	0.04	<0.01
Hf	0.01	0.10	ppm	0.12	0.08
Hg	0.01	0.02	ppm	0.04	<0.01
Ho	0.01	0.02	ppm	0.03	0.01
Mo	0.01	2.70	ppm	3.10	2.30
Nb	0.01	0.01	ppm	0.02	<0.01
Nd	0.01	1.36	ppm	1.56	1.16
Ni	0.01	12.9	ppm	14.2	11.6
Pb204	0.01	0.02	ppm	0.04	<0.01
Pb206	0.02	0.31	ppm	0.37	0.25
Pb207	0.02	0.25	ppm	0.31	0.19
Pb208	0.02	0.63	ppm	0.73	0.53
PbTOTAL	0.02	1.15	ppm	1.45	0.98
Pr	0.01	0.40	ppm	0.45	0.35
Rb	0.01	0.29	ppm	0.34	0.24
Sb	0.01	0.04	ppm	0.06	0.02
Sc	0.1	0.2	ppm	0.3	<0.1
Se	0.1	0.1	ppm	0.1	<0.1
Sm	0.01	0.26	ppm	0.31	0.21
Sn	0.01	0.33	ppm	0.39	0.27
Ta	0.01	0.01	ppm	0.02	<0.01
Tb	0.01	0.03	ppm	0.04	0.02
Te	0.01	0.02	ppm	0.04	<0.01
Th	0.01	0.75	ppm	0.85	0.65
U	0.01	0.23	ppm	0.28	0.18
V	0.1	1.4	ppm	1.7	1.1
W	0.1	0.1	ppm	0.2	<0.1
Y	0.01	0.50	ppm	0.66	0.40
Yb	0.01	0.10	ppm	0.08	0.04
Zn	0.1	1.0	ppm	2.0	<0.1
Zr	0.01	3.32	ppm	4.32	2.32

ASR109 Standard Information continued

Standard Information

ASR109 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR109 STD QC LIMITS: ICPMS SST Package Total Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.02	0.04	ppm	0.06	0.02
Be	0.1	0.1	ppm	0.2	<0.1
Bi	0.1	0.1	ppm	0.1	<0.1
Cd	0.1	0.2	ppm	0.1	<0.1
Co	0.01	0.74	ppm	0.86	0.62
Cs	0.1	0.2	ppm	0.3	<0.1
Cu	0.1	4.9	ppm	5.5	4.3
Dy	0.01	0.40	ppm	0.47	0.33
Er	0.01	0.22	ppm	0.26	0.17
Eu	0.01	0.15	ppm	0.18	0.12
Ga	0.01	0.8	ppm	1.0	0.6
Gd	0.01	0.9	ppm	1.1	0.7
Hf	0.01	1.3	ppm	1.7	0.9
Ho	0.01	0.08	ppm	0.10	0.06
Mo	0.01	3.30	ppm	3.70	2.90
Nb	0.01	0.8	ppm	1.1	0.5
Nd	0.01	5.2	ppm	5.7	4.7
Ni	0.01	13.1	ppm	14.4	12.1
Pb204	0.01	0.03	ppm	0.05	<0.02
Pb206	0.02	0.58	ppm	0.68	0.48
Pb207	0.02	0.49	ppm	0.59	0.39
Pb208	0.02	1.25	ppm	1.55	0.95
PbTOTAL	0.02	2.5	ppm	2.87	1.84
Pr	0.01	1.5	ppm	1.7	1.4
Rb	0.01	1.0	ppm	1.3	0.7
Sc	0.1	0.3	ppm	0.4	0.2
Sm	0.01	0.9	ppm	1.1	0.7
Sn	0.01	0.38	ppm	0.48	0.28
Ta *	0.1	0.1	ppm	0.2	<0.1
Tb	0.01	0.09	ppm	0.12	0.06
Th	0.01	2.00	ppm	2.42	1.58
U	0.01	0.51	ppm	0.60	0.42
V	0.1	4.5	ppm	5.1	3.9
W	0.1	0.4	ppm	0.8	0.1
Y	0.01	1.8	ppm	2.1	1.5
Yb	0.01	0.25	ppm	0.30	0.20
Zn	0.1	3	ppm	6	1

* Detection Limits have changed

2. ASR209 Standard Information

Standard Information

ASR209 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR209 STD QC LIMITS: ICP U Exploration Package Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.1	0.2	ppm	0.4	<0.1
As	0.2	1.7	ppm	2.3	1.1
Bi	0.2	0.6	ppm	1.0	0.2
Co	0.1	0.7	ppm	1.0	0.4
Cu	0.1	4.3	ppm	4.6	4
Ge	0.2	0.2	ppm	0.5	<0.2
Hg	0.2	0.3	ppm	0.6	<0.2
Mo	0.1	2	ppm	2.3	1.7
Ni	0.1	11.6	ppm	12.5	10.7
Pb	0.02	2.49	ppm	2.69	2.29
Sb	0.2	0.2	ppm	0.5	<0.2
Se	0.2	0.2	ppm	0.5	<0.2
Te	0.2	0.2	ppm	0.5	<0.2
U	0.5	1.5	ppm	2.5	<0.5
V	0.1	4.5	ppm	5	4
Zn	0.1	1.1	ppm	1.4	0.8

ASR209 STD QC LIMITS: Other Packages - Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
U,Fl	0.02	1.21	ppm	1.31	1.11

ASR209 Standard Information continued

Standard Information

ASR209 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR209 STD QC LIMITS: ICP U Exploration Package Total Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.3	ppm	0.6	<0.2
Al2O3	0.01	2.5	%	2.7	2.3
Ba	1	19	ppm	22	16
Be	0.2	0.3	ppm	0.6	<0.2
CaO	0.01	0.01	%	0.03	<0.01
Cd	0.2	0.2	ppm	0.4	<0.2
Ce	1	47	ppm	53	41
Co	1	1	ppm	2	<1
Cr	1	440	ppm	500	380
Cu	1	5	ppm	7	3
Dy	0.2	1.8	ppm	2.1	1.5
Er	0.2	1.2	ppm	1.5	0.9
Eu	0.2	0.4	ppm	0.6	0.2
Fe2O3	0.01	0.85	%	0.88	0.49
Ga	1	4	ppm	6	<1
Gd	0.5	2.5	ppm	3.4	1.6
Hf	0.5	5.8	ppm	7	4.6
Ho	0.4	0.6	ppm	0.9	<0.4
K2O	0.002	0.206	%	0.227	0.185
La	1	22	ppm	28	16
Li	1	8	ppm	10	6
MgO	0.001	0.038	%	0.044	0.032
MnO	0.001	0.004	%	0.006	0.002
Mo	1	3	ppm	5	1
NaO2	0.01	0.01	%	0.03	<0.01
Nb	1	5	ppm	7	3
Nd	1	15	ppm	18	12
Ni	1	13	ppm	16	10
P2O5	0.002	0.045	%	0.05	0.040
Pb	1	6	ppm	9	3
Pr	1	4	ppm	7	<1
Sc	1	1	ppm	3	<1
Sm	0.5	2.5	ppm	3.1	1.9
Sn	1	1	ppm	3	<1
Sr	1	167	ppm	173	161
Ta	1	1	ppm	3	<1
Tb	0.3	0.3	ppm	0.8	<0.3
Th	1	25	ppm	30	20
TiO2	0.001	0.232	%	0.272	0.192
U	2	3	ppm	6	<2
V	1	15	ppm	18	12
W	1	1	ppm	3	<1
Y	1	13	ppm	16	10
Yb	0.1	1.3	ppm	1.6	1
Zn	1	2	ppm	4	<1
Zr	1	272	ppm	308	236

ASR209 Standard Information continued

Standard Information

ASR209 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR209 STD QC LIMITS: ICPMS SST Package Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.01	0.02	ppm	0.04	<0.01
As	0.01	1.60	ppm	1.90	1.30
Be	0.01	0.07	ppm	0.09	0.05
Bi	0.01	0.05	ppm	0.07	0.03
Cd	0.01	0.04	ppm	0.06	0.02
Co	0.01	0.77	ppm	0.87	0.67
Cs	0.01	0.02	ppm	0.04	<0.01
Cu	0.01	4.20	ppm	4.70	3.70
Dy	0.01	0.44	ppm	0.51	0.37
Er	0.01	0.21	ppm	0.25	0.17
Eu	0.01	0.10	ppm	0.13	0.07
Ga	0.01	0.32	ppm	0.37	0.27
Gd	0.01	0.72	ppm	0.79	0.65
Ge	0.01	0.02	ppm	0.04	<0.01
Hf	0.01	0.54	ppm	0.64	0.44
Hg	0.01	0.02	ppm	0.04	<0.01
Ho	0.01	0.08	ppm	0.1	0.06
Mo	0.01	2.15	ppm	2.45	1.85
Nb	0.01	0.01	ppm	0.02	<0.01
Nd	0.01	4.30	ppm	5.0	3.60
Ni	0.01	11.5	ppm	12.6	10.4
Pb204	0.01	0.03	ppm	0.05	0.01
Pb206	0.02	0.77	ppm	0.97	0.57
Pb207	0.02	0.54	ppm	0.71	0.37
Pb208	0.02	1.50	ppm	1.90	1.10
PbTOTAL	0.02	2.50	ppm	3.63	2.05
Pr	0.01	1.33	ppm	1.53	1.13
Rb	0.01	0.44	ppm	0.51	0.37
Sb	0.01	0.04	ppm	0.06	0.02
Sc	0.1	0.2	ppm	0.3	<0.1
Se	0.1	0.04	ppm	0.1	<0.1
Sm	0.01	0.75	ppm	0.9	0.6
Sn	0.01	0.55	ppm	0.65	0.45
Ta	0.01	0.01	ppm	0.02	<0.01
Tb	0.01	0.08	ppm	0.1	0.06
Te	0.01	0.02	ppm	0.04	<0.01
Th	0.01	11.0	ppm	12.5	9.50
U	0.01	1.20	ppm	1.35	1.05
V	0.1	4.2	ppm	4.7	3.7
W	0.1	0.1	ppm	0.2	<0.1
Y	0.01	1.88	ppm	2.13	1.63
Yb	0.01	0.20	ppm	0.25	0.15
Zn	0.1	1.4	ppm	2.6	0.2
Zr	0.01	18.8	ppm	26.0	11.6

ASR209 Standard Information continued

Standard Information

ASR209 is a standard prepared in-house using various reject samples. The standard has been prepared to assure homogeneity. The standards have been sent to third parties for recheck analysis. QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

ASR209 STD QC LIMITS: ICPMS SST Package Total Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.02	0.12	ppm	0.17	0.07
Be	0.1	0.2	ppm	0.3	0.1
Bi	0.1	0.1	ppm	0.2	<0.1
Cd	0.1	0.3	ppm	0.5	0.1
Co	0.01	0.83	ppm	0.95	0.71
Cs	0.1	0.2	ppm	0.3	<0.1
Cu	0.1	4.6	ppm	5.2	4.0
Dy	0.01	1.90	ppm	2.20	1.60
Er	0.01	1.05	ppm	1.20	0.90
Eu	0.01	0.35	ppm	0.40	0.30
Ga	0.01	2.8	ppm	3.1	2.5
Gd	0.01	2.7	ppm	3.2	2.2
Hf	0.01	7.6	ppm	8.6	6.6
Ho	0.01	0.40	ppm	0.45	0.35
Mo	0.01	3.10	ppm	3.50	2.70
Nb	0.01	5.9	ppm	6.7	5.1
Nd	0.01	17.0	ppm	19.0	15.0
Ni	0.01	12.1	ppm	13.3	10.9
Pb204	0.01	0.073	ppm	0.088	0.058
Pb206	0.02	1.7	ppm	1.81	1.59
Pb207	0.02	1.17	ppm	1.29	1.05
Pb208	0.02	3.95	ppm	4.35	3.55
PbTOTAL	0.02	6.89	ppm	7.49	6.29
Pr	0.01	5.0	ppm	5.5	4.5
Rb	0.01	2.7	ppm	3.2	2.2
Sc	0.1	0.9	ppm	1.0	0.7
Sm	0.01	2.7	ppm	3.0	2.4
Sn	0.01	1.33	ppm	1.53	1.13
Ta *	0.1	0.9	ppm	1.0	0.8
Tb	0.01	0.32	ppm	0.39	0.25
Th	0.01	26.9	ppm	30.1	23.7
U	0.01	3.06	ppm	3.46	2.66
V	0.1	16.1	ppm	18.4	13.8
W	0.1	0.9	ppm	1.3	0.5
Y	0.01	10.8	ppm	13.1	8.5
Yb	0.01	1.09	ppm	1.26	0.92
Zn	0.1	3	ppm	8	<1

* Detection Limits have changed

3. LS4 Standard Information

Standard Information

LS4 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

LS4 STD QC LIMITS: Aqua Regia Leach

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.02
Al2O3	0.01	5.88	%	6.24	5.52
As	1	13	ppm	17	9
Ba	1	308	ppm	327	289
Be	0.2	2.1	ppm	2.8	1.4
Bi	1	1	ppm	2	<1
CaO	0.01	0.5	%	0.56	0.44
Cd	1	1	ppm	2	<1
Co	1	39	ppm	44	34
Cr	1	88	ppm	99	77
Cu	1	50	ppm	55	45
Fe2O3	0.01	10.4	%	11.7	9.1
Ge	1	1	ppm	2	<1
Hg	1	1	ppm	2	<1
K2O	0.01	0.51	%	0.57	0.45
MgO	0.01	1.10	%	1.16	1.04
MnO	0.01	0.69	%	0.74	0.64
Mo	1	13	ppm	17	9
Na2O	0.01	0.02	%	0.03	0.01
Ni	1	49	ppm	54	44
P2O5	0.01	0.56	%	0.64	0.48
Pb	1	25	ppm	29	21
Sb	1	1	ppm	2	<1
Sc	1	7	ppm	9	5
Se	1	1	ppm	2	<1
Sn	1	2	ppm	4	<1
Sr	1	24	ppm	29	19
Te	1	1	ppm	2	<1
TiO2	0.01	0.17	%	0.21	0.13
U	1	33	ppm	40	26
V	1	102	ppm	112	92
W	1	1	ppm	2	<1
Y	1	18	ppm	21	15
Zn	1	207	ppm	229	185
Zr	1	2	ppm	4	<1

LS4 Standard Information continued

Standard Information

LS4 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

LS4 STD QC LIMITS: ICP U Exploration Package Partial Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.02
As	1	12	ppm	15	9
Bi	1	1	ppm	2	<1
Co	1	38	ppm	42	34
Cu	1	49	ppm	56	42
Ge	1	1	ppm	2	<1
Hg	1	1	ppm	2	<1
Mo	1	12	ppm	15	9
Ni	1	49	ppm	54	44
Pb	1	23	ppm	27	19
Sb	1	1	ppm	2	<1
Te	1	1	ppm	2	<1
U	1	34	ppm	39	29
V	1	101	ppm	111	91
Zn	1	205	ppm	225	185

LS4 Standard Information continued

Standard Information

LS4 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

LS4 STD QC LIMITS: Aqua Regia Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.2
As	1	13	ppm	17	9
Bi	1	1	ppm	2	<1
Co	1	39	ppm	44	34
Cu	1	50	ppm	55	45
Ge	1	1	ppm	2	<1
Hg	1	1	ppm	2	<1
Mo	1	13	ppm	17	9
Ni	1	49	ppm	54	44
Pb	1	25	ppm	29	21
Sb	1	1	ppm	2	<1
Se	1	1	ppm	2	<1
Te	1	1	ppm	2	<1
U	1	33	ppm	40	26
V	1	102	ppm	112	92
Zn	1	207	ppm	229	185

LS4 Standard Information continued

Standard Information

LS4 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

LS4 STD QC LIMITS: AR ICP3 Gold Exploration

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.02
Al2O3	0.01	5.88	%	6.24	5.52
As	1	13	ppm	17	9
Ba	1	308	ppm	327	289
Be	0.2	2.1	ppm	2.8	1.4
Bi	1	1	ppm	2	<1
CaO	0.01	0.5	%	0.56	0.44
Cd	1	1	ppm	2	<1
Co	1	39	ppm	44	34
Cr	1	88	ppm	99	77
Cu	1	50	ppm	55	45
Fe2O3	0.01	10.4	%	11.7	9.1
K2O	0.01	0.51	%	0.57	0.45
MgO	0.01	1.09	%	1.19	0.99
MnO	0.01	0.67	%	0.74	0.60
Mo	1	13	ppm	17	9
Na2O	0.01	0.02	%	0.04	<0.01
Ni	1	49	ppm	54	44
P2O5	0.01	0.56	%	0.64	0.48
Pb	1	25	ppm	29	21
Sb	1	1	ppm	2	<1
Sc	1	7	ppm	9	5
Sn	1	2	ppm	4	<1
Sr	1	24	ppm	29	19
TiO2	0.01	0.17	%	0.21	0.13
V	1	102	ppm	112	92
W	1	1	ppm	2	<1
Y	1	18	ppm	21	15
Zn	1	207	ppm	229	185
Zr	1	2	ppm	4	<1

4. Boron Standard Information

Standard Information
Boron standard QC values are based on replicate analysis and limits are determinded from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.
Boron STD QC LIMITS: Na2O2 Fusion

Standard	Analyte	Unit	Value	Upper Limit	Lower Limit
Boron High (BH)	B	ppm	880	930	830
Boron Medium (BM)	B	ppm	95	101	89
Boron Low (BL)	B	ppm	16	21	11

5. U3O8 Standard Information

Standard Information

BL standard QC values are based on replicate analysis and limits are determinded from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

STD QC LIMITS: Aqua Regia Digestion

Standard	Analyte	Unit	Value	Upper Limit	Lower Limit
BL1	U3O8	%	0.026	0.030	0.022
BL2A	U3O8	%	0.502	0.510	0.496
BL3	U3O8	%	1.21	1.23	1.19
BL4A	U3O8	%	0.147	0.151	0.143
BL5	U3O8	%	8.36	8.46	8.26
UHU1	U3O8	%	80.5	81.6	79.4
CUP2	U3O8	%	87.5	88.4	86.5

6. CG 51509 Standard Information

Standard Information

CG51509 standard QC values are based on replicate analysis and limits are determined from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that samples sets using this standard have passed QC limits.

CG51509 STD QC LIMITS: ICP U Exploration Package Total Digestion

Analyte	Det Limit	Value	Units	Upper Limit	Lower Limit
Ag	0.2	0.2	ppm	0.4	<0.2
Al2O3	0.01	17.7	%	18.5	16.9
Ba	1	2250	ppm	2450	2050
Be	0.2	2.1	ppm	2.5	1.7
CaO	0.01	4.74	%	5.01	4.47
Cd	1	1	ppm	2	<1
Ce	1	160	ppm	175	145
Co	1	18	ppm	22	14
Cr	1	121	ppm	132	110
Cu	1	4	ppm	6	2
Dy	0.2	3.4	ppm	3.9	2.9
Er	0.2	2.5	ppm	3.0	2.0
Eu	0.2	2.6	ppm	3.0	2.2
Fe2O3	0.01	7.25	%	7.6	6.9
Ga	1	23	ppm	28	18
Gd	1	5.5	ppm	7	4
Hf	1	4	ppm	5	3
Ho	1	1	ppm	2	<1
K2O	0.01	3.11	%	3.31	2.91
La	1	88	ppm	96	80
Li	1	30	ppm	34	26
MgO	0.01	2.81	%	2.98	2.64
MnO	0.01	0.076	%	0.088	0.064
Mo	1	1	ppm	2	<1
Na2O	0.01	3.2	%	3.41	2.99
Nb	1	8	ppm	10	6
Nd	1	63	ppm	69	57
Ni	1	24	ppm	29	19
P2O5	0.01	0.67	%	0.71	0.63
Pb	1	19	ppm	23	15
Pr	1	16	ppm	19	13
Sc	1	13	ppm	15	11
Sm	1	8.8	ppm	9.8	7.8
Sn	1	3	ppm	5	1
Sr	1	1150	ppm	1220	1080
Ta	1	1	ppm	2	<1
Tb	1	1	ppm	2	<1
Th	1	13	ppm	16	10
TiO2	0.01	1.07	%	1.17	0.97
U	2	2	ppm	4	<2
V	1	131	ppm	143	109
W	1	1	ppm	2	<1
Y	1	22	ppm	25	19
Yb	0.1	2	ppm	2.3	1.7
Zn	1	87	ppm	94	80
Zr	1	177	ppm	217	137

7. Lead Isotopes standard information

Standard Information
NBS981 standard QC values are based on replicate analysis and limits are determinded from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.
Pb Isotope STD QC LIMITS: ICP-MS

Ratio	Value	Upper Limit	Lower Limit
Pb 208 / Pb 206	2.178	2.219	2.137
Pb 207 / Pb 206	0.922	0.928	0.915
Pb 206 / Pb 204	17.019	17.328	16.709
Pb 207 / Pb 204	15.683	16.034	15.333
Pb 208 / Pb 204	37.064	38.42	35.709

SASKATCHEWAN RESEARCH COUNCIL

QC LIMITS

FOR

SY3 REFERENCE MATERIAL

By Clare Glennon
Saskatchewan Research Council
Mining & Minerals

11th April 2013

SY3 Standard Information

SY3 Information				
SY3 QC values are based on replicate analysis and limits are determinded from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.				
SY3 QC LIMITS: Trace Element WR Fusion				
Analyte	Value	Units	Upper Limit	Lower Limit
Ag	3.1	ppm	3.8	2.3
As	12.3	ppm	18.5	6
Ba	450	ppm	482	416
Be	20	ppm	24.8	17.2
Bi	0.3	ppm	0.6	<0.1
Cd	0.2	ppm	0.5	0.1
Ce	2230	ppm	2416	2080
Co	7.8	ppm	9.6	5.9
Cs	1.7	ppm	2.9	0.6
Cu	17	ppm	22.9	11.1
Dy	118	ppm	128	109
Er	68.8	ppm	75.5	62
Eu	17	ppm	18.7	15.3
Ga	27	ppm	31.2	21.4
Gd	105	ppm	117	93
Ge	0.4	ppm	1.5	<0.1
Hf	9.7	ppm	12.2	7.2
Hg	0.3	ppm	1.8	<0.1
Ho	29.5	ppm	36.3	23.4
La	1340	ppm	1439	1248
Lu	7.95	ppm	8.83	7.06
Mo	0.6	ppm	3	<0.1
Nb	148	ppm	194	101
Nd	670	ppm	740	603
Ni	11	ppm	17	5
Pb204	0.093	ppm	0.115	0.071
Pb206	78	ppm	83.9	72.1
Pb207	8.36	ppm	9.35	7.36
Pb208	44.1	ppm	48.2	40
PbSUM	133	ppm	140	121
Pr	223	ppm	241	204
Rb	206	ppm	222	190
Sb	1	ppm	3	<1
Se	30	ppm	36	10
Sm	109	ppm	119	98
Sn	5.7	ppm	6.9	4.6
Sr	302	ppm	322	278
Ta	30	ppm	35.4	22.3
Tb	18.1	ppm	19.8	16.3
Te	0.1	ppm	0.2	<0.1
Th	1032	ppm	1144	919
Tl	0.66	ppm	1.16	0.16
Tm	11.6	ppm	13	10.3
U	650	ppm	701	602
W	4	ppm	6	<1
Y	718	ppm	777	668
Yb	62.1	ppm	66.9	57.3
Zn	244	ppm	272	207
Zr	320	ppm	342	275

SY3 Information

SY3 QC values are based on replicate analysis and limits are determinded from 3 sigma data. This standard is continuously control chart monitored by LIMS to ensure that sample sets using this standard have passed QC limits.

SY3 QC LIMITS: MS Fusion Rare Earth Elements (MS REE1)

Analyte	Value	Units	Upper Limit	Lower Limit
Ce	2230	ppm	2416	2080
Dy	118	ppm	128	109
Er	68.8	ppm	75.5	62
Eu	17	ppm	18.7	15.3
Gd	105	ppm	117	93
Ho	29.5	ppm	36.3	23.4
La	1340	ppm	1439	1248
Lu	7.95	ppm	8.83	7.06
Nb	148	ppm	194	101
Nd	670	ppm	740	603
Pr	223	ppm	241	204
Sm	109	ppm	119	98
Ta	30	ppm	35.4	22.3
Tb	18.1	ppm	19.8	16.3
Th	1032	ppm	1144	919
Tl	0.66	ppm	1.16	0.16
Tm	11.6	ppm	13	10.3
U	650	ppm	701	602
Y	718	ppm	777	668
Yb	62.1	ppm	66.9	57.3

CANMET

Canada Centre for Mineral and Energy Technology

Centre canadien de la technologie des minéraux et de l'énergie

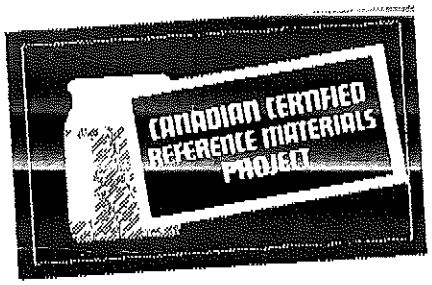
REPORT 79-35

REFERENCE MATERIALS — ROCK SAMPLES

SY-2, SY-3, MRG-1

SYDNEY ABBEY

DISPLAY COPY



MINERALS RESEARCH PROGRAM

MINERAL SCIENCES LABORATORIES

DECEMBER 1979

INTRODUCTION

The geologist generally requires a complete analysis of his rock samples that normally includes the determination of SiO_2, Al_2O_3, Fe_2O_3, FeO, MgO, CaO, Na_2O, K_2O, H_2O, CO_2, TiO_2, P_2O_5 and MnO, and frequently of F and S. More recently, requirements have also included such common trace elements as Ba, Co, Cr, Cu, La, Li, Ni, Pb, Rb, Sr, V, Y, Zn and Zr, with less frequent demands for additional elements. Collaborative analytical programs on reference samples of rocks originating in the U.S.A. (1,2), France (3,4), Japan (5) and South Africa (6) have revealed certain special characteristics of such programs:

(1) Because of the many constituents which must be determined and the limited facilities available in individual laboratories, many such establishments must be enlisted. Laboratories qualified to participate in such programs are generally those in governmental and geological institutions and in geology departments of universities.

(2) Results for individual constituents show the relatively wide and erratic dispersion usually observed for rocks.

Many uncontrolled variables in the collaborative analysis of rock samples make it difficult to treat the data statistically as done for ores - e.g., by Sutarno and Faye (7). Various semi-empirical methods have been proposed for the difficult problem of choosing suitable values. The logic behind the choice of method used here has been described elsewhere (8-11).

HISTORY OF THE SAMPLES

The first reference sample of a rock prepared by the predecessors of the Canadian Certified Reference Materials Project was SY-1, a syenite from the Bancroft area of eastern Ontario, containing unusually high concentrations of uranium, thorium, rare earths and several additional trace elements. Sine et al. listed the most recent analytical data on SY-1 (12). That sample was never subjected to a systematic collaborative analysis, and because it was prepared in a limited quantity the supply became exhausted in a short time.

SY-2 was collected in the same area as a replacement for SY-1 but was found to have lower contents of uranium, thorium and rare earths. To provide a new material closer in composition to SY-1, another batch of syenite from the same source was subjected to autogenous grinding with fist-sized lumps of material containing uraninite, allanite and betafite. Autogenous grinding was performed to minimize the well-known heterogeneity problems encountered in mixing finely-ground solids. Spectrographic checks on the distribution of individual rare-earth elements indicated that the mixing process had been successful. The product was designated SY-3. Preliminary descriptions of SY-2 and SY-3 were given by Gillieson (13).

MRG-1 is a gabbro sample from Mount Royal, Montreal, described in detail by Perrault et al. (14).

The three samples were originally offered for sale as "uncertified" materials, purchasers being invited to report analytical data to the originators, as had been done with SY-1. In an effort at more systematic treatment, a group known as the Task Force on Rock Samples was organized late in 1973 for obtaining and correlating as much compositional data as possible on the three samples. This paper lists all available data and recommends some compositional values.

COLLABORATIVE ANALYSIS

A number of laboratories which had shown competence in the collaborative analysis of other reference rocks were invited to analyze SY-2, SY-3 and MRG-1 (2-5). Because of the many trace elements which had not been reported by those laboratories, additional laboratories were required. Laboratories which had reported limited results before the task force was organized were asked to provide further data, and invitations were also extended to a number of Canadian provincial

institutions. In all, over 100 laboratories were approached and many agreed to participate. Additional results were also taken from the literature.

Two earlier reports have been issued on these samples. Report MRP/MSL 75-132(TR) gave all relevant information as of 1975. A supplement, CANMET Report 76-36, brought matters up to date as of 1976. The current report includes all the material in the earlier reports, updated where necessary, as well as data received since 1976. The recommended values in this report supersede those in the two earlier reports.

SUMMARY OF RESULTS RECEIVED

Table 1 lists all data on the major and minor components and Table 2 those on trace elements. Some trace elements are present at sufficiently high levels that they must be taken into account in deriving the summation for the complete analysis. Major and minor components are tabulated in the order proposed by Maxwell (15), with some modifications. Trace elements are listed in alphabetical order of their chemical symbols.

In Tables 1 and 2 the following notes should be observed:

(1) where replicate results were reported, apparently produced by the same analyst using the same method at about the same time, only the arithmetic average is tabulated, the figure in parentheses indicating the number of replicates. Actual individual results are available on request.

(2) Fe_2O_3T refers to total iron content expressed as ferric oxide.

(3) RE_2O_3T refers to total rare earth oxide content.

(4) Readers are requested to inform the author of any error they may observe.

ANALYTICAL METHODS

The methods used in obtaining individual results in compilations were often listed with such cryptic notations as "spectro", "AAS", "grav", etc. However, the reliability of a result can depend on steps other than the final measurements. Analysts were therefore requested to provide either details of their methods or to cite pertinent literature.

To conserve space a three-letter code based on the three essential analytical unit operations has been adopted. Literature references to the methods are given in the tables when available.

(1) Sample pretreatment

- B pelletization
- F fusion, sintering
- H acid decomposition
- O none used or specified

(2) Separations (if any)

- C chromatography, ion exchange
- D fractional distillation
- P precipitation, leaching
- V bulk volatilization
- Y solvent extraction
- Z electrodeposition
- O none used or specified

(3) Final measurement

- A atomic absorption or fluorescence
- E flame emission
- G gravimetric
- J absorptimetric, fluorimetric
- K gas volumetric
- L electrometric, ion-selective electrode, polarographic, coulometric
- M mass spectrometric
- R radiometric, neutron activation
- S spectrographic
- T titrimetric
- X X-ray fluorescence
- Dif by difference
- O not specified

DISCUSSION

Tables 1 and 2 reveal an erratic pattern in the analytical tasks performed. Although all participants were informed that SY-3 contained unusually high concentrations of uranium, thorium and the rare earths, and that MRG-1 contained somewhat higher concentrations than usual of chromium, copper, nickel and vanadium, some analysts nevertheless provided only a limited amount of data. Moreover some interference in determining the more common components may have been overlooked.

The great spread of values for each component is somewhat offset by the process of selective elimination used in arriving at the recommended values. Nevertheless, reliable values for some components may never be attained, no matter how many additional analyses are reported. In the case of U.S. Geological Survey standard W-1, 20 years after the sample became available, only "magnitude" values were listed for such common trace components as B, Be, Ce, Cl, Ge, Se, and W (16). Only 24 of the 48 other trace element values listed for W-1 in the same compilation are given as "recommended".

Some of the collaborating laboratories used more than one analytical method, thereby providing (in some cases) independent checks on their own results; others depended entirely on one method.

A disappointingly small number of participants reported results for the common components - ferrous iron, water, carbon dioxide and fluorine. Further complications arose in the case of carbon dioxide because of the failure of some contributors to specify whether they determined the carbon dioxide evolved by acid treatment, hence carbonates, or that resulting from the combustion of the sample, hence total carbon. At least two laboratories reported appreciably different results by the two approaches. The difference may represent non-carbonate carbon or contamination. A similar difference has been observed by laboratories of the Geological Survey of Canada with samples having no appreciable non-carbonate carbon.

Because of the availability of additional data it is now possible to make some distinction between carbon dioxide results obtained by acid evolution and by combustion. The following results clearly indicate a significant difference between the two techniques. All of the following values are expressed as per cent carbon dioxide:

SY-2		SY-3		MRG-1	
Acid	Combust	Acid	Combust	Acid	Combust
0.49	0.66	0.47	0.60	1.22	1.22
0.48	0.63	0.42	0.55	1.08	1.21
0.48	0.60	0.41	0.55	1.06	1.15
0.47	0.59	0.41	0.50	1.03	1.14
0.46	0.59	0.40	0.50	1.03	1.14
0.46	0.57	0.40	0.46	1.02	1.13
0.46	0.55	0.40	0.44	1.00	1.11
0.46	0.55	0.35	0.43	0.98	1.11
0.44	0.53	0.34	0.41	0.90	1.10
0.43	0.53	0.26	0.33	0.90	1.06
0.42	0.52	0.18		0.88	1.05
0.32					

The two sets of results for carbon dioxide in each sample were treated as different determinations. Results for which there was insufficient information on the method used were ignored. The recommended value for "carbon dioxide" is derived from the acid-evolution results. "Carbon" represents the difference between the derived values by both methods, recalculated to the element.

Results received from one reliable source suggested inhomogeneity in sample SY-3, with regard to uranium, thorium, lead, and copper. Because the base material used in preparing SY-3 was very similar to SY-2, and the four listed elements are among those for which there is a marked difference between SY-2 and SY-3, there is reason to suspect that the inhomogeneity, if any, is the result of incomplete mixing in the autogenous grinding step mentioned above. Although the data from earlier spectrographic examination of the variation of individual rare earths in SY-3 showed no noticeable evidence of inhomogeneity, additional tests were undertaken, using X-ray fluorescence. The elements observed were uranium,

thorium, cerium, lanthanum, yttrium, strontium and rubidium. Results obtained were not sufficiently conclusive either to confirm or to contradict the suggestion of inhomogeneity. The issue therefore remains in doubt, although the weight of evidence suggests that the one observed example of inhomogeneity may have been fortuitous.

Some questions could be raised regarding the possibility that inhomogeneity is a major source of the general spread of values, particularly for trace elements. Rocks are essentially heterogeneous, and the artificial "homogenization" processes used in sample preparation are reversible to some extent. However, a perusal of the available data suggests that inter-laboratory bias is a much greater source of deviation than could generally be expected from sample inhomogeneity. For example, some of the participating laboratories showed a persistent bias that affected several different elements in a manner that would be difficult to justify in terms of segregation of individual minerals. In many cases, a particular bias in the results for a given element coming from a given laboratory was observable in all three samples. It is also noteworthy that the spread of values for most of the components of the three rocks is not very different from those observed in similar programs originating in other countries (2-6).

DERIVATION OF ASSIGNED VALUES

The errors and aberrations from using mere averages or straightforward statistical treatment to arrive at assigned values have been pointed out elsewhere (9,10,17). The empirical method used in this work was first applied in a study of six samples from the U.S. Geological Survey (2,10) and subsequently modified (10,11). It is based on the assumption that the best values must be derived from results reported only by laboratories with the best over-all performance.

The method involved a series of steps:

(1) Based on the H_2O^- percentages reported with each group of data, all results were converted to the "dry basis". Where no H_2O^- was reported, results were assumed to be on the dry basis.

(2) Where fewer than three results were available for a particular constituent of a particular sample, no value was assigned.

(3) Where three or four results were available, a value was assigned equal to the median of the reported results, provided they were based on at least three mutually independent methods and were in reasonable agreement. Such values are shown with question marks, to indicate uncertainty.

(4) Where five to nine results were available, the median was also used as an assigned value, regardless of method, but also shown with a question mark.

(5) Where ten or more results were available, the mean and standard deviation were calculated. All values removed from the mean by more than one standard deviation were categorized as "poor", each being identified with the laboratory that produced it.

(6) The poor results were set aside and the mean and standard deviation of the remaining values calculated. All values removed from that mean by more than one standard deviation were categorized as "fair" and each identifed with the laboratory that produced it.

(7) The fair results were set aside and the remaining "hard core" of values categorized as "good" and identified with the laboratories that produced them.

(8) After operations (5), (6) and (7) had been completed for all eligible values for all constituents of all three samples, each contributing laboratory was given a rating, determined by the following formula:

$$R = \frac{N_g - N_p}{N_g + N_f + N_p} \times 100$$

where

R = rating

N_g = number of good results

N_f = number of fair results

N_p = number of poor results

(9) Results reported by laboratories with ratings of 40 or higher were categorized as "select".

(10) For each constituent of each sample, any outlying select result that differed from its nearest neighbour by as much as or by more than the latter differed from the opposite extreme, was eliminated.

(11) For constituents where fewer than five select values were available, the median of the available select values was assigned, but again with a question mark.

(12) Where five or more select results were available, a subjective decision was made in choosing either the select median or the select mean as an assigned value.

All recommended values have been categorized as "A", "B", or "?". The "A" is for constituents for which at least 20 results were reported, where there is no evidence of bias in the distribution and where there is close agreement between mode, median, mean, select median and select mean. It follows that any further results received are not likely to affect such values beyond one or two units in the last significant figure. The "?" category includes the values mentioned above, and also others where erratic distribution or other factors cast doubt on the derived value. The "B" is intended for values intermediate between the other two.

Because some trace elements are present at sufficiently high levels to affect the complete analysis of the samples, calculations on those elements were done first. Recommended values are given in Table 3. Most of those with question marks are based on the medians, the others on the select medians. In both cases, some rounding of values has been introduced.

An exception was made for rubidium in SY-3, where two isotopic-dilution mass-spectrometry laboratories, one in Canada, the other in Australia, reported 208.4 and 208 ppm respectively. The select median, 208 ppm, was therefore taken as the recommended value and listed to one significant figure more than usual.

Equivalent percentages as oxides are also given in Table 3 only where those values are 0.01 or higher. They were used in the subsequent calculations on the major and minor elements. The equivalent percentages for non-carbonate carbon and chlorine are expressed as the elements, the form in which those constituents are usually reported in a complete rock analysis.

Recommended values for major and minor constituents are listed in Table 4 in which "others" represents the sum of the "equivalent percentages" of the trace elements, adjusted upward to allow for additional rare-earth elements for which reported results were too limited to justify assigning values. Fe_2O_3TR represents the value for total iron, expressed as ferric oxide and derived from reported values for total iron. Fe_2O_3TC represents the value for total iron, expressed as ferric oxide, but calculated from the values derived for Fe_2O_3 and FeO from reported values for ferric and ferrous iron. Closeness of agreement between the two values for total iron is a rough measure of the validity of the procedures used in deriving recommended values. Closeness of the total to 100% is another, but less reliable, indicator of that validity. The values of elements for which insufficient data were received to assign "recommended" values are recorded in Table 5.

CONCLUSIONS

The present collaborative program has placed the quantitative compositional data for the three samples on a much firmer footing than they were originally. There are, however, some negative aspects to the results:

(1) The suspicion of heterogeneity resulting from the autogenous grinding used in preparing SY-3.

(2) The limited quantity of data, and hence the uncertainty in the assigned values, for uranium, thorium, the rare earths and several additional elements which distinguish SY-2 and SY-3 from other available reference samples.

Table 4 – Recommended values - "complete analysis" (%, dry basis)

	SY-2	SY-3	MRG-1
SiO_2	60.10A	59.68A	39.32A
Al_2O_3	12.12A	11.80A	8.50A
Fe_2O_3	2.28B	2.44B	8.26B
FeO	3.62A	3.58A	8.63A
MgO	2.70A	2.67A	13.49A
CaO	7.98A	8.26A	14.77B
Na_2O	4.34A	4.15A	0.71A
K_2O	4.48A	4.20A	0.18A
H_2O^+	0.43B	0.42B	0.98B
CO_2	0.46B	0.38B	1.00B
TiO_2	0.14A	0.15A	3.69B
P_2O_5	0.43A	0.54A	0.06A
F	0.51B	0.66B	0.025B
S	0.011B	0.05B	0.06B
MnO	0.32A	0.32A	0.17A
Others*	0.43?	1.18?	0.33?
Σ	100.35?	100.46?	100.18?
O/F, etc.	0.22?	0.31?	0.04?
Σ (corr.)	100.13?	100.17?	100.14?
Fe_2O_3TR	6.28A	6.42B	17.82A
Fe_2O_3TC	6.27B	6.42B	17.85B

*Others represents the sum of the "equivalent percentages" of the trace elements, adjusted upward to allow for additional rare-earth elements for which reported results were too limited to justify assigning values.

CANADIAN CERTIFIED REFERENCE MATERIALS PROJECT

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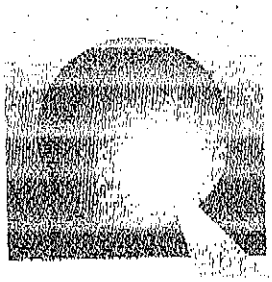

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Date 2007 12 24

Pages from the SY-3 report follow. Let me know if you wish to see the full report.

APPENDIX B

Geotechnical Test Results

Sample ID	Specific Gravity	Moisture Content	Porosity	Hydraulic Conductivity
	-	%	-	m/s
MG-NLR-1	2.7	25	-	7.8E-09
MG-NLR-2	2.7	25	-	7.5E-09
MG-NLR-3	2.7	25	-	6.5E-09
MG-NLR-4	2.7	25	-	9.1E-09
HG-NLR-1	2.7	28	-	5.4E-08
HG-NLR-2	2.7	27	-	0.00000017
HG-NLR-3	2.7	28	-	7.5E-08
HG-NLR-4	2.7	28	-	0.0000002
LUGP-1	2.5	46	-	0.00000049
LUGP-2	2.5	43	-	0.00000042
LUGP-3	2.5	45	-	0.00000039
LUGP-4	2.5	47	-	0.0000004
HUGP-1	2.3	64	-	0.00000047
HUGP-2	2.3	69	-	0.00000048
HUGP-3	2.3	65	-	0.00000035
HUGP-4	2.3	64	-	0.00000037
MPPT-1	3.2	141	-	2.0E-08
MPPT-2	3.2	144	-	8.1E-09
MPPT-3	3.2	152	-	2.4E-08
MPPT-4	3.2	146	-	0.00000061
HLC-1	-	64	0.62	2.5E-08
HLC-2	-	63	0.62	2.7E-08
HLC-3	-	65	0.63	2.4E-08
HLC-4	-	64	0.63	2.7E-08
HHC-1	-	50	0.58	2.9E-09
HHC-2	-	50	0.57	7.0E-09
HHC-3	-	53	0.58	7.9E-09
HHC-4	-	54	0.58	4.8E-09
HPLC-1	-	48	0.59	9.3E-09
HPLC-2	-	49	0.59	9.3E-09
HPLC-3	-	52	0.61	8.3E-09
HPLC-4	-	50	0.61	1.3E-08
HPHC-1	-	50	0.62	9.1E-10
HPHC-2	-	51	0.62	9.1E-10
HPHC-3	-	52	0.61	6.3E-10
HPHC-4	-	52	0.61	4.5E-10
HHGPLC-1	3.0	72	0.72	3.2E-08
HHGPLC-2	3.0	71	0.72	3.3E-08
HHGPLC-3	3.0	70	0.73	3.1E-08
HHGPLC-4	3.0	69	0.70	3.3E-08
HHGPHC-1	-	64	0.68	1.8E-09
HHGPHC-2	-	68	0.69	4.1E-09
HHGPHC-3	-	67	0.69	2.4E-09
HHGPHC-4	-	66	0.69	3.1E-09
HLC-S-1	-	63	0.64	4.9E-08
HLC-S-2	-	67	0.65	4.7E-08
HLC-S-3	-	66	0.65	3.7E-08
HLC-S-4	-	64	0.65	4.2E-08
HHC-S-1	-	55	0.61	3.6E-10
HHC-S-2	-	55	0.61	8.4E-11
HHC-S-3	-	53	0.60	5.1E-10
HHC-S-4	-	54	0.60	4.4E-10
GUCEM	3.6	-	-	-
SLAG	2.9	-	-	-

- : Sample not analyzed

APPENDIX C

Static Test Results

Mineralogy (XRD) Results

NexGen Rook I Geochemical Characterization Report

Sample ID	Anhydrite	Bassanite	Calcite	Chamosite	Clinochlore	Ettringite	Gypsum	Kaolinite	Muscovite	Portlandite	Quartz
	wt. %										
MG-NLR-1	-	-	-	8.9	5.7	-	4.5	-	53	-	28
MG-NLR-2	-	-	-	10	4.9	-	4.9	-	46	-	34
MG-NLR-3	-	-	-	8.4	5.3	-	4.3	-	47	-	35
MG-NLR-4	-	-	-	7.5	5.7	-	6.2	-	49	-	32
HG-NLR-1	-	-	-	8.9	9.5	-	2.1	-	44	-	36
HG-NLR-2	-	-	-	11	8.9	-	2.8	-	50	-	27
HG-NLR-3	-	-	-	11	10	-	3.1	-	47	-	28
HG-NLR-4	-	-	-	11	9.4	-	3.2	-	50	-	27
LUGP-1	-	7.5	-	-	-	-	93	-	-	-	-
LUGP-2	-	6.7	-	-	-	-	93	-	-	-	-
LUGP-3	-	6.9	-	-	-	-	93	-	-	-	-
LUGP-4	-	7.1	-	-	-	-	93	-	-	-	-
HUGP-1	0.40	-	-	-	-	-	100	-	-	-	-
HUGP-2	1.4	-	-	-	-	-	99	-	-	-	-
HUGP-3	0.10	-	-	-	-	-	100	-	-	-	-
HUGP-4	-	-	-	-	-	-	100	-	-	-	-
MPPT-1	0.10	-	-	-	-	-	100	-	-	-	-
MPPT-2	-	-	-	-	-	-	100	-	-	-	-
MPPT-3	-	-	-	-	-	-	100	-	-	-	-
MPPT-4	-	-	-	-	-	-	100	-	-	-	-
HLC-1	-	-	-	8.3	8.2	-	3.0	-	54	-	26
HLC-2	-	-	-	9.3	6.7	-	2.9	-	56	-	25
HLC-3	-	-	-	9.0	6.6	-	3.3	-	57	-	24
HLC-4	-	-	-	9.0	6.7	-	3.4	-	58	-	24
HHC-1	-	-	-	12	1.4	-	-	-	43	4.8	39
HHC-2	-	-	-	13	0.90	-	-	-	42	5.7	39
HHC-3	-	-	-	15	0.20	-	-	-	38	5.8	42
HHC-4	-	-	-	14	0.30	-	-	-	40	5.6	40
HPLC-1	-	-	-	-	20	-	27	-	37	-	16
HPLC-2	-	-	-	-	18	-	26	-	39	-	17
HPLC-3	-	-	-	-	18	-	27	-	40	-	15
HPLC-4	-	-	-	-	17	-	27	-	37	-	19
HPHC-1	-	-	8.4	-	9.3	13	11	-	23	-	35
HPHC-2	-	-	11	-	10	15	12	-	22	-	31
HPHC-3	-	-	9.7	-	11	15	11	-	21	-	33
HPHC-4	-	-	11	-	9.4	16	8.9	-	21	-	34
HHGPLC-1	-	-	-	-	14	2.8	53	-	19	-	12
HHGPLC-2	-	-	-	-	15	2.8	54	-	18	-	10
HHGPLC-3	-	-	1.1	-	11	14	47	-	18	-	9.7
HHGPLC-4	-	-	6.2	-	16	4.8	35	-	22	-	16
HHGPHC-1	-	-	5.6	-	22	24	20	-	14	-	15
HHGPHC-2	-	-	6.6	-	21	24	21	-	13	-	15
HHGPHC-3	-	-	6.9	-	19	27	23	-	12	-	13
HHGPHC-4	-	-	6.1	-	20	26	23	-	12	-	13
HLC-S-1	-	-	-	18	-	-	2.9	-	44	-	35
HLC-S-2	-	-	-	17	-	-	2.1	-	40	-	42
HLC-S-3	-	-	-	17	-	-	3.9	-	37	-	43
HLC-S-4	-	-	-	18	-	-	2.3	-	40	-	39
HHC-S-1	-	-	-	17	-	-	-	5.9	52	-	26
HHC-S-2	-	-	-	15	-	-	-	5.0	45	-	36
HHC-S-3	-	-	-	14	-	-	-	7.2	49	-	30
HHC-S-4	-	-	-	14	-	-	-	8.5	48	-	30

- Mineral not detected

Sample ID	Fizz Rating	Paste pH	Total Sulphur	Sulphide Sulphur	Sulphate Sulphur	Total Inorganic Carbon	Neutralizing Potential[1]	Carbonate Neutralizing Potential[2]	Acid Potential[3]	Net Neutralizing Potential[4]	Net Carbonate Neutralizing Potential[5]	Neutralizing Potential Ratio[6]	Carbonate Neutralizing Potential Ratio[7]
	-	pH units	% S			%	t $CaCO_3$ /1000 t					Ratio	
MG-NLR-1	none	4.1	0.30	0.23	0.067	<0.01	2.5	0.42	7.2	-4.7	-6.8	0.35	0.058
MG-NLR-2	none	4.3	0.31	0.25	0.063	<0.01	2.1	0.42	7.8	-5.7	-7.4	0.27	0.053
MG-NLR-3	none	4.3	0.31	0.24	0.067	<0.01	2.3	0.42	7.5	-5.2	-7.1	0.31	0.056
MG-NLR-4	none	4.4	0.31	0.25	0.060	<0.01	2.8	0.42	7.8	-5.0	-7.4	0.36	0.053
HG-NLR-1	none	5.3	0.64	0.24	0.40	<0.01	3.2	0.42	7.5	-4.3	-7.1	0.43	0.056
HG-NLR-2	none	5.3	0.64	0.24	0.40	<0.01	3.8	0.42	7.5	-3.7	-7.1	0.51	0.056
HG-NLR-3	none	5.3	0.65	0.25	0.40	<0.01	3.3	0.42	7.8	-4.5	-7.4	0.42	0.053
HG-NLR-4	none	5.4	0.61	0.21	0.40	<0.01	3.3	0.42	6.6	-3.3	-6.1	0.50	0.063
LUGP-1	none	6.0	19	0.60	18	<0.01	5.4	0.42	19	-13	-18	0.29	0.022
LUGP-2	none	5.6	19	0.83	18	<0.01	2.1	0.42	26	-24	-26	0.081	0.016
LUGP-3	none	5.6	19	0.90	18	<0.01	1.9	0.42	28	-26	-28	0.068	0.015
LUGP-4	none	5.7	19	1.0	18	<0.01	2.1	0.42	31	-29	-31	0.067	0.013
HUGP-1	none	9.0	19	0.27	18	<0.01	2.9	0.42	8.4	-5.5	-8.0	0.34	0.049
HUGP-2	none	9.0	19	1.2	18	<0.01	3.0	0.42	38	-35	-37	0.080	0.011
HUGP-3	none	9.0	19	0.93	18	<0.01	2.4	0.42	29	-27	-29	0.083	0.014
HUGP-4	none	9.0	19	1.9	17	<0.01	2.9	0.42	59	-56	-59	0.049	0.0070
MPPT-1	none	7.5	13	0.83	12	<0.01	4.4	0.42	26	-22	-26	0.17	0.016
MPPT-2	none	7.5	12	0.63	12	<0.01	<0.5	0.42	20	-19	-19	0.013	0.021
MPPT-3	none	7.5	12	0.30	12	<0.01	<0.5	0.42	9.4	-9.1	-9.0	0.027	0.044
MPPT-4	none	7.5	12	0.20	12	<0.01	<0.5	0.42	6.3	-6.0	-5.8	0.040	0.067
HLC-1	slight	9.4	0.76	0.19	0.57	0.26	47	22	5.9	41	16	7.8	3.6
HLC-2	slight	9.5	0.75	0.18	0.57	0.27	48	23	5.6	43	17	8.6	4.0
HLC-3	slight	9.5	0.75	0.18	0.57	0.26	47	22	5.6	41	16	8.4	3.9
HLC-4	slight	9.5	0.75	0.18	0.57	0.23	47	19	5.6	41	14	8.4	3.4
HHC-1	moderate	12	0.69	<0.01	0.73	0.70	<0.5	58	0.16	0.094	58	1.6	373
HHC-2	moderate	12	0.72	<0.01	0.73	0.70	<0.5	58	0.16	0.094	58	1.6	373
HHC-3	moderate	12	0.77	0.037	0.73	0.68	<0.5	57	1.1	-0.90	56	0.22	49
HHC-4	moderate	12	0.72	<0.01	0.77	0.66	<0.5	55	0.16	0.094	55	1.6	352
HPLC-1	moderate	8.7	5.0	0.96	4.0	0.27	<0.5	23	30	-30	-7.5	0.0083	0.75
HPLC-2	moderate	8.8	5.0	0.97	4.0	0.22	<0.5	18	30	-30	-12	0.0082	0.60
HPLC-3	moderate	8.8	5.0	1.0	4.0	0.23	<0.5	19	32	-31	-12	0.0079	0.61
HPLC-4	moderate	8.6	5.1	1.1	4.0	0.23	<0.5	19	33	-33	-14	0.0076	0.58
HPHC-1	moderate	12	3.4	0.027	3.3	0.66	274	55	0.84	273	54	324	65
HPHC-2	moderate	12	3.4	0.11	3.3	0.72	285	60	3.4	282	57	83	17
HPHC-3	moderate	12	3.4	0.10	3.3	0.69	262	58	3.1	259	54	84	18
HPHC-4	moderate	12	3.4	0.050	3.3	0.72	286	60	1.6	284	58	183	38
HHGPLC-1	moderate	10	9.3	1.6	7.7	0.19	<0.5	16	51	-50	-35	0.0049	0.31
HHGPLC-2	moderate	10	9.3	1.6	7.7	0.15	66	13	50	16	-37	1.3	0.25
HHGPLC-3	moderate	10	9.1	1.4	7.7	0.19	56	16	43	13	-27	1.3	0.37
HHGPLC-4	moderate	10	9.2	1.5	7.7	0.19	61	16	46	15	-30	1.3	0.34
HHGPHC-1	moderate	12	5.5	0.18	5.3	0.77	244	64	5.6	239	59	43	11
HHGPHC-2	moderate	12	6.2	0.54	5.7	0.73	256	61	17	239	44	15	3.6
HHGPHC-3	moderate	12	5.9	0.61	5.3	0.71	260	59	19	241	40	14	3.1
HHGPHC-4	moderate	12	5.7	0.060	5.7	0.73	254	61	1.9	252	59	136	32
HLC-S-1	slight	9.9	0.91	0.18	0.73	0.080	34	6.7	5.6	29	1.0	6.1	1.2
HLC-S-2	slight	9.9	0.85	0.15	0.70	0.080	34	6.7	4.7	29	2.0	7.3	1.4
HLC-S-3	slight	10.0	0.78	0.11	0.67	0.080	28	6.7	3.4	25	3.2	8.3	1.9
HLC-S-4	slight	9.9	0.87	0.14	0.73	0.090	35	7.5	4.4	31	3.1	8.0	1.7
HHC-S-1	moderate	12	0.97	0.070	0.90	0.55	200	46	2.2	198	44	91	21
HHC-S-2	moderate	12	0.96	0.060	0.90	0.56	217	47	1.9	215	45	116	25
HHC-S-3	moderate	12	0.93	0.060	0.87	0.55	205	46	1.9	203	44	109	24
HHC-S-4	moderate	12	0.95	0.050	0.90	0.56	205	47	1.6	203	45	131	30
GUCEM	slight	12	1.7	0.39	1.3	1.4	1090	115	12	1078	103	89	9.4
SLAG	strong	12	1.5	0.87	0.63	0.13	600	11	27	573	-16	22	0.40

(1) Neutralization potential (NP) is determined directly from modified Sobek method (MEND, 2009).
(2) Carbonate neutralization potential (CO3-NP) = (% Total Inorganic Carbon (TIC)) * (100.09/12.01) * 10
(3) Acid potential (AP) = Sulphide Sulphur (%) x 31.25
(4) Net neutralization potential = NP - AP
(5) Net carbonate neutralization potential = CO3-NP - AP
(6) Net Potential Ratio (NPR) = NP / AP
(7) Carbonate NPR (CO3-NPR) = CO3-NP / AP

Sample ID	Al_2O_3	BaO	CaO	Cr_2O_3	Fe_2O_3	K_2O	MgO	MnO	Na2O	P_2O_5	Sc_2O_3	SiO_2	SrO	TiO_2	Y_2O_3	ZrO_2	LOI	SUM
	wt %																	
MG-NLR-1	22	0.14	0.18	0.021	1.7	4.8	2.2	<0.01	0.22	0.050	0.0032	61	0.017	1.0	0.0032	0.062	6.5	99
MG-NLR-2	22	0.15	0.18	0.021	1.7	4.8	2.2	<0.01	0.21	0.050	0.0032	61	0.018	0.99	0.0029	0.053	6.5	100
MG-NLR-3	22	0.14	0.16	0.021	1.7	4.8	2.2	<0.01	0.20	0.060	0.0032	62	0.018	1.0	0.0032	0.058	6.5	100
MG-NLR-4	21	0.14	0.16	0.021	1.8	4.7	2.2	<0.01	0.20	0.060	0.0032	61	0.018	1.0	0.0030	0.060	6.8	99
HG-NLR-1	21	0.13	0.76	0.021	1.8	4.4	2.7	0.010	0.18	0.10	0.0031	59	0.027	1.0	0.0050	0.067	8.2	99
HG-NLR-2	21	0.13	0.74	0.020	1.9	4.4	2.6	<0.01	0.18	0.10	0.0031	59	0.027	1.1	0.0048	0.054	8.3	99
HG-NLR-3	21	0.13	0.77	0.020	1.9	4.5	2.7	0.010	0.18	0.10	0.0031	59	0.028	1.0	0.0046	0.064	8.3	99
HG-NLR-4	22	0.13	0.75	0.021	1.9	4.5	2.7	0.010	0.18	0.10	0.0031	59	0.027	1.1	0.0046	0.065	8.2	100
LUGP-1	0.14	0.0030	35	0.0016	0.020	0.040	0.080	<0.01	0.090	<0.01	0.00031	0.50	0.011	<0.01	0.00025	0.0012	22	57
LUGP-2	0.10	0.0033	36	0.0015	0.020	0.030	0.070	<0.01	0.090	<0.01	0.00031	0.60	0.011	<0.01	0.00025	0.00027	22	59
LUGP-3	0.070	0.0035	34	0.0025	0.030	0.040	0.070	<0.01	0.080	<0.01	0.00031	0.60	0.011	<0.01	0.00025	0.00027	22	57
LUGP-4	0.17	0.0035	34	0.0034	0.040	0.040	0.080	<0.01	0.090	<0.01	0.00031	0.60	0.011	<0.01	0.00025	0.00027	22	57
HUGP-1	0.12	0.0030	34	0.00029	0.020	0.020	0.23	<0.01	0.24	<0.01	0.00031	0.40	0.012	<0.01	0.00063	0.0026	22	57
HUGP-2	0.20	0.0021	35	0.00073	0.020	0.040	0.23	<0.01	0.24	<0.01	0.00031	0.40	0.012	<0.01	0.00063	0.0023	22	57
HUGP-3	0.090	0.0021	34	0.0010	0.010	0.040	0.22	<0.01	0.24	<0.01	0.00031	0.40	0.012	<0.01	0.00063	0.0023	22	57
HUGP-4	0.070	0.0022	34	0.00088	0.010	0.040	0.20	<0.01	0.24	<0.01	0.00031	0.50	0.012	<0.01	0.00051	0.0023	22	57
MPPT-1	9.8	0.053	19	0.020	5.0	0.050	3.1	0.040	0.97	0.090	0.0081	2.3	0.0085	0.040	0.067	0.00068	37	77
MPPT-2	9.7	0.055	19	0.020	5.0	0.060	3.0	0.040	0.92	0.090	0.0080	2.2	0.0085	0.040	0.066	0.00081	37	77
MPPT-3	9.8	0.053	19	0.020	5.0	0.050	3.0	0.040	0.94	0.10	0.0081	2.2	0.0084	0.040	0.067	0.00068	37	77
MPPT-4	9.8	0.053	19	0.020	5.0	0.050	3.1	0.040	0.93	0.10	0.0081	2.2	0.0084	0.040	0.067	0.00081	37	77
HLC-1	20	0.13	3.6	0.026	2.1	4.1	2.7	0.010	0.19	0.070	0.0029	56	0.030	1.1	0.0047	0.065	9.7	100
HLC-2	20	0.13	3.6	0.027	2.1	4.0	2.7	0.010	0.18	0.070	0.0031	56	0.031	1.0	0.0048	0.068	9.7	100
HLC-3	22	0.13	3.6	0.027	2.2	4.0	2.6	0.010	0.20	0.070	0.0028	55	0.031	1.0	0.0048	0.067	9.7	100
HLC-4	20	0.13	3.6	0.027	2.1	4.1	2.6	0.010	0.18	0.060	0.0028	56	0.030	1.1	0.0041	0.064	9.7	100
HHC-1	17	0.12	16	0.016	2.4	3.0	2.8	0.020	0.18	0.090	0.0023	46	0.038	0.84	0.0044	0.056	13	100
HHC-2	16	0.12	16	0.017	2.3	3.0	2.8	0.020	0.19	0.070	0.0023	46	0.036	0.81	0.0038	0.056	13	100
HHC-3	17	0.12	16	0.018	2.3	3.1	2.8	0.020	0.17	0.060	0.0023	45	0.036	0.85	0.0037	0.057	13	100
HHC-4	16	0.12	16	0.017	2.3	3.0	2.8	0.020	0.18	0.050	0.0021	45	0.037	0.82	0.0037	0.062	13	100
HPLC-1	17	0.10	8.5	0.022	2.7	3.0	3.1	0.020	0.34	0.090	0.0043	39	0.023	0.71	0.020	0.045	24	99
HPLC-2	17	0.10	8.7	0.021	2.7	3.0	3.1	0.020	0.34	0.090	0.0041	39	0.024	0.72	0.020	0.050	24	99
HPLC-3	18	0.10	8.5	0.022	2.7	3.1	3.1	0.020	0.34	0.090	0.0041	39	0.023	0.74	0.020	0.048	24	99
HPLC-4	17	0.10	8.5	0.022	2.7	3.0	3.1	0.020	0.34	0.090	0.0041	39	0.023	0.73	0.020	0.053	24	99
HPHC-1	13	0.095	20	0.016	2.6	2.1	3.2	0.020	0.35	0.080	0.0028	32	0.030	0.55	0.014	0.038	23	96
HPHC-2	13	0.099	21	0.016	2.8	2.2	3.3	0.030	0.37	0.080	0.0029	33	0.031	0.57	0.014	0.039	22	98
HPHC-3	13	0.100	21	0.015	2.6	2.2	3.3	0.030	0.38	0.080	0.0029	31	0.031	0.53	0.014	0.038	22	96
HPHC-4	13	0.094	20	0.017	2.8	2.1	3.2	0.020	0.35	0.070	0.0028	36	0.030	0.60	0.014	0.038	20	97
HHGPLC-1	13	0.082	16	0.015	2.2	2.1	2.4	0.020	0.40	0.080	0.0031	27	0.023	0.50	0.016	0.036	27	90
HHGPLC-2	13	0.081	17	0.015	2.2	2.1	2.4	0.020	0.38	0.080	0.0032	26	0.022	0.50	0.016	0.034	27	90
HHGPLC-3	12	0.077	17	0.015	2.1	2.0	2.4	0.020	0.37	0.080	0.0031	25	0.021	0.47	0.016	0.034	28	89
HHGPLC-4	13	0.080	17	0.015	2.2	2.0	2.4	0.020	0.39	0.070	0.0031	26	0.022	0.49	0.017	0.033	28	91
HHGPHC-1	9.3	0.063	23	0.011	2.1	1.6	2.3	0.020	0.64	0.060	0.0021	21	0.025	0.37	0.010	0.024	31	91
HHGPHC-2	8.7	0.059	23	0.0099	2.1	1.4	2.3	0.020	0.69	0.060	0.0020	19	0.024	0.34	0.010	0.022	32	90
HHGPHC-3	8.6	0.059	23	0.010	2.1	1.4	2.3	0.020	0.70	0.050	0.0020	19	0.024	0.34	0.011	0.028	32	90
HHGPHC-4	9.5	0.063	24	0.011	2.2	1.5	2.3	0.020	0.66	0.050	0.0021	22	0.025	0.36	0.011	0.028	29	91
HLC-S-1	20	0.13	2.6	0.024	1.9	4.3	2.5	0.010	0.65	0.090	0.0028	58	0.030	1.1	0.0039	0.061	8.4	99
HLC-S-2	20	0.13	2.5	0.024	1.9	4.3	2.5	0.010	0.66	0.090	0.0028	59	0.030	1.1	0.0042	0.069	8.2	99
HLC-S-3	20	0.13	2.6	0.024	2.0	4.4	2.6	0.010	0.67	0.10	0.0029	58	0.030	1.1	0.0042	0.076	8.3	99
HLC-S-4	20	0.13	2.6	0.024	2.0	4.3	2.5	0.010	0.66	0.10	0.0028	58	0.030	1.1	0.0046	0.069	8.2	99
HHC-S-1	17	0.10	14	0.020	1.8	3.3	3.0	0.030	0.59	0.080	0.0025	41	0.036	0.81	0.0044	0.050	18	99
HHC-S-2	17	0.10	13	0.022	1.8	3.2	3.0	0.030	0.57	0.080	0.0025	42	0.035	0.81	0.0044	0.056	18	99
HHC-S-3	17	0.10	14	0.020	1.8	3.3	3.0	0.030	0.58	0.080	0.0025	41	0.036	0.81	0.0044	0.052	18	99
HHC-S-4	17	0.10	13	0.022	1.8	3.2	2.9	0.030	0.57	0.070	0.0025	42	0.035	0.80	0.0042	0.049	18	100
GUCEM	3.9	0.11	63	0.013	3.5	0.52	4.3	0.060	0.16	0.050	0.00031	19	0.060	0.15	0.0011	0.0072	5.0	99
SLAG	14	0.058	45	0.0057	0.75	0.35	5.2	0.14	0.21	0.030	0.0031	33	0.065	0.57	0.0085	0.032	0.50	100

Sample ID	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sn	Sr	Ti	U	V	W	Y	Zn	Zr
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Average Crustal Abundance[1]	0.075	82300	1.8	425	3	0.0085	41500	3	25	102	60	56300	-	20850	39	23300	950	1.2	23550	84	1050	14	350	0.2	22	0.05	2.3	370	5650	2.7	120	1.25	33	70	165
MG-NLR-1	1.2	22229	26	79	2.0	37	1001	<1	28	44	517	7554	<1	2822	15	8804	31	241	297	46	39	1310	3460	<1	2.0	20	<1	43	120	221	105	<1	4.0	6.0	38
MG-NLR-2	1.1	21117	23	75	1.8	34	929	<1	27	42	484	7204	<1	2656	14	8262	23	235	148	43	35	1280	3340	<1	2.0	17	<1	41	120	209	101	<1	3.0	6.0	37
MG-NLR-3	1.0	21858	26	78	1.9	35	1001	<1	28	45	511	7414	<1	2739	15	8623	23	235	148	45	31	1280	3410	<1	2.0	19	<1	42	120	207	104	<1	3.0	5.0	37
MG-NLR-4	1.1	22229	24	78	2.0	35	1001	<1	28	43	512	7414	<1	2822	15	8684	23	244	148	44	31	1290	3360	1.0	2.0	17	<1	43	120	228	105	<1	3.0	5.0	37
HG-NLR-1	4.5	24822	35	71	2.2	55	5646	<1	54	37	533	8323	<1	2656	18	10674	39	738	148	56	65	3710	6870	6.0	3.0	35	<1	55	180	2520	109	1.0	15	7.0	50
HG-NLR-2	4.2	24769	35	70	2.2	54	5575	<1	51	37	530	8323	<1	2739	19	10674	39	707	148	55	70	3580	6870	6.0	3.0	32	<1	55	180	2530	109	1.0	15	7.0	49
HG-NLR-3	4.5	25404	36	72	2.2	57	5718	<1	53	38	538	8463	<1	2822	19	10915	39	754	148	55	70	3440	7080	5.0	3.0	34	<1	56	180	2540	112	1.0	15	7.0	50
HG-NLR-4	4.7	25722	34	73	2.2	58	5789	<1	53	38	549	8463	<1	2822	19	10975	39	762	148	56	74	3560	7110	7.0	3.0	35	<1	57	180	2520	114	1.0	15	7.0	53
LUGP-1	<0.2	53	11	6.0	<0.5	5.0	218699	<1	<1	7.0	<1	140	<1	249	4.0	603	15	4.0	816	<1	22	<1	115000	14	<1	<1	8.0	76	60	163	<1	<1	1.0	<1	5.0
LUGP-2	<0.2	53	11	6.0	<0.5	5.0	205834	<1	<1	7.0	<1	140	<1	249	4.0	603	15	5.0	816	<1	22	<1	110000	12	<1	<1	6.0	73	60	164	<1	<1	1.0	<1	5.0
LUGP-3	<0.2	53	12	8.0	<0.5	6.0	219413	<1	<1	10	<1	210	<1	249	4.0	543	15	5.0	742	<1	26	<1	116000	14	<1	<1	7.0	75	60	160	<1	<1	1.0	<1	5.0
LUGP-4	<0.2	53	11	8.0	<0.5	6.0	205834	<1	<1	13	<1	280	<1	249	4.0	543	15	5.0	742	<1	22	<1	115000	12	<1	<1	7.0	71	60	155	<1	<1	1.0	<1	4.0
HUGP-1	<0.2	53	14	6.0	<0.5	4.0	210122	<1	<1	2.0	1.0	140	<1	249	7.0	1568	15	9.0	2226	<1	26	2.0	114000	14	<1	<1	7.0	89	60	641	<1	<1	6.0	<1	25
HUGP-2	<0.2	53	16	6.0	<0.5	3.0	206549	<1	<1	3.0	<1	70	<1	249	7.0	1447	15	8.0	2151	<1	26	1.0	114000	13	<1	<1	6.0	86	60	637	<1	<1	6.0	<1	24
HUGP-3	<0.2	53	12	7.0	<0.5	3.0	207263	<1	<1	7.0	<1	70	<1	249	7.0	1447	15	9.0	2151	1.0	26	2.0	115000	13	<1	<1	6.0	87	60	637	<1	<1	6.0	<1	25
HUGP-4	<0.2	53	12	6.0	<0.5	3.0	205119	<1	<1	3.0	<1	70	<1	249	7.0	1447	15	8.0	2077	<1	26	1.0	114000	14	<1	<1	6.0	85	60	628	<1	<1	6.0	<1	23
MPPT-1	<0.2	65098	185	152	9.2	26	144370	1.0	131	152	1110	35601	<1	498	4.0	20865	379	1060	9199	231	458	82	97900	<1	60	<1	<1	64	240	1870	472	<1	505	168	13
MPPT-2	<0.2	67744	191	227	9.5	29	162237	1.0	135	157	1170	36510	<1	498	4.0	21167	395	1080	9051	239	471	84	96700	2.0	63	<1	<1	70	300	1890	485	<1	533	176	14
MPPT-3	<0.2	66156	187	200	9.5	25	157949	1.0	131	181	1150	36650	<1	498	4.0	21106	395	1090	9125	233	471	82	94200	5.0	62	<1	<1	69	300	1860	482	<1	526	173	13
MPPT-4	<0.2	65627	188	162	9.4	25	157234	1.0	134	155	1140	36231	<1	498	4.0	21106	387	1110	8976	236	471	83	103000	1.0	62	<1	<1	68	300	1870	482	<1	521	172	13
HLC-1	3.8	22758	34	69	1.6	60	27016	<1	49	67	542	10002	<1	3570	19	10674	77	655	668	52	83	3450	7840	5.0	3.0	29	<1	70	180	2300	90	1.0	13	39	53
HLC-2	4.0	23234	35	73	1.6	59	27445	<1	50	69	546	10142	<1	3653	19	10975	77	677	668	53	83	3500	7810	5.0	3.0	32	<1	72	180	2310	92	1.0	13	40	53
HLC-3	3.9	22705	35	61	1.6	58	26801	<1	49	67	536	9932	<1	3487	19	10734	70	647	668	51	79	3420	7860	3.0	3.0	31	<1	70	180	2270	92	1.0	13	39	47
HLC-4	3.7	21382	33	72	1.6	57	26015	<1	47	64	536	9652	<1	3404	18	10312	70	635	668	50	79	3230	7740	5.0	3.0	29	<1	67	180	2230	87	1.0	13	37	46
HHC-1	<0.2	25510	41	77	1.4	43	129361	<1	39	44	477	12240	<1	4566	34	15136	170	462	1039	48	140	2420	9080	12	3.0	17	7.0	180	300	1840	86	<1	14	185	33
HHC-2	<0.2	24928	41	85	1.3	44	128646	<1	39	43	474	12310	<1	4649	33	15136	170	463	1039	47	131	2460	9370	12	3.0	16	7.0	179	300	1810	86	<1	14	186	32
HHC-3	<0.2	24398	37	90	1.3	43	127217	<1	38	43	464	12100	<1	4566	33	14835	163	455	964	47	131	2430	9320	12	3.0	15	7.0	177	300	1810	84	<1	14	184	33
HHC-4	<0.2	25034	39	106	1.3	44	129361	<1	39	44	468	12100	<1	4649	34	14835	163	473	964	47	131	2450	9240	12	3.0	14	6.0	180	360	1780	84	<1	14	184	34
HPLC-1	<0.2	38847	82	105	3.5	52	74329	<1	72	85	687	16647	<1	3653	17	17307	170	768	2003	109	201	2290	38400	5.0	20	15	<1	81	240	2270	210	<1	159	82	51
HPLC-2	<0.2	37894	76	78	3.7	50	72185	<1	71	83	681	16577	<1	3570	16	17247	163	740	1929	105	192	2200	37500	4.0	20	17	<1	78	240	2250	206	<1	159	79	50
HPLC-3	<0.2	37365	79	76	3.7	50	70970	<1	69	82	675	16367	<1	3570	16	17066	163	754	1929	103	196	2230	37300	5.0	19	18	<1	76	240	2190	204	<1	157	78	49
HPLC-4	<0.2	38106	79	74	3.7	52	74329	<1	71	83	715	16926	<1	3570	16	17609	163	766	2003	105	196	2290	39300	5.0	20	18	<1	79	240	2260	212	<1	164	80	42
HPHC-1	<0.2	34031	93	471	2.6	33	143655	1.0	53	75	466	17696	<1	5064	34	20443	232	529	3116	81	253	1760	35000	<1	15	19	<1	206	480	1660	186	<1	116	240	73
HPHC-2	<0.2	34190	85	471	2.6	35	150087	<1	53	74	478	17556	<1	4981	34	20564	232	548	3116	79	249	1790	34800	<1	15	<1	<1	209	480	1640	185	<1	116	226	76
HPHC-3	<0.2	33925	79	478	2.6	34	153661	<1	53	71	492	18045	<1	4898	35	21468	240	544	3116	82	266	1790	36400	<1	15	2.0	<1	213	540	1640	188	<1	122	236	75
HPHC-4	<0.2	34137	83	460	2.5	33	144370	1.0	53	76	447	17416	<1	5313	33	19900	217	516	3042	76	231	1720	34800	<1	15	<1	<1	203	480	1590	182	<1	113	211	71
HHGPLC-1	<0.2	28897	96	281	2.9	40	117211	<1	57	62	508	13359	<1	2822	18	14533	132	596	3413	84	209	2030	82800	<1	16	6.0	<1	113	300	1920	186	<1	133	72	69
HHGPLC-2	<0.2	29109	89	277	2.8	40	120070	<1	56	60	498	13149	<1	2906	21	14232	132	601	3264	83	201	2060	83500	<1	16	2.0	<1	112	300	1980	185	<1	128	72	68
HHGPLC-3	<0.2	28580	90	281	2.9	43	120070	<1	56	60	501	13289	<1	2739	19	14473	132	587	3264	82	214	2000	84100	<1	16	14	<1	112	300	2010	185	<1	135	74	69
HHGPLC-4	<0.2	27733	102	273	2.8	37	117211	<1	54	60	498	13079	<1	2656	18	14111	132	591	3264	80	183	2040	82200	<1	16	4.0	<1	108	300	1970	183	<1	133	72	69
HHGPHC-1	<0.2	24346	77	263	1.8	28	165096	<1	38	51	338	13709	<1	3238	20	14714	155	419	5712	57	201	1370	56100	<1	11	2.0	<1	175	420	1240	136	<1	86	76	59
HHGPHC-2	<0.2	23605	70	262	1.8	27	170099	<1	35	49	327	13709	<1	3238	22	14714	155	417	5861	57	196	1380	59100	<1	11	4.0	<1	174	420	1200	133	<1	90	75	59
HHGPHC-3	<0.2	23340	72	261	1.8	27	171528	<1	35	51	333	13569	<1	3072	21	14413	155	426	5786	56	192	1400	58900	<1	11	<1	<1	174	420	1220	133	<1	87	77	59
HHGPHC-4	<0.2	24187	72	264	1.8	26	167955	<1	37	52	326	13429	<1	3155	22	14352	155	425	5416	57	205	1410	58400	<1	11	<1	<1	172	420	1230	135	<1	85	77	59
HLC-S-1	8.4	25722	33	93	2.0	47	19726	<1	43	59	477	8813	<1	3321	19	11458	77	579	4080	52	70	2950	9270	<1	3.0	1.0	<1	64	240	2080	105	<1	13	14	40
HLC-S-2	8.9	27786	33	108	2.1	49	21012	<1	45	62	504	9302	<1	3570	21	12362	85	601	4451	55	65	2920	9310	<1	4.0	1.0	<1	69	300	2130	113	<1	15	16	45
HLC-S-3	8.4	26092	33	93	2.0	46	18654	<1	42	63	470	8813	<1	3404	20	11518	77	599	4303	52	65	2860	8980	<1	3.0	1.0	<1	63	240	2020	106	<1	13	14	39
HLC-S-4	8.4	26833	33	105	2.1	47	19297	<1	43	63	486	9023	<1	3487	20	11940	77	629	4451	52	65	2940	9180	<1	4.0	2.0	<1	66	240	2110	107	<1	14	15	40
HHC-S-1	4.1	36571	56	227	2.9	36	110064	<1	33	70	447	10142	<1	4234	35	18212	256	453	4154	59	127	2390	12800	<1	6.0	1.0	<1	176	779	1720	107	<1	23	45	51
HHC-S-2	4.1	34560	62	219	2.7	37	105776	<1	33	76	403	10002	<1	3985	33	17187	256	442	4006	57	127	2360	12700	<1	5.0	2.0	<1	168	719	1740	99	<1	21	45	43
HHC-S-3	4.0	34348	55	218	2.7	37	108635	<1	33	66	415	9722	<1	3819	36	17187	248	443	4080	57	109	2370	12900	<1	5.0	1.0	<1	170	719	1720	98	<1	22	49	50
HHC-S-4	4.1	34243	60	212	2.6	36	104346	<1	32	74	395	9652	<1	3819	32	16764	240	446	3932	54	122	2330	12400	<1	5.0	2.0	<1	165	719	1700	97	<1	21	42	47
GUCEM	<0.2	28791	29	189	0.80	<1	556037	1.0	7.0	88	194	27278	<1	5977	70	32082	581	15	1558	25	345	16	12500	67	3.0	<1	45	569	659	11	52	<1	13	851	13
SLAG	<0.2	83092	7.0	573	11	42	322330	2.0	<1	47	4.0	5316	<1	3072	59	32865	1332	4.0	1632	2.0	140	<1	25300	<1	22	<1	<1	560	3777	19	31	<1	81	17	154

(1) Price,W.A., 1997. Draft Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Mine sites in British Columbia, Ministry of Energy and Mines. p.159.

XX	Denotes values greater than five times the Price Crustal Abundance.
XX	Denotes values greater than ten times the Price Crustal Abundance.

Sample ID	pH	Specific Conductivity	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Ammonia	Nitrate	Nitrite	Chloride	Fluoride	Calcium	Magnesium	Potassium	Sodium	Sulfate	Phosphate	Total Hardness	Total Dissolved Solids	Sum of Ions	Aluminum	Antimony	Arsenic
	pH units	µS/cm	mg/L $CaCO_3$	mg/L $CaCO_3$	mg/L	mg/L	mg/L	mg/L-N	mg/L-N	mg/L-N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L-P	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MG-NLR-1	4.7	387	5.0	<1	<1	<1	<1	<0.01	<0.0090	<0.0091	10	0.11	46	9.9	5.0	3.8	160	<0.016	155	280	235	0.041	0.00070	0.0061
MG-NLR-2	4.8	353	5.0	<1	<1	<1	<1	<0.01	<0.0090	<0.0091	9.0	0.10	42	9.1	4.7	3.6	150	<0.016	142	264	218	0.036	0.00080	0.0059
MG-NLR-3	4.9	380	5.0	<1	<1	<1	<1	<0.01	<0.0090	<0.0091	10	0.10	46	9.8	5.1	4.0	160	<0.016	155	282	235	0.040	0.00070	0.0059
MG-NLR-4	4.8	398	5.0	<1	<1	<1	<1	<0.01	<0.0090	<0.0091	10	0.11	49	10	5.3	4.0	170	<0.016	163	317	248	0.041	0.00070	0.0060
HG-NLR-1	5.4	2160	10	2.0	2.0	<1	<1	0.50	<0.0090	<0.0091	8.0	0.50	516	36	6.2	4.3	1380	<0.016	1430	2160	1950	0.027	0.0016	0.011
HG-NLR-2	5.6	1530	5.0	1.0	1.0	<1	<1	0.26	<0.0090	<0.0091	5.0	0.44	336	22	4.4	2.7	890	<0.016	928	1420	1260	0.022	0.0014	0.0076
HG-NLR-3	5.6	1660	7.0	3.0	4.0	<1	<1	0.29	<0.0090	<0.0091	6.0	0.41	376	26	4.9	3.0	990	<0.016	1040	1570	1410	0.022	0.0013	0.0082
HG-NLR-4	5.7	1980	5.0	<1	<1	<1	<1	0.26	<0.0090	<0.0091	7.0	0.47	467	32	5.9	3.9	1230	<0.016	1300	1950	1750	0.028	0.0018	0.010
LUGP-1	5.5	2860	5.0	37	45	<1	<1	0.65	<0.0090	<0.0091	23	<0.1	543	59	40	106	1770	<0.016	1600	2770	2590	<0.0005	<0.0002	0.00090
LUGP-2	6.2	2920	5.0	24	29	<1	<1	0.66	<0.0090	<0.0091	21	<0.1	538	64	39	109	1780	<0.016	1600	2780	2580	<0.0005	<0.0002	0.0011
LUGP-3	5.5	2820	5.0	27	33	<1	<1	0.67	<0.0090	<0.0091	23	<0.1	543	54	37	97	1730	<0.016	1580	2740	2520	<0.0005	<0.0002	0.00090
LUGP-4	5.8	2880	2.0	24	29	<1	<1	0.60	<0.0090	<0.0091	20	<0.1	542	57	38	103	1740	<0.016	1580	2780	2530	<0.0005	<0.0002	0.00080
HUGP-1	7.4	3590	7.0	27	33	<1	<1	0.26	<0.0090	<0.0091	37	0.30	509	126	29	242	2210	<0.016	1790	3590	3190	<0.0005	<0.0002	0.0061
HUGP-2	7.4	3600	5.0	29	35	<1	<1	0.12	<0.0090	<0.0091	40	0.30	517	126	29	246	2230	<0.016	1810	3530	3220	<0.0005	<0.0002	0.0060
HUGP-3	7.3	3520	5.0	25	30	<1	<1	0.26	<0.0090	<0.0091	35	0.30	522	119	28	233	2190	<0.016	1790	3460	3160	<0.0005	<0.0002	0.0057
HUGP-4	7.5	3580	5.0	28	34	<1	<1	1.0	<0.0090	<0.0091	35	0.30	515	126	29	245	2240	<0.016	1800	3520	3220	<0.0005	<0.0002	0.0062
MPPT-1	6.5	4920	5.0	27	33	<1	<1	0.58	<0.0090	<0.0091	32	1.0	473	301	22	452	3200	<0.016	2420	5140	4510	0.075	<0.002	0.040
MPPT-2	6.6	6140	7.0	28	34	<1	<1	0.33	<0.0090	<0.0091	42	1.2	456	455	30	645	4100	<0.016	3010	6600	5760	0.059	<0.002	0.048
MPPT-3	6.6	5840	7.0	28	34	<1	<1	0.19	<0.0090	<0.0091	38	1.1	466	424	27	591	3900	<0.016	2900	6260	5480	0.073	<0.002	0.045
MPPT-4	6.6	6200	5.0	28	34	<1	<1	0.18	<0.0090	<0.0091	40	1.2	464	470	29	637	4200	<0.016	3090	6780	5870	0.057	<0.002	0.045
HLC-1	9.5	1700	<1	33	13	13	<1	0.28	<0.0090	<0.0091	40	0.090	402	0.20	13	36	1040	<0.01	1000	1550	1560	0.012	0.0069	0.096
HLC-2	9.5	1230	<1	30	15	11	<1	0.13	<0.0090	<0.0091	30	0.080	260	0.20	9.8	26	700	<0.01	649	1050	1050	0.015	0.0073	0.092
HLC-3	9.3	1540	<1	30	17	10	<1	1.6	<0.0090	<0.0091	36	0.10	356	0.20	12	32	940	<0.01	889	1390	1400	0.011	0.0089	0.091
HLC-4	9.3	1540	<1	31	16	11	<1	0.14	<0.0090	<0.0091	37	0.090	351	0.20	12	33	920	<0.01	876	1380	1380	0.012	0.012	0.088
HHC-1	12	4820	<1	1110	<1	36	357	0.10	<0.0090	0.018	8.0	0.070	320	<0.1	152	94	120	<0.01	798	1380	1090	0.024	<0.0002	0.036
HHC-2	12	4900	<1	1100	<1	48	347	0.12	<0.0090	0.018	8.0	0.070	306	<0.1	171	107	120	<0.01	763	1410	1110	0.011	<0.0002	0.041
HHC-3	12	5130	<1	1160	<1	48	367	0.17	<0.0090	0.024	9.0	0.080	317	<0.1	179	117	150	<0.01	790	1510	1190	0.010	<0.0002	0.046
HHC-4	12	4750	<1	1070	<1	48	337	0.11	<0.0090	0.021	8.0	0.070	350	<0.1	143	94	190	<0.01	873	1400	1170	0.026	<0.0002	0.037
HPLC-1	8.8	2580	<1	26	24	4.0	<1	0.45	<0.0090	<0.0091	39	0.62	627	0.60	16	136	1650	<0.01	1570	2480	2500	2.0	0.0057	0.14
HPLC-2	8.7	2540	<1	26	24	4.0	<1	0.52	<0.0090	<0.0091	34	0.63	631	0.70	15	118	1670	<0.01	1580	2480	2500	2.0	0.0060	0.12
HPLC-3	8.8	2630	<1	28	24	5.0	<1	0.46	<0.0090	<0.0091	44	0.64	619	0.70	17	144	1710	<0.01	1550	2550	2560	2.0	0.0063	0.15
HPLC-4	8.8	2640	<1	26	22	5.0	<1	0.46	<0.0090	<0.0091	45	0.62	614	0.60	18	157	1730	<0.01	1530	2570	2590	2.0	0.0060	0.16
HPHC-1	12	5500	<1	716	<1	142	163	0.14	<0.0090	<0.0091	32	0.20	358	<0.1	199	452	1410	<0.01	893	2870	2760	0.022	<0.0002	0.23
HPHC-2	12	7290	<1	1020	<1	192	238	0.22	<0.0090	<0.0091	41	0.20	472	0.10	262	592	1780	<0.01	1180	3700	3580	<0.005	<0.002	0.38
HPHC-3	12	5230	<1	699	<1	186	132	0.25	<0.0090	<0.0091	30	0.10	364	<0.1	177	396	1360	<0.01	908	2760	2640	0.0090	<0.002	0.35
HPHC-4	12	7540	<1	1100	<1	253	230	0.40	<0.0090	<0.0091	42	0.20	529	0.10	263	592	1890	<0.01	1320	3890	3800	<0.005	<0.002	0.40
HHGPLC-1	10	3580	<1	70	85	<1	<1	0.23	<0.0090	<0.0091	47	0.10	522	0.30	31	421	2200	<0.01	1300	3200	3310	3.7	0.0011	0.26
HHGPLC-2	10	3500	<1	67	82	<1	<1	0.52	<0.0090	<0.0091	44	0.20	524	0.30	29	396	2130	<0.01	1310	3120	3210	3.6	0.0012	0.24
HHGPLC-3	10	3710	<1	65	79	<1	<1	0.30	<0.0090	<0.0091	51	0.10	520	0.30	33	456	2260	<0.01	1300	3270	3400	3.6	0.0011	0.27
HHGPLC-4	10	3500	<1	66	80	<1	<1	0.38	<0.0090	<0.0091	44	0.20	536	0.30	30	398	2130	<0.01	1340	3090	3220	3.5	0.0010	0.24
HHGPHC-1	12	5700	<1	662	<1	212	105	0.41	<0.0090	<0.0091	11	0.10	563	<0.1	118	484	1990	<0.01	1400	3560	3480	0.020	<0.0002	0.13
HHGPHC-2	12	5630	<1	610	<1	175	108	0.38	<0.0090	<0.0091	11	0.10	559	<0.1	115	466	1960	<0.01	1390	3520	3390	0.0084	<0.0002	0.13
HHGPHC-3	12	5320	<1	666	<1	252	84	0.61	<0.0090	<0.0091	10	0.10	590	<0.1	105	412	1900	<0.01	1470	3350	3350	0.0085	<0.0002	0.20
HHGPHC-4	12	5320	<1	656	<1	253	80	0.60	<0.0090	<0.0091	10	0.10	589	<0.1	110	433	1950	<0.01	1470	3410	3420	0.012	<0.0002	0.13
HLC-S-1	10	5080	<1	94	115	<1	<1	0.73	<0.0090	<0.0091	166	1.4	554	0.40	12	727	3200	0.010	1380	4230	4780	0.055	0.068	0.15
HLC-S-2	10	5060	<1	84	102	<1	<1	0.86	<0.0090	<0.0091	174	1.5	557	0.40	12	739	3000	<0.01	1390	4240	4580	0.30	0.066	0.16
HLC-S-3	11	5230	<1	92	112	<1	<1	0.92	<0.0090	0.0091	169	1.5	578	0.40	12	753	3100	<0.01	1440	4280	4720	0.054	0.064	0.16
HLC-S-4	10	4940	<1	92	112	<1	<1	0.56	<0.0090	<0.0091	161	1.4	524	0.40	11	685	3000	<0.01	1310	4090	4490	0.073	0.064	0.15
HHC-S-1	12	4780	<1	949	<1	403	94	0.42	<0.0090	<0.0091	149	0.40	46	0.10	86	408	510	<0.01	115	1360	1700	4.5	0.0020	0.061
HHC-S-2	12	5340	<1	977	<1	385	114	0.48	<0.0090	<0.0091	114	0.40	39	0.20	98	483	670	<0.01	98	1580	1900	5.1	0.0020	0.082
HHC-S-3	12	4370	<1	884	<1	424	60	0.43	<0.0090	<0.0091	93	0.40	46	0.10	78	371	470	<0.01	115	1260	1540	4.5	0.0020	0.059
HHC-S-4	12	4690	<1	902	<1	373	95	0.62	<0.0090	<0.0091	105	0.30	46	0.20	84	400	520	<0.01	116	1360	1620	4.6	0.0020	0.064
GUCEM	12	11200	<1	2520	<1	300	687	1.3	<0.0090	<0.0091	6.0	<0.1	1010	<0.1	304	60	580	<0.016	2520	3190	2950	0.0070	<0.002	<0.001
SLAG	12	3880	<1	512	78	269	<1	1.8	<0.0090	0.021	108	0.40	756	0.10	56	13	3300	<0.01	1880	2650	4580	0.087	<0.0002	0.00020

(1) Radioactivity analysis for SFE leachate
(2) Radioactivity analysis for initial sample
(3) Radioactivity analysis for solid residue sample

Sample ID	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc	Gross Alpha Activity[1]	Gross Beta Activity[1]
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	Bq/L
MG-NLR-1	0.15	<0.0001	0.28	0.00010	<0.0005	0.11	0.086	0.032	3.1	0.039	0.000029	0.00030	0.078	0.088	<0.0005	0.45	0.0022	<0.0001	0.00030	0.19	0.00020	0.0072	500	390
MG-NLR-2	0.15	<0.0001	0.28	<0.0001	<0.0005	0.10	0.078	0.031	3.2	0.037	0.000030	0.00030	0.073	0.084	<0.0005	0.44	0.0021	<0.0001	<0.0002	0.18	0.00020	0.0059	610	400
MG-NLR-3	0.15	<0.0001	0.30	0.00010	<0.0005	0.11	0.080	0.033	3.2	0.040	0.000027	0.00030	0.086	0.089	<0.0005	0.46	0.0022	<0.0001	0.00020	0.20	0.00020	0.0084	530	380
MG-NLR-4	0.14	<0.0001	0.32	0.00010	<0.0005	0.12	0.081	0.034	3.2	0.042	0.000034	0.00030	0.087	0.090	<0.0005	0.46	0.0023	<0.0001	0.00020	0.21	0.00020	0.0062	560	390
HG-NLR-1	0.0076	<0.0001	0.34	0.00030	<0.0005	0.24	0.034	0.020	3.5	0.37	0.000064	0.0068	0.15	0.076	<0.0005	0.54	0.0037	<0.0001	0.00040	4.2	<0.0001	0.0031	240	410
HG-NLR-2	0.017	<0.0001	0.28	0.00020	<0.0005	0.18	0.025	0.012	2.9	0.23	0.000029	0.0056	0.12	0.054	<0.0005	0.38	0.0027	<0.0001	0.00030	3.2	<0.0001	0.0033	280	360
HG-NLR-3	0.011	<0.0001	0.30	0.00020	<0.0005	0.20	0.026	0.012	3.0	0.27	0.000031	0.0059	0.12	0.054	<0.0005	0.40	0.0029	<0.0001	0.00030	3.4	<0.0001	0.0021	250	370
HG-NLR-4	0.0081	<0.0001	0.34	0.00030	<0.0005	0.24	0.031	0.015	3.2	0.33	0.000070	0.0064	0.14	0.070	<0.0005	0.49	0.0034	<0.0001	0.00040	4.0	<0.0001	0.0025	290	410
LUGP-1	0.020	<0.0001	0.33	<0.0001	0.0020	0.0012	0.0054	0.032	0.057	0.020	<0.000001	0.13	0.011	0.0015	<0.0005	0.40	<0.0002	<0.0001	0.00040	2.4	<0.0001	0.012	50	10
LUGP-2	0.020	<0.0001	0.35	<0.0001	0.00050	0.0012	0.016	0.0016	0.00050	0.023	<0.000001	0.17	0.012	0.0015	<0.0005	0.40	<0.0002	<0.0001	0.00040	1.7	<0.0001	0.014	40	12
LUGP-3	0.019	<0.0001	0.32	<0.0001	0.0020	0.0010	0.0047	0.032	0.0013	0.018	0.0000040	0.13	0.011	0.0012	<0.0005	0.39	<0.0002	<0.0001	0.00020	2.3	<0.0001	0.011	59	17
LUGP-4	0.019	<0.0001	0.33	<0.0001	0.00080	0.0010	0.012	0.0080	<0.0001	0.020	<0.000001	0.14	0.011	0.0014	<0.0005	0.39	<0.0002	<0.0001	0.00040	1.7	<0.0001	0.012	52	12
HUGP-1	0.017	<0.0001	0.94	<0.0001	<0.0005	0.00010	<0.0002	<0.0005	<0.0001	0.0052	0.0000040	0.56	0.0050	0.0032	<0.0005	0.36	<0.0002	<0.0001	0.0016	0.63	<0.0001	<0.0005	19	5.1
HUGP-2	0.017	<0.0001	0.90	<0.0001	0.0011	0.00010	<0.0002	0.0034	<0.0001	0.0052	<0.000001	0.54	0.0045	0.0032	<0.0005	0.36	<0.0002	<0.0001	0.0017	0.60	<0.0001	0.00090	15	4.4
HUGP-3	0.012	<0.0001	0.88	<0.0001	<0.0005	0.00010	<0.0002	<0.0005	<0.0001	0.0049	<0.000001	0.52	0.0042	0.0030	<0.0005	0.35	<0.0002	<0.0001	0.0015	0.55	<0.0001	<0.0005	15	4.5
HUGP-4	0.016	<0.0001	0.94	<0.0001	<0.0005	0.00010	<0.0002	<0.0005	<0.0001	0.0053	0.0000010	0.55	0.0047	0.0034	<0.0005	0.36	<0.0002	<0.0001	0.0018	0.60	<0.0001	<0.0005	16	4.2
MPPT-1	0.020	<0.001	1.3	<0.001	<0.005	0.0020	<0.002	<0.005	<0.001	0.42	<0.000001	12	<0.001	0.012	<0.005	0.24	0.016	<0.001	0.041	0.010	0.0020	<0.005	<2.1	<0.86
MPPT-2	0.019	<0.001	1.6	<0.001	<0.005	0.0030	<0.002	<0.005	<0.001	0.56	<0.000001	16	<0.001	0.019	<0.005	0.26	0.020	<0.001	0.046	0.015	0.0020	<0.005	3.8	3.4
MPPT-3	0.018	<0.001	1.5	<0.001	<0.005	0.0020	<0.002	<0.005	<0.001	0.51	0.0000080	15	<0.001	0.017	<0.005	0.27	0.018	<0.001	0.051	0.011	0.0020	<0.005	3.5	1.6
MPPT-4	0.020	<0.001	1.4	<0.001	<0.005	0.0030	<0.002	<0.005	<0.001	0.56	0.0000010	16	<0.001	0.019	<0.005	0.27	0.020	<0.001	0.057	0.011	0.0020	<0.005	<3.3	2.4
HLC-1	0.048	<0.0001	0.15	<0.0001	0.00060	0.00010	0.00030	<0.0005	0.0020	<0.0005	0.00060	2.1	0.00020	0.11	0.052	1.1	0.0025	<0.0001	0.0072	0.0048	0.018	<0.0005	240	58
HLC-2	0.047	<0.0001	0.14	<0.0001	0.00060	0.00010	0.00030	<0.0005	0.0020	<0.0005	0.00021	2.0	0.00020	0.11	0.049	1.1	0.0025	<0.0001	0.0070	0.0046	0.018	<0.0005	210	57
HLC-3	0.047	<0.0001	0.14	<0.0001	0.00070	0.00010	0.00040	<0.0005	0.0018	<0.0005	0.00046	2.0	0.00020	0.11	0.048	1.0	0.0024	<0.0001	0.0063	0.012	0.017	<0.0005	180	53
HLC-4	0.050	<0.0001	0.16	<0.0001	0.00070	0.00010	0.00050	<0.0005	0.0015	<0.0005	0.00045	2.2	0.00020	0.12	0.053	1.0	0.0024	<0.0001	0.0070	0.0089	0.017	<0.0005	210	58
HHC-1	0.22	<0.0001	0.020	<0.0001	0.026	<0.0001	0.00040	<0.0005	0.42	<0.0005	<0.000001	6.0	0.00020	0.045	<0.0005	4.5	0.0028	<0.0001	0.013	0.020	0.00060	<0.0005	280	140
HHC-2	0.21	<0.0001	0.020	<0.0001	0.028	<0.0001	0.00050	<0.0005	0.42	<0.0005	<0.000001	6.6	0.00020	0.043	<0.0005	4.7	0.0030	<0.0001	0.014	0.014	0.00060	<0.0005	270	130
HHC-3	0.20	<0.0001	<0.01	0.00010	0.033	<0.0001	0.00050	<0.0005	0.40	<0.0005	<0.000001	6.8	0.00020	0.028	<0.0005	4.7	0.0031	<0.0001	0.014	0.015	0.00040	<0.0005	390	140
HHC-4	0.17	<0.0001	<0.01	<0.0001	0.029	<0.0001	0.00040	<0.0005	0.32	<0.0005	<0.000001	5.6	0.00020	0.022	<0.0005	3.4	0.0023	<0.0001	0.012	0.012	0.00040	<0.0005	210	100
HPLC-1	0.024	<0.0001	0.53	<0.0001	0.0072	<0.0001	0.0011	0.0014	0.00050	<0.0005	<0.000001	3.6	0.00020	0.053	<0.0005	0.45	0.0010	<0.0001	0.010	0.070	0.022	0.00090	52	16
HPLC-2	0.025	<0.0001	0.51	<0.0001	0.0066	<0.0001	0.0021	0.0020	0.0011	<0.0005	<0.000001	3.3	0.00020	0.053	<0.0005	0.45	0.00090	<0.0001	0.0098	0.075	0.022	0.0020	37	12
HPLC-3	0.023	<0.0001	0.58	<0.0001	0.0078	<0.0001	0.0024	0.0018	0.0042	<0.0005	<0.000001	3.9	0.00040	0.064	<0.0005	0.46	0.0010	<0.0001	0.013	0.068	0.023	0.0038	45	12
HPLC-4	0.024	<0.0001	0.59	<0.0001	0.0084	<0.0001	0.0015	0.0011	0.00070	<0.0005	<0.000001	4.4	0.00030	0.064	0.00090	0.47	0.0011	<0.0001	0.014	0.064	0.023	0.0014	41	11
HPHC-1	0.071	<0.0001	<0.01	<0.0001	0.29	0.00040	0.0045	0.0014	0.055	<0.0005	<0.000001	8.8	0.0020	0.025	<0.0005	1.7	0.0040	<0.0001	0.030	0.013	0.011	<0.0005	65	34
HPHC-2	0.072	<0.001	<0.1	<0.001	0.50	<0.001	0.0050	<0.005	0.12	<0.005	<0.000001	15	0.0030	0.039	<0.005	3.2	0.0070	<0.001	0.051	0.022	0.010	<0.005	71	41
HPHC-3	0.071	<0.001	<0.1	<0.001	0.44	<0.001	0.0040	<0.005	0.078	<0.005	<0.000001	14	0.0030	0.035	<0.005	2.2	0.0050	<0.001	0.049	0.019	0.013	<0.005	55	29
HPHC-4	0.076	<0.001	<0.1	<0.001	0.51	<0.001	0.0050	<0.005	0.14	<0.005	<0.000001	17	0.0030	0.040	<0.005	3.6	0.0070	<0.001	0.056	0.025	0.0090	<0.005	48	40
HHGPLC-1	0.024	<0.0001	0.52	<0.0001	0.032	0.00010	0.0065	0.0018	0.00060	<0.0005	0.0000040	4.2	0.00080	0.19	<0.0005	0.68	0.0017	<0.0001	0.013	0.014	0.046	<0.0005	43	16
HHGPLC-2	0.025	<0.0001	0.52	<0.0001	0.032	0.00010	0.0062	0.0032	0.00080	<0.0005	0.0000080	4.2	0.00080	0.19	<0.0005	0.66	0.0016	<0.0001	0.012	0.014	0.046	<0.0005	38	12
HHGPLC-3	0.024	<0.0001	0.54	<0.0001	0.035	0.00010	0.0069	0.0030	0.00060	<0.0005	0.0000060	4.7	0.00090	0.20	0.00050	0.69	0.0018	0.00010	0.014	0.015	0.048	0.00050	35	13
HHGPLC-4	0.024	<0.0001	0.49	<0.0001	0.031	0.00010	0.0060	0.0025	0.00060	<0.0005	0.000015	4.1	0.00080	0.18	<0.0005	0.66	0.0016	<0.0001	0.012	0.013	0.046	<0.0005	45	16
HHGPHC-1	0.049	<0.0001	0.010	<0.0001	0.25	0.00040	0.0029	0.0023	0.046	<0.0005	0.000021	5.8	0.0034	0.015	<0.0005	1.6	0.0039	<0.0001	0.018	0.012	0.012	0.00060	44	24
HHGPHC-2	0.049	<0.0001	0.010	<0.0001	0.24	0.00040	0.0029	0.0012	0.044	<0.0005	0.000020	5.7	0.0032	0.014	<0.0005	1.6	0.0039	<0.0001	0.020	0.011	0.012	0.0011	53	23
HHGPHC-3	0.049	<0.0001	0.010	<0.0001	0.34	0.00070	0.0056	0.0023	0.056	<0.0005	0.000011	9.5	0.0061	0.022	<0.0005	1.9	0.0046	<0.0001	0.030	0.014	0.012	<0.0005	55	29
HHGPHC-4	0.051	<0.0001	0.010	<0.0001	0.24	0.00040	0.0031	0.00060	0.042	<0.0005	0.0000050	6.1	0.0033	0.015	<0.0005	1.7	0.0038	<0.0001	0.021	0.0094	0.012	<0.0005	39	20
HLC-S-1	0.026	<0.001	0.30	<0.001	<0.005	<0.001	0.0030	<0.005	0.0020	<0.005	<0.000001	7.8	0.0010	0.55	<0.005	1.3	<0.002	<0.001	0.025	0.0020	0.039	<0.005	160	44
HLC-S-2	0.028	<0.001	0.30	<0.001	<0.005	<0.001	0.0040	<0.005	0.0030	<0.005	<0.000001	8.5	0.0010	0.54	<0.005	1.3	<0.002	<0.001	0.024	0.0020	0.042	<0.005	140	44
HLC-S-3	0.028	<0.001	0.30	<0.001	<0.005	<0.001	0.0020	<0.005	0.0030	<0.005	<0.000001	8.1	<0.001	0.54	<0.005	1.3	<0.002	<0.001	0.023	0.0020	0.041	<0.005	150	41
HLC-S-4	0.026	<0.001	0.30	<0.001	<0.005	<0.001	0.0020	<0.005	0.0020	<0.005	<0.000001	7.8	<0.001	0.52	<0.005	1.2	<0.002	<0.001	0.020	0.0020	0.036	<0.005	140	41
HHC-S-1	0.063	<0.001	<0.1	<0.001	0.013	0.0010	0.0020	0.054	0.13	<0.005	<0.000001	26	<0.001	0.092	<0.005	0.52	<0.002	<0.001	0.079	0.032	0.0040	<0.005	110	51
HHC-S-2	0.063	<0.001	<0.1	<0.001	0.017	0.0020	0.0030	0.075	0.14	<0.005	<0.000001	35	<0.001	0.11	<0.005	0.51	0.0020	<0.001	0.10	0.038	0.0050	<0.005	110	54
HHC-S-3	0.062	<0.001	<0.1	<0.001	0.013	0.0010	0.0020	0.054	0.11	<0.005	0.0000080	24	<0.001	0.084	<0.005	0.48	<0.002	<0.001	0.077	0.029	0.0040	<0.005	99	45
HHC-S-4	0.065	<0.001	<0.1	<0.001	0.013	0.0010	0.0020	0.056	0.13	<0.005	0.0000020	28	<0.001	0.091	<0.005	0.51	<0.002	<0.001	0.089	0.032	0.0040	<0.005	100	50
GUCEM	0.34	<0.001	<0.1	<0.001	0.29	<0.001	<0.002	<0.005	<0.001	<0.005	<0.000001	0.19	<0.001	0.0050	<0.005	6.6	<0.002	<0.001	<0.002	0.0080	<0.001	<0.005	<2.5	10
SLAG	0.35	<0.0001	<0.01	<0.0001	0.020	0.00040	<0.0002	0.050	<0.0001	<0.0005	<0.000001	0.017	0.00020	0.038	<0.0005	2.9	<0.0002	<0.0001	0.00040	<0.0001	0.0016	0.00060	<4.3	<3.3

(1) Radioactivity analysis for SFE leachate
(2) Radioactivity analysis for initial sample
(3) Radioactivity analysis for solid residue sam

Sample ID	Pb-210[1]	Po-210[1]	Ra-226[1]	Ra-228[1]	Gross Alpha Activity[2]	Gross Beta Activity[2]	K-40[2]	Ra-226[2]	Th-230[2]	Th-232[2]	U-234[2]	U-235[2]	U-238[2]	Gross Alpha Activity[3]	Gross Beta Activity[3]	K-40[3]	Ra-226[3]	Th-230[3]	Th-232[3]	U-234[3]	U-235[3]	U-238[3]
	Bq/L	Bq/L	Bq/L	Bq/L	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g	Bq/g
MG-NLR-1	260	31	340	4.0	1300	580	1.0	190	70	0.068	3.1	0.16	3.1	1300	580	2.0	170	60	0.064	2.6	0.13	2.6
MG-NLR-2	280	21	360	5.0	1300	580	2.0	200	60	0.068	2.7	0.14	2.7	1400	590	<0.5	210	60	0.078	3.0	0.15	3.0
MG-NLR-3	290	17	350	3.0	1400	610	2.0	220	60	0.068	3.8	0.19	3.8	1400	580	2.0	160	60	0.074	2.9	0.14	2.9
MG-NLR-4	270	21	330	3.0	1200	560	1.0	210	60	0.060	2.9	0.14	2.9	1200	520	2.0	200	60	0.074	3.1	0.16	3.1
HG-NLR-1	270	10	77	<2	3100	1500	<2	440	230	0.13	33	1.7	33	3300	1400	<1	390	210	0.12	28	1.4	28
HG-NLR-2	230	5.6	99	<2	3000	1500	2.0	460	240	0.12	34	1.7	34	3400	1600	2.0	370	210	0.12	29	1.4	29
HG-NLR-3	260	6.1	92	3.0	3300	1500	<1	430	230	0.13	32	1.6	32	3300	1500	2.0	450	230	0.12	28	1.4	28
HG-NLR-4	200	7.9	75	<2	3100	1500	1.0	420	220	0.13	32	1.6	32	3100	1500	<1	370	210	0.11	27	1.3	27
LUGP-1	<0.8	<0.2	<0.2	<1	8.8	26	<0.06	0.040	12	0.0030	2.1	0.10	2.1	7.8	25	<0.08	0.040	13	0.0030	2.0	0.10	2.0
LUGP-2	0.80	<0.2	1.3	<1	9.2	25	<0.08	0.040	10	0.0030	2.0	0.10	2.0	7.7	25	<0.07	0.050	13	0.0030	2.0	0.099	2.0
LUGP-3	2.0	<0.2	0.60	<2	7.8	24	<0.06	0.050	11	0.0030	2.1	0.10	2.1	8.2	25	<0.05	0.080	12	0.0040	2.0	0.10	2.0
LUGP-4	<0.8	<0.2	0.30	<2	8.4	23	0.090	0.060	12	0.0030	2.1	0.10	2.1	6.8	22	<0.02	0.050	12	0.0040	2.1	0.10	2.1
HUGP-1	<0.8	<0.2	0.60	<2	18	13	<0.05	0.18	12	0.0050	8.0	0.40	8.0	11	11	<0.06	0.16	12	0.0060	8.4	0.42	8.4
HUGP-2	<0.8	<0.2	0.30	<2	18	14	<0.05	0.18	13	0.0050	8.0	0.40	8.0	16	13	<0.05	0.17	14	0.0060	8.9	0.44	8.9
HUGP-3	<0.8	<0.2	0.60	<2	19	13	<0.04	0.18	14	0.0050	8.4	0.42	8.4	18	13	<0.06	0.12	12	0.0060	8.8	0.44	8.8
HUGP-4	<0.8	<0.2	0.60	<2	17	12	<0.02	0.24	14	0.0050	8.2	0.41	8.2	16	13	<0.05	0.18	14	0.0060	8.7	0.43	8.7
MPPT-1	<0.8	<0.2	0.30	<2	800	150	<0.2	12	1500	0.41	25	1.2	25	910	150	<0.03	11	1600	0.53	26	1.3	26
MPPT-2	<0.8	<0.2	0.20	<2	920	160	<0.1	11	1600	0.45	25	1.2	25	990	170	<0.1	15	1600	0.56	28	1.4	28
MPPT-3	<0.8	<0.2	<0.2	<2	880	110	0.20	13	1500	0.46	25	1.2	25	960	160	<0.1	12	1600	0.56	27	1.3	27
MPPT-4	<0.8	<0.2	0.50	<2	720	140	<0.1	8.0	1500	0.46	25	1.3	25	820	140	<0.08	11	1600	0.55	27	1.3	27
HLC-1	<0.8	0.20	82	<3	4800	1500	<3	390	210	0.11	28	1.4	28	4200	1300	<4	390	200	0.11	29	1.4	29
HLC-2	<0.8	0.20	89	<3	5200	1600	<3	340	220	0.11	28	1.4	28	4100	1400	<4	420	210	0.12	29	1.5	29
HLC-3	1.0	<0.2	80	<3	5000	1500	3.0	380	220	0.11	29	1.4	29	3800	1500	<4	360	220	0.11	29	1.5	29
HLC-4	<0.8	0.30	82	3.0	3900	1500	<4	410	200	0.11	29	1.4	29	4100	1400	<3	320	200	0.12	30	1.5	30
HHC-1	45	2.1	119	6.0	4300	1300	<2	290	170	0.086	23	1.2	23	3400	1200	<3	220	150	0.17	45	2.2	45
HHC-2	45	1.9	120	4.0	3400	1300	3.0	300	190	0.088	24	1.2	24	3400	1200	<3	310	160	0.19	47	2.3	47
HHC-3	47	1.8	95	5.0	3600	1300	<2	290	170	0.085	23	1.1	23	3700	1200	3.0	320	180	0.18	46	2.3	46
HHC-4	36	1.4	99	3.0	3700	1300	2.0	280	170	0.085	23	1.2	23	3400	1200	<3	230	170	0.18	47	2.3	47
HPLC-1	<0.8	0.30	15	4.0	3000	1100	<2	320	550	0.24	27	1.4	27	3100	1100	<2	330	590	0.26	34	1.7	34
HPLC-2	<0.8	0.20	15	<3	2900	1100	<2	270	580	0.25	29	1.4	29	3200	1100	<3	280	560	0.27	31	1.6	31
HPLC-3	<0.8	0.30	16	<3	2800	1000	<2	290	550	0.24	28	1.4	28	2800	1100	<3	320	570	0.26	31	1.6	31
HPLC-4	<0.8	0.50	21	<3	3600	1100	<2	290	560	0.24	28	1.4	28	3600	1200	<2	310	590	0.27	33	1.6	33
HPHC-1	4.0	0.30	6.9	3.0	2600	840	<2	160	380	0.17	23	1.1	23	1900	690	<2	120	350	0.17	20	1.0	20
HPHC-2	10	<0.2	7.6	<3	2600	860	<3	210	370	0.16	22	1.1	22	1900	700	<2	200	340	0.16	20	1.0	20
HPHC-3	7.0	0.80	7.9	4.0	2800	870	<2	160	400	0.17	23	1.1	23	2000	730	2.0	190	350	0.16	20	0.98	20
HPHC-4	11	0.30	6.3	5.0	2600	850	<2	160	340	0.16	22	1.1	22	2000	680	2.0	190	350	0.16	20	0.99	20
HHGPLC-1	<0.8	0.20	12	<3	3100	890	3.0	180	400	0.18	26	1.3	26	2400	820	<2	210	390	0.17	22	1.1	22
HHGPLC-2	<0.8	<0.2	8.8	9.0	3100	840	<2	200	400	0.18	26	1.3	26	2200	810	<2	190	380	0.17	22	1.1	22
HHGPLC-3	<0.8	<0.2	8.3	<3	3000	860	2.0	140	420	0.19	26	1.3	26	2300	810	<2	140	390	0.17	22	1.1	22
HHGPLC-4	<0.8	<0.2	14	<3	2800	820	<2	220	400	0.18	26	1.3	26	2400	820	<2	210	360	0.18	24	1.2	24
HHGPHC-1	4.0	<0.2	6.0	<3	1700	560	2.0	120	270	0.13	17	0.86	17	1400	540	<2	95	290	0.14	16	0.83	16
HHGPHC-2	2.0	0.40	7.2	4.0	1900	590	<2	160	280	0.13	17	0.87	17	1400	470	<1	160	300	0.13	16	0.79	16
HHGPHC-3	6.0	<0.2	6.8	<3	1800	500	<2	160	280	0.13	17	0.85	17	1800	600	<2	110	280	0.14	16	0.82	16
HHGPHC-4	4.0	<0.2	7.4	3.0	1500	540	<2	160	280	0.12	17	0.85	17	1500	570	<2	170	280	0.13	16	0.81	16
HLC-S-1	2.0	0.70	64	<2	4700	1500	<2	320	200	0.12	31	1.6	31	3900	1400	<2	390	210	0.12	32	1.6	32
HLC-S-2	1.0	0.70	65	<2	4800	1500	<3	430	210	0.12	31	1.6	31	4200	1500	<4	420	240	0.12	34	1.7	34
HLC-S-3	2.0	0.80	66	<2	4900	1500	<4	370	210	0.12	30	1.5	30	3900	1500	<3	390	210	0.12	35	1.7	35
HLC-S-4	3.0	0.80	61	<2	4900	1500	<3	440	230	0.13	32	1.6	32	4200	1500	<3	420	200	0.12	41	2.1	41
HHC-S-1	16	0.80	47	3.0	3000	1000	<2	290	160	0.12	24	1.2	24	3300	1400	4.0	400	220	0.094	78	3.9	78
HHC-S-2	18	1.0	48	<3	3000	1000	<0.8	240	150	0.11	23	1.2	23	2700	1000	<2	280	160	0.093	25	1.2	25
HHC-S-3	14	0.80	47	6.0	3100	1100	<2	270	170	0.11	23	1.1	23	2500	1000	<4	260	160	0.095	26	1.3	26
HHC-S-4	19	1.1	48	6.0	2500	980	<1	210	120	0.11	23	1.1	23	2700	1100	<2	290	160	0.096	28	1.4	28
GUCEM	<0.8	<0.2	0.20	<2	<0.49	0.34	<0.04	0.040	0.020	0.010	0.024	0.0010	0.024	0.74	0.22	0.14	0.040	0.020	0.0090	0.026	0.0010	0.026
SLAG	<0.8	<0.2	0.30	<3	2.5	0.90	0.10	0.10	<0.5	0.052	0.12	0.0061	0.12	1.7	0.96	0.10	0.10	<0.5	0.047	0.11	0.0053	0.11

(1) Radioactivity analysis for SFE leachate
(2) Radioactivity analysis for initial sample
(3) Radioactivity analysis for solid residue sam

Process Water Chemistry Results

NexGen Rook I Geochemical Characterization Report

Parameter	Units	Sample ID							
		MG-PW-1	MG-PW-2	MG-PW-3	MG-PW-4	HG-PW-1	HG-PW-2	HG-PW-3	HG-PW-4
pH	s.u.	6.4	6.4	6.4	6.3	5.3	5.2	5.2	5.2
Specific Conductivity	µS/cm	1990	1990	2000	2000	2720	2730	2740	2730
Total Alkalinity	mg/L	6.0	6.0	6.0	6.0	5.0	5.0	5.0	5.0
Bicarbonate	mg/L	7.0	7.0	7.0	7.0	6.0	6.0	6.0	6.0
Carbonate	mg/L	<1	<1	<1	<1	<1	<1	<1	<1
Hydroxide	mg/L	<1	<1	<1	<1	<1	<1	<1	<1
Ammonia	mg/L-N	0.31	0.15	0.20	0.11	0.45	0.42	0.42	0.43
Nitrate	mg/L-N	1.0	0.93	0.77	0.72	1.2	0.41	0.41	0.41
Nitrite	mg/L-N	0.22	-	-	-	<0.0091	-	-	-
Chloride	mg/L	43	43	43	43	52	52	52	52
Fluoride	mg/L	1.2	1.2	1.2	1.2	1.9	1.9	1.9	1.9
Calcium	mg/L	389	393	394	394	332	332	335	334
Magnesium	mg/L	50	50	50	50	234	234	236	235
Potassium	mg/L	10	10	10	10	23	23	23	23
Sodium	mg/L	37	37	37	37	40	40	40	40
Sulfate	mg/L	1130	1140	1150	1150	1750	1750	1770	1760
Orthophosphate	mg/L-P	0.020	0.020	-	-	0.010	0.010	-	-
Total Hardness	mg/L	1180	1180	1190	1190	1790	1790	1800	1800
Total Dissolved Solids	mg/L	1890	1890	1890	1900	2740	2750	2750	2740
Aluminum	mg/L	0.031	0.031	0.031	0.029	0.54	0.54	0.54	0.54
Antimony	mg/L	0.0010	0.0010	0.0010	0.0010	0.00070	0.00060	0.00060	0.00060
Arsenic	mg/L	0.080	0.080	0.080	0.080	0.012	0.012	0.012	0.012
Barium	mg/L	0.026	0.025	0.025	0.026	0.019	0.020	0.019	0.020
Beryllium	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	0.00010	0.00010	0.00010	0.00010
Boron	mg/L	0.11	0.11	0.11	0.11	1.4	1.4	1.4	1.4
Cadmium	mg/L	<0.00001	0.000020	0.000040	0.000030	0.000070	0.000070	0.000060	0.000070
Chromium	mg/L	0.00060	0.00060	0.00060	0.00060	0.0011	0.0011	0.0011	0.0011
Cobalt	mg/L	0.0054	0.0055	0.0056	0.0055	0.047	0.047	0.047	0.048
Copper	mg/L	0.0094	0.0097	0.0097	0.0096	0.019	0.019	0.019	0.019
Iron	mg/L	0.068	0.066	0.069	0.068	0.28	0.27	0.27	0.28
Lead	mg/L	0.0039	0.0039	0.0040	0.0040	0.23	0.22	0.23	0.23
Manganese	mg/L	0.045	0.045	0.046	0.046	0.56	0.55	0.55	0.56
Mercury	mg/L	0.0000020	0.0000020	0.0000020	0.0000020	0.0000020	0.0000020	0.0000020	0.0000020
Molybdenum	mg/L	1.4	1.4	1.4	1.4	0.012	0.013	0.013	0.013
Nickel	mg/L	0.038	0.038	0.038	0.038	0.15	0.15	0.15	0.15
Selenium	mg/L	0.044	0.044	0.045	0.045	0.022	0.022	0.022	0.022
Silver	mg/L	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Strontium	mg/L	1.4	1.4	1.4	1.4	4.0	3.9	3.9	4.0
Thallium	mg/L	0.0010	0.0010	0.0010	0.0010	0.0023	0.0023	0.0022	0.0022
Tin	mg/L	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Titanium	mg/L	0.0062	0.0061	0.0065	0.0062	0.0011	0.00090	0.00090	0.00080
Uranium	mg/L	1.2	1.2	1.2	1.2	4.5	4.5	4.4	4.5
Vanadium	mg/L	0.00080	0.00080	0.00090	0.00080	0.00030	0.00030	0.00030	0.00030
Zinc	mg/L	0.0053	0.0056	0.0051	0.0051	0.014	0.013	0.013	0.013
Gross Alpha Activity	Bq/L	130	150	-	-	840	860	-	-
Gross Beta Activity	Bq/L	27	47	-	-	320	320	-	-
Lead-210	Bq/L	1.7	0.60	-	-	26	28	-	-
Polonium-210	Bq/L	1.6	0.40	-	-	3.8	4.0	-	-
Radium-226	Bq/L	26	24	-	-	110	95	-	-
Radium-228	Bq/L	0.70	<0.5	-	-	2.0	3.0	-	-

- Parameter not measured

APPENDIX D

Static Test Figures

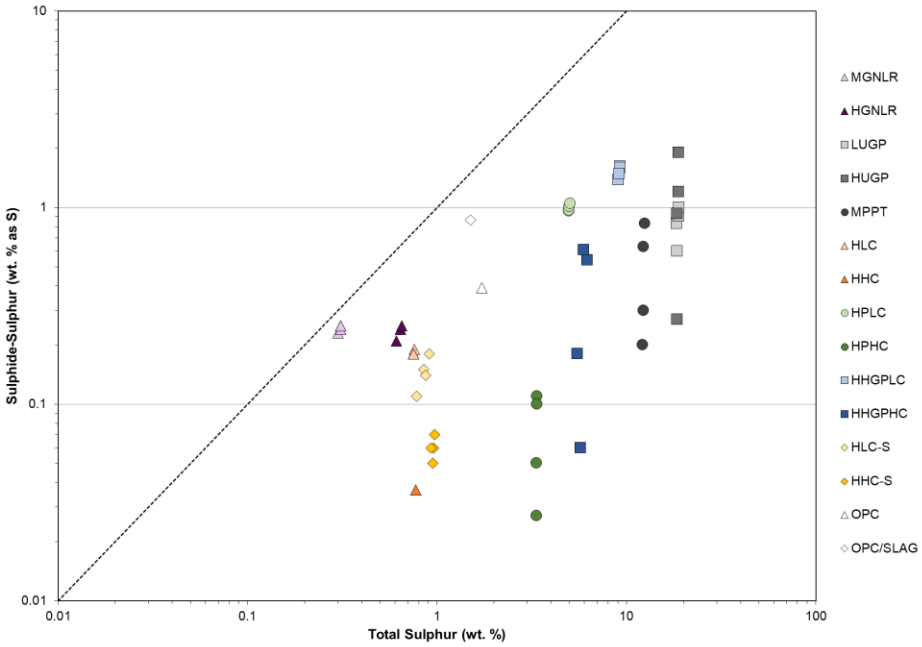


Figure D1-1: Sulphide-Sulphur vs Total Sulphur

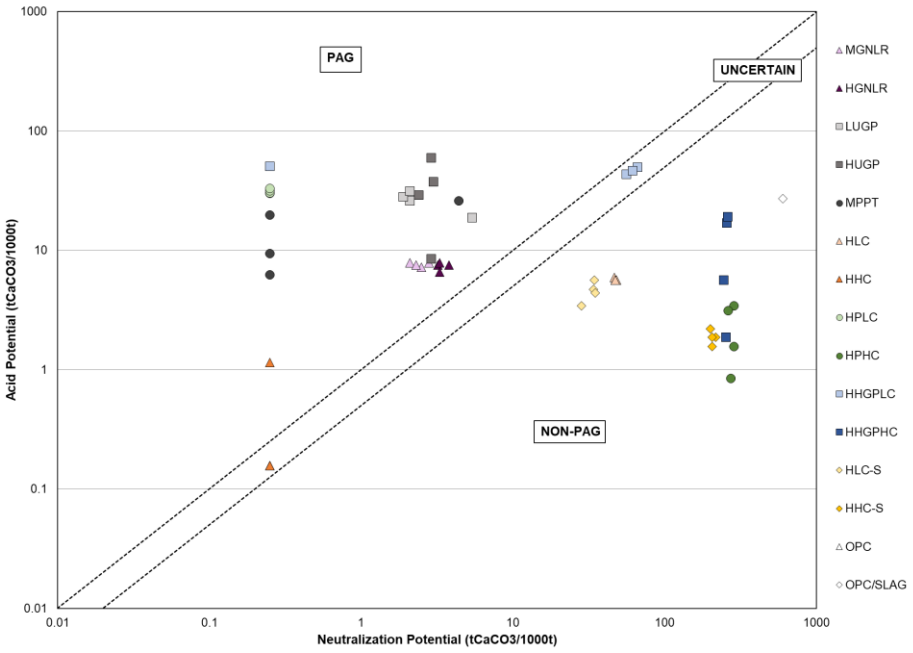


Figure D1-2: Acid Potential vs Modified Sobek Neutralization Potential

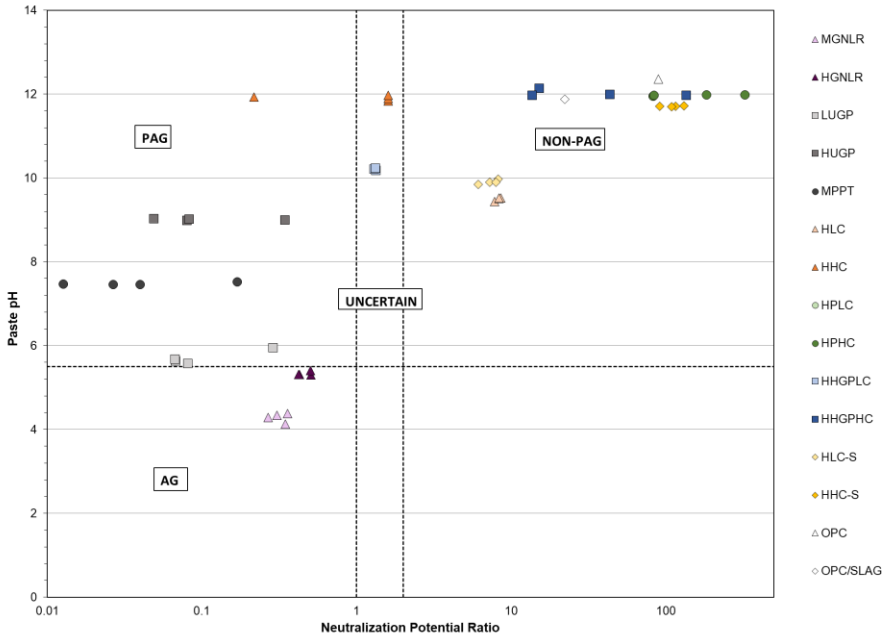


Figure D1-3: Paste pH vs Neutralization Potential Ratio

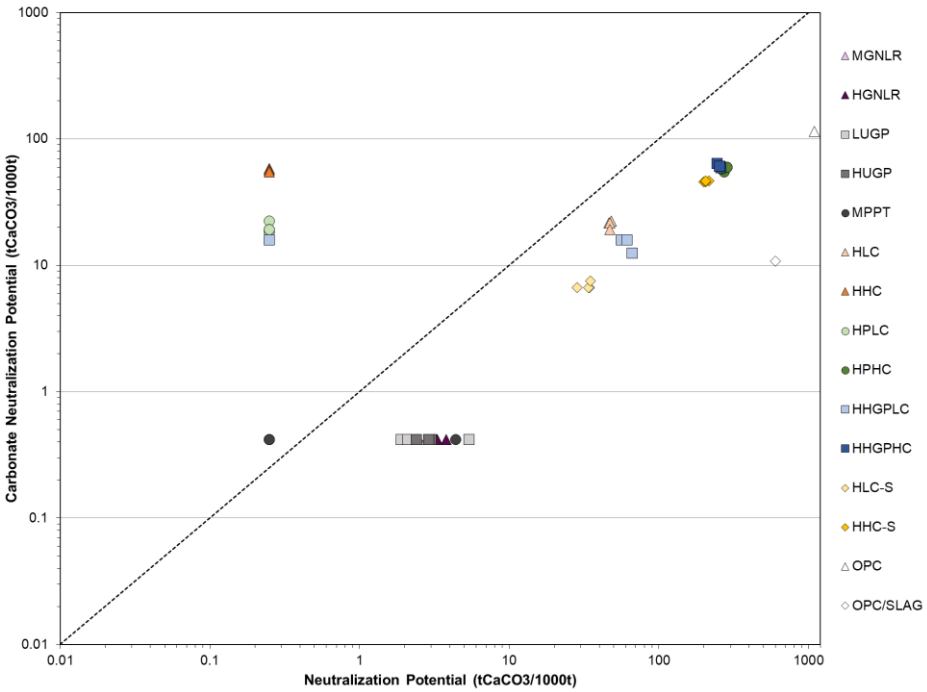


Figure D1-4: Carbonate Neutralization Potential vs Modified Sobek Neutralization Potential

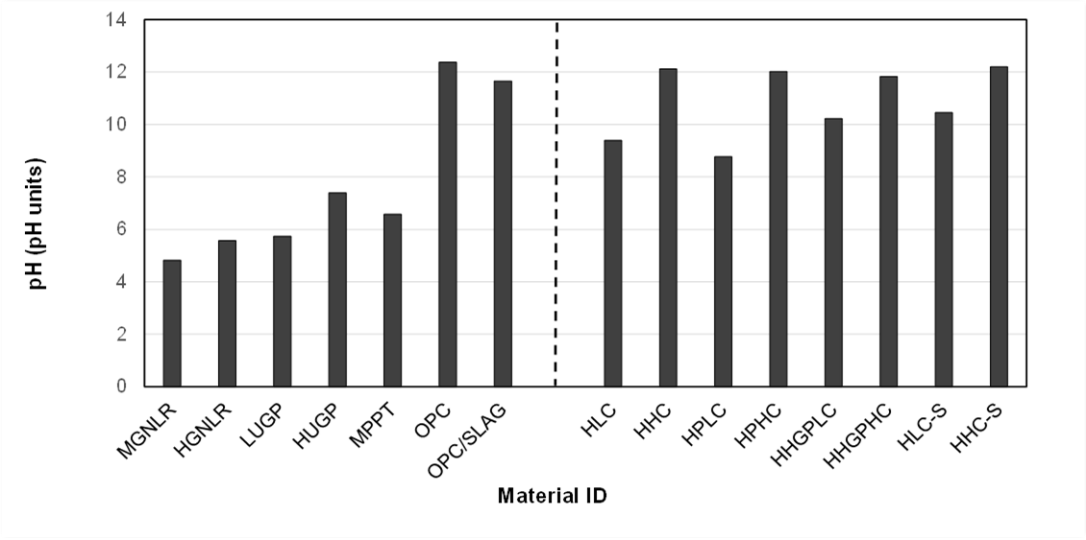


Figure D2-1: SFE pH vs Material Type

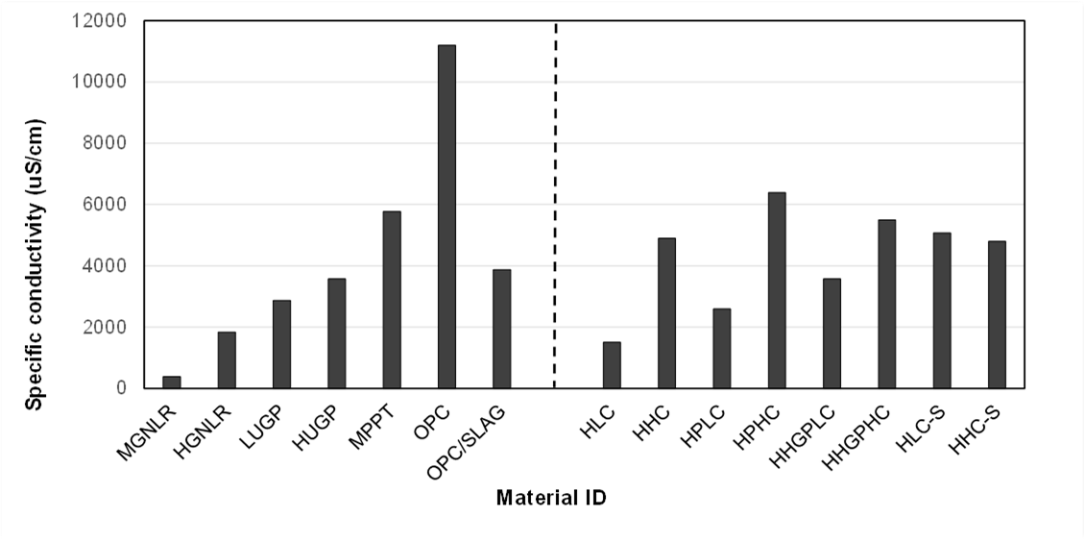


Figure D2-2: SFE Specific Conductivity vs Material Type

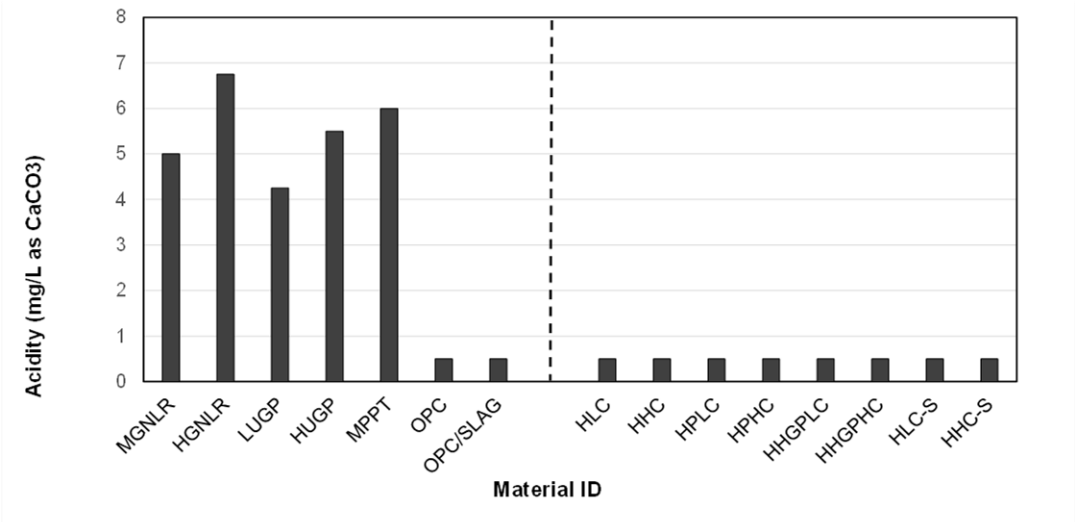


Figure D2-3: SFE Acidity vs Material Type

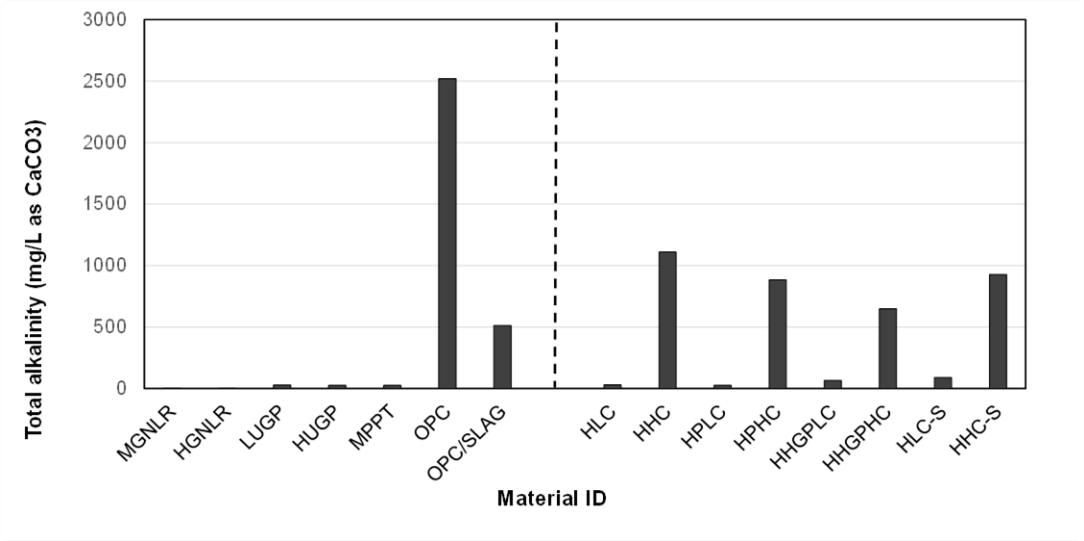


Figure D2-4: SFE Alkalinity vs Material Type

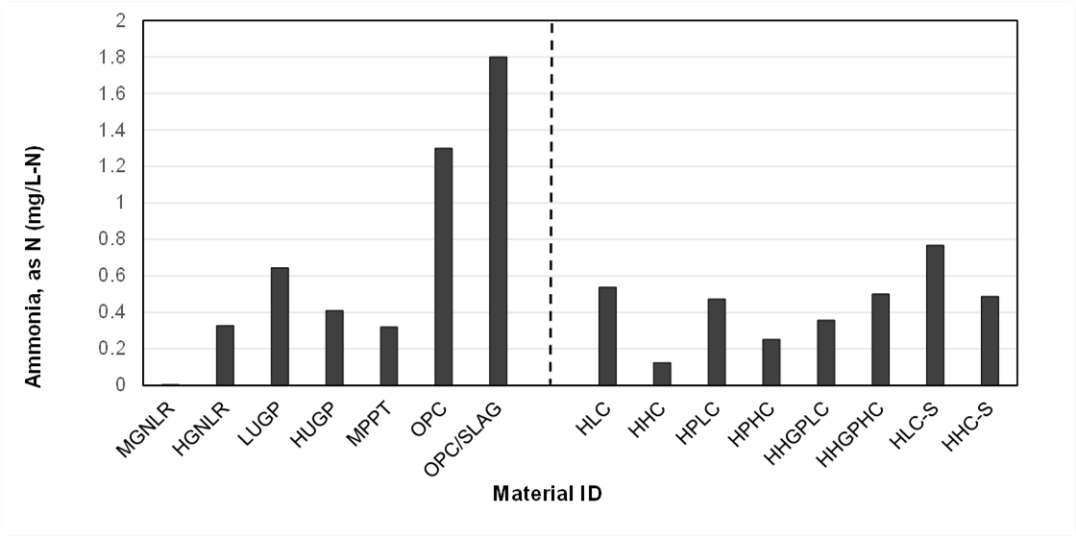


Figure D2-5: SFE Ammonia Concentration vs Material Type

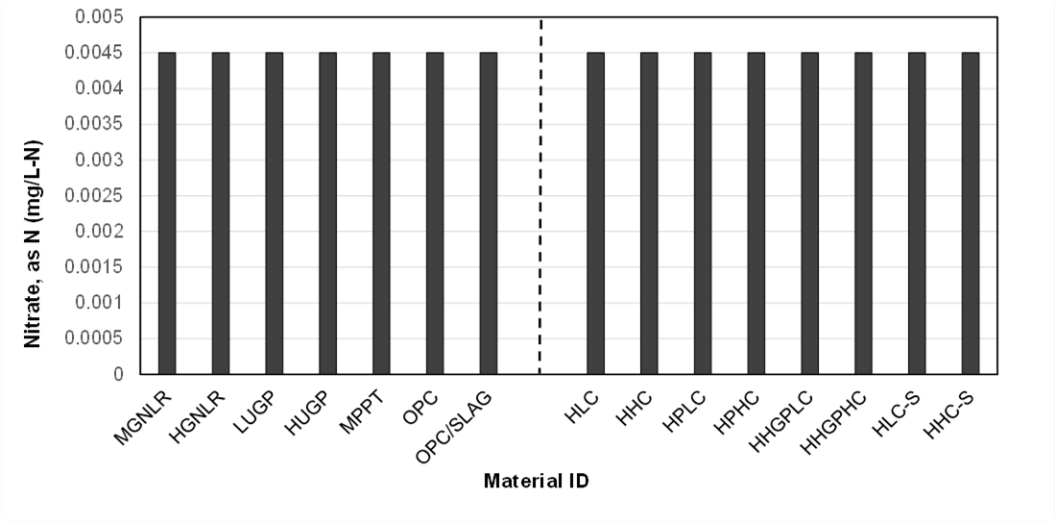


Figure D2-6: SFE Nitrate Concentration vs Material Type

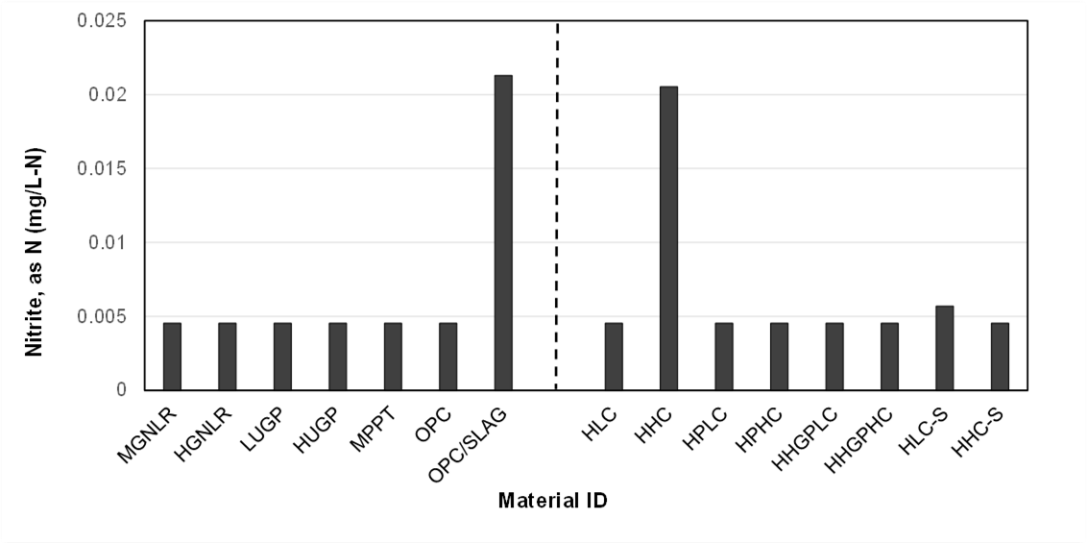


Figure D2-7: SFE Nitrite Concentration vs Material Type

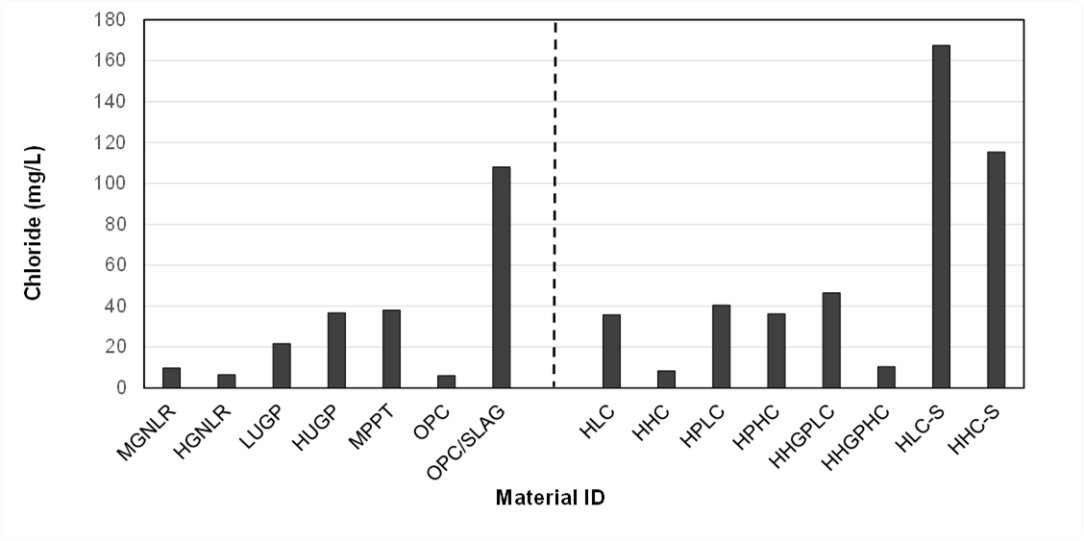


Figure D2-8: SFE Chloride Concentration vs Material Type

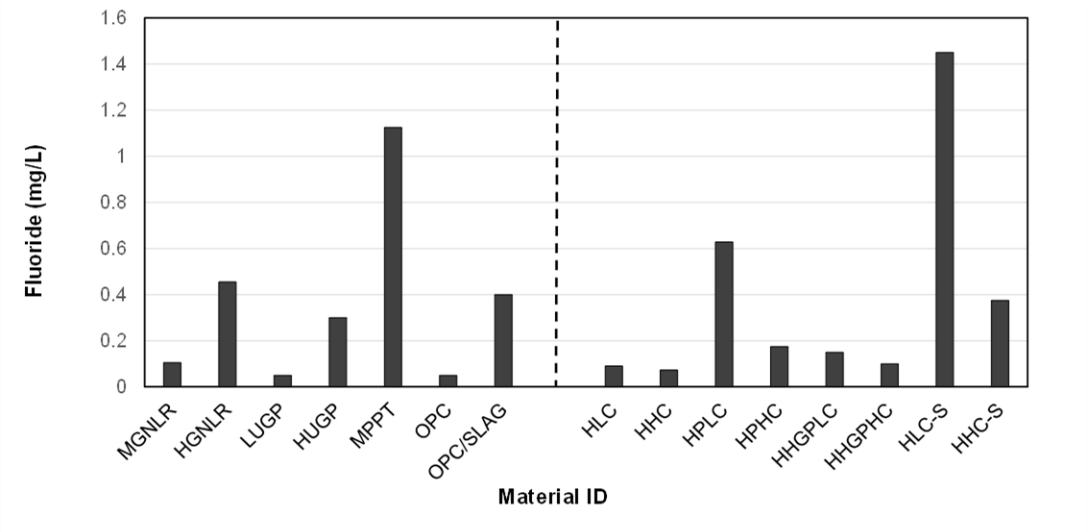


Figure D2-9: SFE Fluoride Concentration vs Material Type

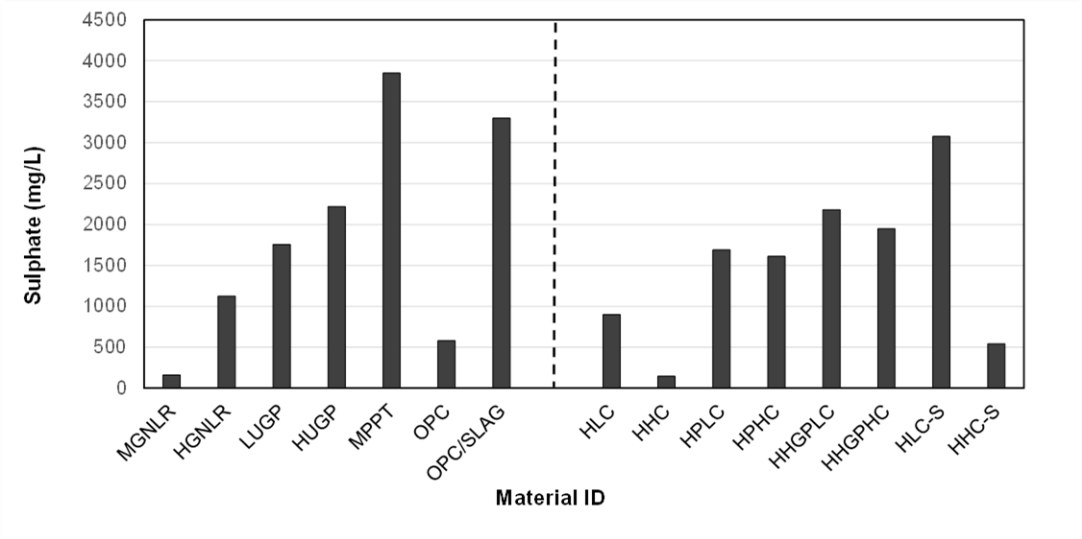


Figure D2-10: SFE Sulphate Concentration vs Material Type

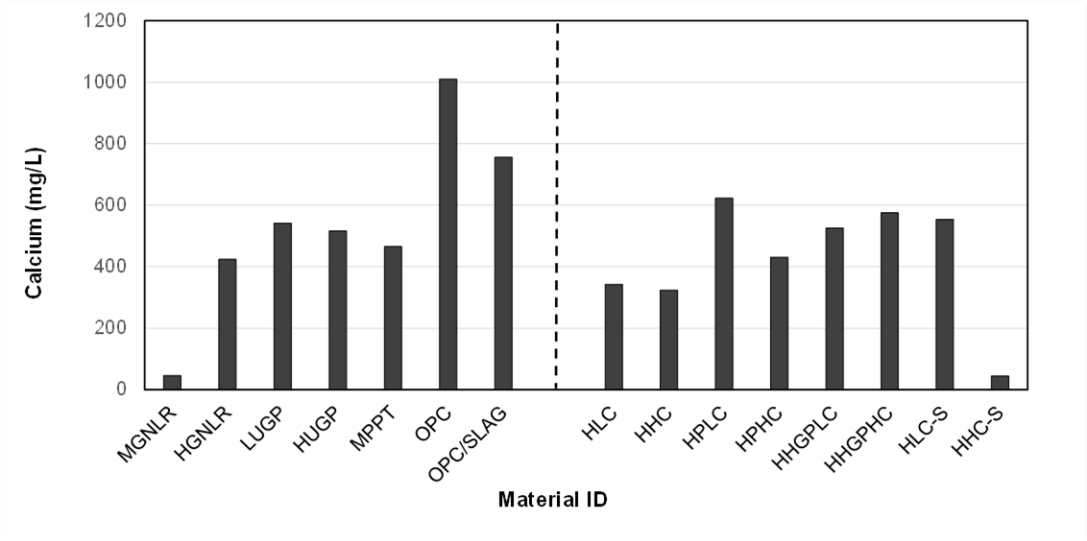


Figure D2-11: SFE Calcium Concentration vs Material Type

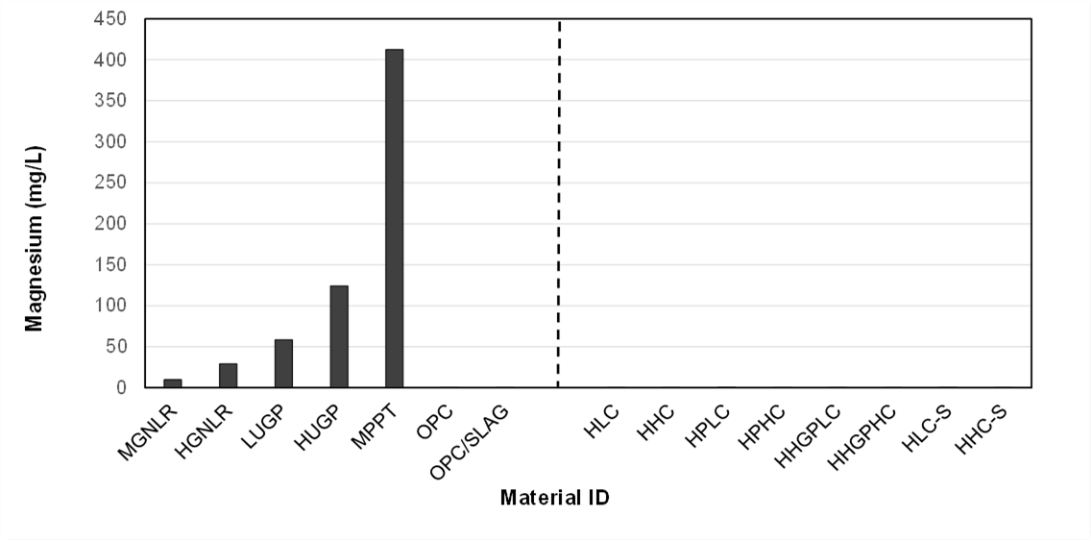


Figure D2-12: SFE Magnesium Concentration vs Material Type

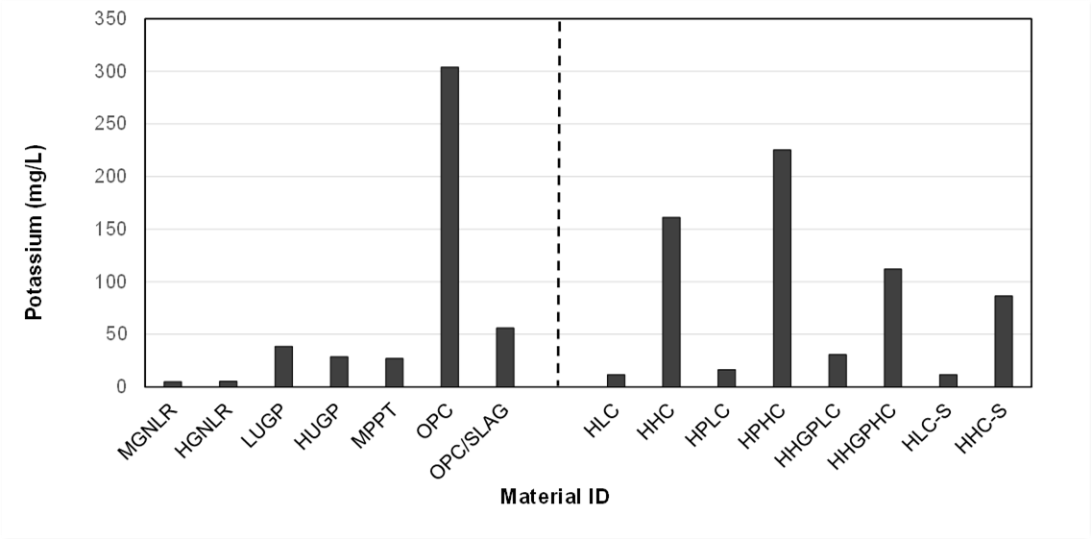


Figure D2-13: SFE Potassium Concentration vs Material Type

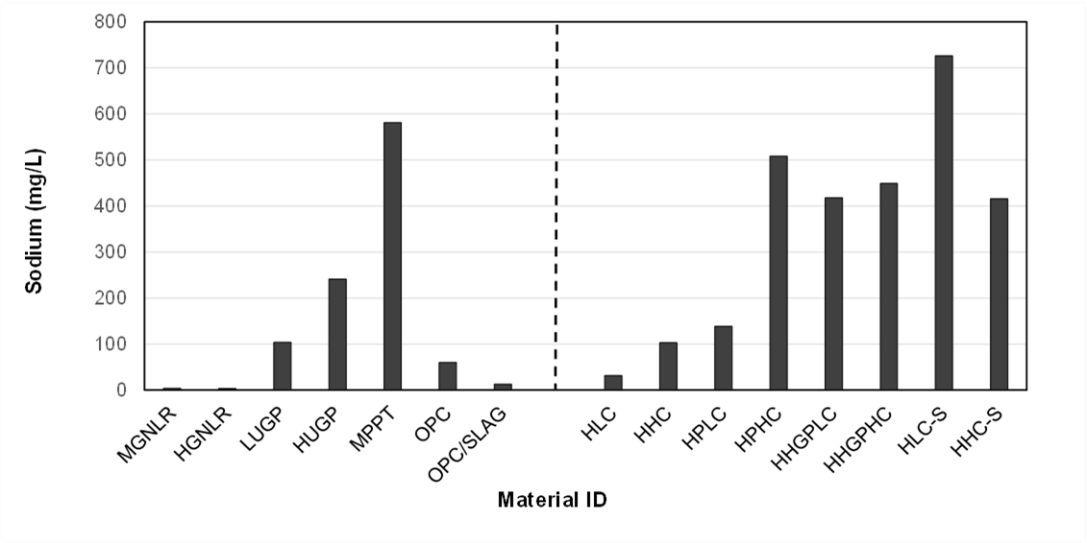


Figure D2-14: SFE Sodium Concentration vs Material Type

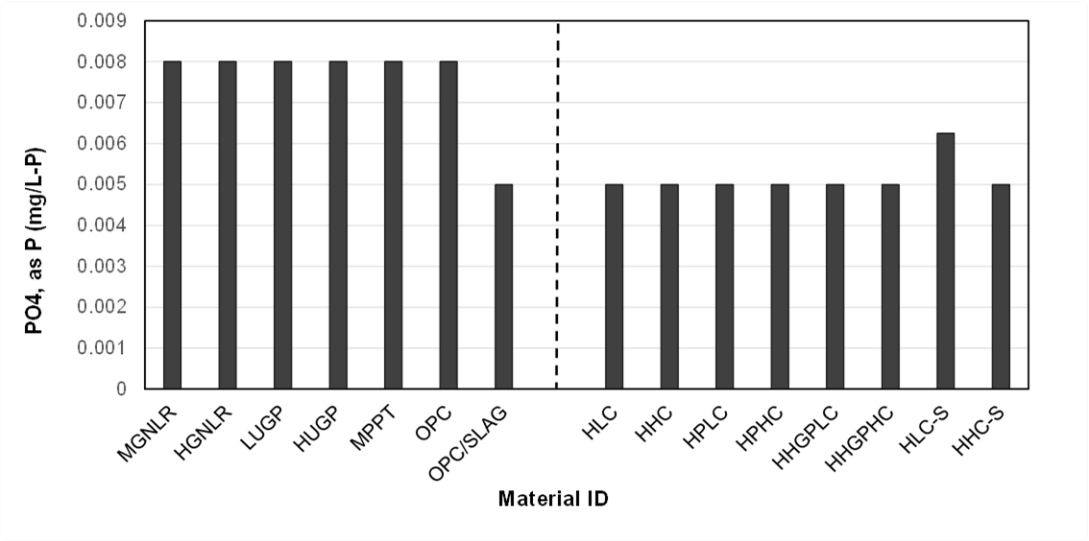


Figure D2-15: SFE Phosphate Concentration vs Material Type

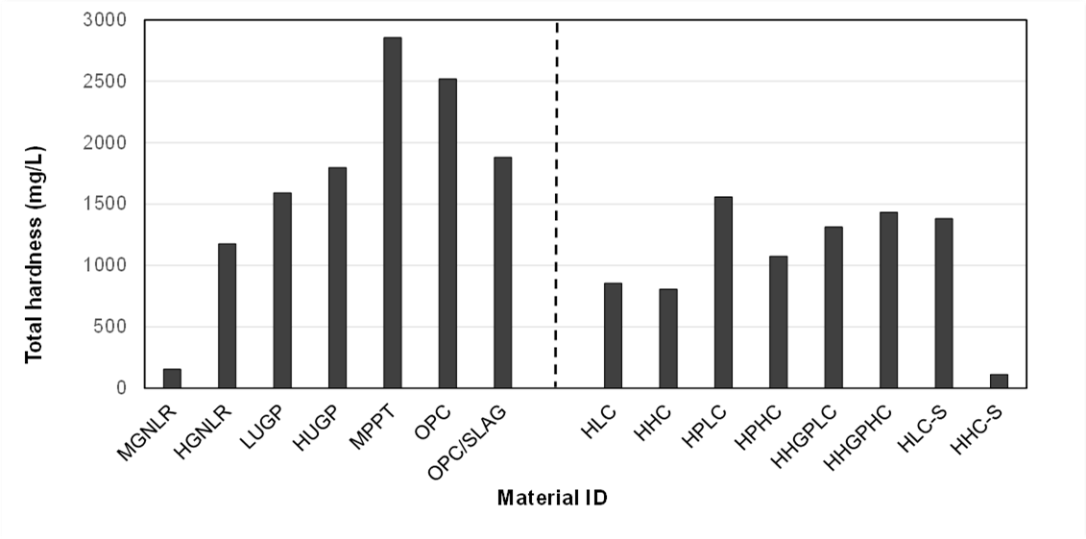


Figure D2-16: SFE Total Hardness vs Material Type

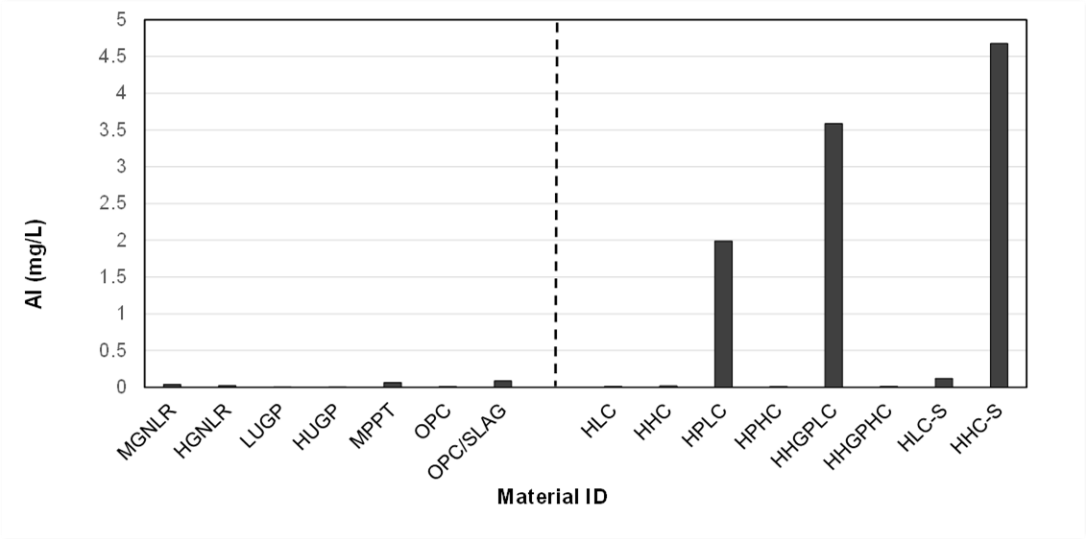


Figure D2-17: SFE Aluminum Concentration vs Material Type

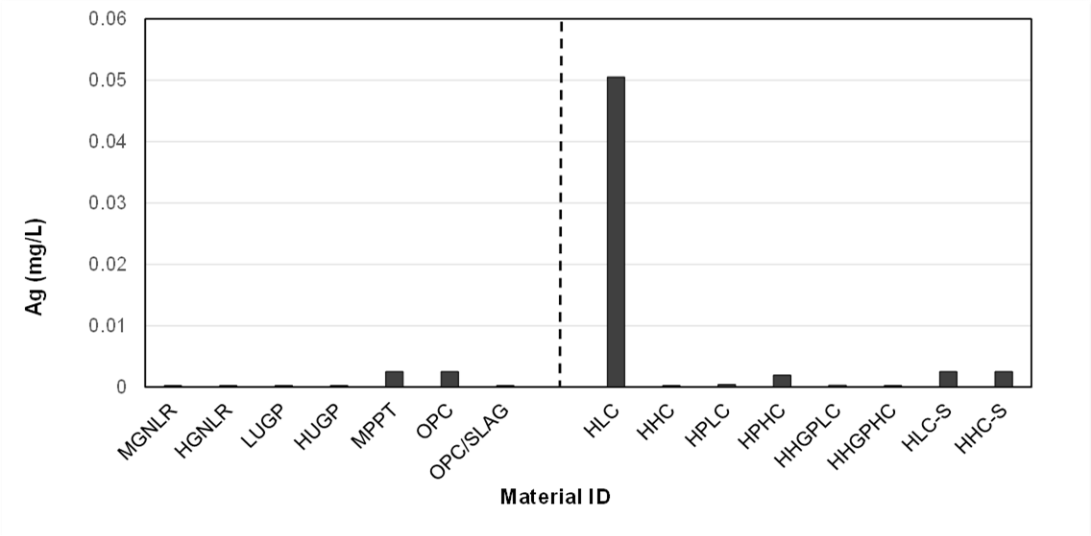


Figure D2-18: SFE Silver Concentration vs Material Type

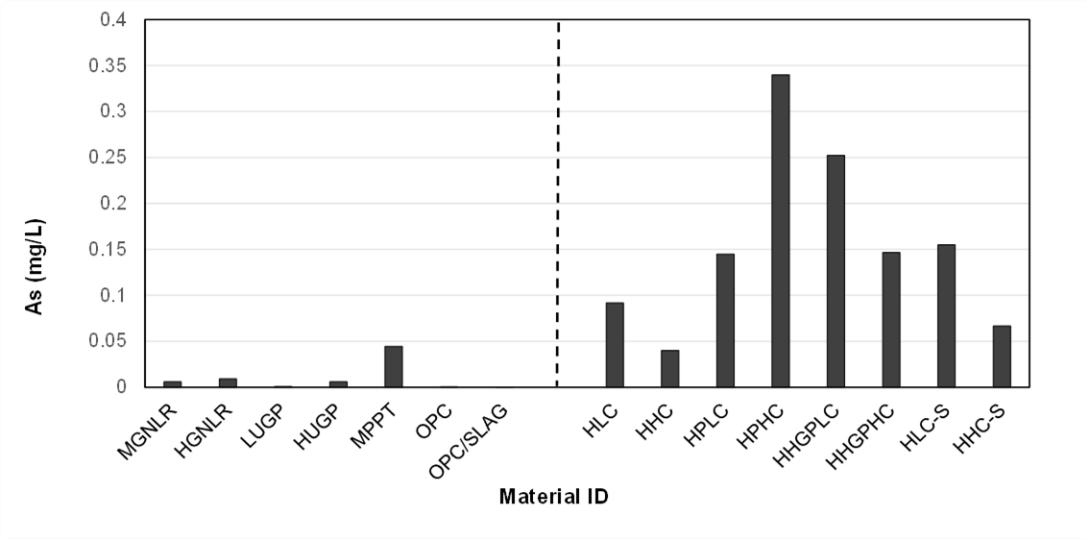


Figure D2-19: SFE Arsenic Concentration vs Material Type

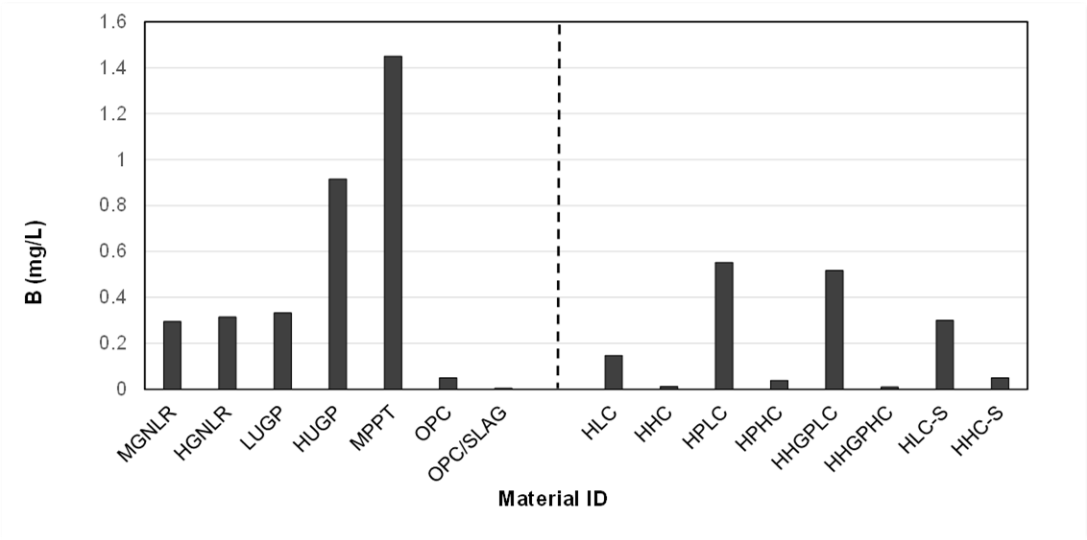


Figure D2-20: SFE Boron Concentration vs Material Type

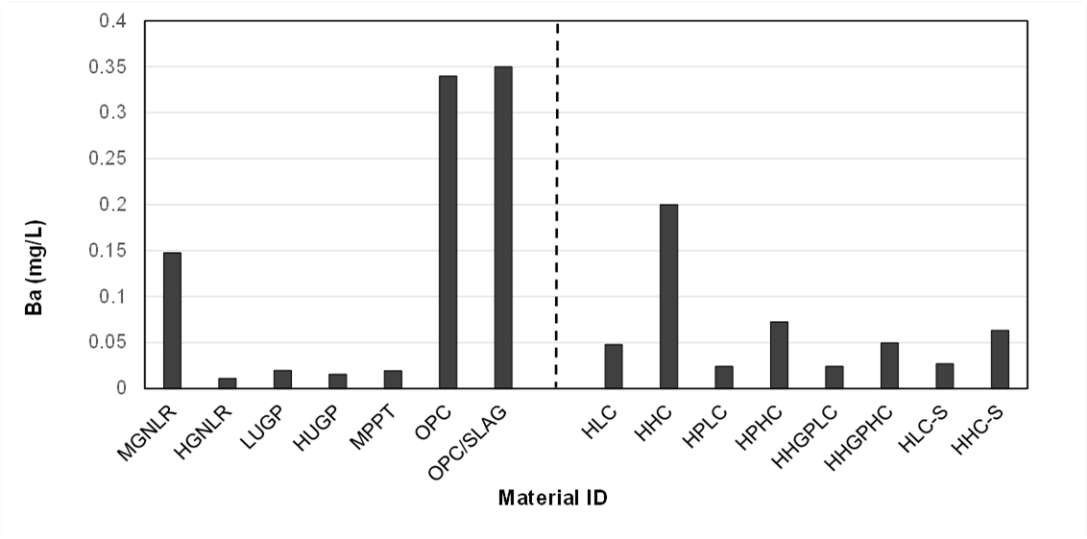


Figure D2-21: SFE Barium Concentration vs Material Type

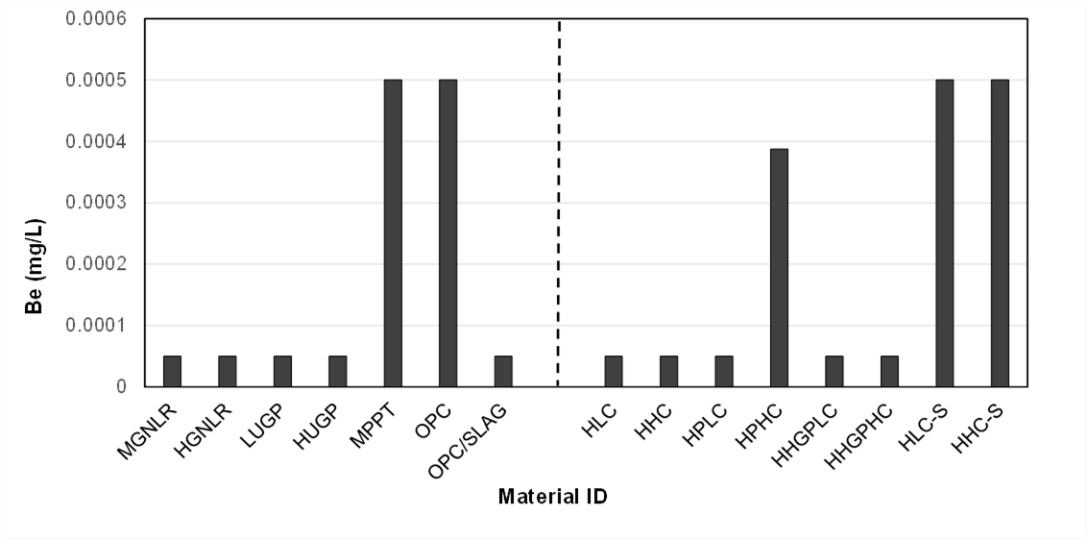


Figure D2-22: SFE Beryllium Concentration vs Material Type

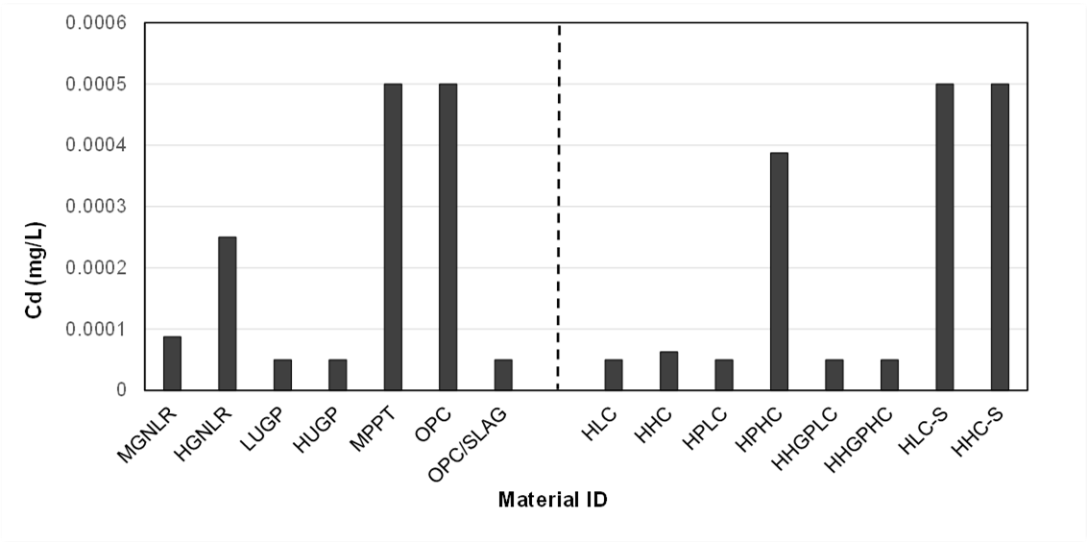


Figure D2-23: SFE Cadmium Concentration vs Material Type

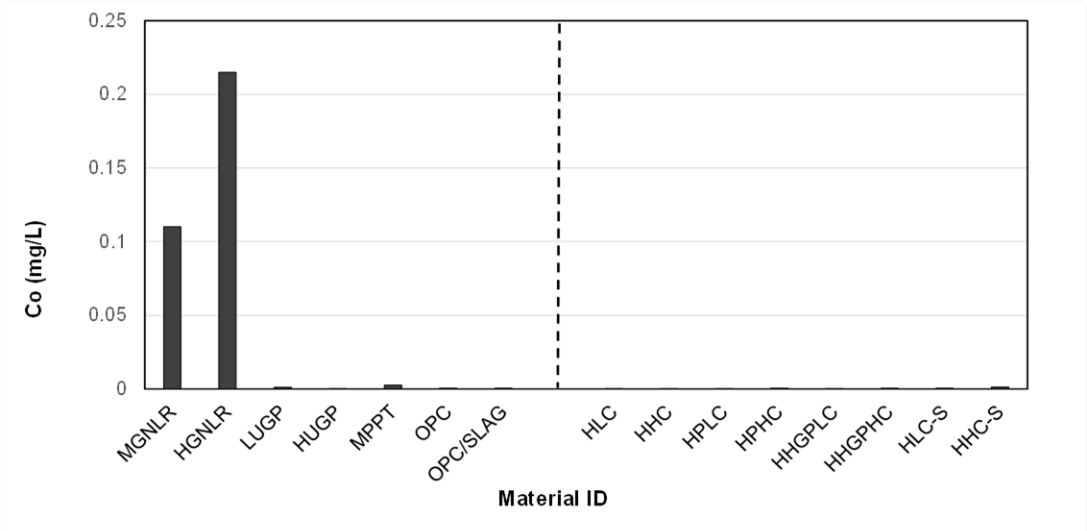


Figure D2-24: SFE Cobalt Concentration vs Material Type

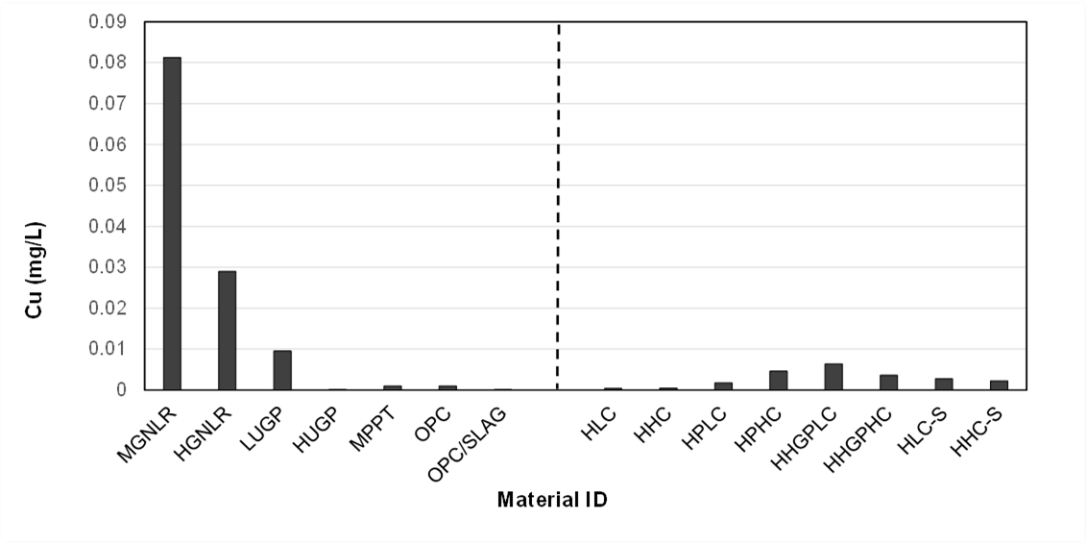


Figure D2-25: SFE Copper Concentration vs Material Type

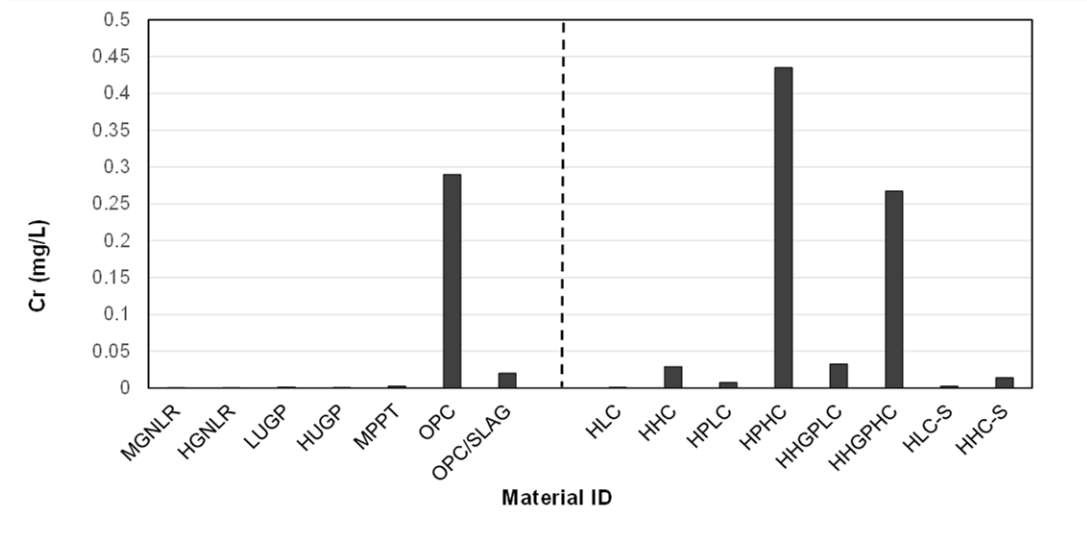


Figure D2-26: SFE Chromium Concentration vs Material Type

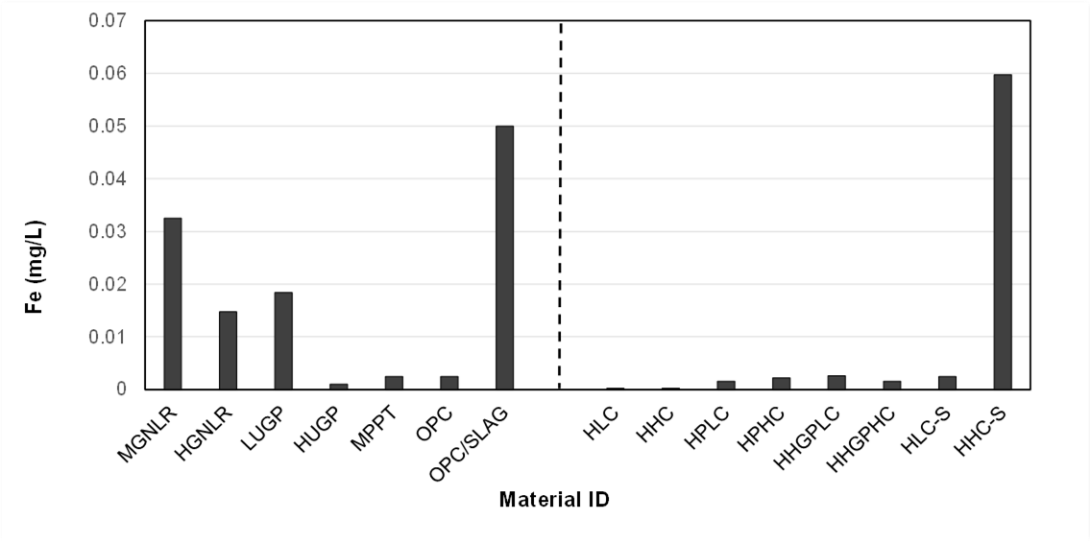


Figure D2-27: SFE Iron Concentration vs Material Type

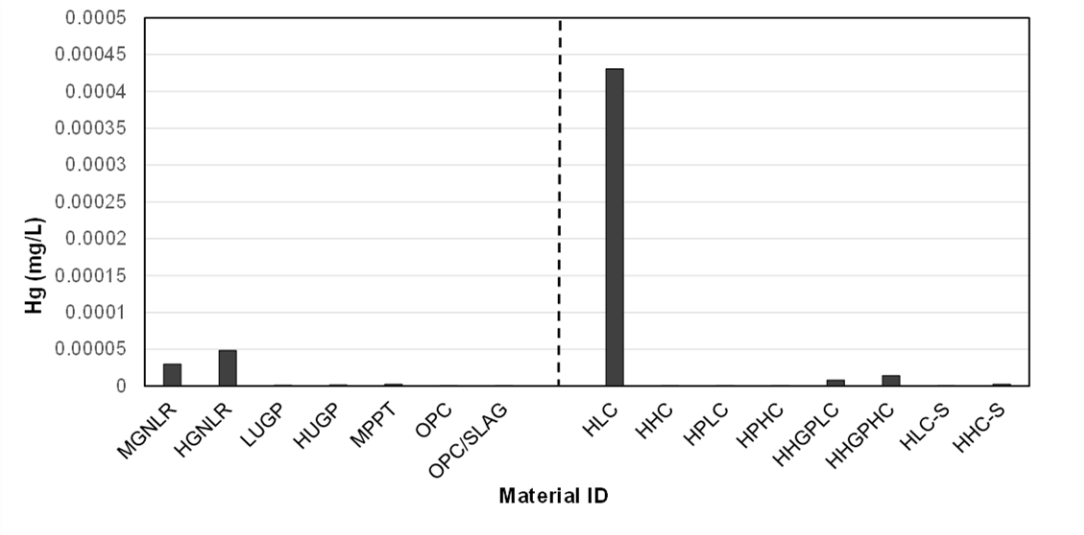


Figure D2-28: SFE Mercury Concentration vs Material Type

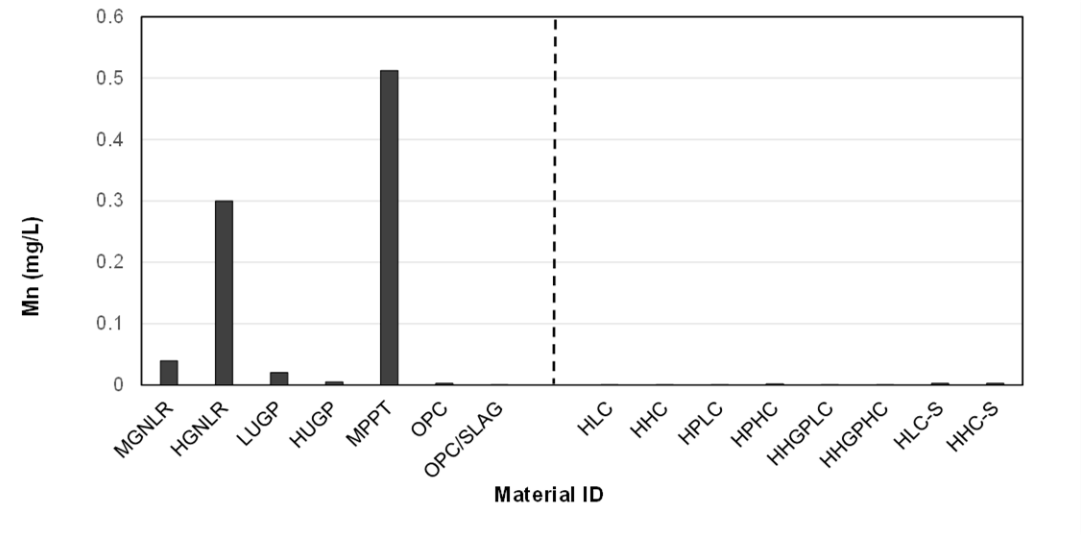


Figure D2-29: SFE Manganese Concentration vs Material Type

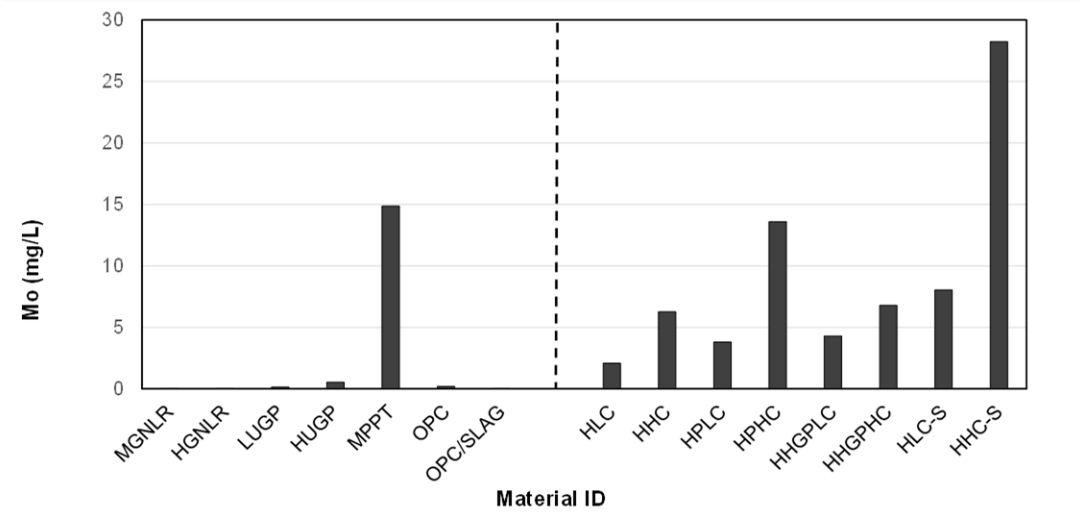


Figure D2-30: SFE Molybdenum Concentraiton vs Material Type

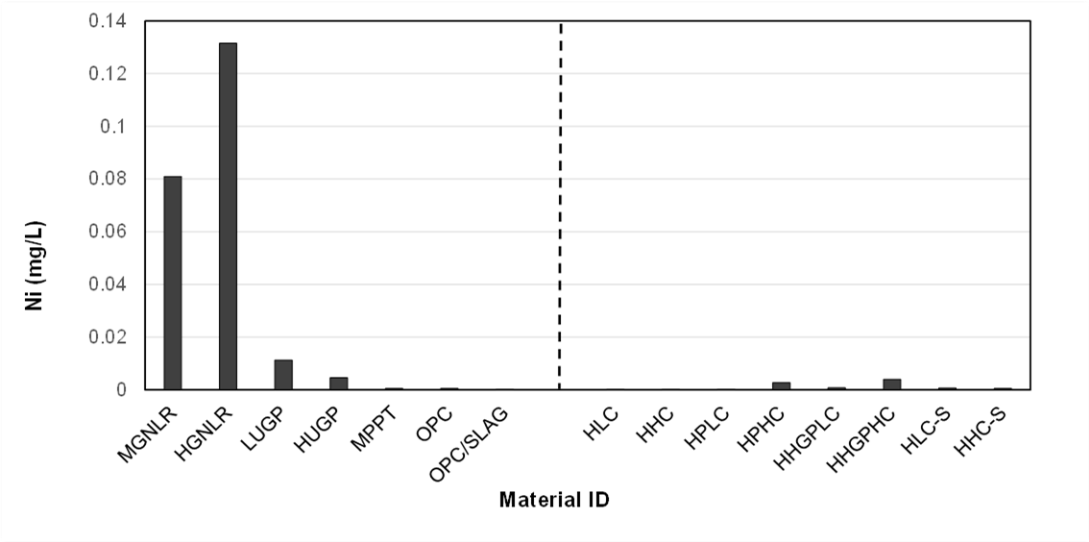


Figure D2-31: SFE Nickel Concentration vs Material Type

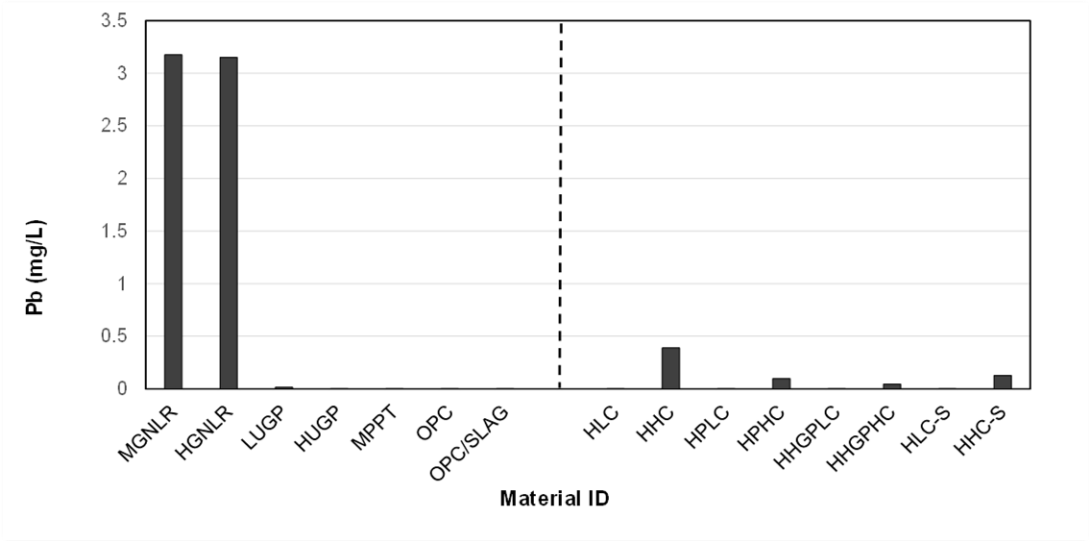


Figure D2-32: SFE Lead Concentration vs Material Type

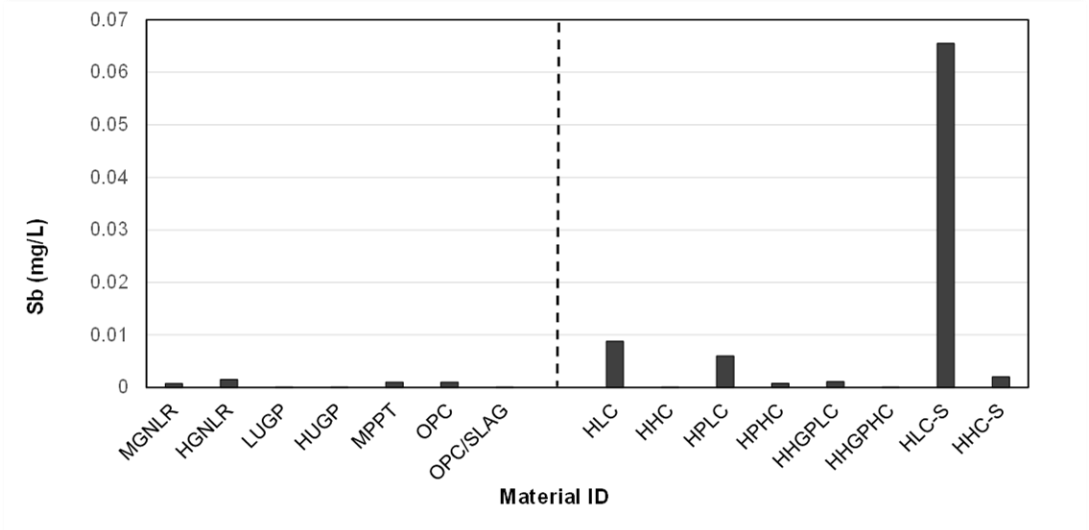


Figure D2-33: SFE Antimony Concentration vs Material Type

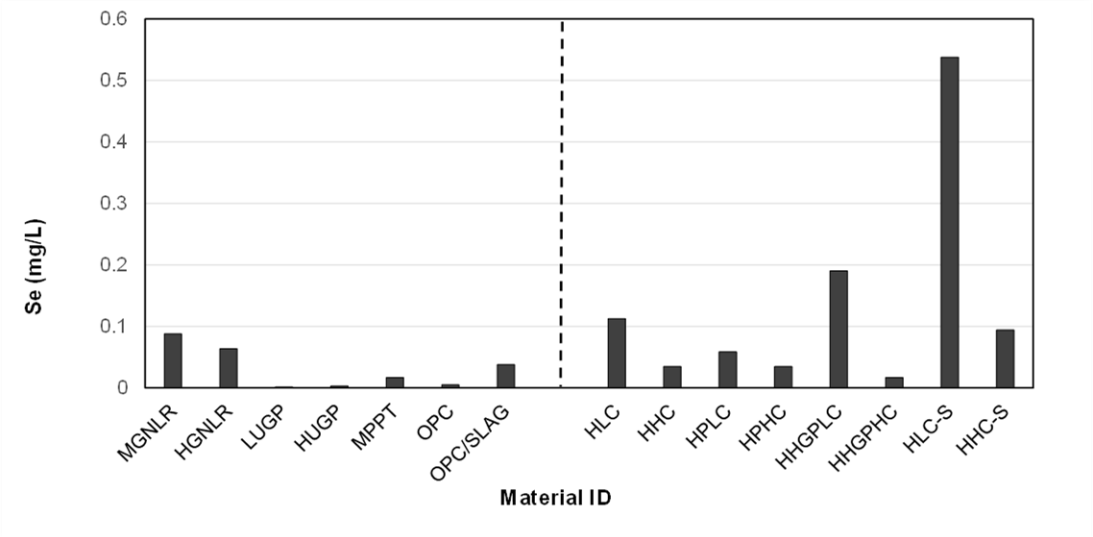


Figure D2-34: SFE Selenium Concentration vs Material Type

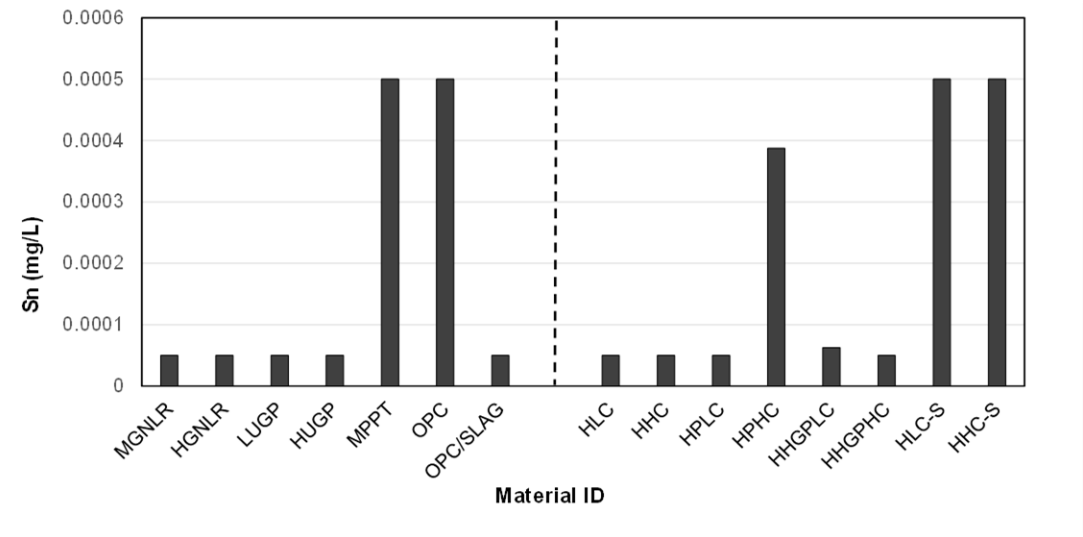


Figure D2-35: SFE Tin Concentration vs Material Type

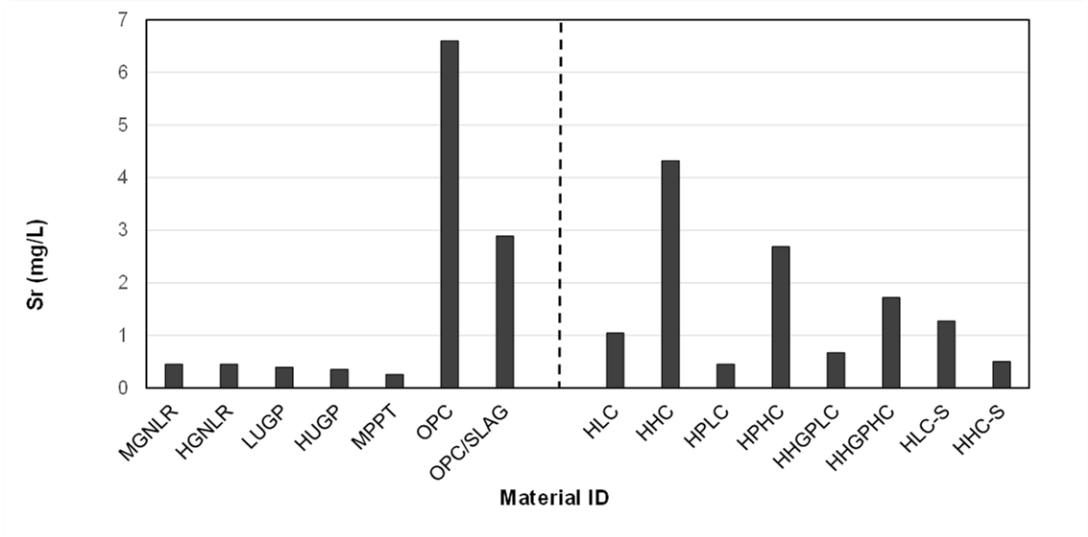


Figure D2-36: SFE Strontium Concentration vs Material Type

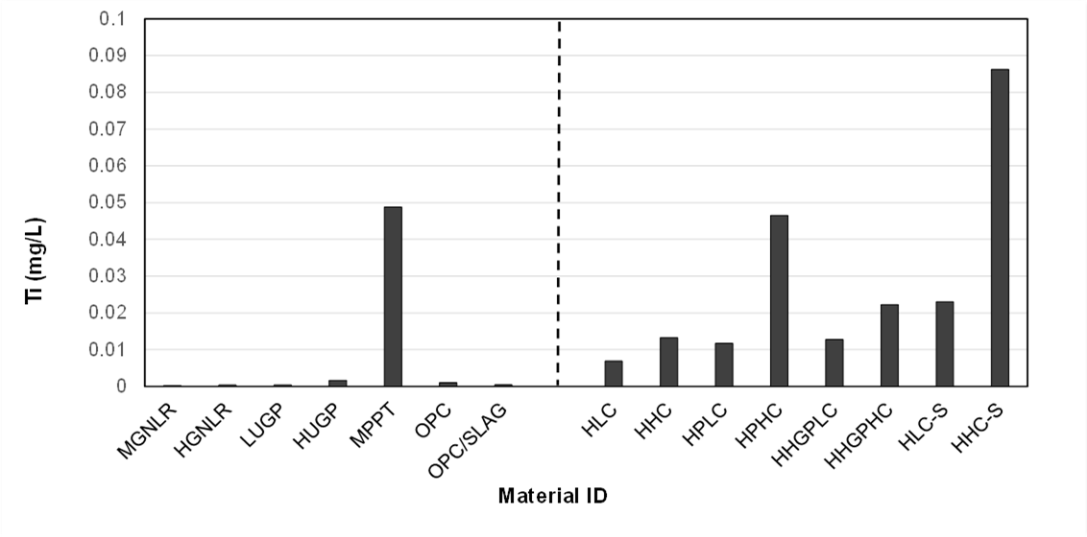


Figure D2-37: SFE Titanium vs Material Type

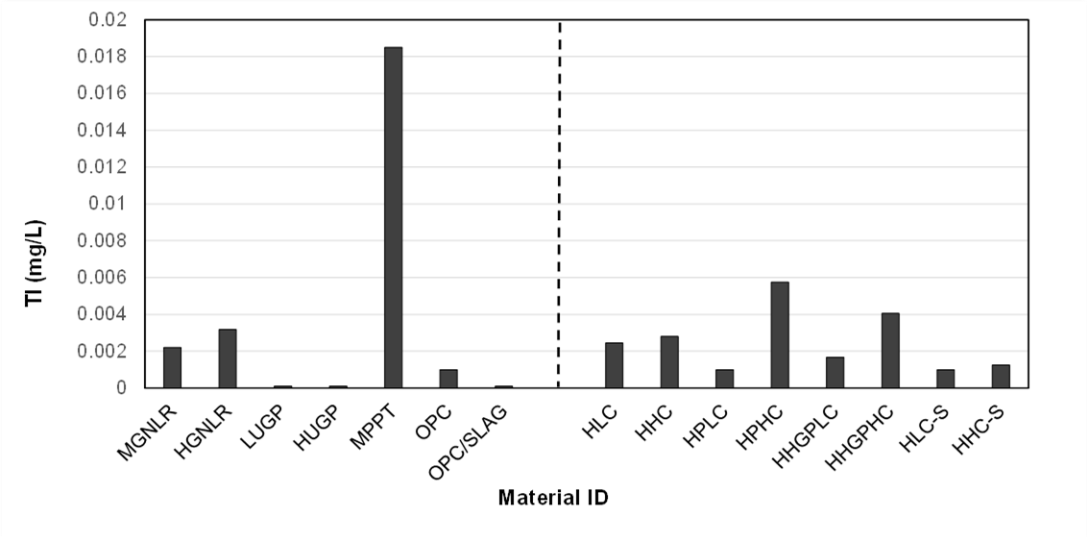


Figure D2-38: SFE Thallium Concentration vs Material Type

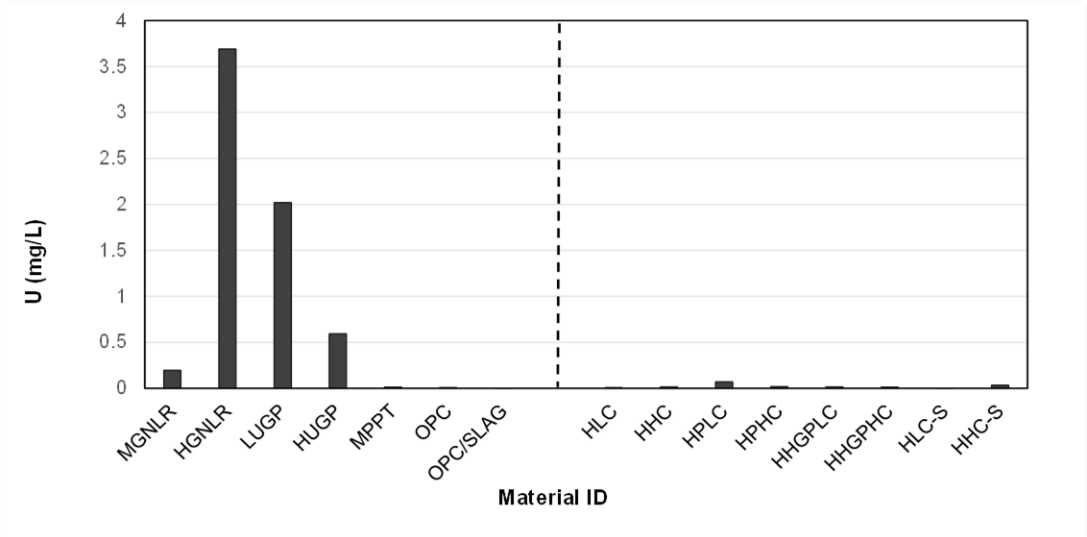


Figure D2-39: SFE Uranium Concentration vs Material Type

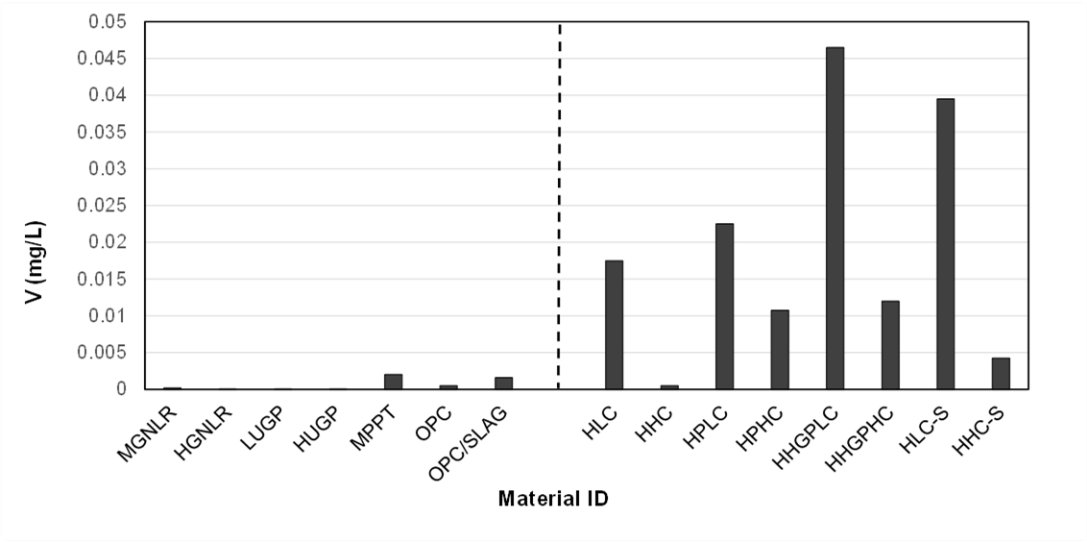


Figure D2-40: SFE Vanadium Concentration vs Material Type

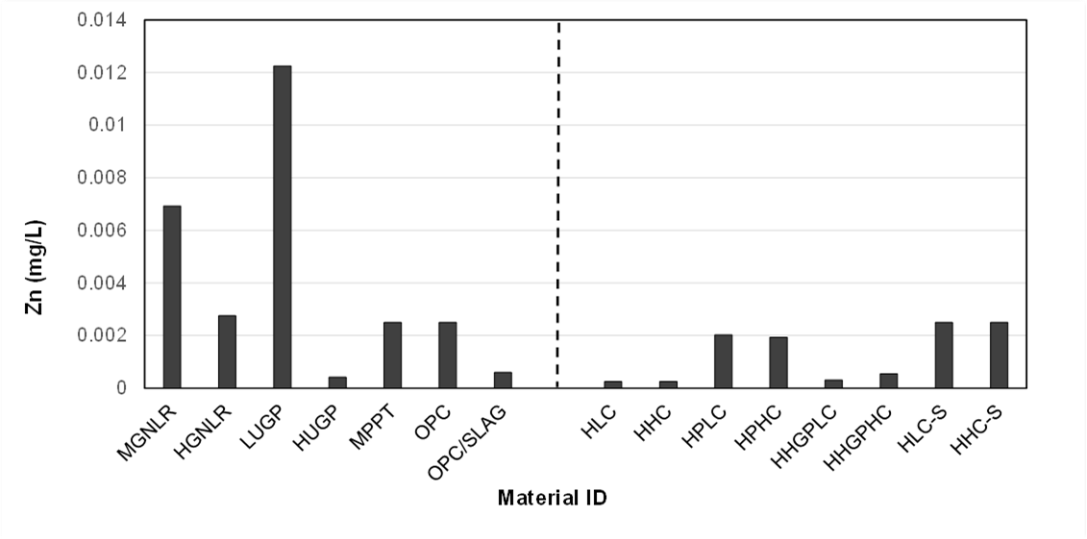


Figure D2-41: SFE Zinc Concentration vs Material Type

APPENDIX E

Kinetic Test Results

Sample ID	Replicate Number	Pore Volume Replacement	SNC pH	SRC pH	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
			pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
HHGPLC	1	0.25	10	10	0.94	<0.02	1.7	<0.05	<0.01	<1	0.0030	<0.05	0.040	0.81	0.19	0.030
HHGPLC	2	0.25	11	9.4	0.75	<0.02	1.6	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.10	0.080	0.020
HHGPLC	3	0.25	11	9.8	1.1	<0.02	1.9	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.18	0.18	0.040
HHGPLC	4	0.25	10	9.9	3.6	<0.02	1.8	0.060	<0.01	<1	0.0010	<0.05	0.010	0.18	1.8	0.24
HHGPLC	1	0.5	11	10	0.91	<0.02	1.7	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.56	0.090	0.030
HHGPLC	2	0.5	11	9.3	0.79	<0.02	2.1	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.19	0.090	<0.01
HHGPLC	3	0.5	10	10	0.85	<0.02	2.0	<0.05	<0.01	<1	0.0020	<0.05	<0.01	0.040	0.090	0.020
HHGPLC	4	0.5	10	10	0.91	<0.02	2.0	<0.05	<0.01	<1	0.0020	<0.05	<0.01	0.050	0.17	0.020
HHGPLC	1	0.75	11	10	0.84	<0.02	1.5	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.040	<0.05	0.010
HHGPLC	2	0.75	11	9.7	0.83	<0.02	1.8	<0.05	<0.01	<1	0.0010	<0.05	<0.01	0.69	<0.05	<0.01
HHGPLC	3	0.75	11	10	0.86	<0.02	1.6	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.040	0.050	0.020
HHGPLC	4	0.75	10	10.0	0.85	<0.02	1.8	<0.05	<0.01	<1	0.0020	<0.05	<0.01	<0.02	<0.05	<0.01
HHGPLC	1	1	10	10	0.67	<0.002	1.1	0.017	<0.001	<0.1	0.00080	0.012	0.0020	0.12	0.029	0.015
HHGPLC	2	1	11	9.9	0.65	0.0070	1.3	0.019	<0.001	0.20	0.0010	0.018	0.0010	0.72	0.032	0.0060
HHGPLC	3	1	11	9.9	0.74	0.0060	1.1	0.016	<0.001	0.20	0.00030	0.012	0.0020	0.15	0.030	0.017
HHGPLC	4	1	10	10	0.74	0.0050	1.1	0.016	<0.001	0.20	<0.0001	0.011	0.0010	0.017	0.036	0.0070
HHGPLC	1	1.25	10	10	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	1.25	11	9.6	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	1.75	10	9.1	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	1.75	10	9.8	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	2.25	10	9.2	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	2.25	10	9.9	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	2.75	-	9.6	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	2.75	-	9.6	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	3.25	-	10	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	3.25	-	9.6	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	3.75	-	9.4	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	3.75	-	9.8	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	5	10	7.5	0.37	0.0017	0.064	0.023	<0.0001	0.060	0.00011	0.0031	<0.0001	0.011	0.0088	0.00040
HHGPLC	2	5	10	8.0	0.46	0.0026	0.076	0.022	<0.0001	0.090	0.000060	0.0036	0.00020	0.0071	0.0014	0.0018
HHGPLC	1	15	10	7.8	0.45	0.0018	0.0090	0.022	<0.0001	0.070	0.000050	0.00090	<0.0001	0.0018	0.0050	0.00010
HHGPLC	2	15	9.6	7.9	0.43	0.0025	0.013	0.024	<0.0001	0.080	0.00016	0.0033	0.00020	0.0063	0.0013	0.0018
HHGPLC	1	25	10.0	7.5	0.40	0.0019	0.0074	0.020	<0.0001	0.060	0.000040	0.00080	<0.0001	0.0022	0.0041	0.00020
HHGPLC	2	25	10	7.9	0.43	0.0025	0.0080	0.022	<0.0001	0.080	0.000030	0.0019	<0.0001	0.0018	0.00090	0.00090
HHGPLC	1	30	10	7.7	0.43	0.0020	0.0063	0.020	<0.0001	0.070	0.000040	0.00070	<0.0001	0.0010	0.0039	0.00010
HHGPLC	2	30	10	8.9	0.43	0.0023	0.0069	0.021	<0.0001	0.080	0.000060	0.0020	0.00010	0.0023	0.0054	0.0019
HLC-S	1	0.25	10	10	0.60	<0.02	0.36	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.11	<0.05	0.010
HLC-S	2	0.25	11	9.7	0.78	<0.02	0.53	<0.05	<0.01	<1	<0.001	<0.05	<0.01	0.090	<0.05	0.010
HLC-S	3	0.25	11	9.8	0.55	<0.02	0.39	<0.05	<0.01	<1	0.0060	<0.05	<0.01	0.060	<0.05	0.020
HLC-S	4	0.25	10	9.7	0.40	<0.02	0.64	<0.05	<0.01	<1	0.0050	<0.05	<0.01	0.050	<0.05	<0.01
HLC-S	1	0.5	11	10	0.46	<0.02	0.50	<0.05	<0.01	<1	0.0050	<0.05	<0.01	0.27	<0.05	0.020
HLC-S	2	0.5	11	11	0.60	<0.02	0.62	<0.05	<0.01	<1	0.0050	<0.05	<0.01	0.10	<0.05	0.010
HLC-S	3	0.5	10	9.4	0.54	<0.02	0.62	<0.05	<0.01	<1	0.0030	<0.05	<0.01	0.27	0.11	0.010
HLC-S	4	0.5	10	10.0	0.30	<0.02	0.84	<0.05	<0.01	<1	0.0010	<0.05	<0.01	0.040	<0.05	<0.01
HLC-S	1	2	10	7.8	0.32	0.0030	0.043	0.027	<0.001	0.40	0.00030	<0.005	<0.001	0.062	0.014	0.0040
HLC-S	3	2	10	8.8	0.30	0.0030	0.050	0.023	<0.001	0.30	0.00020	<0.005	<0.001	0.024	0.0050	0.0060
HLC-S	1	4	10	9.2	0.26	0.0021	0.020	0.028	<0.0001	0.26	0.000080	<0.0005	<0.0001	0.013	0.0031	0.0020
HLC-S	3	4	10	10	0.27	0.0020	0.021	0.028	<0.0001	0.22	0.00020	<0.0005	<0.0001	0.0045	0.0017	0.0031
HLC-S	1	6	10	9.1	0.25	0.0021	0.018	0.028	<0.0001	0.26	0.00023	<0.0005	<0.0001	0.0082	0.0023	0.0016
HLC-S	3	6	10	9.6	0.26	0.0021	0.019	0.028	<0.0001	0.22	0.000050	<0.0005	<0.0001	0.0060	0.0026	0.0042
HLC-S	1	10	-	10	0.31	0.0035	0.020	0.028	<0.0001	0.35	0.000080	<0.0005	<0.0001	0.0046	0.0018	0.0023
HLC-S	3	10	-	10	0.26	0.0022	0.019	0.028	<0.0001	0.29	0.00010	<0.0005	<0.0001	0.0029	0.0018	0.0033

Sample ID	Replicate Number	Pore Volume Replacement	Manganese	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
HHGPLC	1	0.25	<0.05	126	0.030	0.26	<0.005	1.5	<0.02	<0.01	0.29	0.020	0.23	1.2
HHGPLC	2	0.25	<0.05	104	0.010	0.22	<0.005	1.3	<0.02	<0.01	0.26	0.060	0.18	0.39
HHGPLC	3	0.25	<0.05	128	0.11	0.26	<0.005	1.4	<0.02	<0.01	0.30	0.040	0.24	0.15
HHGPLC	4	0.25	<0.05	118	0.050	0.25	<0.005	1.4	<0.02	<0.01	0.35	0.31	0.25	0.20
HHGPLC	1	0.5	<0.05	144	0.020	0.27	<0.005	1.6	<0.02	<0.01	0.35	0.010	0.26	0.17
HHGPLC	2	0.5	<0.05	124	0.020	0.26	<0.005	1.5	<0.02	<0.01	0.34	0.030	0.21	0.060
HHGPLC	3	0.5	<0.05	132	0.050	0.28	<0.005	1.5	<0.02	<0.01	0.36	0.020	0.26	<0.05
HHGPLC	4	0.5	<0.05	132	0.020	0.26	<0.005	1.5	<0.02	<0.01	0.37	0.030	0.26	0.050
HHGPLC	1	0.75	<0.05	144	0.020	0.26	<0.005	1.7	<0.02	<0.01	0.36	<0.01	0.26	0.080
HHGPLC	2	0.75	<0.05	118	0.020	0.26	<0.005	1.4	<0.02	<0.01	0.28	0.020	0.22	<0.05
HHGPLC	3	0.75	<0.05	128	0.060	0.27	<0.005	1.5	<0.02	<0.01	0.29	0.010	0.25	<0.05
HHGPLC	4	0.75	<0.05	120	0.020	0.24	<0.005	1.5	<0.02	<0.01	0.27	0.010	0.25	<0.05
HHGPLC	1	1	<0.005	101	0.011	0.20	<0.0005	1.6	0.0070	<0.001	0.25	0.0070	0.22	0.060
HHGPLC	2	1	<0.005	81	0.0080	0.19	0.00080	1.4	0.0060	<0.001	0.21	0.017	0.18	0.024
HHGPLC	3	1	<0.005	87	0.023	0.20	<0.0005	1.4	0.0060	<0.001	0.20	0.0090	0.21	0.028
HHGPLC	4	1	<0.005	83	0.011	0.17	<0.0005	1.4	0.0060	<0.001	0.20	0.010	0.20	0.019
HHGPLC	1	1.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	1.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	1.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	1.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	2.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	2.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	2.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	2.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	3.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	3.25	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	3.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	2	3.75	-	-	-	-	-	-	-	-	-	-	-	-
HHGPLC	1	5	<0.0005	9.6	0.0014	0.022	0.00010	1.6	0.0014	0.00010	0.035	0.0047	0.055	0.0067
HHGPLC	2	5	<0.0005	6.8	0.055	0.020	0.00017	1.5	0.0012	<0.0001	0.024	0.0023	0.054	0.0059
HHGPLC	1	15	<0.0005	3.0	0.00020	0.016	0.00021	0.55	0.00040	<0.0001	0.010	0.0054	0.059	0.0018
HHGPLC	2	15	<0.0005	7.4	0.051	0.018	<0.00005	0.61	0.00050	<0.0001	0.026	0.0028	0.055	0.0040
HHGPLC	1	25	<0.0005	2.1	0.00060	0.014	0.0021	0.45	0.00040	<0.0001	0.0079	0.0043	0.057	0.0023
HHGPLC	2	25	<0.0005	3.0	0.024	0.017	0.00014	0.43	0.00040	<0.0001	0.0096	0.0034	0.055	0.0017
HHGPLC	1	30	<0.0005	1.6	<0.0001	0.014	0.00070	0.38	0.00030	<0.0001	0.0064	0.0036	0.057	0.00080
HHGPLC	2	30	<0.0005	2.2	0.032	0.016	0.000060	0.37	0.00030	<0.0001	0.0079	0.0043	0.056	0.0039
HLC-S	1	0.25	<0.05	141	<0.01	1.0	0.0070	2.8	<0.02	<0.01	0.23	<0.01	0.040	0.080
HLC-S	2	0.25	<0.05	148	<0.01	1.1	<0.005	3.0	<0.02	<0.01	0.27	<0.01	0.050	0.060
HLC-S	3	0.25	<0.05	152	0.020	1.0	<0.005	2.9	<0.02	<0.01	0.25	0.010	0.050	<0.05
HLC-S	4	0.25	<0.05	146	<0.01	1.5	0.024	2.6	<0.02	<0.01	0.26	<0.01	0.060	<0.05
HLC-S	1	0.5	<0.05	177	<0.01	1.4	0.020	3.4	<0.02	<0.01	0.31	<0.01	0.030	<0.05
HLC-S	2	0.5	<0.05	180	<0.01	1.2	<0.005	3.7	<0.02	<0.01	0.32	<0.01	0.030	<0.05
HLC-S	3	0.5	<0.05	189	0.050	1.6	0.0090	3.7	<0.02	<0.01	0.29	<0.01	0.040	<0.05
HLC-S	4	0.5	<0.05	194	<0.01	1.7	0.015	3.5	<0.02	<0.01	0.34	<0.01	0.040	<0.05
HLC-S	1	2	<0.005	12	<0.001	0.40	<0.0005	2.7	0.0030	<0.001	0.020	<0.001	0.015	0.0080
HLC-S	3	2	<0.005	13	0.017	0.37	<0.0005	2.7	0.0030	<0.001	0.019	<0.001	0.013	0.010
HLC-S	1	4	0.00090	8.3	0.00030	0.31	0.00030	2.7	0.0017	<0.0001	0.013	0.00060	0.012	0.0026
HLC-S	3	4	0.0013	8.7	0.0021	0.26	0.00010	2.8	0.0018	<0.0001	0.014	0.00050	0.010	0.0027
HLC-S	1	6	0.00090	6.7	0.00040	0.32	<0.00005	2.6	0.0012	<0.0001	0.011	0.00080	0.012	0.0031
HLC-S	3	6	0.0012	7.2	0.012	0.24	0.000070	2.7	0.0012	<0.0001	0.011	0.00060	0.011	0.0079
HLC-S	1	10	0.00080	9.4	0.00020	0.66	0.000080	1.2	0.00050	<0.0001	0.014	0.00090	0.014	0.0022
HLC-S	3	10	0.0011	6.4	0.0043	0.54	0.000090	1.5	0.00060	<0.0001	0.0093	0.00080	0.012	0.0035

Sample ID	Replicate Number	Pore Volume Replacement	SNC pH	SRC pH	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead
			pH units	pH units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
HLC	1	0.5	10.0	7.4	0.14	0.0040	0.26	0.073	<0.001	0.10	0.00010	<0.005	0.0020	0.078	<0.005	0.0040
HLC	2	0.5	10	7.4	0.14	0.0060	0.26	0.074	<0.001	0.10	0.00020	<0.005	0.0010	0.048	<0.005	0.0040
HLC	3	0.5	10.0	7.4	0.19	<0.002	0.33	0.067	<0.001	0.20	<0.0001	0.0090	0.0020	0.15	0.020	0.047
HLC	4	0.5	9.8	7.5	0.16	<0.002	0.35	0.075	<0.001	0.10	0.00020	0.010	0.0020	0.10	0.015	0.036
HLC	1	1	12	9.0	0.078	0.0020	0.27	0.063	<0.001	0.10	<0.0001	<0.005	0.0020	0.033	<0.005	0.0050
HLC	2	1	10	9.2	0.089	0.0080	0.26	0.059	<0.001	0.10	<0.0001	<0.005	0.0010	0.071	<0.005	0.0050
HLC	3	1	10	7.8	0.16	<0.002	0.25	0.060	<0.001	<0.1	<0.0001	0.0090	0.0020	0.12	0.031	0.041
HLC	4	1	10	7.5	0.13	<0.002	0.31	0.071	<0.001	<0.1	0.00040	0.011	0.0020	0.14	0.016	0.054
HLC	1	2	11	9.6	0.074	0.0055	0.12	0.061	<0.0001	0.080	0.00012	0.00080	0.0011	0.046	0.0028	0.0061
HLC	2	2	10	8.4	0.055	0.012	0.089	0.067	<0.0001	0.18	<0.00001	0.00060	0.00030	0.064	0.0019	0.0025
HLC	1	5	9.4	7.5	0.023	0.077	0.038	0.067	<0.001	<0.1	<0.0001	0.0060	<0.001	0.0070	<0.005	0.0030
HLC	2	5	9.3	7.5	0.018	0.11	0.054	0.080	<0.0001	0.34	0.00010	0.00080	0.00030	0.0072	0.0018	0.0019
HLC	1	20	9.4	8.1	0.019	0.075	0.026	0.039	<0.0001	4.9	0.00012	0.0014	0.00020	0.0018	0.0031	0.0013
HLC	2	20	9.4	8.8	0.018	0.11	0.046	0.046	<0.0001	3.4	0.000060	0.00060	0.00020	0.0062	0.0045	0.0025
HLC	1	30	9.6	8.6	0.031	0.047	0.018	0.039	<0.0001	3.3	0.000080	0.0011	0.00010	0.0014	0.0015	0.00090
HLC	2	30	9.4	8.7	0.020	0.077	0.034	0.040	<0.0001	3.4	0.000070	0.00060	<0.0001	0.0025	0.0060	0.0019
HPLC	1	0.25	10	7.4	0.80	0.014	2.4	0.070	<0.001	1.0	0.00060	0.023	<0.001	0.014	0.0060	0.0020
HPLC	2	0.25	10	7.5	0.45	0.0080	2.6	0.081	<0.001	0.40	0.00050	<0.005	<0.001	0.020	<0.005	0.0020
HPLC	3	0.25	9.5	8.0	0.37	0.012	3.0	0.087	<0.001	0.40	0.00020	<0.005	<0.001	0.011	<0.005	<0.001
HPLC	4	0.25	10	7.7	0.87	0.010	2.7	0.067	<0.001	0.80	0.00060	<0.005	<0.001	0.041	<0.005	0.0020
HPLC	1	1	9.5	8.8	1.4	0.010	0.63	0.038	<0.001	0.70	0.00060	0.012	<0.001	0.042	0.15	0.022
HPLC	2	1	10	8.2	2.6	0.0060	1.1	0.046	<0.001	0.20	0.00020	0.0070	0.0080	0.050	1.5	0.22
HPLC	3	1	10	7.7	0.47	0.0070	0.97	0.025	<0.001	0.30	0.00020	<0.005	<0.001	0.0040	0.0070	<0.001
HPLC	4	1	10	8.4	0.99	0.014	1.3	0.020	<0.001	0.80	0.00020	<0.005	<0.001	0.090	<0.005	0.0020
HPLC	1	2	9.4	7.4	0.73	0.013	0.45	0.018	<0.001	1.0	0.00030	0.010	<0.001	0.0070	<0.005	0.0010
HPLC	2	2	10	7.4	0.40	0.0070	0.53	0.020	<0.001	0.30	0.00020	<0.005	<0.001	0.0070	<0.005	0.0010
HPLC	1	3	9.8	7.2	0.64	0.011	0.30	0.017	<0.001	0.90	0.00020	0.0070	<0.001	0.0080	<0.005	<0.001
HPLC	2	3	9.8	7.4	0.34	0.0057	0.31	0.016	<0.0001	0.24	0.00013	0.00070	0.00010	0.013	0.0017	0.00080
HPLC	1	5	9.8	8.0	0.54	0.0097	0.24	0.020	<0.0001	0.73	0.00010	0.0038	<0.0001	0.0072	0.0023	0.00090
HPLC	2	5	9.7	7.4	0.40	0.0060	0.20	0.023	<0.001	0.30	0.00020	<0.005	<0.001	0.013	<0.005	0.0010
HPLC	1	20	9.7	7.2	0.55	0.0094	0.020	0.018	<0.0001	0.38	0.000030	0.0014	<0.0001	0.00070	0.0017	0.00050
HPLC	2	20	9.1	7.8	0.33	0.0057	0.012	0.019	<0.0001	0.19	0.000030	0.0019	<0.0001	0.0011	0.0018	0.00060
HPLC	1	30	9.0	8.2	0.50	0.0094	0.014	0.019	<0.0001	0.26	0.000040	0.0030	<0.0001	0.0011	0.0041	0.00080
HPLC	2	30	9.1	7.5	0.36	0.0058	0.012	0.020	<0.0001	0.17	0.000070	0.0030	<0.0001	0.00070	0.0014	0.00050

- Parameter not analyzed

Sample ID	Replicate Number	Pore Volume Replacement	Manganese	Molybdenum	Nickel	Selenium	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
HLC	1	0.5	<0.005	17	0.048	0.50	0.0019	3.3	0.010	<0.001	0.072	0.023	0.014	0.024
HLC	2	0.5	<0.005	17	0.0040	0.50	0.0021	3.2	0.011	<0.001	0.068	0.033	0.0090	0.0050
HLC	3	0.5	<0.005	13	0.047	0.42	0.0017	4.0	0.010	<0.001	0.052	0.0070	0.022	0.27
HLC	4	0.5	<0.005	13	0.0060	0.42	0.0022	3.9	0.011	<0.001	0.058	0.0030	0.039	0.28
HLC	1	1	<0.005	21	0.023	0.58	0.011	4.0	0.014	<0.001	0.086	0.018	0.012	0.018
HLC	2	1	<0.005	17	0.0030	0.47	0.0069	3.8	0.014	<0.001	0.074	0.038	0.011	<0.005
HLC	3	1	<0.005	12	0.10	0.38	<0.0005	4.2	0.012	<0.001	0.051	0.0030	0.015	0.13
HLC	4	1	<0.005	14	0.0050	0.42	0.0016	4.2	0.013	<0.001	0.055	0.0010	0.021	0.14
HLC	1	2	<0.0005	5.7	0.24	0.058	0.016	3.9	0.015	0.00040	0.023	0.014	0.016	0.013
HLC	2	2	<0.0005	5.7	0.0014	0.062	0.025	4.5	0.018	<0.0001	0.025	0.10	0.016	0.0025
HLC	1	5	<0.005	10	0.085	0.21	0.0012	1.7	0.019	<0.001	0.036	0.032	0.0050	0.11
HLC	2	5	<0.0005	7.3	0.011	0.21	0.00014	1.8	0.026	<0.0001	0.031	0.23	0.0053	0.0044
HLC	1	20	<0.0005	6.9	0.031	0.38	0.00097	0.57	0.012	0.00020	0.027	0.58	0.0058	0.022
HLC	2	20	<0.0005	6.5	0.024	0.55	<0.00005	0.67	0.025	<0.0001	0.028	0.85	0.0068	0.017
HLC	1	30	<0.0005	5.0	0.015	0.37	0.0010	0.63	0.0052	<0.0001	0.022	0.12	0.0065	0.032
HLC	2	30	<0.0005	7.2	0.0067	0.42	<0.00005	0.55	0.013	<0.0001	0.033	0.90	0.0061	0.016
HPLC	1	0.25	<0.005	59	0.010	0.51	<0.0005	1.3	0.0070	<0.001	0.12	0.0070	0.097	0.013
HPLC	2	0.25	0.057	48	0.044	0.36	0.00090	1.5	0.0060	<0.001	0.10	0.0040	0.12	0.0080
HPLC	3	0.25	<0.005	56	0.010	0.48	0.0033	1.7	0.0050	<0.001	0.12	0.0030	0.14	0.0090
HPLC	4	0.25	<0.005	49	0.054	0.40	0.00050	1.6	0.0060	<0.001	0.12	0.016	0.094	0.17
HPLC	1	1	<0.005	25	0.010	0.22	<0.0005	0.89	0.0040	<0.001	0.052	0.030	0.060	0.025
HPLC	2	1	0.022	23	0.025	0.17	0.00060	1.1	0.0040	<0.001	0.089	0.25	0.093	0.057
HPLC	3	1	<0.005	23	0.0020	0.18	<0.0005	1.6	0.0040	<0.001	0.049	0.0010	0.10	<0.005
HPLC	4	1	<0.005	38	0.018	0.30	<0.0005	1.6	0.0060	<0.001	0.076	0.0080	0.088	0.12
HPLC	1	2	<0.005	19	<0.001	0.16	<0.0005	1.5	0.0040	<0.001	0.040	0.020	0.060	<0.005
HPLC	2	2	<0.005	14	0.0050	0.085	<0.0005	1.7	0.0030	<0.001	0.029	0.0060	0.067	0.0050
HPLC	1	3	<0.005	10	<0.001	0.11	<0.0005	1.4	0.0030	<0.001	0.021	0.011	0.048	<0.005
HPLC	2	3	0.0010	8.7	0.024	0.068	<0.00005	1.6	0.0022	0.00020	0.016	0.0024	0.052	0.016
HPLC	1	5	0.0013	8.7	0.00070	0.072	0.00016	1.5	0.0017	<0.0001	0.015	0.010	0.042	0.0023
HPLC	2	5	<0.005	10	0.0020	0.052	0.0020	1.7	<0.002	<0.001	0.024	0.0020	0.058	<0.005
HPLC	1	20	<0.0005	4.3	0.00060	0.050	0.00025	0.78	0.00050	<0.0001	0.0079	0.0070	0.042	0.0011
HPLC	2	20	0.00060	5.2	0.00050	0.048	0.0012	0.74	0.00040	<0.0001	0.0096	0.0023	0.053	0.0022
HPLC	1	30	0.00070	5.0	0.0034	0.048	0.000060	0.51	0.00040	<0.0001	0.010	0.013	0.041	0.0015
HPLC	2	30	0.0010	4.9	<0.0001	0.057	<0.00005	0.50	0.00040	<0.0001	0.0090	0.0026	0.054	0.0014

- Parameter not analyzed

Cell Identification	Week	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-1	1	4.3	2100	1368	378	90	26	0.97	42	0.30	17	21	0.49	0.0044	0.0044	-	0.16
MG-NLR-1	2	4.4	743	207	59	12	15	0.56	-	-	-	-	-	-	-	-	-
MG-NLR-1	3	4.7	275	83	24	3.7	20	0.75	-	-	-	-	-	-	-	-	-
MG-NLR-1	4	4.6	167	59	16	2.6	11	0.93	0.19	0.15	5.1	0.47	0.0047	0.0042	0.0042	0.028	0.056
MG-NLR-1	5	4.6	116	35	8.9	1.6	11	0.89	-	-	-	-	-	-	-	-	-
MG-NLR-1	6	4.6	55	9.4	2.2	0.40	6.0	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-1	7	4.9	70	13	3.2	0.57	6.8	0.57	-	-	-	-	-	-	-	-	-
MG-NLR-1	8	4.7	52	21	4.7	0.94	20	1.2	0.35	0.21	2.6	0.47	0.0059	0.0053	0.0053	0.012	0.093
MG-NLR-1	9	4.5	56	3.2	0.70	0.13	2.7	0.16	-	-	-	-	-	-	-	-	-
MG-NLR-1	10	5.0	25	3.2	0.74	0.20	8.4	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-1	11	4.3	152	15	3.7	0.77	4.9	0.29	-	-	-	-	-	-	-	-	-
MG-NLR-1	12	4.7	104	24	5.9	1.2	2.6	0.66	0.13	0.099	1.6	0.46	0.0033	0.0030	0.0030	0.0066	0.086
MG-NLR-1	13	4.4	103	3.2	0.75	0.16	0.36	0.090	-	-	-	-	-	-	-	-	-
MG-NLR-1	14	4.5	111	19	4.3	0.93	1.9	0.46	-	-	-	-	-	-	-	-	-
MG-NLR-1	15	4.5	109	4.7	1.1	0.23	0.49	0.12	-	-	-	-	-	-	-	-	-
MG-NLR-1	16	4.8	31	9.9	2.3	0.60	7.0	0.99	0.050	0.070	0.70	0.20	0.0050	0.0045	0.0045	0.0050	0.039
MG-NLR-1	17	4.3	154	15	3.7	0.91	2.0	0.29	-	-	-	-	-	-	-	-	-
MG-NLR-1	18	4.2	192	24	5.9	1.4	2.3	0.33	-	-	-	-	-	-	-	-	-
MG-NLR-1	19	4.3	156	16	3.9	0.94	1.9	0.28	-	-	-	-	-	-	-	-	-
MG-NLR-1	20	4.4	132	63	13	3.3	15	1.00	0.050	0.23	2.7	0.50	0.040	0.0045	0.0045	0.020	0.16
MG-NLR-1	21	4.1	176	20	4.7	1.2	5.1	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-1	22	4.3	135	8.6	1.9	0.55	2.6	0.18	-	-	-	-	-	-	-	-	-
MG-NLR-1	23	4.1	150	12	2.6	0.71	3.6	0.24	-	-	-	-	-	-	-	-	-
MG-NLR-1	24	4.3	123	39	8.3	2.2	13	0.88	0.44	0.17	2.3	0.44	0.079	0.0040	0.0040	0.044	0.21
MG-NLR-1	25	4.3	118	11	2.3	0.67	4.6	0.31	-	-	-	-	-	-	-	-	-
MG-NLR-1	26	4.2	164	29	6.3	2.3	7.9	0.53	-	-	-	-	-	-	-	-	-
MG-NLR-1	27	4.2	120	15	3.2	0.94	6.1	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-1	28	4.3	108	19	3.9	1.2	6.3	0.57	0.29	0.092	1.0	0.23	0.17	0.026	0.0026	0.0029	0.086
MG-NLR-1	29	4.2	109	11	2.3	0.69	3.8	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-1	30	4.1	121	19	3.9	1.3	5.4	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-1	31	4.3	98	17	3.7	1.2	6.4	0.58	-	-	-	-	-	-	-	-	-
MG-NLR-1	32	4.4	82	19	3.8	1.3	6.8	0.61	0.25	0.074	1.1	0.25	0.12	0.028	0.0028	0.0031	0.092
MG-NLR-1	33	4.3	88	10	2.1	0.66	3.8	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-1	34	5.0	101	15	3.0	1.00	5.5	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-1	35	4.2	88	15	2.7	0.96	5.6	0.51	-	-	-	-	-	-	-	-	-
MG-NLR-1	36	4.7	97	28	5.4	1.8	10	0.86	0.17	0.16	1.4	0.26	0.0043	0.039	0.0039	0.0043	0.11
MG-NLR-1	37	4.3	90	13	2.6	0.90	5.4	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-1	38	4.5	55	6.2	1.2	0.44	4.4	0.37	-	-	-	-	-	-	-	-	-
MG-NLR-1	39	4.0	128	19	3.7	1.3	6.0	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-1	40	4.3	85	27	5.0	1.9	12	0.88	0.044	0.12	1.1	0.18	0.44	0.040	0.0040	0.018	0.16
MG-NLR-1	41	4.3	98	19	3.5	1.3	7.9	0.57	-	-	-	-	-	-	-	-	-
MG-NLR-1	42	4.1	212	27	4.9	1.9	5.3	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-1	43	4.0	205	32	6.3	2.4	5.9	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-1	44	4.2	141	37	6.6	2.6	17	0.73	0.15	0.21	1.2	0.22	0.37	0.033	0.0033	0.0073	0.24
MG-NLR-1	45	4.2	145	26	4.7	1.8	11	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-1	46	4.0	96	11	2.0	0.81	7.7	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-1	47	3.9	187	26	4.7	1.8	8.9	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-1	48	4.0	171	43	7.4	3.0	18	0.68	0.068	0.23	1.4	0.14	0.034	0.15	0.0031	0.020	0.32
MG-NLR-1	49	4.0	215	30	5.0	2.1	11	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-1	50	4.0	220	29	4.5	1.9	9.8	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-1	51	3.9	170	27	4.2	1.8	11	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-1	52	4.1	172	34	5.3	2.2	18	0.57	0.057	0.19	1.1	0.17	0.28	0.026	0.0026	0.011	0.28
MG-NLR-1	53	3.9	196	30	4.7	2.0	14	0.43	-	-	-	-	-	-	-	-	-
MG-NLR-1	54	3.9	189	25	3.7	1.7	12	0.37	-	-	-	-	-	-	-	-	-
MG-NLR-1	55	3.9	202	30	4.7	2.0	14	0.43	-	-	-	-	-	-	-	-	-
MG-NLR-1	56	4.1	168	27	3.9	1.7	15	0.47	0.047	0.18	0.84	0.093	0.23	0.021	0.0021	0.014	0.25
MG-NLR-1	57	4.0	167	18	2.5	1.1	11	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-1	58	4.1	155	21	2.8	1.3	13	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-1	59	3.9	164	22	2.9	1.3	12	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-1	60	3.7	156	26	3.2	1.5	16	0.61	0.030	0.16	0.79	0.061	0.030	0.027	0.0028	0.0030	0.26
MG-NLR-1	61	4.0	153	24	2.8	1.3	13	0.48	-	-	-	-	-	-	-	-	-
MG-NLR-1	62	3.8	143	25	2.9	1.3	13	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-1	63	4.1	141	22	2.5	1.2	12	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-1	64	4.0	103	22	2.5	1.2	16	0.69	0.034	0.055	0.82	0.069	0.034	0.031	0.0031	0.014	0.35

- Parameter not analyzed

Cell Identification	Week	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-1	1	0.00078	0.011	0.054	0.00019	1.5	0.0026	0.00024	0.97	0.95	0.13	2.2	0.15	0.0000039	0.00087	0.83	0.15
MG-NLR-1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	4	0.00065	0.0087	0.028	0.000047	0.41	0.00021	0.00023	0.49	0.056	0.0074	2.2	0.11	0.0000037	0.0044	0.35	0.038
MG-NLR-1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	8	0.00094	0.0076	0.16	0.000059	0.45	0.00025	0.00029	0.056	0.13	0.029	2.1	0.0052	0.0000047	0.00047	0.038	0.056
MG-NLR-1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	12	0.00033	0.0032	0.13	0.000033	0.28	0.00014	0.00016	0.092	0.21	0.066	3.1	0.0073	0.0000026	0.00013	0.062	0.030
MG-NLR-1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	16	0.00030	0.0022	0.084	0.000050	0.089	0.00012	0.00025	0.036	0.12	0.040	1.3	0.0032	0.0000040	0.00020	0.025	0.018
MG-NLR-1	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	20	0.00050	0.0036	0.18	0.000100	0.37	0.00014	0.00025	0.16	0.53	0.18	5.1	0.012	0.0000050	0.00040	0.11	0.036
MG-NLR-1	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	24	0.00053	0.0051	0.22	0.000088	0.48	0.00021	0.00022	0.15	0.61	0.27	4.8	0.011	0.0000035	0.00053	0.10	0.036
MG-NLR-1	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	28	0.00034	0.0025	0.14	0.000057	0.26	0.000086	0.00014	0.080	0.30	0.13	2.4	0.0057	0.00000029	0.000029	0.053	0.025
MG-NLR-1	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	32	0.00037	0.0023	0.14	0.000061	0.21	0.000098	0.00015	0.068	0.30	0.15	2.3	0.0057	0.0000018	0.00025	0.049	0.031
MG-NLR-1	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	36	0.00043	0.0030	0.16	0.000043	0.21	0.000095	0.00021	0.086	0.40	0.21	2.8	0.0072	0.00000043	0.00052	0.062	0.046
MG-NLR-1	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	40	0.00044	0.0032	0.11	0.000088	0.16	0.00013	0.00022	0.11	0.70	0.37	3.5	0.0088	0.00000044	0.0064	0.073	0.047
MG-NLR-1	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	44	0.00029	0.0024	0.073	0.00022	0.18	0.00012	0.00018	0.18	1.4	0.57	4.6	0.013	0.00000073	0.00029	0.12	0.041
MG-NLR-1	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	48	0.00034	0.0024	0.047	0.00027	0.21	0.00016	0.00017	0.22	2.2	0.84	5.1	0.015	0.00000034	0.00020	0.15	0.043
MG-NLR-1	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	52	0.00028	0.0019	0.039	0.00023	0.16	0.00015	0.00014	0.16	2.3	0.85	4.2	0.011	0.0000040	0.000028	0.12	0.038
MG-NLR-1	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	56	0.00019	0.0015	0.029	0.00019	0.11	0.00013	0.00012	0.14	2.4	0.74	3.6	0.0093	0.00000023	0.000093	0.098	0.028
MG-NLR-1	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	60	0.00024	0.0017	0.049	0.00024	0.098	0.00011	0.00015	0.13	2.9	0.89	4.1	0.0079	0.0000073	0.00043	0.090	0.033
MG-NLR-1	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-1	64	0.00027	0.0022	0.069	0.00027	0.12	0.00015	0.00017	0.13	3.3	1.2	5.0	0.0082	0.00000034	0.0024	0.092	0.036

- Parameter not analyzed

Cell Identification	Week	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-1	1	0.000024	0.90	0.0049	0.000049	0.000097	1.4	0.00019	0.092
MG-NLR-1	2	-	-	-	-	-	-	-	-
MG-NLR-1	3	-	-	-	-	-	-	-	-
MG-NLR-1	4	0.000023	0.53	0.0020	0.000047	0.00028	5.2	0.000047	0.070
MG-NLR-1	5	-	-	-	-	-	-	-	-
MG-NLR-1	6	-	-	-	-	-	-	-	-
MG-NLR-1	7	-	-	-	-	-	-	-	-
MG-NLR-1	8	0.000029	0.32	0.0012	0.000059	0.0015	0.13	0.00035	0.027
MG-NLR-1	9	-	-	-	-	-	-	-	-
MG-NLR-1	10	-	-	-	-	-	-	-	-
MG-NLR-1	11	-	-	-	-	-	-	-	-
MG-NLR-1	12	0.000016	0.44	0.00086	0.000033	0.000066	0.23	0.000033	0.031
MG-NLR-1	13	-	-	-	-	-	-	-	-
MG-NLR-1	14	-	-	-	-	-	-	-	-
MG-NLR-1	15	-	-	-	-	-	-	-	-
MG-NLR-1	16	0.000025	0.16	0.00030	0.000050	0.00050	0.12	0.000050	0.012
MG-NLR-1	17	-	-	-	-	-	-	-	-
MG-NLR-1	18	-	-	-	-	-	-	-	-
MG-NLR-1	19	-	-	-	-	-	-	-	-
MG-NLR-1	20	0.000025	0.63	0.00100	0.000050	0.00030	0.42	0.000050	0.024
MG-NLR-1	21	-	-	-	-	-	-	-	-
MG-NLR-1	22	-	-	-	-	-	-	-	-
MG-NLR-1	23	-	-	-	-	-	-	-	-
MG-NLR-1	24	0.000022	0.55	0.0011	0.000044	0.0019	0.45	0.000044	0.022
MG-NLR-1	25	-	-	-	-	-	-	-	-
MG-NLR-1	26	-	-	-	-	-	-	-	-
MG-NLR-1	27	-	-	-	-	-	-	-	-
MG-NLR-1	28	0.000014	0.25	0.00052	0.000029	0.000057	0.22	0.000029	0.013
MG-NLR-1	29	-	-	-	-	-	-	-	-
MG-NLR-1	30	-	-	-	-	-	-	-	-
MG-NLR-1	31	-	-	-	-	-	-	-	-
MG-NLR-1	32	0.000015	0.24	0.00049	0.000031	0.00037	0.20	0.000031	0.010
MG-NLR-1	33	-	-	-	-	-	-	-	-
MG-NLR-1	34	-	-	-	-	-	-	-	-
MG-NLR-1	35	-	-	-	-	-	-	-	-
MG-NLR-1	36	0.000021	0.29	0.00060	0.000043	0.00043	0.22	0.000043	0.010
MG-NLR-1	37	-	-	-	-	-	-	-	-
MG-NLR-1	38	-	-	-	-	-	-	-	-
MG-NLR-1	39	-	-	-	-	-	-	-	-
MG-NLR-1	40	0.000022	0.33	0.00062	0.000044	0.0039	0.32	0.000088	0.015
MG-NLR-1	41	-	-	-	-	-	-	-	-
MG-NLR-1	42	-	-	-	-	-	-	-	-
MG-NLR-1	43	-	-	-	-	-	-	-	-
MG-NLR-1	44	0.000018	0.48	0.00066	0.000037	0.00095	0.60	0.000037	0.021
MG-NLR-1	45	-	-	-	-	-	-	-	-
MG-NLR-1	46	-	-	-	-	-	-	-	-
MG-NLR-1	47	-	-	-	-	-	-	-	-
MG-NLR-1	48	0.000017	0.52	0.00068	0.000034	0.00068	0.85	0.000034	0.030
MG-NLR-1	49	-	-	-	-	-	-	-	-
MG-NLR-1	50	-	-	-	-	-	-	-	-
MG-NLR-1	51	-	-	-	-	-	-	-	-
MG-NLR-1	52	0.000014	0.40	0.00057	0.000028	0.00023	0.84	0.000028	0.032
MG-NLR-1	53	-	-	-	-	-	-	-	-
MG-NLR-1	54	-	-	-	-	-	-	-	-
MG-NLR-1	55	-	-	-	-	-	-	-	-
MG-NLR-1	56	0.000012	0.28	0.00047	0.000023	0.00065	0.77	0.000023	0.026
MG-NLR-1	57	-	-	-	-	-	-	-	-
MG-NLR-1	58	-	-	-	-	-	-	-	-
MG-NLR-1	59	-	-	-	-	-	-	-	-
MG-NLR-1	60	0.000015	0.24	0.00049	0.000030	0.00073	0.84	0.000030	0.026
MG-NLR-1	61	-	-	-	-	-	-	-	-
MG-NLR-1	62	-	-	-	-	-	-	-	-
MG-NLR-1	63	-	-	-	-	-	-	-	-
MG-NLR-1	64	0.000017	0.24	0.00055	0.000034	0.0021	1.1	0.000034	0.031

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-2	1	4.2	2150	1221	344	81	25	0.87	41	0.31	17	19	0.43	0.0039	0.0039	-	0.30
MG-NLR-2	2	4.4	434	85	25	3.9	12	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-2	3	4.5	279	117	35	5.2	31	1.1	-	-	-	-	-	-	-	-	-
MG-NLR-2	4	4.6	164	52	14	2.2	11	0.84	0.084	0.11	4.7	0.34	0.0042	0.0038	0.0038	0.0084	0.079
MG-NLR-2	5	4.7	125	25	6.8	1.0	7.3	0.56	-	-	-	-	-	-	-	-	-
MG-NLR-2	6	4.6	66	11	2.5	0.44	5.7	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-2	7	4.7	54	9.9	2.5	0.44	7.2	0.55	-	-	-	-	-	-	-	-	-
MG-NLR-2	8	4.6	82	31	7.5	1.5	16	1.1	0.42	0.18	3.0	0.42	0.0053	0.0095	0.0048	0.0053	0.075
MG-NLR-2	9	5.0	1640	132	53	0.90	2.0	0.13	-	-	-	-	-	-	-	-	-
MG-NLR-2	10	4.5	91	17	3.9	0.93	7.7	0.52	-	-	-	-	-	-	-	-	-
MG-NLR-2	11	4.3	144	11	2.9	0.95	3.3	0.22	-	-	-	-	-	-	-	-	-
MG-NLR-2	12	4.4	142	24	5.7	1.2	2.2	0.44	0.088	0.088	1.4	0.26	0.0022	0.050	0.0020	0.0044	0.088
MG-NLR-2	13	4.3	136	4.5	1.1	0.22	0.45	0.090	-	-	-	-	-	-	-	-	-
MG-NLR-2	14	4.4	138	21	4.9	1.1	2.0	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-2	15	4.3	141	4.3	1.0	0.23	0.42	0.085	-	-	-	-	-	-	-	-	-
MG-NLR-2	16	4.4	100	32	7.6	1.7	16	0.94	0.094	0.12	2.1	0.37	0.028	0.0042	0.0043	0.0047	0.12
MG-NLR-2	17	4.4	89	10	2.3	0.55	5.8	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-2	18	4.3	103	12	2.8	0.68	5.8	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-2	19	4.3	104	12	2.9	0.72	5.8	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-2	20	4.7	34	12	2.6	0.79	6.9	0.98	0.049	0.098	0.98	0.30	0.0049	0.0044	0.0045	0.0098	0.042
MG-NLR-2	21	4.5	125	13	2.9	0.79	2.0	0.29	-	-	-	-	-	-	-	-	-
MG-NLR-2	22	4.2	170	11	2.6	0.67	1.2	0.17	-	-	-	-	-	-	-	-	-
MG-NLR-2	23	4.2	154	14	3.1	0.85	1.7	0.24	-	-	-	-	-	-	-	-	-
MG-NLR-2	24	4.4	144	41	9.0	2.5	12	0.99	0.49	0.22	2.3	0.49	0.14	0.0044	0.0045	0.020	0.20
MG-NLR-2	25	4.4	106	12	2.5	0.71	4.1	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-2	26	4.4	116	16	3.3	0.96	5.0	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-2	27	4.2	124	17	3.6	1.1	5.5	0.46	-	-	-	-	-	-	-	-	-
MG-NLR-2	28	4.3	106	15	3.0	0.91	8.4	0.65	0.32	0.097	0.84	0.19	0.19	0.029	0.0029	0.0032	0.11
MG-NLR-2	29	4.3	109	18	3.5	1.1	6.4	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-2	30	4.5	62	10	2.0	0.69	6.4	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-2	31	4.4	113	20	4.1	1.4	6.9	0.53	-	-	-	-	-	-	-	-	-
MG-NLR-2	32	4.3	165	41	8.5	2.8	7.9	0.61	0.24	0.13	1.6	0.36	0.061	0.027	0.0028	0.0030	0.22
MG-NLR-2	33	4.0	173	23	4.9	1.6	4.9	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-2	34	5.0	25	4.5	0.73	0.37	6.8	0.52	-	-	-	-	-	-	-	-	-
MG-NLR-2	35	4.3	139	18	3.3	1.2	4.9	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-2	36	4.5	163	47	9.3	3.1	17	0.84	0.17	0.24	1.7	0.25	0.0042	0.038	0.0038	0.0042	0.24
MG-NLR-2	37	4.0	148	19	3.6	1.3	7.4	0.37	-	-	-	-	-	-	-	-	-
MG-NLR-2	38	4.2	133	15	2.8	0.99	7.0	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-2	39	4.0	185	28	4.9	1.8	8.9	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-2	40	4.2	153	46	8.2	3.1	19	0.82	0.041	0.15	1.5	0.16	0.41	0.037	0.0037	0.016	0.34
MG-NLR-2	41	4.1	171	23	3.9	1.5	9.0	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-2	42	4.2	119	14	2.4	0.87	9.1	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-2	43	4.0	174	19	3.4	1.3	7.1	0.31	-	-	-	-	-	-	-	-	-
MG-NLR-2	44	4.1	166	43	7.1	2.8	21	0.73	0.15	0.25	1.5	0.22	0.37	0.033	0.0033	0.0037	0.32
MG-NLR-2	45	4.0	158	23	3.7	1.5	11	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-2	46	3.8	152	21	3.5	1.4	11	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-2	47	3.9	126	17	2.5	1.0	11	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-2	48	4.0	134	31	4.8	2.0	17	0.67	0.20	0.19	1.1	0.13	0.034	0.14	0.0031	0.0067	0.34
MG-NLR-2	49	4.0	156	19	2.8	1.2	9.8	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-2	50	4.1	154	18	2.5	1.1	8.9	0.36	-	-	-	-	-	-	-	-	-
MG-NLR-2	51	3.8	157	22	3.0	1.3	9.6	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-2	52	4.1	156	29	4.1	1.9	21	0.56	0.056	0.18	0.96	0.17	0.28	0.025	0.0026	0.0056	0.27
MG-NLR-2	53	3.9	153	18	2.5	1.1	13	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-2	54	4.1	150	21	2.7	1.3	15	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-2	55	3.9	176	26	3.5	1.7	16	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-2	56	4.1	144	29	3.7	1.8	18	0.61	0.061	0.20	0.92	0.12	0.31	0.028	0.0028	0.0031	0.28
MG-NLR-2	57	3.9	151	17	2.2	1.0	11	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-2	58	4.0	144	15	1.8	0.89	9.2	0.32	-	-	-	-	-	-	-	-	-
MG-NLR-2	59	3.9	167	17	2.0	1.0	8.6	0.30	-	-	-	-	-	-	-	-	-
MG-NLR-2	60	3.8	176	23	2.7	1.4	15	0.44	0.022	0.15	0.66	0.088	0.022	0.020	0.0020	0.0022	0.27
MG-NLR-2	61	3.8	149	20	2.1	1.1	14	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-2	62	3.8	142	20	2.1	1.0	14	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-2	63	3.9	145	20	2.0	1.1	14	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-2	64	3.9	104	17	1.7	0.94	13	0.52	0.026	0.042	0.52	0.052	0.026	0.024	0.0024	0.016	0.19

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-2	1	0.00069	0.012	0.032	0.00035	2.3	0.00069	0.00087	1.7	0.95	0.27	2.3	0.27	0.0000069	0.00061	1.5	0.35
MG-NLR-2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	4	0.00059	0.0065	0.10	0.000042	0.66	0.000050	0.00021	0.13	0.18	0.037	2.9	0.013	0.0000034	0.00017	0.10	0.040
MG-NLR-2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	8	0.00063	0.0054	0.24	0.000053	0.45	0.000032	0.00026	0.087	0.14	0.041	3.4	0.0073	0.0000053	0.00021	0.059	0.054
MG-NLR-2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	12	0.00022	0.0021	0.070	0.000044	0.27	0.000031	0.00011	0.10	0.25	0.083	3.1	0.0070	0.0000013	0.000044	0.067	0.023
MG-NLR-2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	16	0.00056	0.0041	0.20	0.000047	0.37	0.000047	0.00023	0.11	0.36	0.15	4.3	0.0094	0.0000056	0.000094	0.083	0.030
MG-NLR-2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	20	0.00039	0.0025	0.098	0.000049	0.12	0.000020	0.00025	0.042	0.16	0.061	1.7	0.0033	0.0000039	0.000098	0.031	0.023
MG-NLR-2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	24	0.00059	0.0041	0.18	0.000099	0.44	0.000059	0.00025	0.17	0.78	0.36	5.4	0.012	0.0000059	0.000049	0.12	0.034
MG-NLR-2	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	28	0.00032	0.0022	0.15	0.000065	0.24	0.000032	0.00016	0.091	0.43	0.23	2.9	0.0065	0.00000065	0.000065	0.062	0.025
MG-NLR-2	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	32	0.00024	0.0019	0.091	0.00012	0.24	0.000067	0.00015	0.16	0.96	0.47	4.8	0.012	0.0000012	0.00012	0.11	0.047
MG-NLR-2	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	36	0.00042	0.0024	0.078	0.00017	0.24	0.000084	0.00021	0.19	1.4	0.59	5.5	0.014	0.00000042	0.00025	0.13	0.049
MG-NLR-2	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	40	0.00033	0.0029	0.056	0.00033	0.30	0.000098	0.00020	0.25	2.3	0.94	6.5	0.017	0.0000074	0.0012	0.16	0.058
MG-NLR-2	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	44	0.00037	0.0026	0.067	0.00029	0.24	0.00010	0.00018	0.22	2.3	0.91	5.7	0.015	0.00000073	0.00015	0.15	0.054
MG-NLR-2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	48	0.00040	0.0036	0.010	0.00027	0.22	0.000094	0.00017	0.16	2.2	0.97	1.9	0.012	0.00000034	0.0047	0.11	0.065
MG-NLR-2	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	52	0.00023	0.0019	0.043	0.00023	0.16	0.00011	0.00014	0.14	2.5	0.91	4.1	0.0096	0.0000040	0.000028	0.100	0.035
MG-NLR-2	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	56	0.00024	0.0017	0.048	0.00024	0.13	0.000092	0.00015	0.15	2.9	0.94	4.3	0.0092	0.00000031	0.00012	0.10	0.032
MG-NLR-2	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	60	0.00013	0.0013	0.031	0.00027	0.097	0.000084	0.00011	0.12	2.7	0.99	3.7	0.0071	0.00000022	0.00053	0.083	0.030
MG-NLR-2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-2	64	0.00021	0.0013	0.045	0.00016	0.068	0.000057	0.00013	0.078	2.1	0.75	3.0	0.0049	0.0000010	0.00010	0.055	0.025

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-2	1	0.000022	0.88	0.0056	0.000043	0.00026	2.3	0.00026	0.15
MG-NLR-2	2	-	-	-	-	-	-	-	-
MG-NLR-2	3	-	-	-	-	-	-	-	-
MG-NLR-2	4	0.000021	0.60	0.0022	0.000042	0.00050	0.23	0.00017	0.049
MG-NLR-2	5	-	-	-	-	-	-	-	-
MG-NLR-2	6	-	-	-	-	-	-	-	-
MG-NLR-2	7	-	-	-	-	-	-	-	-
MG-NLR-2	8	0.000026	0.50	0.0013	0.000053	0.00032	0.15	0.00011	0.055
MG-NLR-2	9	-	-	-	-	-	-	-	-
MG-NLR-2	10	-	-	-	-	-	-	-	-
MG-NLR-2	11	-	-	-	-	-	-	-	-
MG-NLR-2	12	0.000011	0.46	0.00070	0.000022	0.000044	0.24	0.000022	0.013
MG-NLR-2	13	-	-	-	-	-	-	-	-
MG-NLR-2	14	-	-	-	-	-	-	-	-
MG-NLR-2	15	-	-	-	-	-	-	-	-
MG-NLR-2	16	0.000023	0.52	0.0010	0.000047	0.000094	0.33	0.000047	0.025
MG-NLR-2	17	-	-	-	-	-	-	-	-
MG-NLR-2	18	-	-	-	-	-	-	-	-
MG-NLR-2	19	-	-	-	-	-	-	-	-
MG-NLR-2	20	0.000025	0.18	0.00039	0.000049	0.00030	0.099	0.000049	0.022
MG-NLR-2	21	-	-	-	-	-	-	-	-
MG-NLR-2	22	-	-	-	-	-	-	-	-
MG-NLR-2	23	-	-	-	-	-	-	-	-
MG-NLR-2	24	0.000025	0.60	0.0011	0.000049	0.00039	0.46	0.000049	0.029
MG-NLR-2	25	-	-	-	-	-	-	-	-
MG-NLR-2	26	-	-	-	-	-	-	-	-
MG-NLR-2	27	-	-	-	-	-	-	-	-
MG-NLR-2	28	0.000016	0.28	0.00052	0.000032	0.00013	0.25	0.000032	0.026
MG-NLR-2	29	-	-	-	-	-	-	-	-
MG-NLR-2	30	-	-	-	-	-	-	-	-
MG-NLR-2	31	-	-	-	-	-	-	-	-
MG-NLR-2	32	0.000015	0.50	0.00067	0.000030	0.00030	0.52	0.000030	0.024
MG-NLR-2	33	-	-	-	-	-	-	-	-
MG-NLR-2	34	-	-	-	-	-	-	-	-
MG-NLR-2	35	-	-	-	-	-	-	-	-
MG-NLR-2	36	0.000021	0.57	0.00076	0.000042	0.00067	0.62	0.000042	0.028
MG-NLR-2	37	-	-	-	-	-	-	-	-
MG-NLR-2	38	-	-	-	-	-	-	-	-
MG-NLR-2	39	-	-	-	-	-	-	-	-
MG-NLR-2	40	0.000020	0.64	0.00074	0.000041	0.00090	0.94	0.000041	0.035
MG-NLR-2	41	-	-	-	-	-	-	-	-
MG-NLR-2	42	-	-	-	-	-	-	-	-
MG-NLR-2	43	-	-	-	-	-	-	-	-
MG-NLR-2	44	0.000018	0.53	0.00073	0.000037	0.00015	0.96	0.000037	0.035
MG-NLR-2	45	-	-	-	-	-	-	-	-
MG-NLR-2	46	-	-	-	-	-	-	-	-
MG-NLR-2	47	-	-	-	-	-	-	-	-
MG-NLR-2	48	0.000017	0.34	0.00067	0.000034	0.0062	0.86	0.000034	0.050
MG-NLR-2	49	-	-	-	-	-	-	-	-
MG-NLR-2	50	-	-	-	-	-	-	-	-
MG-NLR-2	51	-	-	-	-	-	-	-	-
MG-NLR-2	52	0.000014	0.32	0.00051	0.000028	0.00028	0.87	0.000028	0.032
MG-NLR-2	53	-	-	-	-	-	-	-	-
MG-NLR-2	54	-	-	-	-	-	-	-	-
MG-NLR-2	55	-	-	-	-	-	-	-	-
MG-NLR-2	56	0.000015	0.27	0.00049	0.000031	0.00037	0.96	0.000031	0.029
MG-NLR-2	57	-	-	-	-	-	-	-	-
MG-NLR-2	58	-	-	-	-	-	-	-	-
MG-NLR-2	59	-	-	-	-	-	-	-	-
MG-NLR-2	60	0.000011	0.19	0.00040	0.000022	0.0022	0.90	0.000022	0.027
MG-NLR-2	61	-	-	-	-	-	-	-	-
MG-NLR-2	62	-	-	-	-	-	-	-	-
MG-NLR-2	63	-	-	-	-	-	-	-	-
MG-NLR-2	64	0.000013	0.13	0.00031	0.000026	0.00031	0.67	0.000026	0.020

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-3	1	4.3	2040	1182	332	77	20	0.90	43	0.25	20	21	0.45	0.0040	0.0041	-	0.21
MG-NLR-3	2	4.5	374	105	30	4.7	14	0.62	-	-	-	-	-	-	-	-	-
MG-NLR-3	3	4.6	252	72	21	3.2	16	0.72	-	-	-	-	-	-	-	-	-
MG-NLR-3	4	4.6	141	51	13	2.2	9.6	0.96	0.096	0.13	5.2	0.38	0.0048	0.0043	0.0044	0.0096	0.085
MG-NLR-3	5	4.7	131	38	9.5	1.6	7.9	0.79	-	-	-	-	-	-	-	-	-
MG-NLR-3	6	4.6	63	11	2.6	0.44	4.9	0.49	-	-	-	-	-	-	-	-	-
MG-NLR-3	7	4.6	79	12	3.1	0.56	4.6	0.46	-	-	-	-	-	-	-	-	-
MG-NLR-3	8	4.7	40	16	3.6	1.1	19	1.1	0.33	0.14	2.2	0.22	0.0055	0.0049	0.0050	0.16	0.072
MG-NLR-3	9	4.6	86	3.6	0.83	0.15	2.0	0.12	-	-	-	-	-	-	-	-	-
MG-NLR-3	10	4.6	61	11	2.5	0.50	8.5	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-3	11	4.3	158	17	4.1	0.91	5.0	0.29	-	-	-	-	-	-	-	-	-
MG-NLR-3	12	4.4	120	28	6.8	1.4	3.1	0.62	0.062	0.093	1.8	0.31	0.0031	3.1	0.0028	0.0062	0.12
MG-NLR-3	13	4.3	117	4.4	1.0	0.21	0.51	0.10	-	-	-	-	-	-	-	-	-
MG-NLR-3	14	4.3	127	22	5.2	1.1	2.3	0.47	-	-	-	-	-	-	-	-	-
MG-NLR-3	15	4.3	132	4.6	1.1	0.25	0.50	0.100	-	-	-	-	-	-	-	-	-
MG-NLR-3	16	4.6	64	34	7.7	1.7	13	1.1	0.11	0.14	2.1	0.42	0.0053	0.0047	0.0048	0.032	0.081
MG-NLR-3	17	4.4	97	14	3.2	0.76	5.1	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-3	18	4.6	37	5.4	1.2	0.29	5.0	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-3	19	4.3	101	14	3.3	0.86	4.7	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-3	20	4.7	42	14	3.2	1.1	9.9	0.99	0.049	0.079	0.99	0.30	0.0049	0.0044	0.0045	0.0099	0.050
MG-NLR-3	21	4.4	114	13	3.0	0.78	3.2	0.32	-	-	-	-	-	-	-	-	-
MG-NLR-3	22	4.2	185	24	5.6	1.5	3.5	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-3	23	4.3	196	30	7.0	1.9	4.1	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-3	24	4.3	180	52	11	3.1	13	1.1	0.43	0.26	2.6	0.43	0.19	0.0048	0.0049	0.032	0.26
MG-NLR-3	25	4.4	112	19	3.9	1.1	5.8	0.48	-	-	-	-	-	-	-	-	-
MG-NLR-3	26	4.4	97	18	3.6	1.1	6.9	0.58	-	-	-	-	-	-	-	-	-
MG-NLR-3	27	4.2	135	25	5.1	1.6	7.2	0.60	-	-	-	-	-	-	-	-	-
MG-NLR-3	28	4.4	71	19	3.9	1.3	12	0.88	0.18	0.096	0.96	0.18	0.26	0.039	0.0040	0.0044	0.096
MG-NLR-3	29	5.4	10	2.0	0.36	0.41	7.1	0.51	-	-	-	-	-	-	-	-	-
MG-NLR-3	30	4.2	135	20	4.1	1.3	6.0	0.43	-	-	-	-	-	-	-	-	-
MG-NLR-3	31	4.2	223	55	12	3.7	9.6	0.69	-	-	-	-	-	-	-	-	-
MG-NLR-3	32	4.2	173	53	11	3.5	9.4	0.67	0.20	0.14	1.8	0.33	0.067	0.030	0.0030	0.0033	0.28
MG-NLR-3	33	4.0	185	29	5.7	1.9	6.1	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-3	34	4.5	158	31	5.5	2.0	7.7	0.55	-	-	-	-	-	-	-	-	-
MG-NLR-3	35	4.0	143	26	4.4	1.6	7.6	0.54	-	-	-	-	-	-	-	-	-
MG-NLR-3	36	4.5	131	37	6.5	2.3	15	0.87	0.17	0.21	1.6	0.17	0.0043	0.039	0.0039	0.0043	0.19
MG-NLR-3	37	4.1	100	13	2.3	0.77	6.9	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-3	38	4.3	68	8.8	1.4	0.55	7.1	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-3	39	4.1	139	23	3.9	1.4	8.8	0.52	-	-	-	-	-	-	-	-	-
MG-NLR-3	40	4.1	118	43	7.2	2.8	23	1.0	0.051	0.14	1.5	0.20	0.51	0.046	0.0047	0.020	0.32
MG-NLR-3	41	4.1	153	23	3.6	1.4	9.7	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-3	42	4.0	169	26	4.1	1.7	11	0.51	-	-	-	-	-	-	-	-	-
MG-NLR-3	43	3.9	182	33	5.1	2.1	11	0.51	-	-	-	-	-	-	-	-	-
MG-NLR-3	44	4.4	50	15	2.3	0.95	11	0.95	0.19	0.12	0.66	0.19	0.47	0.043	0.0043	0.0047	0.21
MG-NLR-3	45	4.0	174	19	3.0	1.3	3.8	0.31	-	-	-	-	-	-	-	-	-
MG-NLR-3	46	3.8	173	27	4.0	1.7	5.4	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-3	47	3.8	174	24	3.4	1.5	4.7	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-3	48	4.0	150	40	5.7	2.5	20	0.75	0.075	0.24	1.3	0.15	0.037	0.15	0.0034	0.030	0.31
MG-NLR-3	49	4.0	175	22	3.1	1.4	11	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-3	50	4.0	168	23	3.0	1.4	12	0.44	-	-	-	-	-	-	-	-	-
MG-NLR-3	51	3.8	177	25	3.3	1.5	10	0.38	-	-	-	-	-	-	-	-	-
MG-NLR-3	52	4.0	157	32	4.1	1.9	27	0.61	0.061	0.19	1.0	0.18	0.30	0.027	0.0028	0.018	0.29
MG-NLR-3	53	3.9	166	27	3.5	1.6	22	0.48	-	-	-	-	-	-	-	-	-
MG-NLR-3	54	3.9	183	18	2.3	1.1	13	0.28	-	-	-	-	-	-	-	-	-
MG-NLR-3	55	4.0	180	28	3.3	1.7	21	0.46	-	-	-	-	-	-	-	-	-
MG-NLR-3	56	4.2	130	34	3.9	2.0	29	0.82	0.041	0.24	1.2	0.16	0.41	0.037	0.0037	0.016	0.34
MG-NLR-3	57	3.9	128	16	1.8	0.94	15	0.43	-	-	-	-	-	-	-	-	-
MG-NLR-3	58	4.0	130	15	1.6	0.81	13	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-3	59	4.0	148	14	1.4	0.75	10	0.28	-	-	-	-	-	-	-	-	-
MG-NLR-3	60	3.8	145	27	2.8	1.5	20	0.64	0.032	0.17	0.89	0.064	0.032	0.029	0.0029	0.0032	0.29
MG-NLR-3	61	3.9	128	18	1.8	0.96	15	0.46	-	-	-	-	-	-	-	-	-
MG-NLR-3	62	3.8	120	19	1.8	0.89	16	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-3	63	3.9	117	17	1.5	0.85	14	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-3	64	3.9	101	17	1.5	0.89	16	0.56	0.028	0.078	0.56	0.056	0.028	0.025	0.0025	0.017	0.19

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-3	1	0.00081	0.013	0.034	0.00027	2.3	0.00073	0.00054	1.8	0.95	0.18	2.4	0.27	0.0000063	0.00081	1.5	0.39
MG-NLR-3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	4	0.00067	0.0075	0.12	0.000048	0.75	0.000048	0.00024	0.14	0.19	0.033	3.1	0.013	0.0000038	0.00029	0.11	0.056
MG-NLR-3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	8	0.00076	0.0059	0.15	0.000055	0.40	0.000011	0.00027	0.055	0.092	0.026	2.0	0.0048	0.0000065	0.00022	0.037	0.043
MG-NLR-3	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	12	0.00037	0.0033	0.099	0.000062	0.33	0.000031	0.00015	0.12	0.27	0.093	3.7	0.0087	0.0000012	0.0019	0.084	0.028
MG-NLR-3	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	16	0.00074	0.0040	0.19	0.000053	0.26	0.000021	0.00026	0.080	0.21	0.076	3.1	0.0062	0.0000032	0.00011	0.054	0.034
MG-NLR-3	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	20	0.00030	0.0022	0.084	0.000049	0.12	0.000020	0.00025	0.056	0.22	0.077	2.0	0.0043	0.0000040	0.00059	0.040	0.024
MG-NLR-3	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	24	0.00053	0.0045	0.14	0.00021	0.46	0.000075	0.00027	0.22	1.1	0.47	6.6	0.016	0.0000053	0.000053	0.15	0.042
MG-NLR-3	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	28	0.00035	0.0021	0.11	0.000044	0.15	0.000035	0.00022	0.088	0.49	0.20	2.9	0.0060	0.00000044	0.000044	0.059	0.029
MG-NLR-3	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	32	0.00027	0.0024	0.040	0.00020	0.28	0.000074	0.00017	0.19	1.6	0.67	4.9	0.013	0.0000013	0.000067	0.13	0.032
MG-NLR-3	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	36	0.00043	0.0027	0.12	0.00017	0.24	0.000069	0.00022	0.13	1.0	0.56	4.4	0.0087	0.00000043	0.00017	0.090	0.035
MG-NLR-3	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	40	0.00051	0.0034	0.10	0.00031	0.32	0.000082	0.00026	0.21	2.1	1.0	8.0	0.013	0.00000051	0.0012	0.13	0.082
MG-NLR-3	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	44	0.00038	0.0022	0.045	0.000095	0.095	0.000038	0.00024	0.069	0.79	0.44	2.6	0.0049	0.0000019	0.0033	0.047	0.020
MG-NLR-3	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	48	0.00037	0.0022	0.058	0.00030	0.22	0.00011	0.00019	0.17	2.7	0.97	5.2	0.012	0.00000037	0.000075	0.11	0.050
MG-NLR-3	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	52	0.00024	0.0019	0.042	0.00024	0.16	0.00010	0.00015	0.15	3.1	1.0	4.4	0.0097	0.0000049	0.000061	0.10	0.038
MG-NLR-3	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	56	0.00033	0.0025	0.079	0.00033	0.16	0.00011	0.00020	0.16	3.9	1.4	5.6	0.011	0.000014	0.000041	0.11	0.034
MG-NLR-3	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	60	0.00019	0.0018	0.052	0.00025	0.11	0.000083	0.00016	0.13	3.5	1.3	4.8	0.0076	0.0000025	0.000064	0.086	0.036
MG-NLR-3	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-3	64	0.00017	0.0012	0.067	0.00017	0.073	0.000061	0.00014	0.073	2.4	0.87	3.4	0.0047	0.00000028	0.000028	0.051	0.028

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-3	1	0.000022	0.90	0.0063	0.00018	0.00036	2.4	0.00027	0.12
MG-NLR-3	2	-	-	-	-	-	-	-	-
MG-NLR-3	3	-	-	-	-	-	-	-	-
MG-NLR-3	4	0.000024	0.64	0.0024	0.000048	0.00029	0.29	0.00019	0.079
MG-NLR-3	5	-	-	-	-	-	-	-	-
MG-NLR-3	6	-	-	-	-	-	-	-	-
MG-NLR-3	7	-	-	-	-	-	-	-	-
MG-NLR-3	8	0.000027	0.29	0.00098	0.000055	0.00076	0.12	0.00022	0.025
MG-NLR-3	9	-	-	-	-	-	-	-	-
MG-NLR-3	10	-	-	-	-	-	-	-	-
MG-NLR-3	11	-	-	-	-	-	-	-	-
MG-NLR-3	12	0.000015	0.56	0.00093	0.000031	0.0022	0.33	0.00012	0.014
MG-NLR-3	13	-	-	-	-	-	-	-	-
MG-NLR-3	14	-	-	-	-	-	-	-	-
MG-NLR-3	15	-	-	-	-	-	-	-	-
MG-NLR-3	16	0.000026	0.35	0.00074	0.000053	0.00011	0.25	0.000053	0.025
MG-NLR-3	17	-	-	-	-	-	-	-	-
MG-NLR-3	18	-	-	-	-	-	-	-	-
MG-NLR-3	19	-	-	-	-	-	-	-	-
MG-NLR-3	20	0.000025	0.22	0.00040	0.000049	0.00040	0.15	0.000049	0.026
MG-NLR-3	21	-	-	-	-	-	-	-	-
MG-NLR-3	22	-	-	-	-	-	-	-	-
MG-NLR-3	23	-	-	-	-	-	-	-	-
MG-NLR-3	24	0.000027	0.75	0.0012	0.000053	0.00011	0.77	0.000053	0.042
MG-NLR-3	25	-	-	-	-	-	-	-	-
MG-NLR-3	26	-	-	-	-	-	-	-	-
MG-NLR-3	27	-	-	-	-	-	-	-	-
MG-NLR-3	28	0.000022	0.25	0.00044	0.000044	0.00018	0.29	0.000044	0.029
MG-NLR-3	29	-	-	-	-	-	-	-	-
MG-NLR-3	30	-	-	-	-	-	-	-	-
MG-NLR-3	31	-	-	-	-	-	-	-	-
MG-NLR-3	32	0.000017	0.55	0.00074	0.000033	0.00020	0.90	0.000033	0.028
MG-NLR-3	33	-	-	-	-	-	-	-	-
MG-NLR-3	34	-	-	-	-	-	-	-	-
MG-NLR-3	35	-	-	-	-	-	-	-	-
MG-NLR-3	36	0.000022	0.36	0.00069	0.000043	0.00052	0.54	0.000043	0.021
MG-NLR-3	37	-	-	-	-	-	-	-	-
MG-NLR-3	38	-	-	-	-	-	-	-	-
MG-NLR-3	39	-	-	-	-	-	-	-	-
MG-NLR-3	40	0.000026	0.48	0.00072	0.000051	0.0020	0.95	0.000051	0.045
MG-NLR-3	41	-	-	-	-	-	-	-	-
MG-NLR-3	42	-	-	-	-	-	-	-	-
MG-NLR-3	43	-	-	-	-	-	-	-	-
MG-NLR-3	44	0.000047	0.17	0.00038	0.000047	0.0086	0.35	0.00038	0.017
MG-NLR-3	45	-	-	-	-	-	-	-	-
MG-NLR-3	46	-	-	-	-	-	-	-	-
MG-NLR-3	47	-	-	-	-	-	-	-	-
MG-NLR-3	48	0.000019	0.36	0.00060	0.000037	0.00030	0.99	0.000037	0.031
MG-NLR-3	49	-	-	-	-	-	-	-	-
MG-NLR-3	50	-	-	-	-	-	-	-	-
MG-NLR-3	51	-	-	-	-	-	-	-	-
MG-NLR-3	52	0.000015	0.32	0.00055	0.000030	0.00024	1.00	0.000030	0.032
MG-NLR-3	53	-	-	-	-	-	-	-	-
MG-NLR-3	54	-	-	-	-	-	-	-	-
MG-NLR-3	55	-	-	-	-	-	-	-	-
MG-NLR-3	56	0.000020	0.29	0.00074	0.000041	0.00057	1.1	0.000041	0.038
MG-NLR-3	57	-	-	-	-	-	-	-	-
MG-NLR-3	58	-	-	-	-	-	-	-	-
MG-NLR-3	59	-	-	-	-	-	-	-	-
MG-NLR-3	60	0.000016	0.21	0.00051	0.000032	0.00032	1.0	0.000032	0.028
MG-NLR-3	61	-	-	-	-	-	-	-	-
MG-NLR-3	62	-	-	-	-	-	-	-	-
MG-NLR-3	63	-	-	-	-	-	-	-	-
MG-NLR-3	64	0.000014	0.12	0.00033	0.000028	0.00039	0.65	0.000028	0.018

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-4	1	4.3	1970	1293	361	85	28	1.0	39	0.35	19	19	0.51	0.0046	0.0047	-	0.15
MG-NLR-4	2	4.5	333	83	23	3.7	15	0.55	-	-	-	-	-	-	-	-	-
MG-NLR-4	3	4.6	198	55	15	2.4	19	0.70	-	-	-	-	-	-	-	-	-
MG-NLR-4	4	4.5	144	33	8.9	1.5	6.4	0.64	0.064	0.077	3.1	0.26	0.0032	0.0029	0.0029	0.0064	0.056
MG-NLR-4	5	5.4	15	4.7	1.5	3.3	11	1.1	-	-	-	-	-	-	-	-	-
MG-NLR-4	6	4.6	151	20	5.0	1.1	3.3	0.33	-	-	-	-	-	-	-	-	-
MG-NLR-4	7	4.4	200	31	8.0	1.5	4.0	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-4	8	4.6	125	61	16	3.1	35	1.2	0.96	0.22	5.4	0.60	0.0060	0.0054	0.0055	0.54	0.13
MG-NLR-4	9	4.5	118	5.1	1.3	0.26	3.4	0.12	-	-	-	-	-	-	-	-	-
MG-NLR-4	10	4.4	130	27	6.8	1.4	16	0.57	-	-	-	-	-	-	-	-	-
MG-NLR-4	11	4.5	101	10	2.3	0.50	7.7	0.27	-	-	-	-	-	-	-	-	-
MG-NLR-4	12	4.7	48	9.0	2.1	0.51	2.3	0.56	0.056	0.084	1.2	0.17	0.028	0.011	0.0026	0.011	0.044
MG-NLR-4	13	4.6	43	1.6	0.33	0.083	0.41	0.10	-	-	-	-	-	-	-	-	-
MG-NLR-4	14	4.5	66	11	2.5	0.57	1.9	0.48	-	-	-	-	-	-	-	-	-
MG-NLR-4	15	4.6	72	2.3	0.51	0.12	0.37	0.091	-	-	-	-	-	-	-	-	-
MG-NLR-4	16	4.6	49	17	3.8	0.95	11	1.1	0.11	0.15	1.8	0.32	0.0053	0.0047	0.0048	0.063	0.061
MG-NLR-4	17	4.6	48	7.5	1.6	0.47	4.7	0.47	-	-	-	-	-	-	-	-	-
MG-NLR-4	18	4.5	66	11	2.4	0.61	4.7	0.47	-	-	-	-	-	-	-	-	-
MG-NLR-4	19	4.5	62	9.5	2.2	0.54	4.5	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-4	20	4.9	18	6.7	1.5	0.59	6.9	0.99	0.049	0.099	0.89	0.20	0.0049	0.0044	0.0045	0.0099	0.023
MG-NLR-4	21	4.7	34	4.3	0.96	0.25	2.5	0.36	-	-	-	-	-	-	-	-	-
MG-NLR-4	22	4.4	102	17	4.0	1.0	3.3	0.47	-	-	-	-	-	-	-	-	-
MG-NLR-4	23	5.0	6.0	1.3	0.33	0.80	3.3	0.47	-	-	-	-	-	-	-	-	-
MG-NLR-4	24	4.8	24	8.6	1.9	1.4	5.3	1.1	0.11	0.053	1.2	0.11	0.085	0.0048	0.0048	0.064	0.075
MG-NLR-4	25	4.6	51	7.7	1.7	0.58	2.4	0.48	-	-	-	-	-	-	-	-	-
MG-NLR-4	26	4.4	80	14	3.0	0.85	2.6	0.53	-	-	-	-	-	-	-	-	-
MG-NLR-4	27	4.6	34	3.5	0.77	0.33	2.0	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-4	28	4.2	161	53	12	3.5	17	0.83	0.25	0.17	2.0	0.33	0.33	0.037	0.0038	0.12	0.23
MG-NLR-4	29	4.1	169	37	8.6	2.3	12	0.62	-	-	-	-	-	-	-	-	-
MG-NLR-4	30	4.2	183	36	7.6	2.3	11	0.55	-	-	-	-	-	-	-	-	-
MG-NLR-4	31	4.9	12	2.3	0.49	0.65	11	0.54	-	-	-	-	-	-	-	-	-
MG-NLR-4	32	4.2	209	67	15	4.6	19	0.87	0.26	0.19	2.3	0.43	0.087	0.039	0.0039	0.017	0.70
MG-NLR-4	33	4.0	219	33	7.2	2.2	8.9	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-4	34	4.5	206	41	8.7	2.6	12	0.55	-	-	-	-	-	-	-	-	-
MG-NLR-4	35	4.0	179	37	7.2	2.3	13	0.60	-	-	-	-	-	-	-	-	-
MG-NLR-4	36	4.7	56	19	3.7	1.1	11	1.0	0.10	0.11	0.94	0.10	0.0052	0.047	0.0047	0.042	0.51
MG-NLR-4	37	4.1	92	12	2.3	0.70	4.3	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-4	38	4.5	136	19	3.8	1.2	4.6	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-4	39	3.9	214	43	8.2	2.7	6.4	0.59	-	-	-	-	-	-	-	-	-
MG-NLR-4	40	4.0	167	53	10	3.5	26	0.86	0.043	0.18	1.8	0.17	0.43	0.039	0.0039	0.017	0.44
MG-NLR-4	41	4.0	176	25	4.5	1.5	12	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-4	42	4.2	102	10	1.8	0.60	11	0.36	-	-	-	-	-	-	-	-	-
MG-NLR-4	43	4.7	6.0	1.3	0.26	0.74	16	0.53	-	-	-	-	-	-	-	-	-
MG-NLR-4	44	4.1	179	57	9.9	3.6	26	0.90	0.27	0.32	2.0	0.36	0.45	0.040	0.0041	0.0045	0.78
MG-NLR-4	45	4.0	173	27	4.5	1.7	13	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-4	46	3.8	150	21	3.6	1.3	12	0.41	-	-	-	-	-	-	-	-	-
MG-NLR-4	47	3.8	161	25	4.1	1.5	13	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-4	48	4.0	161	40	6.7	2.6	20	0.70	0.070	0.24	1.4	0.14	0.035	0.14	0.0032	0.035	0.31
MG-NLR-4	49	4.0	190	24	3.8	1.5	11	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-4	50	3.9	171	24	3.7	1.5	12	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-4	51	3.8	185	24	3.9	1.5	9.8	0.35	-	-	-	-	-	-	-	-	-
MG-NLR-4	52	4.0	161	32	4.8	2.0	18	0.60	0.060	0.18	1.1	0.18	0.30	0.027	0.0027	0.030	0.29
MG-NLR-4	53	3.9	186	28	4.2	1.8	13	0.45	-	-	-	-	-	-	-	-	-
MG-NLR-4	54	3.9	175	22	3.1	1.4	11	0.36	-	-	-	-	-	-	-	-	-
MG-NLR-4	55	3.9	168	29	4.1	1.8	15	0.51	-	-	-	-	-	-	-	-	-
MG-NLR-4	56	4.1	131	27	3.8	1.7	16	0.65	0.032	0.19	0.97	0.13	0.32	0.029	0.0029	0.013	0.37
MG-NLR-4	57	3.9	148	18	2.5	1.1	10.0	0.42	-	-	-	-	-	-	-	-	-
MG-NLR-4	58	4.0	148	18	2.4	1.1	9.3	0.39	-	-	-	-	-	-	-	-	-
MG-NLR-4	59	3.9	159	18	2.4	1.1	8.2	0.34	-	-	-	-	-	-	-	-	-
MG-NLR-4	60	3.7	147	28	3.5	1.7	18	0.67	0.034	0.18	1.0	0.067	0.034	0.030	0.0031	0.0067	0.31
MG-NLR-4	61	3.9	150	18	2.2	1.0	11	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-4	62	3.8	144	24	2.7	1.2	13	0.50	-	-	-	-	-	-	-	-	-
MG-NLR-4	63	3.9	144	19	2.1	1.0	11	0.40	-	-	-	-	-	-	-	-	-
MG-NLR-4	64	3.9	113	26	2.9	1.5	20	0.76	0.038	0.098	0.91	0.076	0.038	0.034	0.0034	0.015	0.29

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-4	1	0.00072	0.0096	0.069	0.00021	1.2	0.00031	0.00026	0.73	0.53	0.12	2.5	0.10	0.0000051	0.00051	0.58	0.10
MG-NLR-4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	4	0.00038	0.0040	0.096	0.000032	0.38	0.000026	0.00016	0.077	0.11	0.024	2.0	0.0077	0.0000026	0.00013	0.059	0.031
MG-NLR-4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	8	0.00072	0.0095	0.19	0.000060	0.88	0.000048	0.00030	0.18	0.34	0.082	5.3	0.014	0.0000072	0.00012	0.12	0.059
MG-NLR-4	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	12	0.00039	0.0035	0.079	0.000028	0.24	0.000011	0.00014	0.038	0.090	0.019	1.2	0.0032	0.0000023	0.00011	0.028	0.019
MG-NLR-4	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	16	0.00084	0.0057	0.15	0.000053	0.36	0.000021	0.00026	0.059	0.14	0.031	1.9	0.0046	0.0000042	0.00011	0.042	0.035
MG-NLR-4	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	20	0.00049	0.0027	0.059	0.000049	0.089	0.0000049	0.00025	0.024	0.057	0.013	0.76	0.0020	0.0000089	0.00020	0.017	0.016
MG-NLR-4	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	24	0.00043	0.0023	0.083	0.000053	0.085	0.000021	0.00075	0.047	0.15	0.058	1.4	0.0038	0.0000043	0.00075	0.033	0.017
MG-NLR-4	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	28	0.00033	0.0029	0.076	0.00017	0.33	0.000083	0.00021	0.22	0.92	0.32	5.1	0.016	0.00000042	0.000083	0.15	0.050
MG-NLR-4	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	32	0.00061	0.0095	0.10	0.00017	0.31	0.000069	0.00069	0.18	0.73	0.55	5.3	0.016	0.000049	0.070	0.12	0.043
MG-NLR-4	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	36	0.00052	0.0047	0.070	0.00010	0.13	0.000031	0.00063	0.094	0.56	0.35	3.1	0.0067	0.0000010	0.014	0.065	0.020
MG-NLR-4	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	40	0.00043	0.0037	0.050	0.00035	0.36	0.00014	0.00022	0.30	2.3	0.94	8.0	0.021	0.0000017	0.0041	0.21	0.050
MG-NLR-4	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	44	0.00063	0.015	0.075	0.00018	0.13	0.000036	0.00099	0.099	0.94	1.2	4.5	0.0076	0.0000027	0.097	0.071	0.035
MG-NLR-4	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	48	0.00042	0.0024	0.045	0.00028	0.22	0.000091	0.00017	0.18	1.8	0.77	4.7	0.012	0.0000007	0.0011	0.12	0.045
MG-NLR-4	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	52	0.00024	0.0021	0.042	0.00030	0.17	0.000090	0.00015	0.16	2.1	0.85	4.3	0.010	0.0000048	0.000030	0.11	0.035
MG-NLR-4	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	56	0.00026	0.0026	0.060	0.00032	0.19	0.00010	0.00016	0.18	2.7	1.1	5.7	0.012	0.0000019	0.00032	0.13	0.041
MG-NLR-4	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	60	0.00020	0.0022	0.053	0.00027	0.11	0.000088	0.00017	0.15	2.6	1.0	5.1	0.0094	0.0000054	0.00034	0.10	0.036
MG-NLR-4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MG-NLR-4	64	0.00023	0.0020	0.068	0.00030	0.11	0.000083	0.00019	0.12	2.5	1.1	5.3	0.0076	0.00000038	0.00015	0.088	0.036

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
MG-NLR-4	1	0.000026	0.89	0.0049	0.000051	0.00031	1.1	0.00021	0.028
MG-NLR-4	2	-	-	-	-	-	-	-	-
MG-NLR-4	3	-	-	-	-	-	-	-	-
MG-NLR-4	4	0.000016	0.36	0.0012	0.000032	0.00051	0.14	0.00013	0.013
MG-NLR-4	5	-	-	-	-	-	-	-	-
MG-NLR-4	6	-	-	-	-	-	-	-	-
MG-NLR-4	7	-	-	-	-	-	-	-	-
MG-NLR-4	8	0.000030	0.76	0.0022	0.000060	0.00012	0.40	0.000060	0.016
MG-NLR-4	9	-	-	-	-	-	-	-	-
MG-NLR-4	10	-	-	-	-	-	-	-	-
MG-NLR-4	11	-	-	-	-	-	-	-	-
MG-NLR-4	12	0.000014	0.18	0.00056	0.000028	0.00056	0.11	0.000028	0.016
MG-NLR-4	13	-	-	-	-	-	-	-	-
MG-NLR-4	14	-	-	-	-	-	-	-	-
MG-NLR-4	15	-	-	-	-	-	-	-	-
MG-NLR-4	16	0.000026	0.27	0.00095	0.000053	0.00011	0.15	0.000053	0.041
MG-NLR-4	17	-	-	-	-	-	-	-	-
MG-NLR-4	18	-	-	-	-	-	-	-	-
MG-NLR-4	19	-	-	-	-	-	-	-	-
MG-NLR-4	20	0.000025	0.11	0.00040	0.000049	0.00030	0.050	0.000049	0.018
MG-NLR-4	21	-	-	-	-	-	-	-	-
MG-NLR-4	22	-	-	-	-	-	-	-	-
MG-NLR-4	23	-	-	-	-	-	-	-	-
MG-NLR-4	24	0.000027	0.17	0.00032	0.000053	0.0026	0.11	0.000053	0.030
MG-NLR-4	25	-	-	-	-	-	-	-	-
MG-NLR-4	26	-	-	-	-	-	-	-	-
MG-NLR-4	27	-	-	-	-	-	-	-	-
MG-NLR-4	28	0.000021	0.64	0.00083	0.000042	0.00075	0.48	0.000042	0.100
MG-NLR-4	29	-	-	-	-	-	-	-	-
MG-NLR-4	30	-	-	-	-	-	-	-	-
MG-NLR-4	31	-	-	-	-	-	-	-	-
MG-NLR-4	32	0.00011	0.52	0.0011	0.000043	0.037	2.4	0.0025	0.030
MG-NLR-4	33	-	-	-	-	-	-	-	-
MG-NLR-4	34	-	-	-	-	-	-	-	-
MG-NLR-4	35	-	-	-	-	-	-	-	-
MG-NLR-4	36	0.000052	0.29	0.00063	0.000052	0.032	0.36	0.0020	0.014
MG-NLR-4	37	-	-	-	-	-	-	-	-
MG-NLR-4	38	-	-	-	-	-	-	-	-
MG-NLR-4	39	-	-	-	-	-	-	-	-
MG-NLR-4	40	0.000022	0.82	0.0010	0.000043	0.0030	1.5	0.00017	0.045
MG-NLR-4	41	-	-	-	-	-	-	-	-
MG-NLR-4	42	-	-	-	-	-	-	-	-
MG-NLR-4	43	-	-	-	-	-	-	-	-
MG-NLR-4	44	0.000081	0.26	0.00081	0.000045	0.039	0.70	0.0042	0.024
MG-NLR-4	45	-	-	-	-	-	-	-	-
MG-NLR-4	46	-	-	-	-	-	-	-	-
MG-NLR-4	47	-	-	-	-	-	-	-	-
MG-NLR-4	48	0.000017	0.40	0.00063	0.000035	0.00091	1.1	0.000035	0.027
MG-NLR-4	49	-	-	-	-	-	-	-	-
MG-NLR-4	50	-	-	-	-	-	-	-	-
MG-NLR-4	51	-	-	-	-	-	-	-	-
MG-NLR-4	52	0.000015	0.37	0.00060	0.000030	0.00024	1.2	0.000030	0.030
MG-NLR-4	53	-	-	-	-	-	-	-	-
MG-NLR-4	54	-	-	-	-	-	-	-	-
MG-NLR-4	55	-	-	-	-	-	-	-	-
MG-NLR-4	56	0.000016	0.36	0.00071	0.000032	0.00097	1.5	0.000032	0.033
MG-NLR-4	57	-	-	-	-	-	-	-	-
MG-NLR-4	58	-	-	-	-	-	-	-	-
MG-NLR-4	59	-	-	-	-	-	-	-	-
MG-NLR-4	60	0.000017	0.26	0.00054	0.000034	0.00054	1.3	0.000034	0.030
MG-NLR-4	61	-	-	-	-	-	-	-	-
MG-NLR-4	62	-	-	-	-	-	-	-	-
MG-NLR-4	63	-	-	-	-	-	-	-	-
MG-NLR-4	64	0.000019	0.22	0.00053	0.000038	0.00060	1.3	0.000038	0.026

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-1	1	5.3	3130	2554	620	222	36	3.3	69	1.3	16	19	0.25	0.0050	0.0051	0.0089	0.14
HG-NLR-1	2	5.6	2150	240	90	5.3	5.5	0.52	-	-	-	-	-	-	-	-	-
HG-NLR-1	3	5.2	1600	979	406	5.1	33	3.1	-	-	-	-	-	-	-	-	-
HG-NLR-1	4	5.2	1450	889	373	3.3	12	1.1	4.2	0.75	4.4	0.53	0.0053	0.0048	0.0048	0.011	0.11
HG-NLR-1	5	5.5	1310	729	306	2.4	11	0.99	-	-	-	-	-	-	-	-	-
HG-NLR-1	6	5.2	1520	491	203	1.2	5.9	0.54	-	-	-	-	-	-	-	-	-
HG-NLR-1	7	5.5	1550	530	221	0.90	6.2	0.56	-	-	-	-	-	-	-	-	-
HG-NLR-1	8	5.3	1710	1131	466	1.6	22	1.1	4.4	0.95	4.7	0.67	0.0055	0.013	0.0050	0.0055	0.13
HG-NLR-1	9	5.1	1170	145	61	0.11	4.5	0.22	-	-	-	-	-	-	-	-	-
HG-NLR-1	10	5.5	1260	337	141	0.28	9.5	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-1	11	5.2	1170	219	91	0.20	6.7	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-1	12	5.3	1170	619	255	0.49	12	2.0	2.9	0.69	2.6	0.29	0.020	0.0044	0.0045	0.020	0.13
HG-NLR-1	13	5.3	1290	443	182	0.30	7.2	1.2	-	-	-	-	-	-	-	-	-
HG-NLR-1	14	5.0	987	216	90	0.16	4.7	0.79	-	-	-	-	-	-	-	-	-
HG-NLR-1	15	5.4	1170	319	132	0.20	6.0	1.00	-	-	-	-	-	-	-	-	-
HG-NLR-1	16	5.2	838	475	197	0.23	17	1.2	2.3	0.85	2.4	0.46	0.081	0.0052	0.0053	0.0058	0.21
HG-NLR-1	17	5.0	644	152	63	0.098	7.4	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	18	5.0	510	128	54	0.099	7.4	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	19	5.1	335	75	31	0.099	7.5	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-1	20	5.1	231	128	52	0.13	15	1.3	0.064	0.89	1.9	0.38	0.026	0.0057	0.0058	0.038	0.22
HG-NLR-1	21	5.5	242	49	19	0.098	5.9	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	22	5.4	157	34	12	0.099	5.9	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	23	4.9	161	34	12	0.098	5.9	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	24	5.1	110	60	21	0.23	14	1.2	0.23	0.91	2.0	0.35	0.16	0.052	0.0053	0.0058	0.28
HG-NLR-1	25	5.1	97	14	4.7	0.078	4.7	0.39	-	-	-	-	-	-	-	-	-
HG-NLR-1	26	5.3	94	22	6.7	0.17	6.7	0.55	-	-	-	-	-	-	-	-	-
HG-NLR-1	27	4.9	114	23	6.9	0.098	5.9	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-1	28	5.0	122	38	12	0.24	16	0.79	0.16	0.53	1.3	0.24	0.39	0.035	0.0036	0.0039	0.20
HG-NLR-1	29	4.7	134	30	9.2	0.15	11	0.51	-	-	-	-	-	-	-	-	-
HG-NLR-1	30	4.8	132	23	7.3	0.12	8.5	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-1	31	4.8	146	44	14	0.21	15	0.70	-	-	-	-	-	-	-	-	-
HG-NLR-1	32	4.6	133	56	18	0.29	19	3.9	0.19	0.63	1.9	0.29	0.39	0.044	0.0044	0.0049	0.40
HG-NLR-1	33	5.0	146	22	6.6	0.13	8.8	1.8	-	-	-	-	-	-	-	-	-
HG-NLR-1	34	5.2	111	23	6.2	0.14	9.6	1.9	-	-	-	-	-	-	-	-	-
HG-NLR-1	35	4.7	113	23	6.3	0.14	9.6	1.9	-	-	-	-	-	-	-	-	-
HG-NLR-1	36	5.1	107	31	8.7	0.20	13	1.3	0.27	0.55	1.1	0.13	0.033	0.030	0.0030	0.0033	0.25
HG-NLR-1	37	4.6	113	22	6.5	0.14	8.9	0.93	-	-	-	-	-	-	-	-	-
HG-NLR-1	38	4.7	128	24	6.7	0.17	8.0	0.84	-	-	-	-	-	-	-	-	-
HG-NLR-1	39	4.6	115	25	6.7	0.15	9.8	1.0	-	-	-	-	-	-	-	-	-
HG-NLR-1	40	4.8	109	29	8.3	0.17	14	0.85	0.043	0.51	1.2	0.26	0.43	0.038	0.0039	0.017	0.30
HG-NLR-1	41	6.0	100	18	4.9	0.13	7.6	0.45	-	-	-	-	-	-	-	-	-
HG-NLR-1	42	4.6	112	17	4.4	0.12	6.9	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-1	43	4.7	110	16	4.6	0.14	6.1	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-1	44	4.6	109	33	8.6	0.34	19	0.86	0.086	0.61	1.5	0.17	0.43	0.039	0.0039	0.0043	0.29
HG-NLR-1	45	4.6	105	15	4.2	0.12	8.4	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-1	46	4.4	112	20	5.6	0.19	10	0.46	-	-	-	-	-	-	-	-	-
HG-NLR-1	47	4.6	110	18	4.5	0.16	9.0	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-1	48	4.5	115	36	10	0.30	16	0.75	0.45	0.53	1.4	0.37	0.037	0.14	0.0034	0.022	0.28
HG-NLR-1	49	4.5	108	13	3.2	0.13	6.8	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-1	50	4.5	123	17	4.6	0.15	8.0	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-1	51	4.5	107	17	4.6	0.19	8.0	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-1	52	4.6	109	28	7.8	0.28	21	0.71	0.035	0.45	1.1	0.28	0.35	0.032	0.0032	0.0071	0.23
HG-NLR-1	53	4.4	98	16	3.9	0.16	12	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-1	54	4.6	103	13	3.3	0.13	9.6	0.33	-	-	-	-	-	-	-	-	-
HG-NLR-1	55	4.6	100	17	4.3	0.18	13	0.46	-	-	-	-	-	-	-	-	-
HG-NLR-1	56	4.6	78	28	7.3	0.31	19	0.78	0.078	0.40	1.1	0.23	0.039	0.035	0.0035	0.016	0.24
HG-NLR-1	57	4.3	101	10	2.7	0.13	8.0	0.33	-	-	-	-	-	-	-	-	-
HG-NLR-1	58	4.5	99	13	3.4	0.15	8.7	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-1	59	4.4	95	12	3.1	0.17	8.1	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-1	60	4.4	97	18	4.5	0.21	13	0.70	0.035	0.042	0.77	0.035	0.035	0.032	0.0032	0.0035	0.23
HG-NLR-1	61	4.4	89	12	2.9	0.15	7.2	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-1	62	4.6	91	14	3.3	0.15	7.2	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-1	63	4.4	90	15	3.7	0.18	8.4	0.44	-	-	-	-	-	-	-	-	-
HG-NLR-1	64	4.7	69	19	4.7	0.23	11	0.77	0.039	0.22	0.77	0.077	0.039	0.035	0.0035	0.0077	0.23

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-1	1	0.0011	0.036	0.0028	0.00056	2.5	0.0017	0.0028	3.3	0.23	0.014	4.9	2.8	0.0000022	0.0089	3.0	0.29
HG-NLR-1	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	4	0.00074	0.0086	0.13	0.000053	0.88	0.0013	0.00026	0.17	0.38	0.046	3.6	0.018	0.0000032	0.00021	0.13	0.063
HG-NLR-1	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	8	0.00067	0.014	0.018	0.000055	0.57	0.00027	0.00028	0.86	0.11	0.011	3.9	0.11	0.0000044	0.0045	0.52	0.058
HG-NLR-1	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	12	0.00049	0.0078	0.026	0.000049	0.53	0.00011	0.00025	0.43	0.092	0.011	2.8	0.048	0.0000039	0.0030	0.26	0.046
HG-NLR-1	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	16	0.00046	0.0075	0.044	0.000058	0.50	0.000058	0.00029	0.31	0.11	0.013	3.0	0.028	0.0000058	0.0025	0.17	0.047
HG-NLR-1	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	20	0.00038	0.0032	0.089	0.000064	0.38	0.000026	0.00032	0.15	0.078	0.0086	2.9	0.015	0.0000038	0.0014	0.087	0.042
HG-NLR-1	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	24	0.00035	0.0025	0.12	0.000058	0.37	0.000035	0.00029	0.16	0.091	0.0096	4.2	0.016	0.0000058	0.00081	0.089	0.038
HG-NLR-1	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	28	0.00024	0.0018	0.094	0.000039	0.32	0.000024	0.00020	0.14	0.086	0.0086	3.3	0.013	0.00000039	0.00047	0.076	0.036
HG-NLR-1	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	32	0.00029	0.0028	0.16	0.000049	0.44	0.000049	0.00024	0.23	0.18	0.024	6.0	0.023	0.0000019	0.0012	0.13	0.045
HG-NLR-1	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	36	0.00013	0.0019	0.093	0.000033	0.21	0.000020	0.00017	0.15	0.13	0.023	4.1	0.015	0.00000033	0.0011	0.088	0.027
HG-NLR-1	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	40	0.000085	0.0026	0.13	0.000043	0.32	0.000034	0.00021	0.20	0.20	0.031	6.3	0.020	0.0000017	0.00051	0.12	0.039
HG-NLR-1	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	44	0.00017	0.0028	0.13	0.000043	0.28	0.000043	0.00022	0.22	0.24	0.040	7.1	0.022	0.00000043	0.00052	0.13	0.037
HG-NLR-1	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	48	0.00022	0.0025	0.11	0.000075	0.25	0.000037	0.00019	0.19	0.25	0.074	6.7	0.020	0.0000030	0.0020	0.12	0.031
HG-NLR-1	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	52	0.00014	0.0024	0.099	0.000071	0.22	0.000043	0.00018	0.19	0.30	0.062	6.7	0.018	0.0000057	0.00021	0.12	0.028
HG-NLR-1	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	56	0.000078	0.0024	0.10	0.000078	0.21	0.000023	0.00019	0.20	0.31	0.063	6.9	0.019	0.0000031	0.00039	0.12	0.032
HG-NLR-1	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	60	0.000070	0.0022	0.11	0.000070	0.16	0.000028	0.00018	0.20	0.34	0.070	7.0	0.019	0.0000035	0.00021	0.12	0.025
HG-NLR-1	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-1	64	0.000077	0.0023	0.12	0.000077	0.14	0.000039	0.00019	0.20	0.40	0.085	7.6	0.019	0.0000023	0.00093	0.12	0.024

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-1	1	0.00028	0.43	0.0078	0.00056	0.0011	17	0.00056	0.096
HG-NLR-1	2	-	-	-	-	-	-	-	-
HG-NLR-1	3	-	-	-	-	-	-	-	-
HG-NLR-1	4	0.000026	0.76	0.0028	0.000053	0.00032	0.35	0.00021	0.088
HG-NLR-1	5	-	-	-	-	-	-	-	-
HG-NLR-1	6	-	-	-	-	-	-	-	-
HG-NLR-1	7	-	-	-	-	-	-	-	-
HG-NLR-1	8	0.000028	0.79	0.0025	0.000055	0.00033	11	0.000055	0.031
HG-NLR-1	9	-	-	-	-	-	-	-	-
HG-NLR-1	10	-	-	-	-	-	-	-	-
HG-NLR-1	11	-	-	-	-	-	-	-	-
HG-NLR-1	12	0.000025	0.61	0.0016	0.000049	0.00020	8.3	0.000049	0.026
HG-NLR-1	13	-	-	-	-	-	-	-	-
HG-NLR-1	14	-	-	-	-	-	-	-	-
HG-NLR-1	15	-	-	-	-	-	-	-	-
HG-NLR-1	16	0.000029	0.68	0.0016	0.000058	0.00012	9.0	0.000058	0.030
HG-NLR-1	17	-	-	-	-	-	-	-	-
HG-NLR-1	18	-	-	-	-	-	-	-	-
HG-NLR-1	19	-	-	-	-	-	-	-	-
HG-NLR-1	20	0.000032	0.46	0.0013	0.000064	0.00013	4.7	0.000064	0.026
HG-NLR-1	21	-	-	-	-	-	-	-	-
HG-NLR-1	22	-	-	-	-	-	-	-	-
HG-NLR-1	23	-	-	-	-	-	-	-	-
HG-NLR-1	24	0.000029	0.43	0.0014	0.000058	0.00012	4.5	0.000058	0.034
HG-NLR-1	25	-	-	-	-	-	-	-	-
HG-NLR-1	26	-	-	-	-	-	-	-	-
HG-NLR-1	27	-	-	-	-	-	-	-	-
HG-NLR-1	28	0.000020	0.29	0.00086	0.000039	0.000079	3.5	0.000039	0.017
HG-NLR-1	29	-	-	-	-	-	-	-	-
HG-NLR-1	30	-	-	-	-	-	-	-	-
HG-NLR-1	31	-	-	-	-	-	-	-	-
HG-NLR-1	32	0.000024	0.51	0.0016	0.000049	0.0012	6.4	0.000049	0.0076
HG-NLR-1	33	-	-	-	-	-	-	-	-
HG-NLR-1	34	-	-	-	-	-	-	-	-
HG-NLR-1	35	-	-	-	-	-	-	-	-
HG-NLR-1	36	0.000017	0.31	0.00093	0.000033	0.0015	4.1	0.000033	0.0039
HG-NLR-1	37	-	-	-	-	-	-	-	-
HG-NLR-1	38	-	-	-	-	-	-	-	-
HG-NLR-1	39	-	-	-	-	-	-	-	-
HG-NLR-1	40	0.000021	0.39	0.0013	0.000043	0.00043	5.9	0.000043	0.0094
HG-NLR-1	41	-	-	-	-	-	-	-	-
HG-NLR-1	42	-	-	-	-	-	-	-	-
HG-NLR-1	43	-	-	-	-	-	-	-	-
HG-NLR-1	44	0.000022	0.40	0.0013	0.000043	0.00026	6.7	0.000043	0.014
HG-NLR-1	45	-	-	-	-	-	-	-	-
HG-NLR-1	46	-	-	-	-	-	-	-	-
HG-NLR-1	47	-	-	-	-	-	-	-	-
HG-NLR-1	48	0.000019	0.34	0.0011	0.000037	0.0028	6.5	0.000037	0.0090
HG-NLR-1	49	-	-	-	-	-	-	-	-
HG-NLR-1	50	-	-	-	-	-	-	-	-
HG-NLR-1	51	-	-	-	-	-	-	-	-
HG-NLR-1	52	0.000018	0.34	0.0011	0.000035	0.000071	6.7	0.000035	0.0085
HG-NLR-1	53	-	-	-	-	-	-	-	-
HG-NLR-1	54	-	-	-	-	-	-	-	-
HG-NLR-1	55	-	-	-	-	-	-	-	-
HG-NLR-1	56	0.000019	0.30	0.00094	0.000039	0.00039	7.1	0.000039	0.011
HG-NLR-1	57	-	-	-	-	-	-	-	-
HG-NLR-1	58	-	-	-	-	-	-	-	-
HG-NLR-1	59	-	-	-	-	-	-	-	-
HG-NLR-1	60	0.000018	0.28	0.00098	0.000035	0.00035	6.8	0.000035	0.0077
HG-NLR-1	61	-	-	-	-	-	-	-	-
HG-NLR-1	62	-	-	-	-	-	-	-	-
HG-NLR-1	63	-	-	-	-	-	-	-	-
HG-NLR-1	64	0.000019	0.29	0.00093	0.000039	0.0015	7.3	0.000039	0.0067

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-2	1	5.3	1620	1132	320	73	11	2.2	40	0.59	5.7	7.8	0.044	0.0050	0.0050	0.0089	0.031
HG-NLR-2	2	5.4	2370	1706	527	93	11	2.2	-	-	-	-	-	-	-	-	-
HG-NLR-2	3	5.3	2140	1497	509	58	11	2.1	-	-	-	-	-	-	-	-	-
HG-NLR-2	4	5.3	1780	1303	477	33	13	2.3	6.9	0.70	6.7	2.2	0.40	0.0051	0.0052	0.023	0.074
HG-NLR-2	5	5.5	1600	1040	416	18	12	2.1	-	-	-	-	-	-	-	-	-
HG-NLR-2	6	5.2	1520	445	173	5.9	5.4	0.98	-	-	-	-	-	-	-	-	-
HG-NLR-2	7	5.2	1440	401	159	4.3	5.1	0.93	-	-	-	-	-	-	-	-	-
HG-NLR-2	8	5.2	1530	956	380	8.8	21	1.1	5.4	0.85	4.8	0.64	0.0054	0.0048	0.0049	0.086	0.12
HG-NLR-2	9	4.6	93	9.9	2.3	0.44	5.9	0.29	-	-	-	-	-	-	-	-	-
HG-NLR-2	10	5.2	1480	429	175	2.1	9.9	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-2	11	5.1	1450	250	104	0.96	6.0	0.30	-	-	-	-	-	-	-	-	-
HG-NLR-2	12	5.3	1470	966	384	2.0	20	1.2	3.5	1.0	4.4	0.35	0.0058	0.0052	0.0053	0.047	0.20
HG-NLR-2	13	5.1	1310	329	135	0.44	7.5	0.44	-	-	-	-	-	-	-	-	-
HG-NLR-2	14	5.1	1090	254	104	0.25	7.0	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-2	15	5.2	986	258	106	0.30	8.4	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-2	16	5.1	834	504	208	0.48	20	1.2	3.6	0.82	2.9	0.36	0.060	0.0054	0.0055	0.060	0.20
HG-NLR-2	17	5.1	868	214	90	0.20	8.5	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-2	18	5.1	680	203	78	0.19	8.2	0.48	-	-	-	-	-	-	-	-	-
HG-NLR-2	19	5.1	618	150	62	0.15	8.5	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-2	20	5.2	461	306	124	0.84	24	1.4	4.2	1.2	3.5	0.84	0.056	0.0063	0.0063	0.042	0.60
HG-NLR-2	21	5.1	385	87	34	0.097	8.2	0.48	-	-	-	-	-	-	-	-	-
HG-NLR-2	22	5.1	323	74	29	0.099	8.4	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-2	23	5.0	271	53	20	0.089	7.6	0.44	-	-	-	-	-	-	-	-	-
HG-NLR-2	24	5.1	183	97	36	0.36	14	1.2	0.24	0.88	2.4	0.36	0.14	0.0053	0.0054	0.048	0.32
HG-NLR-2	25	4.8	176	30	10	0.12	4.8	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	26	5.1	131	28	9.1	0.10	6.1	0.51	-	-	-	-	-	-	-	-	-
HG-NLR-2	27	4.9	149	26	8.7	0.087	5.2	0.43	-	-	-	-	-	-	-	-	-
HG-NLR-2	28	4.9	133	45	15	0.25	13	0.83	0.17	0.59	1.5	0.25	0.33	0.037	0.0038	0.0041	0.25
HG-NLR-2	29	4.9	134	26	8.5	0.13	7.2	0.45	-	-	-	-	-	-	-	-	-
HG-NLR-2	30	4.8	135	24	7.5	0.12	6.4	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	31	5.0	127	26	8.0	0.14	7.6	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-2	32	5.0	112	34	10	0.37	9.7	0.74	0.15	0.56	1.4	0.22	0.15	0.033	0.0034	0.0037	0.32
HG-NLR-2	33	4.8	127	19	5.7	0.11	4.6	0.35	-	-	-	-	-	-	-	-	-
HG-NLR-2	34	5.3	118	23	6.6	0.14	6.1	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-2	35	4.8	109	25	7.0	0.16	7.0	0.54	-	-	-	-	-	-	-	-	-
HG-NLR-2	36	5.1	100	35	10	0.26	15	0.86	0.34	0.65	1.4	0.17	0.086	0.039	0.0039	0.0043	0.39
HG-NLR-2	37	4.7	113	23	6.8	0.15	8.3	0.49	-	-	-	-	-	-	-	-	-
HG-NLR-2	38	4.8	124	26	7.0	0.19	7.9	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-2	39	4.7	112	24	6.5	0.15	8.4	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-2	40	4.8	106	26	7.7	0.18	17	0.89	0.044	0.52	1.2	0.18	0.44	0.040	0.0040	0.018	0.30
HG-NLR-2	41	5.2	100	16	4.3	0.12	7.4	0.39	-	-	-	-	-	-	-	-	-
HG-NLR-2	42	4.8	109	17	4.4	0.12	7.6	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	43	4.8	97	16	4.5	0.16	7.8	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-2	44	4.7	98	37	11	0.35	15	0.88	0.088	0.62	1.5	0.18	0.44	0.040	0.0040	0.0044	0.36
HG-NLR-2	45	4.8	96	14	4.2	0.11	6.5	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-2	46	4.4	97	17	4.9	0.18	7.5	0.44	-	-	-	-	-	-	-	-	-
HG-NLR-2	47	4.5	99	16	4.1	0.16	7.0	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-2	48	4.6	89	29	8.1	0.33	15	0.81	0.041	0.54	1.3	0.16	0.041	0.17	0.0037	0.0081	0.30
HG-NLR-2	49	4.6	107	12	3.2	0.13	6.1	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-2	50	5.0	113	16	4.2	0.15	7.2	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-2	51	4.4	101	16	4.4	0.20	7.6	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	52	4.6	98	25	6.6	0.28	17	0.69	0.034	0.41	1.1	0.21	0.34	0.031	0.0031	0.0069	0.23
HG-NLR-2	53	4.8	98	16	4.1	0.16	10	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-2	54	4.7	86	11	3.2	0.097	8.1	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-2	55	4.6	109	18	4.9	0.22	11	0.44	-	-	-	-	-	-	-	-	-
HG-NLR-2	56	4.6	97	27	7.3	0.37	16	0.75	0.075	0.46	1.0	0.22	0.037	0.034	0.0034	0.015	0.43
HG-NLR-2	57	4.6	95	13	3.5	0.15	8.5	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-2	58	4.5	94	16	4.1	0.18	9.9	0.45	-	-	-	-	-	-	-	-	-
HG-NLR-2	59	4.5	91	13	3.2	0.18	7.9	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-2	60	4.3	102	19	4.9	0.36	16	0.71	0.036	0.18	0.86	0.071	0.036	0.032	0.0032	0.0036	0.33
HG-NLR-2	61	4.4	89	13	3.2	0.16	8.7	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	62	4.4	89	14	3.5	0.16	8.9	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-2	63	4.5	87	15	3.8	0.23	9.9	0.45	-	-	-	-	-	-	-	-	-
HG-NLR-2	64	4.5	69	20	5.0	0.32	11	0.80	0.040	0.13	0.88	0.080	0.040	0.036	0.0036	0.016	0.25

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-2	1	0.00044	0.012	0.040	0.000055	1.2	0.00059	0.00028	1.1	0.065	0.0061	2.2	0.91	0.00000055	0.0050	0.95	0.20
HG-NLR-2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	4	0.00080	0.014	0.026	0.000057	0.59	0.00049	0.00029	0.93	0.083	0.0054	2.9	0.46	0.0000046	0.0064	0.76	0.045
HG-NLR-2	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	8	0.00064	0.012	0.024	0.000054	0.54	0.00033	0.00027	0.87	0.099	0.0084	3.7	0.24	0.0000054	0.0042	0.60	0.048
HG-NLR-2	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	12	0.0012	0.013	0.023	0.00058	0.58	0.00023	0.0029	0.71	0.15	0.012	3.7	0.099	0.0000047	0.0047	0.45	0.044
HG-NLR-2	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	16	0.00048	0.0077	0.043	0.000060	0.46	0.000084	0.00030	0.38	0.12	0.012	3.1	0.038	0.0000048	0.0029	0.22	0.046
HG-NLR-2	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	20	0.00070	0.0057	0.084	0.00014	0.50	0.000056	0.00035	0.31	0.14	0.092	3.9	0.028	0.0000084	0.010	0.17	0.053
HG-NLR-2	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	24	0.00036	0.0031	0.10	0.000059	0.45	0.000036	0.00030	0.19	0.11	0.011	4.0	0.019	0.0000059	0.0012	0.11	0.048
HG-NLR-2	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	28	0.00017	0.0021	0.083	0.000041	0.33	0.000033	0.00021	0.16	0.099	0.0091	3.3	0.014	0.00000041	0.00050	0.083	0.035
HG-NLR-2	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	32	0.00022	0.0022	0.082	0.000037	0.25	0.000022	0.00019	0.13	0.10	0.026	3.6	0.013	0.0000045	0.0023	0.079	0.028
HG-NLR-2	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	36	0.00026	0.0027	0.094	0.000043	0.25	0.000026	0.00021	0.15	0.15	0.045	4.6	0.016	0.00000086	0.0036	0.094	0.031
HG-NLR-2	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	40	0.00018	0.0027	0.11	0.000044	0.31	0.000027	0.00022	0.20	0.18	0.032	6.2	0.018	0.0000018	0.0019	0.10	0.036
HG-NLR-2	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	44	0.00018	0.0032	0.12	0.000044	0.27	0.000035	0.00022	0.20	0.22	0.053	6.7	0.019	0.0000018	0.0032	0.12	0.034
HG-NLR-2	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	48	0.00024	0.0029	0.098	0.000081	0.24	0.000033	0.00020	0.19	0.23	0.064	6.5	0.018	0.0000041	0.0029	0.11	0.029
HG-NLR-2	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	52	0.00014	0.0023	0.069	0.000069	0.20	0.000041	0.00017	0.17	0.25	0.054	5.6	0.017	0.0000062	0.00041	0.10	0.025
HG-NLR-2	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	56	0.00045	0.0036	0.082	0.000075	0.20	0.000037	0.00019	0.20	0.30	0.13	6.8	0.020	0.0000097	0.018	0.12	0.029
HG-NLR-2	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	60	0.00021	0.0029	0.086	0.000071	0.16	0.000043	0.00018	0.20	0.33	0.11	6.7	0.019	0.000029	0.0064	0.12	0.024
HG-NLR-2	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-2	64	0.00016	0.0023	0.10	0.000080	0.14	0.000040	0.00020	0.18	0.36	0.088	7.2	0.018	0.0000008	0.00064	0.11	0.023

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-2	1	0.000028	0.36	0.0028	0.000055	0.00044	4.7	0.000055	0.026
HG-NLR-2	2	-	-	-	-	-	-	-	-
HG-NLR-2	3	-	-	-	-	-	-	-	-
HG-NLR-2	4	0.000029	0.66	0.0030	0.000057	0.00034	7.3	0.000057	0.029
HG-NLR-2	5	-	-	-	-	-	-	-	-
HG-NLR-2	6	-	-	-	-	-	-	-	-
HG-NLR-2	7	-	-	-	-	-	-	-	-
HG-NLR-2	8	0.000027	0.66	0.0025	0.000054	0.00021	9.1	0.000054	0.016
HG-NLR-2	9	-	-	-	-	-	-	-	-
HG-NLR-2	10	-	-	-	-	-	-	-	-
HG-NLR-2	11	-	-	-	-	-	-	-	-
HG-NLR-2	12	0.00029	0.78	0.0023	0.00058	0.0012	13	0.00058	0.022
HG-NLR-2	13	-	-	-	-	-	-	-	-
HG-NLR-2	14	-	-	-	-	-	-	-	-
HG-NLR-2	15	-	-	-	-	-	-	-	-
HG-NLR-2	16	0.000030	0.67	0.0017	0.000060	0.00012	9.1	0.000060	0.018
HG-NLR-2	17	-	-	-	-	-	-	-	-
HG-NLR-2	18	-	-	-	-	-	-	-	-
HG-NLR-2	19	-	-	-	-	-	-	-	-
HG-NLR-2	20	0.000035	0.65	0.0018	0.000070	0.013	8.1	0.0013	0.017
HG-NLR-2	21	-	-	-	-	-	-	-	-
HG-NLR-2	22	-	-	-	-	-	-	-	-
HG-NLR-2	23	-	-	-	-	-	-	-	-
HG-NLR-2	24	0.000030	0.49	0.0015	0.000059	0.00012	5.4	0.000059	0.0094
HG-NLR-2	25	-	-	-	-	-	-	-	-
HG-NLR-2	26	-	-	-	-	-	-	-	-
HG-NLR-2	27	-	-	-	-	-	-	-	-
HG-NLR-2	28	0.000021	0.31	0.00099	0.000041	0.00017	3.7	0.000041	0.014
HG-NLR-2	29	-	-	-	-	-	-	-	-
HG-NLR-2	30	-	-	-	-	-	-	-	-
HG-NLR-2	31	-	-	-	-	-	-	-	-
HG-NLR-2	32	0.000019	0.30	0.0010	0.000037	0.0042	3.8	0.00030	0.0050
HG-NLR-2	33	-	-	-	-	-	-	-	-
HG-NLR-2	34	-	-	-	-	-	-	-	-
HG-NLR-2	35	-	-	-	-	-	-	-	-
HG-NLR-2	36	0.000021	0.34	0.0011	0.000043	0.0053	4.4	0.00034	0.0069
HG-NLR-2	37	-	-	-	-	-	-	-	-
HG-NLR-2	38	-	-	-	-	-	-	-	-
HG-NLR-2	39	-	-	-	-	-	-	-	-
HG-NLR-2	40	0.000022	0.36	0.0012	0.000044	0.0019	5.6	0.000044	0.0067
HG-NLR-2	41	-	-	-	-	-	-	-	-
HG-NLR-2	42	-	-	-	-	-	-	-	-
HG-NLR-2	43	-	-	-	-	-	-	-	-
HG-NLR-2	44	0.000022	0.38	0.0012	0.000044	0.0043	5.8	0.00026	0.0080
HG-NLR-2	45	-	-	-	-	-	-	-	-
HG-NLR-2	46	-	-	-	-	-	-	-	-
HG-NLR-2	47	-	-	-	-	-	-	-	-
HG-NLR-2	48	0.000020	0.33	0.0011	0.000041	0.0031	5.8	0.000041	0.0073
HG-NLR-2	49	-	-	-	-	-	-	-	-
HG-NLR-2	50	-	-	-	-	-	-	-	-
HG-NLR-2	51	-	-	-	-	-	-	-	-
HG-NLR-2	52	0.000017	0.30	0.00090	0.000034	0.000069	5.4	0.000034	0.025
HG-NLR-2	53	-	-	-	-	-	-	-	-
HG-NLR-2	54	-	-	-	-	-	-	-	-
HG-NLR-2	55	-	-	-	-	-	-	-	-
HG-NLR-2	56	0.000075	0.31	0.0010	0.000037	0.019	6.4	0.00090	0.0090
HG-NLR-2	57	-	-	-	-	-	-	-	-
HG-NLR-2	58	-	-	-	-	-	-	-	-
HG-NLR-2	59	-	-	-	-	-	-	-	-
HG-NLR-2	60	0.000036	0.29	0.00093	0.000036	0.0071	6.1	0.00043	0.0086
HG-NLR-2	61	-	-	-	-	-	-	-	-
HG-NLR-2	62	-	-	-	-	-	-	-	-
HG-NLR-2	63	-	-	-	-	-	-	-	-
HG-NLR-2	64	0.000020	0.26	0.00088	0.000040	0.0012	6.5	0.000040	0.0080

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-3	1	5.4	2800	2078	514	160	17	3.0	74	1.0	12	16	0.31	0.0045	0.0046	0.0080	0.052
HG-NLR-3	2	5.4	2400	1776	601	75	19	3.3	-	-	-	-	-	-	-	-	-
HG-NLR-3	3	5.4	1860	1264	497	17	19	3.3	-	-	-	-	-	-	-	-	-
HG-NLR-3	4	5.4	1690	1105	450	11	11	2.1	4.3	0.60	5.2	0.85	0.0053	0.0048	0.0048	0.011	0.047
HG-NLR-3	5	5.5	1690	1076	449	9.2	10	2.1	-	-	-	-	-	-	-	-	-
HG-NLR-3	6	5.3	1640	465	188	2.6	4.7	0.93	-	-	-	-	-	-	-	-	-
HG-NLR-3	7	5.3	1600	509	209	2.4	5.1	1.0	-	-	-	-	-	-	-	-	-
HG-NLR-3	8	5.2	1570	1069	436	3.4	23	1.1	4.6	1.0	4.8	0.69	0.0057	0.0052	0.0052	0.0057	0.10
HG-NLR-3	9	5.1	1520	261	109	0.50	5.9	0.29	-	-	-	-	-	-	-	-	-
HG-NLR-3	10	5.2	1500	462	210	0.68	10	0.52	-	-	-	-	-	-	-	-	-
HG-NLR-3	11	5.2	1340	168	71	0.22	4.4	0.22	-	-	-	-	-	-	-	-	-
HG-NLR-3	12	5.3	1150	636	253	0.61	12	1.0	2.0	0.72	2.8	0.20	0.030	0.0045	0.0046	0.020	0.11
HG-NLR-3	13	5.2	1200	328	135	0.25	6.0	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-3	14	5.1	1060	230	95	0.19	4.6	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-3	15	5.2	998	248	102	0.23	5.6	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-3	16	5.3	773	436	184	0.36	21	2.4	3.6	0.99	2.5	0.36	0.073	0.0055	0.0055	0.0061	0.17
HG-NLR-3	17	5.2	697	164	68	0.15	8.4	0.99	-	-	-	-	-	-	-	-	-
HG-NLR-3	18	5.3	542	146	58	0.097	8.3	0.97	-	-	-	-	-	-	-	-	-
HG-NLR-3	19	5.1	502	119	49	0.15	8.4	0.99	-	-	-	-	-	-	-	-	-
HG-NLR-3	20	5.2	340	181	71	0.23	17	1.1	2.3	1.00	2.1	0.34	0.023	0.0051	0.0051	0.045	0.20
HG-NLR-3	21	5.1	272	60	24	0.10	7.5	0.50	-	-	-	-	-	-	-	-	-
HG-NLR-3	22	5.1	215	47	17	0.097	7.2	0.48	-	-	-	-	-	-	-	-	-
HG-NLR-3	23	5.1	175	39	14	0.10	7.6	0.51	-	-	-	-	-	-	-	-	-
HG-NLR-3	24	5.0	151	79	28	0.25	19	1.3	0.25	1.1	2.6	0.38	0.18	0.0057	0.0057	0.025	0.30
HG-NLR-3	25	5.0	151	25	7.9	0.076	5.7	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-3	26	5.0	156	32	10	0.091	6.9	0.46	-	-	-	-	-	-	-	-	-
HG-NLR-3	27	5.0	164	32	11	0.14	7.2	0.48	-	-	-	-	-	-	-	-	-
HG-NLR-3	28	5.0	133	49	16	0.27	16	0.88	0.18	0.76	1.8	0.27	0.35	0.040	0.0040	0.0044	0.27
HG-NLR-3	29	5.0	121	21	6.3	0.079	7.1	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-3	30	4.9	138	12	3.7	0.058	3.5	0.19	-	-	-	-	-	-	-	-	-
HG-NLR-3	31	5.0	121	25	7.6	0.095	8.5	0.47	-	-	-	-	-	-	-	-	-
HG-NLR-3	32	4.9	113	42	13	0.35	13	0.88	0.18	0.62	1.8	0.26	0.18	0.039	0.0040	0.0044	0.38
HG-NLR-3	33	4.9	114	18	5.4	0.11	5.4	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-3	34	5.3	100	19	5.4	0.090	6.7	0.45	-	-	-	-	-	-	-	-	-
HG-NLR-3	35	4.8	107	22	6.0	0.14	6.9	0.46	-	-	-	-	-	-	-	-	-
HG-NLR-3	36	5.2	100	34	9.7	0.32	15	2.4	0.32	0.69	1.5	0.24	0.041	0.037	0.0037	0.016	0.30
HG-NLR-3	37	4.7	111	23	5.9	0.14	8.7	1.4	-	-	-	-	-	-	-	-	-
HG-NLR-3	38	4.5	136	30	7.9	0.17	7.9	1.2	-	-	-	-	-	-	-	-	-
HG-NLR-3	39	4.7	140	38	10	0.24	11	1.8	-	-	-	-	-	-	-	-	-
HG-NLR-3	40	4.9	81	25	7.0	0.17	16	0.83	0.041	0.43	1.2	0.25	0.41	0.037	0.0038	0.017	0.33
HG-NLR-3	41	5.1	92	18	4.3	0.13	8.2	0.43	-	-	-	-	-	-	-	-	-
HG-NLR-3	42	4.9	104	17	4.2	0.12	7.3	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-3	43	4.7	92	17	4.2	0.13	8.0	0.42	-	-	-	-	-	-	-	-	-
HG-NLR-3	44	4.9	87	31	7.9	0.25	14	0.84	0.084	0.66	1.4	0.17	0.42	0.038	0.0038	0.0042	0.29
HG-NLR-3	45	4.8	84	15	3.6	0.12	6.6	0.39	-	-	-	-	-	-	-	-	-
HG-NLR-3	46	4.6	90	16	4.1	0.12	7.0	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-3	47	4.8	56	7.2	2.2	0.13	5.3	0.31	-	-	-	-	-	-	-	-	-
HG-NLR-3	48	4.7	96	35	9.2	0.33	14	0.84	0.17	0.54	1.3	0.25	0.042	0.15	0.0038	0.025	0.34
HG-NLR-3	49	5.1	40	5.1	1.2	0.17	5.8	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-3	50	4.6	114	18	4.2	0.15	6.4	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-3	51	4.5	93	16	3.8	0.19	6.4	0.38	-	-	-	-	-	-	-	-	-
HG-NLR-3	52	4.7	92	25	6.2	0.27	18	0.68	0.068	0.40	1.7	0.34	0.34	0.031	0.0031	0.021	0.21
HG-NLR-3	53	4.7	87	14	3.3	0.15	9.5	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-3	54	4.6	105	15	3.5	0.16	8.4	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-3	55	4.6	90	16	4.2	0.19	12	0.48	-	-	-	-	-	-	-	-	-
HG-NLR-3	56	4.7	83	25	6.2	0.31	15	0.77	0.039	0.48	1.0	0.23	0.039	0.035	0.0035	0.015	0.37
HG-NLR-3	57	4.6	77	9.9	2.5	0.14	6.5	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-3	58	4.7	87	13	3.3	0.16	7.5	0.39	-	-	-	-	-	-	-	-	-
HG-NLR-3	59	4.5	85	12	3.0	0.14	6.8	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-3	60	4.2	93	15	3.9	0.25	12	0.62	0.031	0.099	0.68	0.031	0.031	0.028	0.0028	0.0031	0.20
HG-NLR-3	61	4.5	80	11	2.5	0.14	6.7	0.35	-	-	-	-	-	-	-	-	-
HG-NLR-3	62	4.4	86	13	3.2	0.15	7.1	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-3	63	4.6	85	14	3.5	0.21	8.0	0.42	-	-	-	-	-	-	-	-	-
HG-NLR-3	64	4.5	62	19	4.9	0.42	12	0.84	0.042	0.18	0.92	0.084	0.042	0.038	0.0038	0.017	0.52

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-3	1	0.0010	0.026	0.011	0.00050	2.2	0.0014	0.0025	2.0	0.079	0.0090	3.4	2.1	0.0000060	0.0080	1.8	0.35
HG-NLR-3	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	4	0.00085	0.012	0.023	0.000053	0.44	0.00031	0.00027	0.60	0.045	0.0034	2.6	0.23	0.0000032	0.0066	0.46	0.041
HG-NLR-3	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	8	0.00080	0.014	0.021	0.000057	0.56	0.00031	0.00029	0.83	0.069	0.0068	3.7	0.17	0.0000057	0.0057	0.53	0.056
HG-NLR-3	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	12	0.00061	0.0074	0.029	0.000050	0.48	0.00012	0.00025	0.44	0.058	0.0050	2.9	0.058	0.0000040	0.0037	0.27	0.043
HG-NLR-3	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	16	0.00061	0.0068	0.046	0.000061	0.51	0.000085	0.00030	0.36	0.076	0.0073	3.3	0.036	0.0000048	0.0034	0.21	0.048
HG-NLR-3	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	20	0.00045	0.0034	0.075	0.000057	0.44	0.000034	0.00028	0.20	0.064	0.0061	2.8	0.020	0.0000057	0.0020	0.11	0.044
HG-NLR-3	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	24	0.00038	0.0031	0.12	0.000063	0.50	0.000038	0.00031	0.21	0.083	0.011	4.2	0.023	0.0000088	0.0015	0.12	0.052
HG-NLR-3	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	28	0.00027	0.0022	0.097	0.000044	0.39	0.000035	0.00022	0.19	0.076	0.0081	3.5	0.019	0.00000044	0.00071	0.098	0.038
HG-NLR-3	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	32	0.00026	0.0026	0.096	0.000044	0.32	0.000026	0.00022	0.18	0.096	0.031	4.4	0.019	0.0000035	0.0037	0.10	0.034
HG-NLR-3	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	36	0.00024	0.0024	0.11	0.000041	0.27	0.000024	0.00020	0.17	0.11	0.024	4.6	0.018	0.0000016	0.0019	0.099	0.032
HG-NLR-3	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	40	0.00033	0.0035	0.13	0.000083	0.38	0.000033	0.00021	0.20	0.14	0.062	6.4	0.022	0.0000050	0.017	0.12	0.041
HG-NLR-3	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	44	0.00017	0.0025	0.12	0.000042	0.25	0.000034	0.00021	0.19	0.14	0.032	5.9	0.019	0.0000017	0.0018	0.10	0.031
HG-NLR-3	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	48	0.00058	0.0037	0.17	0.000042	0.29	0.000033	0.00021	0.21	0.17	0.13	7.7	0.022	0.0000050	0.018	0.12	0.033
HG-NLR-3	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	52	0.00021	0.0022	0.11	0.000034	0.22	0.000034	0.00017	0.15	0.15	0.040	5.8	0.017	0.0000055	0.00027	0.095	0.025
HG-NLR-3	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	56	0.00031	0.0029	0.12	0.000039	0.19	0.000039	0.00019	0.19	0.19	0.077	6.8	0.020	0.0000046	0.0085	0.11	0.026
HG-NLR-3	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	60	0.000062	0.0018	0.10	0.000062	0.14	0.000025	0.00015	0.16	0.18	0.043	5.7	0.016	0.0000049	0.00099	0.094	0.020
HG-NLR-3	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-3	64	0.00042	0.0032	0.13	0.000084	0.15	0.000042	0.00050	0.19	0.26	0.12	7.3	0.020	0.0000058	0.011	0.12	0.023

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-3	1	0.00025	0.42	0.0060	0.00050	0.0010	8.2	0.00050	0.029
HG-NLR-3	2	-	-	-	-	-	-	-	-
HG-NLR-3	3	-	-	-	-	-	-	-	-
HG-NLR-3	4	0.000027	0.64	0.0027	0.000053	0.00043	5.7	0.000053	0.019
HG-NLR-3	5	-	-	-	-	-	-	-	-
HG-NLR-3	6	-	-	-	-	-	-	-	-
HG-NLR-3	7	-	-	-	-	-	-	-	-
HG-NLR-3	8	0.000029	0.78	0.0028	0.000057	0.0022	9.2	0.000057	0.014
HG-NLR-3	9	-	-	-	-	-	-	-	-
HG-NLR-3	10	-	-	-	-	-	-	-	-
HG-NLR-3	11	-	-	-	-	-	-	-	-
HG-NLR-3	12	0.000025	0.64	0.0018	0.000050	0.00010	7.8	0.000050	0.010
HG-NLR-3	13	-	-	-	-	-	-	-	-
HG-NLR-3	14	-	-	-	-	-	-	-	-
HG-NLR-3	15	-	-	-	-	-	-	-	-
HG-NLR-3	16	0.000030	0.67	0.0018	0.000061	0.00012	8.4	0.000061	0.013
HG-NLR-3	17	-	-	-	-	-	-	-	-
HG-NLR-3	18	-	-	-	-	-	-	-	-
HG-NLR-3	19	-	-	-	-	-	-	-	-
HG-NLR-3	20	0.000028	0.49	0.0015	0.000057	0.00011	5.5	0.000057	0.010
HG-NLR-3	21	-	-	-	-	-	-	-	-
HG-NLR-3	22	-	-	-	-	-	-	-	-
HG-NLR-3	23	-	-	-	-	-	-	-	-
HG-NLR-3	24	0.000031	0.52	0.0019	0.000063	0.00013	5.8	0.000063	0.015
HG-NLR-3	25	-	-	-	-	-	-	-	-
HG-NLR-3	26	-	-	-	-	-	-	-	-
HG-NLR-3	27	-	-	-	-	-	-	-	-
HG-NLR-3	28	0.000022	0.35	0.0012	0.000044	0.000088	4.5	0.000044	0.0097
HG-NLR-3	29	-	-	-	-	-	-	-	-
HG-NLR-3	30	-	-	-	-	-	-	-	-
HG-NLR-3	31	-	-	-	-	-	-	-	-
HG-NLR-3	32	0.000022	0.38	0.0014	0.000044	0.0054	5.2	0.00018	0.0096
HG-NLR-3	33	-	-	-	-	-	-	-	-
HG-NLR-3	34	-	-	-	-	-	-	-	-
HG-NLR-3	35	-	-	-	-	-	-	-	-
HG-NLR-3	36	0.000020	0.36	0.0012	0.000041	0.0023	4.8	0.000041	0.011
HG-NLR-3	37	-	-	-	-	-	-	-	-
HG-NLR-3	38	-	-	-	-	-	-	-	-
HG-NLR-3	39	-	-	-	-	-	-	-	-
HG-NLR-3	40	0.000021	0.40	0.0013	0.000041	0.0100	6.2	0.00033	0.011
HG-NLR-3	41	-	-	-	-	-	-	-	-
HG-NLR-3	42	-	-	-	-	-	-	-	-
HG-NLR-3	43	-	-	-	-	-	-	-	-
HG-NLR-3	44	0.000021	0.35	0.0013	0.000042	0.0023	5.7	0.000084	0.0093
HG-NLR-3	45	-	-	-	-	-	-	-	-
HG-NLR-3	46	-	-	-	-	-	-	-	-
HG-NLR-3	47	-	-	-	-	-	-	-	-
HG-NLR-3	48	0.000050	0.38	0.0013	0.000042	0.016	6.4	0.00033	0.0068
HG-NLR-3	49	-	-	-	-	-	-	-	-
HG-NLR-3	50	-	-	-	-	-	-	-	-
HG-NLR-3	51	-	-	-	-	-	-	-	-
HG-NLR-3	52	0.000017	0.29	0.00096	0.000034	0.00014	5.3	0.000034	0.0068
HG-NLR-3	53	-	-	-	-	-	-	-	-
HG-NLR-3	54	-	-	-	-	-	-	-	-
HG-NLR-3	55	-	-	-	-	-	-	-	-
HG-NLR-3	56	0.000039	0.29	0.0011	0.000039	0.010	6.0	0.00062	0.0062
HG-NLR-3	57	-	-	-	-	-	-	-	-
HG-NLR-3	58	-	-	-	-	-	-	-	-
HG-NLR-3	59	-	-	-	-	-	-	-	-
HG-NLR-3	60	0.000015	0.23	0.00080	0.000031	0.0016	5.1	0.00012	0.0052
HG-NLR-3	61	-	-	-	-	-	-	-	-
HG-NLR-3	62	-	-	-	-	-	-	-	-
HG-NLR-3	63	-	-	-	-	-	-	-	-
HG-NLR-3	64	0.000042	0.28	0.0010	0.000042	0.018	6.5	0.0012	0.0066

- Parameter not analyzed

Cell Identification	Cycle	pH	Specific Conductivity	Sulphate	Calcium	Magnesium	Acidity	Total Alkalinity	Chloride	Fluoride	Potassium	Sodium	Ammonia-N	Nitrate-N	Nitrite-N	Orthophosphate-P	Aluminum
		pH units	uS/cm	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-4	1	5.4	3130	2128	532	175	20	0.91	79	1.1	14	17	0.22	0.0041	0.0042	0.0073	0.061
HG-NLR-4	2	5.4	2220	313	108	12	4.7	0.21	-	-	-	-	-	-	-	-	-
HG-NLR-4	3	5.4	1480	766	288	20	20	0.90	-	-	-	-	-	-	-	-	-
HG-NLR-4	4	5.4	544	233	90	4.1	2.7	2.7	1.8	0.20	1.6	0.54	0.0045	0.0040	0.0041	0.018	0.014
HG-NLR-4	5	5.4	1890	1027	413	15	2.6	2.6	-	-	-	-	-	-	-	-	-
HG-NLR-4	6	5.3	1660	427	169	4.7	1.3	1.3	-	-	-	-	-	-	-	-	-
HG-NLR-4	7	5.3	1870	473	194	3.7	1.2	1.2	-	-	-	-	-	-	-	-	-
HG-NLR-4	8	5.2	1840	976	397	5.1	19	0.87	4.4	0.78	4.7	0.52	0.035	0.0039	0.0040	0.035	0.081
HG-NLR-4	9	5.2	1910	222	90	0.65	4.1	0.19	-	-	-	-	-	-	-	-	-
HG-NLR-4	10	5.2	1820	411	208	1.2	8.1	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-4	11	5.2	1760	237	99	0.50	5.0	0.23	-	-	-	-	-	-	-	-	-
HG-NLR-4	12	5.2	1840	922	363	1.0	16	1.7	2.6	0.77	3.2	0.17	0.0043	0.0038	0.0039	0.017	0.12
HG-NLR-4	13	5.2	1570	374	154	0.24	7.6	0.80	-	-	-	-	-	-	-	-	-
HG-NLR-4	14	5.1	1500	255	104	0.16	5.2	0.54	-	-	-	-	-	-	-	-	-
HG-NLR-4	15	5.2	1380	294	119	0.22	7.1	0.74	-	-	-	-	-	-	-	-	-
HG-NLR-4	16	5.2	1160	609	255	0.30	15	1.0	3.0	0.91	2.6	0.30	0.091	0.0046	0.0046	0.020	0.16
HG-NLR-4	17	5.2	924	184	78	0.080	6.0	0.40	-	-	-	-	-	-	-	-	-
HG-NLR-4	18	5.2	740	181	68	0.082	6.2	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-4	19	5.1	663	117	50	0.11	5.5	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-4	20	5.1	461	209	82	0.28	18	0.95	2.8	0.80	2.1	0.28	0.057	0.0043	0.0043	0.038	0.20
HG-NLR-4	21	5.1	347	66	26	0.082	7.8	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-4	22	5.1	306	58	23	0.082	7.8	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-4	23	5.1	238	45	16	0.082	7.8	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-4	24	5.1	214	108	40	0.23	17	1.2	0.23	1.2	2.7	0.46	0.16	0.0052	0.0053	0.012	0.33
HG-NLR-4	25	5.0	186	26	8.8	0.063	4.7	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-4	26	5.0	170	29	9.3	0.12	5.8	0.39	-	-	-	-	-	-	-	-	-
HG-NLR-4	27	5.0	167	24	7.9	0.10	5.2	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-4	28	5.0	147	42	14	0.21	13	0.68	0.14	0.66	1.4	0.21	0.27	0.031	0.0031	0.0034	0.24
HG-NLR-4	29	5.0	138	16	5.0	0.079	5.0	0.26	-	-	-	-	-	-	-	-	-
HG-NLR-4	30	4.9	133	18	5.5	0.12	5.8	0.31	-	-	-	-	-	-	-	-	-
HG-NLR-4	31	-	-	-	-	-	7.1	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-4	32	5.0	111	34	10	0.50	9.3	2.1	0.14	0.59	1.5	0.21	0.14	0.032	0.0033	0.0036	0.42
HG-NLR-4	33	4.9	110	14	4.2	0.059	3.9	0.89	-	-	-	-	-	-	-	-	-
HG-NLR-4	34	5.3	108	18	4.8	0.11	4.8	1.1	-	-	-	-	-	-	-	-	-
HG-NLR-4	35	4.8	108	20	5.7	0.12	5.3	1.2	-	-	-	-	-	-	-	-	-
HG-NLR-4	36	5.2	96	21	6.3	0.16	8.9	1.1	0.21	0.45	0.84	0.16	0.053	0.024	0.0024	0.0026	0.23
HG-NLR-4	37	4.7	110	15	4.5	0.096	5.4	0.64	-	-	-	-	-	-	-	-	-
HG-NLR-4	38	4.9	108	19	5.2	0.12	6.9	0.81	-	-	-	-	-	-	-	-	-
HG-NLR-4	39	4.8	116	19	5.3	0.11	6.5	0.76	-	-	-	-	-	-	-	-	-
HG-NLR-4	40	4.8	95	22	5.7	0.17	9.8	0.57	0.029	0.32	0.92	0.23	0.29	0.026	0.0026	0.011	0.18
HG-NLR-4	41	5.0	95	15	4.1	0.11	6.3	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-4	42	4.9	101	13	3.2	0.096	5.4	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-4	43	4.7	90	13	3.7	0.13	5.7	0.33	-	-	-	-	-	-	-	-	-
HG-NLR-4	44	4.9	87	25	6.6	0.20	12	0.68	0.068	0.51	1.1	0.14	0.34	0.030	0.0031	0.0034	0.28
HG-NLR-4	45	4.8	91	14	3.3	0.10	5.7	0.33	-	-	-	-	-	-	-	-	-
HG-NLR-4	46	4.5	92	14	3.6	0.11	6.2	0.36	-	-	-	-	-	-	-	-	-
HG-NLR-4	47	4.6	94	13	3.2	0.13	5.4	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-4	48	4.7	84	25	6.6	0.40	11	0.66	0.033	0.45	1.1	0.13	0.033	0.12	0.0030	0.0033	0.19
HG-NLR-4	49	4.8	88	9.3	2.5	0.082	4.7	0.27	-	-	-	-	-	-	-	-	-
HG-NLR-4	50	4.3	98	13	3.2	0.13	5.6	0.33	-	-	-	-	-	-	-	-	-
HG-NLR-4	51	4.4	94	13	3.2	0.13	5.5	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-4	52	4.6	95	21	5.5	0.29	13	0.58	0.029	0.35	0.87	0.23	0.29	0.026	0.0026	0.012	0.17
HG-NLR-4	53	4.7	86	13	3.4	0.15	8.5	0.37	-	-	-	-	-	-	-	-	-
HG-NLR-4	54	4.6	88	10	2.6	0.11	6.5	0.28	-	-	-	-	-	-	-	-	-
HG-NLR-4	55	4.6	89	14	3.7	0.16	9.4	0.41	-	-	-	-	-	-	-	-	-
HG-NLR-4	56	4.7	80	19	5.1	0.26	12	0.64	0.064	0.38	0.77	0.19	0.032	0.029	0.0029	0.019	0.28
HG-NLR-4	57	4.7	77	8.3	2.2	0.089	5.6	0.30	-	-	-	-	-	-	-	-	-
HG-NLR-4	58	4.6	87	12	3.1	0.14	6.7	0.35	-	-	-	-	-	-	-	-	-
HG-NLR-4	59	4.5	86	9.2	2.4	0.11	5.3	0.28	-	-	-	-	-	-	-	-	-
HG-NLR-4	60	4.2	95	15	4.1	0.24	9.2	0.48	0.024	0.087	0.63	0.048	0.024	0.022	0.0022	0.0024	0.16
HG-NLR-4	61	4.5	86	9.2	2.3	0.11	5.4	0.29	-	-	-	-	-	-	-	-	-
HG-NLR-4	62	4.4	87	12	3.1	0.14	6.6	0.34	-	-	-	-	-	-	-	-	-
HG-NLR-4	63	4.5	91	12	3.0	0.16	6.1	0.32	-	-	-	-	-	-	-	-	-
HG-NLR-4	64	4.5	76	18	4.7	0.31	11	0.63	0.031	0.15	0.75	0.13	0.031	0.028	0.0028	0.013	0.24

- Parameter not analyzed

Cell Identification	Cycle	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Chromium	Cobalt	Copper	Iron	Lead	Manganese	Mercury	Molybdenum	Nickel	Selenium
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-4	1	0.00091	0.026	0.0055	0.00046	2.0	0.0013	0.0023	2.0	0.090	0.0055	3.7	1.9	0.00000091	0.0082	1.8	0.26
HG-NLR-4	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	4	0.00027	0.0024	0.026	0.000045	0.18	0.000099	0.00022	0.18	0.016	0.0027	0.82	0.083	0.0000036	0.0023	0.14	0.015
HG-NLR-4	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	8	0.00061	0.012	0.012	0.000044	0.45	0.00032	0.00022	0.80	0.064	0.0047	3.2	0.19	0.0000035	0.0045	0.53	0.045
HG-NLR-4	9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	12	0.00085	0.013	0.0085	0.00043	0.51	0.00026	0.0021	0.60	0.094	0.0077	3.4	0.082	0.0000017	0.0043	0.39	0.041
HG-NLR-4	13	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	16	0.00061	0.0084	0.028	0.00010	0.48	0.00010	0.00025	0.39	0.088	0.0084	2.8	0.038	0.000014	0.0037	0.22	0.049
HG-NLR-4	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	20	0.00038	0.0033	0.060	0.000047	0.44	0.000038	0.00024	0.19	0.067	0.0072	2.5	0.018	0.0000038	0.0021	0.11	0.045
HG-NLR-4	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	22	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	24	0.00035	0.0034	0.11	0.000058	0.55	0.000046	0.00029	0.21	0.090	0.013	4.2	0.020	0.0000093	0.0015	0.11	0.057
HG-NLR-4	25	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	26	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	28	0.00021	0.0018	0.075	0.000034	0.33	0.000021	0.00017	0.14	0.067	0.0068	2.8	0.014	0.00000034	0.00062	0.073	0.031
HG-NLR-4	29	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	32	0.00036	0.0027	0.086	0.000036	0.27	0.000029	0.00018	0.14	0.086	0.067	3.7	0.014	0.0000079	0.011	0.075	0.031
HG-NLR-4	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	34	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	35	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	36	0.00021	0.0018	0.063	0.000026	0.17	0.000016	0.00013	0.100	0.068	0.034	2.8	0.011	0.0000011	0.0053	0.057	0.020
HG-NLR-4	37	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	38	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	39	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	40	0.00023	0.0018	0.063	0.000029	0.20	0.000017	0.00014	0.10	0.080	0.032	3.1	0.011	0.0000057	0.0046	0.059	0.023
HG-NLR-4	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	44	0.00027	0.0024	0.088	0.000034	0.22	0.000027	0.00017	0.14	0.12	0.055	4.3	0.015	0.0000020	0.0068	0.083	0.027
HG-NLR-4	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	48	0.00027	0.0022	0.080	0.000033	0.19	0.000027	0.00017	0.14	0.13	0.035	4.5	0.015	0.0000060	0.0025	0.080	0.025
HG-NLR-4	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	51	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	52	0.00012	0.0019	0.075	0.000029	0.20	0.000029	0.00014	0.14	0.17	0.031	4.6	0.015	0.0000069	0.00023	0.083	0.022
HG-NLR-4	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	55	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	56	0.00026	0.0022	0.077	0.000032	0.15	0.000026	0.00016	0.15	0.17	0.058	4.7	0.016	0.0000038	0.0041	0.088	0.021
HG-NLR-4	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	58	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	59	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	60	0.000048	0.0014	0.063	0.000048	0.12	0.000014	0.00012	0.13	0.16	0.040	3.9	0.013	0.0000039	0.00043	0.074	0.016
HG-NLR-4	61	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	62	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	63	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HG-NLR-4	64	0.00019	0.0019	0.075	0.000063	0.12	0.000031	0.00016	0.15	0.23	0.063	4.8	0.016	0.0000019	0.0015	0.092	0.019

- Parameter not analyzed

Cell Identification	Cycle	Silver	Strontium	Thallium	Tin	Titanium	Uranium	Vanadium	Zinc
		mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
HG-NLR-4	1	0.00023	0.44	0.0064	0.00046	0.00091	9.4	0.00046	0.034
HG-NLR-4	2	-	-	-	-	-	-	-	-
HG-NLR-4	3	-	-	-	-	-	-	-	-
HG-NLR-4	4	0.000022	0.14	0.00081	0.000045	0.00018	1.4	0.000045	0.0099
HG-NLR-4	5	-	-	-	-	-	-	-	-
HG-NLR-4	6	-	-	-	-	-	-	-	-
HG-NLR-4	7	-	-	-	-	-	-	-	-
HG-NLR-4	8	0.000022	0.58	0.0026	0.000044	0.00044	8.4	0.000044	0.0096
HG-NLR-4	9	-	-	-	-	-	-	-	-
HG-NLR-4	10	-	-	-	-	-	-	-	-
HG-NLR-4	11	-	-	-	-	-	-	-	-
HG-NLR-4	12	0.00021	0.68	0.0026	0.00043	0.00085	11	0.00043	0.013
HG-NLR-4	13	-	-	-	-	-	-	-	-
HG-NLR-4	14	-	-	-	-	-	-	-	-
HG-NLR-4	15	-	-	-	-	-	-	-	-
HG-NLR-4	16	0.000025	0.69	0.0017	0.000051	0.00010	9.5	0.000051	0.012
HG-NLR-4	17	-	-	-	-	-	-	-	-
HG-NLR-4	18	-	-	-	-	-	-	-	-
HG-NLR-4	19	-	-	-	-	-	-	-	-
HG-NLR-4	20	0.000024	0.50	0.0013	0.000047	0.000095	5.5	0.000047	0.010
HG-NLR-4	21	-	-	-	-	-	-	-	-
HG-NLR-4	22	-	-	-	-	-	-	-	-
HG-NLR-4	23	-	-	-	-	-	-	-	-
HG-NLR-4	24	0.000029	0.57	0.0019	0.000058	0.00012	6.1	0.000058	0.011
HG-NLR-4	25	-	-	-	-	-	-	-	-
HG-NLR-4	26	-	-	-	-	-	-	-	-
HG-NLR-4	27	-	-	-	-	-	-	-	-
HG-NLR-4	28	0.000017	0.29	0.00096	0.000034	0.00014	3.6	0.000034	0.0068
HG-NLR-4	29	-	-	-	-	-	-	-	-
HG-NLR-4	30	-	-	-	-	-	-	-	-
HG-NLR-4	31	-	-	-	-	-	-	-	-
HG-NLR-4	32	0.000018	0.32	0.0011	0.000036	0.014	4.0	0.00079	0.0054
HG-NLR-4	33	-	-	-	-	-	-	-	-
HG-NLR-4	34	-	-	-	-	-	-	-	-
HG-NLR-4	35	-	-	-	-	-	-	-	-
HG-NLR-4	36	0.000026	0.22	0.00074	0.000026	0.0063	2.9	0.00032	0.0043
HG-NLR-4	37	-	-	-	-	-	-	-	-
HG-NLR-4	38	-	-	-	-	-	-	-	-
HG-NLR-4	39	-	-	-	-	-	-	-	-
HG-NLR-4	40	0.000014	0.22	0.00080	0.000029	0.0044	3.3	0.000057	0.0045
HG-NLR-4	41	-	-	-	-	-	-	-	-
HG-NLR-4	42	-	-	-	-	-	-	-	-
HG-NLR-4	43	-	-	-	-	-	-	-	-
HG-NLR-4	44	0.000034	0.27	0.0010	0.000034	0.0081	4.2	0.00041	0.0052
HG-NLR-4	45	-	-	-	-	-	-	-	-
HG-NLR-4	46	-	-	-	-	-	-	-	-
HG-NLR-4	47	-	-	-	-	-	-	-	-
HG-NLR-4	48	0.000017	0.27	0.00093	0.000033	0.0021	4.3	0.000033	0.0063
HG-NLR-4	49	-	-	-	-	-	-	-	-
HG-NLR-4	50	-	-	-	-	-	-	-	-
HG-NLR-4	51	-	-	-	-	-	-	-	-
HG-NLR-4	52	0.000014	0.25	0.00081	0.000029	0.00023	4.3	0.000029	0.0087
HG-NLR-4	53	-	-	-	-	-	-	-	-
HG-NLR-4	54	-	-	-	-	-	-	-	-
HG-NLR-4	55	-	-	-	-	-	-	-	-
HG-NLR-4	56	0.000016	0.23	0.00083	0.000032	0.0064	4.4	0.00038	0.0064
HG-NLR-4	57	-	-	-	-	-	-	-	-
HG-NLR-4	58	-	-	-	-	-	-	-	-
HG-NLR-4	59	-	-	-	-	-	-	-	-
HG-NLR-4	60	0.000012	0.17	0.00063	0.000048	0.00097	3.6	0.000097	0.0053
HG-NLR-4	61	-	-	-	-	-	-	-	-
HG-NLR-4	62	-	-	-	-	-	-	-	-
HG-NLR-4	63	-	-	-	-	-	-	-	-
HG-NLR-4	64	0.000063	0.21	0.00069	0.000031	0.0038	4.9	0.00013	0.0062

- Parameter not analyzed

HCT Depletion Calculation Results

NexGen Rook I Geochemical Characterization Report

Sample ID			HG-NLR-1	HG-NLR-2	HG-NLR-3	HG-NLR-4	MG-NLR-1	MG-NLR-2	MG-NLR-3	MG-NLR-4
Static Test Results	Total Sulphur	%	0.64	0.64	0.65	0.61	0.30	0.31	0.31	0.31
	Sulphide Sulphur	%	0.24	0.24	0.25	0.21	0.23	0.25	0.24	0.25
	NP	t $CaCO_3$/1000 t	3.2	3.8	3.3	3.3	2.5	2.1	2.3	2.8
	CO_3-NP	t $CaCO_3$/1000 t	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
	ARD Designation	NPR	PAG	PAG	PAG	PAG	PAG	PAG	PAG	PAG
Kinetic Test Results	Total Sulphur Remaining	%	38	29	29	38	67	70	70	70
	Time to Total Sulphur Depletion	years	1.9	1.2	1.4	1.5	5.4	6.2	5.4	5.7
	Sulphide Remaining	%	0	0	0	0	57	63	62	63
	Time to Sulphide Depletion	years	0	0	0	0	3.5	4.5	3.7	4.1
	Neutralization Capacity Remaining (NP)	%	0	0	0	0	0	0	2.3	20
	Time to NP depletion	years	0	0	0	0	0	0	0.072	0.81
	Neutralization Capacity Remaining (CO_3-NP)	%	0	0	0	0	0	0	0	0
	Time to CO_3-NP Depletion	years	0	0	0	0	0	0	0	0
	ARD Designation	CO_3-NPR	PAG	PAG	PAG	PAG	PAG	PAG	PAG	PAG
		NPR	PAG	PAG	PAG	PAG	PAG	PAG	PAG	PAG
		Overall	PAG	PAG	PAG	PAG	PAG	PAG	PAG	PAG

Calculations include data to October 15, 2020 (64 leaching cycles)

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	664	1.00	0.67	0.0082	8.1	0.86	1846	-	0.082	0.094	0.0059	0.0059	1.7	1.0	0.41	0.022
HLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0050	0.0060	0.00050	0.00050	0.20	0.096	0.038	0.018
HLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	663	1.00	0.66	0.0082	8.1	0.86	1846	-	0.0019	0.0019	0.00047	0.00047	0.17	0.077	0.031	0.017
HLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.86	1846	-	0.0013	0.0015	0.000092	0.000092	0.085	0.044	0.017	0.010
HLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.86	1846	-	0.0014	0.0017	0.000065	0.000065	0.066	0.033	0.013	0.0069
HLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	649	1.00	0.65	0.0082	7.9	0.86	1846	-	0.00072	0.00085	0.000033	0.000033	0.045	0.024	0.0096	0.0041
HLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	660	1.00	0.66	0.0082	8.1	0.86	1846	-	0.00073	0.00053	0.00013	0.000033	0.041	0.021	0.0084	0.0030
HLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	657	1.00	0.66	0.0082	8.0	0.86	1846	-	0.00040	0.00053	0.000067	0.000067	0.041	0.023	0.0091	0.0027
HLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00092	0.0011	0.000033	0.000033	0.034	0.018	0.0074	0.0020
HLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00086	0.0011	0.000033	0.000033	0.031	0.017	0.0070	0.0015
HLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.86	1846	-	0.00092	0.00046	0.00033	0.000033	0.030	0.017	0.0067	0.0012
HLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00099	0.00086	0.00013	0.000033	0.027	0.014	0.0058	0.0011
HLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1846	-	0.00046	0.00039	0.000066	0.000033	0.024	0.014	0.0054	0.00085
HLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1846	-	0.00059	0.00072	0.000033	0.000033	0.024	0.013	0.0053	0.00065
HLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0017	0.0018	0.00013	0.000033	0.020	0.013	0.0051	0.00059
HLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00079	0.00033	0.00033	0.000033	0.020	0.013	0.0052	0.00040
HLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0016	0.0019	0.000033	0.000033	0.019	0.012	0.0047	0.00040
HLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	667	1.00	0.67	0.0082	8.2	0.86	1844	-	0.012	0.012	0.0059	0.0059	0.43	0.19	0.067	0.024
HLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.86	1844	-	0.0030	0.0040	0.00050	0.00050	0.21	0.095	0.038	0.023
HLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	672	1.00	0.67	0.0082	8.2	0.86	1844	-	0.0038	0.0048	0.00048	0.00048	0.17	0.078	0.031	0.016
HLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1844	-	0.0011	0.0013	0.000092	0.000092	0.087	0.045	0.018	0.010
HLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1844	-	0.0012	0.0015	0.000066	0.000066	0.067	0.034	0.014	0.0070
HLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	662	1.00	0.66	0.0082	8.1	0.86	1844	-	0.0015	0.0015	0.00013	0.000034	0.046	0.024	0.0097	0.0043
HLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	661	1.00	0.66	0.0082	8.1	0.86	1844	-	0.00094	0.00047	0.00033	0.000033	0.043	0.022	0.0087	0.0030
HLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1844	-	0.00053	0.00067	0.000067	0.000067	0.039	0.023	0.0091	0.0025
HLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	0.00086	0.00086	0.000066	0.000033	0.034	0.019	0.0074	0.0019
HLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1844	-	0.00099	0.0011	0.000066	0.000033	0.030	0.017	0.0070	0.0015
HLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1844	-	0.00060	0.000066	0.00033	0.000033	0.029	0.016	0.0064	0.0012
HLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1844	-	0.0011	0.0011	0.00013	0.000033	0.026	0.014	0.0058	0.0011
HLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1844	-	0.0016	0.0017	0.00013	0.000033	0.025	0.014	0.0054	0.00079
HLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1844	-	0.0016	0.0019	0.000033	0.000033	0.025	0.014	0.0054	0.00066
HLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	0.00040	0.000033	0.00013	0.000033	0.020	0.013	0.0052	0.00053
HLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1844	-	0.00086	0.00040	0.00033	0.000033	0.020	0.013	0.0052	0.00040
HLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	0.00066	0.00080	0.000033	0.000033	0.019	0.012	0.0047	0.00040
HLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1842	-	0.023	0.023	0.0058	0.0058	0.37	0.17	0.072	0.0058
HLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1842	-	0.0020	0.0020	0.00050	0.00050	0.21	0.097	0.039	0.016
HLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	659	1.00	0.66	0.0082	8.1	0.86	1842	-	0.0037	0.0047	0.00047	0.00047	0.16	0.075	0.030	0.014
HLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00093	0.0011	0.000093	0.000093	0.089	0.046	0.018	0.0098
HLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00053	0.00066	0.000066	0.000066	0.068	0.035	0.014	0.0066
HLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1842	-	0.0016	0.0016	0.00013	0.000033	0.047	0.025	0.0098	0.0041
HLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1842	-	0.00066	0.00047	0.00013	0.000033	0.043	0.022	0.0088	0.0029
HLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1842	-	0.0011	0.0013	0.000067	0.000067	0.042	0.023	0.0091	0.0025
HLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1842	-	0.00086	0.0011	0.000033	0.000033	0.033	0.018	0.0074	0.0019
HLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1842	-	0.00066	0.00033	0.00027	0.000033	0.031	0.018	0.0071	0.0015
HLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00059	0.000066	0.00033	0.000033	0.028	0.016	0.0065	0.0013
HLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00079	0.00066	0.00013	0.000033	0.026	0.015	0.0058	0.0011
HLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	654	1.00	0.66	0.0082	8.0	0.86	1842	-	0.00099	0.00086	0.00013	0.000033	0.026	0.014	0.0055	0.00086
HLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00093	0.0011	0.000033	0.000033	0.025	0.014	0.0055	0.00073
HLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00053	0.00013	0.00026	0.000033	0.022	0.013	0.0051	0.00060
HLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00093	0.00046	0.00033	0.000033	0.021	0.013	0.0052	0.00040
HLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1842	-	0.00079	0.00099	0.000033	0.000033	0.019	0.012	0.0047	0.00046
HLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	659	1.00	0.66	0.0082	8.1	0.86	1846	-	0.023	0.023	0.0058	0.0058	0.37	0.20	0.081	0.0047
HLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1846	-	0.0050	0.0061	0.00050	0.00050	0.20	0.10	0.041	0.018
HLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	663	1.00	0.66	0.0082	8.1	0.86	1846	-	0.0028	0.0038	0.00047	0.00047	0.17	0.077	0.031	0.015
HLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0011	0.0013	0.000092	0.000092	0.089	0.045	0.018	0.011
HLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0012	0.0014	0.000066	0.000066	0.068	0.034	0.014	0.0071
HLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	660	1.00	0.66	0.0082	8.1	0.86	1846	-	0.0016	0.0016	0.00013	0.000033	0.047	0.024	0.0097	0.0044
HLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1846	-	0.00080	0.00033	0.00033	0.000033	0.041	0.022	0.0087	0.0030
HLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	657	1.00	0.66	0.0082	8.0	0.86	1846	-	0.00053	0.00067	0.000067	0.000067	0.042	0.023	0.0090	0.0027
HLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00093	0.0011	0.000033	0.000033	0.034	0.018	0.0073	0.0019
HLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0015	0.0018	0.000033	0.000033	0.032	0.017	0.0070	0.0016
HLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00053	0.00013	0.00026	0.000033	0.029	0.016	0.0065	0.0013
HLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	649	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0011	0.0011	0.00013	0.000033	0.027	0.015	0.0059	0.0011
HLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	649	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00059	0.00039	0.00013	0.000033	0.025	0.014	0.0055	0.00086
HLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1846	-	0.00066	0.00079	0.000033	0.000033	0.025	0.013	0.0054	0.00066
HLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00059	0.00026	0.00026	0.000033	0.019	0.013	0.0050	0.00053
HLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	0.00066	0.00013	0.00033	0.000033	0.020	0.013	0.0051	0.00040
HLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	0.0015	0.0018	0.000033	0.000033	0.019	0.012	0.0048	0.00040

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-P/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HLC-1	L-1	0.00047	0.024	0.0059	0.057	-	-	0.000053	-	1.1	0.0000082	0.00052	0.000088	0.00012	0.00020	0.00000059	5.9E-08	0.00000059	0.000011	0.000014	0.000054	0.00000033
HLC-1	L-2	0.000040	0.0034	0.00010	0.012	-	-	0.000045	-	0.11	0.00000076	0.000067	0.000013	0.000020	0.000016	5.0E-08	2.0E-08	0.0000006	0.00000025	0.0000033	0.000042	5.0E-10
HLC-1	L-3	0.000038	0.0029	0.000047	0.011	-	-	0.0000042	-	0.10	0.00000048	0.000033	0.000012	0.000019	0.000012	4.7E-08	1.9E-08	4.7E-08	0.00000024	0.00000047	0.0000036	4.7E-10
HLC-1	L-4	0.000022	0.0016	0.000037	0.0062	-	-	0.00000082	-	0.057	0.00000024	0.0000038	0.0000081	0.0000092	0.0000040	9.2E-09	9.2E-10	1.8E-08	4.6E-08	0.00000027	0.0000013	3.7E-10
HLC-1	L-5	0.000016	0.0012	0.000026	0.0044	-	-	0.00000059	-	0.042	0.00000013	0.0000039	0.0000059	0.0000078	0.0000026	6.5E-09	6.5E-10	1.3E-08	3.3E-08	0.00000014	0.0000014	2.6E-10
HLC-1	L-6	0.000011	0.00079	0.000020	0.0030	-	-	0.0000003	-	0.030	8.5E-08	0.00000085	0.0000040	0.0000053	0.0000018	3.3E-09	3.3E-09	3.3E-09	1.6E-08	5.3E-08	5.3E-08	1.3E-10
HLC-1	L-7	0.000010	0.00073	0.000020	0.0023	-	-	0.0000003	-	0.025	5.5E-08	0.00000094	0.0000035	0.0000060	0.0000017	3.3E-09	1.3E-09	3.3E-09	1.7E-08	6.0E-08	0.00000021	3.3E-11
HLC-1	L-8	0.000012	0.00079	0.000013	0.0024	-	-	0.0000060	-	0.027	3.7E-08	0.0000040	0.0000035	0.0000067	0.0000021	6.7E-09	2.7E-09	2.7E-08	3.3E-08	0.00000019	0.0000021	1.3E-10
HLC-1	L-9	0.0000066	0.00056	0.000013	0.0017	-	-	0.0000030	-	0.021	1.5E-08	0.0000018	0.0000027	0.0000059	0.0000018	3.3E-09	2.6E-09	1.3E-08	1.6E-08	7.9E-08	0.00000086	1.3E-10
HLC-1	L-10	0.0000066	0.00053	0.000013	0.0015	-	-	0.0000030	-	0.020	9.9E-09	0.00000099	0.0000026	0.0000059	0.0000017	3.3E-09	6.6E-10	3.3E-09	1.7E-08	4.0E-08	0.00000011	3.3E-11
HLC-1	L-11	0.0000066	0.00049	0.000013	0.0014	-	-	0.0000030	-	0.018	7.9E-09	0.0000014	0.0000025	0.0000059	0.0000018	3.3E-09	6.6E-10	3.3E-09	1.6E-08	3.9E-08	0.00000011	6.6E-11
HLC-1	L-12	0.0000066	0.00042	0.000013	0.0011	-	-	0.0000030	-	0.016	5.9E-09	0.0000012	0.0000021	0.0000053	0.0000016	3.3E-09	3.3E-10	3.3E-09	1.6E-08	2.6E-08	5.3E-08	3.3E-11
HLC-1	L-13	0.0000066	0.00040	0.000013	0.00098	-	-	0.0000030	-	0.015	5.2E-09	0.0000012	0.0000020	0.0000052	0.0000016	3.3E-09	3.3E-10	3.3E-09	1.6E-08	2.6E-08	6.6E-08	3.3E-11
HLC-1	L-14	0.0000059	0.00038	0.0000065	0.00091	-	-	0.0000029	-	0.014	4.6E-09	0.0000013	0.0000018	0.0000052	0.0000015	3.3E-09	6.5E-10	3.3E-09	1.6E-08	2.6E-08	5.9E-08	3.3E-11
HLC-1	L-15	0.0000072	0.00036	0.0000066	0.00079	-	-	0.000030	-	0.014	3.3E-09	0.0000018	0.0000017	0.0000046	0.0000016	3.3E-09	6.6E-10	3.3E-09	1.6E-08	2.0E-08	1.6E-08	3.3E-11
HLC-1	L-16	0.0000059	0.00036	0.0000066	0.00073	-	-	0.0000030	-	0.014	1.6E-09	0.0000016	0.0000016	0.0000053	0.0000015	3.3E-09	2.0E-09	3.3E-09	1.6E-08	2.6E-08	0.00000016	3.3E-11
HLC-1	L-17	0.0000066	0.00032	0.0000066	0.00059	-	-	0.0000030	-	0.013	1.6E-09	0.0000014	0.0000016	0.0000046	0.0000015	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.9E-08	9.2E-08	1.3E-10
HLC-2	L-1	0.00024	0.013	0.0059	0.039	-	-	0.000053	-	0.25	0.0000027	0.00041	0.000028	0.000059	0.000043	0.00000059	5.9E-08	0.0000012	0.0000030	0.000015	0.00014	2.4E-08
HLC-2	L-2	0.000040	0.0039	0.000050	0.015	-	-	0.000045	-	0.12	0.0000011	0.000013	0.000016	0.000020	0.0000064	5.0E-08	5.0E-08	5.0E-08	0.00000025	0.0000010	0.0000037	4.0E-09
HLC-2	L-3	0.000029	0.0031	0.000048	0.010	-	-	0.0000043	-	0.095	0.00000061	0.000034	0.000012	0.000019	0.0000059	4.8E-08	9.5E-09	4.8E-08	0.00000024	0.00000057	0.0000055	1.9E-09
HLC-2	L-4	0.000020	0.0016	0.000037	0.0062	-	-	0.00000083	-	0.057	0.00000024	0.0000040	0.0000077	0.0000092	0.0000024	9.2E-09	1.8E-09	9.2E-09	4.6E-08	0.00000022	0.0000015	5.5E-10
HLC-2	L-5	0.000017	0.0012	0.000026	0.0045	-	-	0.0000006	-	0.042	0.00000012	0.0000028	0.0000060	0.0000066	0.0000019	6.6E-09	1.3E-09	6.6E-09	3.3E-08	0.00000011	0.00000054	2.6E-10
HLC-2	L-6	0.0000087	0.00080	0.000020	0.0030	-	-	0.0000003	-	0.030	8.7E-08	0.00000087	0.0000040	0.0000054	0.0000015	3.4E-09	4.0E-09	3.4E-09	1.7E-08	4.0E-08	6.7E-08	3.4E-11
HLC-2	L-7	0.000010	0.00074	0.000013	0.0024	-	-	0.0000003	-	0.027	5.9E-08	0.00000074	0.0000035	0.0000067	0.0000015	3.3E-09	2.7E-09	3.3E-09	1.7E-08	8.0E-08	0.0000001	6.7E-11
HLC-2	L-8	0.000012	0.00080	0.000013	0.0024	-	-	0.0000060	-	0.027	3.9E-08	0.0000013	0.0000033	0.0000080	0.0000019	6.7E-09	2.7E-09	6.7E-09	3.3E-08	6.7E-08	0.00000032	6.7E-11
HLC-2	L-9	0.0000066	0.00058	0.000013	0.0017	-	-	0.0000030	-	0.021	1.8E-08	0.0000008	0.0000027	0.0000066	0.0000016	3.3E-09	2.7E-09	3.3E-09	1.7E-08	4.0E-08	0.00000014	3.3E-11
HLC-2	L-10	0.0000066	0.00053	0.000013	0.0015	-	-	0.0000030	-	0.019	1.5E-08	0.00000066	0.0000025	0.0000060	0.0000015	3.3E-09	6.6E-10	3.3E-09	1.7E-08	3.3E-08	9.3E-08	3.3E-11
HLC-2	L-11	0.0000060	0.00048	0.000013	0.0013	-	-	0.0000030	-	0.018	1.2E-08	0.0000008	0.0000023	0.0000060	0.0000015	3.3E-09	1.3E-09	3.3E-09	1.7E-08	3.3E-08	0.00000011	3.3E-11
HLC-2	L-12	0.0000053	0.00043	0.0000066	0.0011	-	-	0.0000030	-	0.017	9.3E-09	0.00000086	0.0000021	0.0000053	0.0000014	3.3E-09	3.3E-10	3.3E-09	1.7E-08	2.7E-08	0.00000011	3.3E-11
HLC-2	L-13	0.0000066	0.00041	0.0000066	0.00099	-	-	0.0000030	-	0.015	7.3E-09	0.0000014	0.0000020	0.0000053	0.0000013	3.3E-09	4.6E-09	3.3E-09	1.6E-08	4.0E-08	0.0000004	3.3E-11
HLC-2	L-14	0.0000053	0.00040	0.0000066	0.00093	-	-	0.0000030	-	0.015	6.6E-09	0.0000012	0.0000019	0.0000053	0.0000014	3.3E-09	1.3E-09	3.3E-09	1.7E-08	4.0E-08	0.0000003	3.3E-11
HLC-2	L-15	0.0000073	0.00036	0.0000066	0.00080	-	-	0.000030	-	0.014	4.0E-09	0.0000012	0.0000017	0.0000046	0.0000014	3.3E-09	3.3E-09	3.3E-09	1.7E-08	2.7E-08	1.7E-08	3.3E-11
HLC-2	L-16	0.0000053	0.00036	0.0000066	0.00073	-	-	0.0000030	-	0.014	3.3E-09	0.0000012	0.0000016	0.0000053	0.0000013	3.3E-09	2.0E-09	3.3E-09	1.7E-08	2.6E-08	7.9E-08	3.3E-11
HLC-2	L-17	0.0000053	0.00032	0.0000066	0.00059	-	-	0.0000030	-	0.013	1.7E-09	0.0000011	0.0000015	0.0000053	0.0000013	3.3E-09	6.6E-10	3.3E-09	1.7E-08	2.7E-08	1.0E-07	1.3E-10
HLC-3	L-1	0.000058	0.0070	0.00058	0.014	-	-	0.000052	-	0.19	0.0000012	0.00027	0.000014	0.000058	0.000041	0.00000058	0.00000012	0.0000012	0.0000029	0.000016	0.00011	5.8E-09
HLC-3	L-2	0.000040	0.0034	0.000050	0.011	-	-	0.000045	-	0.12	0.00000065	0.000014	0.000011	0.000020	0.0000087	5.0E-08	2.0E-08	5.0E-08	0.00000025	0.0000010	0.0000092	5.0E-10
HLC-3	L-3	0.000028	0.0028	0.000047	0.0093	-	-	0.0000042	-	0.093	0.00000047	0.000026	0.000010	0.000019	0.0000069	4.7E-08	9.3E-09	4.7E-08	0.00000023	0.00000047	0.0000037	4.7E-10
HLC-3	L-4	0.000022	0.0016	0.000037	0.0063	-	-	0.00000083	-	0.057	0.00000022	0.0000043	0.0000078	0.0000093	0.0000028	9.3E-09	9.3E-10	1.9E-08	4.6E-08	0.00000022	0.0000015	3.7E-10
HLC-3	L-5	0.000017	0.0012	0.000026	0.0044	-	-	0.0000006	-	0.044	9.0E-08	0.0000028	0.0000060	0.0000079	0.0000021	6.6E-09	4.0E-09	2.6E-08	3.3E-08	0.0000025	0.0000020	2.6E-10
HLC-3	L-6	0.000011	0.00080	0.000020	0.0029	-	-	0.0000003	-	0.030	6.7E-08	0.00000093	0.0000040	0.0000060	0.0000016	3.3E-09	3.3E-09	6.7E-09	1.7E-08	5.3E-08	0.00000031	3.3E-11
HLC-3	L-7	0.0000100	0.00073	0.000013	0.0023	-	-	0.0000003	-	0.026	4.3E-08	0.00000086	0.0000034	0.0000066	0.0000016	3.3E-09	1.3E-09	3.3E-09	1.7E-08	6.0E-08	0.0000021	3.3E-11
HLC-3	L-8	0.000012	0.00077	0.000013	0.0023	-	-	0.0000060	-	0.027	3.1E-08	0.0000017	0.0000033	0.0000080	0.0000019	6.7E-09	6.7E-10	6.7E-09	3.3E-08	0.00000011	0.0000010	6.7E-11
HLC-3	L-9	0.0000053	0.00055	0.000013	0.0017	-	-	0.0000030	-	0.021	2.7E-08	0.00000086	0.0000027	0.0000060	0.0000016	3.3E-09	2.7E-09	3.3E-09	1.7E-08	4.6E-08	0.00000028	3.3E-11
HLC-3	L-10	0.0000060	0.00052	0.000013	0.0015	-	-	0.0000030	-	0.020	1.1E-08	0.00000099	0.0000025	0.0000060	0.0000015	3.3E-09	6.6E-10	3.3E-09	1.7E-08	5.3E-08	0.00000036	3.3E-11
HLC-3	L-11	0.0000066	0.00048	0.000013	0.0013	-	-	0.0000030	-	0.018	7.3E-09	0.0000011	0.0000024	0.0000059	0.0000015	3.3E-09	1.3E-09	6.6E-09	1.7E-08	5.3E-08	0.00000049	6.6E-11
HLC-3	L-12	0.0000060	0.00042	0.0000066	0.0011	-	-	0.0000030	-	0.017	5.3E-09	0.00000079	0.0000022	0.0000053	0.0000015	3.3E-09	2.0E-09	3.3E-09	1.7E-08	2.0E-08	9.9E-08	3.3E-11
HLC-3	L-13	0.0000066	0.00040	0.0000066	0.00099	-	-	0.0000030	-	0.015	5.3E-09	0.0000011	0.0000021	0.0000053	0.0000015	3.3E-09	6.6E-10	3.3E-09	1.7E-08	3.3E-08	0.00000012	3.3E-11
HLC-3	L-14	0.0000066	0.00040	0.0000066	0.00093	-	-	0.0000030	-	0.015	4.6E-09	0.0000013	0.0000019	0.0000053	0.0000015	3.3E-09	6.6E-10	3.3E-09	1.7E-08	2.6E-08	0.00000013	3.3E-11
HLC-3	L-15	0.0000066	0.00035	0.0000066	0.00079	-	-	0.000030	-	0.014	3.3E-09	0.0000012	0.0000017	0.0000046	0.0000015	3.3E-09	3.3E-10	3.3E-09	1.7E-08	2.0E-08	1.7E-08	3.3E-11
HLC-3	L-16	0.0000046	0.00036	0.0000066	0.00073	-	-	0.0000030	-	0.014	4.0E-09	0.0000012	0.0000017	0.0000053	0.0000015	3.3E-09	3.3E-10	3.3E-09	1.7E-08	2.0E-08	6.6E-08	3.3E-11
HLC-3	L-17	0.0000053	0.00032	0.0000066	0.00061	-	-	0.0000030	-	0.013	5.3E-09	0.0000014	0.0000016	0.0000046	0.0000015	3.3E-09	3.3E-10	3.3E-09	1.6E-08	4.6E-08	0.00000024	1.3E-10
HLC-4	L-1	0.000058	0.0070	0.00058	0.016	-	-	0.000053	-	0.21	0.0000019	0.00029	0.000015	0.000058	0.000040	0.00000058	0.00000012	0.00000058	0.0000029	0.000012	0.000096	1.2E-08
HLC-4	L-2	0.000030	0.0036	0.00010	0.012	-	-	0.000045	-	0.12	0.00000071	0.0000084	0.000012	0.000020	0.0000081	5.0E-08	2.0E-08	5.0E-08	0.0000017	0.0000005	0.0000059	1.0E-09
HLC-4	L-3	0.000028	0.0028	0.000047	0.010	-	-	0.0000042	-	0.094	0.00000047	0.000034	0.000011	0.000019	0.0000066	4.7E-08	9.4E-09	4.7E-08	0.00000024	0.00000028	0.0000035	4.7E-10
HLC-4	L-4	0.000022	0.0016	0.000037	0.0065	-	-	0.00000083	-	0.057	0.00000022	0.0000028	0.0000079	0.0000092	0.0000026	9.2E-09	1.8E-09	9.2E-09	4.6E-08	0.00000018	0.0000016	5.5E-10
HLC-4	L-5	0.000017	0.0012	0.000026	0.0046	-	-	0.00000059	-	0.043	0.00000012	0.0000020	0.0000062	0.0000066	0.0000020	6.6E-09	2.6E-09	1.3E-08	3.3E-08	0.00000012	0.0000010	2.6E-10
HLC-4	L-6	0.000011	0.00080	0.000020	0.0030	-	-	0.0000003	-	0.030	8.0E-08	0.00000087	0.0000041	0.0000067	0.0000015	3.3E-09	3.3E-10	3.3E-09	1.7E-08	4.0E-08	0.00000051	3.3E-11
HLC-4	L-7	0.0000100	0.00073	0.000013	0.0024	-	-	0.0000003	-	0.026	4.9E-08	0.00000087	0.0000035	0.0000067	0.0000016	3.3E-09	3.3E-10	3.3E-09	1.7E-08	5.3E-08	0.00000026	6.7E-11
HLC-4	L-8	0.000012	0.00080	0.000013	0.0024	-	-	0.0000060	-	0.027	3.5E-08	0.0000016	0.0000035	0.0000080	0.0000019	6.7E-09	1.3E-09	6.7E-09	3.3E-08	8.0E-08	0.00000088	6.7E-11
HLC-4	L-9	0.0000053	0.00056	0.000013	0.0017	-	-	0.0000030	-	0.021	2.8E-08	0.00000079	0.0000027	0.0000059	0.0000016	3.3E-09	6.6E-10	3.3E-09	1.7E-08	4.0E-08	0.00000022	3.3E-11
HLC-4	L-10	0.0000066	0.00053	0.000013	0.0016	-	-	0.0000030	-	0.020	1.1E-08	0.00000099	0.0000026	0.0000066	0.0000015	3.3E-09	1.3E-09	3.3E-09	1.7E-08	4.6E-08	0.00000038	3.3E-11
HLC-4	L-11	0.0000066	0.00048	0.000013	0.0014	-	-	0.0000030	-	0.018	8.6E-09	0.0000011	0.0000024	0.0000060	0.0000015	3.3E-09	1.3E-09	6.6E-09	1.7E-08	5.3E-08	0.0000005	6.6E-11
HLC-4	L-12	0.0000066	0.00043	0.000013	0.0012	-	-	0.0000030	-	0.016	5.9E-09	0.0000011	0.0000022	0.0000053	0.0000014	3.3E-09	6.6E-10	3.3E-09	1.6E-08	2.0E-08	5.9E-08	3.3E-11
HLC-4	L-13	0.0000072	0.00041	0.0000066	0.00099	-	-	0.0000030	-	0.016	4.6E-09	0.00000099	0.0000021	0.0000053	0.0000014	3.3E-09	3.3E-10	3.3E-09	1.6E-08	2.6E-08	0.00000016	3.3E-11
HLC-4	L-14	0.0000059	0.00041	0.0000066	0.00092	-	-	0.0000030	-	0.015	4.6E-09	0.0000011	0.0000019	0.0000052	0.0000014	3.3E-09	2.0E-09	3.3E-09	1.6E-08	3.3E-08	0.00000022	3.3E-11
HLC-4	L-15	0.0000066	0.00036	0.0000066	0.00079	-	-	0.000030	-	0.014	4.0E-09	0.00000099	0.0000017	0.0000046	0.0000014	3.3E-09	2.6E-09	3.3E-09	1.7E-08	2.0E-08	1.7E-08	3.3E-11
HLC-4	L-16	0.0000046	0.00036	0.0000066	0.00072	-	-	0.0000030	-	0.013	4.0E-09	0.00000086	0.0000016	0.0000053	0.0000013	3.3E-09	3.3E-10	3.3E-09	5.3E-08	2.0E-08	7.2E-08	3.3E-11
HLC-4	L-17	0.0000059	0.00032	0.0000066	0.00059	-	-	0.0000030	-	0.013	3.3E-09	0.0000016	0.0000015	0.0000053	0.0000015	3.3E-09	2.0E-09	3.3E-09	1.6E-08	3.3E-08	0.00000022	1.3E-10

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HLC-1	L-1	0.0000029	0.0026	0.0000035	0.000025	0.000020	0.00016	0.00000059	0.00079	0.000018	0.0000035	0.00013	0.000016	0.000029	-	-	8.0E-09	-
HLC-1	L-2	0.0000006	0.00057	0.0000006	0.000062	0.0000024	0.000018	5.0E-08	0.000084	0.0000058	0.0000005	0.000056	0.0000016	0.0000021	-	-	9.2E-10	-
HLC-1	L-3	0.00000024	0.00056	0.00000019	0.0000014	0.0000023	0.000016	4.7E-08	0.000071	0.0000019	0.00000038	0.000010	0.0000013	0.00000094	-	-	4.3E-10	-
HLC-1	L-4	4.6E-08	0.00033	5.5E-08	0.0000015	0.0000010	0.0000086	9.2E-09	0.000040	0.0000010	0.00000022	0.0000029	0.00000064	0.00000048	-	-	1.9E-10	-
HLC-1	L-5	3.3E-08	0.00026	3.9E-08	0.0000011	0.00000076	0.0000056	6.5E-09	0.000030	0.00000093	0.00000016	0.0000016	0.00000052	0.00000012	-	-	1.4E-10	-
HLC-1	L-6	1.6E-08	0.00020	2.0E-08	0.00000021	0.00000053	0.0000039	3.3E-09	0.000022	0.0000005	0.00000011	0.00000064	0.00000038	9.2E-08	-	-	8.9E-11	-
HLC-1	L-7	1.7E-08	0.00019	1.3E-08	0.00000026	0.00000049	0.0000033	3.3E-09	0.000019	0.00000043	0.0000001	0.00000057	0.00000039	6.7E-08	-	-	7.8E-11	-
HLC-1	L-8	3.3E-08	0.00020	2.7E-08	0.0000025	0.00000057	0.0000033	6.7E-09	0.000020	0.00000092	0.00000011	0.0000024	0.00000045	0.00000024	-	-	8.6E-11	-
HLC-1	L-9	1.6E-08	0.00018	2.6E-08	0.0000011	0.00000047	0.0000028	3.3E-09	0.000017	0.00000059	9.2E-08	0.0000014	0.00000036	0.00000013	-	-	7.3E-11	-
HLC-1	L-10	1.7E-08	0.00017	3.3E-08	0.00000011	0.00000046	0.0000022	3.3E-09	0.000016	0.00000054	8.6E-08	0.00000073	0.00000036	0.00000016	-	-	6.6E-11	-
HLC-1	L-11	1.6E-08	0.00018	2.0E-08	0.00000015	0.00000047	0.0000025	3.3E-09	0.000015	0.00000052	7.9E-08	0.00000085	0.00000039	5.9E-08	-	-	6.4E-11	-
HLC-1	L-12	1.6E-08	0.00017	1.3E-08	0.00000013	0.00000042	0.0000022	3.3E-09	0.000014	0.00000059	7.9E-08	0.00000086	0.00000035	9.9E-08	-	-	5.0E-11	-
HLC-1	L-13	1.6E-08	0.00016	6.6E-09	0.00000013	0.00000043	0.0000020	3.3E-09	0.000014	0.0000004	7.9E-08	0.00000072	0.00000033	7.2E-08	-	-	5.3E-11	-
HLC-1	L-14	1.6E-08	0.00015	1.3E-08	0.00000011	0.00000038	0.0000017	3.3E-09	0.000012	0.00000049	7.2E-08	0.00000065	0.00000031	0.00000014	-	-	5.3E-11	-
HLC-1	L-15	1.6E-08	0.00015	3.3E-09	0.00000011	0.00000038	0.0000016	3.3E-09	0.000013	0.00000044	5.9E-08	0.00000099	0.00000031	5.3E-08	-	-	4.6E-11	-
HLC-1	L-16	1.6E-08	0.00015	1.3E-08	0.00000013	0.00000035	0.0000013	3.3E-09	0.000011	0.00000034	5.9E-08	0.00000086	0.0000003	0.00000018	-	-	3.9E-11	-
HLC-1	L-17	1.6E-08	0.00016	1.3E-08	0.00000014	0.00000036	0.0000015	3.3E-09	0.000011	0.0000003	5.3E-08	0.00000072	0.00000031	7.9E-08	-	-	4.3E-11	-
HLC-2	L-1	0.0000030	0.00097	0.0000035	0.000048	0.0000035	0.000038	0.00000059	0.00014	0.0000083	0.0000012	0.000076	0.0000047	0.000020	-	-	1.4E-09	-
HLC-2	L-2	0.00000025	0.00060	0.0000002	0.0000014	0.0000016	0.000016	5.0E-08	0.000085	0.0000018	0.0000004	0.0000054	0.0000012	0.0000010	-	-	3.5E-10	-
HLC-2	L-3	0.00000024	0.00050	0.00000019	0.0000036	0.0000014	0.000013	4.8E-08	0.000071	0.0000016	0.00000038	0.0000061	0.0000011	0.00000057	-	-	2.6E-10	-
HLC-2	L-4	4.6E-08	0.00031	5.5E-08	0.00000088	0.00000081	0.0000073	9.2E-09	0.000040	0.00000094	0.0000002	0.0000015	0.00000064	0.00000042	-	-	1.1E-10	-
HLC-2	L-5	3.3E-08	0.00026	2.6E-08	0.00000045	0.00000063	0.0000056	6.6E-09	0.000030	0.00000085	0.00000016	0.00000079	0.00000053	0.00000015	-	-	1.0E-10	-
HLC-2	L-6	1.7E-08	0.00020	2.0E-08	9.4E-08	0.00000048	0.0000038	3.4E-09	0.000022	0.00000051	0.00000011	0.00000042	0.00000039	0.00000013	-	-	7.6E-11	-
HLC-2	L-7	1.7E-08	0.00019	1.3E-08	8.0E-08	0.00000047	0.0000034	3.3E-09	0.000020	0.00000045	0.00000011	0.00000031	0.00000041	6.7E-08	-	-	7.0E-11	-
HLC-2	L-8	3.3E-08	0.00020	2.7E-08	0.00000033	0.00000053	0.0000031	6.7E-09	0.000020	0.00000071	0.00000011	0.00000053	0.00000044	0.00000025	-	-	7.9E-11	-
HLC-2	L-9	1.7E-08	0.00018	1.3E-08	0.00000017	0.00000044	0.0000027	3.3E-09	0.000017	0.0000005	9.3E-08	0.00000038	0.00000037	4.6E-08	-	-	6.5E-11	-
HLC-2	L-10	1.7E-08	0.00017	1.3E-08	6.6E-08	0.00000044	0.0000023	3.3E-09	0.000015	0.00000057	8.6E-08	0.00000031	0.00000036	1.7E-08	-	-	6.1E-11	-
HLC-2	L-11	1.7E-08	0.00016	1.3E-08	8.6E-08	0.00000041	0.0000021	3.3E-09	0.000014	0.0000005	7.3E-08	0.00000031	0.00000035	4.0E-08	-	-	5.6E-11	-
HLC-2	L-12	1.7E-08	0.00017	1.3E-08	0.00000014	0.00000041	0.0000020	3.3E-09	0.000014	0.00000061	8.0E-08	0.00000036	0.00000034	0.00000012	-	-	5.0E-11	-
HLC-2	L-13	1.6E-08	0.00016	6.6E-09	0.00000035	0.00000041	0.0000018	3.3E-09	0.000014	0.00000041	7.3E-08	0.00000053	0.00000033	3.3E-08	-	-	4.6E-11	-
HLC-2	L-14	1.7E-08	0.00015	1.3E-08	0.00000033	0.00000038	0.0000017	3.3E-09	0.000013	0.00000044	7.3E-08	0.00000046	0.00000032	0.00000012	-	-	4.8E-11	-
HLC-2	L-15	1.7E-08	0.00016	6.6E-09	1.0E-07	0.00000038	0.0000015	3.3E-09	0.000012	0.00000043	6.0E-08	0.00000039	0.00000031	6.6E-08	-	-	4.3E-11	-
HLC-2	L-16	1.7E-08	0.00015	6.6E-09	7.3E-08	0.00000035	0.0000013	3.3E-09	0.000011	0.0000003	6.0E-08	0.00000038	0.0000003	7.9E-08	-	-	3.8E-11	-
HLC-2	L-17	1.7E-08	0.00016	6.6E-09	0.00000013	0.00000035	0.0000014	3.3E-09	0.000011	0.0000003	5.3E-08	0.00000042	0.00000031	0.00000015	-	-	4.0E-11	-
HLC-3	L-1	0.0000058	0.00052	0.0000035	0.00014	0.0000046	0.000029	0.00000058	0.00014	0.000087	0.0000012	0.00014	0.0000023	0.000015	-	-	1.9E-09	-
HLC-3	L-2	0.00000025	0.00048	0.0000004	0.0000067	0.0000021	0.000014	5.0E-08	0.000082	0.0000019	0.0000004	0.00011	0.0000011	0.0000020	-	-	4.3E-10	-
HLC-3	L-3	0.00000023	0.00046	0.00000019	0.0000015	0.0000020	0.000013	4.7E-08	0.000067	0.0000012	0.00000037	0.0000049	0.0000010	0.00000065	-	-	3.3E-10	-
HLC-3	L-4	4.6E-08	0.00032	5.6E-08	0.0000013	0.0000011	0.0000078	9.3E-09	0.000041	0.00000098	0.00000022	0.0000020	0.00000061	0.00000044	-	-	1.5E-10	-
HLC-3	L-5	3.3E-08	0.00027	5.3E-08	0.0000015	0.00000079	0.0000060	6.6E-09	0.000030	0.00000087	0.00000016	0.0000016	0.00000052	0.0000010	-	-	1.0E-10	-
HLC-3	L-6	1.7E-08	0.00020	2.0E-08	0.00000041	0.00000057	0.0000039	3.3E-09	0.000023	0.00000054	0.00000012	0.00000067	0.00000038	1.0E-07	-	-	7.6E-11	-
HLC-3	L-7	1.7E-08	0.00019	1.3E-08	0.00000028	0.00000054	0.0000034	3.3E-09	0.000021	0.00000045	0.00000011	0.00000052	0.0000004	4.7E-08	-	-	7.2E-11	-
HLC-3	L-8	3.3E-08	0.00020	1.3E-08	0.00000089	0.00000059	0.0000032	6.7E-09	0.000020	0.00000077	0.00000012	0.0000010	0.00000044	0.00000013	-	-	7.2E-11	-
HLC-3	L-9	1.7E-08	0.00017	1.3E-08	0.00000037	0.00000046	0.0000027	3.3E-09	0.000017	0.00000052	9.3E-08	0.00000056	0.00000034	6.0E-08	-	-	6.3E-11	-
HLC-3	L-10	1.7E-08	0.00018	1.3E-08	0.00000041	0.00000046	0.0000024	3.3E-09	0.000016	0.00000058	8.6E-08	0.00000062	0.00000035	3.3E-08	-	-	5.9E-11	-
HLC-3	L-11	1.7E-08	0.00017	1.3E-08	0.00000055	0.00000044	0.0000023	3.3E-09	0.000015	0.00000057	7.9E-08	0.00000066	0.00000034	3.3E-08	-	-	5.4E-11	-
HLC-3	L-12	1.7E-08	0.00017	1.3E-08	9.3E-08	0.00000043	0.0000021	3.3E-09	0.000015	0.00000062	7.9E-08	0.0000004	0.00000034	8.6E-08	-	-	5.2E-11	-
HLC-3	L-13	1.7E-08	0.00016	6.6E-09	0.00000019	0.00000042	0.0000020	3.3E-09	0.000014	0.00000038	8.0E-08	0.0000006	0.00000034	8.6E-08	-	-	5.4E-11	-
HLC-3	L-14	1.7E-08	0.00016	6.6E-09	0.00000019	0.00000041	0.0000019	3.3E-09	0.000013	0.00000048	7.3E-08	0.00000063	0.00000032	1.7E-08	-	-	5.4E-11	-
HLC-3	L-15	1.7E-08	0.00015	3.3E-09	0.00000011	0.00000038	0.0000016	3.3E-09	0.000012	0.00000047	6.6E-08	0.00000064	0.0000003	4.0E-08	-	-	4.5E-11	-
HLC-3	L-16	1.7E-08	0.00016	6.6E-09	0.00000011	0.00000037	0.0000014	3.3E-09	0.000012	0.00000032	6.6E-08	0.00000066	0.00000032	8.6E-08	-	-	3.9E-11	-
HLC-3	L-17	1.6E-08	0.00016	6.6E-09	0.00000016	0.00000037	0.0000015	3.3E-09	0.000011	0.00000029	5.9E-08	0.00000063	0.00000032	7.9E-08	-	-	4.3E-11	-
HLC-4	L-1	0.0000029	0.00062	0.0000023	0.00010	0.0000047	0.000030	0.00000058	0.00016	0.000012	0.0000012	0.00011	0.0000035	0.000011	-	-	1.9E-09	-
HLC-4	L-2	0.00000025	0.00052	0.0000002	0.0000027	0.0000019	0.000013	5.0E-08	0.000088	0.0000016	0.0000004	0.0000067	0.0000013	0.0000014	-	-	3.8E-10	-
HLC-4	L-3	0.00000024	0.00049	9.4E-08	0.0000011	0.0000018	0.000013	4.7E-08	0.000070	0.0000013	0.00000038	0.0000041	0.0000012	0.00000024	-	-	2.8E-10	-
HLC-4	L-4	4.6E-08	0.00033	3.7E-08	0.00000083	0.00000092	0.0000079	9.2E-09	0.000041	0.0000011	0.00000022	0.0000015	0.00000065	0.00000052	-	-	1.4E-10	-
HLC-4	L-5	3.3E-08	0.00026	2.6E-08	0.00000079	0.00000072	0.0000058	6.6E-09	0.000030	0.00000086	0.00000016	0.0000011	0.00000054	0.00000012	-	-	1.0E-10	-
HLC-4	L-6	1.7E-08	0.00021	2.0E-08	0.00000029	0.00000052	0.0000039	3.3E-09	0.000022	0.00000053	0.00000012	0.00000058	0.0000004	8.7E-08	-	-	7.4E-11	-
HLC-4	L-7	1.7E-08	0.00019	1.3E-08	0.00000031	0.00000049	0.0000035	3.3E-09	0.000020	0.00000046	0.00000011	0.00000053	0.00000041	3.3E-08	-	-	7.0E-11	-
HLC-4	L-8	3.3E-08	0.00020	2.7E-08	0.00000084	0.00000055	0.0000032	6.7E-09	0.000020	0.00000073	0.00000012	0.00000098	0.00000044	0.00000015	-	-	8.6E-11	-
HLC-4	L-9	1.7E-08	0.00017	1.3E-08	0.00000028	0.00000044	0.0000026	3.3E-09	0.000017	0.0000005	9.3E-08	0.0000005	0.00000035	4.6E-08	-	-	6.8E-11	-
HLC-4	L-10	1.7E-08	0.00018	1.3E-08	0.0000004	0.00000044	0.0000024	3.3E-09	0.000016	0.00000057	8.6E-08	0.00000061	0.00000036	5.3E-08	-	-	5.5E-11	-
HLC-4	L-11	1.7E-08	0.00017	2.0E-08	0.00000051	0.00000042	0.0000022	3.3E-09	0.000014	0.00000054	7.9E-08	0.00000065	0.00000035	5.3E-08	-	-	5.5E-11	-
HLC-4	L-12	1.6E-08	0.00017	6.6E-09	0.00000014	0.00000042	0.0000021	3.3E-09	0.000014	0.00000063	7.9E-08	0.00000057	0.00000034	5.9E-08	-	-	5.2E-11	-
HLC-4	L-13	1.6E-08	0.00016	2.0E-08	0.00000018	0.00000042	0.0000020	3.3E-09	0.000014	0.00000037	7.9E-08	0.00000057	0.00000034	5.3E-08	-	-	5.3E-11	-
HLC-4	L-14	1.6E-08	0.00016	6.6E-09	0.00000028	0.00000039	0.0000017	3.3E-09	0.000013	0.00000049	7.2E-08	0.00000055	0.00000033	7.2E-08	-	-	4.6E-11	-
HLC-4	L-15	1.7E-08	0.00015	3.3E-09	0.00000011	0.00000036	0.0000015	3.3E-09	0.000012	0.00000047	6.6E-08	0.00000053	0.00000029	1.7E-08	-	-	4.5E-11	-
HLC-4	L-16	1.6E-08	0.00015	1.3E-08	0.00000013	0.00000036	0.0000013	3.3E-09	0.000011	0.00000034	5.9E-08	0.00000047	0.0000003	6.6E-08	-	-	3.9E-11	-
HLC-4	L-17	1.6E-08	0.00016	1.3E-08	0.00000028	0.00000036	0.0000015	3.3E-09	0.000011	0.0000003	5.9E-08	0.00000057	0.00000032	0.00000028	-	-	4.1E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HHC-1	L-1	2019-10-08	0.080	0.076	0.15	0.00066	4176	1.00	4.2	0.044	9.6	0.89	1346	0.014	0.083	0.097	0.0069	0.0069	0.24	0.11	0.044	0.0069
HHC-1	L-2	2019-10-09	1.0	0.076	0.15	0.00066	4367	1.00	4.4	0.044	10	0.89	1346	0.00063	0.028	0.015	0.0088	0.00063	0.44	0.096	0.035	0.0025
HHC-1	L-3	2019-10-10	2.0	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.89	1346	0.00058	0.026	0.026	0.0023	0.00058	0.31	0.066	0.026	0.0023
HHC-1	L-4	2019-10-15	7.0	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.00012	0.020	0.00012	0.0088	0.0016	0.15	0.031	0.012	0.0016
HHC-1	L-5	2019-10-22	14	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000083	0.028	0.000083	0.0063	0.0058	0.070	0.024	0.0094	0.00066
HHC-1	L-6	2019-11-05	28	0.076	0.15	0.00066	4370	1.00	4.4	0.044	10	0.89	1346	0.000041	0.017	0.000041	0.0030	0.0041	0.041	0.018	0.0073	0.00033
HHC-1	L-7	2019-11-19	42	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000041	0.017	0.000041	0.0035	0.0036	0.033	0.020	0.0080	0.00017
HHC-1	L-8	2019-11-26	49	0.076	0.15	0.00066	4375	1.00	4.4	0.044	10	0.89	1346	0.000083	0.023	0.000083	0.0053	0.0046	0.040	0.027	0.011	0.00017
HHC-1	L-9	2019-12-10	63	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	0.000041	0.014	0.000041	0.0034	0.0029	0.028	0.021	0.0083	0.000083
HHC-1	L-10	2019-12-24	77	0.076	0.15	0.00066	4365	1.00	4.4	0.044	10	0.89	1346	0.000041	0.015	0.000041	0.0031	0.0033	0.026	0.019	0.0074	0.000083
HHC-1	L-11	2020-01-07	91	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	0.000041	0.014	0.000041	0.0031	0.0030	0.024	0.019	0.0076	0.000041
HHC-1	L-12	2020-01-21	105	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000041	0.013	0.000041	0.0029	0.0027	0.024	0.018	0.0074	0.000083
HHC-1	L-13	2020-02-04	119	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000041	0.015	0.000041	0.0028	0.0034	0.024	0.017	0.0069	0.000041
HHC-1	L-14	2020-02-18	133	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	0.000041	0.0093	0.000041	0.0028	0.0016	0.021	0.017	0.0070	0.000041
HHC-1	L-15	2020-03-03	147	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	0.000041	0.012	0.000041	0.0030	0.0023	0.021	0.017	0.0069	0.000041
HHC-1	L-16	2020-03-17	161	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	0.000041	0.0093	0.000041	0.0030	0.0015	0.022	0.016	0.0063	0.000083
HHC-1	L-17	2020-03-31	175	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	0.000041	0.010	0.000041	0.0033	0.0016	0.020	0.014	0.0057	0.000041
HHC-1	L-18	2020-04-28	203	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0078	0.000021	0.0015	0.0017	0.012	0.0092	0.0037	0.000021
HHC-1	L-19	2020-05-26	231	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0070	0.000021	0.0017	0.0015	0.013	0.0090	0.0036	0.000021
HHC-1	L-20	2020-06-23	259	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0080	0.000021	0.0012	0.0021	0.012	0.0098	0.0039	0.000021
HHC-1	L-21	2020-07-24	290	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	0.000019	0.0073	0.000019	0.0011	0.0019	0.011	0.0094	0.0038	0.000019
HHC-1	L-22	2020-08-21	318	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0076	0.000021	0.0014	0.0018	0.012	0.010	0.0041	0.000021
HHC-1	L-23	2020-09-18	346	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0074	0.000021	0.0012	0.0018	0.012	0.0098	0.0039	0.000021
HHC-1	L-24	2020-10-16	374	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	0.000021	0.0060	0.000021	0.0015	0.0012	0.011	0.0094	0.0038	0.000021
HHC-2	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4139	1.00	4.1	0.043	9.5	0.87	1331	0.0069	0.069	0.083	0.0069	0.0069	0.28	0.12	0.047	0.0028
HHC-2	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4338	1.00	4.3	0.043	10	0.87	1331	0.00063	0.029	0.023	0.0063	0.00063	0.44	0.11	0.040	0.0025
HHC-2	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	0.00058	0.023	0.017	0.0058	0.00058	0.34	0.088	0.034	0.0035
HHC-2	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.00012	0.014	0.00012	0.0079	0.00023	0.18	0.043	0.017	0.0019
HHC-2	L-5	2019-10-22	14	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	0.000083	0.025	0.000083	0.0061	0.0051	0.075	0.023	0.0091	0.00099
HHC-2	L-6	2019-11-05	28	0.076	0.14	0.00065	4348	1.00	4.4	0.043	10	0.87	1331	0.000041	0.017	0.000041	0.0029	0.0041	0.042	0.015	0.0061	0.00033
HHC-2	L-7	2019-11-19	42	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	0.000041	0.016	0.000041	0.0036	0.0034	0.031	0.017	0.0069	0.00017
HHC-2	L-8	2019-11-26	49	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	0.000083	0.022	0.000083	0.0061	0.0040	0.037	0.025	0.0100	0.00017
HHC-2	L-9	2019-12-10	63	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1331	0.000041	0.013	0.000041	0.0034	0.0026	0.026	0.019	0.0075	0.000083
HHC-2	L-10	2019-12-24	77	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1331	0.000041	0.014	0.000041	0.0031	0.0031	0.025	0.017	0.0067	0.000083
HHC-2	L-11	2020-01-07	91	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.000041	0.013	0.000041	0.0035	0.0025	0.022	0.017	0.0070	0.000041
HHC-2	L-12	2020-01-21	105	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.000041	0.012	0.000041	0.0027	0.0024	0.021	0.018	0.0072	0.000083
HHC-2	L-13	2020-02-04	119	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	0.000041	0.013	0.000041	0.0022	0.0032	0.022	0.016	0.0065	0.000083
HHC-2	L-14	2020-02-18	133	0.076	0.14	0.00065	4353	1.00	4.4	0.043	10	0.87	1331	0.000041	0.0089	0.000041	0.0027	0.0015	0.019	0.016	0.0065	0.000041
HHC-2	L-15	2020-03-03	147	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.000041	0.012	0.000041	0.0030	0.0023	0.019	0.016	0.0063	0.000041
HHC-2	L-16	2020-03-17	161	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	0.000041	0.0085	0.000041	0.0029	0.0012	0.020	0.015	0.0059	0.000041
HHC-2	L-17	2020-03-31	175	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	0.000041	0.0087	0.000041	0.0026	0.0015	0.019	0.013	0.0053	0.000041
HHC-2	L-18	2020-04-28	203	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0071	0.000021	0.0015	0.0016	0.011	0.0087	0.0035	0.000021
HHC-2	L-19	2020-05-26	231	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0064	0.000021	0.0015	0.0013	0.012	0.0083	0.0033	0.000021
HHC-2	L-20	2020-06-23	259	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0080	0.000021	0.0015	0.0019	0.010	0.0094	0.0038	0.000021
HHC-2	L-21	2020-07-24	290	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	0.000019	0.0072	0.000019	0.0012	0.0018	0.0095	0.0082	0.0033	0.000019
HHC-2	L-22	2020-08-21	318	0.076	0.14	0.00065	4353	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0072	0.000021	0.0014	0.0017	0.011	0.0092	0.0037	0.000021
HHC-2	L-23	2020-09-18	346	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0070	0.000021	0.0011	0.0017	0.0098	0.0085	0.0034	0.000021
HHC-2	L-24	2020-10-16	374	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	0.000021	0.0051	0.000021	0.0012	0.0011	0.0097	0.0079	0.0032	0.000021
HHC-3	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4119	1.00	4.1	0.043	9.5	0.87	1333	0.0069	0.082	0.096	0.0069	0.0069	0.36	0.18	0.069	0.0014
HHC-3	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4348	1.00	4.4	0.043	10	0.87	1333	0.00063	0.035	0.025	0.0088	0.00063	0.53	0.14	0.052	0.0025
HHC-3	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.00058	0.034	0.027	0.0070	0.00058	0.37	0.11	0.042	0.0035
HHC-3	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	0.00012	0.013	0.00023	0.0079	0.00012	0.19	0.054	0.021	0.0019
HHC-3	L-5	2019-10-22	14	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	0.000083	0.024	0.000083	0.0063	0.0045	0.075	0.027	0.011	0.00099
HHC-3	L-6	2019-11-05	28	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1333	0.000041	0.016	0.000041	0.0033	0.0036	0.043	0.013	0.0052	0.00033
HHC-3	L-7	2019-11-19	42	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.000041	0.016	0.000041	0.0039	0.0032	0.032	0.018	0.0073	0.00017
HHC-3	L-8	2019-11-26	49	0.076	0.14	0.00065	4355	1.00	4.4	0.043	10	0.87	1333	0.000083	0.022	0.000083	0.0053	0.0043	0.038	0.025	0.010	0.00017
HHC-3	L-9	2019-12-10	63	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	0.000041	0.012	0.000041	0.0033	0.0023	0.026	0.019	0.0076	0.000083
HHC-3	L-10	2019-12-24	77	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1333	0.000041	0.014	0.000041	0.0029	0.0031	0.025	0.017	0.0067	0.000041
HHC-3	L-11	2020-01-07	91	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.000041	0.013	0.000041	0.0033	0.0026	0.023	0.016	0.0065	0.000041
HHC-3	L-12	2020-01-21	105	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	0.000041	0.012	0.000041	0.0031	0.0023	0.021	0.018	0.0072	0.000083
HHC-3	L-13	2020-02-04	119	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1333	0.000041	0.014	0.000041	0.0036	0.0029	0.021	0.017	0.0066	0.000083
HHC-3	L-14	2020-02-18	133	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.000041	0.0089	0.000041	0.0027	0.0015	0.019	0.016	0.0066	0.000041
HHC-3	L-15	2020-03-03	147	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.000041	0.011	0.000041	0.0030	0.0020	0.021	0.016	0.0066	0.000041
HHC-3	L-16	2020-03-17	161	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	0.000041	0.0086	0.000041	0.0032	0.0012	0.021	0.015	0.0061	0.000083
HHC-3	L-17	2020-03-31	175	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	0.000041	0.0081	0.000041	0.0028	0.0012	0.019	0.013	0.0054	0.000041
HHC-4	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4020	1.00	4.0	0.043	9.4	0.84	1319	0.0068	0.055	0.068	0.0068	0.0068	0.25	0.14	0.052	0.0014
HHC-4	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4275	1.00	4.3	0.043	10	0.84	1319	0.00063	0.028	0.013	0.010	0.00063	0.48	0.14	0.050	0.0025
HHC-4	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	0.00058	0.031	0.024	0.0070	0.00058	0.35	0.11	0.041	0.0023
HHC-4	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4276	1.00	4.3	0.043	10	0.84	1319	0.00012	0.0090	0.0019	0.0044	0.00012	0.19	0.056	0.022	0.0014
HHC-4	L-5	2019-10-22	14	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	0.000083	0.022	0.000083	0.0056	0.0043	0.078	0.029	0.011	0.00083
HHC-4	L-6	2019-11-05	28	0.076	0.14	0.00064	4277	1.00	4.3	0.043	10	0.84	1319	0.000041	0.016	0.000041	0.0027	0.0038	0.042	0.015	0.0062	0.00025
HHC-4	L-7	2019-11-19	42	0.076	0.14	0.00064	4278	1.00	4.3	0.043	10	0.84	1319	0.000041	0.015	0.000041	0.0031	0.0034	0.032	0.019	0.0075	0.00017
HHC-4	L-8	2019-11-26	49	0.076	0.14	0.00064	4282	1.00	4.3	0.043	10	0.84	1319	0.000083	0.024	0.000083	0.0040	0.0060	0.039	0.027	0.011	0.00017
HHC-4	L-9	2019-12-10	63	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	0.000041	0.012	0.000041	0.0033	0.0022	0.027	0.020	0.0079	0.000083
HHC-4	L-10	2019-12-24	77	0.076	0.14	0.00064	4273	1.00	4.3	0.043	10	0.84	1319	0.000041	0.014	0.000041	0.0030	0.0030	0.026	0.018	0.0072	0.000083
HHC-4	L-11	2020-01-07	91	0.076	0.14	0.00064	4280	1.00	4.3	0.043	10	0.84	1319	0.000041	0.013	0.000041	0.0030	0.0026	0.023	0.016	0.0066	0.000041
HHC-4	L-12	2020-01-21	105	0.076	0.14	0.00064	4276	1.00	4.3	0.043	10	0.84	1319	0.000041	0.012	0.000041	0.0031	0.0024	0.024	0.018	0.0073	0.000083
HHC-4	L-13	2020-02-04	119	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	0.000041	0.014	0.000041	0.0032	0.0031	0.023	0.017	0.0069	0.000083
HHC-4	L-14	2020-02-18	133	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	0.000041	0.0091	0.000041	0.0027	0.0016	0.020	0.017	0.0069	0.000041
HHC-4	L-15	2020-03-03	147	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	0.000041	0.011	0.000041	0.0032	0.0020	0.022	0.017	0.0069	0.000041
HHC-4	L-16	2020-03-17	161	0.076	0.14	0.00064	4280	1.00	4.3	0.043	10	0.84	1319	0.000041	0.0085	0.000041	0.0030	0.0012	0.021	0.016	0.0064	0.000041
HHC-4	L-17	2020-03-31	175	0.076	0.14	0.00064	4282	1.00	4.3	0.043	10	0.84	1319	0.000042	0.0078	0.000042	0.0024	0.0013	0.021	0.014	0.0056	0.000042

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg-N/m²s	mg-N/m²s	mg-N/m²s	mg-P/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s	mg/m²s
HHC-1	L-1	0.00028	0.062	0.0014	0.087	0.000069	0.000063	0.000062	0.000069	0.29	0.00000035	0.00080	0.000090	0.00014	0.000078	0.00000069	6.9E-08	0.00000069	0.000058	0.0000083	0.00022	6.9E-09
HHC-1	L-2	0.00023	0.042	0.0019	0.069	0.000050	0.0000057	0.0000057	0.0000063	0.25	3.1E-08	0.00030	0.000042	0.00011	0.000020	6.3E-08	1.3E-08	6.3E-08	0.000049	0.0000005	0.000019	6.3E-10
HHC-1	L-3	0.00016	0.026	0.00070	0.052	0.000023	0.0000053	0.0000052	0.0000058	0.17	2.9E-08	0.00036	0.000024	0.000081	0.000015	5.8E-08	1.2E-08	5.8E-08	0.000030	0.00000058	0.000017	1.2E-09
HHC-1	L-4	0.000051	0.012	0.000023	0.027	0.000014	0.0000011	0.0000010	0.0000012	0.077	5.8E-09	0.00041	0.000010	0.000014	0.0000065	1.2E-08	1.2E-08	1.2E-08	0.000016	0.00000012	0.0000013	1.2E-10
HHC-1	L-5	0.000027	0.0055	0.0000083	0.012	0.0000083	0.00000075	0.00000075	0.00000083	0.030	4.1E-09	0.00046	0.0000048	0.0000017	0.0000061	8.3E-09	6.6E-09	8.3E-09	0.0000081	6.6E-08	0.00000093	5.0E-10
HHC-1	L-6	0.000014	0.0020	0.0000041	0.0048	0.000012	0.00000038	0.00000037	0.00000041	0.013	2.1E-09	0.00024	0.0000027	0.00000041	0.0000055	4.1E-09	2.5E-09	4.1E-09	0.0000044	5.8E-08	0.00000036	1.7E-10
HHC-1	L-7	0.000012	0.00082	0.0000041	0.0018	0.0000066	0.00000038	0.00000037	0.00000041	0.0083	2.1E-09	0.00023	0.0000018	0.00000041	0.0000070	4.1E-09	1.7E-09	4.1E-09	0.0000034	5.0E-08	0.00000031	4.1E-11
HHC-1	L-8	0.000012	0.00056	0.0000083	0.00095	0.0000083	0.00000075	0.0000034	0.0000017	0.0085	4.1E-09	0.00035	0.0000015	0.00000083	0.000010	8.3E-09	1.7E-09	8.3E-09	0.0000030	6.6E-08	0.0000023	8.3E-11
HHC-1	L-9	0.0000099	0.00023	0.0000041	0.00039	0.0000083	0.00000038	0.00000037	0.00000041	0.0064	2.1E-09	0.00021	0.0000011	0.00000041	0.0000080	4.1E-09	3.3E-09	4.1E-09	0.0000023	4.1E-08	0.00000031	4.1E-11
HHC-1	L-10	0.0000099	0.00016	0.0000041	0.00020	0.0000041	0.00000038	0.00000037	0.00000041	0.0058	2.1E-09	0.00021	0.00000083	0.00000041	0.0000083	4.1E-09	8.3E-10	4.1E-09	0.0000021	4.1E-08	0.0000004	4.1E-11
HHC-1	L-11	0.0000083	0.00012	0.0000041	0.00011	0.0000041	0.00000038	0.00000037	0.00000083	0.0053	2.1E-09	0.00019	0.00000075	0.00000041	0.0000099	4.1E-09	2.5E-09	4.1E-09	0.0000019	5.0E-08	0.0000007	4.1E-11
HHC-1	L-12	0.0000083	0.000091	0.0000041	0.000083	0.00000041	0.00000038	0.00000037	0.00000041	0.0049	2.1E-09	0.00019	0.00000065	0.00000041	0.0000099	4.1E-09	8.3E-10	4.1E-09	0.0000018	4.1E-08	0.00000052	8.3E-11
HHC-1	L-13	0.0000066	0.000075	0.0000041	0.000050	0.0000050	0.00000038	0.00000037	0.00000041	0.0046	2.1E-09	0.00018	0.00000056	0.00000041	0.0000099	4.1E-09	8.3E-10	4.1E-09	0.0000016	5.0E-08	0.00000099	4.1E-11
HHC-1	L-14	0.0000033	0.000058	0.0000041	0.000050	0.0000091	0.00000038	0.00000037	0.00000041	0.0041	2.1E-09	0.00018	0.00000051	0.00000041	0.0000099	4.1E-09	1.7E-09	4.1E-09	0.0000015	3.3E-08	0.00000058	4.1E-11
HHC-1	L-15	0.0000083	0.000058	0.0000041	0.000033	0.0000050	0.00000038	0.00000037	0.00000041	0.0041	2.1E-09	0.00018	0.00000047	0.00000041	0.0000099	4.1E-09	1.7E-09	4.1E-09	0.0000015	3.3E-08	0.0000008	4.1E-11
HHC-1	L-16	0.0000066	0.000041	0.0000041	0.000033	0.0000017	0.00000038	0.00000037	0.00000041	0.0039	2.1E-09	0.00017	0.00000045	0.00000041	0.0000100	4.1E-09	1.7E-09	4.1E-09	0.0000014	5.0E-08	0.0000010	4.1E-11
HHC-1	L-17	0.0000050	0.000041	0.0000041	0.000025	0.0000041	0.00000038	0.0000011	0.00000041	0.0038	2.1E-09	0.00017	0.00000043	0.00000041	0.0000100	4.1E-09	1.7E-09	4.1E-09	0.0000015	3.3E-08	0.00000091	4.1E-11
HHC-1	L-18	0.0000041	0.000033	0.0000021	0.000021	0.00000021	0.00000019	0.00000019	0.00000041	0.0028	1.0E-09	0.000097	0.00000036	0.00000021	0.0000062	2.1E-09	2.1E-10	2.1E-09	0.0000011	2.5E-08	0.00000037	2.1E-11
HHC-1	L-19	0.0000041	0.000029	0.0000021	0.000025	0.00000083	0.00000019	0.00000019	0.00000021	0.0027	1.0E-09	0.000090	0.00000033	0.00000021	0.0000058	2.1E-09	4.1E-10	2.1E-09	0.0000011	2.5E-08	0.00000035	2.1E-11
HHC-1	L-20	0.0000041	0.000025	0.0000021	0.000021	0.00000083	0.00000019	0.00000084	0.00000021	0.0026	1.0E-09	0.000089	0.00000031	0.00000021	0.0000058	2.1E-09	9.5E-09	2.1E-09	0.0000010	2.1E-08	0.00000036	2.1E-11
HHC-1	L-21	0.0000037	0.000026	0.0000019	0.000019	0.00000019	0.00000017	0.00000017	0.00000019	0.0024	9.4E-10	0.000079	0.00000029	0.00000019	0.0000052	1.9E-09	9.4E-09	1.9E-09	0.00000097	2.2E-08	0.00000041	1.9E-11
HHC-1	L-22	0.0000033	0.000021	0.0000021	0.000017	0.00000083	0.00000019	0.00000019	0.00000021	0.0024	1.0E-09	0.000078	0.0000003	0.00000021	0.0000054	2.1E-09	8.3E-10	2.1E-09	0.00000091	2.9E-08	0.00000054	2.1E-11
HHC-1	L-23	0.0000017	0.000017	0.0000021	0.0000083	0.00000041	0.00000019	0.00000019	0.00000021	0.0025	1.0E-09	0.000084	0.00000031	0.00000021	0.0000054	2.1E-09	2.1E-10	2.1E-09	0.00000099	2.5E-08	0.00000035	2.1E-11
HHC-1	L-24	0.0000021	0.000021	0.0000021	0.000012	0.00000041	0.00000019	0.00000019	0.00000021	0.0024	1.0E-09	0.000077	0.00000028	0.00000021	0.0000050	2.1E-09	4.1E-10	2.1E-09	0.00000091	2.1E-08	0.00000041	2.1E-11
HHC-2	L-1	0.00028	0.065	0.0014	0.10	0.000069	0.000063	0.000062	0.000069	0.33	0.00000035	0.00077	0.00011	0.00028	0.000072	0.00000069	6.9E-08	0.00000069	0.000077	0.0000055	0.00022	6.9E-09
HHC-2	L-2	0.00021	0.038	0.0025	0.072	0.000050	0.0000057	0.0000057	0.0000063	0.28	3.1E-08	0.00028	0.000043	0.00015	0.000020	6.3E-08	6.3E-09	6.3E-08	0.000060	0.00000063	0.000021	6.3E-10
HHC-2	L-3	0.00017	0.024	0.0012	0.055	0.000035	0.0000053	0.0000052	0.0000058	0.20	2.9E-08	0.00030	0.000023	0.000093	0.000016	5.8E-08	1.2E-08	5.8E-08	0.000037	0.00000058	0.000019	1.2E-09
HHC-2	L-4	0.0000060	0.012	0.000093	0.031	0.000019	0.0000011	0.0000010	0.0000012	0.10	5.8E-09	0.00028	0.000013	0.000023	0.0000067	1.2E-08	7.0E-09	1.2E-08	0.000020	0.00000014	0.0000014	1.2E-10
HHC-2	L-5	0.000028	0.0056	0.0000083	0.015	0.0000099	0.00000075	0.00000075	0.00000083	0.036	4.1E-09	0.00044	0.0000056	0.0000033	0.0000051	8.3E-09	3.3E-09	8.3E-09	0.000010	8.3E-08	0.00000094	8.3E-11
HHC-2	L-6	0.000015	0.0022	0.0000041	0.0061	0.000011	0.00000038	0.00000037	0.00000041	0.013	2.1E-09	0.00026	0.0000031	0.00000041	0.0000045	4.1E-09	3.3E-09	4.1E-09	0.0000053	5.8E-08	0.00000039	4.1E-11
HHC-2	L-7	0.000012	0.00100	0.0000041	0.0024	0.0000075	0.00000038	0.00000037	0.00000041	0.0082	2.1E-09	0.00025	0.0000020	0.00000041	0.0000061	4.1E-09	2.5E-09	4.1E-09	0.0000040	5.0E-08	0.0000004	4.1E-11
HHC-2	L-8	0.000012	0.00066	0.0000083	0.0013	0.0000050	0.0000075	0.0000034	0.0000017	0.0076	4.1E-09	0.00038	0.0000016	0.00000083	0.0000093	8.3E-09	8.3E-10	8.3E-09	0.0000035	8.3E-08	0.0000010	8.3E-11
HHC-2	L-9	0.000012	0.00027	0.0000041	0.00051	0.0000075	0.00000038	0.00000037	0.00000041	0.0056	2.1E-09	0.00022	0.0000012	0.00000041	0.0000071	4.1E-09	2.5E-09	4.1E-09	0.0000026	4.1E-08	0.00000036	4.1E-11
HHC-2	L-10	0.0000099	0.00018	0.0000041	0.00026	0.0000025	0.00000038	0.00000037	0.0000017	0.0051	2.1E-09	0.00022	0.00000091	0.00000041	0.0000078	4.1E-09	8.3E-10	4.1E-09	0.0000023	5.0E-08	0.00000061	4.1E-11
HHC-2	L-11	0.0000083	0.00013	0.0000041	0.00013	0.0000033	0.00000038	0.00000037	0.00000041	0.0046	2.1E-09	0.00021	0.0000008	0.00000041	0.0000083	4.1E-09	1.7E-09	4.1E-09	0.0000022	5.0E-08	0.00000091	4.1E-11
HHC-2	L-12	0.0000083	0.000100	0.0000041	0.000091	0.0000041	0.00000038	0.00000037	0.00000041	0.0041	2.1E-09	0.00020	0.00000068	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000021	5.0E-08	0.00000082	4.1E-11
HHC-2	L-13	0.0000058	0.000083	0.0000041	0.000058	0.0000083	0.00000038	0.00000037	0.00000041	0.0039	2.1E-09	0.00019	0.00000061	0.00000041	0.0000091	4.1E-09	8.3E-10	4.1E-09	0.0000018	5.0E-08	0.0000013	4.1E-11
HHC-2	L-14	0.0000033	0.000066	0.0000041	0.000058	0.0000066	0.00000038	0.00000037	0.00000083	0.0036	2.1E-09	0.00020	0.00000054	0.00000041	0.0000091	4.1E-09	1.7E-09	4.1E-09	0.0000017	3.3E-08	0.00000059	4.1E-11
HHC-2	L-15	0.0000050	0.000058	0.0000041	0.0000041	0.0000050	0.00000038	0.00000037	0.00000041	0.0036	2.1E-09	0.00019	0.00000051	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000017	3.3E-08	0.00000091	4.1E-11
HHC-2	L-16	0.0000050	0.000050	0.0000041	0.000033	0.0000017	0.00000038	0.00000037	0.00000041	0.0033	2.1E-09	0.00019	0.00000048	0.00000041	0.0000100	4.1E-09	1.7E-09	4.1E-09	0.0000016	5.0E-08	0.0000013	4.1E-11
HHC-2	L-17	0.0000041	0.000041	0.0000041	0.000025	0.00000083	0.00000038	0.00000094	0.00000041	0.0032	2.1E-09	0.00018	0.00000045	0.00000041	0.0000100	4.1E-09	4.1E-10	4.1E-09	0.0000016	4.1E-08	0.0000010	4.1E-11
HHC-2	L-18	0.0000041	0.000029	0.0000021	0.000021	0.00000021	0.00000019	0.00000019	0.00000041	0.0024	1.0E-09	0.00011	0.00000037	0.00000021	0.0000062	2.1E-09	2.1E-10	2.1E-09	0.0000012	2.1E-08	0.00000033	2.1E-11
HHC-2	L-19	0.0000041	0.000029	0.0000021	0.000021	0.00000083	0.00000019	0.00000019	0.00000021	0.0022	1.0E-09	0.00010	0.00000034	0.00000021	0.0000058	2.1E-09	4.1E-10	2.1E-09	0.0000012	2.9E-08	0.00000054	2.1E-11
HHC-2	L-20	0.0000041	0.000025	0.0000021	0.000021	0.00000041	0.00000019	0.00000075	0.00000021	0.0021	1.0E-09	0.00010	0.00000032	0.00000021	0.0000058	2.1E-09	9.1E-09	2.1E-09	0.0000011	2.5E-08	0.00000041	2.1E-11
HHC-2	L-21	0.0000037	0.000026	0.0000019	0.000019	0.00000075	0.00000017	0.00000017	0.00000019	0.0019	9.4E-10	0.000093	0.00000028	0.00000019	0.0000056	1.9E-09	7.9E-09	1.9E-09	0.00000097	0.0000001	0.00000075	1.9E-11
HHC-2	L-22	0.0000041	0.000021	0.0000021	0.000017	0.00000083	0.00000019	0.00000019	0.00000083	0.0019	1.0E-09	0.000100	0.00000028	0.00000021	0.0000058	2.1E-09	2.1E-10	2.1E-09	0.00000095	2.9E-08	0.00000066	2.1E-11
HHC-2	L-23	0.0000012	0.000017	0.0000021	0.0000083	0.00000041	0.00000019	0.00000019	0.00000021	0.0018	1.0E-09	0.000099	0.00000026	0.00000021	0.0000058	2.1E-09	2.1E-10	2.1E-09	0.00000091	3.3E-08	0.00000083	2.1E-11
HHC-2	L-24	0.0000017	0.000021	0.0000021	0.000012	0.00000041	0.00000019	0.00000084	0.00000041	0.0017	1.0E-09	0.000092	0.00000024	0.00000021	0.0000054	2.1E-09	8.3E-10	4.1E-09	0.00000083	4.1E-08	0.0000015	2.1E-11
HHC-3	L-1	0.00027	0.070	0.0027	0.11	0.000069	0.000063	0.000062	0.000069	0.40	0.00000034	0.0016	0.00011	0.00027	0.000085	0.00000069	0.00000014	0.0000027	0.000077	0.000016	0.00074	6.9E-09
HHC-3	L-2	0.00025	0.038	0.0028	0.073	0.000050	0.0000057	0.0000057	0.0000063	0.30	3.2E-08	0.00032	0.000045	0.00016	0.000024	6.3E-08	1.3E-08	0.00000013	0.000057	0.0000010	0.000038	6.3E-10
HHC-3	L-3	0.00017	0.024	0.0013	0.055	0.000058	0.0000053	0.0000052	0.0000058	0.21	2.9E-08	0.00034	0.000024	0.00010	0.000019	5.8E-08	5.8E-09	5.8E-08	0.000035	0.0000007	0.000026	5.8E-10
HHC-3	L-4	0.000058	0.012	0.000093	0.030	0.000021	0.0000011	0.0000010	0.0000012	0.11	5.8E-09	0.00028	0.000013	0.000023	0.0000074	1.2E-08	2.3E-09	1.2E-08	0.000019	0.00000014	0.0000018	1.2E-10
HHC-3	L-5	0.000022	0.0055	0.0000083	0.014	0.0000099	0.00000075	0.00000075	0.00000083	0.038	4.1E-09	0.00043	0.0000058	0.0000033	0.0000060	8.3E-09	1.7E-09	8.3E-09	0.0000095	8.3E-08	0.0000012	8.3E-11
HHC-3	L-6	0.000016	0.0022	0.0000041	0.0060	0.000013	0.00000038	0.00000037	0.00000041	0.015	2.1E-09	0.00026	0.0000031	0.00000041	0.0000048	4.1E-09	1.7E-09	4.1E-09	0.0000048	5.8E-08	0.00000036	4.1E-11
HHC-3	L-7	0.000012	0.00100	0.0000041	0.0023	0.0000058	0.00000038	0.00000037	0.00000041	0.0083	2.1E-09	0.00025	0.0000020	0.00000041	0.0000063	4.1E-09	1.7E-09	4.1E-09	0.0000036	5.8E-08	0.00000073	4.1E-11
HHC-3	L-8	0.000013	0.00070	0.0000083	0.0013	0.0000066	0.00000076	0.0000034	0.00000083	0.0081	4.2E-09	0.00038	0.0000017	0.00000083	0.0000096	8.3E-09	1.7E-09	8.3E-09	0.0000032	6.6E-08	0.0000010	8.3E-11
HHC-3	L-9	0.000011	0.00028	0.0000041	0.00054	0.0000075	0.00000038	0.00000037	0.00000041	0.0061	2.1E-09	0.00023	0.0000012	0.00000041	0.0000075	4.1E-09	2.5E-09	4.1E-09	0.0000023	5.0E-08	0.00000039	4.1E-11
HHC-3	L-10	0.0000099	0.00018	0.0000041	0.00027	0.0000025	0.00000038	0.00000037	0.00000083	0.0054	2.1E-09	0.00022	0.00000099	0.00000041	0.0000078	4.1E-09	4.1E-09	4.1E-09	0.0000021	4.1E-08	0.00000049	4.1E-11
HHC-3	L-11	0.0000091	0.00013	0.0000041	0.00014	0.0000041	0.00000038	0.00000037	0.00000041	0.0049	2.1E-09	0.00021	0.00000081	0.00000041	0.0000083	4.1E-09	8.3E-10	4.1E-09	0.0000020	5.0E-08	0.00000091	4.1E-11
HHC-3	L-12	0.0000083	0.000099	0.0000041	0.000099	0.0000025	0.00000038	0.00000037	0.00000041	0.0045	2.1E-09	0.00020	0.00000072	0.00000041	0.0000091	4.1E-09	8.3E-10	4.1E-09	0.0000018	5.0E-08	0.00000083	4.1E-11
HHC-3	L-13	0.0000058	0.000083	0.0000041	0.000066	0.0000075	0.00000038	0.00000037	0.00000041	0.0042	2.1E-09	0.00019	0.00000063	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000017	5.8E-08	0.0000016	4.1E-11
HHC-3	L-14	0.0000033	0.000075	0.0000041	0.000058	0.0000066	0.00000038	0.00000037	0.00000041	0.0038	2.1E-09	0.00020	0.00000056	0.00000041	0.0000091	4.1E-09	8.3E-10	4.1E-09	0.0000016	3.3E-08	0.00000066	4.1E-11
HHC-3	L-15	0.0000050	0.000058	0.0000041	0.000041	0.0000050	0.00000038	0.00000037	0.00000041	0.0039	2.1E-09	0.00020	0.00000053	0.00000041	0.0000091	4.1E-09	1.7E-09	4.1E-09	0.0000016	4.1E-08	0.0000012	4.1E-11
HHC-3	L-16	0.0000041	0.000050	0.0000041	0.000025	0.0000041	0.00000038	0.00000037	0.00000041	0.0036	2.1E-09	0.00019	0.00000049	0.00000041	0.0000100	4.1E-09	8.3E-10	4.1E-09	0.0000014	4.1E-08	0.0000010	4.1E-11
HHC-3	L-17	0.0000050	0.000041	0.0000041	0.000025	0.0000017	0.00000038	0.00000094	0.00000041	0.0035	2.1E-09	0.00018	0.00000048	0.00000041	0.0000100	4.1E-09	8.3E-10	4.1E-09	0.0000014	3.3E-08	0.00000072	4.1E-11
HHC-4	L-1	0.00027	0.061	0.0027	0.079	0.000068	0.000062	0.000061	0.000068	0.30	0.00000034	0.00076	0.000093	0.00027	0.000068	0.00000068	0.00000014	0.00000068	0.000063	0.000012	0.00022	6.8E-09
HHC-4	L-2	0.00023	0.038	0.0029	0.062	0.000063	0.0000057	0.0000057	0.0000063	0.28	3.2E-08	0.00024	0.000040	0.00014	0.000023	6.3E-08	1.3E-08	6.3E-08	0.000054	0.0000005	0.000018	6.3E-10
HHC-4	L-3	0.00016	0.024	0.0014	0.048	0.000012	0.0000053	0.0000052	0.0000058	0.21	2.9E-08	0.00026	0.000021	0.000093	0.000017	5.8E-08	2.3E-08	5.8E-08	0.000032	0.00000046	0.0000080	5.8E-10
HHC-4	L-4	0.000056	0.012	0.00012	0.027	0.000019	0.0000011	0.0000010	0.0000012	0.11	5.8E-09	0.00023	0.000011	0.000021	0.0000072	1.2E-08	7.0E-09	1.2E-08	0.000018	0.00000012	0.0000010	1.2E-10
HHC-4	L-5	0.000028	0.0056	0.0000083	0.013	0.000013	0.00000075	0.00000075	0.00000083	0.038	4.1E-09	0.00038	0.0000051	0.0000033	0.0000058	8.3E-09	8.3E-10	8.3E-09	0.0000090	8.3E-08	0.00000068	8.3E-11
HHC-4	L-6	0.000015	0.0021	0.0000041	0.0051	0.0000075	0.00000038	0.00000037	0.00000041	0.014	2.1E-09	0.00025	0.0000028	0.00000083	0.0000048	4.1E-09	3.3E-09	4.1E-09	0.0000046	6.6E-08	0.00000044	4.1E-11
HHC-4	L-7	0.000013	0.00091	0.0000041	0.0019	0.0000058	0.00000038	0.00000037	0.00000041	0.0083	2.1E-09	0.00024	0.0000018	0.00000041	0.0000062	4.1E-09	8.3E-10	4.1E-09	0.0000035	5.8E-08	0.00000051	4.1E-11
HHC-4	L-8	0.000012	0.00063	0.0000083	0.00100	0.0000083	0.00000076	0.0000034	0.0000033	0.0081	4.1E-09	0.00037	0.0000015	0.00000083	0.0000093	8.3E-09	8.3E-10	8.3E-09	0.0000032	8.3E-08	0.0000010	8.3E-11
HHC-4	L-9	0.000011	0.00026	0.0000041	0.00039	0.0000075	0.00000038	0.0000011	0.00000041	0.0062	2.1E-09	0.00021	0.0000011	0.00000041	0.0000072	4.1E-09	2.5E-09	4.1E-09	0.0000023	4.1E-08	0.00000027	4.1E-11
HHC-4	L-10	0.0000099	0.00017	0.0000041	0.00020	0.0000041	0.00000038	0.00000037	0.00000041	0.0056	2.1E-09	0.00022	0.00000083	0.00000041	0.0000078	4.1E-09	1.7E-09	4.1E-09	0.0000022	5.0E-08	0.00000073	4.1E-11
HHC-4	L-11	0.0000083	0.00012	0.0000041	0.00011	0.0000033	0.00000038	0.00000037	0.00000041	0.0051	2.1E-09	0.00021	0.00000074	0.00000041	0.0000083	4.1E-09	1.7E-09	4.1E-09	0.0000020	5.0E-08	0.00000071	4.1E-11
HHC-4	L-12	0.0000083	0.000099	0.0000041	0.000083	0.0000033	0.00000038	0.00000037	0.00000041	0.0047	2.1E-09	0.00020	0.00000065	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000019	4.1E-08	0.00000061	4.1E-11
HHC-4	L-13	0.0000066	0.000083	0.0000041	0.000050	0.0000058	0.00000038	0.00000037	0.00000041	0.0044	2.1E-09	0.00019	0.00000057	0.00000041	0.0000091	4.1E-09	1.7E-09	4.1E-09	0.0000017	4.1E-08	0.00000075	4.1E-11
HHC-4	L-14	0.0000033	0.000066	0.0000041	0.000050	0.0000083	0.00000038	0.00000037	0.00000041	0.0041	2.1E-09	0.00020	0.00000053	0.00000041	0.0000091	4.1E-09	8.3E-10	4.1E-09	0.0000017	3.3E-08	0.00000061	4.1E-11
HHC-4	L-15	0.0000050	0.000058	0.0000041	0.000033	0.0000050	0.00000038	0.00000037	0.00000041	0.0041	2.1E-09	0.00019	0.00000049	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000017	4.1E-08	0.0000011	4.1E-11
HHC-4	L-16	0.0000050	0.000050	0.0000041	0.000033	0.0000017	0.00000038	0.00000037	0.00000041	0.0038	2.1E-09	0.00019	0.00000046	0.00000041	0.0000091	4.1E-09	4.1E-10	4.1E-09	0.0000015	5.0E-08	0.0000012	4.1E-11
HHC-4	L-17	0.0000042	0.000050	0.0000042	0.000025	0.0000017	0.00000038	0.00000094	0.00000042	0.0037	2.1E-09	0.00019	0.00000045	0.00000042	0.0000100	4.2E-09	4.2E-10	4.2E-09	0.0000015	3.3E-08	0.00000071	4.2E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHC-1	L-1	0.0000035	0.0015	0.0000042	0.000030	0.0000042	0.000015	0.0000014	0.000096	0.000017	0.0000014	0.000069	0.000025	0.000012	4.5E-12	6.2E-14	5.2E-10	1.4E-13
HHC-1	L-2	0.00000031	0.0014	0.00000013	0.0000024	0.0000025	0.0000074	6.3E-08	0.000060	0.0000050	0.00000013	0.000025	0.000018	0.00000031	-	-	-	-
HHC-1	L-3	0.00000029	0.00091	0.00000012	0.0000022	0.0000017	0.0000062	5.8E-08	0.000046	0.0000030	0.00000012	0.0000091	0.000021	0.0000007	1.9E-13	2.5E-15	8.8E-11	5.8E-15
HHC-1	L-4	5.8E-08	0.00052	1.2E-08	0.00000042	0.00000058	0.0000023	1.2E-08	0.000035	0.0000016	7.0E-08	0.0000022	0.000023	5.8E-08	-	-	-	-
HHC-1	L-5	4.1E-08	0.00029	8.3E-09	0.0000005	0.00000018	0.00000086	8.3E-09	0.000038	0.00000085	5.0E-08	0.0000018	0.000010	4.1E-08	-	-	-	-
HHC-1	L-6	2.1E-08	0.00017	8.3E-09	0.00000044	6.6E-08	0.00000036	4.1E-09	0.000041	0.00000036	2.5E-08	0.00000083	0.0000035	5.8E-08	4.7E-14	6.8E-17	3.1E-11	7.5E-16
HHC-1	L-7	2.1E-08	0.00013	4.1E-09	0.00000053	5.0E-08	0.00000027	4.1E-09	0.000051	0.00000038	2.5E-08	0.00000091	0.0000023	2.1E-08	-	-	-	-
HHC-1	L-8	4.1E-08	0.00013	8.3E-09	0.00000066	8.3E-08	0.00000027	8.3E-09	0.000066	0.00000038	1.7E-08	0.0000013	0.0000027	4.1E-08	-	-	-	-
HHC-1	L-9	2.1E-08	0.00010	4.1E-09	0.00000056	4.1E-08	0.00000019	4.1E-09	0.000047	0.00000032	1.7E-08	0.00000081	0.0000017	2.1E-08	4.1E-14	4.9E-17	3.6E-11	2.5E-15
HHC-1	L-10	2.1E-08	0.000089	4.1E-09	0.00000058	4.1E-08	0.00000017	4.1E-09	0.000043	0.00000026	8.3E-09	0.00000091	0.0000015	2.1E-08	-	-	-	-
HHC-1	L-11	2.1E-08	0.000080	4.1E-09	0.00000066	5.0E-08	0.00000017	4.1E-09	0.000041	0.00000022	8.3E-09	0.00000099	0.0000013	2.1E-08	-	-	-	-
HHC-1	L-12	2.1E-08	0.000074	4.1E-09	0.00000065	5.8E-08	0.00000017	4.1E-09	0.000038	0.0000002	8.3E-09	0.00000099	0.0000013	5.0E-08	4.1E-14	9.7E-17	4.5E-11	2.5E-15
HHC-1	L-13	2.1E-08	0.000066	4.1E-09	0.0000007	5.8E-08	0.00000015	4.1E-09	0.000035	0.0000002	8.3E-09	0.00000091	0.0000012	2.1E-08	-	-	-	-
HHC-1	L-14	2.1E-08	0.000058	4.1E-09	0.00000068	6.6E-08	0.00000015	4.1E-09	0.000033	0.00000022	8.3E-09	0.00000099	0.0000012	2.1E-08	-	-	-	-
HHC-1	L-15	2.1E-08	0.000056	4.1E-09	0.00000068	6.6E-08	0.00000015	4.1E-09	0.000030	0.0000002	8.3E-09	0.0000011	0.0000012	2.1E-08	4.7E-14	9.7E-17	4.5E-11	2.9E-15
HHC-1	L-16	2.1E-08	0.000051	4.1E-09	0.0000007	6.6E-08	0.00000015	4.1E-09	0.000028	0.00000021	8.3E-09	0.0000011	0.0000011	2.1E-08	-	-	-	-
HHC-1	L-17	2.1E-08	0.000049	4.1E-09	0.0000007	7.5E-08	0.00000016	4.1E-09	0.000027	1.0E-07	8.3E-09	0.0000011	0.0000011	2.1E-08	5.3E-14	2.0E-16	4.9E-11	2.9E-15
HHC-1	L-18	1.0E-08	0.000041	2.1E-09	0.0000005	3.7E-08	9.1E-08	2.1E-09	0.000019	9.1E-08	4.1E-09	0.00000058	0.00000066	5.0E-08	2.7E-14	4.9E-17	2.7E-11	1.2E-15
HHC-1	L-19	1.0E-08	0.000038	2.1E-09	0.0000005	4.1E-08	8.3E-08	2.1E-09	0.000017	9.1E-08	4.1E-09	0.00000058	0.00000058	1.0E-08	3.0E-14	7.3E-17	2.7E-11	1.2E-15
HHC-1	L-20	1.0E-08	0.000035	2.1E-09	0.0000005	5.0E-08	7.9E-08	2.1E-09	0.000017	7.9E-08	4.1E-09	0.00000058	0.00000054	1.0E-08	5.0E-14	1.7E-16	3.1E-11	1.2E-15
HHC-1	L-21	9.4E-09	0.000033	1.9E-09	0.00000045	4.5E-08	7.1E-08	1.9E-09	0.000016	7.9E-08	3.7E-09	0.00000049	0.00000052	1.9E-08	3.1E-14	8.8E-17	2.9E-11	1.1E-15
HHC-1	L-22	1.0E-08	0.000032	3.7E-08	0.0000005	4.6E-08	7.5E-08	2.1E-09	0.000015	5.8E-08	4.1E-09	0.00000058	0.00000054	3.3E-08	4.3E-14	1.9E-16	2.7E-11	1.4E-15
HHC-1	L-23	1.0E-08	0.000032	1.7E-08	0.00000046	4.6E-08	7.5E-08	2.1E-09	0.000014	8.3E-08	4.1E-09	0.00000054	0.00000054	2.5E-08	3.5E-14	9.7E-17	2.2E-11	1.2E-15
HHC-1	L-24	1.0E-08	0.000031	2.1E-09	0.00000041	4.1E-08	7.0E-08	2.1E-09	0.000012	7.9E-08	4.1E-09	0.0000005	0.00000054	1.0E-08	3.0E-14	7.3E-17	2.5E-11	1.2E-15
HHC-2	L-1	0.0000035	0.0016	0.0000014	0.000023	0.0000041	0.000017	0.00000069	0.00011	0.000012	0.0000014	0.000069	0.000025	0.000011	3.7E-12	4.2E-14	3.5E-10	1.4E-13
HHC-2	L-2	0.00000031	0.0015	0.00000013	0.0000023	0.0000026	0.0000084	6.3E-08	0.000058	0.0000054	0.00000013	0.000029	0.000015	0.00000031	-	-	-	-
HHC-2	L-3	0.00000029	0.00094	0.00000012	0.0000021	0.0000020	0.0000063	5.8E-08	0.000057	0.0000029	0.00000012	0.000012	0.000014	0.0000007	1.7E-13	1.8E-15	9.1E-11	5.8E-15
HHC-2	L-4	5.8E-08	0.00057	1.2E-08	0.0000003	0.00000074	0.0000028	1.2E-08	0.000037	0.0000015	7.0E-08	0.0000018	0.000019	5.8E-08	-	-	-	-
HHC-2	L-5	4.1E-08	0.00034	8.3E-09	0.0000004	0.00000027	0.0000012	8.3E-09	0.000031	0.0000009	5.0E-08	0.0000018	0.000012	4.1E-08	-	-	-	-
HHC-2	L-6	2.1E-08	0.00018	8.3E-09	0.00000036	9.1E-08	0.00000047	4.1E-09	0.000032	0.00000046	2.5E-08	0.00000091	0.0000044	2.1E-08	4.7E-14	6.8E-17	2.5E-11	8.3E-16
HHC-2	L-7	2.1E-08	0.00013	4.1E-09	0.00000043	6.6E-08	0.00000032	4.1E-09	0.000043	0.00000041	2.5E-08	0.0000011	0.0000028	2.1E-08	-	-	-	-
HHC-2	L-8	4.1E-08	0.00013	1.7E-08	0.00000056	8.3E-08	0.00000032	8.3E-09	0.000061	0.00000041	1.7E-08	0.0000014	0.0000030	0.0000005	-	-	-	-
HHC-2	L-9	2.1E-08	0.00010	4.1E-09	0.00000045	5.0E-08	0.00000022	4.1E-09	0.000044	0.00000032	8.3E-09	0.00000083	0.0000018	2.1E-08	3.8E-14	3.9E-17	3.1E-11	2.5E-15
HHC-2	L-10	2.1E-08	0.000089	4.1E-09	0.0000005	5.0E-08	0.00000019	4.1E-09	0.000041	0.0000003	8.3E-09	0.00000083	0.0000017	2.1E-08	-	-	-	-
HHC-2	L-11	2.1E-08	0.000083	4.1E-09	0.00000057	5.8E-08	0.00000019	4.1E-09	0.000040	0.00000027	8.3E-09	0.00000099	0.0000016	2.1E-08	-	-	-	-
HHC-2	L-12	2.1E-08	0.000077	4.1E-09	0.00000057	5.8E-08	0.00000018	4.1E-09	0.000037	0.00000022	8.3E-09	0.0000010	0.0000015	2.1E-08	5.0E-14	2.4E-16	4.3E-11	2.5E-15
HHC-2	L-13	2.1E-08	0.000067	4.1E-09	0.00000062	5.0E-08	0.00000017	4.1E-09	0.000035	0.00000023	8.3E-09	0.00000099	0.0000013	2.1E-08	-	-	-	-
HHC-2	L-14	2.1E-08	0.000060	4.1E-09	0.00000057	6.6E-08	0.00000017	4.1E-09	0.000032	0.00000023	8.3E-09	0.0000010	0.0000013	2.1E-08	-	-	-	-
HHC-2	L-15	2.1E-08	0.000056	4.1E-09	0.00000059	6.6E-08	0.00000017	4.1E-09	0.000030	0.00000021	8.3E-09	0.0000011	0.0000013	2.1E-08	5.6E-14	1.5E-16	4.5E-11	2.9E-15
HHC-2	L-16	2.1E-08	0.000051	4.1E-09	0.00000065	6.6E-08	0.00000017	4.1E-09	0.000028	0.00000022	8.3E-09	0.0000012	0.0000012	2.1E-08	-	-	-	-
HHC-2	L-17	2.1E-08	0.000048	4.1E-09	0.0000006	7.5E-08	0.00000017	4.1E-09	0.000027	0.00000012	8.3E-09	0.0000012	0.0000012	2.1E-08	8.0E-14	1.5E-16	4.5E-11	2.9E-15
HHC-2	L-18	1.0E-08	0.000040	2.1E-09	0.00000041	4.1E-08	0.0000001	2.1E-09	0.000018	8.7E-08	4.1E-09	0.00000058	0.00000075	3.3E-08	2.5E-14	4.9E-17	2.9E-11	1.2E-15
HHC-2	L-19	1.0E-08	0.000035	2.1E-09	0.00000041	4.1E-08	9.9E-08	2.1E-09	0.000017	9.9E-08	4.1E-09	0.00000062	0.00000066	2.5E-08	3.3E-14	9.8E-17	2.6E-11	1.2E-15
HHC-2	L-20	1.0E-08	0.000033	2.1E-09	0.00000046	5.0E-08	8.7E-08	2.1E-09	0.000017	7.0E-08	4.1E-09	0.00000058	0.00000062	2.1E-08	4.3E-14	2.0E-16	3.2E-11	1.2E-15
HHC-2	L-21	9.4E-09	0.000030	3.7E-09	0.00000045	4.5E-08	8.2E-08	1.9E-09	0.000015	7.5E-08	3.7E-09	0.00000056	0.00000056	6.0E-08	2.5E-14	1.1E-16	2.7E-11	1.3E-15
HHC-2	L-22	1.0E-08	0.000028	1.2E-08	0.00000046	5.0E-08	8.3E-08	2.1E-09	0.000015	6.6E-08	4.1E-09	0.00000062	0.00000062	2.9E-08	5.0E-14	2.0E-16	2.9E-11	1.5E-15
HHC-2	L-23	1.0E-08	0.000026	4.1E-09	0.00000046	5.0E-08	9.1E-08	2.1E-09	0.000013	7.5E-08	4.1E-09	0.00000062	0.00000058	2.5E-08	4.6E-14	1.5E-16	2.6E-11	1.2E-15
HHC-2	L-24	2.5E-08	0.000024	8.3E-09	0.0000005	4.6E-08	8.7E-08	2.1E-09	0.000012	0.0000001	4.1E-09	0.00000066	0.00000058	4.1E-08	4.7E-14	3.2E-16	2.6E-11	1.2E-15
HHC-3	L-1	0.000012	0.0018	0.0000041	0.000089	0.0000041	0.000018	0.0000014	0.00011	0.000026	0.0000014	0.00015	0.000029	0.000018	-	-	-	-
HHC-3	L-2	0.00000076	0.0016	0.00000025	0.0000045	0.0000028	0.0000088	6.3E-08	0.000078	0.0000063	0.00000025	0.000044	0.000015	0.00000076	-	-	-	-
HHC-3	L-3	0.00000029	0.00098	0.00000023	0.0000031	0.0000020	0.0000066	5.8E-08	0.000066	0.0000035	0.00000012	0.000017	0.000014	0.0000007	-	-	-	-
HHC-3	L-4	5.8E-08	0.00060	2.3E-08	0.00000039	0.00000077	0.0000030	1.2E-08	0.000046	0.0000018	9.3E-08	0.0000019	0.000018	5.8E-08	-	-	-	-
HHC-3	L-5	4.1E-08	0.00035	8.3E-09	0.00000043	0.00000027	0.0000012	8.3E-09	0.000038	0.0000011	5.0E-08	0.0000018	0.000012	4.1E-08	-	-	-	-
HHC-3	L-6	2.1E-08	0.00020	8.3E-09	0.00000036	9.1E-08	0.00000049	4.1E-09	0.000034	0.0000005	3.3E-08	0.00000091	0.0000046	2.1E-08	-	-	-	-
HHC-3	L-7	2.1E-08	0.00014	8.3E-09	0.00000047	6.6E-08	0.00000034	4.1E-09	0.000043	0.00000042	2.5E-08	0.0000010	0.0000030	2.1E-08	-	-	-	-
HHC-3	L-8	4.2E-08	0.00014	8.3E-09	0.00000061	1.0E-07	0.00000035	8.3E-09	0.000061	0.0000004	1.7E-08	0.0000015	0.0000032	0.0000002	-	-	-	-
HHC-3	L-9	2.1E-08	0.00012	4.1E-09	0.00000047	5.0E-08	0.00000024	4.1E-09	0.000043	0.00000041	1.7E-08	0.00000083	0.0000019	4.1E-08	-	-	-	-
HHC-3	L-10	2.1E-08	0.000096	4.1E-09	0.00000049	5.0E-08	0.00000021	4.1E-09	0.000041	0.00000033	8.3E-09	0.00000083	0.0000017	2.1E-08	-	-	-	-
HHC-3	L-11	2.1E-08	0.000089	4.1E-09	0.0000006	5.8E-08	0.0000002	4.1E-09	0.000040	0.00000028	8.3E-09	0.0000011	0.0000017	2.1E-08	-	-	-	-
HHC-3	L-12	2.1E-08	0.000081	4.1E-09	0.00000059	5.8E-08	0.00000019	4.1E-09	0.000037	0.00000022	8.3E-09	0.00000099	0.0000016	2.1E-08	-	-	-	-
HHC-3	L-13	2.1E-08	0.000074	8.3E-09	0.00000069	5.8E-08	0.00000018	4.1E-09	0.000035	0.00000031	8.3E-09	0.0000011	0.0000014	4.1E-08	-	-	-	-
HHC-3	L-14	2.1E-08	0.000065	4.1E-09	0.0000006	6.6E-08	0.00000017	4.1E-09	0.000032	0.00000022	8.3E-09	0.0000011	0.0000014	2.1E-08	-	-	-	-
HHC-3	L-15	2.1E-08	0.000061	8.3E-09	0.00000065	6.6E-08	0.00000018	4.1E-09	0.000030	0.00000022	8.3E-09	0.0000012	0.0000013	2.1E-08	-	-	-	-
HHC-3	L-16	2.1E-08	0.000055	4.1E-09	0.00000064	7.5E-08	0.00000018	4.1E-09	0.000028	0.00000025	8.3E-09	0.0000012	0.0000013	2.1E-08	-	-	-	-
HHC-3	L-17	2.1E-08	0.000052	4.1E-09	0.0000006	7.5E-08	0.00000018	4.1E-09	0.000027	0.00000015	8.3E-09	0.0000012	0.0000012	2.1E-08	-	-	-	-
HHC-4	L-1	0.0000034	0.0015	0.0000027	0.000030	0.0000027	0.000012	0.00000068	0.00010	0.000016	0.0000014	0.000080	0.000019	0.000011	-	-	-	-
HHC-4	L-2	0.00000032	0.0015	0.00000013	0.0000024	0.0000025	0.0000076	6.3E-08	0.000073	0.0000058	0.00000025	0.000039	0.000013	0.00000032	-	-	-	-
HHC-4	L-3	0.00000029	0.00092	5.8E-08	0.0000013	0.0000019	0.0000058	5.8E-08	0.000065	0.0000029	0.00000012	0.000013	0.000013	0.00000029	-	-	-	-
HHC-4	L-4	5.8E-08	0.00055	1.2E-08	0.00000028	0.00000072	0.0000026	1.2E-08	0.000046	0.0000017	9.3E-08	0.0000016	0.000017	5.8E-08	-	-	-	-
HHC-4	L-5	4.1E-08	0.00033	8.3E-09	0.00000038	0.00000025	0.0000011	8.3E-09	0.000038	0.00000088	5.0E-08	0.0000016	0.000012	4.1E-08	-	-	-	-
HHC-4	L-6	2.1E-08	0.00018	8.3E-09	0.00000036	8.3E-08	0.00000041	4.1E-09	0.000036	0.00000043	2.5E-08	0.00000099	0.0000043	2.1E-08	-	-	-	-
HHC-4	L-7	2.1E-08	0.00014	4.1E-09	0.00000045	6.6E-08	0.0000003	4.1E-09	0.000046	0.00000041	2.5E-08	0.00000091	0.0000028	2.1E-08	-	-	-	-
HHC-4	L-8	4.1E-08	0.00013	8.3E-09	0.0000006	8.3E-08	0.00000032	8.3E-09	0.000065	0.00000037	1.7E-08	0.0000015	0.0000030	0.00000017	-	-	-	-
HHC-4	L-9	2.1E-08	0.00011	4.1E-09	0.00000046	5.0E-08	0.00000022	4.1E-09	0.000046	0.00000042	1.7E-08	0.00000083	0.0000018	2.1E-08	-	-	-	-
HHC-4	L-10	2.1E-08	0.000094	4.1E-09	0.00000053	4.1E-08	0.00000019	4.1E-09	0.000041	0.00000032	8.3E-09	0.00000083	0.0000017	2.1E-08	-	-	-	-
HHC-4	L-11	2.1E-08	0.000087	4.1E-09	0.00000059	5.8E-08	0.00000019	4.1E-09	0.000041	0.00000029	8.3E-09	0.0000011	0.0000016	2.1E-08	-	-	-	-
HHC-4	L-12	2.1E-08	0.000081	4.1E-09	0.00000059	5.8E-08	0.00000017	4.1E-09	0.000039	0.00000019	8.3E-09	0.00000099	0.0000015	2.1E-08	-	-	-	-
HHC-4	L-13	2.1E-08	0.000075	4.1E-09	0.00000063	5.8E-08	0.00000017	4.1E-09	0.000037	0.00000027	8.3E-09	0.0000010	0.0000013	2.1E-08	-	-	-	-
HHC-4	L-14	2.1E-08	0.000065	4.1E-09	0.00000063	6.6E-08	0.00000017	4.1E-09	0.000034	0.00000022	8.3E-09	0.0000011	0.0000013	2.1E-08	-	-	-	-
HHC-4	L-15	2.1E-08	0.000060	4.1E-09	0.00000066	6.6E-08	0.00000017	4.1E-09	0.000031	0.00000023	8.3E-09	0.0000012	0.0000013	2.1E-08	-	-	-	-
HHC-4	L-16	2.1E-08	0.000054	4.1E-09	0.00000071	7.5E-08	0.00000017	4.1E-09	0.000030	0.00000026	8.3E-09	0.0000012	0.0000012	2.1E-08	-	-	-	-
HHC-4	L-17	2.1E-08	0.000052	4.2E-09	0.00000065	7.5E-08	0.00000017	4.2E-09	0.000028	0.00000012	8.3E-09	0.0000012	0.0000012	2.1E-08	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HPLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	599	1.00	0.60	0.0082	7.3	0.76	1637	-	0.053	0.064	0.0053	0.0053	1.0	0.66	0.27	0.00053
HPLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.76	1637	-	0.0039	0.0048	0.00048	0.00048	0.26	0.14	0.058	0.0048
HPLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.76	1637	-	0.0037	0.0046	0.00046	0.00046	0.26	0.13	0.052	0.0065
HPLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	0.0013	0.0015	0.000091	0.000091	0.14	0.059	0.024	0.0058
HPLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1637	-	0.0014	0.0017	0.000065	0.000065	0.12	0.048	0.019	0.0048
HPLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1637	-	0.0012	0.0015	0.000033	0.000033	0.082	0.035	0.014	0.0030
HPLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1637	-	0.0016	0.0019	0.000033	0.000033	0.078	0.034	0.013	0.0022
HPLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.76	1637	-	0.00052	0.00066	0.000066	0.000066	0.092	0.043	0.017	0.0020
HPLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	0.0016	0.0020	0.000033	0.000033	0.068	0.032	0.013	0.0012
HPLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1637	-	0.00052	0.00065	0.000033	0.000033	0.065	0.031	0.012	0.00091
HPLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	644	1.00	0.65	0.0082	7.9	0.76	1637	-	0.0011	0.0014	0.000033	0.000033	0.061	0.030	0.012	0.00072
HPLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	0.0010	0.0013	0.000033	0.000033	0.059	0.029	0.011	0.00052
HPLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.76	1637	-	0.00045	0.00052	0.000032	0.000032	0.056	0.028	0.011	0.00039
HPLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1637	-	0.00058	0.00071	0.000032	0.000032	0.055	0.028	0.011	0.00026
HPLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	0.00072	0.00085	0.000033	0.000033	0.048	0.027	0.011	0.00026
HPLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1637	-	0.00065	0.00078	0.000033	0.000033	0.047	0.027	0.011	0.00020
HPLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1637	-	0.00059	0.00072	0.000033	0.000033	0.046	0.026	0.010	0.00020
HPLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	562	1.0	0.56	0.0082	6.9	0.76	1638	-	0.11	0.13	0.0050	0.0050	3.3	2.2	0.90	0.0050
HPLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.76	1638	-	0.0040	0.0050	0.00050	0.00050	0.42	0.25	0.10	0.0050
HPLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0055	0.0064	0.00046	0.00046	0.36	0.19	0.076	0.0055
HPLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.76	1638	-	0.0023	0.0029	0.000090	0.000090	0.15	0.071	0.028	0.0052
HPLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0013	0.0016	0.000065	0.000065	0.13	0.056	0.022	0.0045
HPLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0011	0.0014	0.000033	0.000033	0.087	0.037	0.015	0.0031
HPLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0018	0.0022	0.000033	0.000033	0.083	0.037	0.015	0.0023
HPLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1638	-	0.0016	0.0020	0.000065	0.000065	0.10	0.049	0.019	0.0021
HPLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0015	0.0018	0.000033	0.000033	0.072	0.034	0.014	0.0014
HPLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1638	-	0.0017	0.0021	0.000033	0.000033	0.069	0.034	0.014	0.0010
HPLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	0.00091	0.0011	0.000033	0.000033	0.066	0.033	0.013	0.00085
HPLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.76	1638	-	0.00078	0.00097	0.000032	0.000032	0.062	0.031	0.012	0.00071
HPLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	628	1.00	0.63	0.0082	7.7	0.76	1638	-	0.00089	0.0011	0.000032	0.000032	0.058	0.029	0.012	0.00051
HPLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	0.00085	0.0010	0.000033	0.000033	0.059	0.031	0.012	0.00039
HPLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1638	-	0.0013	0.0016	0.000033	0.000033	0.051	0.030	0.012	0.00033
HPLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1638	-	0.0014	0.0017	0.000033	0.000033	0.050	0.029	0.011	0.00026
HPLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1638	-	0.00091	0.0011	0.000033	0.000033	0.049	0.027	0.011	0.00026
HPLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	567	1.0	0.57	0.0082	6.9	0.76	1635	-	0.12	0.15	0.0050	0.0050	5.1	3.4	1.4	0.0050
HPLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	0.0050	0.0060	0.00050	0.00050	0.48	0.29	0.12	0.0060
HPLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.76	1635	-	0.0081	0.0100	0.00045	0.00045	0.39	0.22	0.086	0.0054
HPLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	636	1.00	0.64	0.0082	7.8	0.76	1635	-	0.0022	0.0027	0.000090	0.000090	0.16	0.075	0.030	0.0054
HPLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.76	1635	-	0.0016	0.0019	0.000065	0.000065	0.13	0.059	0.023	0.0047
HPLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0016	0.0020	0.000033	0.000033	0.089	0.038	0.015	0.0032
HPLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	0.0015	0.0018	0.000033	0.000033	0.085	0.038	0.015	0.0024
HPLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0032	0.0039	0.000065	0.000065	0.10	0.049	0.020	0.0021
HPLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0017	0.0021	0.000033	0.000033	0.073	0.035	0.014	0.0014
HPLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0018	0.0022	0.000033	0.000033	0.070	0.035	0.014	0.0010
HPLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.76	1635	-	0.0016	0.0019	0.000032	0.000032	0.065	0.033	0.013	0.00084
HPLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1635	-	0.00085	0.0010	0.000033	0.000033	0.060	0.032	0.013	0.00065
HPLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0014	0.0017	0.000032	0.000032	0.060	0.030	0.012	0.00052
HPLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	0.0013	0.0016	0.000033	0.000033	0.059	0.031	0.012	0.00039
HPLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0014	0.0017	0.000033	0.000033	0.051	0.030	0.012	0.00039
HPLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	0.00085	0.0010	0.000033	0.000033	0.051	0.031	0.012	0.00026
HPLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	0.0011	0.0014	0.000033	0.000033	0.050	0.027	0.011	0.00026
HPLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	555	1.0	0.55	0.0082	6.8	0.75	1619	-	0.16	0.20	0.0049	0.0049	3.6	2.4	0.96	0.0049
HPLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.75	1619	-	0.0087	0.011	0.00048	0.00048	0.61	0.37	0.15	0.0058
HPLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.75	1619	-	0.013	0.015	0.00045	0.00045	0.46	0.27	0.11	0.0054
HPLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.75	1619	-	0.0021	0.0027	0.000089	0.000089	0.16	0.075	0.030	0.0055
HPLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.75	1619	-	0.0022	0.0027	0.000065	0.000065	0.15	0.058	0.023	0.0049
HPLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	0.0014	0.0017	0.000033	0.000033	0.089	0.037	0.015	0.0033
HPLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	0.00091	0.0011	0.000033	0.000033	0.087	0.038	0.015	0.0023
HPLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.75	1619	-	0.0016	0.0020	0.000065	0.000065	0.10	0.048	0.019	0.0021
HPLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	0.0016	0.0020	0.000033	0.000033	0.071	0.035	0.014	0.0014
HPLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.75	1619	-	0.0015	0.0018	0.000032	0.000032	0.070	0.034	0.014	0.0010
HPLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.75	1619	-	0.0012	0.0014	0.000032	0.000032	0.066	0.033	0.013	0.00084
HPLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.75	1619	-	0.0014	0.0017	0.000032	0.000032	0.062	0.031	0.012	0.00065
HPLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.75	1619	-	0.0013	0.0016	0.000032	0.000032	0.059	0.030	0.012	0.00052
HPLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	0.0014	0.0018	0.000033	0.000033	0.059	0.031	0.012	0.00039
HPLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	0.00091	0.0011	0.000033	0.000033	0.051	0.030	0.012	0.00033
HPLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	0.00085	0.0010	0.000033	0.000033	0.051	0.032	0.013	0.00026
HPLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.75	1619	-	0.0010	0.0013	0.000033	0.000033	0.050	0.028	0.011	0.00026

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-P/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HPLC-1	L-1	0.00064	0.0042	0.00053	0.0074	-	-	0.00019	-	0.57	0.00000027	0.0040	0.000016	0.00021	0.00021	0.00000053	5.3E-08	0.0000021	0.0000027	0.000012	0.00036	5.3E-09
HPLC-1	L-2	0.00021	0.0026	0.00019	0.014	-	-	0.0000043	-	0.15	2.4E-08	0.00033	0.0000082	0.00011	0.0000067	4.8E-08	9.7E-09	9.7E-08	0.00000058	0.00000097	0.000018	4.8E-10
HPLC-1	L-3	0.00021	0.0029	0.00018	0.019	-	-	0.0000042	-	0.16	4.6E-08	0.00034	0.000011	0.00011	0.0000067	4.6E-08	4.6E-09	4.6E-08	0.00000092	0.00000055	0.0000068	4.6E-10
HPLC-1	L-4	0.00014	0.0018	0.00011	0.017	-	-	0.00000082	-	0.088	2.7E-08	0.00013	0.000011	0.000062	0.0000014	9.1E-09	3.7E-09	1.8E-08	0.00000026	0.00000042	0.0000024	9.1E-11
HPLC-1	L-5	0.00010	0.0016	0.000091	0.014	-	-	0.00000059	-	0.072	6.5E-09	0.000088	0.000011	0.000047	0.00000095	6.5E-09	6.5E-09	6.5E-09	0.00000014	0.00000023	0.00000049	6.5E-11
HPLC-1	L-6	0.000072	0.0011	0.000065	0.011	-	-	0.00000029	-	0.052	5.2E-09	0.000054	0.0000083	0.000038	0.00000059	3.3E-09	4.6E-09	3.3E-09	7.8E-08	0.00000014	0.00000016	3.3E-11
HPLC-1	L-7	0.000072	0.00098	0.000059	0.0092	-	-	0.00000029	-	0.050	5.2E-09	0.000053	0.0000077	0.000035	0.00000059	3.3E-09	5.2E-09	6.5E-09	5.9E-08	0.00000015	0.00000078	3.3E-11
HPLC-1	L-8	0.000080	0.0011	0.000079	0.0094	-	-	0.0000059	-	0.058	3.3E-09	0.000076	0.0000076	0.000043	0.00000097	6.6E-09	3.9E-09	1.3E-08	6.6E-08	0.00000018	0.0000021	6.6E-11
HPLC-1	L-9	0.000040	0.00072	0.000052	0.0068	-	-	0.0000029	-	0.042	3.3E-09	0.000052	0.0000061	0.000029	0.00000065	3.3E-09	3.3E-09	1.3E-08	4.6E-08	0.00000013	0.0000016	3.3E-11
HPLC-1	L-10	0.000038	0.00072	0.000052	0.0063	-	-	0.0000029	-	0.040	3.3E-09	0.000046	0.0000055	0.000027	0.00000061	3.3E-09	3.3E-10	6.5E-09	3.9E-08	0.0000001	0.00000091	3.3E-11
HPLC-1	L-11	0.000046	0.00065	0.000052	0.0056	-	-	0.0000030	-	0.039	1.6E-09	0.000040	0.0000050	0.000026	0.00000063	3.3E-09	6.5E-10	3.3E-09	1.6E-08	7.2E-08	9.2E-08	3.3E-11
HPLC-1	L-12	0.000041	0.00060	0.000046	0.0048	-	-	0.0000029	-	0.037	1.6E-09	0.000040	0.0000044	0.000024	0.00000063	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.2E-08	3.9E-08	3.3E-11
HPLC-1	L-13	0.000050	0.00056	0.000045	0.0042	-	-	0.0000029	-	0.035	1.6E-09	0.000037	0.0000039	0.000023	0.00000061	3.2E-09	3.2E-09	3.2E-09	1.6E-08	5.8E-08	7.1E-08	3.2E-11
HPLC-1	L-14	0.000035	0.00056	0.000045	0.0038	-	-	0.0000029	-	0.035	1.6E-09	0.000034	0.0000035	0.000021	0.00000063	3.2E-09	3.2E-10	3.2E-09	1.6E-08	5.2E-08	7.1E-08	3.2E-11
HPLC-1	L-15	0.000048	0.00051	0.000039	0.0033	-	-	0.000029	-	0.033	1.6E-09	0.000030	0.0000029	0.000019	0.00000065	3.3E-09	6.5E-10	3.3E-09	1.6E-08	4.6E-08	7.2E-08	3.3E-11
HPLC-1	L-16	0.000043	0.00048	0.000046	0.0028	-	-	0.0000030	-	0.031	1.6E-09	0.000029	0.0000027	0.000020	0.00000065	3.3E-09	3.3E-10	3.3E-09	1.6E-08	4.6E-08	7.8E-08	3.3E-11
HPLC-1	L-17	0.000035	0.00046	0.000039	0.0025	-	-	0.0000029	-	0.031	1.6E-09	0.000022	0.0000023	0.000019	0.00000072	3.3E-09	1.3E-09	3.3E-09	3.3E-08	5.9E-08	9.1E-08	6.5E-11
HPLC-2	L-1	0.0012	0.0050	0.0020	0.0099	-	-	0.00018	-	2.0	0.00000025	0.0069	0.000036	0.00040	0.00026	0.0000005	5.0E-08	0.0000020	0.0000025	0.000012	0.00029	5.0E-09
HPLC-2	L-2	0.00029	0.0030	0.00030	0.013	-	-	0.0000045	-	0.25	2.5E-08	0.00061	0.0000097	0.00014	0.000011	5.0E-08	2.0E-08	5.0E-08	0.0000006	0.0000017	0.000012	5.0E-10
HPLC-2	L-3	0.00024	0.0028	0.00027	0.017	-	-	0.0000041	-	0.20	2.3E-08	0.00070	0.0000011	0.00012	0.000015	4.6E-08	2.7E-08	4.6E-08	0.00000023	0.00000055	0.0000061	4.6E-10
HPLC-2	L-4	0.00013	0.0018	0.00013	0.016	-	-	0.00000081	-	0.096	3.1E-08	0.00019	0.000010	0.000063	0.0000023	9.0E-09	5.4E-09	0.00000013	0.0000004	0.0000010	0.000027	9.0E-11
HPLC-2	L-5	0.00012	0.0016	0.000091	0.014	-	-	0.00000058	-	0.079	7.8E-09	0.00011	0.0000010	0.000049	0.0000013	6.5E-09	3.9E-09	6.5E-09	0.00000014	0.00000021	0.00000094	6.5E-11
HPLC-2	L-6	0.000078	0.0010	0.000072	0.010	-	-	0.00000029	-	0.055	4.6E-09	0.000065	0.0000079	0.000038	0.00000072	3.3E-09	2.0E-09	6.5E-09	9.1E-08	0.00000014	0.00000085	3.3E-11
HPLC-2	L-7	0.000064	0.00098	0.000065	0.0091	-	-	0.00000029	-	0.053	3.9E-09	0.000057	0.0000076	0.000036	0.00000065	3.3E-09	1.3E-09	3.3E-09	6.5E-08	0.00000011	0.00000018	3.3E-11
HPLC-2	L-8	0.000089	0.0011	0.000078	0.0097	-	-	0.0000059	-	0.063	3.3E-09	0.000095	0.0000078	0.000044	0.0000016	6.5E-09	1.3E-09	3.9E-08	9.1E-08	0.0000003	0.0000064	6.5E-11
HPLC-2	L-9	0.000044	0.00078	0.000059	0.0068	-	-	0.0000029	-	0.045	1.6E-09	0.000059	0.0000061	0.000030	0.00000078	3.3E-09	6.5E-10	3.3E-09	5.2E-08	8.5E-08	0.00000016	3.3E-11
HPLC-2	L-10	0.000037	0.00072	0.000052	0.0063	-	-	0.0000029	-	0.043	1.6E-09	0.000050	0.0000056	0.000029	0.00000078	3.3E-09	2.0E-09	3.3E-09	4.6E-08	7.8E-08	0.00000027	3.3E-11
HPLC-2	L-11	0.000050	0.00065	0.000052	0.0056	-	-	0.0000029	-	0.042	1.6E-09	0.000048	0.0000051	0.000029	0.00000091	3.3E-09	3.3E-10	3.3E-09	3.9E-08	6.5E-08	9.8E-08	3.3E-11
HPLC-2	L-12	0.000045	0.00060	0.000045	0.0048	-	-	0.0000029	-	0.039	1.6E-09	0.000046	0.0000045	0.000025	0.00000084	3.2E-09	3.2E-10	3.2E-09	3.9E-08	5.2E-08	0.00000014	3.2E-11
HPLC-2	L-13	0.000048	0.00055	0.000045	0.0041	-	-	0.0000029	-	0.036	1.6E-09	0.000042	0.0000040	0.000023	0.00000083	3.2E-09	2.5E-09	3.2E-09	3.2E-08	5.7E-08	0.00000034	3.2E-11
HPLC-2	L-14	0.000040	0.00055	0.000046	0.0038	-	-	0.0000029	-	0.037	1.6E-09	0.000044	0.0000036	0.000023	0.00000091	3.3E-09	3.3E-10	6.5E-09	1.6E-08	7.2E-08	0.00000085	3.3E-11
HPLC-2	L-15	0.000047	0.00049	0.000046	0.0033	-	-	0.000029	-	0.034	1.6E-09	0.000042	0.0000031	0.000020	0.00000091	3.3E-09	1.3E-09	3.3E-09	1.6E-08	4.6E-08	7.2E-08	3.3E-11
HPLC-2	L-16	0.000037	0.00048	0.000046	0.0029	-	-	0.0000030	-	0.034	1.6E-09	0.000035	0.0000029	0.000021	0.00000078	3.3E-09	3.3E-10	3.3E-09	1.6E-08	4.6E-08	9.2E-08	3.3E-11
HPLC-2	L-17	0.000039	0.00044	0.000039	0.0025	-	-	0.0000029	-	0.031	1.6E-09	0.000029	0.0000026	0.000020	0.00000085	3.3E-09	3.3E-10	6.5E-09	3.3E-08	7.2E-08	0.00000072	6.5E-11
HPLC-3	L-1	0.0016	0.0060	0.0020	0.011	-	-	0.00018	-	3.1	0.00000025	0.010	0.000049	0.00050	0.00028	0.0000005	0.0000001	0.0000060	0.0000070	0.000036	0.0012	5.0E-09
HPLC-3	L-2	0.00031	0.0034	0.00040	0.016	-	-	0.0000045	-	0.30	2.5E-08	0.00071	0.0000012	0.00015	0.000014	5.0E-08	5.0E-09	5.0E-08	0.00000025	0.0000008	0.0000099	5.0E-10
HPLC-3	L-3	0.00027	0.0030	0.00027	0.019	-	-	0.0000041	-	0.24	2.3E-08	0.00084	0.0000013	0.00013	0.000017	4.5E-08	4.5E-09	4.5E-08	0.00000023	0.00000054	0.0000085	4.5E-10
HPLC-3	L-4	0.00014	0.0018	0.00013	0.016	-	-	0.00000081	-	0.10	2.2E-08	0.00018	0.0000010	0.000067	0.0000025	9.0E-09	3.6E-09	1.8E-08	0.00000025	0.00000038	0.0000038	9.0E-11
HPLC-3	L-5	0.00012	0.0016	0.00010	0.014	-	-	0.00000058	-	0.082	3.2E-09	0.00011	0.0000010	0.000052	0.00000017	6.5E-09	3.9E-09	1.3E-08	0.00000016	0.00000026	0.0000016	6.5E-11
HPLC-3	L-6	0.000078	0.0011	0.000072	0.011	-	-	0.00000029	-	0.057	4.6E-09	0.000065	0.0000082	0.000040	0.00000085	3.3E-09	2.0E-09	3.3E-09	9.8E-08	0.0000001	0.00000016	3.3E-11
HPLC-3	L-7	0.000072	0.0010	0.000065	0.0094	-	-	0.0000029	-	0.052	3.9E-09	0.000059	0.0000076	0.000037	0.00000078	3.3E-09	6.5E-10	3.3E-09	7.8E-08	9.8E-08	0.00000016	3.3E-11
HPLC-3	L-8	0.000088	0.0011	0.000078	0.0096	-	-	0.0000059	-	0.064	3.2E-09	0.000095	0.0000078	0.000043	0.0000016	6.5E-09	6.5E-10	1.3E-08	7.8E-08	0.00000014	0.0000017	6.5E-11
HPLC-3	L-9	0.000030	0.00078	0.000059	0.0068	-	-	0.0000029	-	0.046	1.6E-09	0.000059	0.0000061	0.000029	0.00000085	3.3E-09	2.6E-09	3.3E-09	5.2E-08	7.2E-08	0.00000014	3.3E-11
HPLC-3	L-10	0.000043	0.00072	0.000059	0.0063	-	-	0.0000029	-	0.044	3.3E-09	0.000055	0.0000056	0.000029	0.00000085	3.3E-09	2.0E-09	2.0E-08	5.9E-08	0.00000015	0.0000029	3.3E-11
HPLC-3	L-11	0.000058	0.00065	0.000052	0.0055	-	-	0.0000029	-	0.042	1.6E-09	0.000049	0.0000051	0.000028	0.00000091	3.2E-09	3.2E-10	3.2E-09	3.9E-08	6.5E-08	0.00000017	3.2E-11
HPLC-3	L-12	0.000045	0.00061	0.000052	0.0048	-	-	0.0000029	-	0.039	1.6E-09	0.000050	0.0000046	0.000026	0.00000091	3.3E-09	3.3E-09	3.3E-09	5.9E-08	6.5E-08	0.0000006	3.3E-11
HPLC-3	L-13	0.000053	0.00056	0.000045	0.0042	-	-	0.0000029	-	0.037	1.6E-09	0.000045	0.0000040	0.000024	0.00000091	3.2E-09	6.5E-10	3.2E-09	3.9E-08	5.8E-08	0.00000044	3.2E-11
HPLC-3	L-14	0.000039	0.00055	0.000046	0.0038	-	-	0.0000030	-	0.037	1.6E-09	0.000047	0.0000037	0.000024	0.00000092	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.2E-08	0.00000026	3.3E-11
HPLC-3	L-15	0.000048	0.00050	0.000046	0.0033	-	-	0.000029	-	0.034	1.6E-09	0.000039	0.0000031	0.000020	0.00000085	3.3E-09	2.6E-09	3.3E-09	1.6E-08	4.6E-08	0.0000001	3.3E-11
HPLC-3	L-16	0.000046	0.00050	0.000046	0.0031	-	-	0.0000030	-	0.035	1.6E-09	0.000044	0.0000029	0.000021	0.00000085	3.3E-09	3.3E-10	3.3E-09	1.6E-08	4.6E-08	0.00000012	3.3E-11
HPLC-3	L-17	0.000039	0.00044	0.000039	0.0024	-	-	0.0000029	-	0.032	1.6E-09	0.000031	0.0000026	0.000020	0.00000091	3.3E-09	1.3E-09	3.3E-09	3.3E-08	5.2E-08	0.00000016	6.5E-11
HPLC-4	L-1	0.000049	0.0059	0.0020	0.0098	-	-	0.0029	-	2.2	0.00000025	0.0083	0.000041	0.00039	0.00024	0.00000049	4.9E-08	0.0000059	0.0000069	0.000034	0.0011	4.9E-09
HPLC-4	L-2	0.00036	0.0036	0.00039	0.016	-	-	0.0000043	-	0.38	4.8E-08	0.00085	0.000014	0.00017	0.000013	4.8E-08	2.9E-08	4.8E-08	0.00000048	0.00000077	0.000011	4.8E-10
HPLC-4	L-3	0.00027	0.0029	0.00036	0.016	-	-	0.0000041	-	0.27	2.3E-08	0.0010	0.000013	0.00014	0.000026	4.5E-08	1.8E-08	4.5E-08	0.00000023	0.00000054	0.0000070	4.5E-10
HPLC-4	L-4	0.00014	0.0018	0.00012	0.016	-	-	0.0000008	-	0.10	2.3E-08	0.00018	0.000010	0.000064	0.0000025	8.9E-09	7.1E-09	8.9E-09	0.00000025	0.00000035	0.0000023	8.9E-11
HPLC-4	L-5	0.00011	0.0017	0.000090	0.015	-	-	0.00000058	-	0.083	7.7E-09	0.00013	0.000011	0.000050	0.0000018	6.5E-09	2.6E-09	3.9E-08	0.00000019	0.00000041	0.0000077	6.5E-11
HPLC-4	L-6	0.000072	0.0011	0.000072	0.011	-	-	0.00000029	-	0.057	5.2E-09	0.000069	0.0000084	0.000039	0.00000085	3.3E-09	2.0E-09	2.6E-08	0.00000012	0.00000021	0.0000040	3.3E-11
HPLC-4	L-7	0.000072	0.0010	0.000065	0.0099	-	-	0.00000029	-	0.054	4.6E-09	0.000061	0.0000081	0.000038	0.00000085	3.3E-09	2.6E-09	3.3E-09	7.2E-08	9.1E-08	0.00000024	3.3E-11
HPLC-4	L-8	0.000089	0.0012	0.000078	0.010	-	-	0.0000059	-	0.065	3.3E-09	0.000095	0.0000082	0.000046	0.0000016	6.5E-09	5.2E-09	6.5E-09	7.8E-08	0.00000012	0.0000010	6.5E-11
HPLC-4	L-9	0.000049	0.00078	0.000059	0.0070	-	-	0.0000029	-	0.046	3.3E-09	0.000059	0.0000063	0.000029	0.00000091	3.3E-09	2.0E-09	3.3E-09	5.9E-08	7.2E-08	0.00000037	3.3E-11
HPLC-4	L-10	0.000045	0.00071	0.000058	0.0063	-	-	0.0000029	-	0.044	3.9E-09	0.000058	0.0000058	0.000030	0.00000097	3.2E-09	1.3E-09	1.9E-08	6.5E-08	0.00000017	0.0000038	3.2E-11
HPLC-4	L-11	0.000046	0.00065	0.000052	0.0056	-	-	0.0000029	-	0.042	1.6E-09	0.000061	0.0000051	0.000032	0.00000084	3.2E-09	6.5E-10	3.2E-09	3.9E-08	6.5E-08	0.00000024	3.2E-11
HPLC-4	L-12	0.000046	0.00061	0.000045	0.0047	-	-	0.0000029	-	0.039	1.6E-09	0.000059	0.0000045	0.000026	0.00000097	3.2E-09	1.3E-09	3.2E-09	3.9E-08	7.1E-08	0.00000077	3.2E-11
HPLC-4	L-13	0.000049	0.00057	0.000045	0.0040	-	-	0.0000029	-	0.037	1.6E-09	0.000047	0.0000040	0.000025	0.00000091	3.2E-09	6.5E-10	3.2E-09	3.2E-08	5.8E-08	0.00000021	3.2E-11
HPLC-4	L-14	0.000036	0.00056	0.000046	0.0037	-	-	0.0000030	-	0.037	1.6E-09	0.000046	0.0000036	0.000024	0.00000098	3.3E-09	3.3E-09	3.3E-09	3.3E-08	5.9E-08	0.00000048	3.3E-11
HPLC-4	L-15	0.000048	0.00051	0.000046	0.0031	-	-	0.000029	-	0.034	1.6E-09	0.000049	0.0000030	0.000020	0.00000091	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.2E-08	0.00000025	3.3E-11
HPLC-4	L-16	0.000046	0.00053	0.000052	0.0030	-	-	0.0000029	-	0.036	1.6E-09	0.000048	0.0000028	0.000022	0.00000091	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.2E-08	0.00000022	3.3E-11
HPLC-4	L-17	0.000037	0.00044	0.000046	0.0023	-	-	0.0000030	-	0.032	1.6E-09	0.000033	0.0000025	0.000020	0.00000098	3.3E-09	3.3E-10	3.3E-09	1.6E-08	7.8E-08	7.2E-08	6.5E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HPLC-1	L-1	0.0000064	0.00078	0.0000032	0.000047	0.0000042	0.000025	0.00000053	0.00019	0.0000085	0.0000011	0.000075	0.000015	0.000014	-	-	2.4E-09	-
HPLC-1	L-2	0.00000024	0.00040	0.00000029	0.0000032	0.0000012	0.0000063	4.8E-08	0.000053	0.0000016	0.00000019	0.000014	0.0000014	0.0000015	-	-	1.7E-10	-
HPLC-1	L-3	0.00000023	0.00052	9.2E-08	0.0000011	0.0000010	0.0000074	4.6E-08	0.000050	0.0000017	0.00000018	0.0000092	0.0000015	0.00000055	-	-	1.3E-10	-
HPLC-1	L-4	4.6E-08	0.00045	7.3E-08	0.00000053	0.00000051	0.0000049	9.1E-09	0.000026	0.0000013	0.00000015	0.0000062	0.00000075	0.00000018	-	-	4.1E-11	-
HPLC-1	L-5	3.3E-08	0.00038	3.9E-08	0.00000013	0.0000004	0.0000040	6.5E-09	0.000021	0.0000012	0.0000001	0.0000052	0.00000062	0.00000023	-	-	2.6E-11	-
HPLC-1	L-6	1.6E-08	0.00030	2.0E-08	3.9E-08	0.00000031	0.0000031	3.3E-09	0.000016	0.00000078	7.8E-08	0.0000055	0.00000044	7.8E-08	-	-	1.3E-11	-
HPLC-1	L-7	1.6E-08	0.00027	2.0E-08	0.00000015	0.00000029	0.0000031	3.3E-09	0.000014	0.0000006	7.2E-08	0.0000050	0.00000046	3.9E-08	-	-	1.3E-11	-
HPLC-1	L-8	3.3E-08	0.00027	3.9E-08	0.00000035	0.00000034	0.0000031	6.6E-09	0.000017	0.00000085	7.9E-08	0.0000049	0.00000056	0.00000016	-	-	1.9E-11	-
HPLC-1	L-9	3.9E-08	0.00022	2.0E-08	0.00000028	0.00000026	0.0000027	3.3E-09	0.000014	0.00000064	6.5E-08	0.0000048	0.00000044	6.5E-08	-	-	1.4E-11	-
HPLC-1	L-10	1.6E-08	0.00020	2.6E-08	0.0000002	0.00000025	0.0000023	3.3E-09	0.000012	0.00000063	6.5E-08	0.0000042	0.00000042	0.00000023	-	-	1.1E-11	-
HPLC-1	L-11	1.6E-08	0.00018	2.0E-08	7.9E-08	0.00000026	0.0000022	3.3E-09	0.000012	0.00000058	5.9E-08	0.0000039	0.00000039	4.6E-08	-	-	1.1E-11	-
HPLC-1	L-12	1.6E-08	0.00018	1.3E-08	3.3E-08	0.00000025	0.0000021	3.3E-09	0.000012	0.00000059	5.9E-08	0.0000034	0.00000039	3.9E-08	-	-	1.0E-11	-
HPLC-1	L-13	1.6E-08	0.00015	1.3E-08	5.8E-08	0.00000025	0.0000019	3.2E-09	0.000012	0.00000037	6.5E-08	0.0000033	0.00000038	5.8E-08	-	-	1.3E-11	-
HPLC-1	L-14	1.6E-08	0.00014	1.3E-08	4.5E-08	0.00000024	0.0000017	3.2E-09	0.000011	0.00000043	6.5E-08	0.0000029	0.00000036	9.7E-08	-	-	1.2E-11	-
HPLC-1	L-15	1.6E-08	0.00013	1.3E-08	2.6E-08	0.00000022	0.0000016	3.3E-09	0.000010	0.00000039	5.2E-08	0.0000025	0.00000034	4.6E-08	-	-	1.4E-11	-
HPLC-1	L-16	1.6E-08	0.00013	1.3E-08	4.6E-08	0.00000022	0.0000013	3.3E-09	0.000010	0.00000029	5.2E-08	0.0000024	0.00000035	0.00000018	-	-	1.4E-11	-
HPLC-1	L-17	1.6E-08	0.00012	1.3E-08	4.6E-08	0.00000022	0.0000014	3.3E-09	0.000010	0.00000025	5.2E-08	0.0000021	0.00000033	0.00000018	-	-	1.2E-11	-
HPLC-2	L-1	0.0000025	0.0014	0.0000030	0.000039	0.0000080	0.000060	0.0000005	0.00053	0.00032	0.00000099	0.00014	0.000026	0.0000060	-	-	3.2E-09	-
HPLC-2	L-2	0.0000006	0.00051	0.0000009	0.0000018	0.0000014	0.0000092	5.0E-08	0.000083	0.0000017	0.0000002	0.000016	0.0000026	0.000054	-	-	2.1E-10	-
HPLC-2	L-3	0.00000023	0.00055	0.00000018	0.00000091	0.0000013	0.0000091	4.6E-08	0.000066	0.0000016	0.00000027	0.000011	0.0000025	0.00000064	-	-	2.4E-10	-
HPLC-2	L-4	0.00000034	0.00044	0.00000025	0.0000034	0.00000054	0.0000051	9.0E-09	0.000029	0.0000018	0.00000014	0.000010	0.0000012	0.0000006	-	-	5.4E-11	-
HPLC-2	L-5	3.2E-08	0.00040	2.6E-08	0.00000021	0.00000044	0.0000042	6.5E-09	0.000023	0.0000013	0.0000001	0.0000052	0.00000074	0.00000012	-	-	3.0E-11	-
HPLC-2	L-6	3.9E-08	0.00031	2.0E-08	0.00000014	0.00000031	0.0000032	3.3E-09	0.000016	0.00000078	7.8E-08	0.0000057	0.00000049	7.8E-08	-	-	1.5E-11	-
HPLC-2	L-7	1.6E-08	0.00029	2.6E-08	6.5E-08	0.00000031	0.0000031	3.3E-09	0.000016	0.00000063	7.2E-08	0.0000049	0.00000049	3.3E-08	-	-	1.5E-11	-
HPLC-2	L-8	0.0000001	0.00029	6.5E-08	0.0000011	0.00000038	0.0000034	6.5E-09	0.000018	0.0000011	9.1E-08	0.0000059	0.0000007	0.00000021	-	-	3.3E-11	-
HPLC-2	L-9	1.6E-08	0.00023	1.3E-08	5.2E-08	0.00000028	0.0000027	3.3E-09	0.000014	0.00000065	6.5E-08	0.0000039	0.00000046	4.6E-08	-	-	1.5E-11	-
HPLC-2	L-10	1.6E-08	0.00022	2.6E-08	9.1E-08	0.00000027	0.0000024	3.3E-09	0.000013	0.00000065	6.5E-08	0.0000037	0.00000046	9.8E-08	-	-	1.8E-11	-
HPLC-2	L-11	1.6E-08	0.00020	1.3E-08	7.8E-08	0.00000027	0.0000024	3.3E-09	0.000013	0.00000061	5.9E-08	0.0000034	0.00000048	1.6E-08	-	-	1.6E-11	-
HPLC-2	L-12	1.6E-08	0.00019	1.3E-08	5.2E-08	0.00000027	0.0000022	3.2E-09	0.000013	0.00000071	6.5E-08	0.0000030	0.00000046	6.5E-08	-	-	1.5E-11	-
HPLC-2	L-13	1.6E-08	0.00016	1.3E-08	9.5E-08	0.00000026	0.0000020	3.2E-09	0.000013	0.00000045	5.7E-08	0.0000031	0.00000044	1.6E-08	-	-	1.5E-11	-
HPLC-2	L-14	1.6E-08	0.00016	1.3E-08	0.00000019	0.00000026	0.0000018	3.3E-09	0.000012	0.00000049	6.5E-08	0.0000029	0.00000045	1.6E-08	-	-	1.6E-11	-
HPLC-2	L-15	1.6E-08	0.00014	1.3E-08	3.3E-08	0.00000023	0.0000016	3.3E-09	0.000011	0.00000043	5.2E-08	0.0000024	0.0000004	1.6E-08	-	-	1.5E-11	-
HPLC-2	L-16	1.6E-08	0.00014	1.3E-08	3.9E-08	0.00000023	0.0000014	3.3E-09	0.000011	0.00000029	5.2E-08	0.0000025	0.00000041	7.8E-08	-	-	1.3E-11	-
HPLC-2	L-17	1.6E-08	0.00013	2.0E-08	0.00000013	0.00000023	0.0000016	3.3E-09	0.000010	0.00000026	5.2E-08	0.0000025	0.00000039	0.00000013	-	-	1.5E-11	-
HPLC-3	L-1	0.000014	0.0018	0.0000090	0.00016	0.000011	0.000082	0.0000005	0.00075	0.000035	0.0000010	0.00039	0.000046	0.000012	-	-	3.5E-09	-
HPLC-3	L-2	0.00000025	0.00060	0.0000004	0.0000015	0.0000016	0.000011	5.0E-08	0.000096	0.0000017	0.0000003	0.000020	0.0000030	0.000012	-	-	2.5E-10	-
HPLC-3	L-3	0.00000023	0.00062	9.0E-08	0.0000014	0.0000014	0.000011	4.5E-08	0.000073	0.0000019	0.00000027	0.000014	0.0000033	0.00000023	-	-	2.4E-10	-
HPLC-3	L-4	9.0E-08	0.00046	7.2E-08	0.00000065	0.00000056	0.0000049	9.0E-09	0.000031	0.0000013	0.00000014	0.0000059	0.00000099	0.00000032	-	-	4.1E-11	-
HPLC-3	L-5	6.5E-08	0.00041	3.9E-08	0.00000027	0.00000045	0.0000044	6.5E-09	0.000023	0.0000013	0.00000012	0.0000060	0.00000082	9.1E-08	-	-	3.9E-11	-
HPLC-3	L-6	1.6E-08	0.00032	2.0E-08	4.6E-08	0.00000033	0.0000033	3.3E-09	0.000017	0.00000085	8.5E-08	0.0000055	0.00000052	5.9E-08	-	-	1.8E-11	-
HPLC-3	L-7	1.6E-08	0.00029	2.0E-08	5.9E-08	0.00000031	0.0000033	3.3E-09	0.000016	0.00000064	7.8E-08	0.0000049	0.00000052	1.6E-08	-	-	1.6E-11	-
HPLC-3	L-8	3.2E-08	0.00030	5.2E-08	0.00000032	0.00000039	0.0000035	6.5E-09	0.000018	0.0000011	9.1E-08	0.0000049	0.00000068	0.00000048	-	-	3.3E-11	-
HPLC-3	L-9	1.6E-08	0.00023	1.3E-08	5.2E-08	0.00000029	0.0000028	3.3E-09	0.000015	0.00000065	7.2E-08	0.0000038	0.00000049	3.9E-08	-	-	1.8E-11	-
HPLC-3	L-10	5.9E-08	0.00022	3.3E-08	0.00000047	0.00000028	0.0000025	3.3E-09	0.000014	0.00000078	6.5E-08	0.0000041	0.00000053	6.5E-08	-	-	1.4E-11	-
HPLC-3	L-11	1.6E-08	0.00019	1.9E-08	6.5E-08	0.00000027	0.0000024	3.2E-09	0.000013	0.00000061	5.8E-08	0.0000032	0.00000048	0.0000001	-	-	1.6E-11	-
HPLC-3	L-12	3.3E-08	0.00020	3.3E-08	0.0000001	0.00000028	0.0000023	3.3E-09	0.000013	0.00000078	6.5E-08	0.0000031	0.0000005	0.00000021	-	-	1.7E-11	-
HPLC-3	L-13	1.6E-08	0.00017	1.3E-08	0.00000012	0.00000027	0.0000021	3.2E-09	0.000013	0.00000045	6.5E-08	0.0000029	0.00000045	1.6E-08	-	-	1.6E-11	-
HPLC-3	L-14	1.6E-08	0.00016	1.3E-08	7.9E-08	0.00000026	0.0000019	3.3E-09	0.000012	0.00000046	6.5E-08	0.0000024	0.00000045	1.6E-08	-	-	1.5E-11	-
HPLC-3	L-15	1.6E-08	0.00015	6.5E-09	3.9E-08	0.00000023	0.0000016	3.3E-09	0.000011	0.00000032	5.2E-08	0.0000022	0.0000004	1.6E-08	-	-	1.4E-11	-
HPLC-3	L-16	1.6E-08	0.00014	6.5E-09	3.9E-08	0.00000024	0.0000014	3.3E-09	0.000011	0.00000024	5.2E-08	0.0000021	0.00000043	0.00000012	-	-	1.5E-11	-
HPLC-3	L-17	1.6E-08	0.00014	1.3E-08	5.2E-08	0.00000023	0.0000016	3.3E-09	0.000011	0.00000024	5.2E-08	0.0000022	0.00000039	0.00000013	-	-	1.6E-11	-
HPLC-4	L-1	0.000013	0.0015	0.0000079	0.00015	0.0000088	0.000063	0.00000049	0.00055	0.000030	0.00000098	0.00028	0.000037	0.000011	-	-	3.5E-09	-
HPLC-4	L-2	0.00000024	0.00076	0.00000019	0.0000015	0.0000019	0.000013	4.8E-08	0.00012	0.0000021	0.00000029	0.000021	0.0000040	0.0000027	-	-	2.6E-10	-
HPLC-4	L-3	0.00000023	0.00064	9.1E-08	0.0000012	0.0000016	0.000013	4.5E-08	0.000089	0.0000016	0.00000027	0.000016	0.0000040	0.00000023	-	-	3.9E-10	-
HPLC-4	L-4	4.4E-08	0.00046	7.1E-08	0.00000037	0.00000055	0.0000050	8.9E-09	0.000030	0.0000013	0.00000014	0.0000050	0.0000010	0.00000041	-	-	3.6E-11	-
HPLC-4	L-5	0.00000014	0.00042	7.7E-08	0.0000011	0.00000044	0.0000046	6.5E-09	0.000023	0.0000014	0.00000012	0.0000066	0.0000009	0.00000012	-	-	3.4E-11	-
HPLC-4	L-6	7.2E-08	0.00032	4.6E-08	0.00000059	0.00000033	0.0000033	6.5E-09	0.000016	0.00000091	8.5E-08	0.0000063	0.00000056	9.1E-08	-	-	1.9E-11	-
HPLC-4	L-7	1.6E-08	0.00031	1.3E-08	7.2E-08	0.00000031	0.0000033	3.3E-09	0.000016	0.00000072	7.8E-08	0.0000053	0.00000052	1.6E-08	-	-	1.8E-11	-
HPLC-4	L-8	3.3E-08	0.00030	2.6E-08	0.0000002	0.00000039	0.0000035	6.5E-09	0.000018	0.0000011	9.1E-08	0.0000051	0.00000069	7.8E-08	-	-	3.2E-11	-
HPLC-4	L-9	1.6E-08	0.00024	2.0E-08	6.5E-08	0.00000029	0.0000027	3.3E-09	0.000015	0.00000072	7.2E-08	0.0000040	0.0000005	4.6E-08	-	-	1.9E-11	-
HPLC-4	L-10	6.5E-08	0.00023	3.9E-08	0.00000059	0.00000028	0.0000025	3.2E-09	0.000014	0.00000084	6.5E-08	0.0000041	0.00000054	7.8E-08	-	-	1.9E-11	-
HPLC-4	L-11	1.6E-08	0.00020	1.9E-08	7.1E-08	0.00000027	0.0000024	3.2E-09	0.000013	0.00000064	5.8E-08	0.0000029	0.0000005	7.1E-08	-	-	1.6E-11	-
HPLC-4	L-12	1.6E-08	0.00019	1.9E-08	0.00000014	0.00000028	0.0000022	3.2E-09	0.000013	0.00000071	6.5E-08	0.0000029	0.0000005	6.5E-08	-	-	1.6E-11	-
HPLC-4	L-13	1.6E-08	0.00017	1.3E-08	5.8E-08	0.00000027	0.0000020	3.2E-09	0.000013	0.00000045	6.5E-08	0.0000029	0.00000047	3.9E-08	-	-	1.8E-11	-
HPLC-4	L-14	1.6E-08	0.00016	1.3E-08	0.00000011	0.00000027	0.0000018	3.3E-09	0.000012	0.00000048	6.5E-08	0.0000025	0.00000048	7.2E-08	-	-	1.7E-11	-
HPLC-4	L-15	1.6E-08	0.00015	1.3E-08	5.9E-08	0.00000023	0.0000017	3.3E-09	0.000012	0.00000042	5.2E-08	0.0000020	0.00000044	3.9E-08	-	-	1.5E-11	-
HPLC-4	L-16	1.6E-08	0.00014	6.5E-09	4.6E-08	0.00000024	0.0000015	3.3E-09	0.000012	0.00000033	5.2E-08	0.0000021	0.00000044	0.0000001	-	-	1.6E-11	-
HPLC-4	L-17	1.6E-08	0.00014	1.3E-08	3.9E-08	0.00000024	0.0000016	3.3E-09	0.000011	0.00000028	5.2E-08	0.0000023	0.0000004	0.00000011	-	-	1.5E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HPHC-1	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4075	1.00	4.1	0.043	9.4	0.83	1277	0.0068	0.19	0.21	0.014	0.0068	0.29	0.027	0.014	0.0014
HPHC-1	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4323	1.00	4.3	0.043	10	0.83	1277	0.00063	0.088	0.00063	0.045	0.0038	0.20	0.014	0.0058	0.00038
HPHC-1	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	0.00058	0.082	0.00058	0.046	0.0023	0.15	0.013	0.0052	0.00023
HPHC-1	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4324	1.00	4.3	0.043	10	0.83	1277	0.00012	0.037	0.00012	0.014	0.0046	0.066	0.0070	0.0028	0.00023
HPHC-1	L-5	2019-10-22	14	0.076	0.14	0.00065	4323	1.00	4.3	0.043	10	0.83	1277	0.000083	0.026	0.000083	0.0058	0.0055	0.028	0.012	0.0050	0.00033
HPHC-1	L-6	2019-11-05	28	0.076	0.14	0.00065	4326	1.00	4.3	0.043	10	0.83	1277	0.000041	0.015	0.000041	0.0028	0.0036	0.020	0.011	0.0042	0.000041
HPHC-1	L-7	2019-11-19	42	0.076	0.14	0.00065	4331	1.00	4.3	0.043	10	0.83	1277	0.000042	0.014	0.000042	0.0032	0.0029	0.017	0.012	0.0046	0.000042
HPHC-1	L-8	2019-11-26	49	0.076	0.14	0.00065	4330	1.00	4.3	0.043	10	0.83	1277	0.000083	0.018	0.000083	0.0053	0.0030	0.024	0.016	0.0063	0.000083
HPHC-1	L-9	2019-12-10	63	0.076	0.14	0.00065	4330	1.00	4.3	0.043	10	0.83	1277	0.000041	0.011	0.000041	0.0030	0.0022	0.015	0.011	0.0045	0.000041
HPHC-1	L-10	2019-12-24	77	0.076	0.14	0.00065	4325	1.00	4.3	0.043	10	0.83	1277	0.000041	0.012	0.000041	0.0030	0.0023	0.014	0.0099	0.0040	0.000041
HPHC-1	L-11	2020-01-07	91	0.076	0.14	0.00065	4329	1.00	4.3	0.043	10	0.83	1277	0.000041	0.011	0.000041	0.0030	0.0019	0.013	0.010	0.0041	0.000041
HPHC-1	L-12	2020-01-21	105	0.076	0.14	0.00065	4325	1.00	4.3	0.043	10	0.83	1277	0.000041	0.010	0.000041	0.0027	0.0019	0.012	0.011	0.0044	0.000041
HPHC-1	L-13	2020-02-04	119	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	0.000041	0.012	0.000041	0.0028	0.0024	0.012	0.010	0.0041	0.000041
HPHC-1	L-14	2020-02-18	133	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	0.000041	0.0070	0.000041	0.0022	0.0012	0.012	0.011	0.0042	0.0000083
HPHC-1	L-15	2020-03-03	147	0.076	0.14	0.00065	4331	1.00	4.3	0.043	10	0.83	1277	0.000041	0.0099	0.000041	0.0028	0.0017	0.013	0.010	0.0041	0.000041
HPHC-1	L-16	2020-03-17	161	0.076	0.14	0.00065	4328	1.00	4.3	0.043	10	0.83	1277	0.000041	0.0074	0.000041	0.0029	0.00083	0.013	0.0093	0.0037	0.0000083
HPHC-1	L-17	2020-03-31	175	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	0.000041	0.0076	0.000041	0.0026	0.0012	0.013	0.0083	0.0033	0.0000083
HPHC-2	L-1	2019-10-08	0.080	0.076	0.14	0.00064	3997	1.00	4.0	0.042	9.4	0.80	1266	0.0068	0.14	0.14	0.014	0.0068	0.34	0.027	0.014	0.00068
HPHC-2	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	0.00063	0.081	0.00063	0.044	0.0025	0.17	0.014	0.0055	0.00050
HPHC-2	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4256	1.00	4.3	0.042	10	0.80	1266	0.00058	0.072	0.00058	0.042	0.00058	0.14	0.012	0.0049	0.00023
HPHC-2	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	0.00012	0.037	0.00012	0.014	0.0044	0.066	0.0063	0.0026	0.00023
HPHC-2	L-5	2019-10-22	14	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	0.000083	0.026	0.000083	0.0060	0.0053	0.030	0.012	0.0046	0.000083
HPHC-2	L-6	2019-11-05	28	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	0.000041	0.015	0.000041	0.0028	0.0034	0.018	0.011	0.0043	0.000041
HPHC-2	L-7	2019-11-19	42	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	0.000041	0.013	0.000041	0.0029	0.0029	0.017	0.012	0.0047	0.000041
HPHC-2	L-8	2019-11-26	49	0.076	0.14	0.00064	4260	1.00	4.3	0.042	10	0.80	1266	0.000083	0.018	0.000083	0.0058	0.0030	0.024	0.017	0.0070	0.000083
HPHC-2	L-9	2019-12-10	63	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	0.000041	0.011	0.000041	0.0027	0.0021	0.014	0.012	0.0046	0.000041
HPHC-2	L-10	2019-12-24	77	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	0.000041	0.012	0.000041	0.0034	0.0022	0.015	0.011	0.0045	0.000041
HPHC-2	L-11	2020-01-07	91	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	0.000041	0.011	0.000041	0.0033	0.0018	0.013	0.011	0.0043	0.000041
HPHC-2	L-12	2020-01-21	105	0.076	0.14	0.00064	4256	1.00	4.3	0.042	10	0.80	1266	0.000041	0.011	0.000041	0.0027	0.0021	0.012	0.011	0.0045	0.000041
HPHC-2	L-13	2020-02-04	119	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	0.000041	0.012	0.000041	0.0032	0.0022	0.014	0.011	0.0043	0.000041
HPHC-2	L-14	2020-02-18	133	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	0.000041	0.0071	0.000041	0.0024	0.0011	0.012	0.010	0.0041	0.0000083
HPHC-2	L-15	2020-03-03	147	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	0.000041	0.0095	0.000041	0.0027	0.0017	0.013	0.0093	0.0037	0.000041
HPHC-2	L-16	2020-03-17	161	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	0.000042	0.0066	0.000042	0.0024	0.00091	0.013	0.0095	0.0038	0.000017
HPHC-2	L-17	2020-03-31	175	0.076	0.14	0.00064	4258	0.98	4.3	0.042	10	0.80	1266	0.000042	0.0078	0.000042	0.0030	0.00093	0.013	0.0084	0.0034	0.0000084
HPHC-3	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4036	1.00	4.0	0.043	9.4	0.82	1279	0.0068	0.20	0.25	0.0068	0.0068	0.082	0.0068	0.0041	0.00068
HPHC-3	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4300	1.00	4.3	0.043	10	0.82	1279	0.00063	0.074	0.00063	0.044	0.00063	0.18	0.013	0.0049	0.00038
HPHC-3	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.82	1279	0.00058	0.075	0.0046	0.043	0.00058	0.14	0.010	0.0043	0.00023
HPHC-3	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4299	1.00	4.3	0.043	10	0.82	1279	0.00012	0.038	0.00012	0.016	0.0042	0.065	0.0053	0.0021	0.00023
HPHC-3	L-5	2019-10-22	14	0.076	0.14	0.00064	4302	1.00	4.3	0.043	10	0.82	1279	0.000083	0.025	0.000083	0.0066	0.0050	0.033	0.011	0.0043	0.000083
HPHC-3	L-6	2019-11-05	28	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.82	1279	0.000041	0.015	0.000041	0.0030	0.0033	0.020	0.011	0.0043	0.000041
HPHC-3	L-7	2019-11-19	42	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	0.000041	0.013	0.000041	0.0028	0.0029	0.016	0.012	0.0047	0.000041
HPHC-3	L-8	2019-11-26	49	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	0.000083	0.019	0.000083	0.0056	0.0032	0.024	0.017	0.0068	0.000083
HPHC-3	L-9	2019-12-10	63	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	0.000041	0.010	0.000041	0.0029	0.0018	0.016	0.011	0.0045	0.000041
HPHC-3	L-10	2019-12-24	77	0.076	0.14	0.00064	4300	1.00	4.3	0.043	10	0.82	1279	0.000041	0.012	0.000041	0.0029	0.0023	0.015	0.011	0.0043	0.000041
HPHC-3	L-11	2020-01-07	91	0.076	0.14	0.00064	4305	1.00	4.3	0.043	10	0.82	1279	0.000041	0.011	0.000041	0.0033	0.0017	0.012	0.010	0.0041	0.000041
HPHC-3	L-12	2020-01-21	105	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.82	1279	0.000041	0.0096	0.000041	0.0028	0.0017	0.014	0.011	0.0044	0.000041
HPHC-3	L-13	2020-02-04	119	0.076	0.14	0.00064	4305	1.00	4.3	0.043	10	0.82	1279	0.000041	0.012	0.000041	0.0032	0.0022	0.015	0.010	0.0041	0.000041
HPHC-3	L-14	2020-02-18	133	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	0.000041	0.0067	0.000041	0.0023	0.00100	0.012	0.010	0.0041	0.0000083
HPHC-3	L-15	2020-03-03	147	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	0.000042	0.0092	0.000042	0.0029	0.0015	0.013	0.010	0.0041	0.000042
HPHC-3	L-16	2020-03-17	161	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	0.000042	0.0065	0.000042	0.0026	0.00075	0.012	0.0095	0.0038	0.0000083
HPHC-3	L-17	2020-03-31	175	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	0.000042	0.0073	0.000042	0.0028	0.00091	0.012	0.0087	0.0035	0.0000083
HPHC-4	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4034	1.00	4.0	0.043	9.4	0.80	1236	0.0068	0.14	0.14	0.014	0.0068	0.23	0.027	0.011	0.00068
HPHC-4	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4296	1.00	4.3	0.043	10	0.80	1236	0.0013	0.069	0.00063	0.040	0.00063	0.17	0.014	0.0050	0.00050
HPHC-4	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.80	1236	0.00058	0.065	0.00058	0.039	0.00058	0.13	0.013	0.0048	0.00035
HPHC-4	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.80	1236	0.00012	0.035	0.00012	0.014	0.0039	0.063	0.0058	0.0023	0.00023
HPHC-4	L-5	2019-10-22	14	0.076	0.14	0.00064	4302	1.00	4.3	0.043	10	0.80	1236	0.000083	0.024	0.000083	0.0060	0.0048	0.032	0.011	0.0043	0.000083
HPHC-4	L-6	2019-11-05	28	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.80	1236	0.000041	0.014	0.000041	0.0030	0.0032	0.019	0.010	0.0041	0.000041
HPHC-4	L-7	2019-11-19	42	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	0.000042	0.012	0.000042	0.0029	0.0026	0.017	0.011	0.0045	0.000042
HPHC-4	L-8	2019-11-26	49	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	0.000083	0.018	0.000083	0.0058	0.0028	0.025	0.016	0.0065	0.000083
HPHC-4	L-9	2019-12-10	63	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	0.000041	0.010	0.000041	0.0031	0.0017	0.015	0.011	0.0045	0.000041
HPHC-4	L-10	2019-12-24	77	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.80	1236	0.000041	0.011	0.000041	0.0026	0.0022	0.014	0.011	0.0045	0.000041
HPHC-4	L-11	2020-01-07	91	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	0.000041	0.010	0.000041	0.0033	0.0017	0.012	0.011	0.0042	0.000041
HPHC-4	L-12	2020-01-21	105	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.80	1236	0.000041	0.0092	0.000041	0.0026	0.0017	0.014	0.011	0.0043	0.000041
HPHC-4	L-13	2020-02-04	119	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.80	1236	0.000041	0.011	0.000041	0.0026	0.0022	0.015	0.011	0.0042	0.000041
HPHC-4	L-14	2020-02-18	133	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	0.000041	0.0066	0.000041	0.0021	0.00100	0.011	0.010	0.0041	0.0000083
HPHC-4	L-15	2020-03-03	147	0.076	0.14	0.00064	4308	1.00	4.3	0.043	10	0.80	1236	0.000042	0.0086	0.000042	0.0025	0.0015	0.013	0.010	0.0042	0.000042
HPHC-4	L-16	2020-03-17	161	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	0.000042	0.0067	0.000042	0.0027	0.00075	0.013	0.0095	0.0038	0.0000083
HPHC-4	L-17	2020-03-31	175	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	0.000042	0.0070	0.000042	0.0026	0.00091	0.012	0.0087	0.0035	0.0000083

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-P/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HPHC-1	L-1	0.00014	0.053	0.00068	0.046	0.000068	0.000062	0.000062	0.000068	0.029	0.00000034	0.00013	0.000029	0.000068	0.000052	0.00000068	0.00000014	0.00000068	0.000016	0.0000041	0.000060	6.8E-09
HPHC-1	L-2	0.00020	0.032	0.000063	0.030	0.0000063	0.0000057	0.0000057	0.0000063	0.033	3.2E-08	0.000045	0.000011	0.000076	0.000014	6.3E-08	2.5E-08	6.3E-08	0.000013	0.0000005	0.000018	6.3E-10
HPHC-1	L-3	0.000093	0.027	0.000058	0.021	0.0000058	0.0000053	0.0000052	0.0000058	0.012	2.9E-08	0.000044	0.0000044	0.000035	0.000014	5.8E-08	1.2E-08	5.8E-08	0.0000045	0.00000023	0.0000092	5.8E-10
HPHC-1	L-4	0.000030	0.014	0.000012	0.0077	0.0000070	0.0000011	0.0000010	0.0000023	0.0032	5.8E-09	0.000074	0.0000015	0.0000070	0.0000035	1.2E-08	2.3E-09	1.2E-08	0.0000013	4.6E-08	0.0000015	1.2E-10
HPHC-1	L-5	0.000013	0.0065	0.0000083	0.0023	0.0000066	0.00000075	0.00000075	0.00000083	0.0011	4.1E-09	0.00011	0.00000053	0.0000033	0.0000027	8.3E-09	8.3E-10	8.3E-09	0.00000038	1.7E-08	0.0000008	8.3E-11
HPHC-1	L-6	0.0000083	0.0019	0.0000041	0.00067	0.0000083	0.00000038	0.00000037	0.00000041	0.00053	2.1E-09	0.000080	0.00000022	0.00000083	0.0000016	4.1E-09	4.1E-10	4.1E-09	0.00000015	3.3E-08	0.0000002	8.3E-11
HPHC-1	L-7	0.0000050	0.00083	0.0000042	0.00026	0.0000058	0.00000038	0.00000037	0.00000042	0.00043	2.1E-09	0.000090	0.00000013	0.00000042	0.0000017	4.2E-09	4.2E-10	4.2E-09	1.0E-07	2.5E-08	0.00000028	4.2E-11
HPHC-1	L-8	0.0000033	0.00070	0.0000083	0.00017	0.0000050	0.00000076	0.0000030	0.00000083	0.00041	4.1E-09	0.00014	0.00000012	0.00000083	0.0000027	8.3E-09	8.3E-10	8.3E-09	4.1E-08	3.3E-08	0.00000088	8.3E-11
HPHC-1	L-9	0.0000041	0.00031	0.0000041	0.000083	0.0000050	0.00000038	0.00000037	0.0000017	0.00037	2.1E-09	0.000086	9.1E-08	0.00000041	0.0000018	4.1E-09	4.1E-10	4.1E-09	5.0E-08	1.7E-08	0.00000027	4.1E-11
HPHC-1	L-10	0.0000025	0.00023	0.0000041	0.000058	0.0000017	0.00000038	0.00000037	0.00000083	0.00026	2.1E-09	0.000091	8.3E-08	0.00000041	0.0000021	4.1E-09	4.1E-10	4.1E-09	4.1E-08	2.5E-08	0.00000041	4.1E-11
HPHC-1	L-11	0.0000017	0.00019	0.0000041	0.000041	0.00000041	0.00000038	0.00000037	0.00000041	0.00027	2.1E-09	0.000086	7.5E-08	0.00000041	0.0000024	4.1E-09	4.1E-10	4.1E-09	5.0E-08	1.7E-08	0.00000044	4.1E-11
HPHC-1	L-12	0.0000017	0.00015	0.0000041	0.000033	0.0000025	0.00000038	0.00000037	0.00000041	0.00022	2.1E-09	0.000085	7.5E-08	0.00000041	0.0000027	4.1E-09	8.3E-10	4.1E-09	4.1E-08	1.7E-08	0.0000004	4.1E-11
HPHC-1	L-13	0.00000083	0.00013	0.0000041	0.000025	0.0000033	0.00000038	0.00000037	0.00000041	0.00025	2.1E-09	0.000079	6.6E-08	0.00000041	0.0000030	4.1E-09	4.1E-10	4.1E-09	2.1E-08	2.5E-08	0.00000069	4.1E-11
HPHC-1	L-14	0.00000041	0.00012	0.0000041	0.000025	0.0000041	0.00000038	0.00000037	0.00000041	0.00022	2.1E-09	0.000083	6.6E-08	0.00000041	0.0000033	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.0000005	4.1E-11
HPHC-1	L-15	0.0000017	0.00012	0.0000041	0.000025	0.0000050	0.00000038	0.00000037	0.00000041	0.00023	2.1E-09	0.000081	6.6E-08	0.00000041	0.0000037	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000037	4.1E-11
HPHC-1	L-16	0.00000083	0.000091	0.0000041	0.000017	0.0000033	0.00000038	0.00000037	0.00000041	0.00023	2.1E-09	0.000078	6.6E-08	0.00000041	0.0000040	4.1E-09	4.1E-10	4.1E-09	2.1E-08	2.5E-08	0.00000066	4.1E-11
HPHC-1	L-17	0.00000083	0.000091	0.0000041	0.000017	0.0000033	0.00000038	0.0000011	0.00000041	0.00024	2.1E-09	0.000077	6.6E-08	0.00000041	0.0000043	4.1E-09	8.3E-10	4.1E-09	2.1E-08	8.3E-09	0.00000035	4.1E-11
HPHC-2	L-1	0.00014	0.055	0.00068	0.049	0.000068	0.000062	0.000061	0.000068	0.035	0.00000034	0.00018	0.000033	0.000068	0.000061	0.00000068	6.8E-08	0.00000068	0.000023	0.0000041	0.00011	6.8E-09
HPHC-2	L-2	0.00019	0.030	0.00013	0.030	0.0000063	0.0000057	0.0000057	0.0000063	0.038	3.2E-08	0.000043	0.000010	0.000076	0.000014	6.3E-08	1.3E-08	6.3E-08	0.000015	0.00000038	0.000011	6.3E-10
HPHC-2	L-3	0.00010	0.024	0.000058	0.020	0.0000058	0.0000053	0.0000052	0.0000058	0.013	2.9E-08	0.000044	0.0000044	0.000046	0.000013	5.8E-08	5.8E-09	5.8E-08	0.0000052	0.00000012	0.0000073	5.8E-10
HPHC-2	L-4	0.000032	0.013	0.000012	0.0079	0.0000093	0.0000011	0.0000010	0.0000023	0.0039	5.8E-09	0.000063	0.0000016	0.0000093	0.0000032	1.2E-08	4.6E-09	1.2E-08	0.0000015	2.3E-08	0.0000013	1.2E-10
HPHC-2	L-5	0.000013	0.0066	0.0000083	0.0025	0.0000066	0.00000075	0.00000075	0.00000083	0.0012	4.1E-09	0.000099	0.00000061	0.0000033	0.0000027	8.3E-09	1.7E-09	8.3E-09	0.00000055	1.7E-08	0.00000056	8.3E-11
HPHC-2	L-6	0.0000075	0.0020	0.0000041	0.00066	0.0000083	0.00000038	0.00000037	0.00000041	0.00058	2.1E-09	0.000080	0.00000026	0.0000017	0.0000016	4.1E-09	4.1E-10	4.1E-09	0.00000018	1.7E-08	0.00000036	4.1E-11
HPHC-2	L-7	0.0000058	0.00091	0.0000041	0.00025	0.0000050	0.00000038	0.00000037	0.0000033	0.00046	2.1E-09	0.000090	0.00000015	0.00000041	0.0000017	4.1E-09	4.1E-10	4.1E-09	0.00000012	2.5E-08	0.00000063	4.1E-11
HPHC-2	L-8	0.0000033	0.00075	0.0000083	0.00017	0.0000083	0.00000076	0.0000030	0.0000050	0.00040	4.2E-09	0.00014	0.00000013	0.00000083	0.0000023	8.3E-09	8.3E-10	8.3E-09	0.00000012	1.7E-08	0.0000010	8.3E-11
HPHC-2	L-9	0.0000041	0.00032	0.0000041	0.000083	0.0000041	0.00000038	0.00000075	0.00000041	0.00041	2.1E-09	0.000089	0.00000011	0.00000041	0.0000017	4.1E-09	4.1E-10	4.1E-09	6.6E-08	8.3E-09	0.00000043	4.1E-11
HPHC-2	L-10	0.0000025	0.00024	0.0000041	0.000050	0.0000017	0.00000038	0.00000037	0.0000017	0.00028	2.1E-09	0.000094	8.3E-08	0.00000041	0.0000019	4.1E-09	4.1E-10	4.1E-09	5.0E-08	8.3E-09	0.0000006	4.1E-11
HPHC-2	L-11	0.0000025	0.00019	0.0000041	0.000041	0.0000017	0.00000038	0.00000037	0.00000041	0.00030	2.1E-09	0.000088	7.5E-08	0.00000041	0.0000022	4.1E-09	4.1E-10	4.1E-09	5.0E-08	1.7E-08	0.00000048	4.1E-11
HPHC-2	L-12	0.0000017	0.00015	0.0000041	0.000033	0.00000083	0.00000038	0.00000075	0.00000041	0.00026	2.1E-09	0.000086	6.6E-08	0.00000041	0.0000027	4.1E-09	4.1E-10	4.1E-09	5.0E-08	8.3E-09	0.00000047	4.1E-11
HPHC-2	L-13	0.00000083	0.00014	0.0000041	0.000025	0.0000050	0.00000038	0.00000037	0.00000041	0.00028	2.1E-09	0.000082	7.5E-08	0.00000041	0.0000028	4.1E-09	8.3E-10	4.1E-09	4.1E-08	1.7E-08	0.0000007	4.1E-11
HPHC-2	L-14	0.00000041	0.00012	0.0000041	0.000025	0.0000041	0.00000038	0.00000037	0.00000041	0.00024	2.1E-09	0.000085	6.6E-08	0.00000041	0.0000032	4.1E-09	4.1E-10	4.1E-09	4.1E-08	1.7E-08	0.00000076	4.1E-11
HPHC-2	L-15	0.0000017	0.000100	0.0000041	0.000017	0.0000041	0.00000038	0.00000037	0.00000041	0.00026	2.1E-09	0.000084	6.6E-08	0.00000041	0.0000036	4.1E-09	4.1E-10	4.1E-09	4.1E-08	1.7E-08	0.00000071	4.1E-11
HPHC-2	L-16	0.00000083	0.000091	0.0000042	0.000017	0.0000033	0.00000038	0.00000037	0.00000042	0.00024	2.1E-09	0.000081	6.6E-08	0.00000042	0.0000038	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000068	4.2E-11
HPHC-2	L-17	0.00000084	0.000093	0.0000042	0.000017	0.0000017	0.00000038	0.00000095	0.00000042	0.00025	2.1E-09	0.000080	6.7E-08	0.00000042	0.0000041	4.2E-09	8.4E-10	4.2E-09	4.2E-08	8.4E-09	0.00000046	4.2E-11
HPHC-3	L-1	0.00014	0.052	0.00068	0.046	0.000068	0.000062	0.000061	0.000068	0.029	0.00000034	0.00015	0.000027	0.000068	0.000048	0.00000068	0.00000082	0.00000068	0.000016	0.0000054	0.00010	6.8E-09
HPHC-3	L-2	0.00019	0.030	0.00013	0.029	0.0000063	0.0000057	0.0000057	0.0000063	0.038	3.2E-08	0.000035	0.0000096	0.000076	0.000014	6.3E-08	6.3E-09	6.3E-08	0.000013	0.00000025	0.0000072	6.3E-10
HPHC-3	L-3	0.00012	0.023	0.000058	0.019	0.0000058	0.0000053	0.0000052	0.0000058	0.013	2.9E-08	0.000045	0.0000044	0.000046	0.000012	5.8E-08	2.3E-08	5.8E-08	0.0000046	0.0000012	0.0000066	5.8E-10
HPHC-3	L-4	0.000032	0.014	0.000012	0.0079	0.0000070	0.0000011	0.0000010	0.0000023	0.0035	5.8E-09	0.000063	0.0000017	0.0000093	0.0000028	1.2E-08	4.6E-09	1.2E-08	0.0000013	2.3E-08	0.0000014	1.2E-10
HPHC-3	L-5	0.000013	0.0070	0.0000083	0.0027	0.0000066	0.00000075	0.00000075	0.00000083	0.0012	4.1E-09	0.00010	0.00000066	0.0000033	0.0000023	8.3E-09	3.3E-09	8.3E-09	0.0000004	1.7E-08	0.00000053	8.3E-11
HPHC-3	L-6	0.0000075	0.0021	0.0000041	0.00067	0.0000058	0.00000038	0.00000037	0.00000041	0.00059	2.1E-09	0.000076	0.00000027	0.00000083	0.0000015	4.1E-09	4.1E-10	4.1E-09	0.00000017	8.3E-09	0.00000026	4.1E-11
HPHC-3	L-7	0.0000058	0.00091	0.0000041	0.00024	0.0000066	0.00000038	0.00000037	0.0000017	0.00050	2.1E-09	0.000089	0.00000016	0.00000041	0.0000017	4.1E-09	4.1E-10	4.1E-09	1.0E-07	1.7E-08	0.00000045	4.1E-11
HPHC-3	L-8	0.0000033	0.00075	0.0000083	0.00015	0.0000100	0.00000076	0.0000052	0.00000083	0.00046	4.1E-09	0.00015	0.00000013	0.00000083	0.0000023	8.3E-09	8.3E-10	8.3E-09	1.0E-07	1.7E-08	0.00000086	8.3E-11
HPHC-3	L-9	0.0000050	0.00032	0.0000041	0.000083	0.0000041	0.00000038	0.00000037	0.00000041	0.00038	2.1E-09	0.000091	9.1E-08	0.00000083	0.0000017	4.1E-09	4.1E-10	4.1E-09	6.6E-08	8.3E-09	0.00000037	4.1E-11
HPHC-3	L-10	0.0000025	0.00023	0.0000041	0.000050	0.0000033	0.00000038	0.00000037	0.0000017	0.00031	2.1E-09	0.000094	8.3E-08	0.00000041	0.0000019	4.1E-09	4.1E-10	4.1E-09	5.0E-08	8.3E-09	0.00000045	4.1E-11
HPHC-3	L-11	0.0000025	0.00018	0.0000041	0.000041	0.00000083	0.00000038	0.00000037	0.00000083	0.00030	2.1E-09	0.000087	8.3E-08	0.00000041	0.0000022	4.1E-09	4.1E-10	4.1E-09	5.0E-08	8.3E-09	0.00000045	4.1E-11
HPHC-3	L-12	0.0000017	0.00015	0.0000041	0.000033	0.0000017	0.00000038	0.00000037	0.00000041	0.00028	2.1E-09	0.000085	7.5E-08	0.00000041	0.0000026	4.1E-09	4.1E-10	4.1E-09	4.1E-08	1.7E-08	0.00000056	4.1E-11
HPHC-3	L-13	0.00000083	0.00013	0.0000041	0.000025	0.0000033	0.00000038	0.00000037	0.00000041	0.00030	2.1E-09	0.000080	7.5E-08	0.00000041	0.0000029	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000061	4.1E-11
HPHC-3	L-14	0.00000041	0.00012	0.0000041	0.000025	0.0000041	0.00000038	0.00000037	0.00000041	0.00027	2.1E-09	0.000084	6.6E-08	0.00000041	0.0000032	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000061	4.1E-11
HPHC-3	L-15	0.0000017	0.00011	0.0000042	0.000017	0.0000050	0.00000038	0.00000037	0.00000042	0.00030	2.1E-09	0.000082	6.6E-08	0.00000042	0.0000037	4.2E-09	4.2E-10	4.2E-09	2.1E-08	8.3E-09	0.00000063	4.2E-11
HPHC-3	L-16	0.00000083	0.000100	0.0000042	0.000017	0.0000033	0.00000038	0.00000037	0.00000042	0.00026	2.1E-09	0.000081	6.6E-08	0.00000042	0.0000039	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000083	4.2E-11
HPHC-3	L-17	0.00000083	0.000091	0.0000042	0.000017	0.0000017	0.00000038	0.00000094	0.00000042	0.00027	2.1E-09	0.000077	6.6E-08	0.00000042	0.0000042	4.2E-09	8.3E-10	4.2E-09	2.1E-08	8.3E-09	0.00000037	4.2E-11
HPHC-4	L-1	0.00014	0.049	0.00068	0.044	0.000068	0.000062	0.000061	0.000068	0.031	0.00000034	0.00016	0.000029	0.000068	0.000060	0.00000068	0.00000014	0.00000068	0.000015	0.0000041	0.000094	6.8E-09
HPHC-4	L-2	0.00018	0.029	0.00025	0.029	0.0000063	0.0000057	0.0000057	0.0000063	0.042	3.1E-08	0.000039	0.0000098	0.000063	0.000013	6.3E-08	1.3E-08	6.3E-08	0.000014	0.00000025	0.0000081	6.3E-10
HPHC-4	L-3	0.00012	0.022	0.00012	0.017	0.0000058	0.0000053	0.0000052	0.0000058	0.013	2.9E-08	0.000044	0.0000042	0.000046	0.000013	5.8E-08	1.2E-08	5.8E-08	0.0000045	0.00000012	0.0000060	5.8E-10
HPHC-4	L-4	0.000035	0.013	0.000012	0.0077	0.000019	0.0000011	0.0000010	0.0000023	0.0037	5.8E-09	0.000053	0.0000016	0.000012	0.0000028	1.2E-08	4.6E-09	1.2E-08	0.0000013	2.3E-08	0.00000088	1.2E-10
HPHC-4	L-5	0.000015	0.0068	0.0000083	0.0027	0.0000066	0.00000075	0.00000075	0.00000083	0.0012	4.1E-09	0.000093	0.00000065	0.0000033	0.0000025	8.3E-09	8.3E-10	8.3E-09	0.00000041	1.7E-08	0.00000058	8.3E-11
HPHC-4	L-6	0.0000075	0.0021	0.0000041	0.00069	0.0000083	0.00000038	0.00000037	0.00000041	0.00059	2.1E-09	0.000075	0.00000026	0.0000017	0.0000015	4.1E-09	8.3E-10	4.1E-09	0.00000015	8.3E-09	0.0000002	4.1E-11
HPHC-4	L-7	0.0000058	0.00091	0.0000042	0.00025	0.0000058	0.00000038	0.00000037	0.00000083	0.00051	2.1E-09	0.000085	0.00000015	0.00000083	0.0000016	4.2E-09	4.2E-10	4.2E-09	0.00000012	1.7E-08	0.00000039	4.2E-11
HPHC-4	L-8	0.0000083	0.00076	0.0000083	0.00017	0.0000100	0.00000076	0.0000030	0.00000083	0.00050	4.1E-09	0.00014	0.00000013	0.00000083	0.0000023	8.3E-09	8.3E-10	8.3E-09	8.3E-08	1.7E-08	0.00000098	8.3E-11
HPHC-4	L-9	0.0000050	0.00032	0.0000041	0.000083	0.0000025	0.00000038	0.00000037	0.00000041	0.00050	2.1E-09	0.000085	1.0E-07	0.00000041	0.0000017	4.1E-09	8.3E-10	4.1E-09	5.8E-08	8.3E-09	0.00000028	4.1E-11
HPHC-4	L-10	0.0000033	0.00024	0.0000041	0.000058	0.00000041	0.00000038	0.00000037	0.0000017	0.00033	2.1E-09	0.000088	8.3E-08	0.00000041	0.0000019	4.1E-09	4.1E-10	4.1E-09	5.0E-08	8.3E-09	0.00000038	4.1E-11
HPHC-4	L-11	0.0000025	0.00019	0.0000041	0.000041	0.0000058	0.00000038	0.00000037	0.00000041	0.00035	2.1E-09	0.000086	8.3E-08	0.00000041	0.0000023	4.1E-09	4.1E-10	4.1E-09	5.0E-08	1.7E-08	0.0000005	4.1E-11
HPHC-4	L-12	0.0000017	0.00015	0.0000041	0.000033	0.00000083	0.00000038	0.00000037	0.00000041	0.00030	2.1E-09	0.000085	8.3E-08	0.00000041	0.0000027	4.1E-09	4.1E-10	4.1E-09	5.8E-08	1.7E-08	0.00000044	4.1E-11
HPHC-4	L-13	0.00000083	0.00013	0.0000041	0.000025	0.0000041	0.00000038	0.00000037	0.00000041	0.00033	2.1E-09	0.000083	6.6E-08	0.00000041	0.0000031	4.1E-09	4.1E-10	4.1E-09	4.1E-08	2.5E-08	0.00000083	4.1E-11
HPHC-4	L-14	0.00000041	0.00012	0.0000041	0.000025	0.0000050	0.00000038	0.00000037	0.00000041	0.00028	2.1E-09	0.000084	6.6E-08	0.00000041	0.0000034	4.1E-09	8.3E-10	4.1E-09	4.1E-08	8.3E-09	0.00000061	4.1E-11
HPHC-4	L-15	0.0000017	0.00011	0.0000042	0.000017	0.0000033	0.00000038	0.00000037	0.00000042	0.00031	2.1E-09	0.000083	6.6E-08	0.00000042	0.0000039	4.2E-09	4.2E-10	4.2E-09	4.2E-08	1.7E-08	0.00000091	4.2E-11
HPHC-4	L-16	0.0000017	0.000100	0.0000042	0.000017	0.0000033	0.00000038	0.00000037	0.00000042	0.00028	2.1E-09	0.000077	6.6E-08	0.00000042	0.0000042	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000061	4.2E-11
HPHC-4	L-17	0.00000083	0.000091	0.0000042	0.000017	0.0000025	0.00000038	0.00000094	0.00000042	0.00030	2.1E-09	0.000076	5.8E-08	0.00000042	0.0000045	4.2E-09	8.3E-10	4.2E-09	4.2E-08	8.3E-09	0.00000034	4.2E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HPHC-1	L-1	0.0000034	0.0010	0.0000014	0.000025	0.000015	0.000025	0.00000068	0.00011	0.0000068	0.0000014	0.00018	0.0000082	0.0000082	1.5E-12	2.1E-14	3.2E-10	1.4E-13
HPHC-1	L-2	0.00000032	0.00071	0.00000013	0.0000057	0.0000012	0.000020	6.3E-08	0.000064	0.0000035	0.00000013	0.000050	0.000012	0.00000032	-	-	-	-
HPHC-1	L-3	0.00000029	0.00030	5.8E-08	0.0000030	0.0000059	0.0000056	5.8E-08	0.000049	0.0000015	0.00000012	0.000016	0.0000056	0.0000007	3.1E-13	4.6E-15	1.2E-10	5.8E-15
HPHC-1	L-4	5.8E-08	0.00011	1.2E-08	0.00000093	0.0000021	0.0000013	1.2E-08	0.000019	0.00000037	2.3E-08	0.0000022	0.0000016	5.8E-08	-	-	-	-
HPHC-1	L-5	4.1E-08	0.000039	8.3E-09	0.00000093	0.00000066	0.00000055	8.3E-09	0.000030	9.9E-08	1.7E-08	0.00000096	0.00000056	4.1E-08	-	-	-	-
HPHC-1	L-6	2.1E-08	0.000017	4.1E-09	0.00000082	0.00000024	0.00000037	4.1E-09	0.000037	5.0E-08	8.3E-09	0.00000053	0.00000027	2.1E-08	8.6E-14	1.7E-16	2.1E-11	1.7E-15
HPHC-1	L-7	2.1E-08	0.0000090	4.2E-09	0.0000010	0.00000022	0.00000037	4.2E-09	0.000045	4.2E-08	8.3E-09	0.00000058	0.00000028	2.1E-08	-	-	-	-
HPHC-1	L-8	4.1E-08	0.0000065	8.3E-09	0.0000013	0.00000032	0.00000038	8.3E-09	0.000066	3.3E-08	1.7E-08	0.0000011	0.00000033	4.1E-08	-	-	-	-
HPHC-1	L-9	2.1E-08	0.0000046	4.1E-09	0.00000091	0.00000019	0.00000033	4.1E-09	0.000043	3.3E-08	8.3E-09	0.00000059	0.00000022	2.1E-08	6.8E-14	1.5E-16	1.7E-11	2.5E-15
HPHC-1	L-10	2.1E-08	0.0000040	4.1E-09	0.00000099	0.00000018	0.00000032	4.1E-09	0.000044	2.5E-08	8.3E-09	0.00000065	0.00000022	2.1E-08	-	-	-	-
HPHC-1	L-11	2.1E-08	0.0000038	4.1E-09	0.0000011	0.00000019	0.00000034	4.1E-09	0.000043	1.7E-08	8.3E-09	0.00000079	0.00000021	2.1E-08	-	-	-	-
HPHC-1	L-12	2.1E-08	0.0000036	4.1E-09	0.0000011	0.00000018	0.00000031	4.1E-09	0.000042	3.3E-08	8.3E-09	0.00000074	0.00000021	2.1E-08	8.3E-14	3.4E-16	2.1E-11	2.5E-15
HPHC-1	L-13	2.1E-08	0.0000036	4.1E-09	0.0000012	0.00000017	0.00000031	4.1E-09	0.000041	5.8E-08	8.3E-09	0.00000079	0.00000017	2.1E-08	-	-	-	-
HPHC-1	L-14	2.1E-08	0.0000035	4.1E-09	0.0000012	0.00000017	0.00000031	4.1E-09	0.000041	3.3E-08	8.3E-09	0.00000083	0.00000018	2.1E-08	-	-	-	-
HPHC-1	L-15	2.1E-08	0.0000032	4.1E-09	0.0000012	0.00000017	0.0000003	4.1E-09	0.000038	2.5E-08	8.3E-09	0.00000082	0.00000017	2.1E-08	9.8E-14	2.4E-16	2.5E-11	2.9E-15
HPHC-1	L-16	2.1E-08	0.0000032	4.1E-09	0.0000012	0.00000017	0.0000003	4.1E-09	0.000037	4.1E-08	8.3E-09	0.00000091	0.00000017	2.1E-08	-	-	-	-
HPHC-1	L-17	2.1E-08	0.0000032	4.1E-09	0.0000012	0.00000017	0.00000031	4.1E-09	0.000037	8.3E-09	8.3E-09	0.00000083	0.00000015	2.1E-08	8.6E-14	2.4E-16	2.9E-11	5.8E-15
HPHC-2	L-1	0.0000034	0.0030	0.0000014	0.000033	0.000015	0.000025	0.00000068	0.00010	0.000015	0.0000014	0.00016	0.0000095	0.000011	2.9E-12	3.8E-14	4.8E-10	1.4E-13
HPHC-2	L-2	0.00000032	0.00079	6.3E-08	0.0000039	0.000013	0.000020	6.3E-08	0.000062	0.0000032	0.00000013	0.000040	0.000011	0.00000063	-	-	-	-
HPHC-2	L-3	0.00000029	0.00033	5.8E-08	0.0000028	0.0000062	0.0000071	5.8E-08	0.000046	0.0000013	0.00000012	0.000019	0.0000067	0.00000029	2.8E-13	3.6E-15	1.2E-10	5.8E-15
HPHC-2	L-4	5.8E-08	0.00013	1.2E-08	0.00000086	0.0000023	0.0000016	1.2E-08	0.000017	0.00000044	2.3E-08	0.0000023	0.0000018	5.8E-08	-	-	-	-
HPHC-2	L-5	4.1E-08	0.000051	8.3E-09	0.00000086	0.00000075	0.00000063	8.3E-09	0.000027	0.00000018	1.7E-08	0.00000098	0.00000065	4.1E-08	-	-	-	-
HPHC-2	L-6	2.1E-08	0.000023	4.1E-09	0.00000083	0.00000027	0.00000039	4.1E-09	0.000036	6.6E-08	8.3E-09	0.00000052	0.00000029	2.1E-08	9.8E-14	2.0E-16	1.9E-11	2.5E-15
HPHC-2	L-7	2.1E-08	0.000012	4.1E-09	0.0000011	0.00000023	0.00000037	4.1E-09	0.000046	8.3E-08	8.3E-09	0.00000083	0.00000027	2.1E-08	-	-	-	-
HPHC-2	L-8	4.2E-08	0.0000081	8.3E-09	0.0000014	0.00000032	0.0000004	8.3E-09	0.000068	6.6E-08	1.7E-08	0.0000011	0.00000032	4.2E-08	-	-	-	-
HPHC-2	L-9	2.1E-08	0.0000056	4.1E-09	0.0000010	0.0000002	0.00000033	4.1E-09	0.000045	3.3E-08	8.3E-09	0.00000066	0.00000023	4.1E-08	7.4E-14	2.0E-16	1.6E-11	2.5E-15
HPHC-2	L-10	2.1E-08	0.0000046	4.1E-09	0.0000011	0.00000018	0.00000032	4.1E-09	0.000045	2.5E-08	8.3E-09	0.0000007	0.00000022	2.1E-08	-	-	-	-
HPHC-2	L-11	2.1E-08	0.0000042	4.1E-09	0.0000012	0.0000002	0.00000033	4.1E-09	0.000044	2.5E-08	8.3E-09	0.00000083	0.00000022	2.1E-08	-	-	-	-
HPHC-2	L-12	2.1E-08	0.0000040	4.1E-09	0.0000012	0.00000018	0.00000032	4.1E-09	0.000042	2.5E-08	8.3E-09	0.0000008	0.00000021	2.1E-08	9.2E-14	9.3E-16	2.2E-11	2.5E-15
HPHC-2	L-13	2.1E-08	0.0000036	4.1E-09	0.0000012	0.00000018	0.00000031	4.1E-09	0.000042	4.1E-08	8.3E-09	0.00000082	0.00000017	2.1E-08	-	-	-	-
HPHC-2	L-14	2.1E-08	0.0000035	4.1E-09	0.0000012	0.00000019	0.00000032	4.1E-09	0.000041	6.6E-08	8.3E-09	0.00000091	0.00000019	2.1E-08	-	-	-	-
HPHC-2	L-15	2.1E-08	0.0000034	4.1E-09	0.0000012	0.00000017	0.00000031	4.1E-09	0.000038	4.1E-08	8.3E-09	0.00000091	0.00000018	2.1E-08	9.5E-14	3.4E-16	2.5E-11	2.9E-15
HPHC-2	L-16	2.1E-08	0.0000033	4.2E-09	0.0000012	0.00000017	0.00000031	4.2E-09	0.000037	5.0E-08	8.3E-09	0.00000091	0.00000018	2.1E-08	-	-	-	-
HPHC-2	L-17	2.1E-08	0.0000035	4.2E-09	0.0000013	0.00000018	0.00000032	4.2E-09	0.000037	3.4E-08	8.4E-09	0.00000093	0.00000017	2.1E-08	9.0E-14	3.5E-16	-	-
HPHC-3	L-1	0.0000034	0.0015	0.0000014	0.000033	0.000014	0.000019	0.00000068	0.000054	0.000011	0.0000014	0.00015	0.0000082	0.000014	-	-	-	-
HPHC-3	L-2	0.00000032	0.00077	6.3E-08	0.0000028	0.000013	0.000021	6.3E-08	0.000068	0.0000033	0.00000013	0.000040	0.000012	0.00000032	-	-	-	-
HPHC-3	L-3	0.00000029	0.00033	5.8E-08	0.0000027	0.0000065	0.0000073	5.8E-08	0.000046	0.0000015	0.00000012	0.000017	0.0000070	0.00000029	-	-	-	-
HPHC-3	L-4	5.8E-08	0.00013	1.2E-08	0.00000079	0.00000023	0.0000017	1.2E-08	0.000015	0.00000046	2.3E-08	0.0000023	0.0000019	5.8E-08	-	-	-	-
HPHC-3	L-5	4.1E-08	0.000055	8.3E-09	0.00000078	0.00000075	0.00000063	8.3E-09	0.000023	0.00000015	1.7E-08	0.00000091	0.00000063	4.1E-08	-	-	-	-
HPHC-3	L-6	2.1E-08	0.000022	4.1E-09	0.00000079	0.00000025	0.0000004	4.1E-09	0.000038	6.6E-08	8.3E-09	0.00000048	0.0000003	2.1E-08	-	-	-	-
HPHC-3	L-7	2.1E-08	0.000012	4.1E-09	0.0000010	0.00000023	0.00000038	4.1E-09	0.000047	5.0E-08	8.3E-09	0.00000061	0.00000029	2.1E-08	-	-	-	-
HPHC-3	L-8	4.1E-08	0.0000086	8.3E-09	0.0000014	0.00000033	0.0000004	8.3E-09	0.000070	5.0E-08	1.7E-08	0.0000010	0.00000033	4.1E-08	-	-	-	-
HPHC-3	L-9	2.1E-08	0.0000059	4.1E-09	0.0000010	0.0000002	0.00000035	4.1E-09	0.000045	4.1E-08	8.3E-09	0.00000061	0.00000023	2.1E-08	-	-	-	-
HPHC-3	L-10	2.1E-08	0.0000050	4.1E-09	0.00000099	0.00000019	0.00000034	4.1E-09	0.000045	4.1E-08	8.3E-09	0.00000065	0.00000023	2.1E-08	-	-	-	-
HPHC-3	L-11	2.1E-08	0.0000045	4.1E-09	0.0000011	0.00000021	0.00000035	4.1E-09	0.000045	2.5E-08	8.3E-09	0.00000079	0.00000022	2.1E-08	-	-	-	-
HPHC-3	L-12	2.1E-08	0.0000040	4.1E-09	0.0000012	0.00000019	0.00000035	4.1E-09	0.000043	3.3E-08	8.3E-09	0.00000077	0.00000022	2.1E-08	-	-	-	-
HPHC-3	L-13	2.1E-08	0.0000036	4.1E-09	0.0000012	0.00000019	0.00000033	4.1E-09	0.000042	6.6E-08	8.3E-09	0.00000077	0.00000019	2.1E-08	-	-	-	-
HPHC-3	L-14	2.1E-08	0.0000034	4.1E-09	0.0000012	0.00000019	0.00000034	4.1E-09	0.000041	5.0E-08	8.3E-09	0.00000083	0.00000019	2.1E-08	-	-	-	-
HPHC-3	L-15	2.1E-08	0.0000033	4.2E-09	0.0000012	0.00000018	0.00000034	4.2E-09	0.000039	5.0E-08	8.3E-09	0.00000083	0.00000019	2.1E-08	-	-	-	-
HPHC-3	L-16	2.1E-08	0.0000032	4.2E-09	0.0000012	0.00000019	0.00000033	4.2E-09	0.000038	5.0E-08	8.3E-09	0.00000091	0.00000018	2.1E-08	-	-	-	-
HPHC-3	L-17	2.1E-08	0.0000032	4.2E-09	0.0000012	0.00000017	0.00000035	4.2E-09	0.000037	2.5E-08	8.3E-09	0.00000091	0.00000017	2.1E-08	-	-	-	-
HPHC-4	L-1	0.0000034	0.0018	0.0000014	0.000027	0.000012	0.000018	0.00000068	0.000087	0.000011	0.0000014	0.00014	0.0000082	0.0000082	-	-	-	-
HPHC-4	L-2	0.00000031	0.00084	6.3E-08	0.0000028	0.000012	0.000020	6.3E-08	0.000058	0.0000033	0.00000013	0.000038	0.000010	0.00000031	-	-	-	-
HPHC-4	L-3	0.00000029	0.00034	5.8E-08	0.0000024	0.0000065	0.0000089	5.8E-08	0.000044	0.0000013	0.00000012	0.000017	0.0000074	0.00000029	-	-	-	-
HPHC-4	L-4	5.8E-08	0.00014	1.2E-08	0.00000065	0.0000026	0.0000019	1.2E-08	0.000015	0.00000046	2.3E-08	0.0000020	0.0000020	5.8E-08	-	-	-	-
HPHC-4	L-5	4.1E-08	0.000055	8.3E-09	0.00000076	0.00000083	0.0000007	8.3E-09	0.000025	0.00000018	1.7E-08	0.00000091	0.00000071	8.3E-08	-	-	-	-
HPHC-4	L-6	2.1E-08	0.000020	4.1E-09	0.00000069	0.00000028	0.00000041	4.1E-09	0.000036	5.0E-08	8.3E-09	0.00000046	0.00000032	2.1E-08	-	-	-	-
HPHC-4	L-7	2.1E-08	0.000012	4.2E-09	0.00000091	0.00000025	0.0000004	4.2E-09	0.000046	5.0E-08	8.3E-09	0.00000056	0.00000031	2.1E-08	-	-	-	-
HPHC-4	L-8	4.1E-08	0.0000085	8.3E-09	0.0000012	0.00000033	0.00000041	8.3E-09	0.000070	3.3E-08	1.7E-08	0.00000096	0.00000035	4.1E-08	-	-	-	-
HPHC-4	L-9	2.1E-08	0.0000059	4.1E-09	0.00000091	0.00000021	0.00000035	4.1E-09	0.000046	3.3E-08	8.3E-09	0.00000069	0.00000024	2.1E-08	-	-	-	-
HPHC-4	L-10	2.1E-08	0.0000049	4.1E-09	0.00000099	0.00000019	0.00000034	4.1E-09	0.000045	4.1E-08	8.3E-09	0.00000065	0.00000023	2.1E-08	-	-	-	-
HPHC-4	L-11	2.1E-08	0.0000046	4.1E-09	0.0000011	0.00000021	0.00000034	4.1E-09	0.000046	4.1E-08	8.3E-09	0.00000083	0.00000023	0.00000015	-	-	-	-
HPHC-4	L-12	2.1E-08	0.0000043	4.1E-09	0.0000012	0.00000021	0.00000034	4.1E-09	0.000044	5.0E-08	8.3E-09	0.00000073	0.00000022	2.1E-08	-	-	-	-
HPHC-4	L-13	2.1E-08	0.0000037	4.1E-09	0.0000012	0.00000019	0.00000033	4.1E-09	0.000044	6.6E-08	8.3E-09	0.0000008	0.0000002	5.0E-08	-	-	-	-
HPHC-4	L-14	2.1E-08	0.0000035	4.1E-09	0.0000012	0.00000019	0.00000034	4.1E-09	0.000042	3.3E-08	8.3E-09	0.00000083	0.0000002	2.1E-08	-	-	-	-
HPHC-4	L-15	2.1E-08	0.0000034	4.2E-09	0.0000012	0.00000019	0.00000035	4.2E-09	0.000039	5.8E-08	8.3E-09	0.00000091	0.00000019	5.0E-08	-	-	-	-
HPHC-4	L-16	2.1E-08	0.0000033	4.2E-09	0.0000012	0.00000018	0.00000035	4.2E-09	0.000038	3.3E-08	8.3E-09	0.00000091	0.00000018	2.1E-08	-	-	-	-
HPHC-4	L-17	2.1E-08	0.0000033	4.2E-09	0.0000012	0.00000018	0.00000035	4.2E-09	0.000037	2.5E-08	8.3E-09	0.00000083	0.00000017	2.1E-08	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HHGPLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	503	1.0	0.50	0.0082	6.1	0.69	1471	-	0.089	0.11	0.0044	0.0044	4.9	3.3	1.3	0.0044
HHGPLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	620	1.00	0.62	0.0082	7.6	0.69	1471	-	0.0057	0.0067	0.00048	0.00048	0.70	0.43	0.17	0.0029
HHGPLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	630	1.00	0.63	0.0082	7.7	0.69	1471	-	0.014	0.018	0.00045	0.00045	0.59	0.35	0.14	0.0018
HHGPLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	621	1.00	0.62	0.0082	7.6	0.69	1471	-	0.0021	0.0026	0.000088	0.000088	0.18	0.090	0.036	0.0025
HHGPLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0016	0.0020	0.000065	0.000065	0.16	0.070	0.028	0.0030
HHGPLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	638	1.0	0.64	0.0082	7.8	0.69	1471	-	0.0013	0.0015	0.000032	0.000032	0.11	0.039	0.016	0.0026
HHGPLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.8	0.69	1471	-	0.0018	0.0021	0.000032	0.000032	0.11	0.041	0.016	0.0023
HHGPLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0010	0.0013	0.000065	0.000065	0.14	0.059	0.023	0.0023
HHGPLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1471	-	0.0018	0.0022	0.000033	0.000033	0.10	0.038	0.015	0.0016
HHGPLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1471	-	0.0014	0.0018	0.000033	0.000033	0.096	0.038	0.015	0.0012
HHGPLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1471	-	0.0011	0.0014	0.000032	0.000032	0.091	0.038	0.015	0.00097
HHGPLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1471	-	0.0010	0.0013	0.000033	0.000033	0.087	0.037	0.015	0.00085
HHGPLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.69	1471	-	0.00078	0.00097	0.000032	0.000032	0.082	0.036	0.014	0.00058
HHGPLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0025	0.0030	0.000033	0.000033	0.079	0.037	0.015	0.00046
HHGPLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0016	0.0020	0.000033	0.000033	0.070	0.036	0.015	0.00039
HHGPLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0011	0.0014	0.000033	0.000033	0.068	0.041	0.016	0.00026
HHGPLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.69	1471	-	0.0015	0.0018	0.000033	0.000033	0.068	0.036	0.014	0.00026
HHGPLC-1	L-18	2020-07-01	203	0.10	0.057	0.00047	631	1.00	0.63	0.0082	7.7	0.69	1471	-	0.00045	0.00054	0.000016	0.000016	0.050	0.026	0.010	0.00022
HHGPLC-1	L-19	2020-07-29	231	0.10	0.057	0.00047	640	1.0	0.64	0.0082	7.8	0.69	1471	-	0.00042	0.00052	0.000016	0.000016	0.048	0.027	0.011	0.00019
HHGPLC-1	L-20	2020-08-26	259	0.10	0.057	0.00047	638	1.0	0.64	0.0082	7.8	0.69	1471	-	0.00045	0.00055	0.000016	0.000016	0.044	0.026	0.011	0.00013
HHGPLC-1	L-21	2020-09-23	287	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.69	1471	-	0.00068	0.00084	0.000016	0.000016	0.041	0.026	0.010	0.000097
HHGPLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	488	1.0	0.49	0.0082	6.0	0.69	1477	-	0.18	0.22	0.0043	0.0043	8.1	5.4	2.2	0.0043
HHGPLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1477	-	0.0069	0.0079	0.00050	0.00050	0.75	0.46	0.18	0.0020
HHGPLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	631	1.00	0.63	0.0082	7.7	0.69	1477	-	0.012	0.014	0.00045	0.00045	0.62	0.38	0.15	0.0018
HHGPLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	622	1.00	0.62	0.0082	7.6	0.69	1477	-	0.0023	0.0028	0.000088	0.000088	0.20	0.091	0.036	0.0035
HHGPLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.69	1477	-	0.0012	0.0014	0.000065	0.000065	0.18	0.069	0.028	0.0043
HHGPLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.69	1477	-	0.0016	0.0019	0.000032	0.000032	0.12	0.040	0.016	0.0035
HHGPLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	649	1.0	0.65	0.0082	7.9	0.69	1477	-	0.0016	0.0020	0.000033	0.000033	0.12	0.041	0.016	0.0026
HHGPLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	0.0021	0.0026	0.000065	0.000065	0.15	0.057	0.023	0.0024
HHGPLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1477	-	0.0014	0.0017	0.000033	0.000033	0.10	0.038	0.015	0.0015
HHGPLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	647	1.0	0.65	0.0082	7.9	0.69	1477	-	0.0016	0.0019	0.000033	0.000033	0.097	0.039	0.016	0.0011
HHGPLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.69	1477	-	0.0014	0.0017	0.000032	0.000032	0.091	0.039	0.015	0.00084
HHGPLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	0.0011	0.0014	0.000033	0.000033	0.087	0.038	0.015	0.00065
HHGPLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.69	1477	-	0.00097	0.0012	0.000032	0.000032	0.080	0.036	0.015	0.00052
HHGPLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	0.0013	0.0016	0.000033	0.000033	0.079	0.038	0.015	0.00039
HHGPLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1477	-	0.0018	0.0018	0.00013	0.000033	0.070	0.038	0.015	0.00026
HHGPLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	0.0017	0.0021	0.000033	0.000033	0.068	0.042	0.017	0.00020
HHGPLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1477	-	0.00072	0.00085	0.000033	0.000033	0.067	0.036	0.015	0.00020
HHGPLC-2	L-18	2020-07-01	203	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1477	-	0.00046	0.00055	0.000016	0.000016	0.045	0.027	0.011	0.00016
HHGPLC-2	L-19	2020-07-29	231	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1477	-	0.00052	0.00065	0.000016	0.000016	0.045	0.027	0.011	0.00013
HHGPLC-2	L-20	2020-08-26	259	0.10	0.057	0.00047	645	1.0	0.64	0.0082	7.9	0.69	1477	-	0.00052	0.00065	0.000016	0.000016	0.043	0.027	0.011	0.000098
HHGPLC-2	L-21	2020-09-23	287	0.10	0.057	0.00047	640	1.0	0.64	0.0082	7.8	0.69	1477	-	0.00081	0.00097	0.000016	0.000016	0.040	0.027	0.011	0.000065
HHGPLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	480	1.0	0.48	0.0082	5.9	0.68	1461	-	0.085	0.10	0.0042	0.0042	8.3	5.5	2.2	0.0042
HHGPLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	633	1.00	0.63	0.0082	7.8	0.68	1461	-	0.020	0.025	0.00049	0.00049	0.74	0.47	0.19	0.0020
HHGPLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	622	1.00	0.62	0.0082	7.6	0.68	1461	-	0.020	0.025	0.00044	0.00044	0.69	0.42	0.17	0.0026
HHGPLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	618	1.00	0.62	0.0082	7.6	0.68	1461	-	0.0025	0.0030	0.000088	0.000088	0.21	0.097	0.039	0.0032
HHGPLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	0.0018	0.0022	0.000065	0.000065	0.17	0.072	0.029	0.0031
HHGPLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	635	1.0	0.63	0.0082	7.8	0.68	1461	-	0.0011	0.0013	0.000032	0.000032	0.11	0.041	0.016	0.0026
HHGPLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.0	0.65	0.0082	7.9	0.68	1461	-	0.00072	0.00072	0.000065	0.000033	0.11	0.043	0.017	0.0022
HHGPLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.68	1461	-	0.0018	0.0022	0.000065	0.000065	0.15	0.064	0.025	0.0021
HHGPLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.68	1461	-	0.0018	0.0021	0.000032	0.000032	0.099	0.040	0.016	0.0014
HHGPLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.68	1461	-	0.0016	0.0019	0.000032	0.000032	0.095	0.039	0.016	0.0012
HHGPLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.68	1461	-	0.0013	0.0016	0.000033	0.000033	0.090	0.040	0.016	0.00098
HHGPLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	0.0010	0.0013	0.000032	0.000032	0.087	0.038	0.015	0.00078
HHGPLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.68	1461	-	0.0010	0.0013	0.000033	0.000033	0.083	0.037	0.015	0.00065
HHGPLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.68	1461	-	0.0018	0.0022	0.000033	0.000033	0.079	0.038	0.015	0.00046
HHGPLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.68	1461	-	0.0018	0.0019	0.00013	0.000033	0.073	0.037	0.015	0.00039
HHGPLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.68	1461	-	0.0014	0.0017	0.000032	0.000032	0.071	0.041	0.016	0.00026
HHGPLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.68	1461	-	0.0017	0.0021	0.000033	0.000033	0.070	0.035	0.014	0.00026
HHGPLC-3	L-18	2020-07-01	203	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	0.00045	0.00055	0.000016	0.000016	0.048	0.027	0.011	0.00023
HHGPLC-3	L-19	2020-07-29	231	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.68	1461	-	0.00052	0.00065	0.000016	0.000016	0.047	0.026	0.011	0.00016
HHGPLC-3	L-20	2020-08-26	259	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.68	1461	-	0.00052	0.00064	0.000016	0.000016	0.044	0.027	0.011	0.00016
HHGPLC-3	L-21	2020-09-23	287	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.68	1461	-	0.00068	0.00085	0.000016	0.000016	0.041	0.026	0.011	0.000098
HHGPLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	490	1.0	0.49	0.0082	6.0	0.69	1485	-	0.11	0.14	0.0043	0.0043	4.5	3.0	1.2	0.0043
HHGPLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	614	1.00	0.61	0.0082	7.5	0.69	1485	-	0.021	0.026	0.00047	0.00047	0.79	0.50	0.20	0.00095
HHGPLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	620	1.00	0.62	0.0082	7.6	0.69	1485	-	0.0018	0.0018	0.00044	0.00044	0.73	0.44	0.18	0.0018
HHGPLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	612	1.00	0.61	0.0082	7.5	0.69	1485	-	0.0024	0.0029	0.000087	0.000087	0.20	0.097	0.039	0.0033
HHGPLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.69	1485	-	0.0013	0.0016	0.000065	0.000065	0.17	0.071	0.028	0.0036
HHGPLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.69	1485	-	0.0014	0.0017	0.000032	0.000032	0.12	0.043	0.017	0.0030
HHGPLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1485	-	0.0014	0.0016	0.000065	0.000032	0.11	0.042	0.017	0.0024
HHGPLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1485	-	0.0021	0.0026	0.000065	0.000065	0.15	0.062	0.025	0.0022
HHGPLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	634	1.0	0.63	0.0082	7.8	0.69	1485	-	0.0013	0.0017	0.000032	0.000032	0.10	0.041	0.016	0.0015
HHGPLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.69	1485	-	0.0014	0.0018	0.000033	0.000033	0.098	0.040	0.016	0.0012
HHGPLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	645	1.0	0.64	0.0082	7.9	0.69	1485	-	0.0013	0.0016	0.000033	0.000033	0.092	0.040	0.016	0.00091
HHGPLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.69	1485	-	0.0016	0.0019	0.000032	0.000032	0.090	0.039	0.015	0.00078
HHGPLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.69	1485	-	0.00084	0.0010	0.000032	0.000032	0.082	0.037	0.015	0.00065
HHGPLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1485	-	0.0021	0.0025	0.000033	0.000033	0.080	0.039	0.015	0.00046
HHGPLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1485	-	0.0012	0.0011	0.00013	0.000033	0.074	0.037	0.015	0.00033
HHGPLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1485	-	0.0011	0.0014	0.000033	0.000033	0.071	0.041	0.017	0.00026
HHGPLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1485	-	0.0014	0.0017	0.000033	0.000033	0.069	0.035	0.014	0.00026
HHGPLC-4	L-18	2020-07-01	203	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.69	1485	-	0.00065	0.00078	0.000016	0.000016	0.049	0.027	0.011	0.00019
HHGPLC-4	L-19	2020-07-29	231	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.69	1485	-	0.00049	0.00059	0.000016	0.000016	0.047	0.027	0.011	0.00016
HHGPLC-4	L-20	2020-08-26	259	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.8	0.69	1485	-	0.00049	0.00052	0.000032	0.000016	0.043	0.027	0.011	0.00013
HHGPLC-4	L-21	2020-09-23	287	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1485	-	0.00084	0.0010	0.000016	0.000016	0.042	0.027	0.011	0.000097

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg-N/m^2s	mg-N/m^2s	mg-N/m^2s	mg-P/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HHGPLC-1	L-1	0.00098	0.0062	0.0018	0.018	-	-	0.00016	-	3.0	0.00000022	0.0081	0.000040	0.00036	0.00025	0.00000044	4.4E-08	0.0000027	0.000011	0.000020	0.00052	4.4E-09
HHGPLC-1	L-2	0.00017	0.0036	0.00038	0.025	-	-	0.0000043	-	0.44	2.4E-08	0.00073	0.000015	0.000095	0.000014	4.8E-08	4.8E-09	4.8E-08	0.0000014	0.00000057	0.000011	4.8E-10
HHGPLC-1	L-3	0.00013	0.0029	0.00027	0.022	-	-	0.0000040	-	0.36	2.2E-08	0.00087	0.000012	0.000071	0.000024	4.5E-08	1.8E-08	4.5E-08	0.0000012	0.00000045	0.0000073	4.5E-10
HHGPLC-1	L-4	0.000060	0.0017	0.00011	0.015	-	-	0.00000079	-	0.12	4.4E-09	0.00015	0.0000067	0.000032	0.0000025	8.8E-09	3.5E-09	3.5E-08	0.00000083	0.00000032	0.0000046	1.8E-10
HHGPLC-1	L-5	0.000044	0.0016	0.000078	0.016	-	-	0.00000059	-	0.098	3.3E-09	0.00011	0.0000070	0.000022	0.0000022	6.5E-09	2.6E-09	2.6E-08	0.00000076	0.00000029	0.0000044	6.5E-11
HHGPLC-1	L-6	0.000026	0.0011	0.000045	0.015	-	-	0.00000029	-	0.069	3.9E-09	0.000071	0.0000068	0.000019	0.0000011	3.2E-09	5.2E-09	2.6E-08	0.00000077	0.00000024	0.0000043	3.2E-11
HHGPLC-1	L-7	0.000020	0.0011	0.000039	0.017	-	-	0.00000029	-	0.071	1.6E-09	0.000069	0.0000076	0.000018	0.0000011	3.2E-09	3.9E-09	3.2E-09	0.00000078	0.0000001	0.00000018	3.2E-11
HHGPLC-1	L-8	0.000023	0.0013	0.000052	0.019	-	-	0.0000059	-	0.091	3.3E-09	0.00011	0.0000086	0.000022	0.0000020	6.5E-09	6.5E-10	6.5E-09	0.00000083	0.00000013	0.00000043	6.5E-11
HHGPLC-1	L-9	0.000011	0.00091	0.000033	0.013	-	-	0.0000029	-	0.063	1.6E-09	0.000069	0.0000067	0.000015	0.0000012	3.3E-09	2.6E-09	3.3E-09	0.00000062	9.8E-08	0.0000002	3.3E-11
HHGPLC-1	L-10	0.000010	0.00085	0.000033	0.013	-	-	0.0000029	-	0.061	1.6E-09	0.000064	0.0000062	0.000014	0.0000010	3.3E-09	2.0E-09	1.3E-08	0.00000059	0.00000014	0.0000010	3.3E-11
HHGPLC-1	L-11	0.000011	0.00078	0.000032	0.011	-	-	0.0000029	-	0.057	1.6E-09	0.000068	0.0000057	0.000014	0.0000012	3.2E-09	3.2E-09	1.3E-08	0.0000005	0.00000017	0.0000023	3.2E-11
HHGPLC-1	L-12	0.000011	0.00072	0.000026	0.0095	-	-	0.0000029	-	0.054	1.6E-09	0.000068	0.0000052	0.000013	0.0000014	3.3E-09	3.3E-10	3.3E-09	0.00000042	9.8E-08	0.00000027	3.3E-11
HHGPLC-1	L-13	0.0000097	0.00065	0.000026	0.0081	-	-	0.0000029	-	0.051	1.6E-09	0.000063	0.0000046	0.000012	0.0000012	3.2E-09	6.5E-10	3.2E-09	0.00000037	0.0000001	0.00000027	3.2E-11
HHGPLC-1	L-14	0.0000098	0.00063	0.000026	0.0074	-	-	0.0000029	-	0.051	1.6E-09	0.000056	0.0000040	0.000012	0.0000012	3.3E-09	3.3E-10	1.3E-08	0.00000031	0.00000012	0.0000012	3.3E-11
HHGPLC-1	L-15	0.0000098	0.00055	0.000026	0.0063	-	-	0.000029	-	0.047	1.6E-09	0.000058	0.0000035	0.0000098	0.0000012	3.3E-09	3.3E-10	3.3E-09	0.00000025	9.1E-08	0.00000021	3.3E-11
HHGPLC-1	L-16	0.0000065	0.00059	0.000033	0.0062	-	-	0.0000029	-	0.050	1.6E-09	0.000055	0.0000033	0.0000098	0.0000011	3.3E-09	3.3E-10	3.3E-09	0.00000025	9.1E-08	0.0000003	3.3E-11
HHGPLC-1	L-17	0.0000078	0.00048	0.000026	0.0046	-	-	0.0000029	-	0.043	1.6E-09	0.000053	0.0000029	0.0000098	0.0000012	3.3E-09	1.3E-09	3.3E-09	0.00000022	7.8E-08	0.00000014	6.5E-11
HHGPLC-1	L-18	0.0000048	0.00038	0.000019	0.0037	-	-	0.0000014	-	0.032	8.0E-10	0.000032	0.0000021	0.0000077	0.00000067	1.6E-09	3.5E-08	1.6E-09	0.00000016	5.1E-08	4.5E-08	3.2E-11
HHGPLC-1	L-19	0.0000042	0.00039	0.000019	0.0029	-	-	0.0000015	-	0.031	8.1E-10	0.000029	0.0000020	0.0000074	0.00000068	1.6E-09	3.2E-08	1.6E-09	0.00000015	4.9E-08	8.1E-08	3.2E-11
HHGPLC-1	L-20	0.0000019	0.00035	0.000019	0.0022	-	-	0.0000015	-	0.029	8.0E-10	0.000021	0.0000016	0.0000071	0.00000061	1.6E-09	1.6E-09	1.6E-09	0.00000013	3.5E-08	7.1E-08	3.2E-11
HHGPLC-1	L-21	0.0000032	0.00030	0.000019	0.0016	-	-	0.0000015	-	0.028	8.1E-10	0.000030	0.0000015	0.0000068	0.00000062	1.6E-09	6.5E-10	1.6E-09	0.00000014	5.2E-08	0.00000032	1.6E-11
HHGPLC-2	L-1	0.0014	0.0069	0.0026	0.012	-	-	0.00016	-	4.9	0.00000022	0.012	0.000066	0.00043	0.00022	0.00000043	4.3E-08	0.0000026	0.000016	0.000026	0.00062	4.3E-09
HHGPLC-2	L-2	0.00019	0.0038	0.00040	0.020	-	-	0.0000045	-	0.47	2.5E-08	0.00077	0.000015	0.000099	0.000017	5.0E-08	9.9E-09	5.0E-08	0.0000012	0.0000005	0.0000065	5.0E-10
HHGPLC-2	L-3	0.00014	0.0029	0.00027	0.018	-	-	0.0000040	-	0.38	2.2E-08	0.00095	0.000011	0.000072	0.000027	4.5E-08	8.9E-09	0.00000027	0.0000027	0.0000018	0.000059	4.5E-10
HHGPLC-2	L-4	0.000058	0.0019	0.00011	0.020	-	-	0.00000079	-	0.13	4.4E-09	0.00016	0.0000079	0.000033	0.0000026	8.8E-09	1.1E-08	3.5E-08	0.00000092	0.00000032	0.0000046	8.8E-11
HHGPLC-2	L-5	0.000044	0.0018	0.000078	0.024	-	-	0.00000058	-	0.11	3.2E-09	0.00012	0.0000096	0.000025	0.0000023	6.5E-09	3.9E-09	2.6E-08	0.0000011	0.00000034	0.0000027	6.5E-11
HHGPLC-2	L-6	0.000025	0.0014	0.000045	0.021	-	-	0.00000029	-	0.078	3.2E-09	0.000066	0.0000085	0.000021	0.0000010	3.2E-09	5.2E-09	6.5E-09	0.00000097	0.00000015	0.00000071	3.2E-11
HHGPLC-2	L-7	0.000022	0.0014	0.000046	0.021	-	-	0.0000003	-	0.081	3.9E-09	0.000067	0.0000091	0.000020	0.00000092	3.3E-09	3.9E-09	1.3E-08	0.00000098	0.00000013	0.00000066	3.3E-11
HHGPLC-2	L-8	0.000027	0.0014	0.000052	0.021	-	-	0.0000059	-	0.096	3.3E-09	0.000099	0.0000094	0.000024	0.0000014	6.5E-09	6.5E-10	6.5E-09	0.00000092	0.00000016	0.00000037	6.5E-11
HHGPLC-2	L-9	0.000012	0.00098	0.000033	0.015	-	-	0.0000029	-	0.065	1.6E-09	0.000070	0.0000072	0.000015	0.00000098	3.3E-09	5.2E-09	6.5E-09	0.00000065	0.00000012	0.0000004	3.3E-11
HHGPLC-2	L-10	0.0000098	0.00092	0.000033	0.013	-	-	0.0000030	-	0.063	1.6E-09	0.000056	0.0000064	0.000015	0.0000010	3.3E-09	2.0E-09	6.5E-09	0.0000006	0.00000012	0.00000034	3.3E-11
HHGPLC-2	L-11	0.0000097	0.00084	0.000032	0.011	-	-	0.0000029	-	0.058	1.6E-09	0.000058	0.0000056	0.000016	0.0000010	3.2E-09	3.2E-10	6.5E-09	0.00000047	0.00000012	0.00000051	3.2E-11
HHGPLC-2	L-12	0.000010	0.00072	0.000026	0.0090	-	-	0.0000030	-	0.054	1.6E-09	0.000067	0.0000051	0.000014	0.0000012	3.3E-09	3.3E-10	3.3E-09	0.00000042	0.00000011	0.00000057	3.3E-11
HHGPLC-2	L-13	0.000010	0.00065	0.000026	0.0075	-	-	0.0000029	-	0.050	1.6E-09	0.000062	0.0000043	0.000012	0.0000010	3.2E-09	1.9E-09	3.2E-09	0.00000034	0.0000001	0.00000034	3.2E-11
HHGPLC-2	L-14	0.0000079	0.00064	0.000033	0.0064	-	-	0.0000030	-	0.050	1.6E-09	0.000056	0.0000038	0.000012	0.0000012	3.3E-09	2.0E-09	3.3E-09	0.00000029	9.8E-08	0.00000046	3.3E-11
HHGPLC-2	L-15	0.0000098	0.00057	0.000026	0.0054	-	-	0.000029	-	0.046	1.6E-09	0.000059	0.0000032	0.000010	0.0000013	3.3E-09	3.9E-09	3.3E-09	0.00000023	7.8E-08	0.00000017	3.3E-11
HHGPLC-2	L-16	0.0000052	0.00059	0.000033	0.0050	-	-	0.0000030	-	0.048	1.6E-09	0.000056	0.0000029	0.000011	0.0000012	3.3E-09	3.3E-10	3.3E-09	0.00000023	8.5E-08	0.00000044	3.3E-11
HHGPLC-2	L-17	0.0000072	0.00048	0.000026	0.0038	-	-	0.0000030	-	0.042	1.6E-09	0.000053	0.0000026	0.0000098	0.0000012	3.3E-09	3.3E-09	3.3E-09	0.0000002	8.5E-08	0.00000029	1.3E-10
HHGPLC-2	L-18	0.0000049	0.00036	0.000020	0.0026	-	-	0.0000015	-	0.031	8.1E-10	0.000032	0.0000018	0.0000078	0.00000065	1.6E-09	3.3E-08	1.6E-09	0.00000014	5.2E-08	0.00000019	3.3E-11
HHGPLC-2	L-19	0.0000036	0.00033	0.000023	0.0021	-	-	0.0000015	-	0.030	8.1E-10	0.000022	0.0000016	0.0000072	0.00000065	1.6E-09	2.8E-08	1.6E-09	0.00000013	5.2E-08	0.00000026	6.5E-11
HHGPLC-2	L-20	0.0000026	0.00031	0.000023	0.0015	-	-	0.0000015	-	0.029	8.1E-10	0.000024	0.0000014	0.0000072	0.00000065	1.6E-09	6.5E-10	1.6E-09	0.00000011	3.3E-08	6.5E-08	1.6E-11
HHGPLC-2	L-21	0.0000026	0.00027	0.000019	0.0011	-	-	0.0000015	-	0.027	8.1E-10	0.000033	0.0000013	0.0000068	0.00000065	1.6E-09	1.6E-09	1.6E-09	0.00000011	4.2E-08	0.0000002	1.6E-11
HHGPLC-3	L-1	0.0014	0.0068	0.0025	0.012	-	-	0.00015	-	5.0	0.00000021	0.014	0.000064	0.00042	0.00022	0.00000042	4.2E-08	0.0000051	0.000013	0.0000039	0.0010	4.2E-09
HHGPLC-3	L-2	0.00020	0.0033	0.00039	0.014	-	-	0.0000044	-	0.46	2.4E-08	0.00079	0.000013	0.000098	0.000014	4.9E-08	2.0E-08	4.9E-08	0.00000088	0.00000049	0.0000083	4.9E-10
HHGPLC-3	L-3	0.00014	0.0030	0.00026	0.019	-	-	0.0000040	-	0.42	2.2E-08	0.0010	0.000012	0.000079	0.000028	4.4E-08	1.8E-08	0.00000035	0.0000012	0.0000022	0.000071	4.4E-10
HHGPLC-3	L-4	0.000061	0.0019	0.00011	0.020	-	-	0.00000079	-	0.13	4.4E-09	0.00018	0.0000084	0.000033	0.0000035	8.8E-09	5.3E-09	8.8E-09	0.00000091	0.00000023	0.0000019	8.8E-11
HHGPLC-3	L-5	0.000044	0.0017	0.000078	0.019	-	-	0.00000058	-	0.11	3.2E-09	0.00011	0.0000083	0.000023	0.0000019	6.5E-09	3.9E-09	2.6E-08	0.00000088	0.00000027	0.0000030	6.5E-11
HHGPLC-3	L-6	0.000023	0.0012	0.000045	0.016	-	-	0.00000029	-	0.071	1.6E-09	0.000062	0.0000068	0.000019	0.0000009	3.2E-09	6.4E-10	6.4E-09	0.00000077	0.00000015	0.00000083	3.2E-11
HHGPLC-3	L-7	0.000020	0.0012	0.000039	0.016	-	-	0.00000029	-	0.074	1.6E-09	0.000067	0.0000073	0.000018	0.0000010	3.3E-09	5.9E-09	3.3E-09	0.00000078	0.00000012	0.00000029	3.3E-11
HHGPLC-3	L-8	0.000025	0.0013	0.000052	0.018	-	-	0.0000059	-	0.094	3.3E-09	0.00012	0.0000078	0.000022	0.0000021	6.5E-09	3.9E-09	6.5E-09	0.00000078	0.00000014	0.0000003	6.5E-11
HHGPLC-3	L-9	0.000012	0.00084	0.000032	0.013	-	-	0.0000029	-	0.062	1.6E-09	0.000076	0.0000062	0.000014	0.0000014	3.2E-09	3.2E-09	3.2E-09	0.0000006	0.0000001	0.00000036	3.2E-11
HHGPLC-3	L-10	0.000011	0.00078	0.000032	0.012	-	-	0.0000029	-	0.060	1.6E-09	0.000065	0.0000059	0.000014	0.0000011	3.2E-09	6.5E-10	6.5E-09	0.00000056	0.00000012	0.00000054	3.2E-11
HHGPLC-3	L-11	0.000010	0.00078	0.000033	0.010	-	-	0.0000029	-	0.057	1.6E-09	0.000061	0.0000054	0.000014	0.0000013	3.3E-09	2.6E-09	6.5E-09	0.00000048	0.00000012	0.00000059	3.3E-11
HHGPLC-3	L-12	0.0000091	0.00065	0.000026	0.0089	-	-	0.0000029	-	0.053	1.6E-09	0.000066	0.0000049	0.000013	0.0000012	3.2E-09	1.9E-09	3.2E-09	0.00000044	8.4E-08	0.00000047	3.2E-11
HHGPLC-3	L-13	0.000010	0.00062	0.000026	0.0077	-	-	0.0000029	-	0.051	1.6E-09	0.000064	0.0000044	0.000012	0.0000012	3.3E-09	3.3E-09	3.3E-09	0.00000038	7.2E-08	0.00000044	3.3E-11
HHGPLC-3	L-14	0.0000078	0.00059	0.000026	0.0071	-	-	0.0000030	-	0.051	1.6E-09	0.000063	0.0000041	0.000012	0.0000012	3.3E-09	1.3E-09	3.3E-09	0.00000033	5.9E-08	0.00000045	3.3E-11
HHGPLC-3	L-15	0.0000091	0.00053	0.000026	0.0062	-	-	0.000029	-	0.048	1.6E-09	0.000057	0.0000035	0.0000098	0.0000012	3.3E-09	1.3E-09	3.3E-09	0.00000027	5.9E-08	0.0000001	3.3E-11
HHGPLC-3	L-16	0.0000065	0.00056	0.000032	0.0060	-	-	0.0000029	-	0.050	1.6E-09	0.000045	0.0000032	0.000010	0.0000012	3.2E-09	3.9E-09	3.2E-09	0.00000026	5.2E-08	0.00000017	3.2E-11
HHGPLC-3	L-17	0.0000085	0.00046	0.000026	0.0046	-	-	0.0000030	-	0.044	1.6E-09	0.000054	0.0000029	0.0000098	0.0000012	3.3E-09	2.6E-09	1.3E-08	0.00000024	0.0000001	0.0000018	6.5E-11
HHGPLC-3	L-18	0.0000049	0.00036	0.000019	0.0035	-	-	0.0000015	-	0.032	8.1E-10	0.000034	0.0000020	0.0000078	0.00000062	1.6E-09	3.2E-08	1.6E-09	0.00000016	3.6E-08	0.00000023	1.6E-11
HHGPLC-3	L-19	0.0000036	0.00036	0.000019	0.0030	-	-	0.0000015	-	0.031	8.1E-10	0.000027	0.0000018	0.0000068	0.00000065	1.6E-09	3.1E-08	3.2E-09	0.00000015	4.5E-08	0.00000045	3.2E-11
HHGPLC-3	L-20	0.0000016	0.00032	0.000019	0.0024	-	-	0.0000015	-	0.030	8.1E-10	0.000026	0.0000016	0.0000064	0.00000061	1.6E-09	1.3E-09	1.6E-09	0.00000013	3.5E-08	0.00000016	1.6E-11
HHGPLC-3	L-21	0.0000026	0.00030	0.000020	0.0018	-	-	0.0000015	-	0.028	8.1E-10	0.000031	0.0000015	0.0000065	0.00000065	1.6E-09	6.5E-10	1.6E-09	0.00000014	3.9E-08	0.00000024	1.6E-11
HHGPLC-4	L-1	0.00078	0.0052	0.0017	0.010	-	-	0.00016	-	2.7	0.00000022	0.0073	0.000036	0.00026	0.00021	0.00000043	8.7E-08	0.00000043	0.0000078	0.000012	0.00021	4.3E-09
HHGPLC-4	L-2	0.00017	0.0034	0.00038	0.015	-	-	0.0000043	-	0.49	2.4E-08	0.00087	0.000013	0.000095	0.000016	4.7E-08	9.5E-09	9.5E-08	0.0000011	0.00000095	0.000024	4.7E-10
HHGPLC-4	L-3	0.00014	0.0029	0.00026	0.018	-	-	0.0000040	-	0.45	2.2E-08	0.0011	0.000011	0.000079	0.000031	4.4E-08	8.8E-09	0.00000018	0.0000011	0.0000014	0.000043	4.4E-10
HHGPLC-4	L-4	0.000055	0.0019	0.00010	0.020	-	-	0.00000078	-	0.13	4.3E-09	0.00016	0.0000083	0.000033	0.0000028	8.7E-09	3.5E-09	8.7E-09	0.00000087	0.00000019	0.0000014	8.7E-11
HHGPLC-4	L-5	0.000040	0.0017	0.000078	0.021	-	-	0.00000058	-	0.11	3.2E-09	0.00011	0.0000092	0.000023	0.0000019	6.5E-09	6.5E-10	1.3E-08	0.00000089	0.00000025	0.0000025	6.5E-11
HHGPLC-4	L-6	0.000024	0.0012	0.000045	0.018	-	-	0.00000029	-	0.075	3.2E-09	0.000070	0.0000078	0.000019	0.0000011	3.2E-09	5.8E-09	6.5E-09	0.00000078	0.00000016	0.00000047	3.2E-11
HHGPLC-4	L-7	0.000021	0.0012	0.000039	0.017	-	-	0.00000029	-	0.071	1.6E-09	0.000070	0.0000080	0.000018	0.0000010	3.2E-09	2.6E-09	6.5E-09	0.00000078	0.00000014	0.00000065	3.2E-11
HHGPLC-4	L-8	0.000025	0.0013	0.000052	0.019	-	-	0.0000059	-	0.094	3.3E-09	0.00012	0.0000085	0.000022	0.0000023	6.5E-09	1.3E-09	3.9E-08	0.00000083	0.00000033	0.0000068	6.5E-11
HHGPLC-4	L-9	0.0000083	0.00090	0.000032	0.013	-	-	0.0000029	-	0.064	1.6E-09	0.000082	0.0000067	0.000015	0.0000015	3.2E-09	2.6E-09	1.9E-08	0.00000063	0.0000002	0.0000037	3.2E-11
HHGPLC-4	L-10	0.0000098	0.00085	0.000033	0.012	-	-	0.0000029	-	0.062	1.6E-09	0.000069	0.0000063	0.000014	0.0000012	3.3E-09	1.3E-09	1.3E-08	0.00000058	0.00000017	0.0000022	3.3E-11
HHGPLC-4	L-11	0.0000091	0.00078	0.000033	0.011	-	-	0.0000029	-	0.059	1.6E-09	0.000065	0.0000057	0.000014	0.0000013	3.3E-09	1.3E-09	3.3E-09	0.00000048	0.0000001	0.00000037	3.3E-11
HHGPLC-4	L-12	0.000010	0.00071	0.000032	0.0090	-	-	0.0000029	-	0.055	1.6E-09	0.000064	0.0000051	0.000012	0.0000012	3.2E-09	2.6E-09	3.2E-09	0.00000044	0.0000001	0.00000051	3.2E-11
HHGPLC-4	L-13	0.0000091	0.00063	0.000026	0.0077	-	-	0.0000029	-	0.051	1.6E-09	0.000061	0.0000045	0.000012	0.0000011	3.2E-09	3.2E-09	3.2E-09	0.00000037	7.1E-08	0.00000027	3.2E-11
HHGPLC-4	L-14	0.0000078	0.00062	0.000026	0.0071	-	-	0.0000029	-	0.051	1.6E-09	0.000063	0.0000040	0.000011	0.0000014	3.3E-09	3.3E-09	3.3E-09	0.00000031	6.5E-08	0.00000046	3.3E-11
HHGPLC-4	L-15	0.0000091	0.00053	0.000026	0.0059	-	-	0.000029	-	0.048	1.6E-09	0.000060	0.0000034	0.000010	0.0000014	3.3E-09	2.6E-09	3.3E-09	0.00000026	5.9E-08	0.0000003	3.3E-11
HHGPLC-4	L-16	0.0000059	0.00056	0.000026	0.0058	-	-	0.0000029	-	0.050	1.6E-09	0.000058	0.0000032	0.000010	0.0000012	3.3E-09	1.3E-09	3.3E-09	0.00000025	6.5E-08	0.00000065	3.3E-11
HHGPLC-4	L-17	0.0000078	0.00046	0.000026	0.0044	-	-	0.0000029	-	0.044	1.6E-09	0.000056	0.0000028	0.0000098	0.0000012	3.3E-09	2.0E-09	6.5E-09	0.00000023	8.5E-08	0.0000011	1.3E-10
HHGPLC-4	L-18	0.0000045	0.00036	0.000019	0.0033	-	-	0.0000015	-	0.032	8.1E-10	0.000028	0.0000019	0.0000074	0.00000068	1.6E-09	3.2E-08	6.5E-09	0.00000016	4.5E-08	0.00000071	9.7E-11
HHGPLC-4	L-19	0.0000039	0.00036	0.000020	0.0028	-	-	0.0000015	-	0.031	8.1E-10	0.000032	0.0000018	0.0000072	0.00000068	1.6E-09	3.1E-08	3.3E-09	0.00000014	5.5E-08	0.00000059	3.3E-11
HHGPLC-4	L-20	0.0000029	0.00032	0.000019	0.0022	-	-	0.0000015	-	0.030	8.1E-10	0.000029	0.0000016	0.0000071	0.00000065	1.6E-09	2.3E-09	1.6E-09	0.00000012	3.9E-08	0.0000001	1.6E-11
HHGPLC-4	L-21	0.0000026	0.00031	0.000019	0.0017	-	-	0.0000015	-	0.029	8.1E-10	0.000031	0.0000014	0.0000062	0.00000068	1.6E-09	1.6E-10	1.6E-09	0.00000012	3.6E-08	0.00000013	1.6E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHGPLC-1	L-1	0.0000080	0.0014	0.0000062	0.000070	0.0000098	0.000060	0.00000044	0.00069	0.000020	0.00000089	0.00045	0.000042	0.000063	-	-	3.4E-09	-
HHGPLC-1	L-2	0.00000024	0.00074	0.00000019	0.0000016	0.0000017	0.0000095	4.8E-08	0.00012	0.0000025	0.00000038	0.000039	0.0000054	0.00000057	-	-	2.1E-10	-
HHGPLC-1	L-3	0.00000022	0.00065	8.9E-08	0.0000012	0.0000016	0.0000089	4.5E-08	0.000098	0.0000019	0.00000036	0.000029	0.0000055	0.00000022	-	-	2.9E-10	-
HHGPLC-1	L-4	4.4E-08	0.00039	0.00000011	0.00000072	0.00000049	0.0000030	8.8E-09	0.000032	0.0000013	0.00000016	0.0000055	0.0000017	0.00000053	-	-	5.7E-11	-
HHGPLC-1	L-5	7.8E-08	0.00039	5.2E-08	0.00000074	0.00000042	0.0000030	6.5E-09	0.000025	0.0000014	0.00000013	0.0000047	0.0000014	0.0000001	-	-	3.3E-11	-
HHGPLC-1	L-6	5.8E-08	0.00039	5.8E-08	0.0000006	0.00000028	0.0000025	3.2E-09	0.000017	0.0000011	0.0000001	0.0000042	0.0000011	0.00000059	-	-	1.9E-11	-
HHGPLC-1	L-7	1.6E-08	0.00040	2.6E-08	4.5E-08	0.00000029	0.0000027	3.2E-09	0.000016	0.00000091	9.7E-08	0.0000029	0.0000011	1.6E-08	-	-	1.9E-11	-
HHGPLC-1	L-8	3.3E-08	0.00044	3.9E-08	9.1E-08	0.00000035	0.0000030	6.5E-09	0.000021	0.0000014	0.00000012	0.0000026	0.0000014	3.3E-08	-	-	3.3E-11	-
HHGPLC-1	L-9	1.6E-08	0.00033	2.6E-08	4.6E-08	0.00000025	0.0000023	3.3E-09	0.000015	0.00000098	9.1E-08	0.0000026	0.0000010	1.6E-08	-	-	2.1E-11	-
HHGPLC-1	L-10	1.6E-08	0.00032	3.3E-08	0.00000017	0.00000025	0.0000020	3.3E-09	0.000014	0.00000098	8.5E-08	0.0000023	0.0000010	3.3E-08	-	-	1.9E-11	-
HHGPLC-1	L-11	1.6E-08	0.00027	5.2E-08	0.00000034	0.00000024	0.0000020	3.2E-09	0.000013	0.00000091	7.8E-08	0.0000022	0.0000010	0.00000019	-	-	1.8E-11	-
HHGPLC-1	L-12	1.6E-08	0.00026	2.6E-08	6.5E-08	0.00000024	0.0000018	3.3E-09	0.000014	0.00000098	7.8E-08	0.0000018	0.0000010	1.6E-08	-	-	2.1E-11	-
HHGPLC-1	L-13	1.6E-08	0.00022	1.9E-08	0.00000011	0.00000023	0.0000016	3.2E-09	0.000014	0.00000059	7.8E-08	0.0000016	0.0000010	3.9E-08	-	-	1.7E-11	-
HHGPLC-1	L-14	1.6E-08	0.00020	2.6E-08	0.00000022	0.00000023	0.0000014	3.3E-09	0.000013	0.00000063	7.8E-08	0.0000023	0.00000091	3.9E-08	-	-	1.9E-11	-
HHGPLC-1	L-15	1.6E-08	0.00018	2.0E-08	5.9E-08	0.0000002	0.0000012	3.3E-09	0.000012	0.00000048	6.5E-08	0.0000016	0.00000085	0.00000018	-	-	1.7E-11	-
HHGPLC-1	L-16	1.6E-08	0.00017	2.6E-08	5.9E-08	0.0000002	0.0000010	3.3E-09	0.000012	0.00000038	6.5E-08	0.0000014	0.00000085	0.00000022	-	-	1.5E-11	-
HHGPLC-1	L-17	1.6E-08	0.00016	2.0E-08	3.9E-08	0.0000002	0.0000011	3.3E-09	0.000012	0.00000025	5.9E-08	0.0000012	0.00000085	0.0000002	-	-	1.6E-11	-
HHGPLC-1	L-18	8.0E-09	0.00013	1.3E-08	1.3E-08	0.00000014	0.00000073	1.6E-09	0.0000086	0.00000025	3.8E-08	0.0000011	0.00000054	1.9E-08	-	-	1.1E-11	-
HHGPLC-1	L-19	8.1E-09	0.00012	1.3E-08	1.9E-08	0.00000015	0.00000074	1.6E-09	0.0000091	0.00000024	3.9E-08	0.00000081	0.00000055	4.5E-08	-	-	1.1E-11	-
HHGPLC-1	L-20	8.0E-09	0.00011	2.6E-08	1.6E-08	0.00000012	0.00000064	1.6E-09	0.0000087	0.00000048	3.5E-08	0.0000011	0.00000051	2.6E-08	-	-	1.2E-11	-
HHGPLC-1	L-21	8.1E-09	0.00010	5.2E-08	1.9E-08	0.00000012	0.00000065	3.2E-09	0.0000088	0.00000019	3.6E-08	0.00000088	0.00000052	5.8E-08	-	-	1.1E-11	-
HHGPLC-2	L-1	0.0000086	0.0019	0.0000086	0.000082	0.000013	0.000086	0.00000043	0.0011	0.000025	0.00000086	0.00086	0.000066	0.000095	-	-	2.2E-09	-
HHGPLC-2	L-2	0.00000025	0.00072	9.9E-08	0.00000099	0.0000019	0.000011	5.0E-08	0.00014	0.0000018	0.0000004	0.000040	0.0000061	0.00000069	-	-	2.1E-10	-
HHGPLC-2	L-3	0.00000072	0.00057	0.00000089	0.0000081	0.0000016	0.0000098	4.5E-08	0.00011	0.0000025	0.00000036	0.000041	0.0000065	0.00000054	-	-	3.1E-10	-
HHGPLC-2	L-4	4.4E-08	0.00047	8.8E-08	0.00000063	0.00000053	0.0000035	8.8E-09	0.000033	0.0000016	0.00000018	0.0000062	0.0000019	0.00000037	-	-	5.7E-11	-
HHGPLC-2	L-5	3.2E-08	0.00053	5.2E-08	0.00000055	0.00000043	0.0000036	6.5E-09	0.000026	0.0000017	0.00000016	0.0000048	0.0000017	0.0000001	-	-	3.5E-11	-
HHGPLC-2	L-6	1.6E-08	0.00049	3.9E-08	0.00000013	0.0000003	0.0000030	3.2E-09	0.000017	0.0000012	0.00000012	0.0000043	0.0000012	0.00000019	-	-	1.7E-11	-
HHGPLC-2	L-7	1.6E-08	0.00047	3.9E-08	0.00000012	0.00000029	0.0000031	3.3E-09	0.000016	0.0000011	0.00000011	0.0000033	0.0000012	1.6E-08	-	-	1.7E-11	-
HHGPLC-2	L-8	3.3E-08	0.00047	5.2E-08	9.2E-08	0.00000035	0.0000031	6.5E-09	0.000020	0.0000016	0.00000013	0.0000030	0.0000014	0.00000027	-	-	2.7E-11	-
HHGPLC-2	L-9	1.6E-08	0.00034	3.3E-08	8.5E-08	0.00000026	0.0000023	3.3E-09	0.000016	0.0000010	9.8E-08	0.0000021	0.0000011	3.3E-08	-	-	1.8E-11	-
HHGPLC-2	L-10	1.6E-08	0.00032	3.3E-08	7.9E-08	0.00000025	0.0000020	3.3E-09	0.000014	0.00000098	9.2E-08	0.0000024	0.0000010	1.6E-08	-	-	1.9E-11	-
HHGPLC-2	L-11	1.6E-08	0.00026	3.9E-08	0.00000012	0.00000024	0.0000019	3.2E-09	0.000013	0.00000084	7.8E-08	0.0000022	0.0000010	0.00000011	-	-	1.6E-11	-
HHGPLC-2	L-12	1.6E-08	0.00025	2.6E-08	9.8E-08	0.00000025	0.0000018	3.3E-09	0.000014	0.00000092	7.9E-08	0.0000020	0.0000010	1.6E-08	-	-	1.8E-11	-
HHGPLC-2	L-13	1.6E-08	0.00021	1.9E-08	6.5E-08	0.00000023	0.0000015	3.2E-09	0.000014	0.00000052	7.8E-08	0.0000014	0.0000010	3.9E-08	-	-	1.6E-11	-
HHGPLC-2	L-14	1.6E-08	0.00019	2.0E-08	0.00000012	0.00000022	0.0000014	3.3E-09	0.000014	0.00000064	7.9E-08	0.0000020	0.00000092	3.9E-08	-	-	1.9E-11	-
HHGPLC-2	L-15	1.6E-08	0.00017	1.3E-08	5.2E-08	0.0000002	0.0000012	3.3E-09	0.000013	0.00000051	6.5E-08	0.0000012	0.00000085	3.9E-08	-	-	1.7E-11	-
HHGPLC-2	L-16	1.6E-08	0.00016	2.0E-08	5.9E-08	0.0000002	0.0000010	3.3E-09	0.000013	0.00000037	5.9E-08	0.0000012	0.00000092	0.00000016	-	-	1.5E-11	-
HHGPLC-2	L-17	1.6E-08	0.00015	1.3E-08	3.9E-08	0.0000002	0.0000010	3.3E-09	0.000012	0.00000031	5.2E-08	0.0000012	0.00000085	0.00000016	-	-	1.8E-11	-
HHGPLC-2	L-18	8.1E-09	0.00012	9.8E-09	3.3E-08	0.00000014	0.00000065	1.6E-09	0.0000088	0.00000022	3.6E-08	0.00000081	0.00000055	2.0E-08	-	-	1.1E-11	-
HHGPLC-2	L-19	8.1E-09	0.00010	1.3E-08	4.2E-08	0.00000015	0.00000072	1.6E-09	0.0000091	0.00000021	3.6E-08	0.0000013	0.00000049	2.6E-08	-	-	1.1E-11	-
HHGPLC-2	L-20	8.1E-09	0.00010	2.0E-08	1.6E-08	0.00000012	0.00000062	6.5E-09	0.0000088	0.00000039	3.3E-08	0.0000011	0.00000052	8.1E-09	-	-	1.1E-11	-
HHGPLC-2	L-21	8.1E-09	0.000098	2.3E-08	2.9E-08	0.00000012	0.00000065	1.6E-09	0.0000091	0.00000019	3.2E-08	0.00000071	0.00000052	8.4E-08	-	-	8.8E-12	-
HHGPLC-3	L-1	0.000013	0.0018	0.000012	0.00014	0.000014	0.000093	0.00000042	0.0011	0.000025	0.00000085	0.0012	0.000073	0.000053	-	-	2.2E-09	-
HHGPLC-3	L-2	0.00000024	0.00061	0.0000002	0.0000012	0.0000020	0.0000098	4.9E-08	0.00014	0.0000020	0.00000039	0.000050	0.0000059	0.00000024	-	-	1.6E-10	-
HHGPLC-3	L-3	0.00000088	0.00061	0.00000053	0.000011	0.0000018	0.000011	4.4E-08	0.00011	0.0000030	0.00000035	0.000052	0.0000073	0.00000071	-	-	3.6E-10	-
HHGPLC-3	L-4	4.4E-08	0.00050	5.3E-08	0.00000028	0.00000056	0.0000035	8.8E-09	0.000035	0.0000014	0.00000018	0.0000058	0.0000021	0.00000028	-	-	5.2E-11	-
HHGPLC-3	L-5	3.2E-08	0.00046	5.2E-08	0.00000052	0.00000042	0.0000034	6.5E-09	0.000026	0.0000014	0.00000014	0.0000038	0.0000016	3.2E-08	-	-	2.9E-11	-
HHGPLC-3	L-6	1.6E-08	0.00038	3.2E-08	0.00000017	0.00000028	0.0000025	3.2E-09	0.000017	0.0000010	0.00000011	0.0000036	0.0000011	5.1E-08	-	-	1.6E-11	-
HHGPLC-3	L-7	1.6E-08	0.00038	2.6E-08	5.9E-08	0.00000028	0.0000025	3.3E-09	0.000017	0.00000091	9.8E-08	0.0000027	0.0000012	1.6E-08	-	-	1.7E-11	-
HHGPLC-3	L-8	3.3E-08	0.00040	3.9E-08	7.8E-08	0.00000034	0.0000027	6.5E-09	0.000021	0.0000013	0.00000012	0.0000029	0.0000016	0.00000038	-	-	3.5E-11	-
HHGPLC-3	L-9	1.6E-08	0.00032	3.2E-08	6.5E-08	0.00000025	0.0000021	3.2E-09	0.000016	0.00000091	9.1E-08	0.0000025	0.0000011	3.9E-08	-	-	2.8E-11	-
HHGPLC-3	L-10	1.6E-08	0.00030	2.6E-08	0.00000011	0.00000025	0.0000019	3.2E-09	0.000014	0.00000091	8.4E-08	0.0000023	0.0000011	3.2E-08	-	-	1.9E-11	-
HHGPLC-3	L-11	1.6E-08	0.00026	3.3E-08	0.00000011	0.00000024	0.0000018	3.3E-09	0.000014	0.00000085	7.8E-08	0.0000026	0.0000010	5.2E-08	-	-	1.9E-11	-
HHGPLC-3	L-12	1.6E-08	0.00026	2.6E-08	9.1E-08	0.00000024	0.0000017	3.2E-09	0.000014	0.00000091	7.8E-08	0.0000016	0.0000011	1.6E-08	-	-	1.8E-11	-
HHGPLC-3	L-13	1.6E-08	0.00022	2.6E-08	9.1E-08	0.00000024	0.0000016	3.3E-09	0.000014	0.00000055	7.8E-08	0.0000023	0.0000010	1.6E-08	-	-	1.9E-11	-
HHGPLC-3	L-14	1.6E-08	0.00020	2.0E-08	5.9E-08	0.00000023	0.0000014	3.3E-09	0.000014	0.00000059	7.8E-08	0.0000014	0.0000010	1.6E-08	-	-	1.8E-11	-
HHGPLC-3	L-15	1.6E-08	0.00018	2.0E-08	5.2E-08	0.00000021	0.0000012	3.3E-09	0.000012	0.00000056	6.5E-08	0.0000012	0.00000091	0.00000022	-	-	1.5E-11	-
HHGPLC-3	L-16	1.6E-08	0.00017	1.9E-08	4.5E-08	0.00000021	0.0000010	3.2E-09	0.000012	0.0000004	6.5E-08	0.0000018	0.00000084	0.00000011	-	-	1.7E-11	-
HHGPLC-3	L-17	1.6E-08	0.00017	2.6E-08	0.00000026	0.00000021	0.0000012	3.3E-09	0.000012	0.00000035	5.9E-08	0.0000020	0.00000085	7.8E-08	-	-	1.7E-11	-
HHGPLC-3	L-18	8.1E-09	0.00013	1.3E-08	3.9E-08	0.00000015	0.00000071	1.6E-09	0.0000084	0.00000025	3.9E-08	0.00000075	0.00000058	8.1E-09	-	-	1.1E-11	-
HHGPLC-3	L-19	8.1E-09	0.00011	1.3E-08	7.5E-08	0.00000015	0.00000075	1.6E-09	0.0000084	0.00000023	3.9E-08	0.0000014	0.00000052	2.9E-08	-	-	1.1E-11	-
HHGPLC-3	L-20	8.1E-09	0.00011	1.9E-08	2.3E-08	0.00000013	0.00000064	1.6E-09	0.0000084	0.00000048	3.5E-08	0.0000011	0.00000055	8.1E-09	-	-	1.1E-11	-
HHGPLC-3	L-21	8.1E-09	0.00010	1.6E-08	3.6E-08	0.00000013	0.00000068	3.3E-09	0.0000085	0.00000021	3.6E-08	0.0000010	0.00000052	3.9E-08	-	-	8.8E-12	-
HHGPLC-4	L-1	0.0000022	0.0011	0.0000043	0.000023	0.0000095	0.000055	0.00000043	0.00062	0.0000069	0.00000087	0.00026	0.000036	0.000053	-	-	2.3E-09	-
HHGPLC-4	L-2	0.00000024	0.00060	0.00000019	0.0000032	0.0000020	0.000010	4.7E-08	0.00014	0.0000023	0.00000038	0.000041	0.0000069	0.00000076	-	-	2.1E-10	-
HHGPLC-4	L-3	0.00000053	0.00058	0.00000035	0.0000061	0.0000020	0.000011	4.4E-08	0.00012	0.0000027	0.00000035	0.000040	0.0000075	0.00000044	-	-	4.0E-10	-
HHGPLC-4	L-4	4.3E-08	0.00048	5.2E-08	0.00000019	0.00000052	0.0000035	8.7E-09	0.000035	0.0000014	0.00000017	0.0000049	0.0000019	0.00000014	-	-	3.8E-11	-
HHGPLC-4	L-5	3.2E-08	0.00049	3.9E-08	0.0000004	0.00000043	0.0000034	6.5E-09	0.000026	0.0000017	0.00000014	0.0000036	0.0000017	6.5E-08	-	-	3.1E-11	-
HHGPLC-4	L-6	1.6E-08	0.00043	2.6E-08	8.4E-08	0.00000029	0.0000028	3.2E-09	0.000017	0.0000012	0.00000011	0.0000031	0.0000012	4.5E-08	-	-	1.7E-11	-
HHGPLC-4	L-7	1.6E-08	0.00042	7.1E-08	9.7E-08	0.00000029	0.0000028	3.2E-09	0.000016	0.0000010	0.0000001	0.0000023	0.0000012	1.6E-08	-	-	1.8E-11	-
HHGPLC-4	L-8	7.8E-08	0.00042	7.8E-08	0.00000099	0.00000036	0.0000029	6.5E-09	0.000021	0.0000016	0.00000013	0.0000036	0.0000017	0.00000016	-	-	3.5E-11	-
HHGPLC-4	L-9	4.5E-08	0.00032	5.1E-08	0.00000056	0.00000026	0.0000023	3.2E-09	0.000015	0.0000011	9.6E-08	0.0000028	0.0000012	7.1E-08	-	-	2.6E-11	-
HHGPLC-4	L-10	1.6E-08	0.00032	3.9E-08	0.00000033	0.00000025	0.0000020	3.3E-09	0.000015	0.00000098	9.1E-08	0.0000021	0.0000012	5.9E-08	-	-	1.9E-11	-
HHGPLC-4	L-11	1.6E-08	0.00027	2.6E-08	8.5E-08	0.00000023	0.0000019	3.3E-09	0.000014	0.00000078	7.8E-08	0.0000018	0.0000011	3.3E-08	-	-	1.9E-11	-
HHGPLC-4	L-12	1.6E-08	0.00026	2.6E-08	0.0000001	0.00000025	0.0000017	3.2E-09	0.000014	0.00000097	8.4E-08	0.0000017	0.0000011	1.6E-08	-	-	1.8E-11	-
HHGPLC-4	L-13	1.6E-08	0.00021	1.9E-08	6.5E-08	0.00000024	0.0000015	3.2E-09	0.000014	0.00000055	7.8E-08	0.0000013	0.0000010	3.9E-08	-	-	1.8E-11	-
HHGPLC-4	L-14	1.6E-08	0.00020	2.0E-08	0.0000001	0.00000024	0.0000014	3.3E-09	0.000014	0.00000065	7.8E-08	0.0000014	0.0000010	1.6E-08	-	-	2.1E-11	-
HHGPLC-4	L-15	1.6E-08	0.00018	2.0E-08	7.2E-08	0.00000022	0.0000012	3.3E-09	0.000013	0.0000005	6.5E-08	0.0000012	0.00000091	6.5E-08	-	-	1.8E-11	-
HHGPLC-4	L-16	1.6E-08	0.00017	2.0E-08	9.8E-08	0.00000021	0.0000010	3.3E-09	0.000013	0.00000038	6.5E-08	0.0000012	0.00000098	9.1E-08	-	-	1.6E-11	-
HHGPLC-4	L-17	1.6E-08	0.00016	2.0E-08	0.00000021	0.0000002	0.0000012	3.3E-09	0.000012	0.00000031	5.9E-08	0.0000012	0.00000091	6.5E-08	-	-	1.8E-11	-
HHGPLC-4	L-18	8.1E-09	0.00013	1.6E-08	0.0000001	0.00000015	0.00000068	1.6E-09	0.0000084	0.00000026	3.9E-08	0.0000013	0.00000058	8.1E-09	-	-	1.2E-11	-
HHGPLC-4	L-19	8.1E-09	0.00011	1.3E-08	9.1E-08	0.00000015	0.00000075	1.6E-09	0.0000088	0.00000024	3.9E-08	0.00000078	0.00000059	4.6E-08	-	-	8.8E-12	-
HHGPLC-4	L-20	8.1E-09	0.00011	1.3E-08	2.3E-08	0.00000013	0.00000065	1.6E-09	0.0000084	0.00000039	3.6E-08	0.00000071	0.00000058	8.1E-09	-	-	1.2E-11	-
HHGPLC-4	L-21	8.1E-09	0.00010	1.6E-08	2.6E-08	0.00000013	0.00000065	1.6E-09	0.0000088	0.00000019	3.6E-08	0.0000010	0.00000052	3.6E-08	-	-	1.1E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HHGPHC-1	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4233	1.00	4.2	0.044	9.6	0.85	1260	0.0069	0.18	0.15	0.028	0.0069	1.5	0.51	0.21	0.0028
HHGPHC-1	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4437	1.00	4.4	0.044	10	0.85	1260	0.00063	0.10	0.00063	0.044	0.010	0.71	0.26	0.10	0.0038
HHGPHC-1	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4443	1.00	4.4	0.044	10	0.85	1260	0.00058	0.17	0.00058	0.039	0.035	0.52	0.18	0.072	0.0012
HHGPHC-1	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1260	0.00012	0.068	0.00012	0.0083	0.018	0.27	0.098	0.039	0.00093
HHGPHC-1	L-5	2019-11-12	21	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.85	1260	0.000041	0.044	0.000041	0.0027	0.013	0.12	0.055	0.022	0.00025
HHGPHC-1	L-6	2019-11-26	35	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.85	1260	0.000041	0.031	0.000041	0.0029	0.0090	0.086	0.052	0.021	0.00017
HHGPHC-1	L-7	2019-12-10	49	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	0.000041	0.024	0.000041	0.0039	0.0059	0.072	0.052	0.021	0.000083
HHGPHC-1	L-8	2019-12-17	56	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.85	1260	0.000083	0.039	0.000083	0.0058	0.0099	0.083	0.062	0.025	0.000083
HHGPHC-1	L-9	2019-12-31	70	0.076	0.15	0.00067	4443	1.00	4.4	0.044	10	0.85	1260	0.000041	0.018	0.000041	0.0026	0.0047	0.057	0.044	0.018	0.000041
HHGPHC-1	L-10	2020-01-14	84	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	0.000041	0.020	0.000041	0.0030	0.0051	0.053	0.040	0.016	0.000041
HHGPHC-1	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	0.000041	0.020	0.000041	0.0017	0.0059	0.051	0.041	0.016	0.000083
HHGPHC-1	L-12	2020-02-11	112	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	0.000041	0.014	0.000041	0.0035	0.0029	0.047	0.037	0.015	0.000041
HHGPHC-1	L-13	2020-02-25	126	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.85	1260	0.000041	0.017	0.000041	0.0025	0.0043	0.047	0.036	0.015	0.000041
HHGPHC-1	L-14	2020-03-10	140	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	0.000041	0.015	0.000041	0.0022	0.0039	0.043	0.032	0.013	0.000041
HHGPHC-1	L-15	2020-03-24	154	0.076	0.15	0.00067	4444	1.00	4.4	0.044	10	0.85	1260	0.000041	0.016	0.000041	0.0026	0.0038	0.042	0.032	0.013	0.000083
HHGPHC-1	L-16	2020-04-07	168	0.076	0.15	0.00067	4447	1.00	4.4	0.044	10	0.85	1260	0.000041	0.016	0.000041	0.0027	0.0061	0.071	0.052	0.021	0.000041
HHGPHC-1	L-17	2020-04-21	182	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1260	0.000041	0.014	0.000041	0.0027	0.0031	0.040	0.029	0.011	0.000041
HHGPHC-2	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4229	1.00	4.2	0.044	9.5	0.84	1251	0.0069	0.17	0.14	0.028	0.0069	1.3	0.55	0.22	0.0055
HHGPHC-2	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4439	1.00	4.4	0.044	10	0.84	1251	0.00063	0.099	0.00063	0.039	0.011	0.71	0.28	0.11	0.0025
HHGPHC-2	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.84	1251	0.00058	0.16	0.00058	0.042	0.030	0.51	0.18	0.073	0.0023
HHGPHC-2	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.84	1251	0.00012	0.065	0.00012	0.0086	0.017	0.27	0.095	0.038	0.00070
HHGPHC-2	L-5	2019-11-12	21	0.076	0.15	0.00067	4447	1.00	4.4	0.044	10	0.84	1251	0.000041	0.042	0.000041	0.0029	0.013	0.12	0.054	0.022	0.00025
HHGPHC-2	L-6	2019-11-26	35	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	0.000041	0.029	0.000041	0.0027	0.0085	0.087	0.054	0.021	0.00017
HHGPHC-2	L-7	2019-12-10	49	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.84	1251	0.000041	0.022	0.000041	0.0027	0.0061	0.071	0.052	0.021	0.000041
HHGPHC-2	L-8	2019-12-17	56	0.076	0.15	0.00067	4446	1.00	4.5	0.044	10	0.84	1251	0.000083	0.037	0.000083	0.0048	0.0099	0.081	0.064	0.026	0.000083
HHGPHC-2	L-9	2019-12-31	70	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.84	1251	0.000041	0.019	0.000041	0.0033	0.0045	0.057	0.044	0.018	0.000041
HHGPHC-2	L-10	2020-01-14	84	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.84	1251	0.000041	0.019	0.000041	0.0024	0.0051	0.051	0.039	0.016	0.000041
HHGPHC-2	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	0.000041	0.019	0.000041	0.0021	0.0054	0.050	0.041	0.016	0.000041
HHGPHC-2	L-12	2020-02-11	112	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	0.000041	0.013	0.000041	0.0028	0.0029	0.046	0.036	0.015	0.000041
HHGPHC-2	L-13	2020-02-25	126	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.84	1251	0.000041	0.017	0.000041	0.0027	0.0041	0.046	0.036	0.014	0.000041
HHGPHC-2	L-14	2020-03-10	140	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	0.000041	0.016	0.000041	0.0026	0.0038	0.042	0.032	0.013	0.000083
HHGPHC-2	L-15	2020-03-24	154	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	0.000041	0.016	0.000041	0.0018	0.0046	0.042	0.031	0.012	0.000041
HHGPHC-2	L-16	2020-04-07	168	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	0.000041	0.014	0.000041	0.0033	0.0029	0.040	0.029	0.011	0.000041
HHGPHC-2	L-17	2020-04-21	182	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	0.000041	0.014	0.000041	0.0031	0.0031	0.040	0.030	0.012	0.000041
HHGPHC-3	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4234	1.00	4.2	0.044	9.6	0.85	1261	0.0069	0.15	0.055	0.069	0.0069	1.4	0.55	0.22	0.0028
HHGPHC-3	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1261	0.00063	0.082	0.00063	0.035	0.0076	0.73	0.28	0.11	0.0025
HHGPHC-3	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4446	1.00	4.5	0.044	10	0.85	1261	0.00058	0.15	0.00058	0.036	0.030	0.51	0.18	0.073	0.0012
HHGPHC-3	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4444	1.00	4.4	0.044	10	0.85	1261	0.00012	0.064	0.00012	0.0086	0.017	0.26	0.095	0.038	0.00070
HHGPHC-3	L-5	2019-11-12	21	0.076	0.15	0.00067	4447	1.00	4.4	0.044	10	0.85	1261	0.000041	0.042	0.000041	0.0036	0.012	0.12	0.053	0.021	0.00025
HHGPHC-3	L-6	2019-11-26	35	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	0.000041	0.032	0.000041	0.0028	0.0092	0.085	0.054	0.022	0.00017
HHGPHC-3	L-7	2019-12-10	49	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	0.000041	0.022	0.000041	0.0030	0.0059	0.071	0.052	0.021	0.000041
HHGPHC-3	L-8	2019-12-17	56	0.076	0.15	0.00067	4447	1.00	4.5	0.044	10	0.85	1261	0.000083	0.037	0.000083	0.0041	0.010	0.080	0.064	0.026	0.000083
HHGPHC-3	L-9	2019-12-31	70	0.076	0.15	0.00067	4444	1.00	4.4	0.044	10	0.85	1261	0.000041	0.019	0.000041	0.0031	0.0046	0.057	0.044	0.018	0.000041
HHGPHC-3	L-10	2020-01-14	84	0.076	0.15	0.00067	4438	1.00	4.4	0.044	10	0.85	1261	0.000041	0.019	0.000041	0.0023	0.0051	0.052	0.039	0.016	0.000041
HHGPHC-3	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	0.000041	0.020	0.000041	0.0024	0.0055	0.050	0.041	0.016	0.000041
HHGPHC-3	L-12	2020-02-11	112	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	0.000041	0.013	0.000041	0.0027	0.0028	0.048	0.037	0.015	0.000041
HHGPHC-3	L-13	2020-02-25	126	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	0.000041	0.017	0.000041	0.0033	0.0041	0.047	0.037	0.015	0.000041
HHGPHC-3	L-14	2020-03-10	140	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.85	1261	0.000041	0.015	0.000041	0.0024	0.0039	0.043	0.032	0.013	0.000041
HHGPHC-3	L-15	2020-03-24	154	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	0.000041	0.017	0.000041	0.0022	0.0045	0.042	0.032	0.013	0.000041
HHGPHC-3	L-16	2020-04-07	168	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	0.000041	0.014	0.000041	0.0027	0.0031	0.040	0.029	0.012	0.000041
HHGPHC-3	L-17	2020-04-21	182	0.076	0.15	0.00067	4452	1.00	4.5	0.044	10	0.85	1261	0.000042	0.015	0.000042	0.0031	0.0032	0.043	0.030	0.012	0.000042
HHGPHC-4	L-1	2019-10-22	0.080	0.076	0.15	0.00068	4275	1.00	4.3	0.045	9.5	0.85	1252	0.0069	0.11	0.0069	0.069	0.0069	1.5	0.51	0.21	0.0028
HHGPHC-4	L-2	2019-10-23	1.0	0.076	0.15	0.00068	4489	1.00	4.5	0.045	10	0.85	1252	0.00063	0.11	0.00063	0.037	0.018	0.69	0.26	0.10	0.0025
HHGPHC-4	L-3	2019-10-24	2.0	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.00058	0.17	0.00058	0.041	0.036	0.51	0.19	0.074	0.0023
HHGPHC-4	L-4	2019-10-29	7.0	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	0.00012	0.063	0.00012	0.0079	0.017	0.27	0.100	0.040	0.00093
HHGPHC-4	L-5	2019-11-12	21	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.000041	0.045	0.000041	0.0026	0.014	0.13	0.057	0.023	0.00025
HHGPHC-4	L-6	2019-11-26	35	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	0.000041	0.033	0.000041	0.0027	0.0096	0.089	0.055	0.022	0.00017
HHGPHC-4	L-7	2019-12-10	49	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.000041	0.022	0.000041	0.0027	0.0061	0.072	0.053	0.021	0.000041
HHGPHC-4	L-8	2019-12-17	56	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	0.000083	0.038	0.000083	0.0058	0.0096	0.082	0.064	0.026	0.000083
HHGPHC-4	L-9	2019-12-31	70	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.000041	0.017	0.000041	0.0027	0.0044	0.058	0.045	0.018	0.000041
HHGPHC-4	L-10	2020-01-14	84	0.076	0.15	0.00068	4486	1.00	4.5	0.045	10	0.85	1252	0.000041	0.019	0.000041	0.0026	0.0050	0.051	0.041	0.016	0.000041
HHGPHC-4	L-11	2020-01-28	98	0.076	0.15	0.00068	4780	1.00	4.8	0.045	11	0.85	1252	0.000044	0.021	0.000044	0.0028	0.0056	0.053	0.044	0.017	0.000044
HHGPHC-4	L-12	2020-02-11	112	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.000041	0.013	0.000041	0.0026	0.0028	0.047	0.038	0.015	0.000083
HHGPHC-4	L-13	2020-02-25	126	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	0.000041	0.017	0.000041	0.0030	0.0041	0.048	0.036	0.015	0.000041
HHGPHC-4	L-14	2020-03-10	140	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	0.000041	0.016	0.000041	0.0026	0.0038	0.043	0.032	0.013	0.000041
HHGPHC-4	L-15	2020-03-24	154	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	0.000041	0.017	0.000041	0.0022	0.0045	0.042	0.032	0.013	0.000041
HHGPHC-4	L-16	2020-04-07	168	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	0.000041	0.014	0.000041	0.0028	0.0031	0.040	0.030	0.012	0.000041
HHGPHC-4	L-17	2020-04-21	182	0.076	0.15	0.00068	4497	1.00	4.5	0.045	10	0.85	1252	0.000042	0.016	0.000042	0.0035	0.0033	0.041	0.029	0.012	0.000042

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-P/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHGPHC-1	L-1	0.00028	0.094	0.00069	0.17	0.000069	0.000063	0.000062	0.000069	0.83	0.00000035	0.0021	0.00014	0.000069	0.000098	0.00000069	6.9E-08	0.0000014	0.00017	0.000014	0.00050	6.9E-09
HHGPHC-1	L-2	0.000088	0.043	0.00013	0.098	0.000088	0.0000057	0.0000057	0.0000063	0.35	3.1E-08	0.00094	0.000025	0.0000063	0.000044	6.3E-08	6.3E-08	0.00000013	0.000055	0.0000013	0.000035	6.3E-10
HHGPHC-1	L-3	0.000058	0.027	0.000058	0.077	0.000035	0.0000053	0.0000052	0.0000058	0.21	2.9E-08	0.00065	0.000013	0.0000058	0.000036	5.8E-08	2.3E-08	5.8E-08	0.000035	0.00000058	0.000014	5.8E-10
HHGPHC-1	L-4	0.000037	0.013	0.000012	0.043	0.000021	0.0000011	0.0000010	0.0000012	0.11	5.8E-09	0.000063	0.0000093	0.0000012	0.000012	1.2E-08	1.2E-08	1.2E-08	0.000025	0.0000003	0.0000014	1.2E-10
HHGPHC-1	L-5	0.000016	0.0041	0.0000041	0.015	0.000016	0.00000038	0.00000037	0.00000041	0.053	2.1E-09	0.0000042	0.0000045	0.00000041	0.0000047	4.1E-09	7.5E-09	8.3E-09	0.000012	0.00000018	0.00000036	8.3E-11
HHGPHC-1	L-6	0.000012	0.0013	0.0000041	0.0056	0.000012	0.00000038	0.0000015	0.00000041	0.035	2.1E-09	0.0000048	0.0000027	0.00000041	0.0000053	4.1E-09	4.1E-09	4.1E-09	0.0000069	0.00000017	0.00000036	4.1E-11
HHGPHC-1	L-7	0.000012	0.00048	0.0000041	0.0020	0.0000083	0.00000038	0.00000037	0.0000017	0.027	2.1E-09	0.0000064	0.0000017	0.00000041	0.0000057	4.1E-09	8.3E-10	4.1E-09	0.0000049	0.00000013	0.0000004	4.1E-11
HHGPHC-1	L-8	0.000013	0.00028	0.0000083	0.0010	0.000015	0.00000075	0.00000075	0.0000033	0.027	4.1E-09	0.000045	0.0000015	0.00000083	0.000012	8.3E-09	8.3E-10	8.3E-09	0.0000048	0.00000017	0.0000012	8.3E-11
HHGPHC-1	L-9	0.0000091	0.00014	0.0000041	0.00043	0.0000033	0.00000038	0.00000037	0.0000033	0.022	2.1E-09	0.0000099	0.0000011	0.00000041	0.0000055	4.1E-09	1.7E-09	4.1E-09	0.0000035	0.00000012	0.00000051	4.1E-11
HHGPHC-1	L-10	0.0000083	0.000099	0.0000041	0.00021	0.000012	0.00000038	0.00000037	0.00000041	0.020	2.1E-09	0.000012	0.00000083	0.00000041	0.0000060	4.1E-09	2.5E-09	4.1E-09	0.0000032	0.00000011	0.00000052	4.1E-11
HHGPHC-1	L-11	0.0000075	0.000075	0.0000041	0.00012	0.0000041	0.00000038	0.0000011	0.00000041	0.019	2.1E-09	0.000015	0.00000075	0.00000041	0.0000059	4.1E-09	4.1E-10	4.1E-09	0.0000030	9.9E-08	0.00000075	4.1E-11
HHGPHC-1	L-12	0.0000083	0.000058	0.0000041	0.000075	0.000013	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000017	0.00000065	0.00000041	0.0000060	4.1E-09	4.1E-10	4.1E-09	0.0000027	9.9E-08	0.00000051	4.1E-11
HHGPHC-1	L-13	0.0000091	0.000050	0.0000041	0.000066	0.0000100	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000021	0.0000006	0.00000041	0.0000058	4.1E-09	4.1E-10	4.1E-09	0.0000025	9.1E-08	0.00000061	4.1E-11
HHGPHC-1	L-14	0.0000050	0.000050	0.0000041	0.000050	0.000013	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000023	0.00000054	0.00000041	0.0000061	4.1E-09	8.3E-10	4.1E-09	0.0000022	1.0E-07	0.00000082	4.1E-11
HHGPHC-1	L-15	0.0000066	0.000041	0.0000041	0.000041	0.0000033	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000027	0.00000047	0.00000041	0.0000056	4.1E-09	1.7E-09	4.1E-09	0.0000021	8.3E-08	0.00000056	4.1E-11
HHGPHC-1	L-16	0.0000066	0.000033	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.0000017	0.015	2.1E-09	0.000031	0.0000005	0.00000041	0.0000057	4.1E-09	1.7E-09	4.1E-09	0.0000021	8.3E-08	0.00000055	4.1E-11
HHGPHC-1	L-17	0.0000066	0.000033	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.00000041	0.015	2.1E-09	0.000034	0.00000046	0.00000041	0.0000058	4.1E-09	8.3E-10	4.1E-09	0.0000020	8.3E-08	0.00000078	4.1E-11
HHGPHC-2	L-1	0.00028	0.083	0.00069	0.14	0.000069	0.000063	0.000062	0.000069	0.76	0.00000035	0.0022	0.00014	0.000069	0.00010	0.00000069	0.00000028	0.0000028	0.00017	0.000017	0.00069	6.9E-09
HHGPHC-2	L-2	0.000088	0.042	0.00013	0.093	0.000088	0.0000057	0.0000057	0.0000063	0.38	3.1E-08	0.00088	0.000026	0.000013	0.000043	6.3E-08	2.5E-08	6.3E-08	0.000059	0.0000010	0.000018	6.3E-10
HHGPHC-2	L-3	0.000058	0.026	0.000058	0.074	0.000035	0.0000053	0.0000052	0.0000058	0.22	2.9E-08	0.00066	0.000012	0.0000058	0.000036	5.8E-08	2.3E-08	5.8E-08	0.000036	0.00000058	0.000014	5.8E-10
HHGPHC-2	L-4	0.000032	0.012	0.000012	0.042	0.000023	0.0000011	0.0000010	0.0000046	0.11	5.8E-09	0.000067	0.0000090	0.0000012	0.000013	1.2E-08	7.0E-09	1.2E-08	0.000026	0.0000003	0.0000020	1.2E-10
HHGPHC-2	L-5	0.000017	0.0040	0.0000041	0.015	0.000014	0.00000038	0.0000011	0.00000041	0.052	2.1E-09	0.0000044	0.0000045	0.00000041	0.0000048	4.1E-09	6.6E-09	8.3E-09	0.000012	0.00000018	0.00000042	1.7E-10
HHGPHC-2	L-6	0.0000099	0.0013	0.0000041	0.0056	0.000012	0.00000038	0.0000022	0.00000041	0.034	2.1E-09	0.0000050	0.0000026	0.00000041	0.0000054	4.1E-09	2.5E-09	4.1E-09	0.0000074	0.00000016	0.00000046	4.1E-11
HHGPHC-2	L-7	0.000012	0.00047	0.0000041	0.0020	0.0000091	0.00000038	0.00000037	0.00000041	0.027	2.1E-09	0.0000069	0.0000017	0.00000041	0.0000059	4.1E-09	2.5E-09	4.1E-09	0.0000053	0.00000013	0.00000041	4.1E-11
HHGPHC-2	L-8	0.000015	0.00028	0.0000083	0.00098	0.000015	0.00000075	0.00000075	0.00000083	0.027	4.1E-09	0.000046	0.0000014	0.00000083	0.000012	8.3E-09	1.7E-09	8.3E-09	0.0000051	0.00000015	0.0000017	8.3E-11
HHGPHC-2	L-9	0.0000083	0.00014	0.0000041	0.00042	0.0000041	0.00000038	0.00000037	0.0000041	0.022	2.1E-09	0.000012	0.0000011	0.00000041	0.0000057	4.1E-09	1.7E-09	4.1E-09	0.0000038	0.00000012	0.0000007	4.1E-11
HHGPHC-2	L-10	0.0000075	0.000091	0.0000041	0.00020	0.000012	0.00000038	0.00000037	0.00000083	0.020	2.1E-09	0.000013	0.00000091	0.00000041	0.0000060	4.1E-09	8.3E-10	4.1E-09	0.0000036	0.00000011	0.00000056	4.1E-11
HHGPHC-2	L-11	0.0000066	0.000083	0.0000041	0.00012	0.0000058	0.00000038	0.00000094	0.00000041	0.020	2.1E-09	0.000015	0.00000074	0.00000041	0.0000059	4.1E-09	4.1E-10	4.1E-09	0.0000032	9.9E-08	0.00000083	4.1E-11
HHGPHC-2	L-12	0.0000091	0.000058	0.0000041	0.000075	0.000012	0.00000038	0.00000037	0.00000041	0.018	2.1E-09	0.000018	0.00000066	0.00000041	0.0000060	4.1E-09	8.3E-10	4.1E-09	0.0000029	9.1E-08	0.00000059	4.1E-11
HHGPHC-2	L-13	0.0000058	0.000050	0.0000041	0.000066	0.000012	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000021	0.00000059	0.00000041	0.0000058	4.1E-09	8.3E-10	4.1E-09	0.0000027	1.0E-07	0.00000091	4.1E-11
HHGPHC-2	L-14	0.0000041	0.000050	0.0000041	0.000050	0.0000075	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000023	0.00000053	0.00000041	0.0000060	4.1E-09	1.7E-09	4.1E-09	0.0000025	8.3E-08	0.00000061	4.1E-11
HHGPHC-2	L-15	0.0000058	0.000041	0.0000041	0.000041	0.00000041	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000027	0.0000005	0.00000041	0.0000056	4.1E-09	4.1E-10	4.1E-09	0.0000023	7.5E-08	0.00000058	4.1E-11
HHGPHC-2	L-16	0.0000066	0.000033	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.0000017	0.015	2.1E-09	0.000032	0.00000048	0.00000041	0.0000058	4.1E-09	4.1E-10	4.1E-09	0.0000023	8.3E-08	0.00000083	4.1E-11
HHGPHC-2	L-17	0.0000066	0.000033	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.00000041	0.015	2.1E-09	0.000035	0.00000044	0.00000041	0.0000058	4.1E-09	1.7E-09	4.1E-09	0.0000022	7.5E-08	0.0000006	4.1E-11
HHGPHC-3	L-1	0.00028	0.086	0.00069	0.15	0.000069	0.000063	0.000062	0.000069	0.79	0.00000035	0.0019	0.00014	0.000069	0.00010	0.00000069	6.9E-08	0.0000014	0.00014	0.000014	0.00057	6.9E-09
HHGPHC-3	L-2	0.000088	0.043	0.00013	0.091	0.00010	0.0000057	0.0000057	0.0000063	0.38	3.2E-08	0.00079	0.000026	0.0000063	0.000042	6.3E-08	6.3E-09	6.3E-08	0.000053	0.0000010	0.000015	6.3E-10
HHGPHC-3	L-3	0.000058	0.026	0.000058	0.075	0.000046	0.0000053	0.0000052	0.0000058	0.22	2.9E-08	0.00065	0.000013	0.0000058	0.000035	5.8E-08	1.2E-08	5.8E-08	0.000033	0.00000058	0.000014	5.8E-10
HHGPHC-3	L-4	0.000037	0.012	0.000012	0.042	0.000016	0.0000011	0.0000010	0.0000012	0.11	5.8E-09	0.000067	0.0000090	0.0000012	0.000013	1.2E-08	4.6E-09	1.2E-08	0.000022	0.0000028	0.0000015	1.2E-10
HHGPHC-3	L-5	0.000017	0.0038	0.0000041	0.015	0.000012	0.00000038	0.00000037	0.00000041	0.051	2.1E-09	0.0000041	0.0000044	0.00000041	0.0000048	4.1E-09	1.7E-09	8.3E-09	0.000011	0.00000017	0.00000063	8.3E-11
HHGPHC-3	L-6	0.000012	0.0012	0.0000041	0.0055	0.000012	0.00000038	0.0000017	0.00000041	0.034	2.1E-09	0.0000051	0.0000026	0.00000041	0.0000054	4.1E-09	2.5E-09	4.1E-09	0.0000061	0.00000016	0.00000049	4.1E-11
HHGPHC-3	L-7	0.000012	0.00046	0.0000041	0.0019	0.000011	0.00000038	0.00000037	0.00000041	0.027	2.1E-09	0.0000068	0.0000017	0.00000041	0.0000059	4.1E-09	2.5E-09	4.1E-09	0.0000042	0.00000013	0.0000008	4.1E-11
HHGPHC-3	L-8	0.000015	0.00028	0.0000083	0.00096	0.000017	0.00000075	0.00000075	0.00000083	0.027	4.1E-09	0.000046	0.0000014	0.00000083	0.000012	8.3E-09	3.3E-09	8.3E-09	0.0000041	0.00000015	0.0000018	8.3E-11
HHGPHC-3	L-9	0.0000091	0.00014	0.0000041	0.00041	0.0000066	0.00000038	0.00000037	0.00000041	0.022	2.1E-09	0.000012	0.0000011	0.00000041	0.0000056	4.1E-09	8.3E-10	4.1E-09	0.0000031	0.00000011	0.00000052	4.1E-11
HHGPHC-3	L-10	0.0000066	0.000099	0.0000041	0.00020	0.000013	0.00000038	0.00000037	0.00000041	0.020	2.1E-09	0.000012	0.00000083	0.00000041	0.0000060	4.1E-09	4.1E-10	4.1E-09	0.0000028	0.00000012	0.00000091	4.1E-11
HHGPHC-3	L-11	0.0000066	0.000083	0.0000041	0.00012	0.0000066	0.00000038	0.00000075	0.00000041	0.019	2.1E-09	0.000015	0.00000074	0.00000041	0.0000059	4.1E-09	8.3E-10	4.1E-09	0.0000025	9.9E-08	0.00000067	4.1E-11
HHGPHC-3	L-12	0.0000083	0.000058	0.0000041	0.000075	0.000012	0.00000038	0.00000037	0.00000041	0.018	2.1E-09	0.000017	0.00000064	0.00000041	0.0000060	4.1E-09	4.1E-10	4.1E-09	0.0000023	9.1E-08	0.00000062	1.7E-10
HHGPHC-3	L-13	0.0000050	0.000050	0.0000041	0.000066	0.000011	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000020	0.00000058	0.00000041	0.0000056	4.1E-09	8.3E-10	4.1E-09	0.0000021	9.1E-08	0.00000059	4.1E-11
HHGPHC-3	L-14	0.0000050	0.000041	0.0000041	0.000050	0.000011	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000022	0.00000053	0.00000041	0.0000059	4.1E-09	4.1E-10	4.1E-09	0.0000019	9.1E-08	0.00000059	4.1E-11
HHGPHC-3	L-15	0.0000058	0.000041	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000026	0.0000005	0.00000041	0.0000056	4.1E-09	8.3E-10	4.1E-09	0.0000017	8.3E-08	0.00000091	4.1E-11
HHGPHC-3	L-16	0.0000066	0.000033	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.0000017	0.015	2.1E-09	0.000030	0.00000048	0.00000041	0.0000058	4.1E-09	4.1E-10	4.1E-09	0.0000017	9.1E-08	0.0000010	4.1E-11
HHGPHC-3	L-17	0.0000058	0.000033	0.0000042	0.000033	0.00000042	0.00000038	0.00000037	0.00000042	0.015	2.1E-09	0.000035	0.00000044	0.00000042	0.0000058	4.2E-09	4.2E-10	4.2E-09	0.0000017	7.5E-08	0.0000007	4.2E-11
HHGPHC-4	L-1	0.00014	0.086	0.00069	0.18	0.000069	0.000063	0.000062	0.000069	0.79	0.00000035	0.0022	0.00011	0.000069	0.00011	0.00000069	0.00000014	0.0000028	0.00017	0.000018	0.00073	6.9E-09
HHGPHC-4	L-2	0.000088	0.040	0.000063	0.088	0.00032	0.0000057	0.0000057	0.0000063	0.33	3.2E-08	0.00068	0.000023	0.0000063	0.000047	6.3E-08	6.3E-09	6.3E-08	0.000053	0.0000010	0.000028	6.3E-10
HHGPHC-4	L-3	0.000070	0.027	0.000058	0.075	0.000058	0.0000053	0.0000052	0.0000058	0.20	2.9E-08	0.00046	0.000012	0.0000058	0.000036	5.8E-08	5.8E-09	5.8E-08	0.000033	0.00000058	0.000014	5.8E-10
HHGPHC-4	L-4	0.000039	0.013	0.000012	0.042	0.000016	0.0000011	0.0000010	0.0000012	0.11	5.8E-09	0.000042	0.0000093	0.0000012	0.000012	1.2E-08	1.4E-08	1.2E-08	0.000022	0.0000003	0.0000021	1.2E-10
HHGPHC-4	L-5	0.000017	0.0041	0.0000041	0.016	0.000014	0.00000038	0.00000037	0.00000041	0.055	2.1E-09	0.0000030	0.0000047	0.00000041	0.0000047	4.1E-09	4.1E-09	8.3E-09	0.000011	0.00000017	0.00000055	8.3E-11
HHGPHC-4	L-6	0.000012	0.0013	0.0000041	0.0056	0.000013	0.00000038	0.0000013	0.00000041	0.036	2.1E-09	0.0000041	0.0000027	0.00000041	0.0000055	4.1E-09	8.3E-10	4.1E-09	0.0000063	0.00000016	0.00000036	4.1E-11
HHGPHC-4	L-7	0.000012	0.00047	0.0000041	0.0019	0.0000099	0.00000038	0.00000037	0.00000041	0.027	2.1E-09	0.0000057	0.0000017	0.00000041	0.0000059	4.1E-09	8.3E-10	4.1E-09	0.0000043	0.00000013	0.00000033	4.1E-11
HHGPHC-4	L-8	0.000012	0.00028	0.0000083	0.00098	0.000017	0.00000075	0.00000075	0.0000033	0.028	4.1E-09	0.000041	0.0000015	0.00000083	0.000012	8.3E-09	1.7E-09	8.3E-09	0.0000043	0.00000015	0.0000014	8.3E-11
HHGPHC-4	L-9	0.0000083	0.00013	0.0000041	0.00041	0.0000050	0.00000038	0.00000037	0.00000083	0.022	2.1E-09	0.0000099	0.0000011	0.00000041	0.0000057	4.1E-09	8.3E-10	4.1E-09	0.0000031	0.00000012	0.00000041	4.1E-11
HHGPHC-4	L-10	0.0000066	0.000099	0.0000041	0.00020	0.000013	0.00000038	0.00000037	0.00000041	0.021	2.1E-09	0.000012	0.00000091	0.00000041	0.0000060	4.1E-09	1.7E-09	4.1E-09	0.0000029	0.00000012	0.00000048	4.1E-11
HHGPHC-4	L-11	0.0000079	0.000088	0.0000044	0.00012	0.0000071	0.0000004	0.0000012	0.00000044	0.021	2.2E-09	0.000014	0.00000081	0.00000044	0.0000064	4.4E-09	1.8E-09	4.4E-09	0.0000027	0.00000011	0.00000047	4.4E-11
HHGPHC-4	L-12	0.0000075	0.000058	0.0000041	0.000075	0.000012	0.00000038	0.00000037	0.00000041	0.018	2.1E-09	0.000017	0.00000067	0.00000041	0.0000061	4.1E-09	8.3E-10	4.1E-09	0.0000023	9.9E-08	0.0000008	4.1E-11
HHGPHC-4	L-13	0.0000050	0.000050	0.0000041	0.000058	0.000012	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000018	0.00000061	0.00000041	0.0000058	4.1E-09	4.1E-10	4.1E-09	0.0000022	9.1E-08	0.00000056	4.1E-11
HHGPHC-4	L-14	0.0000050	0.000050	0.0000041	0.000050	0.0000083	0.00000038	0.00000037	0.00000041	0.017	2.1E-09	0.000022	0.00000053	0.00000041	0.0000061	4.1E-09	8.3E-10	4.1E-09	0.0000019	9.1E-08	0.0000006	4.1E-11
HHGPHC-4	L-15	0.0000050	0.000041	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.00000041	0.016	2.1E-09	0.000025	0.00000051	0.00000041	0.0000058	4.1E-09	4.1E-10	4.1E-09	0.0000017	9.1E-08	0.0000007	4.1E-11
HHGPHC-4	L-16	0.0000066	0.000041	0.0000041	0.000033	0.00000041	0.00000038	0.00000037	0.0000017	0.015	2.1E-09	0.000028	0.0000005	0.00000041	0.0000060	4.1E-09	4.1E-10	4.1E-09	0.0000017	8.3E-08	0.00000068	4.1E-11
HHGPHC-4	L-17	0.0000058	0.000033	0.0000042	0.000025	0.00000042	0.00000038	0.00000037	0.00000042	0.015	2.1E-09	0.000035	0.00000043	0.00000042	0.0000059	4.2E-09	4.2E-10	4.2E-09	0.0000017	7.5E-08	0.00000051	4.2E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHGPHC-1	L-1	0.0000083	0.0085	0.0000041	0.000057	0.0000041	0.0000083	0.00000069	0.00035	0.000037	0.0000014	0.000084	0.000050	0.000017	3.4E-12	3.7E-14	4.5E-10	6.9E-14
HHGPHC-1	L-2	0.00000031	0.0023	0.00000025	0.0000064	0.00000038	0.0000018	6.3E-08	0.00021	0.0000068	0.00000076	0.0000081	0.000030	0.0000013	-	-	-	-
HHGPHC-1	L-3	0.00000029	0.0013	0.00000012	0.0000058	0.00000012	0.0000012	5.8E-08	0.00017	0.0000039	0.0000007	0.0000063	0.000015	0.00000081	2.8E-13	1.1E-15	1.5E-10	5.8E-15
HHGPHC-1	L-4	5.8E-08	0.00088	4.6E-08	0.0000063	2.3E-08	0.00000086	2.3E-08	0.00012	0.0000021	0.00000044	0.0000025	0.0000039	0.00000012	-	-	-	-
HHGPHC-1	L-5	2.1E-08	0.00043	3.3E-08	0.0000048	8.3E-09	0.00000043	4.1E-09	0.000076	0.00000099	0.00000017	0.0000012	0.00000099	6.6E-08	-	-	-	-
HHGPHC-1	L-6	2.1E-08	0.00024	2.5E-08	0.0000037	8.3E-09	0.00000025	4.1E-09	0.000069	0.00000068	0.00000011	0.00000091	0.00000083	5.0E-08	5.9E-16	7.8E-17	1.7E-11	7.5E-16
HHGPHC-1	L-7	2.1E-08	0.00016	1.7E-08	0.0000030	8.3E-09	0.00000017	4.1E-09	0.000060	0.00000055	7.5E-08	0.00000078	0.00000077	5.8E-08	-	-	-	-
HHGPHC-1	L-8	4.1E-08	0.00014	1.7E-08	0.0000031	6.6E-08	0.00000017	8.3E-09	0.000063	0.0000004	8.3E-08	0.0000011	0.0000013	0.00000012	-	-	-	-
HHGPHC-1	L-9	2.1E-08	0.00011	1.7E-08	0.0000020	1.7E-08	0.00000012	4.1E-09	0.000044	0.00000037	4.1E-08	0.0000006	0.00000083	2.1E-08	9.8E-14	9.7E-17	2.1E-11	1.7E-14
HHGPHC-1	L-10	2.1E-08	0.000093	1.7E-08	0.0000019	1.7E-08	0.00000012	4.1E-09	0.000041	0.00000025	3.3E-08	0.00000066	0.00000083	4.1E-08	-	-	-	-
HHGPHC-1	L-11	2.1E-08	0.000082	1.7E-08	0.0000019	1.7E-08	9.9E-08	4.1E-09	0.000039	0.00000022	2.5E-08	0.00000062	0.00000091	2.1E-08	-	-	-	-
HHGPHC-1	L-12	2.1E-08	0.000071	1.7E-08	0.0000017	2.5E-08	9.1E-08	4.1E-09	0.000036	0.00000022	2.5E-08	0.00000061	0.00000091	6.6E-08	6.5E-14	4.9E-17	2.2E-11	2.5E-15
HHGPHC-1	L-13	2.1E-08	0.000065	8.3E-09	0.0000016	2.5E-08	8.3E-08	4.1E-09	0.000032	0.00000023	2.5E-08	0.00000061	0.00000091	2.1E-08	-	-	-	-
HHGPHC-1	L-14	2.1E-08	0.000058	1.7E-08	0.0000015	3.3E-08	8.3E-08	4.1E-09	0.000028	0.00000017	1.7E-08	0.00000056	0.00000091	2.1E-08	-	-	-	-
HHGPHC-1	L-15	2.1E-08	0.000053	8.3E-09	0.0000013	3.3E-08	7.5E-08	4.1E-09	0.000027	0.00000017	1.7E-08	0.00000056	0.00000099	2.1E-08	9.5E-14	9.8E-17	2.2E-11	2.9E-15
HHGPHC-1	L-16	2.1E-08	0.000051	8.3E-09	0.0000013	3.3E-08	6.6E-08	4.1E-09	0.000027	0.00000017	1.7E-08	0.00000056	0.0000011	2.1E-08	-	-	-	-
HHGPHC-1	L-17	2.1E-08	0.000048	8.3E-09	0.0000012	4.1E-08	7.5E-08	4.1E-09	0.000024	0.00000013	1.7E-08	0.00000054	0.00000099	2.1E-08	6.8E-14	9.7E-17	2.2E-11	2.9E-15
HHGPHC-2	L-1	0.000011	0.0089	0.0000041	0.000073	0.0000055	0.0000083	0.00000069	0.00036	0.000050	0.0000014	0.000087	0.000047	0.000018	3.2E-12	4.5E-14	5.2E-10	6.9E-14
HHGPHC-2	L-2	0.00000031	0.0025	0.00000013	0.0000050	0.0000005	0.0000018	6.3E-08	0.00023	0.0000078	0.00000076	0.0000059	0.000033	0.0000015	-	-	-	-
HHGPHC-2	L-3	0.00000029	0.0013	0.00000012	0.0000058	0.00000012	0.0000012	5.8E-08	0.00017	0.0000037	0.0000007	0.0000059	0.000017	0.00000029	2.7E-13	1.0E-15	1.4E-10	5.8E-15
HHGPHC-2	L-4	5.8E-08	0.00089	4.6E-08	0.0000060	2.3E-08	0.00000086	1.2E-08	0.00012	0.0000021	0.00000044	0.0000026	0.0000044	0.00000014	-	-	-	-
HHGPHC-2	L-5	2.1E-08	0.00043	3.3E-08	0.0000046	8.3E-09	0.00000043	4.1E-09	0.000075	0.00000099	0.00000017	0.0000011	0.0000011	5.0E-08	-	-	-	-
HHGPHC-2	L-6	2.1E-08	0.00024	2.5E-08	0.0000036	8.3E-09	0.00000025	4.1E-09	0.000068	0.00000066	0.00000011	0.00000083	0.00000083	5.0E-08	3.0E-16	7.3E-17	1.8E-11	6.6E-16
HHGPHC-2	L-7	2.1E-08	0.00016	1.7E-08	0.0000029	1.7E-08	0.00000017	4.1E-09	0.000059	0.00000052	7.5E-08	0.00000073	0.0000008	7.5E-08	-	-	-	-
HHGPHC-2	L-8	4.1E-08	0.00014	1.7E-08	0.0000031	6.6E-08	0.00000018	8.3E-09	0.000063	0.0000005	8.3E-08	0.0000012	0.0000014	9.9E-08	-	-	-	-
HHGPHC-2	L-9	2.1E-08	0.00011	1.7E-08	0.0000019	1.7E-08	0.00000012	4.1E-09	0.000044	0.00000033	4.1E-08	0.0000006	0.00000083	5.0E-08	9.2E-14	9.7E-17	2.2E-11	1.7E-14
HHGPHC-2	L-10	2.1E-08	0.000091	1.7E-08	0.0000019	2.5E-08	0.00000012	4.1E-09	0.000041	0.00000025	3.3E-08	0.00000066	0.00000091	5.0E-08	-	-	-	-
HHGPHC-2	L-11	2.1E-08	0.000082	8.3E-09	0.0000018	1.7E-08	9.9E-08	4.1E-09	0.000038	0.00000022	2.5E-08	0.00000061	0.00000091	2.1E-08	-	-	-	-
HHGPHC-2	L-12	2.1E-08	0.000070	1.7E-08	0.0000017	2.5E-08	8.3E-08	4.1E-09	0.000036	0.00000021	2.5E-08	0.00000061	0.00000091	4.1E-08	7.1E-14	9.8E-17	2.2E-11	2.5E-15
HHGPHC-2	L-13	2.1E-08	0.000064	1.7E-08	0.0000016	2.5E-08	8.3E-08	4.1E-09	0.000032	0.00000022	2.5E-08	0.0000006	0.00000091	2.1E-08	-	-	-	-
HHGPHC-2	L-14	2.1E-08	0.000059	8.3E-09	0.0000014	3.3E-08	7.5E-08	4.1E-09	0.000028	0.0000002	1.7E-08	0.00000053	0.00000091	2.1E-08	-	-	-	-
HHGPHC-2	L-15	2.1E-08	0.000053	4.1E-09	0.0000013	3.3E-08	7.5E-08	4.1E-09	0.000027	0.0000002	1.7E-08	0.00000057	0.00000091	2.1E-08	7.4E-14	9.8E-17	2.2E-11	2.9E-15
HHGPHC-2	L-16	2.1E-08	0.000051	8.3E-09	0.0000013	3.3E-08	6.6E-08	4.1E-09	0.000027	0.00000015	1.7E-08	0.00000058	0.0000010	2.1E-08	-	-	-	-
HHGPHC-2	L-17	2.1E-08	0.000047	4.1E-09	0.0000012	4.1E-08	7.5E-08	4.1E-09	0.000024	0.00000013	1.7E-08	0.00000053	0.0000011	2.1E-08	6.8E-14	9.8E-17	2.2E-11	2.9E-15
HHGPHC-3	L-1	0.0000097	0.0083	0.0000041	0.000058	0.0000041	0.0000069	0.00000069	0.00036	0.000035	0.0000014	0.000070	0.000044	0.000014	-	-	-	-
HHGPHC-3	L-2	0.00000032	0.0024	0.00000013	0.0000053	0.0000005	0.0000018	6.3E-08	0.00023	0.0000073	0.00000076	0.0000063	0.0000034	0.00000076	-	-	-	-
HHGPHC-3	L-3	0.00000029	0.0014	0.00000012	0.0000058	0.00000012	0.0000012	5.8E-08	0.00017	0.0000046	0.0000007	0.0000068	0.000019	0.0000007	-	-	-	-
HHGPHC-3	L-4	5.8E-08	0.00087	4.6E-08	0.0000058	2.3E-08	0.00000083	1.2E-08	0.00012	0.0000019	0.0000044	0.0000026	0.0000044	5.8E-08	-	-	-	-
HHGPHC-3	L-5	2.1E-08	0.00041	3.3E-08	0.0000046	8.3E-09	0.00000042	4.1E-09	0.000076	0.00000099	0.00000017	0.0000012	0.0000011	5.8E-08	-	-	-	-
HHGPHC-3	L-6	2.1E-08	0.00024	2.5E-08	0.0000036	8.3E-09	0.00000025	4.1E-09	0.000069	0.0000007	9.9E-08	0.00000083	0.00000083	5.8E-08	-	-	-	-
HHGPHC-3	L-7	2.1E-08	0.00016	1.7E-08	0.0000030	1.7E-08	0.00000017	4.1E-09	0.000060	0.00000056	6.6E-08	0.00000075	0.00000077	5.0E-08	-	-	-	-
HHGPHC-3	L-8	4.1E-08	0.00014	1.7E-08	0.0000032	6.6E-08	0.00000017	8.3E-09	0.000063	0.00000038	6.6E-08	0.0000012	0.0000014	9.9E-08	-	-	-	-
HHGPHC-3	L-9	2.1E-08	0.00011	1.7E-08	0.0000020	1.7E-08	0.00000012	4.1E-09	0.000045	0.00000036	4.1E-08	0.00000059	0.00000083	2.1E-08	-	-	-	-
HHGPHC-3	L-10	2.1E-08	0.000091	1.7E-08	0.0000020	2.5E-08	0.00000011	4.1E-09	0.000041	0.00000024	3.3E-08	0.00000069	0.00000091	5.0E-08	-	-	-	-
HHGPHC-3	L-11	2.1E-08	0.000082	8.3E-09	0.0000019	1.7E-08	9.9E-08	4.1E-09	0.000040	0.00000021	2.5E-08	0.00000063	0.00000091	2.1E-08	-	-	-	-
HHGPHC-3	L-12	2.1E-08	0.000070	1.7E-08	0.0000017	2.5E-08	9.1E-08	4.1E-09	0.000036	0.00000022	2.5E-08	0.0000006	0.00000091	2.1E-08	-	-	-	-
HHGPHC-3	L-13	2.1E-08	0.000064	8.3E-09	0.0000017	2.5E-08	8.3E-08	4.1E-09	0.000032	0.00000021	2.5E-08	0.00000058	0.00000091	2.1E-08	-	-	-	-
HHGPHC-3	L-14	2.1E-08	0.000058	8.3E-09	0.0000014	3.3E-08	7.5E-08	4.1E-09	0.000028	0.00000017	1.7E-08	0.00000052	0.00000091	2.1E-08	-	-	-	-
HHGPHC-3	L-15	2.1E-08	0.000052	8.3E-09	0.0000014	3.3E-08	7.5E-08	4.1E-09	0.000027	0.00000023	1.7E-08	0.00000059	0.00000091	4.1E-08	-	-	-	-
HHGPHC-3	L-16	2.1E-08	0.000053	8.3E-09	0.0000014	3.3E-08	6.6E-08	4.1E-09	0.000027	0.00000017	1.7E-08	0.00000059	0.0000010	2.1E-08	-	-	-	-
HHGPHC-3	L-17	2.1E-08	0.000047	8.3E-09	0.0000012	4.2E-08	6.6E-08	4.2E-09	0.000023	0.00000013	1.7E-08	0.00000051	0.0000010	2.1E-08	-	-	-	-
HHGPHC-4	L-1	0.000012	0.0080	0.0000041	0.000081	0.0000041	0.0000069	0.00000069	0.00039	0.000046	0.0000014	0.000087	0.000043	0.000019	-	-	-	-
HHGPHC-4	L-2	0.00000032	0.0023	0.00000025	0.0000072	0.00000038	0.0000018	6.3E-08	0.00023	0.0000068	0.00000088	0.0000077	0.000025	0.0000025	-	-	-	-
HHGPHC-4	L-3	0.00000029	0.0013	5.8E-08	0.0000077	0.00000012	0.0000012	5.8E-08	0.00019	0.0000036	0.00000081	0.0000068	0.000014	0.00000058	-	-	-	-
HHGPHC-4	L-4	5.8E-08	0.00088	4.6E-08	0.0000077	2.3E-08	0.00000084	1.2E-08	0.00012	0.0000019	0.00000044	0.0000030	0.0000037	0.00000016	-	-	-	-
HHGPHC-4	L-5	2.1E-08	0.00044	3.3E-08	0.0000053	8.3E-09	0.00000043	4.1E-09	0.000080	0.00000099	0.00000017	0.0000012	0.00000099	7.5E-08	-	-	-	-
HHGPHC-4	L-6	2.1E-08	0.00024	2.5E-08	0.0000040	8.3E-09	0.00000025	4.1E-09	0.000070	0.00000069	0.00000011	0.00000099	0.00000083	5.0E-08	-	-	-	-
HHGPHC-4	L-7	2.1E-08	0.00016	1.7E-08	0.0000031	8.3E-09	0.00000017	4.1E-09	0.000060	0.00000055	6.6E-08	0.00000081	0.0000008	7.5E-08	-	-	-	-
HHGPHC-4	L-8	4.1E-08	0.00015	1.7E-08	0.0000033	5.0E-08	0.00000017	8.3E-09	0.000063	0.0000004	8.3E-08	0.0000012	0.0000014	9.9E-08	-	-	-	-
HHGPHC-4	L-9	2.1E-08	0.00011	1.7E-08	0.0000022	1.7E-08	0.00000012	4.1E-09	0.000045	0.00000034	4.1E-08	0.00000063	0.00000083	2.1E-08	-	-	-	-
HHGPHC-4	L-10	2.1E-08	0.000092	1.7E-08	0.0000021	1.7E-08	0.00000011	4.1E-09	0.000041	0.00000022	3.3E-08	0.00000069	0.00000091	4.1E-08	-	-	-	-
HHGPHC-4	L-11	2.2E-08	0.000088	1.8E-08	0.0000020	1.8E-08	9.7E-08	4.4E-09	0.000041	0.00000019	2.6E-08	0.00000067	0.00000097	0.00000014	-	-	-	-
HHGPHC-4	L-12	2.1E-08	0.000070	1.7E-08	0.0000018	2.5E-08	9.1E-08	4.1E-09	0.000036	0.00000028	2.5E-08	0.00000062	0.00000091	2.1E-08	-	-	-	-
HHGPHC-4	L-13	2.1E-08	0.000065	8.3E-09	0.0000017	2.5E-08	8.3E-08	4.1E-09	0.000032	0.00000021	1.7E-08	0.00000058	0.0000010	2.1E-08	-	-	-	-
HHGPHC-4	L-14	2.1E-08	0.000059	8.3E-09	0.0000015	2.5E-08	7.5E-08	4.1E-09	0.000029	0.0000002	1.7E-08	0.00000051	0.00000099	2.1E-08	-	-	-	-
HHGPHC-4	L-15	2.1E-08	0.000053	8.3E-09	0.0000014	3.3E-08	7.5E-08	4.1E-09	0.000027	0.00000018	1.7E-08	0.00000058	0.0000010	2.1E-08	-	-	-	-
HHGPHC-4	L-16	2.1E-08	0.000052	8.3E-09	0.0000014	3.3E-08	6.6E-08	4.1E-09	0.000027	0.00000015	1.7E-08	0.00000056	0.0000011	2.1E-08	-	-	-	-
HHGPHC-4	L-17	2.1E-08	0.000046	8.3E-09	0.0000012	4.2E-08	6.6E-08	4.2E-09	0.000023	0.00000012	8.3E-09	0.00000051	0.0000011	2.1E-08	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HLC-S-1	L-1	2020-01-13	0.080	0.10	0.057	0.00047	573	1.00	0.57	0.0082	7.0	0.86	1842	-	0.030	0.041	0.0051	0.0051	0.56	0.38	0.15	0.0041
HLC-S-1	L-2	2020-01-14	1.0	0.10	0.057	0.00047	635	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0039	0.0049	0.00049	0.00049	0.51	0.14	0.054	0.031
HLC-S-1	L-3	2020-01-15	2.0	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.86	1842	-	0.0045	0.0054	0.00045	0.00045	0.36	0.081	0.032	0.023
HLC-S-1	L-4	2020-01-20	7.0	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0018	0.0022	0.000090	0.000090	0.20	0.039	0.015	0.018
HLC-S-1	L-5	2020-01-27	14	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0019	0.0010	0.00065	0.000065	0.16	0.031	0.012	0.013
HLC-S-1	L-6	2020-02-10	28	0.10	0.057	0.00047	636	1.0	0.64	0.0082	7.8	0.86	1842	-	0.0021	0.0019	0.00032	0.000032	0.11	0.021	0.0083	0.0072
HLC-S-1	L-7	2020-02-24	42	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0021	0.0018	0.00039	0.000032	0.091	0.019	0.0074	0.0069
HLC-S-1	L-8	2020-03-02	49	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.86	1842	-	0.0038	0.0034	0.00065	0.000065	0.097	0.020	0.0079	0.0068
HLC-S-1	L-9	2020-03-16	63	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0022	0.0019	0.00039	0.000032	0.068	0.016	0.0062	0.0049
HLC-S-1	L-10	2020-03-30	77	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0017	0.0014	0.00032	0.000032	0.064	0.014	0.0056	0.0038
HLC-S-1	L-11	2020-04-13	91	0.10	0.057	0.00047	633	1.00	0.63	0.0082	7.7	0.86	1842	-	0.0014	0.0014	0.00013	0.000032	0.059	0.013	0.0052	0.0029
HLC-S-1	L-12	2020-04-27	105	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.86	1842	-	0.0022	0.0019	0.00039	0.000032	0.054	0.012	0.0049	0.0021
HLC-S-1	L-13	2020-05-11	119	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.86	1842	-	0.0021	0.0018	0.00039	0.000033	0.044	0.012	0.0046	0.0016
HLC-S-1	L-14	2020-05-25	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1842	-	0.0016	0.0014	0.00033	0.000033	0.044	0.011	0.0046	0.0013
HLC-S-1	L-15	2020-06-08	147	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0021	0.0017	0.00045	0.000032	0.040	0.011	0.0043	0.0010
HLC-S-1	L-16	2020-06-22	161	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.86	1842	-	0.0013	0.0011	0.00026	0.000032	0.036	0.010	0.0041	0.00084
HLC-S-1	L-17	2020-07-06	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1842	-	0.00091	0.00046	0.00033	0.000033	0.035	0.010	0.0042	0.00065
HLC-S-1	L-18	2020-08-03	203	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	0.00081	0.00097	0.000016	0.000016	0.027	0.0088	0.0035	0.00045
HLC-S-1	L-19	2020-08-31	231	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.86	1842	-	0.00081	0.00035	0.00032	0.000016	0.024	0.0087	0.0035	0.00032
HLC-S-1	L-20	2020-09-28	259	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	0.00074	0.00091	0.000016	0.000016	0.019	0.0086	0.0034	0.00019
HLC-S-2	L-1	2020-01-13	0.080	0.10	0.057	0.00047	587	1.00	0.59	0.0082	7.2	0.85	1828	-	0.042	0.052	0.0052	0.0052	1.0	0.62	0.25	0.0052
HLC-S-2	L-2	2020-01-14	1.0	0.10	0.057	0.00047	625	1.00	0.63	0.0082	7.7	0.85	1828	-	0.0039	0.0048	0.00048	0.00048	0.43	0.12	0.048	0.026
HLC-S-2	L-3	2020-01-15	2.0	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0046	0.0055	0.00046	0.00046	0.32	0.071	0.028	0.022
HLC-S-2	L-4	2020-01-20	7.0	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0035	0.0042	0.000091	0.000091	0.20	0.038	0.015	0.017
HLC-S-2	L-5	2020-01-27	14	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0030	0.0027	0.00052	0.000065	0.15	0.028	0.011	0.012
HLC-S-2	L-6	2020-02-10	28	0.10	0.057	0.00047	645	1.0	0.65	0.0082	7.9	0.85	1828	-	0.0016	0.0012	0.00039	0.000033	0.097	0.021	0.0083	0.0072
HLC-S-2	L-7	2020-02-24	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0021	0.0019	0.00033	0.000033	0.082	0.018	0.0072	0.0058
HLC-S-2	L-8	2020-03-02	49	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0028	0.0024	0.00053	0.000066	0.086	0.020	0.0079	0.0059
HLC-S-2	L-9	2020-03-16	63	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0021	0.0014	0.00052	0.000033	0.063	0.015	0.0061	0.0044
HLC-S-2	L-10	2020-03-30	77	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0021	0.0013	0.00065	0.000032	0.058	0.013	0.0053	0.0038
HLC-S-2	L-11	2020-04-13	91	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0016	0.0011	0.00039	0.000033	0.057	0.013	0.0051	0.0032
HLC-S-2	L-12	2020-04-27	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0024	0.0019	0.00046	0.000033	0.043	0.011	0.0043	0.0012
HLC-S-2	L-13	2020-05-11	119	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0019	0.0015	0.00039	0.000033	0.043	0.011	0.0043	0.0019
HLC-S-2	L-14	2020-05-25	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0019	0.0015	0.00039	0.000033	0.043	0.011	0.0043	0.0012
HLC-S-2	L-15	2020-06-08	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0015	0.00072	0.00052	0.000033	0.040	0.010	0.0042	0.0014
HLC-S-2	L-16	2020-06-22	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	0.00078	0.00033	0.00033	0.000033	0.038	0.010	0.0041	0.0012
HLC-S-2	L-17	2020-07-06	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0014	0.0014	0.00013	0.000033	0.037	0.010	0.0041	0.00098
HLC-S-2	L-18	2020-08-03	203	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.85	1828	-	0.00081	0.00058	0.00019	0.000016	0.029	0.0088	0.0035	0.00071
HLC-S-2	L-19	2020-08-31	231	0.10	0.057	0.00047	635	1.0	0.63	0.0082	7.8	0.85	1828	-	0.00080	0.00035	0.00032	0.000016	0.026	0.0081	0.0032	0.00048
HLC-S-2	L-20	2020-09-28	259	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.00081	0.00075	0.00013	0.000016	0.024	0.0085	0.0034	0.00033
HLC-S-3	L-1	2020-01-13	0.080	0.10	0.057	0.00047	600	1.00	0.60	0.0082	7.4	0.85	1825	-	0.032	0.043	0.0053	0.0053	0.85	0.30	0.12	0.012
HLC-S-3	L-2	2020-01-14	1.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.85	1825	-	0.0049	0.0059	0.00049	0.00049	0.39	0.093	0.037	0.027
HLC-S-3	L-3	2020-01-15	2.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1825	-	0.0045	0.0054	0.00045	0.00045	0.32	0.059	0.024	0.022
HLC-S-3	L-4	2020-01-20	7.0	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1825	-	0.0029	0.0036	0.000091	0.000091	0.19	0.035	0.014	0.016
HLC-S-3	L-5	2020-01-27	14	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0020	0.00078	0.00078	0.000065	0.15	0.028	0.011	0.012
HLC-S-3	L-6	2020-02-10	28	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.85	1825	-	0.0021	0.0018	0.00039	0.000033	0.097	0.020	0.0080	0.0077
HLC-S-3	L-7	2020-02-24	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1825	-	0.0016	0.0015	0.00026	0.000033	0.082	0.018	0.0070	0.0060
HLC-S-3	L-8	2020-03-02	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0031	0.0031	0.00026	0.000065	0.082	0.019	0.0076	0.0060
HLC-S-3	L-9	2020-03-16	63	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0014	0.00039	0.00065	0.000033	0.063	0.015	0.0060	0.0046
HLC-S-3	L-10	2020-03-30	77	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0018	0.0011	0.00052	0.000033	0.059	0.013	0.0054	0.0039
HLC-S-3	L-11	2020-04-13	91	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.85	1825	-	0.0019	0.0017	0.00032	0.000032	0.057	0.012	0.0050	0.0034
HLC-S-3	L-12	2020-04-27	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0023	0.0015	0.00065	0.000033	0.052	0.011	0.0046	0.0024
HLC-S-3	L-13	2020-05-11	119	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0015	0.0012	0.00033	0.000033	0.044	0.011	0.0044	0.0020
HLC-S-3	L-14	2020-05-25	133	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1825	-	0.0017	0.0021	0.000033	0.000033	0.044	0.011	0.0042	0.0016
HLC-S-3	L-15	2020-06-08	147	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0020	0.0017	0.00039	0.000033	0.041	0.010	0.0041	0.0013
HLC-S-3	L-16	2020-06-22	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0013	0.0013	0.00013	0.000033	0.039	0.0099	0.0040	0.0012
HLC-S-3	L-17	2020-07-06	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	0.0014	0.0017	0.000033	0.000033	0.037	0.0099	0.0040	0.00098
HLC-S-3	L-18	2020-08-03	203	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1825	-	0.00085	0.00055	0.00023	0.000016	0.028	0.0087	0.0035	0.00065
HLC-S-3	L-19	2020-08-31	231	0.10	0.057	0.00047	637	1.0	0.64	0.0082	7.8	0.85	1825	-	0.00087	0.00058	0.00023	0.000016	0.025	0.0084	0.0033	0.00045
HLC-S-3	L-20	2020-09-28	259	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1825	-	0.00078	0.00094	0.000016	0.000016	0.023	0.0083	0.0033	0.00026
HLC-S-4	L-1	2020-01-13	0.080	0.10	0.057	0.00047	574	1.00	0.58	0.0082	7.0	0.85	1828	-	0.041	0.051	0.0051	0.0051	0.90	0.54	0.21	0.0041
HLC-S-4	L-2	2020-01-14	1.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0088	0.011	0.00049	0.00049	0.47	0.15	0.061	0.024
HLC-S-4	L-3	2020-01-15	2.0	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.85	1828	-	0.0054	0.0063	0.00045	0.00045	0.35	0.088	0.035	0.020
HLC-S-4	L-4	2020-01-20	7.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0047	0.0052	0.00018	0.000090	0.21	0.041	0.016	0.018
HLC-S-4	L-5	2020-01-27	14	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0041	0.0037	0.00065	0.000065	0.17	0.031	0.013	0.013
HLC-S-4	L-6	2020-02-10	28	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.85	1828	-	0.0023	0.0020	0.00039	0.000033	0.11	0.021	0.0084	0.0073
HLC-S-4	L-7	2020-02-24	42	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	0.0021	0.0016	0.00045	0.000032	0.090	0.018	0.0074	0.0066
HLC-S-4	L-8	2020-03-02	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0034	0.0031	0.00052	0.000065	0.10	0.020	0.0081	0.0069
HLC-S-4	L-9	2020-03-16	63	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0025	0.0018	0.00065	0.000033	0.072	0.016	0.0063	0.0050
HLC-S-4	L-10	2020-03-30	77	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0020	0.0014	0.00052	0.000033	0.065	0.014	0.0056	0.0039
HLC-S-4	L-11	2020-04-13	91	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0020	0.0018	0.00033	0.000033	0.061	0.013	0.0054	0.0031
HLC-S-4	L-12	2020-04-27	105	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0021	0.00098	0.00078	0.000033	0.053	0.013	0.0052	0.0022
HLC-S-4	L-13	2020-05-11	119	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0016	0.00072	0.00065	0.000033	0.046	0.012	0.0048	0.0016
HLC-S-4	L-14	2020-05-25	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0015	0.00085	0.00046	0.000033	0.045	0.011	0.0046	0.0013
HLC-S-4	L-15	2020-06-08	147	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	0.0022	0.0016	0.00052	0.000033	0.040	0.011	0.0045	0.0010
HLC-S-4	L-16	2020-06-22	161	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0018	0.0014	0.00039	0.000033	0.036	0.011	0.0043	0.00078
HLC-S-4	L-17	2020-07-06	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.0015	0.0014	0.00026	0.000033	0.036	0.011	0.0044	0.00065
HLC-S-4	L-18	2020-08-03	203	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.85	1828	-	0.00082	0.00053	0.00023	0.000016	0.027	0.0097	0.0039	0.00043
HLC-S-4	L-19	2020-08-31	231	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.85	1828	-	0.00071	0.00087	0.000016	0.000016	0.024	0.0092	0.0037	0.00026
HLC-S-4	L-20	2020-09-28	259	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	0.00068	0.00085	0.000016	0.000016	0.021	0.0090	0.0036	0.00016

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg-N/m^2s	mg-N/m^2s	mg-N/m^2s	mg-P/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HLC-S-1	L-1	0.00041	0.0051	0.00051	0.069	-	-	0.000046	-	0.46	0.0000012	0.00031	0.000026	0.00010	0.000052	0.00000051	0.0000001	0.00000051	0.0000025	0.000010	0.000032	1.0E-08
HLC-S-1	L-2	0.00017	0.0023	0.00020	0.095	-	-	0.0000044	-	0.33	0.0000026	0.000015	0.000021	0.000059	0.000015	4.9E-08	3.9E-08	4.9E-08	0.00000024	0.0000013	0.0000016	6.9E-09
HLC-S-1	L-3	0.00013	0.0016	0.000090	0.072	-	-	0.0000040	-	0.23	0.0000017	0.000022	0.000016	0.000036	0.000012	4.5E-08	4.5E-08	9.0E-08	0.00000022	0.00000081	0.0000086	1.8E-09
HLC-S-1	L-4	0.000072	0.00096	0.000036	0.046	-	-	0.000081	-	0.14	0.00000034	0.0000058	0.000010	0.000016	0.0000036	9.0E-09	5.4E-09	1.8E-08	4.5E-08	0.00000016	0.0000013	9.0E-11
HLC-S-1	L-5	0.000057	0.00079	0.000026	0.037	-	-	0.000058	-	0.11	0.00000015	0.0000026	0.0000085	0.000014	0.0000028	6.5E-09	3.9E-09	1.3E-08	3.2E-08	0.0000001	0.00000022	6.5E-11
HLC-S-1	L-6	0.000037	0.00052	0.000013	0.024	-	-	0.000029	-	0.073	7.7E-08	0.0000017	0.0000059	0.000013	0.0000017	3.2E-08	1.3E-08	3.2E-08	0.00000016	6.4E-08	0.00000016	3.2E-11
HLC-S-1	L-7	0.000028	0.00045	0.000013	0.020	-	-	0.000029	-	0.060	3.9E-08	0.0000019	0.0000052	0.0000065	0.0000015	3.2E-08	3.2E-09	3.2E-08	0.00000016	6.5E-08	0.00000016	3.2E-11
HLC-S-1	L-8	0.000026	0.00051	0.000013	0.021	-	-	0.0000059	-	0.061	2.7E-08	0.0000034	0.0000060	0.000012	0.0000019	6.5E-09	6.5E-10	6.5E-09	3.2E-08	7.8E-08	0.00000018	6.5E-11
HLC-S-1	L-9	0.000019	0.00036	0.000013	0.015	-	-	0.0000029	-	0.045	1.9E-08	0.0000019	0.0000044	0.0000078	0.0000014	3.2E-09	5.8E-09	3.2E-09	1.6E-08	3.9E-08	0.00000013	3.2E-11
HLC-S-1	L-10	0.000028	0.00032	0.000013	0.013	-	-	0.0000029	-	0.041	1.4E-08	0.0000019	0.0000041	0.0000078	0.0000014	3.2E-09	5.2E-09	3.2E-09	1.6E-08	3.9E-08	0.00000012	3.2E-11
HLC-S-1	L-11	0.000031	0.00029	0.0000064	0.011	-	-	0.0000029	-	0.037	1.2E-08	0.000012	0.0000036	0.0000070	0.0000012	3.2E-09	3.2E-09	6.4E-09	1.6E-08	5.1E-08	0.00000031	3.2E-11
HLC-S-1	L-12	0.000015	0.00026	0.0000064	0.010	-	-	0.0000058	-	0.032	7.1E-09	0.0000018	0.0000033	0.0000071	0.0000012	3.2E-09	3.9E-09	3.2E-09	1.6E-08	2.6E-08	0.00000017	3.2E-11
HLC-S-1	L-13	0.000021	0.00023	0.0000065	0.0088	-	-	0.0000029	-	0.029	5.9E-09	0.0000020	0.0000030	0.0000059	0.0000010	3.3E-09	2.0E-09	3.3E-09	1.6E-08	2.6E-08	9.8E-08	3.3E-11
HLC-S-1	L-14	0.000020	0.00023	0.000013	0.0082	-	-	0.0000029	-	0.027	4.6E-09	0.0000020	0.0000028	0.0000059	0.0000010	3.3E-09	2.0E-09	3.3E-09	1.6E-08	3.3E-08	7.2E-08	3.3E-11
HLC-S-1	L-15	0.000019	0.00021	0.0000032	0.0071	-	-	0.0000029	-	0.024	4.5E-09	0.0000018	0.0000026	0.0000058	0.0000010	3.2E-09	1.3E-09	3.2E-09	1.6E-08	3.9E-08	9.1E-08	6.5E-11
HLC-S-1	L-16	0.000019	0.00019	0.0000032	0.0064	-	-	0.0000029	-	0.023	3.2E-09	0.0000018	0.0000023	0.0000058	0.0000010	3.2E-09	3.2E-10	3.2E-09	1.6E-08	3.9E-08	6.5E-08	6.5E-11
HLC-S-1	L-17	0.000018	0.00019	0.0000033	0.0059	-	-	0.000038	-	0.021	1.6E-09	0.0000020	0.0000021	0.0000059	0.00000098	3.3E-09	4.6E-09	3.3E-09	1.6E-08	2.0E-08	7.2E-08	3.3E-11
HLC-S-1	L-18	0.000011	0.00014	0.0000032	0.0043	-	-	0.0000015	-	0.017	2.3E-09	0.00000097	0.0000016	0.0000039	0.00000084	1.6E-09	2.3E-09	1.6E-09	8.1E-09	1.6E-08	6.1E-08	6.5E-11
HLC-S-1	L-19	0.0000097	0.00014	0.0000032	0.0037	-	-	0.0000015	-	0.015	8.1E-10	0.0000011	0.0000015	0.0000045	0.00000077	1.6E-09	3.9E-09	1.6E-09	8.1E-09	1.3E-08	2.3E-08	1.6E-11
HLC-S-1	L-20	0.000012	0.00013	0.0000032	0.0030	-	-	0.000025	-	0.014	8.1E-10	0.0000013	0.0000013	0.0000039	0.00000071	1.6E-09	3.2E-09	1.6E-09	8.1E-09	3.2E-08	3.9E-08	1.6E-11
HLC-S-2	L-1	0.00073	0.0062	0.0010	0.10	-	-	0.000047	-	0.79	0.0000017	0.00048	0.000040	0.00021	0.000078	0.00000052	5.2E-08	0.0000021	0.0000026	0.000011	0.000094	1.0E-08
HLC-S-2	L-2	0.00014	0.0020	0.00019	0.080	-	-	0.0000043	-	0.28	0.0000016	0.000053	0.000017	0.000048	0.000014	4.8E-08	1.9E-08	0.00000019	0.00000024	0.0000018	0.000016	3.9E-09
HLC-S-2	L-3	0.00013	0.0015	0.000091	0.068	-	-	0.0000041	-	0.22	0.0000011	0.000021	0.000015	0.000036	0.000011	4.6E-08	3.6E-08	4.6E-08	0.00000023	0.00000073	0.0000060	4.6E-10
HLC-S-2	L-4	0.000067	0.00094	0.000036	0.046	-	-	0.00000082	-	0.14	0.00000024	0.0000040	0.000010	0.000016	0.0000038	9.1E-09	1.5E-08	1.8E-08	4.5E-08	0.00000015	0.00000093	9.1E-11
HLC-S-2	L-5	0.000056	0.00071	0.000026	0.033	-	-	0.000058	-	0.10	9.2E-08	0.0000022	0.0000081	0.000013	0.0000028	6.5E-09	1.2E-08	1.3E-08	3.2E-08	0.0000001	0.00000032	6.5E-11
HLC-S-2	L-6	0.000035	0.00048	0.000013	0.021	-	-	0.000029	-	0.065	3.3E-08	0.0000023	0.0000054	0.000013	0.0000017	3.3E-08	6.5E-09	3.3E-08	0.00000016	6.5E-08	0.00000033	3.3E-11
HLC-S-2	L-7	0.000021	0.00040	0.000013	0.017	-	-	0.000029	-	0.053	2.8E-08	0.0000016	0.0000047	0.0000085	0.0000014	3.3E-09	5.2E-09	3.3E-09	1.6E-08	3.9E-08	0.00000017	3.3E-11
HLC-S-2	L-8	0.000028	0.00045	0.000013	0.018	-	-	0.0000059	-	0.054	2.5E-08	0.0000034	0.0000055	0.000011	0.0000020	6.6E-09	1.2E-08	6.6E-09	3.3E-08	7.9E-08	0.00000016	6.6E-11
HLC-S-2	L-9	0.000022	0.00032	0.0000065	0.013	-	-	0.0000030	-	0.041	1.6E-08	0.0000018	0.0000041	0.0000072	0.0000015	3.3E-09	4.6E-09	3.3E-09	1.6E-08	5.2E-08	8.5E-08	3.3E-11
HLC-S-2	L-10	0.000025	0.00029	0.000013	0.011	-	-	0.0000029	-	0.037	1.0E-08	0.0000021	0.0000040	0.0000065	0.0000013	3.2E-09	1.3E-09	3.2E-09	1.6E-08	3.2E-08	0.00000018	3.2E-11
HLC-S-2	L-11	0.000025	0.00026	0.0000065	0.011	-	-	0.0000029	-	0.034	8.5E-09	0.0000023	0.0000035	0.0000072	0.0000013	3.3E-09	3.3E-09	3.3E-09	1.6E-08	3.9E-08	0.00000018	3.3E-11
HLC-S-2	L-12	0.000011	0.00025	0.0000033	0.0099	-	-	0.0000030	-	0.031	7.2E-09	0.0000022	0.0000035	0.0000065	0.0000012	3.3E-09	3.3E-10	3.3E-09	1.6E-08	2.6E-08	9.8E-08	3.3E-11
HLC-S-2	L-13	0.000020	0.00022	0.0000065	0.0088	-	-	0.0000030	-	0.028	7.2E-09	0.0000020	0.0000031	0.0000059	0.0000010	3.3E-09	1.3E-09	3.3E-09	1.6E-08	2.6E-08	9.2E-08	3.3E-11
HLC-S-2	L-14	0.000019	0.00021	0.000013	0.0082	-	-	0.0000030	-	0.027	5.9E-09	0.0000022	0.0000029	0.0000052	0.0000011	3.3E-09	6.5E-10	3.3E-09	1.6E-08	3.3E-08	0.0000001	3.3E-11
HLC-S-2	L-15	0.000018	0.00020	0.0000033	0.0076	-	-	0.0000029	-	0.025	5.2E-09	0.0000023	0.0000028	0.0000059	0.0000011	3.3E-09	2.6E-09	3.3E-09	1.6E-08	3.3E-08	7.2E-08	6.5E-11
HLC-S-2	L-16	0.000018	0.00020	0.0000033	0.0072	-	-	0.0000030	-	0.025	4.6E-09	0.0000020	0.0000032	0.0000059	0.00000091	3.3E-09	3.9E-09	3.3E-09	1.6E-08	3.3E-08	0.00000012	6.5E-11
HLC-S-2	L-17	0.000018	0.00018	0.0000033	0.0068	-	-	0.000040	-	0.023	4.6E-09	0.0000021	0.0000025	0.0000059	0.0000010	3.3E-09	3.9E-09	3.3E-09	1.6E-08	2.6E-08	9.8E-08	6.5E-11
HLC-S-2	L-18	0.000011	0.00014	0.0000032	0.0053	-	-	0.0000015	-	0.019	3.2E-09	0.0000010	0.0000019	0.0000042	0.00000088	1.6E-09	2.3E-09	1.6E-09	8.1E-09	1.6E-08	5.2E-08	6.5E-11
HLC-S-2	L-19	0.000096	0.00013	0.0000016	0.0045	-	-	0.0000014	-	0.016	2.2E-09	0.0000011	0.0000018	0.0000042	0.00000077	1.6E-09	6.4E-10	1.6E-09	8.0E-09	1.9E-08	1.6E-08	1.6E-11
HLC-S-2	L-20	0.0000088	0.00014	0.0000033	0.0038	-	-	0.000024	-	0.016	2.0E-09	0.0000022	0.0000016	0.0000039	0.00000075	1.6E-09	1.6E-10	1.6E-09	8.1E-09	2.6E-08	5.2E-08	1.6E-11
HLC-S-3	L-1	0.00064	0.0053	0.0011	0.17	-	-	0.000048	-	0.62	0.0000051	0.00048	0.000041	0.00011	0.000059	0.00000053	5.3E-08	0.0000021	0.0000027	0.000011	0.000077	4.3E-08
HLC-S-3	L-2	0.00015	0.0021	0.000049	0.085	-	-	0.0000044	-	0.27	0.0000012	0.000042	0.000016	0.000039	0.0000098	4.9E-08	2.9E-08	0.0000002	0.00000025	0.0000012	0.0000093	2.0E-09
HLC-S-3	L-3	0.00011	0.0020	0.000091	0.064	-	-	0.0000041	-	0.20	0.00000058	0.000021	0.000013	0.000027	0.0000072	4.5E-08	4.5E-08	4.5E-08	0.00000023	0.00000045	0.0000036	4.5E-10
HLC-S-3	L-4	0.000069	0.00093	0.000036	0.043	-	-	0.00000082	-	0.13	0.00000012	0.0000056	0.0000095	0.000015	0.0000024	9.1E-09	1.6E-08	1.8E-08	4.5E-08	0.00000013	0.00000082	9.1E-11
HLC-S-3	L-5	0.000052	0.00073	0.000026	0.033	-	-	0.000059	-	0.10	7.1E-08	0.0000033	0.0000077	0.000013	0.0000018	6.5E-09	1.4E-08	2.6E-08	3.3E-08	0.00000013	0.0000010	1.3E-10
HLC-S-3	L-6	0.000034	0.00048	0.000013	0.022	-	-	0.000029	-	0.065	3.3E-08	0.0000017	0.0000053	0.000013	0.0000012	3.3E-08	6.5E-09	3.3E-08	0.00000016	6.5E-08	0.00000016	3.3E-11
HLC-S-3	L-7	0.000023	0.00041	0.000013	0.018	-	-	0.000029	-	0.054	2.5E-08	0.0000013	0.0000047	0.0000085	0.0000011	3.3E-09	3.9E-09	6.5E-09	1.6E-08	3.3E-08	0.00000018	3.3E-11
HLC-S-3	L-8	0.000027	0.00046	0.000013	0.018	-	-	0.0000059	-	0.054	2.4E-08	0.0000029	0.0000054	0.000010	0.0000016	6.5E-09	1.2E-08	6.5E-09	3.3E-08	6.5E-08	0.00000037	6.5E-11
HLC-S-3	L-9	0.000021	0.00033	0.0000065	0.013	-	-	0.0000030	-	0.042	1.3E-08	0.0000016	0.0000037	0.0000078	0.0000012	3.3E-09	3.9E-09	3.3E-09	1.6E-08	2.6E-08	9.1E-08	3.3E-11
HLC-S-3	L-10	0.000026	0.00029	0.0000065	0.012	-	-	0.0000030	-	0.039	7.9E-09	0.0000018	0.0000039	0.0000072	0.0000012	3.3E-09	3.9E-09	3.3E-09	1.6E-08	2.6E-08	0.00000013	3.3E-11
HLC-S-3	L-11	0.000025	0.00027	0.0000032	0.011	-	-	0.0000029	-	0.035	7.1E-09	0.0000018	0.0000036	0.0000078	0.0000012	3.2E-09	6.5E-10	3.2E-09	1.6E-08	2.6E-08	0.00000012	3.2E-11
HLC-S-3	L-12	0.000014	0.00025	0.0000065	0.0099	-	-	0.0000030	-	0.031	5.2E-09	0.0000018	0.0000035	0.0000072	0.0000011	3.3E-09	3.3E-09	3.3E-09	1.6E-08	2.6E-08	0.00000012	3.3E-11
HLC-S-3	L-13	0.000020	0.00022	0.0000033	0.0090	-	-	0.0000030	-	0.029	6.5E-09	0.0000016	0.0000031	0.0000059	0.00000098	3.3E-09	7.9E-09	3.3E-09	1.6E-08	2.6E-08	7.2E-08	3.3E-11
HLC-S-3	L-14	0.000020	0.00022	0.0000065	0.0085	-	-	0.0000029	-	0.028	5.9E-09	0.0000019	0.0000029	0.0000059	0.00000098	3.3E-09	3.3E-10	3.3E-09	1.6E-08	3.3E-08	0.00000011	3.3E-11
HLC-S-3	L-15	0.000018	0.00021	0.0000033	0.0079	-	-	0.0000030	-	0.025	5.9E-09	0.0000018	0.0000029	0.0000065	0.0000010	3.3E-09	1.3E-09	3.3E-09	1.6E-08	3.3E-08	0.00000014	3.3E-11
HLC-S-3	L-16	0.000019	0.00020	0.0000033	0.0075	-	-	0.0000029	-	0.025	3.9E-09	0.0000017	0.0000026	0.0000059	0.00000098	3.3E-09	4.6E-09	3.3E-09	1.6E-08	3.3E-08	0.00000012	3.3E-11
HLC-S-3	L-17	0.000018	0.00020	0.0000033	0.0069	-	-	0.000040	-	0.023	4.6E-09	0.0000027	0.0000024	0.0000059	0.00000098	3.3E-09	3.3E-10	3.3E-09	1.6E-08	5.2E-08	0.00000014	1.3E-10
HLC-S-3	L-18	0.000010	0.00015	0.0000033	0.0053	-	-	0.0000015	-	0.019	2.0E-09	0.0000010	0.0000019	0.0000046	0.00000078	1.6E-09	2.0E-09	1.6E-09	8.1E-09	1.6E-08	0.00000012	3.3E-11
HLC-S-3	L-19	0.0000084	0.00014	0.0000032	0.0044	-	-	0.0000015	-	0.016	1.6E-09	0.0000011	0.0000017	0.0000042	0.00000077	1.6E-09	1.6E-10	1.6E-09	2.9E-08	2.6E-08	0.00000022	1.6E-11
HLC-S-3	L-20	0.0000039	0.00014	0.0000033	0.0036	-	-	0.000024	-	0.015	8.1E-10	0.0000016	0.0000014	0.0000039	0.00000072	1.6E-09	1.6E-10	1.6E-09	8.1E-09	2.0E-08	3.6E-08	1.6E-11
HLC-S-4	L-1	0.00061	0.0051	0.0010	0.088	-	-	0.000046	-	0.65	0.0000016	0.00032	0.000038	0.00020	0.000071	0.00000051	5.1E-08	0.0000010	0.0000025	0.000011	0.000060	1.0E-08
HLC-S-4	L-2	0.00016	0.0022	0.00020	0.080	-	-	0.0000044	-	0.31	0.0000021	0.000030	0.000019	0.000049	0.000016	4.9E-08	9.8E-09	9.8E-08	0.00000025	0.00000088	0.0000059	4.9E-09
HLC-S-4	L-3	0.00013	0.0016	0.000090	0.066	-	-	0.0000040	-	0.22	0.0000012	0.000022	0.000015	0.000036	0.000013	4.5E-08	3.6E-08	4.5E-08	0.00000022	0.00000045	0.0000057	4.5E-10
HLC-S-4	L-4	0.000067	0.00096	0.000036	0.046	-	-	0.00000081	-	0.14	0.00000036	0.0000040	0.000010	0.000016	0.0000043	9.0E-09	7.2E-09	1.8E-08	4.5E-08	0.00000014	0.00000062	9.0E-11
HLC-S-4	L-5	0.000059	0.00080	0.000026	0.038	-	-	0.000059	-	0.12	0.00000016	0.0000026	0.0000089	0.000014	0.0000031	6.5E-09	1.3E-08	1.3E-08	3.3E-08	9.2E-08	0.00000052	6.5E-11
HLC-S-4	L-6	0.000038	0.00051	0.000013	0.025	-	-	0.000029	-	0.072	5.2E-08	0.0000018	0.0000063	0.000013	0.0000018	3.3E-08	6.5E-09	3.3E-08	0.00000016	6.5E-08	0.00000016	3.3E-11
HLC-S-4	L-7	0.000025	0.00044	0.000013	0.020	-	-	0.000029	-	0.060	3.9E-08	0.0000017	0.0000053	0.0000065	0.0000017	3.2E-08	6.5E-09	3.2E-08	0.00000016	6.5E-08	0.00000016	3.2E-11
HLC-S-4	L-8	0.000025	0.00051	0.000013	0.022	-	-	0.0000059	-	0.063	3.3E-08	0.0000040	0.0000065	0.000012	0.0000024	6.5E-09	1.4E-08	6.5E-09	3.3E-08	6.5E-08	7.8E-08	6.5E-11
HLC-S-4	L-9	0.000020	0.00035	0.000013	0.015	-	-	0.0000030	-	0.046	1.6E-08	0.0000018	0.0000046	0.0000078	0.0000016	3.3E-09	1.3E-09	3.3E-09	1.6E-08	2.6E-08	0.00000012	3.3E-11
HLC-S-4	L-10	0.000028	0.00032	0.0000065	0.013	-	-	0.0000029	-	0.042	1.1E-08	0.0000020	0.0000043	0.0000072	0.0000014	3.3E-09	5.9E-09	3.3E-09	1.6E-08	2.6E-08	0.00000022	3.3E-11
HLC-S-4	L-11	0.000027	0.00029	0.0000065	0.012	-	-	0.0000029	-	0.038	9.8E-09	0.0000020	0.0000038	0.0000078	0.0000014	3.3E-09	3.9E-09	3.3E-09	1.6E-08	3.3E-08	0.00000014	3.3E-11
HLC-S-4	L-12	0.000016	0.00029	0.0000065	0.011	-	-	0.0000029	-	0.035	7.2E-09	0.0000023	0.0000036	0.0000072	0.0000013	3.3E-09	3.9E-09	3.3E-09	1.6E-08	2.6E-08	0.0000001	3.3E-11
HLC-S-4	L-13	0.000022	0.00025	0.0000065	0.0091	-	-	0.0000029	-	0.030	5.9E-09	0.0000022	0.0000031	0.0000059	0.0000011	3.3E-09	3.3E-09	3.3E-09	5.2E-08	2.6E-08	0.00000026	3.3E-11
HLC-S-4	L-14	0.000021	0.00023	0.0000065	0.0081	-	-	0.0000030	-	0.027	5.2E-09	0.0000024	0.0000029	0.0000059	0.0000012	3.3E-09	3.3E-09	3.3E-09	1.6E-08	3.3E-08	8.5E-08	3.3E-11
HLC-S-4	L-15	0.000019	0.00022	0.0000033	0.0071	-	-	0.0000029	-	0.025	3.9E-09	0.0000022	0.0000027	0.0000059	0.0000012	3.3E-09	3.3E-09	3.3E-09	1.6E-08	3.9E-08	9.1E-08	6.5E-11
HLC-S-4	L-16	0.000020	0.00021	0.0000065	0.0064	-	-	0.0000029	-	0.023	1.6E-09	0.0000025	0.0000025	0.0000059	0.0000012	3.3E-09	1.3E-09	3.3E-09	1.6E-08	3.3E-08	0.00000021	3.3E-11
HLC-S-4	L-17	0.000019	0.00020	0.0000065	0.0060	-	-	0.000035	-	0.022	3.3E-09	0.0000031	0.0000023	0.0000059	0.0000011	3.3E-09	3.3E-10	3.3E-09	1.6E-08	3.3E-08	0.00000014	1.3E-10
HLC-S-4	L-18	0.000012	0.00014	0.0000066	0.0044	-	-	0.0000015	-	0.017	1.6E-09	0.0000012	0.0000017	0.0000043	0.00000095	1.6E-09	3.3E-10	1.6E-09	8.2E-09	1.6E-08	7.2E-08	6.6E-11
HLC-S-4	L-19	0.0000091	0.00014	0.0000032	0.0037	-	-	0.0000015	-	0.016	2.3E-09	0.0000010	0.0000014	0.0000039	0.00000094	1.6E-09	2.3E-09	1.6E-09	8.1E-09	1.9E-08	6.2E-08	3.2E-11
HLC-S-4	L-20	0.0000059	0.00013	0.0000033	0.0029	-	-	0.000024	-	0.014	8.1E-10	0.0000015	0.0000013	0.0000039	0.00000085	1.6E-09	4.2E-09	1.6E-09	8.1E-09	3.3E-08	8.1E-09	1.6E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HLC-S-1	L-1	0.0000025	0.0015	0.0000020	0.000016	0.000011	0.00013	0.00000051	0.00026	0.0000071	0.0000010	0.00011	0.0000030	0.000024	-	-	1.5E-09	-
HLC-S-1	L-2	0.00000024	0.0027	0.0000002	0.0000015	0.0000065	0.000082	4.9E-08	0.00012	0.0000071	0.00000049	0.000020	0.0000019	0.0000017	-	-	6.6E-10	-
HLC-S-1	L-3	0.00000045	0.0022	0.00000027	0.0000050	0.0000043	0.000067	4.5E-08	0.000074	0.0000058	0.00000036	0.000015	0.0000015	0.0000034	-	-	4.4E-10	-
HLC-S-1	L-4	4.5E-08	0.0015	5.4E-08	0.00000045	0.0000017	0.000040	9.0E-09	0.000038	0.0000038	0.00000016	0.0000017	0.00000096	0.00000022	-	-	2.0E-10	-
HLC-S-1	L-5	3.2E-08	0.0013	5.2E-08	0.00000019	0.0000013	0.000030	6.5E-09	0.000031	0.0000030	0.00000014	0.0000018	0.00000089	3.2E-08	-	-	1.4E-10	-
HLC-S-1	L-6	0.00000016	0.00085	3.2E-08	0.00000013	0.00000077	0.0000015	3.2E-08	0.000022	0.0000027	6.4E-08	0.0000010	0.00000051	0.00000016	-	-	8.9E-11	-
HLC-S-1	L-7	0.00000016	0.00074	3.2E-08	0.00000013	0.00000065	0.000014	3.2E-08	0.000019	0.0000024	6.5E-08	0.00000091	0.00000065	0.00000016	-	-	7.2E-11	-
HLC-S-1	L-8	3.2E-08	0.00080	2.6E-08	0.00000021	0.00000079	0.000017	6.5E-09	0.000021	0.0000023	0.0000001	0.0000013	0.0000008	0.00000016	-	-	7.7E-11	-
HLC-S-1	L-9	1.6E-08	0.00056	1.9E-08	0.00000013	0.00000058	0.000011	3.2E-09	0.000015	0.0000016	7.1E-08	0.0000011	0.00000054	1.6E-08	-	-	6.3E-11	-
HLC-S-1	L-10	1.6E-08	0.00050	1.9E-08	0.00000014	0.00000054	0.0000078	3.2E-09	0.000015	0.0000012	7.1E-08	0.0000012	0.00000053	9.7E-08	-	-	5.9E-11	-
HLC-S-1	L-11	1.6E-08	0.00043	3.2E-08	0.00000024	0.00000051	0.0000070	3.2E-09	0.000013	0.0000010	6.4E-08	0.0000012	0.00000047	0.00000022	-	-	5.5E-11	-
HLC-S-1	L-12	1.6E-08	0.00038	1.9E-08	0.0000001	0.00000049	0.0000064	3.2E-09	0.000012	0.0000010	5.8E-08	0.00000096	0.0000005	0.0000001	-	-	4.5E-11	-
HLC-S-1	L-13	1.6E-08	0.00033	1.3E-08	0.0000001	0.00000041	0.0000058	3.3E-09	0.000011	0.00000085	4.6E-08	0.00000085	0.00000047	0.00000012	-	-	3.9E-11	-
HLC-S-1	L-14	1.6E-08	0.00032	1.3E-08	9.1E-08	0.00000041	0.0000051	3.3E-09	0.000011	0.00000064	5.2E-08	0.00000085	0.00000046	0.0000001	-	-	3.3E-11	-
HLC-S-1	L-15	1.6E-08	0.00029	1.9E-08	0.0000001	0.00000039	0.0000056	3.2E-09	0.000010	0.00000053	4.5E-08	0.0000012	0.00000045	0.00000029	-	-	3.5E-11	-
HLC-S-1	L-16	1.6E-08	0.00026	1.3E-08	8.4E-08	0.00000042	0.0000049	3.2E-09	0.0000097	0.00000065	3.9E-08	0.00000071	0.00000041	0.0000002	-	-	3.0E-11	-
HLC-S-1	L-17	1.6E-08	0.00026	1.3E-08	8.5E-08	0.0000004	0.0000043	3.3E-09	0.0000098	0.00000044	3.9E-08	0.00000056	0.00000029	0.00000012	-	-	2.8E-11	-
HLC-S-1	L-18	8.1E-09	0.00016	1.3E-08	5.5E-08	0.00000026	0.0000028	1.6E-09	0.0000081	0.00000074	2.9E-08	0.00000087	0.00000029	4.8E-08	-	-	2.8E-11	-
HLC-S-1	L-19	8.1E-09	0.00018	9.7E-09	5.2E-08	0.00000025	0.0000031	1.6E-09	0.0000081	0.00000035	2.9E-08	0.00000042	0.00000032	8.1E-09	-	-	2.4E-11	-
HLC-S-1	L-20	8.1E-09	0.00016	1.3E-08	6.1E-08	0.00000024	0.0000026	1.6E-09	0.0000078	0.00000028	2.6E-08	0.00000068	0.00000026	5.8E-08	-	-	2.6E-11	-
HLC-S-2	L-1	0.0000026	0.0025	0.0000021	0.00012	0.000019	0.00022	0.00000052	0.00044	0.000021	0.0000010	0.00021	0.0000052	0.000017	-	-	2.2E-09	-
HLC-S-2	L-2	0.00000067	0.0024	0.00000067	0.000021	0.0000056	0.000087	4.8E-08	0.00011	0.0000080	0.00000039	0.000035	0.0000019	0.000023	-	-	6.0E-10	-
HLC-S-2	L-3	0.00000023	0.0021	0.00000018	0.0000027	0.0000037	0.000064	4.6E-08	0.000067	0.0000052	0.00000027	0.000013	0.0000015	0.0000025	-	-	4.2E-10	-
HLC-S-2	L-4	4.5E-08	0.0015	3.6E-08	0.00000036	0.0000017	0.000040	9.1E-09	0.000036	0.0000036	0.00000016	0.0000015	0.0000010	0.00000015	-	-	1.9E-10	-
HLC-S-2	L-5	3.2E-08	0.0012	2.6E-08	0.00000022	0.0000012	0.000031	6.5E-09	0.000028	0.0000027	0.00000013	0.0000014	0.00000088	3.2E-08	-	-	1.4E-10	-
HLC-S-2	L-6	0.00000016	0.00075	3.3E-08	0.00000046	0.00000072	0.0000014	3.3E-08	0.000021	0.0000023	6.5E-08	0.0000012	0.00000052	0.00000016	-	-	8.8E-11	-
HLC-S-2	L-7	1.6E-08	0.00064	2.0E-08	0.00000021	0.00000064	0.0000014	3.3E-09	0.000018	0.0000021	7.8E-08	0.00000098	0.00000057	4.6E-08	-	-	7.2E-11	-
HLC-S-2	L-8	3.3E-08	0.00071	2.6E-08	0.00000026	0.0000008	0.0000016	6.6E-09	0.000020	0.0000020	9.2E-08	0.0000016	0.00000077	6.6E-08	-	-	7.4E-11	-
HLC-S-2	L-9	1.6E-08	0.00053	1.3E-08	0.00000013	0.00000058	0.000010	3.3E-09	0.000014	0.0000015	6.5E-08	0.00000098	0.00000052	1.6E-08	-	-	6.5E-11	-
HLC-S-2	L-10	1.6E-08	0.00048	1.3E-08	0.00000017	0.00000053	0.0000078	3.2E-09	0.000014	0.0000012	6.5E-08	0.00000084	0.00000052	1.6E-08	-	-	5.6E-11	-
HLC-S-2	L-11	1.6E-08	0.00044	1.3E-08	0.0000002	0.00000051	0.0000078	3.3E-09	0.000013	0.0000010	5.9E-08	0.00000085	0.00000051	0.00000016	-	-	4.9E-11	-
HLC-S-2	L-12	1.6E-08	0.00040	1.3E-08	0.00000012	0.00000048	0.0000072	3.3E-09	0.000012	0.0000011	5.2E-08	0.0000012	0.00000051	1.6E-08	-	-	4.2E-11	-
HLC-S-2	L-13	1.6E-08	0.00035	1.3E-08	0.00000012	0.00000041	0.0000060	3.3E-09	0.000010	0.00000085	4.6E-08	0.00000098	0.00000048	1.6E-08	-	-	3.7E-11	-
HLC-S-2	L-14	1.6E-08	0.00032	1.3E-08	0.00000016	0.00000042	0.0000053	3.3E-09	0.000010	0.00000072	4.6E-08	0.0000011	0.00000046	0.00000019	-	-	3.9E-11	-
HLC-S-2	L-15	1.6E-08	0.00031	1.3E-08	0.00000014	0.00000039	0.0000059	3.3E-09	0.000010	0.00000059	4.6E-08	0.00000098	0.00000046	0.00000016	-	-	3.5E-11	-
HLC-S-2	L-16	0.00000027	0.00031	2.0E-08	0.00000012	0.00000043	0.0000054	3.3E-09	0.000010	0.00000078	3.9E-08	0.00000098	0.00000045	4.6E-08	-	-	3.5E-11	-
HLC-S-2	L-17	1.6E-08	0.00028	1.3E-08	0.00000014	0.0000004	0.0000046	3.3E-09	0.0000098	0.00000045	4.6E-08	0.0000016	0.00000035	0.00000038	-	-	3.2E-11	-
HLC-S-2	L-18	8.1E-09	0.00019	6.5E-09	7.1E-08	0.00000026	0.0000030	1.6E-09	0.0000081	0.00000084	3.2E-08	0.00000088	0.00000031	2.9E-08	-	-	3.0E-11	-
HLC-S-2	L-19	8.0E-09	0.00019	6.4E-09	6.4E-08	0.00000026	0.0000033	1.6E-09	0.0000080	0.00000042	3.2E-08	0.00000054	0.00000032	8.0E-09	-	-	2.6E-11	-
HLC-S-2	L-20	8.1E-09	0.00018	1.3E-08	7.5E-08	0.00000024	0.0000029	1.6E-09	0.0000078	0.00000033	2.9E-08	0.00000098	0.00000029	0.00000011	-	-	2.6E-11	-
HLC-S-3	L-1	0.0000027	0.0043	0.0000021	0.00010	0.0000012	0.00020	0.00000053	0.00023	0.0000027	0.0000011	0.00018	0.0000043	0.0000014	-	-	1.9E-09	-
HLC-S-3	L-2	0.00000025	0.0025	0.00000029	0.000015	0.0000039	0.000083	4.9E-08	0.000082	0.0000078	0.00000039	0.000023	0.0000020	0.0000038	-	-	4.2E-10	-
HLC-S-3	L-3	0.00000054	0.0019	0.00000036	0.0000022	0.0000026	0.0000058	4.5E-08	0.000058	0.0000048	0.00000027	0.0000078	0.0000014	0.0000063	-	-	3.7E-10	-
HLC-S-3	L-4	4.5E-08	0.0014	3.6E-08	0.00000035	0.0000013	0.000038	9.1E-09	0.000035	0.0000033	0.00000016	0.0000010	0.00000098	0.00000022	-	-	1.4E-10	-
HLC-S-3	L-5	3.3E-08	0.0012	3.9E-08	0.0000011	0.0000010	0.000027	6.5E-09	0.000029	0.0000030	0.00000013	0.0000018	0.00000086	6.5E-08	-	-	1.1E-10	-
HLC-S-3	L-6	0.00000016	0.00077	0.00000013	0.0000002	0.00000059	0.000014	3.3E-08	0.000020	0.0000025	6.5E-08	0.00000065	0.00000052	0.00000016	-	-	6.2E-11	-
HLC-S-3	L-7	1.6E-08	0.00065	2.0E-08	0.00000018	0.00000057	0.000013	3.3E-09	0.000018	0.0000021	7.8E-08	0.00000065	0.00000057	8.5E-08	-	-	5.6E-11	-
HLC-S-3	L-8	3.3E-08	0.00071	2.6E-08	0.00000033	0.00000072	0.0000014	6.5E-09	0.000020	0.0000022	9.1E-08	0.00000099	0.00000073	9.1E-08	-	-	6.0E-11	-
HLC-S-3	L-9	1.6E-08	0.00053	1.3E-08	8.5E-08	0.00000054	0.0000098	3.3E-09	0.000014	0.0000016	6.5E-08	0.00000041	0.00000052	1.6E-08	-	-	5.3E-11	-
HLC-S-3	L-10	1.6E-08	0.00049	1.3E-08	0.00000014	0.00000051	0.0000079	3.3E-09	0.000014	0.0000012	6.5E-08	0.00000059	0.00000052	1.6E-08	-	-	5.1E-11	-
HLC-S-3	L-11	1.6E-08	0.00044	1.3E-08	0.00000012	0.00000048	0.0000071	3.2E-09	0.000013	0.0000010	5.8E-08	0.00000078	0.00000049	6.5E-08	-	-	4.9E-11	-
HLC-S-3	L-12	1.6E-08	0.00041	1.3E-08	8.5E-08	0.00000046	0.0000065	3.3E-09	0.000012	0.0000011	5.2E-08	0.0000006	0.00000051	3.9E-08	-	-	4.6E-11	-
HLC-S-3	L-13	1.6E-08	0.00035	1.3E-08	9.2E-08	0.00000039	0.0000059	3.3E-09	0.000010	0.00000079	4.6E-08	0.00000072	0.00000046	9.8E-08	-	-	3.7E-11	-
HLC-S-3	L-14	1.6E-08	0.00033	1.3E-08	0.00000013	0.0000004	0.0000053	3.3E-09	0.000010	0.00000072	5.2E-08	0.00000078	0.00000046	7.8E-08	-	-	3.5E-11	-
HLC-S-3	L-15	1.6E-08	0.00032	1.3E-08	0.00000018	0.00000039	0.0000058	3.3E-09	0.000010	0.00000063	4.6E-08	0.00000092	0.00000046	6.5E-08	-	-	3.7E-11	-
HLC-S-3	L-16	1.6E-08	0.00030	1.3E-08	0.00000013	0.00000043	0.0000052	3.3E-09	0.0000098	0.00000072	3.9E-08	0.00000098	0.00000043	0.0000001	-	-	3.2E-11	-
HLC-S-3	L-17	1.6E-08	0.00029	3.3E-08	9.2E-08	0.00000042	0.0000047	3.3E-09	0.0000098	0.00000033	3.9E-08	0.0000014	0.00000035	0.00000063	-	-	3.4E-11	-
HLC-S-3	L-18	8.1E-09	0.00018	6.5E-09	0.0000001	0.00000028	0.0000031	1.6E-09	0.0000078	0.00000081	3.3E-08	0.00000062	0.00000033	1.6E-08	-	-	2.8E-11	-
HLC-S-3	L-19	8.0E-09	0.00019	5.1E-08	0.00000013	0.00000025	0.0000032	1.6E-09	0.0000077	0.00000042	2.9E-08	0.0000008	0.00000032	0.00000026	-	-	2.8E-11	-
HLC-S-3	L-20	8.1E-09	0.00017	2.6E-08	6.5E-08	0.00000024	0.0000027	1.6E-09	0.0000078	0.0000003	2.9E-08	0.00000091	0.00000026	0.0000001	-	-	2.6E-11	-
HLC-S-4	L-1	0.0000025	0.0022	0.0000020	0.000080	0.000019	0.00020	0.00000051	0.00039	0.000014	0.0000010	0.00019	0.0000041	0.000015	-	-	2.1E-09	-
HLC-S-4	L-2	0.00000025	0.0022	0.0000002	0.0000081	0.0000078	0.000088	4.9E-08	0.00013	0.0000064	0.00000039	0.000024	0.0000020	0.0000016	-	-	5.8E-10	-
HLC-S-4	L-3	0.00000022	0.0019	0.00000018	0.0000028	0.0000049	0.000064	4.5E-08	0.000079	0.0000047	0.00000036	0.000012	0.0000016	0.0000013	-	-	4.6E-10	-
HLC-S-4	L-4	4.5E-08	0.0015	3.6E-08	0.00000065	0.0000020	0.000042	9.0E-09	0.000040	0.0000038	0.00000018	0.0000020	0.0000010	0.00000016	-	-	2.2E-10	-
HLC-S-4	L-5	3.3E-08	0.0013	2.6E-08	0.00000051	0.0000013	0.000033	6.5E-09	0.000031	0.0000033	0.00000014	0.0000020	0.00000094	3.3E-08	-	-	1.6E-10	-
HLC-S-4	L-6	0.00000016	0.00089	6.5E-08	0.00000013	0.00000078	0.000017	3.3E-08	0.000021	0.0000026	6.5E-08	0.00000091	0.00000059	0.00000016	-	-	9.7E-11	-
HLC-S-4	L-7	0.00000016	0.00072	3.2E-08	0.00000013	0.00000071	0.0000016	3.2E-08	0.000019	0.0000025	6.5E-08	0.0000012	0.00000065	0.00000016	-	-	7.7E-11	-
HLC-S-4	L-8	3.3E-08	0.00082	2.6E-08	0.0000003	0.00000086	0.000018	6.5E-09	0.000021	0.0000024	0.0000001	0.0000025	0.00000086	3.3E-08	-	-	9.2E-11	-
HLC-S-4	L-9	1.6E-08	0.00060	1.3E-08	0.00000014	0.00000059	0.000012	3.3E-09	0.000015	0.0000017	7.2E-08	0.00000091	0.00000058	3.9E-08	-	-	6.9E-11	-
HLC-S-4	L-10	1.6E-08	0.00050	2.0E-08	0.00000023	0.00000055	0.0000085	3.3E-09	0.000015	0.0000013	7.2E-08	0.0000011	0.00000057	1.6E-08	-	-	6.2E-11	-
HLC-S-4	L-11	1.6E-08	0.00045	1.3E-08	0.00000017	0.00000053	0.0000078	3.3E-09	0.000014	0.0000012	6.5E-08	0.0000014	0.00000055	6.5E-08	-	-	5.1E-11	-
HLC-S-4	L-12	1.6E-08	0.00039	1.3E-08	0.00000014	0.0000005	0.0000072	3.3E-09	0.000013	0.0000010	5.9E-08	0.00000085	0.00000055	1.6E-08	-	-	4.9E-11	-
HLC-S-4	L-13	1.6E-08	0.00035	2.0E-08	0.00000018	0.00000044	0.0000062	3.3E-09	0.000012	0.00000078	5.2E-08	0.00000078	0.00000052	3.9E-08	-	-	4.2E-11	-
HLC-S-4	L-14	1.6E-08	0.00032	1.3E-08	0.00000018	0.00000043	0.0000054	3.3E-09	0.000012	0.00000072	5.2E-08	0.0000012	0.00000049	8.5E-08	-	-	3.9E-11	-
HLC-S-4	L-15	1.6E-08	0.00031	1.3E-08	0.00000017	0.00000042	0.0000059	3.3E-09	0.000011	0.00000061	4.6E-08	0.0000014	0.0000005	6.5E-08	-	-	3.9E-11	-
HLC-S-4	L-16	1.6E-08	0.00028	2.0E-08	0.00000025	0.00000046	0.0000053	3.3E-09	0.000010	0.00000078	4.6E-08	0.00000085	0.00000048	6.5E-08	-	-	3.3E-11	-
HLC-S-4	L-17	1.6E-08	0.00027	1.3E-08	0.00000018	0.00000044	0.0000046	3.3E-09	0.000010	0.00000048	3.9E-08	0.0000021	0.00000038	0.00000025	-	-	3.7E-11	-
HLC-S-4	L-18	8.2E-09	0.00018	6.6E-09	0.00000012	0.00000029	0.0000031	1.6E-09	0.0000089	0.00000089	3.3E-08	0.0000011	0.00000033	8.2E-09	-	-	7.0E-11	-
HLC-S-4	L-19	8.1E-09	0.00019	1.9E-08	9.7E-08	0.00000028	0.0000031	1.6E-09	0.0000087	0.00000039	3.2E-08	0.0000020	0.00000028	0.00000031	-	-	3.1E-11	-
HLC-S-4	L-20	8.1E-09	0.00017	2.0E-08	6.5E-08	0.00000029	0.0000029	1.6E-09	0.0000081	0.00000032	2.9E-08	0.0000013	0.00000026	7.2E-08	-	-	3.0E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s	mg/m^2s
HHC-S-1	L-1	2020-01-13	0.080	0.076	0.15	0.00067	4262	1.00	4.3	0.044	9.7	0.98	1472	0.0070	0.48	0.0070	0.25	0.014	0.64	0.042	0.020	0.0028
HHC-S-1	L-2	2020-01-14	1.0	0.076	0.15	0.00067	4403	1.00	4.4	0.044	10.0	0.98	1472	0.00063	0.17	0.00063	0.060	0.024	0.28	0.014	0.0054	0.011
HHC-S-1	L-3	2020-01-15	2.0	0.076	0.15	0.00067	4416	1.00	4.4	0.044	10	0.98	1472	0.00058	0.100	0.00058	0.039	0.012	0.18	0.013	0.0051	0.00070
HHC-S-1	L-4	2020-01-20	7.0	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	0.00012	0.048	0.00012	0.011	0.0100	0.072	0.0070	0.0028	0.0026
HHC-S-1	L-5	2020-01-27	14	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	0.000083	0.031	0.000083	0.0061	0.0070	0.042	0.0078	0.0032	0.0012
HHC-S-1	L-6	2020-02-10	28	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	0.000041	0.015	0.000041	0.0039	0.0028	0.022	0.0068	0.0027	0.00066
HHC-S-1	L-7	2020-02-24	42	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	0.000041	0.013	0.000041	0.0036	0.0022	0.020	0.0075	0.0030	0.00050
HHC-S-1	L-8	2020-03-02	49	0.076	0.15	0.00067	4427	1.00	4.4	0.044	10	0.98	1472	0.000083	0.018	0.000083	0.0060	0.0027	0.023	0.012	0.0050	0.00050
HHC-S-1	L-9	2020-03-16	63	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	0.000041	0.012	0.000041	0.0038	0.0018	0.012	0.0075	0.0030	0.00033
HHC-S-1	L-10	2020-03-30	77	0.076	0.15	0.00067	4426	1.00	4.4	0.044	10	0.98	1472	0.000042	0.011	0.000042	0.0026	0.0022	0.014	0.0079	0.0032	0.00033
HHC-S-1	L-11	2020-04-13	91	0.076	0.15	0.00067	4426	1.00	4.4	0.044	10	0.98	1472	0.000042	0.0095	0.000042	0.0028	0.0017	0.015	0.0081	0.0032	0.00025
HHC-S-1	L-12	2020-04-27	105	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	0.000041	0.011	0.000041	0.0026	0.0022	0.013	0.0080	0.0032	0.00025
HHC-S-1	L-13	2020-05-11	119	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	0.000041	0.0095	0.000041	0.0017	0.0023	0.0091	0.0075	0.0030	0.00017
HHC-S-1	L-14	2020-05-25	133	0.076	0.15	0.00067	4428	1.00	4.4	0.044	10	0.98	1472	0.000042	0.0095	0.000042	0.0026	0.0017	0.016	0.0064	0.0026	0.00017
HHC-S-1	L-15	2020-06-08	147	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	0.000041	0.0090	0.000041	0.0020	0.0019	0.011	0.0066	0.0027	0.00017
HHC-S-1	L-16	2020-06-22	161	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	0.000041	0.0083	0.000041	0.0023	0.0015	0.0092	0.0071	0.0028	0.00017
HHC-S-1	L-17	2020-07-06	175	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	0.000041	0.0082	0.000041	0.0018	0.0017	0.013	0.0064	0.0026	0.000025
HHC-S-1	L-18	2020-08-03	203	0.076	0.15	0.00067	4423	1.00	4.4	0.044	10	0.98	1472	0.000021	0.0045	0.000021	0.0013	0.00075	0.0073	0.0042	0.0017	0.00012
HHC-S-1	L-19	2020-08-31	231	0.076	0.15	0.00067	4423	1.0	4.4	0.044	10.0	0.98	1472	0.000021	0.0051	0.000021	0.0013	0.00099	0.0066	0.0050	0.0020	0.00012
HHC-S-1	L-20	2020-09-28	259	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	0.000021	0.0043	0.000021	0.0015	0.00066	0.0073	0.0043	0.0017	0.000083
HHC-S-2	L-1	2020-01-13	0.080	0.076	0.15	0.00066	4266	1.00	4.3	0.044	9.7	0.96	1451	0.0070	0.59	0.028	0.34	0.0070	0.72	0.042	0.018	0.0028
HHC-S-2	L-2	2020-01-14	1.0	0.076	0.15	0.00066	4387	1.00	4.4	0.044	10	0.96	1451	0.00063	0.15	0.00063	0.052	0.023	0.29	0.013	0.0049	0.013
HHC-S-2	L-3	2020-01-15	2.0	0.076	0.15	0.00066	4395	1.00	4.4	0.044	10	0.96	1451	0.00058	0.097	0.00058	0.037	0.012	0.16	0.012	0.0048	0.00070
HHC-S-2	L-4	2020-01-20	7.0	0.076	0.15	0.00066	4396	1.00	4.4	0.044	10	0.96	1451	0.00012	0.050	0.00012	0.012	0.010	0.074	0.0070	0.0028	0.0028
HHC-S-2	L-5	2020-01-27	14	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	0.000083	0.030	0.000083	0.0056	0.0071	0.044	0.0075	0.0030	0.0012
HHC-S-2	L-6	2020-02-10	28	0.076	0.15	0.00066	4398	1.00	4.4	0.044	10	0.96	1451	0.000041	0.016	0.000041	0.0051	0.0026	0.022	0.0062	0.0025	0.00066
HHC-S-2	L-7	2020-02-24	42	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	0.000041	0.013	0.000041	0.0039	0.0022	0.019	0.0075	0.0030	0.00050
HHC-S-2	L-8	2020-03-02	49	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	0.000083	0.018	0.000083	0.0063	0.0023	0.023	0.012	0.0048	0.00050
HHC-S-2	L-9	2020-03-16	63	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	0.000041	0.011	0.000041	0.0036	0.0017	0.011	0.0072	0.0029	0.00033
HHC-S-2	L-10	2020-03-30	77	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	0.000042	0.011	0.000042	0.0027	0.0022	0.013	0.0076	0.0031	0.00033
HHC-S-2	L-11	2020-04-13	91	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	0.000042	0.0096	0.000042	0.0031	0.0015	0.015	0.0066	0.0027	0.00025
HHC-S-2	L-12	2020-04-27	105	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	0.000041	0.010	0.000041	0.0019	0.0023	0.023	0.0086	0.0030	0.00025
HHC-S-2	L-13	2020-05-11	119	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	0.000041	0.0095	0.000041	0.0018	0.0022	0.0086	0.0075	0.0030	0.00017
HHC-S-2	L-14	2020-05-25	133	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	0.000041	0.0091	0.000041	0.0022	0.0018	0.012	0.0062	0.0025	0.00017
HHC-S-2	L-15	2020-06-08	147	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	0.000041	0.0097	0.000041	0.0031	0.0016	0.010	0.0075	0.0030	0.00017
HHC-S-2	L-16	2020-06-22	161	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	0.000041	0.0085	0.000041	0.0027	0.0014	0.0090	0.0066	0.0027	0.00017
HHC-S-2	L-17	2020-07-06	175	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	0.000041	0.0082	0.000041	0.0021	0.0016	0.013	0.0068	0.0027	0.000017
HHC-S-2	L-18	2020-08-03	203	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	0.000021	0.0045	0.000021	0.0014	0.00075	0.0071	0.0041	0.0017	0.00012
HHC-S-2	L-19	2020-08-31	231	0.076	0.15	0.00066	4399	1.0	4.4	0.044	10	0.96	1451	0.000021	0.0052	0.000021	0.0014	0.00099	0.0066	0.0048	0.0019	0.00021
HHC-S-2	L-20	2020-09-28	259	0.076	0.15	0.00066	4398	1.00	4.4	0.044	10	0.96	1451	0.000021	0.0042	0.000021	0.0015	0.00058	0.0069	0.0044	0.0017	0.00012
HHC-S-3	L-1	2020-01-13	0.080	0.076	0.15	0.00066	4288	1.00	4.3	0.044	9.8	0.99	1498	0.0071	0.61	0.0071	0.34	0.014	0.74	0.043	0.020	0.0028
HHC-S-3	L-2	2020-01-14	1.0	0.076	0.15	0.00066	4359	1.00	4.4	0.044	10.0	0.99	1498	0.00063	0.16	0.00063	0.059	0.023	0.30	0.013	0.0052	0.010
HHC-S-3	L-3	2020-01-15	2.0	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.99	1498	0.00058	0.097	0.00058	0.039	0.012	0.16	0.012	0.0046	0.00070
HHC-S-3	L-4	2020-01-20	7.0	0.076	0.15	0.00066	4376	1.00	4.4	0.044	10	0.99	1498	0.00012	0.047	0.00012	0.012	0.0093	0.072	0.0070	0.0028	0.0026
HHC-S-3	L-5	2020-01-27	14	0.076	0.15	0.00066	4376	1.00	4.4	0.044	10	0.99	1498	0.000083	0.030	0.000083	0.0056	0.0068	0.040	0.0083	0.0033	0.00100
HHC-S-3	L-6	2020-02-10	28	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	0.000041	0.015	0.000041	0.0044	0.0027	0.023	0.0071	0.0028	0.00066
HHC-S-3	L-7	2020-02-24	42	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	0.000041	0.013	0.000041	0.0037	0.0023	0.019	0.0080	0.0032	0.00050
HHC-S-3	L-8	2020-03-02	49	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	0.000083	0.018	0.000083	0.0061	0.0025	0.024	0.012	0.0050	0.00033
HHC-S-3	L-9	2020-03-16	63	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	0.000042	0.011	0.000042	0.0038	0.0017	0.012	0.0076	0.0031	0.00033
HHC-S-3	L-10	2020-03-30	77	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	0.000042	0.011	0.000042	0.0029	0.0022	0.0097	0.0060	0.0024	0.00025
HHC-S-3	L-11	2020-04-13	91	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	0.000042	0.0098	0.000042	0.0031	0.0016	0.015	0.0068	0.0027	0.00025
HHC-S-3	L-12	2020-04-27	105	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	0.000041	0.010	0.000041	0.0019	0.0024	0.013	0.0079	0.0032	0.00017
HHC-S-3	L-13	2020-05-11	119	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	0.000042	0.0096	0.000042	0.0020	0.0022	0.011	0.0076	0.0031	0.00017
HHC-S-3	L-14	2020-05-25	133	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	0.000042	0.0089	0.000042	0.0024	0.0017	0.012	0.0064	0.0026	0.00017
HHC-S-3	L-15	2020-06-08	147	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	0.000042	0.0094	0.000042	0.0027	0.0017	0.0090	0.0075	0.0030	0.00017
HHC-S-3	L-16	2020-06-22	161	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	0.000041	0.0089	0.000041	0.0032	0.0012	0.0087	0.0071	0.0028	0.00017
HHC-S-3	L-17	2020-07-06	175	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	0.000042	0.0082	0.000042	0.0019	0.0017	0.013	0.0068	0.0027	0.0000083
HHC-S-3	L-18	2020-08-03	203	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	0.000021	0.0042	0.000021	0.0012	0.00075	0.0071	0.0040	0.0016	0.00012
HHC-S-3	L-19	2020-08-31	231	0.076	0.15	0.00066	4376	1.0	4.4	0.044	10	0.99	1498	0.000021	0.0053	0.000021	0.0014	0.00095	0.0063	0.0046	0.0019	0.00012
HHC-S-3	L-20	2020-09-28	259	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.99	1498	0.000021	0.0042	0.000021	0.0015	0.00062	0.0070	0.0042	0.0017	0.000083
HHC-S-4	L-1	2020-01-13	0.080	0.076	0.15	0.00068	4275	1.00	4.3	0.045	9.6	1.00	1477	0.0069	0.50	0.0069	0.28	0.0069	0.72	0.056	0.021	0.0028
HHC-S-4	L-2	2020-01-14	1.0	0.076	0.15	0.00068	4456	1.00	4.5	0.045	10.0	1.00	1477	0.00063	0.16	0.00063	0.060	0.020	0.28	0.014	0.0057	0.011
HHC-S-4	L-3	2020-01-15	2.0	0.076	0.15	0.00068	4467	1.00	4.5	0.045	10	1.00	1477	0.00058	0.10	0.00058	0.037	0.013	0.15	0.013	0.0053	0.00058
HHC-S-4	L-4	2020-01-20	7.0	0.076	0.15	0.00068	4467	1.00	4.5	0.045	10	1.00	1477	0.00012	0.048	0.00012	0.012	0.0095	0.074	0.0074	0.0030	0.0026
HHC-S-4	L-5	2020-01-27	14	0.076	0.15	0.00068	4471	1.00	4.5	0.045	10	1.00	1477	0.000083	0.031	0.000083	0.0063	0.0068	0.042	0.0083	0.0033	0.0012
HHC-S-4	L-6	2020-02-10	28	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	0.000041	0.015	0.000041	0.0046	0.0027	0.021	0.0068	0.0027	0.00058
HHC-S-4	L-7	2020-02-24	42	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	0.000041	0.013	0.000041	0.0038	0.0022	0.018	0.0079	0.0032	0.00041
HHC-S-4	L-8	2020-03-02	49	0.076	0.15	0.00068	4474	1.00	4.5	0.045	10	1.00	1477	0.000083	0.019	0.000083	0.0080	0.0020	0.024	0.013	0.0051	0.00033
HHC-S-4	L-9	2020-03-16	63	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	0.000041	0.011	0.000041	0.0038	0.0017	0.012	0.0079	0.0032	0.00033
HHC-S-4	L-10	2020-03-30	77	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	0.000042	0.011	0.000042	0.0033	0.0019	0.013	0.0081	0.0032	0.00025
HHC-S-4	L-11	2020-04-13	91	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	0.000042	0.0095	0.000042	0.0029	0.0016	0.015	0.0071	0.0028	0.00025
HHC-S-4	L-12	2020-04-27	105	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	0.000041	0.010	0.000041	0.0020	0.0023	0.012	0.0079	0.0032	0.00017
HHC-S-4	L-13	2020-05-11	119	0.076	0.15	0.00068	4474	1.00	4.5	0.045	10	1.00	1477	0.000042	0.0095	0.000042	0.0020	0.0021	0.010	0.0076	0.0031	0.00017
HHC-S-4	L-14	2020-05-25	133	0.076	0.15	0.00068	4475	1.00	4.5	0.045	10	1.00	1477	0.000042	0.0095	0.000042	0.0028	0.0017	0.012	0.0072	0.0029	0.00017
HHC-S-4	L-15	2020-06-08	147	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	0.000041	0.0095	0.000041	0.0025	0.0018	0.0096	0.0072	0.0029	0.00017
HHC-S-4	L-16	2020-06-22	161	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	0.000041	0.0090	0.000041	0.0032	0.0012	0.0093	0.0075	0.0030	0.00017
HHC-S-4	L-17	2020-07-06	175	0.076	0.15	0.00068	4475	1.00	4.5	0.045	10	1.00	1477	0.000042	0.0081	0.000042	0.0020	0.0017	0.013	0.0071	0.0028	0.000017
HHC-S-4	L-18	2020-08-03	203	0.076	0.15	0.00068	4476	1.00	4.5	0.045	10	1.00	1477	0.000021	0.0042	0.000021	0.0012	0.00075	0.0069	0.0039	0.0016	0.00012
HHC-S-4	L-19	2020-08-31	231	0.076	0.15	0.00068	4467	1.0	4.5	0.045	10.0	1.00	1477	0.000021	0.0052	0.000021	0.0014	0.00095	0.0062	0.0047	0.0019	0.00012
HHC-S-4	L-20	2020-09-28	259	0.076	0.15	0.00068	4469	1.00	4.5	0.045	10	1.00	1477	0.000021	0.0043	0.000021	0.0015	0.00058	0.0073	0.0044	0.0017	0.000083

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-N/m^{2}s	mg-P/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHC-S-1	L-1	0.00070	0.042	0.00070	0.27	0.00042	0.000064	0.000063	0.000070	0.34	0.00000035	0.0036	0.000024	0.00014	0.000036	0.0000007	7.0E-08	0.0000007	0.0000035	0.0000070	0.00020	7.0E-09
HHC-S-1	L-2	0.00019	0.014	0.000063	0.092	0.00023	0.0000057	0.0000057	0.000013	0.10	3.1E-08	0.0019	0.0000098	0.000038	0.0000035	6.3E-08	3.8E-08	0.00000013	0.0000015	0.00000063	0.000024	6.3E-10
HHC-S-1	L-3	0.000058	0.0083	0.000058	0.044	0.00013	0.0000053	0.0000052	0.000023	0.032	2.9E-08	0.0013	0.0000046	0.000012	0.0000027	5.8E-08	5.8E-08	5.8E-08	0.00000081	0.00000035	0.000015	5.8E-10
HHC-S-1	L-4	0.000035	0.0039	0.000012	0.019	0.000065	0.0000011	0.0000010	0.0000023	0.0086	5.8E-09	0.00075	0.0000022	0.0000046	0.00000072	1.2E-08	1.2E-09	4.6E-08	0.00000039	0.00000014	0.0000051	1.2E-10
HHC-S-1	L-5	0.000017	0.0027	0.0000083	0.0095	0.000055	0.00000075	0.00000075	0.0000050	0.0038	4.1E-09	0.00047	0.0000010	0.0000017	0.00000061	8.3E-09	5.0E-09	1.7E-08	0.00000015	6.6E-08	0.0000020	6.6E-10
HHC-S-1	L-6	0.000014	0.0013	0.0000041	0.0043	0.000031	0.00000038	0.0000037	0.00000041	0.0023	2.1E-09	0.00026	0.00000058	0.00000083	0.00000045	4.1E-09	8.3E-10	8.3E-09	6.6E-08	5.8E-08	0.0000012	4.1E-11
HHC-S-1	L-7	0.0000066	0.00091	0.0000041	0.0027	0.000023	0.00000038	0.00000037	0.00000041	0.0019	2.1E-09	0.00021	0.00000038	0.00000041	0.00000047	4.1E-09	3.3E-09	8.3E-09	2.1E-08	4.1E-08	0.00000091	4.1E-11
HHC-S-1	L-8	0.0000083	0.00093	0.0000083	0.0023	0.000013	0.00000076	0.00000075	0.0000017	0.0015	4.2E-09	0.00030	0.00000038	0.00000083	0.00000078	8.3E-09	8.3E-10	8.3E-09	4.2E-08	6.6E-08	0.0000014	8.3E-11
HHC-S-1	L-9	0.0000050	0.00049	0.0000041	0.0014	0.000012	0.00000038	0.00000037	0.00000041	0.0015	2.1E-09	0.00018	0.00000027	0.00000041	0.00000049	4.1E-09	8.3E-10	4.1E-09	2.1E-08	2.5E-08	0.0000006	8.3E-11
HHC-S-1	L-10	0.0000075	0.00040	0.0000042	0.0012	0.0000083	0.00000038	0.00000037	0.0000017	0.0018	2.1E-09	0.00018	0.00000025	0.00000042	0.00000051	4.2E-09	8.3E-10	4.2E-09	2.1E-08	2.5E-08	0.00000066	4.2E-11
HHC-S-1	L-11	0.0000066	0.00032	0.0000042	0.00091	0.0000083	0.00000038	0.00000037	0.00000042	0.0015	2.1E-09	0.00017	0.00000022	0.00000042	0.00000051	4.2E-09	4.2E-10	4.2E-09	2.1E-08	2.5E-08	0.0000005	4.2E-11
HHC-S-1	L-12	0.0000050	0.00030	0.0000041	0.00083	0.0000066	0.00000038	0.00000037	0.00000083	0.0018	2.1E-09	0.00017	0.00000022	0.00000042	0.00000051	4.1E-09	8.3E-10	8.3E-09	2.1E-08	2.5E-08	0.00000059	4.1E-11
HHC-S-1	L-13	0.0000050	0.00022	0.0000041	0.00065	0.0000058	0.00000038	0.00000037	0.00000041	0.0013	2.1E-09	0.00015	0.00000018	0.00000041	0.00000047	4.1E-09	1.7E-09	4.1E-09	2.1E-08	1.7E-08	0.00000061	4.1E-11
HHC-S-1	L-14	0.0000042	0.00020	0.0000042	0.00056	0.0000066	0.00000038	0.00000037	0.0000025	0.0017	2.1E-09	0.00015	0.00000018	0.00000042	0.00000049	4.2E-09	4.2E-10	4.2E-09	2.1E-08	2.5E-08	0.00000061	4.2E-11
HHC-S-1	L-15	0.0000041	0.00017	0.0000041	0.00051	0.0000050	0.00000038	0.00000037	0.00000083	0.0017	2.1E-09	0.00015	0.00000017	0.00000041	0.0000005	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000037	4.1E-11
HHC-S-1	L-16	0.0000041	0.00016	0.0000041	0.00046	0.0000050	0.00000038	0.00000037	0.00000083	0.0017	2.1E-09	0.00014	0.00000017	0.00000041	0.00000049	4.1E-09	4.1E-10	4.1E-09	2.1E-08	2.5E-08	0.00000075	4.1E-11
HHC-S-1	L-17	0.0000041	0.00014	0.0000041	0.00043	0.0000041	0.00000038	0.00000037	0.0000041	0.0013	2.1E-09	0.00014	0.00000017	0.00000041	0.0000005	4.1E-09	4.1E-10	4.1E-09	2.1E-08	2.5E-08	0.00000064	4.1E-11
HHC-S-1	L-18	0.0000021	0.000095	0.0000021	0.00034	0.0000021	0.00000019	0.00000019	0.0000021	0.0011	1.0E-09	0.000081	0.00000012	0.00000041	0.00000033	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000023	2.1E-11
HHC-S-1	L-19	0.0000025	0.000095	0.0000021	0.00031	0.0000029	0.00000019	0.00000019	0.0000021	0.0014	1.0E-09	0.000087	0.00000012	0.00000021	0.00000036	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000018	2.1E-11
HHC-S-1	L-20	0.0000012	0.000087	0.0000083	0.00027	0.0000017	0.00000019	0.00000083	0.0012	1.0E-09	0.000083	1.0E-07	0.00000021	0.00000036	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000014	2.1E-11
HHC-S-2	L-1	0.00070	0.044	0.00070	0.30	0.00056	0.0000064	0.000063	0.00014	0.49	0.00000035	0.0035	0.000030	0.000070	0.000030	0.0000007	0.00000042	0.0000007	0.0000035	0.0000056	0.00023	7.0E-09
HHC-S-2	L-2	0.00016	0.014	0.000063	0.088	0.00021	0.0000057	0.0000057	0.0000063	0.12	3.1E-08	0.0017	0.000010	0.000025	0.0000013	6.3E-08	6.3E-08	0.00000013	0.0000014	0.00000063	0.000025	6.3E-10
HHC-S-2	L-3	0.000070	0.0080	0.000058	0.044	0.00014	0.0000053	0.0000052	0.000012	0.035	2.9E-08	0.0013	0.0000046	0.000023	0.0000013	5.8E-08	1.2E-08	5.8E-08	0.00000081	0.00000035	0.000016	5.8E-10
HHC-S-2	L-4	0.000035	0.0039	0.000012	0.020	0.000070	0.0000011	0.0000010	0.0000012	0.0093	5.8E-09	0.00073	0.0000023	0.0000046	0.00000042	1.2E-08	7.0E-09	2.3E-08	0.00000039	9.3E-08	0.0000037	1.2E-10
HHC-S-2	L-5	0.000018	0.0027	0.0000083	0.010	0.000050	0.00000075	0.00000075	0.0000017	0.0040	4.1E-09	0.00045	0.0000011	0.0000017	0.0000004	8.3E-09	6.6E-09	8.3E-09	0.00000015	6.6E-08	0.0000017	8.3E-11
HHC-S-2	L-6	0.000012	0.0014	0.0000041	0.0046	0.000029	0.00000038	0.0000037	0.00000041	0.0024	2.1E-09	0.00025	0.0000006	0.00000083	0.00000033	4.1E-09	1.7E-09	8.3E-09	6.6E-08	4.1E-08	0.00000066	4.1E-11
HHC-S-2	L-7	0.0000058	0.00100	0.0000041	0.0027	0.000020	0.00000038	0.00000037	0.00000041	0.0019	2.1E-09	0.00020	0.00000039	0.00000041	0.00000039	4.1E-09	3.3E-09	4.1E-09	2.1E-08	2.5E-08	0.00000053	4.1E-11
HHC-S-2	L-8	0.0000083	0.00100	0.0000083	0.0023	0.000015	0.00000076	0.00000075	0.00000083	0.0017	4.1E-09	0.00030	0.0000004	0.00000083	0.00000065	8.3E-09	1.7E-09	8.3E-09	4.1E-08	3.3E-08	0.00000088	8.3E-11
HHC-S-2	L-9	0.0000041	0.00052	0.0000041	0.0015	0.000014	0.00000038	0.00000037	0.00000041	0.0015	2.1E-09	0.00017	0.00000028	0.00000041	0.00000042	4.1E-09	4.1E-10	4.1E-09	2.1E-08	1.7E-08	0.00000046	4.1E-11
HHC-S-2	L-10	0.0000066	0.00043	0.0000042	0.0012	0.0000083	0.00000038	0.00000037	0.0000017	0.0018	2.1E-09	0.00017	0.00000027	0.00000042	0.00000044	4.2E-09	4.2E-10	4.2E-09	2.1E-08	2.5E-08	0.00000046	4.2E-11
HHC-S-2	L-11	0.0000058	0.00034	0.0000042	0.00091	0.0000083	0.00000038	0.00000037	0.00000042	0.0015	2.1E-09	0.00017	0.00000022	0.00000042	0.00000048	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.0000004	4.2E-11
HHC-S-2	L-12	0.0000050	0.00030	0.0000041	0.00081	0.0000058	0.00000038	0.00000037	0.00000083	0.0019	2.1E-09	0.00016	0.00000022	0.00000041	0.00000047	4.1E-09	8.3E-10	4.1E-09	2.1E-08	1.7E-08	0.00000038	4.1E-11
HHC-S-2	L-13	0.0000050	0.00023	0.0000041	0.00063	0.0000083	0.00000038	0.00000037	0.00000083	0.0013	2.1E-09	0.00014	0.00000019	0.00000041	0.00000044	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000044	4.1E-11
HHC-S-2	L-14	0.0000041	0.00020	0.0000041	0.00056	0.0000050	0.00000038	0.00000037	0.0000017	0.0018	2.1E-09	0.00015	0.00000018	0.00000041	0.00000046	4.1E-09	1.7E-09	4.1E-09	2.1E-08	8.3E-09	0.00000042	4.1E-11
HHC-S-2	L-15	0.0000041	0.00018	0.0000041	0.00050	0.0000041	0.00000038	0.00000037	0.0000025	0.0017	2.1E-09	0.00015	0.00000017	0.00000041	0.00000047	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000038	4.1E-11
HHC-S-2	L-16	0.0000041	0.00016	0.0000041	0.00044	0.0000033	0.00000038	0.00000037	0.0000025	0.0018	2.1E-09	0.00013	0.00000017	0.00000041	0.00000046	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000042	4.1E-11
HHC-S-2	L-17	0.0000041	0.00014	0.0000041	0.00041	0.0000033	0.00000038	0.00000037	0.0000017	0.0015	2.1E-09	0.00014	0.00000017	0.00000041	0.00000048	4.1E-09	4.1E-10	4.1E-09	2.1E-08	8.3E-09	0.00000034	4.1E-11
HHC-S-2	L-18	0.0000021	0.000095	0.0000021	0.00032	0.0000021	0.00000019	0.00000019	0.00000083	0.0011	1.0E-09	0.000080	0.00000012	0.00000021	0.00000031	2.1E-09	2.1E-10	2.1E-09	1.0E-08	8.3E-09	0.00000017	2.1E-11
HHC-S-2	L-19	0.0000021	0.000095	0.0000021	0.00029	0.0000017	0.00000019	0.00000019	0.00000021	0.0014	1.0E-09	0.000088	0.00000012	0.00000021	0.00000033	2.1E-09	8.3E-10	2.1E-09	1.0E-08	8.3E-09	0.00000014	2.1E-11
HHC-S-2	L-20	0.0000029	0.000087	0.0000083	0.00025	0.0000012	0.00000019	0.00000019	0.00000021	0.0012	1.0E-09	0.000083	0.00000011	0.00000021	0.00000033	2.1E-09	2.1E-09	2.1E-09	1.0E-08	8.3E-09	0.00000011	2.1E-11
HHC-S-3	L-1	0.00071	0.048	0.00071	0.30	0.00043	0.0000065	0.0000064	0.0000071	0.38	0.00000036	0.0041	0.0000030	0.0000071	0.000036	0.00000071	7.1E-08	0.00000071	0.0000036	0.0000057	0.00016	7.1E-09
HHC-S-3	L-2	0.00015	0.015	0.000063	0.089	0.00023	0.0000057	0.0000057	0.0000063	0.096	3.1E-08	0.0020	0.0000089	0.000038	0.0000031	6.3E-08	8.8E-08	0.00000013	0.0000015	0.00000063	0.000025	6.3E-10
HHC-S-3	L-3	0.000046	0.0084	0.000058	0.042	0.00013	0.0000053	0.0000052	0.000012	0.030	2.9E-08	0.0014	0.0000043	0.000012	0.0000024	5.8E-08	2.3E-08	5.8E-08	0.00000081	0.00000035	0.000015	5.8E-10
HHC-S-3	L-4	0.000030	0.0039	0.000012	0.019	0.000077	0.0000011	0.0000010	0.0000012	0.0086	5.8E-09	0.00076	0.0000021	0.0000046	0.00000067	1.2E-08	2.3E-09	2.3E-08	0.00000042	9.3E-08	0.0000037	1.2E-10
HHC-S-3	L-5	0.000017	0.0025	0.0000083	0.0093	0.000051	0.00000075	0.00000075	0.0000033	0.0036	4.1E-09	0.00048	0.0000011	0.0000017	0.00000063	8.3E-09	8.3E-10	1.7E-08	0.00000017	6.6E-08	0.0000018	5.0E-10
HHC-S-3	L-6	0.000012	0.0013	0.0000041	0.0042	0.000030	0.00000038	0.0000037	0.00000041	0.0023	2.1E-09	0.00026	0.00000056	0.00000083	0.00000046	4.1E-09	4.1E-10	8.3E-09	6.6E-08	4.1E-08	0.00000073	4.1E-11
HHC-S-3	L-7	0.0000075	0.00091	0.0000041	0.0026	0.000023	0.00000038	0.00000037	0.00000041	0.0018	2.1E-09	0.00022	0.00000038	0.00000041	0.00000051	4.1E-09	8.3E-10	4.1E-09	4.1E-08	3.3E-08	0.00000058	4.1E-11
HHC-S-3	L-8	0.0000066	0.00090	0.0000083	0.0022	0.000013	0.00000076	0.00000075	0.0000033	0.0017	4.1E-09	0.00031	0.00000037	0.00000083	0.00000085	8.3E-09	3.3E-09	8.3E-09	4.1E-08	3.3E-08	0.00000083	8.3E-11
HHC-S-3	L-9	0.0000050	0.00048	0.0000042	0.0014	0.000012	0.00000038	0.00000037	0.00000042	0.0015	2.1E-09	0.00018	0.00000027	0.00000041	0.00000056	4.2E-09	8.3E-10	4.2E-09	2.1E-08	2.5E-08	0.00000059	8.3E-11
HHC-S-3	L-10	0.0000066	0.00039	0.0000042	0.0012	0.0000083	0.00000038	0.00000037	0.0000025	0.0017	2.1E-09	0.00018	0.00000025	0.00000042	0.00000057	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000051	4.2E-11
HHC-S-3	L-11	0.0000058	0.00032	0.0000042	0.00091	0.0000083	0.00000038	0.00000037	0.00000042	0.0015	2.1E-09	0.00017	0.00000022	0.00000042	0.0000006	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000046	4.2E-11
HHC-S-3	L-12	0.0000050	0.00028	0.0000041	0.00083	0.0000066	0.00000038	0.00000037	0.00000083	0.0018	2.1E-09	0.00017	0.00000021	0.00000041	0.00000058	4.1E-09	4.1E-10	4.1E-09	2.1E-08	1.7E-08	0.00000051	4.1E-11
HHC-S-3	L-13	0.0000042	0.00022	0.0000042	0.00066	0.0000091	0.00000038	0.00000037	0.00000042	0.0012	2.1E-09	0.00014	0.00000018	0.00000042	0.00000056	4.2E-09	4.2E-10	4.2E-09	2.1E-08	8.3E-09	0.00000047	4.2E-11
HHC-S-3	L-14	0.0000042	0.00020	0.0000042	0.00059	0.0000058	0.00000038	0.00000037	0.0000017	0.0017	2.1E-09	0.00015	0.00000018	0.00000042	0.0000006	4.2E-09	4.2E-10	4.2E-09	2.1E-08	1.7E-08	0.00000046	4.2E-11
HHC-S-3	L-15	0.0000033	0.00018	0.0000042	0.00052	0.0000058	0.00000038	0.00000037	0.0000025	0.0015	2.1E-09	0.00015	0.00000017	0.00000042	0.00000059	4.2E-09	8.3E-10	4.2E-09	2.1E-08	8.3E-09	0.00000045	4.2E-11
HHC-S-3	L-16	0.0000041	0.00016	0.0000041	0.00046	0.0000041	0.00000038	0.00000037	0.0000041	0.0017	2.1E-09	0.00013	0.00000015	0.00000041	0.00000059	4.1E-09	4.1E-10	4.1E-09	2.1E-08	1.7E-08	0.00000053	4.1E-11
HHC-S-3	L-17	0.0000033	0.00014	0.0000042	0.00044	0.0000042	0.00000038	0.00000037	0.00000042	0.0013	2.1E-09	0.00014	0.00000015	0.00000042	0.00000059	4.2E-09	8.3E-10	4.2E-09	2.1E-08	8.3E-09	0.00000051	4.2E-11
HHC-S-3	L-18	0.0000017	0.000100	0.0000021	0.00035	0.0000037	0.00000019	0.00000019	0.00000021	0.0010	1.0E-09	0.000081	0.00000012	0.00000021	0.00000039	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000027	2.1E-11
HHC-S-3	L-19	0.0000025	0.000095	0.0000021	0.00032	0.0000025	0.00000019	0.00000019	0.00000021	0.0013	1.0E-09	0.000086	0.00000012	0.00000021	0.00000041	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000013	2.1E-11
HHC-S-3	L-20	0.0000012	0.000091	0.0000021	0.00028	0.0000017	0.00000019	0.00000019	0.0000012	0.0011	1.0E-09	0.000081	0.0000001	0.00000021	0.00000046	2.1E-09	8.3E-10	2.1E-09	1.0E-08	1.2E-08	0.00000014	2.1E-11
HHC-S-4	L-1	0.00069	0.043	0.00069	0.26	0.00056	0.000063	0.000062	0.000069	0.39	0.00000035	0.0042	0.000026	0.000069	0.000022	0.00000069	0.00000014	0.00000069	0.0000035	0.0000056	0.00013	6.9E-09
HHC-S-4	L-2	0.00018	0.014	0.000063	0.086	0.00021	0.0000057	0.0000057	0.0000063	0.097	3.1E-08	0.0020	0.0000082	0.000025	0.0000033	6.3E-08	7.5E-08	0.00000013	0.0000016	0.0000005	0.000021	6.3E-10
HHC-S-4	L-3	0.000058	0.0079	0.000058	0.042	0.00017	0.0000053	0.0000052	0.000035	0.030	2.9E-08	0.0014	0.0000039	0.000012	0.0000024	5.8E-08	2.3E-08	5.8E-08	0.00000093	0.00000035	0.000014	5.8E-10
HHC-S-4	L-4	0.000032	0.0039	0.000012	0.019	0.000072	0.0000011	0.0000010	0.0000070	0.0084	5.8E-09	0.00074	0.0000021	0.0000046	0.00000072	1.2E-08	1.2E-09	2.3E-08	0.00000046	9.3E-08	0.0000030	1.2E-10
HHC-S-4	L-5	0.000017	0.0027	0.0000083	0.0096	0.000046	0.00000075	0.00000075	0.00000083	0.0038	4.1E-09	0.00047	0.0000011	0.00000083	0.00000065	8.3E-09	5.0E-09	8.3E-09	0.00000017	6.6E-08	0.0000016	3.3E-10
HHC-S-4	L-6	0.0000100	0.0013	0.0000041	0.0045	0.000035	0.00000038	0.0000037	0.00000041	0.0023	2.1E-09	0.00026	0.00000057	0.00000083	0.00000049	4.1E-09	2.5E-09	8.3E-09	6.6E-08	4.1E-08	0.00000066	4.1E-11
HHC-S-4	L-7	0.0000058	0.00091	0.0000041	0.0027	0.000013	0.00000038	0.00000037	0.00000041	0.0018	2.1E-09	0.00021	0.00000038	0.00000041	0.00000053	4.1E-09	1.7E-09	4.1E-09	4.1E-08	2.5E-08	0.00000051	4.1E-11
HHC-S-4	L-8	0.0000083	0.00093	0.0000083	0.0022	0.000012	0.00000076	0.00000075	0.00000083	0.0017	4.1E-09	0.00030	0.00000038	0.00000083	0.00000088	8.3E-09	1.7E-09	8.3E-09	4.1E-08	3.3E-08	0.00000081	8.3E-11
HHC-S-4	L-9	0.0000041	0.00050	0.0000041	0.0014	0.000012	0.00000038	0.00000037	0.00000041	0.0015	2.1E-09	0.00018	0.00000027	0.00000041	0.00000056	4.1E-09	8.3E-10	4.1E-09	2.1E-08	2.5E-08	0.00000048	4.1E-11
HHC-S-4	L-10	0.0000066	0.00042	0.0000042	0.0012	0.0000091	0.00000038	0.00000037	0.0000033	0.0018	2.1E-09	0.00017	0.00000025	0.00000042	0.0000006	4.2E-09	4.2E-10	4.2E-09	2.1E-08	2.5E-08	0.00000048	4.2E-11
HHC-S-4	L-11	0.0000058	0.00032	0.0000042	0.00091	0.0000083	0.00000038	0.00000037	0.00000042	0.0015	2.1E-09	0.00017	0.00000023	0.00000042	0.00000063	4.2E-09	1.7E-09	4.2E-09	2.1E-08	1.7E-08	0.0000004	4.2E-11
HHC-S-4	L-12	0.0000041	0.00029	0.0000041	0.00083	0.0000066	0.00000038	0.00000037	0.00000083	0.0019	2.1E-09	0.00017	0.00000022	0.00000041	0.00000061	4.1E-09	4.1E-10	4.1E-09	5.0E-08	2.5E-08	0.00000058	4.1E-11
HHC-S-4	L-13	0.0000042	0.00022	0.0000042	0.00066	0.000011	0.00000038	0.00000037	0.00000042	0.0013	2.1E-09	0.00014	0.00000018	0.00000042	0.00000056	4.2E-09	1.7E-09	4.2E-09	2.1E-08	8.3E-09	0.00000042	4.2E-11
HHC-S-4	L-14	0.0000042	0.00020	0.0000042	0.00058	0.0000050	0.00000038	0.00000037	0.00000042	0.0017	2.1E-09	0.00015	0.00000018	0.00000042	0.00000059	4.2E-09	8.3E-10	4.2E-09	2.1E-08	8.3E-09	0.0000004	4.2E-11
HHC-S-4	L-15	0.0000033	0.00017	0.0000041	0.00051	0.0000041	0.00000038	0.00000037	0.00000041	0.0016	2.1E-09	0.00014	0.00000017	0.00000041	0.00000059	4.1E-09	8.3E-10	4.1E-09	2.1E-08	8.3E-09	0.00000036	4.1E-11
HHC-S-4	L-16	0.0000041	0.00016	0.0000041	0.00046	0.0000033	0.00000038	0.00000037	0.00000083	0.0017	2.1E-09	0.00013	0.00000017	0.00000041	0.0000006	4.1E-09	8.3E-10	4.1E-09	2.1E-08	8.3E-09	0.00000037	4.1E-11
HHC-S-4	L-17	0.0000033	0.00014	0.0000042	0.00043	0.0000042	0.00000038	0.00000037	0.0000017	0.0013	2.1E-09	0.00014	0.00000016	0.00000042	0.0000006	4.2E-09	8.3E-10	4.2E-09	2.1E-08	8.3E-09	0.00000073	4.2E-11
HHC-S-4	L-18	0.0000021	0.000095	0.0000021	0.00034	0.0000037	0.00000019	0.00000019	0.0000012	0.0010	1.0E-09	0.000081	0.00000012	0.00000021	0.00000039	2.1E-09	4.2E-10	2.1E-09	1.0E-08	1.2E-08	0.00000022	2.1E-11
HHC-S-4	L-19	0.0000017	0.000099	0.0000021	0.00032	0.0000025	0.00000019	0.00000019	0.00000021	0.0013	1.0E-09	0.000086	0.00000011	0.00000021	0.00000041	2.1E-09	2.1E-10	2.1E-09	1.0E-08	1.2E-08	0.00000017	2.1E-11
HHC-S-4	L-20	0.0000012	0.000091	0.0000021	0.00028	0.0000017	0.00000019	0.00000019	0.00000021	0.0010	1.0E-09	0.000081	0.0000001	0.00000021	0.00000041	2.1E-09	2.1E-10	2.1E-09	1.0E-08	8.3E-09	0.00000012	2.1E-11

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s	mg/m^{2}s
HHC-S-1	L-1	0.0000084	0.022	0.0000007	0.000092	0.000017	0.00021	0.0000007	0.000074	0.000098	0.0000014	0.00014	0.000066	0.0000084	6.0E-12	9.9E-14	5.7E-10	4.2E-13
HHC-S-1	L-2	0.00000031	0.0059	6.3E-08	0.0000062	0.0000045	0.000050	6.3E-08	0.000019	0.000015	0.00000013	0.000036	0.000020	0.00000063	-	-	-	-
HHC-S-1	L-3	0.00000029	0.0018	5.8E-08	0.0000044	0.0000019	0.000019	5.8E-08	0.000013	0.0000052	0.00000012	0.000020	0.0000066	0.0000007	3.3E-13	3.4E-15	3.8E-11	4.1E-14
HHC-S-1	L-4	0.0000012	0.00083	1.2E-08	0.0000028	0.00000058	0.0000063	1.2E-08	0.0000056	0.0000022	4.6E-08	0.0000079	0.0000028	5.8E-08	-	-	-	-
HHC-S-1	L-5	4.1E-08	0.00038	8.3E-09	0.0000020	0.00000025	0.0000023	8.3E-09	0.0000066	0.00000096	5.0E-08	0.0000037	0.0000012	4.1E-08	-	-	-	-
HHC-S-1	L-6	5.0E-08	0.00023	8.3E-09	0.0000014	0.00000013	0.0000013	4.1E-09	0.0000077	0.00000077	3.3E-08	0.0000018	0.00000058	5.0E-08	1.3E-13	6.3E-16	9.6E-12	2.5E-15
HHC-S-1	L-7	2.1E-08	0.00015	4.1E-09	0.0000012	1.0E-07	0.0000010	4.1E-09	0.000011	0.00000061	3.3E-08	0.0000015	0.00000043	2.1E-08	-	-	-	-
HHC-S-1	L-8	4.2E-08	0.00014	8.3E-09	0.0000016	0.00000013	0.0000010	8.3E-09	0.000018	0.00000055	5.0E-08	0.0000023	0.0000005	4.2E-08	-	-	-	-
HHC-S-1	L-9	2.1E-08	0.00011	4.1E-09	0.0000010	1.0E-07	0.00000083	4.1E-09	0.000013	0.00000032	2.5E-08	0.0000012	0.00000033	2.1E-08	1.1E-13	2.9E-16	9.9E-12	2.5E-15
HHC-S-1	L-10	2.1E-08	0.000099	4.2E-09	0.0000011	9.1E-08	0.00000076	4.2E-09	0.000015	0.00000032	2.5E-08	0.0000013	0.00000031	2.1E-08	-	-	-	-
HHC-S-1	L-11	2.1E-08	0.000088	4.2E-09	0.0000010	9.1E-08	0.0000008	4.2E-09	0.000016	0.00000024	2.5E-08	0.0000012	0.0000003	2.1E-08	-	-	-	-
HHC-S-1	L-12	2.1E-08	0.000081	4.1E-09	0.00000091	9.1E-08	0.00000082	4.1E-09	0.000016	0.00000024	2.5E-08	0.0000012	0.00000027	2.1E-08	1.1E-13	2.0E-16	9.0E-12	2.9E-15
HHC-S-1	L-13	2.1E-08	0.000068	4.1E-09	0.00000091	8.3E-08	0.00000071	4.1E-09	0.000015	0.00000021	1.7E-08	0.0000011	0.00000024	2.1E-08	-	-	-	-
HHC-S-1	L-14	2.1E-08	0.000061	4.2E-09	0.00000091	9.1E-08	0.00000068	4.2E-09	0.000015	0.00000018	1.7E-08	0.0000012	0.00000022	2.1E-08	-	-	-	-
HHC-S-1	L-15	2.1E-08	0.000059	4.1E-09	0.00000078	9.1E-08	0.00000075	4.1E-09	0.000015	0.00000015	1.7E-08	0.0000011	0.00000023	5.8E-08	8.3E-14	1.5E-16	7.4E-12	2.5E-15
HHC-S-1	L-16	2.1E-08	0.000053	4.1E-09	0.00000091	0.00000011	0.00000076	4.1E-09	0.000014	0.00000022	1.7E-08	0.0000012	0.00000022	2.1E-08	-	-	-	-
HHC-S-1	L-17	2.1E-08	0.000054	4.1E-09	0.00000091	0.00000011	0.00000072	4.1E-09	0.000014	0.00000015	1.7E-08	0.0000012	0.0000002	2.1E-08	1.0E-13	3.9E-16	8.7E-12	2.9E-15
HHC-S-1	L-18	1.0E-08	0.000045	2.1E-09	0.00000054	5.4E-08	0.00000046	2.1E-09	0.0000091	0.00000019	1.2E-08	0.00000058	0.00000015	1.0E-08	7.6E-14	1.7E-16	5.2E-12	1.5E-15
HHC-S-1	L-19	1.0E-08	0.000044	2.1E-09	0.00000058	5.8E-08	0.00000054	2.1E-09	0.0000099	9.9E-08	1.2E-08	0.00000058	0.00000014	1.0E-08	6.6E-14	1.5E-16	5.1E-12	1.4E-15
HHC-S-1	L-20	1.0E-08	0.000036	2.1E-09	0.00000058	6.2E-08	0.0000005	2.1E-09	0.0000095	7.9E-08	1.2E-08	0.00000058	0.00000012	1.0E-08	6.7E-14	1.2E-16	5.7E-12	1.2E-15
HHC-S-2	L-1	0.0000084	0.028	0.0000007	0.000075	0.000017	0.00021	0.0000007	0.000031	0.00012	0.0000014	0.00015	0.000084	0.0000084	6.0E-12	6.6E-14	3.8E-10	4.2E-13
HHC-S-2	L-2	0.00000031	0.0068	6.3E-08	0.0000060	0.0000043	0.000048	6.3E-08	0.0000078	0.000016	0.00000013	0.000033	0.000021	0.00000031	-	-	-	-
HHC-S-2	L-3	0.00000029	0.0021	5.8E-08	0.0000045	0.0000017	0.000016	5.8E-08	0.0000074	0.0000053	0.00000012	0.000017	0.0000079	0.00000029	3.7E-13	6.8E-15	2.2E-11	4.1E-14
HHC-S-2	L-4	0.00000035	0.00093	1.2E-08	0.0000022	0.00000051	0.0000065	1.2E-08	0.0000046	0.0000022	4.6E-08	0.0000074	0.0000032	5.8E-08	-	-	-	-
HHC-S-2	L-5	4.1E-08	0.00039	8.3E-09	0.0000017	0.00000023	0.0000025	8.3E-09	0.0000060	0.00000098	5.0E-08	0.0000036	0.0000014	4.1E-08	-	-	-	-
HHC-S-2	L-6	2.1E-08	0.00023	8.3E-09	0.0000011	0.00000011	0.0000013	4.1E-09	0.0000064	0.0000007	3.3E-08	0.0000017	0.00000064	0.00000011	8.0E-14	2.4E-16	6.7E-12	2.5E-15
HHC-S-2	L-7	2.1E-08	0.00015	4.1E-09	0.0000010	1.0E-07	0.0000010	4.1E-09	0.0000091	0.00000051	3.3E-08	0.0000014	0.00000046	2.1E-08	-	-	-	-
HHC-S-2	L-8	4.1E-08	0.00014	8.3E-09	0.0000013	0.00000013	0.0000010	8.3E-09	0.000016	0.0000005	3.3E-08	0.0000023	0.00000053	4.1E-08	-	-	-	-
HHC-S-2	L-9	2.1E-08	0.00011	4.1E-09	0.00000083	9.1E-08	0.00000083	4.1E-09	0.000012	0.00000033	2.5E-08	0.0000012	0.00000035	2.1E-08	8.9E-14	2.4E-16	7.2E-12	2.5E-15
HHC-S-2	L-10	2.1E-08	0.00010	4.2E-09	0.00000091	9.1E-08	0.00000075	4.2E-09	0.000013	0.0000003	2.5E-08	0.0000013	0.00000032	2.1E-08	-	-	-	-
HHC-S-2	L-11	2.1E-08	0.000090	4.2E-09	0.00000083	9.1E-08	0.0000008	4.2E-09	0.000014	0.00000021	2.5E-08	0.0000012	0.00000031	2.1E-08	-	-	-	-
HHC-S-2	L-12	2.1E-08	0.000082	4.1E-09	0.00000081	1.0E-07	0.00000083	4.1E-09	0.000015	0.00000025	1.7E-08	0.0000012	0.00000028	2.1E-08	1.0E-13	1.5E-16	7.0E-12	2.9E-15
HHC-S-2	L-13	2.1E-08	0.000070	4.1E-09	0.00000078	9.1E-08	0.00000075	4.1E-09	0.000014	0.00000021	1.7E-08	0.0000011	0.00000026	2.1E-08	-	-	-	-
HHC-S-2	L-14	2.1E-08	0.000062	4.1E-09	0.00000081	1.0E-07	0.00000072	4.1E-09	0.000014	0.00000017	1.7E-08	0.0000012	0.00000024	2.1E-08	-	-	-	-
HHC-S-2	L-15	2.1E-08	0.000060	4.1E-09	0.00000076	0.00000011	0.0000008	4.1E-09	0.000014	0.00000014	1.7E-08	0.0000011	0.00000023	2.1E-08	8.9E-14	1.5E-16	7.8E-12	2.5E-15
HHC-S-2	L-16	2.1E-08	0.000053	4.1E-09	0.00000076	0.00000012	0.00000083	4.1E-09	0.000013	0.00000017	8.3E-09	0.0000011	0.00000022	2.1E-08	-	-	-	-
HHC-S-2	L-17	2.1E-08	0.000055	4.1E-09	0.00000071	0.00000012	0.00000078	4.1E-09	0.000013	9.1E-08	8.3E-09	0.0000010	0.0000002	5.0E-08	8.3E-14	2.0E-16	8.1E-12	5.8E-15
HHC-S-2	L-18	1.0E-08	0.000046	2.1E-09	0.0000005	5.8E-08	0.00000046	2.1E-09	0.0000091	0.00000022	8.3E-09	0.00000058	0.00000015	1.0E-08	7.9E-14	1.2E-16	4.8E-12	1.5E-15
HHC-S-2	L-19	1.0E-08	0.000044	2.1E-09	0.00000054	5.8E-08	0.00000054	2.1E-09	0.0000095	9.5E-08	1.2E-08	0.00000062	0.00000014	1.0E-08	6.5E-14	9.7E-17	5.3E-12	1.4E-15
HHC-S-2	L-20	1.0E-08	0.000037	2.1E-09	0.00000054	6.2E-08	0.00000054	2.1E-09	0.0000095	6.6E-08	1.2E-08	0.00000058	0.00000012	1.0E-08	5.5E-14	9.8E-17	6.0E-12	1.2E-15
HHC-S-3	L-1	0.0000071	0.019	0.0000014	0.000071	0.000017	0.00021	0.00000071	0.000078	0.000078	0.0000014	0.00014	0.000063	0.000011	-	-	-	-
HHC-S-3	L-2	0.00000031	0.0053	6.3E-08	0.0000068	0.0000047	0.000052	6.3E-08	0.000016	0.000014	0.00000013	0.000036	0.000018	0.00000088	-	-	-	-
HHC-S-3	L-3	0.00000029	0.0017	5.8E-08	0.0000045	0.0000017	0.000015	5.8E-08	0.000012	0.0000045	0.00000012	0.000017	0.0000063	0.00000029	-	-	-	-
HHC-S-3	L-4	0.00000014	0.00083	1.2E-08	0.0000023	0.00000056	0.0000058	1.2E-08	0.0000060	0.0000021	7.0E-08	0.0000070	0.0000026	5.8E-08	-	-	-	-
HHC-S-3	L-5	4.1E-08	0.00038	8.3E-09	0.0000020	0.00000027	0.0000023	8.3E-09	0.0000081	0.0000011	5.0E-08	0.0000035	0.0000011	4.1E-08	-	-	-	-
HHC-S-3	L-6	2.1E-08	0.00023	4.1E-09	0.0000012	0.00000012	0.0000013	4.1E-09	0.0000091	0.00000066	3.3E-08	0.0000015	0.00000057	2.1E-08	-	-	-	-
HHC-S-3	L-7	2.1E-08	0.00015	4.1E-09	0.0000011	0.00000011	0.00000091	4.1E-09	0.000012	0.00000049	3.3E-08	0.0000013	0.00000043	2.1E-08	-	-	-	-
HHC-S-3	L-8	4.1E-08	0.00014	8.3E-09	0.0000014	0.00000013	0.0000010	8.3E-09	0.000020	0.00000051	5.0E-08	0.0000022	0.0000005	4.1E-08	-	-	-	-
HHC-S-3	L-9	2.1E-08	0.00011	4.2E-09	0.0000010	9.1E-08	0.00000083	4.2E-09	0.000013	0.00000032	2.5E-08	0.0000012	0.00000034	2.1E-08	-	-	-	-
HHC-S-3	L-10	2.1E-08	0.000098	4.2E-09	0.0000010	1.0E-07	0.00000075	4.2E-09	0.000016	0.0000003	2.5E-08	0.0000012	0.00000032	2.1E-08	-	-	-	-
HHC-S-3	L-11	2.1E-08	0.000086	4.2E-09	0.0000010	1.0E-07	0.00000076	4.2E-09	0.000016	0.00000027	2.5E-08	0.0000012	0.0000003	2.1E-08	-	-	-	-
HHC-S-3	L-12	2.1E-08	0.000080	4.1E-09	0.00000091	9.1E-08	0.00000078	4.1E-09	0.000016	0.00000022	2.5E-08	0.0000011	0.00000027	2.1E-08	-	-	-	-
HHC-S-3	L-13	2.1E-08	0.000068	4.2E-09	0.00000083	8.3E-08	0.00000068	4.2E-09	0.000014	0.00000018	1.7E-08	0.0000011	0.00000025	2.1E-08	-	-	-	-
HHC-S-3	L-14	2.1E-08	0.000060	4.2E-09	0.00000083	9.1E-08	0.00000067	4.2E-09	0.000015	0.00000015	1.7E-08	0.0000010	0.00000023	2.1E-08	-	-	-	-
HHC-S-3	L-15	2.1E-08	0.000057	4.2E-09	0.00000083	9.1E-08	0.0000007	4.2E-09	0.000014	0.00000012	1.7E-08	0.0000011	0.00000022	2.1E-08	-	-	-	-
HHC-S-3	L-16	2.1E-08	0.000051	4.1E-09	0.00000083	0.00000011	0.00000073	4.1E-09	0.000013	0.00000023	1.7E-08	0.0000010	0.00000022	2.1E-08	-	-	-	-
HHC-S-3	L-17	2.1E-08	0.000052	4.2E-09	0.00000083	1.0E-07	0.00000068	4.2E-09	0.000013	0.00000012	1.7E-08	0.0000011	0.00000018	2.1E-08	-	-	-	-
HHC-S-3	L-18	1.0E-08	0.000044	2.1E-09	0.00000058	5.4E-08	0.00000046	2.1E-09	0.0000087	0.00000022	1.2E-08	0.00000058	0.00000015	1.0E-08	6.7E-14	2.0E-16	5.7E-12	1.5E-15
HHC-S-3	L-19	1.0E-08	0.000042	2.1E-09	0.00000058	5.4E-08	0.00000054	2.1E-09	0.0000091	8.7E-08	1.2E-08	0.00000058	0.00000014	1.0E-08	6.8E-14	1.5E-16	6.3E-12	1.4E-15
HHC-S-3	L-20	1.0E-08	0.000035	2.1E-09	0.00000058	5.8E-08	0.0000005	2.1E-09	0.0000091	9.9E-08	1.2E-08	0.00000058	0.00000012	1.0E-08	6.2E-14	1.2E-16	6.0E-12	1.2E-15
HHC-S-4	L-1	0.0000035	0.021	0.0000014	0.000053	0.000018	0.00019	0.00000069	0.000083	0.000083	0.0000014	0.00012	0.000060	0.000011	-	-	-	-
HHC-S-4	L-2	0.00000031	0.0060	6.3E-08	0.0000049	0.0000043	0.000048	6.3E-08	0.000019	0.000015	0.00000013	0.000031	0.000018	0.00000031	-	-	-	-
HHC-S-4	L-3	0.00000029	0.0018	5.8E-08	0.0000038	0.0000017	0.000015	5.8E-08	0.000013	0.0000044	0.00000012	0.000016	0.0000066	0.00000029	-	-	-	-
HHC-S-4	L-4	5.8E-08	0.00084	1.2E-08	0.0000023	0.00000051	0.0000056	1.2E-08	0.0000065	0.0000019	4.6E-08	0.0000065	0.0000028	5.8E-08	-	-	-	-
HHC-S-4	L-5	4.1E-08	0.00037	8.3E-09	0.0000018	0.00000022	0.0000022	8.3E-09	0.0000083	0.00000091	5.0E-08	0.0000033	0.0000012	4.1E-08	-	-	-	-
HHC-S-4	L-6	2.1E-08	0.00022	4.1E-09	0.0000012	0.00000012	0.0000012	4.1E-09	0.0000083	0.00000066	3.3E-08	0.0000016	0.00000059	2.1E-08	-	-	-	-
HHC-S-4	L-7	2.1E-08	0.00015	4.1E-09	0.0000011	1.0E-07	0.00000091	4.1E-09	0.000012	0.0000005	3.3E-08	0.0000013	0.00000043	2.1E-08	-	-	-	-
HHC-S-4	L-8	4.1E-08	0.00014	5.0E-08	0.0000014	0.00000015	0.0000010	8.3E-09	0.000018	0.00000046	5.0E-08	0.0000022	0.00000051	4.1E-08	-	-	-	-
HHC-S-4	L-9	2.1E-08	0.00011	4.1E-09	0.00000091	9.1E-08	0.00000083	4.1E-09	0.000013	0.00000032	2.5E-08	0.0000012	0.00000034	2.1E-08	-	-	-	-
HHC-S-4	L-10	2.1E-08	0.000096	4.2E-09	0.0000010	9.1E-08	0.00000077	4.2E-09	0.000015	0.00000027	2.5E-08	0.0000012	0.00000031	2.1E-08	-	-	-	-
HHC-S-4	L-11	2.1E-08	0.000086	4.2E-09	0.00000091	1.0E-07	0.00000079	4.2E-09	0.000015	0.0000002	2.5E-08	0.0000012	0.00000029	2.1E-08	-	-	-	-
HHC-S-4	L-12	2.1E-08	0.000080	1.7E-08	0.00000083	1.0E-07	0.00000081	4.1E-09	0.000015	0.00000023	2.5E-08	0.0000011	0.00000027	2.1E-08	-	-	-	-
HHC-S-4	L-13	2.1E-08	0.000066	4.2E-09	0.00000082	9.1E-08	0.00000074	4.2E-09	0.000014	0.00000022	1.7E-08	0.0000010	0.00000025	2.1E-08	-	-	-	-
HHC-S-4	L-14	2.1E-08	0.000060	4.2E-09	0.00000081	1.0E-07	0.00000071	4.2E-09	0.000015	0.00000015	1.7E-08	0.0000011	0.00000023	2.1E-08	-	-	-	-
HHC-S-4	L-15	2.1E-08	0.000057	4.1E-09	0.0000008	1.0E-07	0.00000076	4.1E-09	0.000014	0.00000012	1.7E-08	0.0000011	0.00000023	2.1E-08	-	-	-	-
HHC-S-4	L-16	2.1E-08	0.000051	4.1E-09	0.00000075	1.0E-07	0.00000077	4.1E-09	0.000013	0.00000017	8.3E-09	0.0000010	0.00000022	2.1E-08	-	-	-	-
HHC-S-4	L-17	2.1E-08	0.000053	4.2E-09	0.00000078	0.00000011	0.00000072	4.2E-09	0.000013	1.0E-07	1.7E-08	0.0000010	0.00000019	2.1E-08	-	-	-	-
HHC-S-4	L-18	1.0E-08	0.000043	2.1E-09	0.00000054	5.4E-08	0.00000046	2.1E-09	0.0000087	0.00000019	1.2E-08	0.00000058	0.00000015	1.0E-08	7.0E-14	2.2E-16	6.5E-12	1.5E-15
HHC-S-4	L-19	1.0E-08	0.000041	2.1E-09	0.00000058	5.8E-08	0.00000054	2.1E-09	0.0000095	9.5E-08	1.2E-08	0.00000058	0.00000014	1.0E-08	6.2E-14	1.7E-16	5.7E-12	1.4E-15
HHC-S-4	L-20	1.0E-08	0.000036	2.1E-09	0.00000054	5.4E-08	0.0000005	2.1E-09	0.0000091	5.8E-08	1.2E-08	0.00000058	0.00000011	1.0E-08	7.1E-14	1.2E-16	5.7E-12	1.2E-15

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	664	1.00	0.67	0.0082	8.1	0.86	1846	-	1.1E-09	9.3E-09	3.6E-11	2.5E-08	2.1E-10	1.9E-10	1.9E-10	5.5E-11
HLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	8.5E-11	7.8E-10	5.4E-12	3.7E-09	6.3E-11	3.3E-11	3.3E-11	7.5E-10
HLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	663	1.00	0.66	0.0082	8.1	0.86	1846	-	4.2E-11	2.7E-10	1.7E-11	1.1E-08	1.5E-10	7.7E-11	7.7E-11	2.3E-09
HLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.86	1846	-	5.5E-11	4.6E-10	1.8E-12	1.2E-09	1.1E-10	6.9E-11	6.8E-11	2.4E-09
HLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.86	1846	-	1.7E-10	1.5E-09	2.3E-12	1.5E-09	1.6E-10	1.0E-10	9.9E-11	2.7E-09
HLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	649	1.00	0.65	0.0082	7.9	0.86	1846	-	8.7E-11	7.8E-10	1.2E-12	7.8E-10	1.5E-10	1.0E-10	1.0E-10	1.9E-09
HLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	660	1.00	0.66	0.0082	8.1	0.86	1846	-	1.5E-10	5.2E-10	3.2E-11	1.4E-09	2.1E-10	1.4E-10	1.3E-10	1.7E-09
HLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	657	1.00	0.66	0.0082	8.0	0.86	1846	-	5.9E-11	6.7E-10	1.1E-11	7.1E-09	2.9E-10	2.1E-10	2.0E-10	1.8E-09
HLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	3.9E-10	3.7E-09	3.2E-12	2.1E-09	2.4E-10	1.7E-10	1.7E-10	1.3E-09
HLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	4.2E-10	4.1E-09	4.0E-12	2.7E-09	2.5E-10	1.9E-10	1.9E-10	8.9E-10
HLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.86	1846	-	5.8E-10	9.3E-10	4.7E-10	3.2E-09	2.9E-10	2.1E-10	2.1E-10	7.2E-10
HLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	7.8E-10	3.8E-09	8.9E-11	3.8E-09	2.6E-10	1.8E-10	1.8E-10	6.0E-10
HLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1846	-	1.9E-10	9.1E-10	2.5E-11	4.3E-09	2.4E-10	1.8E-10	1.8E-10	4.5E-10
HLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1846	-	3.5E-10	3.4E-09	7.0E-12	4.7E-09	2.7E-10	1.9E-10	1.9E-10	3.0E-10
HLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	3.3E-09	2.3E-08	1.3E-10	5.4E-09	2.1E-10	2.0E-10	2.0E-10	2.7E-10
HLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	7.8E-10	8.8E-10	8.8E-10	5.9E-09	2.2E-10	2.3E-10	2.3E-10	1.3E-10
HLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	3.4E-09	3.2E-08	9.5E-12	6.5E-09	2.3E-10	2.1E-10	2.1E-10	1.5E-10
HLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	667	1.00	0.67	0.0082	8.2	0.86	1844	-	2.8E-11	1.1E-10	5.1E-11	2.5E-08	2.9E-11	1.5E-11	1.2E-11	1.1E-10
HLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.86	1844	-	3.6E-11	2.6E-10	7.5E-12	3.6E-09	1.4E-10	7.8E-11	7.8E-11	2.1E-09
HLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	672	1.00	0.67	0.0082	8.2	0.86	1844	-	2.1E-10	1.3E-09	2.4E-11	1.2E-08	3.5E-10	1.9E-10	1.9E-10	3.8E-09
HLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1844	-	4.9E-11	2.7E-10	2.5E-12	1.2E-09	2.5E-10	1.7E-10	1.7E-10	4.1E-09
HLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1844	-	1.4E-10	8.5E-10	3.3E-12	1.6E-09	3.7E-10	2.5E-10	2.5E-10	4.9E-09
HLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	662	1.00	0.66	0.0082	8.1	0.86	1844	-	4.8E-10	1.9E-09	2.7E-11	8.1E-10	3.5E-10	2.5E-10	2.5E-10	3.7E-09
HLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	661	1.00	0.66	0.0082	8.1	0.86	1844	-	3.0E-10	3.0E-10	2.8E-10	1.4E-09	5.2E-10	3.4E-10	3.4E-10	3.1E-09
HLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1844	-	1.3E-10	8.0E-10	1.5E-11	7.2E-09	5.7E-10	4.9E-10	4.9E-10	2.9E-09
HLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	4.1E-10	1.6E-09	1.8E-11	2.2E-09	5.3E-10	4.1E-10	4.0E-10	1.9E-09
HLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1844	-	6.8E-10	3.1E-09	2.2E-11	2.7E-09	5.2E-10	4.5E-10	4.4E-10	1.5E-09
HLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1844	-	2.9E-10	1.5E-11	6.8E-10	3.3E-09	5.5E-10	4.5E-10	4.5E-10	1.2E-09
HLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1844	-	1.2E-09	4.3E-09	1.3E-10	3.8E-09	5.4E-10	4.3E-10	4.3E-10	1.1E-09
HLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1844	-	3.0E-09	1.3E-08	1.4E-10	4.3E-09	5.7E-10	4.3E-10	4.3E-10	6.9E-10
HLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1844	-	3.1E-09	1.8E-08	1.0E-11	4.9E-09	6.3E-10	4.9E-10	4.9E-10	5.4E-10
HLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	2.2E-10	6.1E-12	1.8E-10	5.5E-09	4.5E-10	4.9E-10	4.9E-10	3.9E-10
HLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1844	-	1.1E-09	9.6E-10	1.2E-09	6.0E-09	5.0E-10	5.4E-10	5.4E-10	2.4E-10
HLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1844	-	7.3E-10	4.2E-09	1.4E-11	6.6E-09	5.0E-10	4.8E-10	4.8E-10	2.6E-10
HLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1842	-	1.1E-10	3.3E-10	6.0E-11	2.4E-08	1.3E-11	6.8E-12	7.3E-12	4.6E-12
HLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1842	-	1.6E-11	5.1E-11	9.2E-12	3.7E-09	8.2E-11	4.4E-11	4.4E-11	7.3E-10
HLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	659	1.00	0.66	0.0082	8.1	0.86	1842	-	2.0E-10	9.8E-10	2.8E-11	1.1E-08	1.7E-10	9.2E-11	9.1E-11	2.0E-09
HLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	3.5E-11	1.6E-10	3.1E-12	1.3E-09	1.5E-10	9.8E-11	9.7E-11	2.7E-09
HLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	2.8E-11	1.4E-10	4.0E-12	1.6E-09	2.2E-10	1.4E-10	1.4E-10	3.1E-09
HLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1842	-	5.2E-10	1.6E-09	3.2E-11	8.1E-10	2.1E-10	1.4E-10	1.4E-10	2.3E-09
HLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	656	1.00	0.66	0.0082	8.0	0.86	1842	-	1.5E-10	2.3E-10	5.4E-11	1.4E-09	3.0E-10	1.9E-10	1.9E-10	2.0E-09
HLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1842	-	5.1E-10	2.5E-09	1.8E-11	7.2E-09	3.6E-10	2.6E-10	2.6E-10	2.0E-09
HLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1842	-	4.1E-10	1.9E-09	5.4E-12	2.2E-09	2.8E-10	2.1E-10	2.1E-10	1.3E-09
HLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1842	-	3.0E-10	2.4E-10	4.4E-10	2.7E-09	3.2E-10	2.5E-10	2.5E-10	1.1E-09
HLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	2.9E-10	1.1E-11	8.1E-10	3.3E-09	2.9E-10	2.5E-10	2.5E-10	9.1E-10
HLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	6.1E-10	1.3E-09	1.5E-10	3.8E-09	3.2E-10	2.3E-10	2.3E-10	7.5E-10
HLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	654	1.00	0.66	0.0082	8.0	0.86	1842	-	1.1E-09	2.6E-09	1.7E-10	4.4E-09	3.4E-10	2.4E-10	2.4E-10	5.7E-10
HLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1842	-	1.1E-09	4.9E-09	1.2E-11	4.9E-09	3.7E-10	2.7E-10	2.7E-10	4.6E-10
HLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1842	-	3.9E-10	7.5E-11	8.7E-10	5.4E-09	3.3E-10	2.5E-10	2.5E-10	3.4E-10
HLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1842	-	1.3E-09	1.0E-09	1.5E-09	6.0E-09	3.1E-10	2.9E-10	2.9E-10	1.7E-10
HLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1842	-	1.0E-09	5.0E-09	1.6E-11	6.5E-09	2.7E-10	2.6E-10	2.6E-10	2.4E-10
HLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	659	1.00	0.66	0.0082	8.1	0.86	1846	-	1.0E-10	3.8E-10	5.0E-11	2.4E-08	1.3E-11	9.1E-12	9.3E-12	2.8E-12
HLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	655	1.00	0.66	0.0082	8.0	0.86	1846	-	9.7E-11	5.2E-10	7.7E-12	3.7E-09	7.8E-11	5.1E-11	5.1E-11	8.8E-10
HLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	663	1.00	0.66	0.0082	8.1	0.86	1846	-	1.1E-10	7.1E-10	2.4E-11	1.1E-08	1.9E-10	1.0E-10	1.0E-10	2.1E-09
HLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	4.6E-11	2.4E-10	2.6E-12	1.2E-09	1.5E-10	9.7E-11	9.7E-11	2.9E-09
HLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	1.3E-10	7.4E-10	3.2E-12	1.6E-09	2.2E-10	1.4E-10	1.4E-10	3.3E-09
HLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	660	1.00	0.66	0.0082	8.1	0.86	1846	-	4.8E-10	1.8E-09	2.7E-11	8.1E-10	2.1E-10	1.4E-10	1.4E-10	2.6E-09
HLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	658	1.00	0.66	0.0082	8.1	0.86	1846	-	2.0E-10	1.3E-10	2.8E-10	1.4E-09	2.7E-10	1.9E-10	1.9E-10	2.0E-09
HLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	657	1.00	0.66	0.0082	8.0	0.86	1846	-	1.2E-10	6.9E-10	1.5E-11	7.1E-09	3.6E-10	2.7E-10	2.7E-10	2.1E-09
HLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1846	-	4.4E-10	2.4E-09	4.5E-12	2.2E-09	3.0E-10	2.2E-10	2.2E-10	1.3E-09
HLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	654	1.00	0.65	0.0082	8.0	0.86	1846	-	1.4E-09	7.7E-09	5.6E-12	2.7E-09	3.4E-10	2.4E-10	2.4E-10	1.1E-09
HLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	653	1.00	0.65	0.0082	8.0	0.86	1846	-	2.2E-10	5.1E-11	4.3E-10	3.2E-09	3.2E-10	2.5E-10	2.5E-10	8.6E-10
HLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	649	1.00	0.65	0.0082	8.0	0.86	1846	-	1.1E-09	3.7E-09	1.2E-10	3.7E-09	3.2E-10	2.4E-10	2.4E-10	7.0E-10
HLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	649	1.00	0.65	0.0082	8.0	0.86	1846	-	3.6E-10	6.0E-10	1.4E-10	4.3E-09	3.3E-10	2.5E-10	2.5E-10	5.3E-10
HLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.86	1846	-	5.0E-10	2.7E-09	9.9E-12	4.8E-09	3.6E-10	2.6E-10	2.6E-10	3.5E-10
HLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.86	1846	-	4.6E-10	3.4E-10	7.1E-10	5.4E-09	2.5E-10	2.5E-10	2.5E-10	2.5E-10
HLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.86	1846	-	6.2E-10	9.2E-11	1.2E-09	5.9E-09	2.8E-10	2.8E-10	2.8E-10	1.6E-10
HLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	651	1.00	0.65	0.0082	8.0	0.86	1846	-	3.3E-09	1.8E-08	1.3E-11	6.5E-09	3.0E-10	2.7E-10	2.7E-10	1.7E-10

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-1	L-1	4.9E-09	5.8E-10	0.00000015	4.4E-10	-	-	2.4E-08	-	1.8E-10	4.5E-12	0.00000033	1.5E-10	1.1E-10	3.1E-09	2.5E-08	2.5E-10	6.1E-09	5.5E-08	0.00000039	0.0000083	5.4E-11
HLC-1	L-2	7.3E-10	2.5E-10	9.2E-10	4.1E-10	-	-	0.00000036	-	4.1E-11	7.9E-13	0.00000011	6.8E-11	6.5E-11	4.1E-10	3.7E-09	5.9E-10	0.00000013	6.4E-10	0.00000045	0.00010	2.6E-15
HLC-1	L-3	2.3E-09	6.5E-10	7.1E-10	1.3E-09	-	-	1.1E-08	-	1.3E-10	1.1E-12	9.7E-08	2.1E-10	2.0E-10	8.4E-10	1.1E-08	1.8E-09	2.9E-09	2.0E-09	3.2E-08	0.0000026	8.0E-15
HLC-1	L-4	2.2E-09	5.5E-10	1.2E-09	1.1E-09	-	-	1.2E-09	-	1.1E-10	7.7E-13	3.8E-09	2.6E-10	1.4E-10	2.6E-10	1.2E-09	1.2E-11	1.2E-09	2.1E-10	3.1E-08	0.0000010	1.4E-14
HLC-1	L-5	2.7E-09	7.7E-10	1.5E-09	1.4E-09	-	-	1.5E-09	-	1.5E-10	5.3E-13	9.6E-09	3.4E-10	2.5E-10	2.7E-10	1.5E-09	1.5E-11	1.5E-09	2.7E-10	2.1E-08	0.0000030	1.7E-14
HLC-1	L-6	2.8E-09	6.6E-10	1.8E-09	1.2E-09	-	-	7.6E-10	-	1.5E-10	4.9E-13	9.1E-10	3.1E-10	2.2E-10	2.5E-10	7.8E-10	7.8E-10	1.9E-10	1.4E-10	5.5E-09	8.0E-09	8.7E-15
HLC-1	L-7	3.8E-09	9.8E-10	3.1E-09	1.3E-09	-	-	1.3E-09	-	1.8E-10	3.4E-13	1.9E-09	4.0E-10	4.9E-10	4.0E-10	1.4E-09	2.2E-10	3.4E-10	2.4E-10	1.2E-08	0.00000021	9.6E-16
HLC-1	L-8	7.1E-09	1.5E-09	1.8E-09	1.8E-09	-	-	0.0000007	-	2.6E-10	2.1E-13	4.5E-08	5.2E-10	7.9E-10	7.9E-10	7.1E-09	1.1E-09	2.8E-08	1.2E-09	0.00000016	0.000029	2.0E-14
HLC-1	L-9	2.6E-09	9.2E-10	2.1E-09	1.1E-09	-	-	0.00000021	-	2.0E-10	3.8E-14	1.2E-08	3.9E-10	7.7E-10	7.3E-10	2.1E-09	1.4E-09	8.6E-09	3.7E-10	3.4E-08	0.0000058	2.4E-14
HLC-1	L-10	3.3E-09	1.0E-09	2.7E-09	1.1E-09	-	-	0.00000027	-	2.2E-10	2.2E-14	4.2E-09	4.4E-10	9.7E-10	7.3E-10	2.7E-09	1.1E-10	6.7E-10	4.7E-10	1.1E-08	0.00000011	1.9E-15
HLC-1	L-11	4.0E-09	1.0E-09	3.2E-09	1.1E-09	-	-	0.00000032	-	2.3E-10	1.7E-14	9.8E-09	5.0E-10	1.2E-09	1.1E-09	3.2E-09	1.3E-10	8.0E-10	5.6E-10	1.3E-08	0.00000013	8.9E-15
HLC-1	L-12	4.6E-09	9.1E-10	3.8E-09	8.4E-10	-	-	0.00000037	-	2.2E-10	1.1E-14	8.4E-09	4.2E-10	1.1E-09	1.0E-09	3.8E-09	3.8E-11	9.4E-10	6.5E-10	6.7E-09	3.8E-08	2.6E-15
HLC-1	L-13	5.3E-09	9.4E-10	4.3E-09	7.4E-10	-	-	0.00000042	-	2.1E-10	1.0E-14	1.1E-08	4.4E-10	1.2E-09	1.1E-09	4.3E-09	4.3E-11	1.1E-09	7.4E-10	7.6E-09	6.8E-08	3.0E-15
HLC-1	L-14	4.7E-09	9.7E-10	1.2E-09	7.2E-10	-	-	0.00000047	-	2.1E-10	8.6E-15	1.3E-08	4.0E-10	1.3E-09	1.1E-09	4.7E-09	1.9E-10	1.2E-09	8.2E-10	8.4E-09	6.1E-08	3.3E-15
HLC-1	L-15	8.0E-09	9.3E-10	1.3E-09	6.0E-10	-	-	0.000053	-	2.2E-10	5.0E-15	2.9E-08	3.9E-10	1.2E-09	1.3E-09	5.4E-09	2.2E-10	1.3E-09	9.3E-10	5.4E-09	5.4E-09	3.8E-15
HLC-1	L-16	5.9E-09	1.1E-09	1.5E-09	5.5E-10	-	-	0.00000058	-	2.4E-10	1.4E-15	2.4E-08	3.7E-10	1.7E-09	1.2E-09	5.9E-09	2.1E-09	1.5E-09	1.0E-09	1.1E-08	0.00000059	4.1E-15
HLC-1	L-17	8.0E-09	9.2E-10	1.6E-09	4.0E-10	-	-	0.00000064	-	2.4E-10	1.5E-15	2.0E-08	4.0E-10	1.4E-09	1.5E-09	6.5E-09	6.5E-11	1.6E-09	1.1E-09	5.8E-08	0.0000002	7.2E-14
HLC-2	L-1	1.6E-09	3.1E-10	0.00000016	4.0E-10	-	-	2.4E-08	-	2.2E-11	5.5E-13	0.00000014	1.7E-11	3.2E-11	1.5E-10	2.5E-08	2.5E-10	2.5E-08	4.3E-09	0.00000047	0.000057	2.2E-12
HLC-2	L-2	9.1E-10	5.8E-10	2.3E-10	1.2E-09	-	-	0.00000036	-	1.1E-10	1.8E-12	2.7E-09	1.1E-10	7.4E-11	6.8E-11	3.6E-09	3.6E-09	9.1E-10	6.3E-10	4.0E-08	0.0000008	1.3E-12
HLC-2	L-3	1.7E-09	1.3E-09	7.3E-10	2.1E-09	-	-	1.1E-08	-	2.4E-10	2.0E-12	6.8E-08	2.3E-10	2.4E-10	2.0E-10	1.2E-08	4.7E-10	2.9E-09	2.0E-09	4.7E-08	0.0000063	1.0E-12
HLC-2	L-4	2.3E-09	9.9E-10	1.2E-09	2.1E-09	-	-	1.2E-09	-	2.4E-10	8.7E-13	2.6E-09	2.6E-10	1.6E-10	9.4E-11	1.2E-09	4.9E-11	3.1E-10	2.1E-10	2.0E-08	0.0000014	2.5E-13
HLC-2	L-5	4.2E-09	1.4E-09	1.6E-09	2.7E-09	-	-	1.5E-09	-	3.3E-10	5.8E-13	3.1E-09	3.8E-10	2.0E-10	1.4E-10	1.6E-09	6.3E-11	4.0E-10	2.7E-10	1.1E-08	0.00000043	1.4E-13
HLC-2	L-6	2.1E-09	1.2E-09	1.8E-09	2.4E-09	-	-	8.0E-10	-	3.2E-10	5.7E-13	6.1E-10	3.5E-10	2.7E-10	1.8E-10	8.1E-10	1.2E-09	2.0E-10	1.4E-10	3.3E-09	1.3E-08	4.5E-15
HLC-2	L-7	4.8E-09	1.7E-09	1.4E-09	2.6E-09	-	-	1.3E-09	-	4.5E-10	4.4E-13	7.4E-10	4.6E-10	7.0E-10	3.3E-10	1.4E-09	8.8E-10	3.4E-10	2.4E-10	2.2E-08	4.9E-08	3.1E-14
HLC-2	L-8	9.1E-09	2.7E-09	1.8E-09	3.4E-09	-	-	0.00000071	-	5.8E-10	2.5E-13	3.2E-09	5.3E-10	1.3E-09	6.4E-10	7.2E-09	1.1E-09	1.8E-09	1.2E-09	2.0E-08	0.00000066	4.0E-14
HLC-2	L-9	3.4E-09	1.7E-09	2.2E-09	2.2E-09	-	-	0.00000021	-	4.6E-10	6.6E-14	1.4E-09	4.3E-10	1.1E-09	5.7E-10	2.2E-09	1.4E-09	5.5E-10	3.8E-10	8.7E-09	0.00000015	1.2E-14
HLC-2	L-10	4.2E-09	1.8E-09	2.7E-09	2.1E-09	-	-	0.00000027	-	4.7E-10	5.5E-14	1.2E-09	4.4E-10	1.1E-09	6.0E-10	2.7E-09	1.1E-10	6.8E-10	4.7E-10	7.6E-09	8.5E-08	1.5E-14
HLC-2	L-11	4.1E-09	1.8E-09	3.3E-09	1.9E-09	-	-	0.00000032	-	4.9E-10	4.4E-14	2.1E-09	4.5E-10	1.4E-09	7.2E-10	3.3E-09	5.2E-10	8.2E-10	5.7E-10	9.1E-09	0.00000015	1.8E-14
HLC-2	L-12	3.8E-09	1.7E-09	9.6E-10	1.6E-09	-	-	0.00000038	-	4.9E-10	3.1E-14	2.9E-09	4.6E-10	1.2E-09	7.6E-10	3.8E-09	3.8E-11	9.6E-10	6.6E-10	6.8E-09	0.00000018	2.1E-14
HLC-2	L-13	6.7E-09	1.7E-09	1.1E-09	1.4E-09	-	-	0.00000043	-	4.7E-10	2.2E-14	8.5E-09	4.6E-10	1.4E-09	7.8E-10	4.3E-09	8.5E-09	1.1E-09	7.5E-10	1.7E-08	0.0000026	2.4E-14
HLC-2	L-14	4.9E-09	1.8E-09	1.2E-09	1.4E-09	-	-	0.00000048	-	4.8E-10	2.0E-14	7.0E-09	4.5E-10	1.6E-09	9.8E-10	4.9E-09	7.8E-10	1.2E-09	8.5E-10	2.0E-08	0.0000016	2.7E-14
HLC-2	L-15	1.0E-08	1.7E-09	1.4E-09	1.2E-09	-	-	0.000054	-	4.9E-10	8.2E-15	7.9E-09	4.0E-10	1.4E-09	1.1E-09	5.5E-09	5.5E-09	1.4E-09	9.5E-10	9.7E-09	5.5E-09	3.0E-14
HLC-2	L-16	6.0E-09	1.8E-09	1.5E-09	1.1E-09	-	-	0.00000059	-	5.4E-10	6.2E-15	8.6E-09	4.1E-10	2.0E-09	1.1E-09	6.0E-09	2.2E-09	1.5E-09	1.0E-09	1.1E-08	0.00000014	3.3E-14
HLC-2	L-17	6.6E-09	1.6E-09	1.6E-09	7.5E-10	-	-	0.00000065	-	4.9E-10	1.7E-15	7.5E-09	4.1E-10	2.2E-09	1.2E-09	6.6E-09	2.6E-10	1.6E-09	1.1E-09	1.2E-08	0.00000024	5.9E-13
HLC-3	L-1	6.0E-11	6.0E-11	1.5E-09	3.4E-11	-	-	2.3E-08	-	7.0E-12	1.0E-13	0.0000001	4.2E-12	3.1E-11	1.3E-10	2.4E-08	9.6E-10	2.4E-08	3.1E-09	0.00000029	0.000035	2.8E-14
HLC-3	L-2	5.9E-10	3.0E-10	2.3E-10	4.3E-10	-	-	0.00000036	-	6.0E-11	6.7E-13	6.0E-09	5.4E-11	7.5E-11	1.3E-10	3.7E-09	5.9E-10	9.2E-10	4.7E-10	2.3E-08	0.0000050	4.3E-15
HLC-3	L-3	1.0E-09	7.1E-10	7.1E-10	1.1E-09	-	-	1.1E-08	-	1.3E-10	1.2E-12	7.3E-08	1.7E-10	2.3E-10	2.8E-10	1.1E-08	4.5E-10	2.8E-09	1.4E-09	1.8E-08	0.0000029	1.3E-14
HLC-3	L-4	1.8E-09	6.6E-10	1.3E-09	1.4E-09	-	-	1.2E-09	-	1.4E-10	7.8E-13	5.5E-09	2.7E-10	1.6E-10	1.3E-10	1.3E-09	1.3E-11	1.3E-09	1.6E-10	1.1E-08	0.0000014	2.4E-14
HLC-3	L-5	2.7E-09	9.1E-10	1.6E-09	1.7E-09	-	-	1.6E-09	-	2.0E-10	3.2E-13	5.8E-09	3.9E-10	2.9E-10	1.8E-10	1.6E-09	5.7E-10	6.4E-09	2.0E-10	0.0000036	0.0000057	3.0E-14
HLC-3	L-6	2.1E-09	8.1E-10	1.8E-09	1.5E-09	-	-	7.9E-10	-	1.8E-10	3.5E-13	1.3E-09	3.5E-10	3.3E-10	2.1E-10	8.1E-10	8.1E-10	8.1E-10	1.0E-10	3.2E-09	0.00000028	9.4E-16
HLC-3	L-7	3.1E-09	1.1E-09	1.4E-09	1.6E-09	-	-	1.3E-09	-	2.3E-10	2.4E-13	1.9E-09	4.3E-10	6.9E-10	3.5E-10	1.4E-09	2.2E-10	3.4E-10	1.7E-10	6.9E-09	0.00000022	1.6E-15
HLC-3	L-8	5.8E-09	1.7E-09	1.8E-09	2.0E-09	-	-	0.00000071	-	3.3E-10	1.6E-13	1.0E-08	5.4E-10	1.3E-09	6.4E-10	7.2E-09	7.2E-11	1.8E-09	9.2E-10	2.9E-08	0.0000068	8.4E-15
HLC-3	L-9	1.4E-09	1.0E-09	2.2E-09	1.3E-09	-	-	0.00000021	-	2.5E-10	1.5E-13	3.0E-09	4.2E-10	9.0E-10	5.7E-10	2.2E-09	1.4E-09	5.4E-10	2.8E-10	6.7E-09	0.00000061	2.6E-15
HLC-3	L-10	2.2E-09	1.2E-09	2.7E-09	1.4E-09	-	-	0.00000027	-	2.8E-10	3.4E-14	5.1E-09	4.8E-10	1.1E-09	6.5E-10	2.7E-09	1.1E-10	6.8E-10	3.5E-10	1.1E-08	0.0000013	3.2E-15
HLC-3	L-11	3.3E-09	1.2E-09	3.3E-09	1.3E-09	-	-	0.00000032	-	2.7E-10	1.7E-14	7.8E-09	5.1E-10	1.3E-09	7.8E-10	3.3E-09	5.2E-10	3.3E-09	4.2E-10	1.3E-08	0.0000029	1.5E-14
HLC-3	L-12	3.1E-09	1.1E-09	9.5E-10	1.1E-09	-	-	0.00000037	-	2.7E-10	1.1E-14	4.5E-09	5.0E-10	1.2E-09	8.3E-10	3.8E-09	1.4E-09	9.5E-10	4.9E-10	2.1E-09	0.00000014	4.5E-15
HLC-3	L-13	4.4E-09	1.1E-09	1.1E-09	9.6E-10	-	-	0.00000043	-	2.6E-10	1.2E-14	1.0E-08	5.1E-10	1.4E-09	9.6E-10	4.4E-09	1.7E-10	1.1E-09	5.6E-10	6.8E-09	0.00000023	5.1E-15
HLC-3	L-14	4.9E-09	1.2E-09	1.2E-09	9.4E-10	-	-	0.00000048	-	2.9E-10	1.0E-14	1.6E-08	5.0E-10	1.6E-09	1.2E-09	4.9E-09	2.0E-10	1.2E-09	6.2E-10	4.9E-09	0.00000031	5.7E-15
HLC-3	L-15	5.4E-09	1.1E-09	1.4E-09	7.7E-10	-	-	0.000053	-	2.7E-10	5.9E-15	1.5E-08	4.1E-10	1.4E-09	1.2E-09	5.4E-09	5.4E-11	1.4E-09	6.9E-10	3.1E-09	5.4E-09	6.4E-15
HLC-3	L-16	2.9E-09	1.2E-09	1.5E-09	7.1E-10	-	-	0.00000059	-	3.0E-10	9.4E-15	1.6E-08	4.5E-10	2.0E-09	1.3E-09	6.0E-09	6.0E-11	1.5E-09	7.7E-10	3.4E-09	9.6E-08	7.0E-15
HLC-3	L-17	4.1E-09	1.0E-09	1.6E-09	5.3E-10	-	-	0.00000064	-	2.6E-10	1.8E-14	2.6E-08	4.5E-10	1.6E-09	1.5E-09	6.5E-09	6.5E-11	1.6E-09	8.3E-10	2.0E-08	0.0000013	1.2E-13
HLC-4	L-1	7.5E-11	6.0E-11	1.5E-09	4.3E-11	-	-	2.4E-08	-	9.2E-12	2.2E-13	0.0000001	5.3E-12	2.4E-11	1.1E-10	2.4E-08	9.7E-10	6.0E-09	3.1E-09	9.7E-08	0.000026	1.2E-13
HLC-4	L-2	4.1E-10	3.3E-10	9.3E-10	4.9E-10	-	-	0.00000036	-	6.3E-11	6.5E-13	1.8E-09	6.9E-11	5.8E-11	9.5E-11	3.7E-09	5.9E-10	9.3E-10	2.2E-08	3.7E-09	0.0000020	1.8E-14
HLC-4	L-3	1.3E-09	7.1E-10	7.1E-10	1.3E-09	-	-	1.1E-08	-	1.3E-10	1.0E-12	0.0000001	2.1E-10	1.8E-10	2.2E-10	1.1E-08	4.6E-10	2.9E-09	1.5E-09	4.1E-09	0.0000025	1.4E-14
HLC-4	L-4	2.2E-09	6.7E-10	1.2E-09	1.4E-09	-	-	1.2E-09	-	1.4E-10	6.4E-13	1.9E-09	3.0E-10	1.2E-10	9.7E-11	1.2E-09	5.0E-11	3.1E-10	1.6E-10	5.0E-09	0.0000015	5.5E-14
HLC-4	L-5	3.3E-09	9.2E-10	1.6E-09	1.8E-09	-	-	1.5E-09	-	2.0E-10	4.9E-13	2.5E-09	4.5E-10	1.5E-10	1.4E-10	1.6E-09	2.5E-10	1.6E-09	2.0E-10	5.1E-09	0.0000015	3.1E-14
HLC-4	L-6	2.5E-09	8.1E-10	1.8E-09	1.5E-09	-	-	7.9E-10	-	1.9E-10	4.1E-13	9.4E-10	4.0E-10	3.1E-10	1.7E-10	8.1E-10	8.1E-12	2.0E-10	1.0E-10	1.2E-09	0.00000074	9.9E-16
HLC-4	L-7	3.8E-09	1.1E-09	1.4E-09	1.6E-09	-	-	1.3E-09	-	2.4E-10	2.6E-13	1.6E-09	4.9E-10	5.3E-10	3.1E-10	1.4E-09	1.4E-11	3.4E-10	1.7E-10	3.5E-09	0.00000033	6.7E-15
HLC-4	L-8	7.1E-09	1.8E-09	1.8E-09	2.1E-09	-	-	0.0000007	-	3.4E-10	1.7E-13	7.1E-09	6.2E-10	1.0E-09	5.6E-10	7.1E-09	2.8E-10	1.8E-09	9.1E-10	1.0E-08	0.0000050	8.7E-15
HLC-4	L-9	1.7E-09	1.1E-09	2.2E-09	1.3E-09	-	-	0.00000021	-	2.6E-10	1.4E-13	2.2E-09	4.7E-10	6.8E-10	5.0E-10	2.2E-09	8.6E-11	5.4E-10	2.8E-10	3.1E-09	0.00000038	2.7E-15
HLC-4	L-10	3.3E-09	1.2E-09	2.7E-09	1.4E-09	-	-	0.00000027	-	2.9E-10	2.5E-14	4.2E-09	5.3E-10	1.1E-09	5.7E-10	2.7E-09	4.3E-10	6.8E-10	3.5E-10	5.3E-09	0.0000014	3.3E-15
HLC-4	L-11	4.0E-09	1.2E-09	3.2E-09	1.3E-09	-	-	0.00000032	-	2.8E-10	2.0E-14	5.8E-09	5.4E-10	1.0E-09	6.3E-10	3.2E-09	5.2E-10	3.2E-09	4.1E-10	8.3E-09	0.0000030	1.6E-14
HLC-4	L-12	4.6E-09	1.1E-09	3.7E-09	1.1E-09	-	-	0.00000037	-	2.8E-10	1.1E-14	6.7E-09	5.3E-10	9.4E-10	7.3E-10	3.7E-09	1.5E-10	9.4E-10	4.8E-10	1.3E-09	4.9E-08	4.6E-15
HLC-4	L-13	6.4E-09	1.1E-09	1.1E-09	8.9E-10	-	-	0.00000042	-	2.9E-10	7.5E-15	6.7E-09	5.7E-10	1.1E-09	8.3E-10	4.3E-09	4.3E-11	1.1E-09	5.5E-10	2.7E-09	0.00000039	5.3E-15
HLC-4	L-14	4.8E-09	1.3E-09	1.2E-09	8.6E-10	-	-	0.00000047	-	3.0E-10	8.4E-15	9.6E-09	5.2E-10	1.2E-09	9.3E-10	4.8E-09	1.7E-09	1.2E-09	6.1E-10	4.8E-09	0.00000083	5.9E-15
HLC-4	L-15	6.7E-09	1.1E-09	1.4E-09	7.1E-10	-	-	0.000053	-	2.8E-10	6.9E-15	8.4E-09	4.4E-10	1.0E-09	9.5E-10	5.4E-09	3.5E-09	1.4E-09	6.9E-10	1.9E-09	5.4E-09	6.6E-15
HLC-4	L-16	3.6E-09	1.2E-09	1.5E-09	6.6E-10	-	-	0.00000058	-	2.8E-10	7.6E-15	6.9E-09	4.4E-10	1.5E-09	9.5E-10	5.9E-09	5.9E-11	1.5E-09	7.7E-09	2.1E-09	0.00000011	7.3E-15
HLC-4	L-17	6.5E-09	1.1E-09	1.6E-09	4.8E-10	-	-	0.00000064	-	2.8E-10	5.8E-15	2.6E-08	4.4E-10	1.6E-09	1.3E-09	6.5E-09	2.3E-09	1.6E-09	8.3E-10	6.5E-09	0.0000012	1.3E-13

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-1	L-1	2.5E-08	2.7E-10	5.5E-08	2.7E-08	1.5E-09	4.0E-10	2.5E-08	9.6E-11	1.1E-09	3.5E-10	0.00000013	1.5E-10	0.0000025	-	-	2.3E-09	-
HLC-1	L-2	2.1E-08	2.7E-10	3.3E-08	0.0000035	4.5E-10	9.9E-11	3.7E-09	2.3E-11	2.4E-09	1.5E-10	0.0000005	2.9E-11	0.00000026	-	-	6.3E-10	-
HLC-1	L-3	1.1E-08	9.2E-10	1.1E-08	6.4E-09	1.4E-09	2.7E-10	1.1E-08	5.8E-11	8.8E-10	2.9E-10	6.0E-08	6.9E-11	0.00000018	-	-	4.9E-10	-
HLC-1	L-4	1.2E-09	9.2E-10	2.8E-09	2.2E-08	7.8E-10	2.2E-10	1.2E-09	5.2E-11	7.1E-10	2.8E-10	1.4E-08	4.6E-11	0.00000013	-	-	2.6E-10	-
HLC-1	L-5	1.5E-09	1.4E-09	3.5E-09	2.9E-08	1.1E-09	2.3E-10	1.5E-09	7.1E-11	1.5E-09	3.5E-10	9.6E-09	7.6E-11	2.0E-08	-	-	3.5E-10	-
HLC-1	L-6	7.8E-10	1.7E-09	1.8E-09	2.0E-09	1.1E-09	2.2E-10	7.8E-10	7.4E-11	8.7E-10	3.6E-10	3.2E-09	8.1E-11	2.4E-08	-	-	2.9E-10	-
HLC-1	L-7	1.4E-09	2.5E-09	1.4E-09	5.2E-09	1.6E-09	2.8E-10	1.4E-09	1.0E-10	1.1E-09	4.9E-10	4.4E-09	1.4E-10	2.2E-08	-	-	3.8E-10	-
HLC-1	L-8	7.1E-09	3.9E-09	7.1E-09	0.00000064	2.8E-09	3.7E-10	7.1E-09	1.4E-10	6.5E-09	7.3E-10	0.0000001	2.5E-10	0.00000037	-	-	6.1E-10	-
HLC-1	L-9	2.1E-09	3.6E-09	8.6E-09	0.00000014	2.3E-09	3.3E-10	2.1E-09	1.3E-10	3.3E-09	6.7E-10	4.1E-08	2.0E-10	0.00000012	-	-	5.4E-10	-
HLC-1	L-10	2.7E-09	4.3E-09	1.7E-08	1.7E-09	2.7E-09	2.6E-10	2.7E-09	1.4E-10	3.5E-09	7.3E-10	1.4E-08	2.5E-10	0.00000025	-	-	5.5E-10	-
HLC-1	L-11	3.2E-09	5.4E-09	7.2E-09	4.2E-09	3.5E-09	3.8E-10	3.2E-09	1.5E-10	3.9E-09	7.4E-10	2.3E-08	3.6E-10	4.1E-08	-	-	6.2E-10	-
HLC-1	L-12	3.8E-09	5.9E-09	3.8E-09	3.8E-09	3.2E-09	3.4E-10	3.8E-09	1.4E-10	5.9E-09	8.6E-10	2.8E-08	3.3E-10	0.00000014	-	-	4.4E-10	-
HLC-1	L-13	4.3E-09	5.7E-09	1.1E-09	4.3E-09	3.9E-09	3.2E-10	4.3E-09	1.6E-10	3.1E-09	9.8E-10	2.2E-08	3.4E-10	8.2E-08	-	-	5.7E-10	-
HLC-1	L-14	4.7E-09	5.9E-09	4.7E-09	3.4E-09	3.5E-09	2.6E-10	4.7E-09	1.5E-10	5.1E-09	9.2E-10	2.1E-08	3.2E-10	0.00000033	-	-	6.3E-10	-
HLC-1	L-15	5.4E-09	6.9E-09	3.4E-10	3.9E-09	3.8E-09	2.8E-10	5.4E-09	1.7E-10	4.7E-09	7.0E-10	5.3E-08	3.7E-10	5.5E-08	-	-	5.4E-10	-
HLC-1	L-16	5.9E-09	7.1E-09	5.9E-09	5.3E-09	3.5E-09	2.0E-10	5.9E-09	1.5E-10	3.0E-09	7.7E-10	4.3E-08	3.7E-10	0.00000074	-	-	4.3E-10	-
HLC-1	L-17	6.5E-09	8.7E-09	6.5E-09	7.1E-09	4.1E-09	2.8E-10	6.5E-09	1.6E-10	2.5E-09	6.6E-10	3.4E-08	4.4E-10	0.00000015	-	-	5.5E-10	-
HLC-2	L-1	2.5E-08	4.0E-11	5.6E-08	0.0000001	4.2E-11	2.1E-11	2.5E-08	3.2E-12	2.5E-10	4.0E-11	4.8E-08	1.2E-11	0.0000011	-	-	7.1E-11	-
HLC-2	L-2	3.6E-09	3.2E-10	3.6E-09	1.8E-09	1.7E-10	7.7E-11	3.6E-09	2.3E-11	2.4E-10	9.3E-11	5.0E-09	1.6E-11	5.8E-08	-	-	9.2E-11	-
HLC-2	L-3	1.2E-08	8.0E-10	1.2E-08	4.2E-08	5.0E-10	1.9E-10	1.2E-08	5.7E-11	6.9E-10	3.0E-10	2.3E-08	5.2E-11	6.8E-08	-	-	1.7E-10	-
HLC-2	L-4	1.2E-09	8.3E-10	2.8E-09	7.1E-09	4.5E-10	1.6E-10	1.2E-09	5.3E-11	6.5E-10	2.4E-10	3.7E-09	4.7E-11	0.0000001	-	-	9.7E-11	-
HLC-2	L-5	1.6E-09	1.5E-09	1.6E-09	4.6E-09	6.8E-10	2.3E-10	1.6E-09	7.4E-11	1.3E-09	3.6E-10	2.7E-09	7.8E-11	3.1E-08	-	-	1.8E-10	-
HLC-2	L-6	8.1E-10	1.7E-09	1.8E-09	4.0E-10	7.9E-10	2.1E-10	8.1E-10	7.9E-11	9.6E-10	3.8E-10	1.5E-09	8.4E-11	5.2E-08	-	-	2.1E-10	-
HLC-2	L-7	1.4E-09	2.7E-09	1.4E-09	4.9E-10	1.3E-09	3.0E-10	1.4E-09	1.1E-10	1.3E-09	5.6E-10	1.4E-09	1.6E-10	2.2E-08	-	-	3.1E-10	-
HLC-2	L-8	7.2E-09	4.0E-09	7.2E-09	1.1E-08	2.1E-09	3.1E-10	7.2E-09	1.4E-10	4.1E-09	7.3E-10	5.4E-09	2.4E-10	0.00000041	-	-	5.2E-10	-
HLC-2	L-9	2.2E-09	3.8E-09	2.2E-09	3.7E-09	1.8E-09	2.9E-10	2.2E-09	1.3E-10	2.6E-09	6.8E-10	3.3E-09	2.1E-10	1.7E-08	-	-	4.2E-10	-
HLC-2	L-10	2.7E-09	4.5E-09	2.7E-09	6.8E-10	2.2E-09	2.6E-10	2.7E-09	1.3E-10	4.1E-09	7.4E-10	2.8E-09	2.4E-10	2.7E-09	-	-	4.7E-10	-
HLC-2	L-11	3.3E-09	4.7E-09	3.3E-09	1.4E-09	2.4E-09	2.8E-10	3.3E-09	1.3E-10	3.9E-09	6.3E-10	3.3E-09	2.7E-10	1.9E-08	-	-	4.7E-10	-
HLC-2	L-12	3.8E-09	6.0E-09	3.8E-09	4.2E-09	2.8E-09	2.8E-10	3.8E-09	1.5E-10	6.6E-09	8.8E-10	5.5E-09	3.2E-10	0.0000002	-	-	4.5E-10	-
HLC-2	L-13	4.3E-09	5.9E-09	1.1E-09	3.0E-08	3.1E-09	2.6E-10	4.3E-09	1.7E-10	3.4E-09	8.4E-10	1.3E-08	3.3E-10	1.7E-08	-	-	4.3E-10	-
HLC-2	L-14	4.9E-09	6.4E-09	4.9E-09	3.1E-08	3.1E-09	2.5E-10	4.9E-09	1.6E-10	4.5E-09	9.5E-10	1.1E-08	3.5E-10	0.00000025	-	-	5.3E-10	-
HLC-2	L-15	5.5E-09	7.3E-09	1.4E-09	3.1E-09	3.3E-09	2.4E-10	5.5E-09	1.6E-10	4.7E-09	7.1E-10	8.7E-09	3.6E-10	8.8E-08	-	-	4.7E-10	-
HLC-2	L-16	6.0E-09	7.6E-09	1.5E-09	1.8E-09	3.2E-09	1.8E-10	6.0E-09	1.5E-10	2.5E-09	7.8E-10	9.5E-09	3.9E-10	0.00000014	-	-	3.9E-10	-
HLC-2	L-17	6.6E-09	8.8E-09	1.6E-09	6.6E-09	3.5E-09	2.4E-10	6.6E-09	1.7E-10	2.7E-09	6.7E-10	1.2E-08	4.3E-10	0.00000051	-	-	4.7E-10	-
HLC-3	L-1	9.6E-08	1.2E-11	5.4E-08	0.0000011	4.8E-11	1.2E-11	2.4E-08	3.3E-12	3.4E-08	4.2E-11	2.4E-08	3.3E-12	0.00000065	-	-	1.2E-10	-
HLC-3	L-2	3.7E-09	2.0E-10	1.5E-08	5.1E-08	2.0E-10	6.0E-11	3.7E-09	2.3E-11	3.3E-10	1.0E-10	3.1E-09	1.5E-11	0.00000024	-	-	1.4E-10	-
HLC-3	L-3	1.1E-08	6.7E-10	1.1E-08	8.9E-09	6.3E-10	1.8E-10	1.1E-08	5.5E-11	4.8E-10	3.1E-10	2.1E-09	4.7E-11	8.9E-08	-	-	2.8E-10	-
HLC-3	L-4	1.3E-09	9.2E-10	2.8E-09	1.8E-08	5.2E-10	1.8E-10	1.3E-09	5.7E-11	8.9E-10	3.1E-10	1.1E-09	4.7E-11	0.00000012	-	-	1.7E-10	-
HLC-3	L-5	1.6E-09	1.5E-09	6.4E-09	5.9E-08	7.2E-10	2.7E-10	1.6E-09	7.9E-11	1.7E-09	4.0E-10	1.6E-09	8.4E-11	0.0000015	-	-	2.0E-10	-
HLC-3	L-6	8.1E-10	1.8E-09	1.8E-09	9.2E-09	7.3E-10	2.2E-10	8.1E-10	8.8E-11	1.3E-09	4.5E-10	5.6E-10	9.1E-11	2.9E-08	-	-	2.1E-10	-
HLC-3	L-7	1.4E-09	2.8E-09	1.4E-09	7.4E-09	1.1E-09	2.9E-10	1.4E-09	1.2E-10	1.6E-09	6.0E-10	5.7E-10	1.7E-10	1.1E-08	-	-	3.2E-10	-
HLC-3	L-8	7.2E-09	4.0E-09	1.8E-09	9.9E-08	1.8E-09	3.4E-10	7.2E-09	1.5E-10	6.1E-09	1.0E-09	2.8E-09	2.7E-10	0.00000011	-	-	4.3E-10	-
HLC-3	L-9	2.2E-09	3.6E-09	2.2E-09	2.1E-08	1.3E-09	3.0E-10	2.2E-09	1.4E-10	3.4E-09	7.4E-10	1.1E-09	2.0E-10	2.8E-08	-	-	4.0E-10	-
HLC-3	L-10	2.7E-09	4.6E-09	2.7E-09	3.2E-08	1.7E-09	2.9E-10	2.7E-09	1.5E-10	5.2E-09	8.0E-10	1.7E-09	2.7E-10	1.1E-08	-	-	4.4E-10	-
HLC-3	L-11	3.3E-09	5.0E-09	3.3E-09	6.9E-08	1.8E-09	3.3E-10	3.3E-09	1.5E-10	6.1E-09	8.1E-10	2.3E-09	2.9E-10	1.3E-08	-	-	4.4E-10	-
HLC-3	L-12	3.8E-09	6.3E-09	3.8E-09	2.3E-09	2.0E-09	3.2E-10	3.8E-09	1.7E-10	8.3E-09	9.5E-10	9.8E-10	3.4E-10	0.0000001	-	-	4.8E-10	-
HLC-3	L-13	4.4E-09	6.2E-09	1.1E-09	1.1E-08	2.3E-09	3.2E-10	4.4E-09	1.8E-10	3.7E-09	1.1E-09	2.5E-09	3.9E-10	0.00000012	-	-	5.8E-10	-
HLC-3	L-14	4.9E-09	7.2E-09	1.2E-09	1.2E-08	2.4E-09	3.2E-10	4.9E-09	1.8E-10	6.4E-09	1.0E-09	3.1E-09	4.1E-10	4.9E-09	-	-	6.5E-10	-
HLC-3	L-15	5.4E-09	7.1E-09	3.4E-10	4.3E-09	2.3E-09	2.6E-10	5.4E-09	1.7E-10	6.9E-09	9.5E-10	3.6E-09	3.8E-10	3.1E-08	-	-	5.1E-10	-
HLC-3	L-16	6.0E-09	8.1E-09	1.5E-09	5.4E-09	2.4E-09	2.2E-10	6.0E-09	1.8E-10	3.6E-09	1.0E-09	4.2E-09	5.0E-10	0.00000016	-	-	4.3E-10	-
HLC-3	L-17	6.5E-09	9.3E-09	1.6E-09	1.2E-08	2.6E-09	2.8E-10	6.5E-09	1.8E-10	3.2E-09	9.1E-10	4.1E-09	5.2E-10	0.00000015	-	-	5.5E-10	-
HLC-4	L-1	2.4E-08	1.4E-11	2.4E-08	0.00000079	2.7E-11	1.1E-11	2.4E-08	4.5E-12	4.9E-10	4.2E-11	2.5E-08	7.5E-12	0.00000031	-	-	1.3E-10	-
HLC-4	L-2	3.7E-09	2.0E-10	3.7E-09	1.2E-08	9.3E-11	4.4E-11	3.7E-09	2.6E-11	1.9E-10	1.0E-10	2.0E-09	2.2E-11	0.00000012	-	-	1.1E-10	-
HLC-4	L-3	1.1E-08	6.5E-10	2.9E-09	7.3E-09	2.9E-10	1.6E-10	1.1E-08	5.9E-11	4.6E-10	3.2E-10	2.8E-09	6.7E-11	1.1E-08	-	-	2.1E-10	-
HLC-4	L-4	1.2E-09	8.3E-10	1.2E-09	1.1E-08	2.2E-10	1.6E-10	1.2E-09	5.7E-11	9.1E-10	3.1E-10	1.0E-09	5.3E-11	0.00000016	-	-	1.4E-10	-
HLC-4	L-5	1.6E-09	1.3E-09	1.6E-09	2.5E-08	3.3E-10	2.1E-10	1.6E-09	7.8E-11	1.4E-09	3.9E-10	1.3E-09	9.1E-11	2.0E-08	-	-	2.0E-10	-
HLC-4	L-6	8.1E-10	1.6E-09	1.8E-09	6.6E-09	3.4E-10	1.9E-10	8.1E-10	8.3E-11	1.1E-09	4.5E-10	7.7E-10	1.0E-10	2.2E-08	-	-	2.0E-10	-
HLC-4	L-7	1.4E-09	2.3E-09	1.4E-09	1.3E-08	5.2E-10	2.6E-10	1.4E-09	1.2E-10	1.3E-09	6.0E-10	1.1E-09	1.8E-10	5.4E-09	-	-	3.1E-10	-
HLC-4	L-8	7.1E-09	3.6E-09	7.1E-09	0.00000013	8.3E-10	2.8E-10	7.1E-09	1.5E-10	4.4E-09	1.0E-09	4.9E-09	2.7E-10	0.00000014	-	-	6.1E-10	-
HLC-4	L-9	2.2E-09	3.1E-09	2.2E-09	1.7E-08	6.5E-10	2.4E-10	2.2E-09	1.4E-10	2.5E-09	7.3E-10	1.5E-09	2.1E-10	1.7E-08	-	-	4.6E-10	-
HLC-4	L-10	2.7E-09	4.1E-09	2.7E-09	4.3E-08	8.4E-10	2.4E-10	2.7E-09	1.5E-10	4.1E-09	7.9E-10	2.9E-09	2.8E-10	2.8E-08	-	-	3.9E-10	-
HLC-4	L-11	3.2E-09	4.4E-09	7.3E-09	8.6E-08	8.9E-10	2.6E-10	3.2E-09	1.3E-10	4.5E-09	8.1E-10	3.9E-09	3.2E-10	3.3E-08	-	-	4.6E-10	-
HLC-4	L-12	3.7E-09	5.4E-09	9.4E-10	7.3E-09	1.1E-09	2.7E-10	3.7E-09	1.7E-10	7.1E-09	9.4E-10	3.6E-09	3.5E-10	4.9E-08	-	-	4.7E-10	-
HLC-4	L-13	4.3E-09	5.4E-09	9.6E-09	1.4E-08	1.2E-09	2.7E-10	4.3E-09	1.8E-10	2.8E-09	1.1E-09	4.1E-09	4.0E-10	4.4E-08	-	-	5.7E-10	-
HLC-4	L-14	4.8E-09	5.9E-09	1.2E-09	3.9E-08	1.2E-09	2.2E-10	4.8E-09	1.8E-10	5.5E-09	1.0E-09	4.3E-09	4.1E-10	9.3E-08	-	-	4.8E-10	-
HLC-4	L-15	5.4E-09	6.0E-09	3.4E-10	6.2E-09	1.1E-09	1.8E-10	5.4E-09	1.7E-10	5.6E-09	9.4E-10	4.4E-09	3.6E-10	5.4E-09	-	-	5.0E-10	-
HLC-4	L-16	5.9E-09	6.6E-09	5.9E-09	9.5E-09	1.2E-09	1.5E-10	5.9E-09	1.6E-10	3.1E-09	8.3E-10	3.8E-09	4.3E-10	9.5E-08	-	-	4.3E-10	-
HLC-4	L-17	6.5E-09	8.0E-09	6.5E-09	5.1E-08	1.4E-09	2.2E-10	6.5E-09	1.8E-10	2.7E-09	9.1E-10	6.2E-09	5.2E-10	0.0000019	-	-	5.1E-10	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-1	L-1	2019-10-08	0.080	0.076	0.15	0.00066	4176	1.00	4.2	0.044	9.6	0.89	1346	0.00000026	1.9E-12	0.000013	1.2E-11	1.3E-13	9.7E-12	6.4E-12	6.4E-12	2.5E-10
HHC-1	L-2	2019-10-09	1.0	0.076	0.15	0.00066	4367	1.00	4.4	0.044	10	0.89	1346	1.1E-08	4.3E-12	0.0000063	4.1E-10	2.1E-14	6.9E-10	9.9E-11	8.3E-11	6.8E-10
HHC-1	L-3	2019-10-10	2.0	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.89	1346	3.3E-08	1.3E-11	0.000063	1.0E-10	6.4E-14	1.3E-09	1.7E-10	1.5E-10	2.0E-09
HHC-1	L-4	2019-10-15	7.0	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	3.7E-09	2.2E-11	3.7E-09	4.1E-09	1.4E-12	8.4E-10	1.0E-10	1.0E-10	2.8E-09
HHC-1	L-5	2019-10-22	14	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	4.7E-09	1.0E-10	4.7E-09	5.2E-09	4.5E-11	4.3E-10	1.5E-10	1.5E-10	1.2E-09
HHC-1	L-6	2019-11-05	28	0.076	0.15	0.00066	4370	1.00	4.4	0.044	10	0.89	1346	2.3E-09	8.2E-11	2.3E-09	2.3E-09	4.6E-11	3.0E-10	1.8E-10	1.8E-10	5.8E-10
HHC-1	L-7	2019-11-19	42	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	4.0E-09	1.3E-10	4.0E-09	5.4E-09	6.0E-11	3.3E-10	3.6E-10	3.6E-10	2.5E-10
HHC-1	L-8	2019-11-26	49	0.076	0.15	0.00066	4375	1.00	4.4	0.044	10	0.89	1346	2.1E-08	3.2E-10	2.1E-08	1.6E-08	1.3E-10	6.3E-10	8.4E-10	8.3E-10	3.2E-10
HHC-1	L-9	2019-12-10	63	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	6.4E-09	1.5E-10	6.4E-09	8.3E-09	6.1E-11	3.7E-10	6.2E-10	6.2E-10	1.0E-10
HHC-1	L-10	2019-12-24	77	0.076	0.15	0.00066	4365	1.00	4.4	0.044	10	0.89	1346	8.0E-09	2.1E-10	8.0E-09	8.4E-09	1.0E-10	4.3E-10	6.3E-10	6.3E-10	1.2E-10
HHC-1	L-11	2020-01-07	91	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	9.6E-09	2.2E-10	9.6E-09	1.0E-08	9.8E-11	4.1E-10	7.9E-10	7.9E-10	3.7E-11
HHC-1	L-12	2020-01-21	105	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	1.1E-08	2.2E-10	1.1E-08	1.1E-08	9.6E-11	4.8E-10	8.7E-10	8.6E-10	1.7E-10
HHC-1	L-13	2020-02-04	119	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	1.3E-08	3.3E-10	1.3E-08	1.1E-08	1.7E-10	5.8E-10	8.6E-10	8.6E-10	5.0E-11
HHC-1	L-14	2020-02-18	133	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	1.4E-08	1.5E-10	1.4E-08	1.3E-08	4.1E-11	4.9E-10	9.9E-10	9.9E-10	5.6E-11
HHC-1	L-15	2020-03-03	147	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	1.6E-08	2.7E-10	1.6E-08	1.6E-08	9.8E-11	5.4E-10	1.1E-09	1.1E-09	6.2E-11
HHC-1	L-16	2020-03-17	161	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	1.8E-08	1.8E-10	1.8E-08	1.8E-08	4.5E-11	6.3E-10	1.0E-09	9.9E-10	2.8E-10
HHC-1	L-17	2020-03-31	175	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.89	1346	1.9E-08	2.4E-10	1.9E-08	2.4E-08	5.4E-11	6.0E-10	8.9E-10	8.9E-10	7.5E-11
HHC-1	L-18	2020-04-28	203	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.89	1346	5.4E-09	1.5E-10	5.4E-09	5.7E-09	7.5E-11	2.5E-10	4.2E-10	4.2E-10	2.1E-11
HHC-1	L-19	2020-05-26	231	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	6.2E-09	1.5E-10	6.2E-09	7.6E-09	6.0E-11	3.2E-10	4.6E-10	4.6E-10	2.4E-11
HHC-1	L-20	2020-06-23	259	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	7.0E-09	2.1E-10	7.0E-09	4.5E-09	1.4E-10	3.0E-10	6.2E-10	6.2E-10	2.7E-11
HHC-1	L-21	2020-07-24	290	0.076	0.15	0.00066	4372	1.00	4.4	0.044	10	0.89	1346	6.4E-09	2.0E-10	6.4E-09	4.4E-09	1.3E-10	2.7E-10	6.4E-10	6.4E-10	2.5E-11
HHC-1	L-22	2020-08-21	318	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	8.7E-09	2.4E-10	8.7E-09	7.7E-09	1.3E-10	3.8E-10	8.3E-10	8.3E-10	3.4E-11
HHC-1	L-23	2020-09-18	346	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	9.5E-09	2.5E-10	9.5E-09	6.1E-09	1.4E-10	4.0E-10	8.4E-10	8.3E-10	3.7E-11
HHC-1	L-24	2020-10-16	374	0.076	0.15	0.00066	4371	1.00	4.4	0.044	10	0.89	1346	1.0E-08	1.8E-10	1.0E-08	9.7E-09	7.3E-11	4.1E-10	8.3E-10	8.3E-10	4.0E-11
HHC-2	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4139	1.00	4.1	0.043	9.5	0.87	1331	6.5E-08	1.3E-12	0.0000093	7.0E-12	1.3E-13	1.3E-11	9.0E-12	8.0E-12	4.1E-11
HHC-2	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4338	1.00	4.3	0.043	10	0.87	1331	1.1E-08	4.8E-12	0.000014	1.2E-10	2.3E-14	6.9E-10	1.5E-10	1.2E-10	6.9E-10
HHC-2	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	3.3E-08	1.1E-11	0.000030	3.6E-10	6.9E-14	1.5E-09	3.3E-10	3.0E-10	4.7E-09
HHC-2	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	3.8E-09	1.1E-11	3.8E-09	1.9E-09	3.1E-14	1.2E-09	2.2E-10	2.2E-10	3.8E-09
HHC-2	L-5	2019-10-22	14	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	4.8E-09	9.1E-11	4.8E-09	2.8E-09	3.8E-11	4.9E-10	1.5E-10	1.5E-10	2.7E-09
HHC-2	L-6	2019-11-05	28	0.076	0.14	0.00065	4348	1.00	4.4	0.043	10	0.87	1331	2.4E-09	8.0E-11	2.4E-09	1.3E-09	4.8E-11	3.1E-10	1.4E-10	1.4E-10	6.0E-10
HHC-2	L-7	2019-11-19	42	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	4.1E-09	1.2E-10	4.1E-09	3.3E-09	5.7E-11	2.9E-10	3.0E-10	3.0E-10	2.5E-10
HHC-2	L-8	2019-11-26	49	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	2.1E-08	3.1E-10	2.1E-08	1.3E-08	1.0E-10	5.3E-10	8.2E-10	8.2E-10	3.3E-10
HHC-2	L-9	2019-12-10	63	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1331	6.5E-09	1.3E-10	6.5E-09	4.8E-09	5.2E-11	3.3E-10	5.6E-10	5.6E-10	1.0E-10
HHC-2	L-10	2019-12-24	77	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1331	8.2E-09	2.0E-10	8.2E-09	4.8E-09	9.3E-11	3.8E-10	5.7E-10	5.7E-10	1.3E-10
HHC-2	L-11	2020-01-07	91	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	9.8E-09	2.0E-10	9.8E-09	7.5E-09	7.3E-11	3.4E-10	7.4E-10	7.4E-10	3.8E-11
HHC-2	L-12	2020-01-21	105	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	1.1E-08	1.8E-10	1.1E-08	5.1E-09	8.0E-11	3.7E-10	9.3E-10	9.3E-10	1.8E-10
HHC-2	L-13	2020-02-04	119	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	1.3E-08	2.7E-10	1.3E-08	3.8E-09	1.7E-10	4.4E-10	8.7E-10	8.7E-10	2.0E-10
HHC-2	L-14	2020-02-18	133	0.076	0.14	0.00065	4353	1.00	4.4	0.043	10	0.87	1331	1.5E-08	1.4E-10	1.5E-08	6.6E-09	4.0E-11	4.1E-10	9.5E-10	9.6E-10	5.8E-11
HHC-2	L-15	2020-03-03	147	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	1.6E-08	2.7E-10	1.6E-08	9.2E-09	1.1E-10	4.4E-10	1.0E-09	1.0E-09	6.4E-11
HHC-2	L-16	2020-03-17	161	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	1.8E-08	1.5E-10	1.8E-08	9.6E-09	3.4E-11	5.4E-10	9.7E-10	9.7E-10	7.0E-11
HHC-2	L-17	2020-03-31	175	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	2.0E-08	1.8E-10	2.0E-08	8.2E-09	5.3E-11	8.6E-10	8.6E-10	7.7E-11
HHC-2	L-18	2020-04-28	203	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	5.5E-09	1.3E-10	5.5E-09	2.9E-09	7.0E-11	2.1E-10	4.1E-10	4.2E-10	2.2E-11
HHC-2	L-19	2020-05-26	231	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	6.3E-09	1.3E-10	6.3E-09	3.6E-09	5.4E-11	2.7E-10	4.4E-10	4.3E-10	2.5E-11
HHC-2	L-20	2020-06-23	259	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1331	7.2E-09	2.2E-10	7.2E-09	3.8E-09	1.3E-10	2.2E-10	6.3E-10	6.3E-10	2.8E-11
HHC-2	L-21	2020-07-24	290	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1331	6.5E-09	2.0E-10	6.5E-09	2.7E-09	1.3E-10	2.1E-10	5.4E-10	5.4E-10	2.6E-11
HHC-2	L-22	2020-08-21	318	0.076	0.14	0.00065	4353	1.00	4.4	0.043	10	0.87	1331	8.9E-09	2.2E-10	8.9E-09	4.5E-09	1.2E-10	3.1E-10	7.5E-10	7.5E-10	3.5E-11
HHC-2	L-23	2020-09-18	346	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1331	9.7E-09	2.3E-10	9.7E-09	2.8E-09	1.4E-10	2.7E-10	6.9E-10	7.0E-10	3.8E-11
HHC-2	L-24	2020-10-16	374	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1331	1.1E-08	1.3E-10	1.1E-08	3.8E-09	5.9E-11	2.9E-10	6.5E-10	6.5E-10	4.1E-11
HHC-3	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4119	1.00	4.1	0.043	9.5	0.87	1333	6.4E-08	1.7E-12	0.000013	7.0E-12	1.2E-13	1.9E-11	1.7E-11	1.6E-11	7.9E-12
HHC-3	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4348	1.00	4.4	0.043	10	0.87	1333	1.1E-08	6.5E-12	0.000018	2.4E-10	2.1E-14	8.5E-10	2.2E-10	1.9E-10	5.5E-10
HHC-3	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	3.3E-08	2.1E-11	0.000071	5.2E-10	6.2E-14	1.5E-09	4.7E-10	4.3E-10	3.7E-09
HHC-3	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	3.8E-09	9.1E-12	1.5E-08	1.9E-09	7.0E-15	1.2E-09	3.2E-10	3.2E-10	3.0E-09
HHC-3	L-5	2019-10-22	14	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	4.8E-09	7.2E-11	4.8E-09	3.0E-09	2.6E-11	4.3E-10	2.0E-10	2.0E-10	2.1E-09
HHC-3	L-6	2019-11-05	28	0.076	0.14	0.00065	4352	1.00	4.4	0.043	10	0.87	1333	2.4E-09	6.8E-11	2.4E-09	1.7E-09	3.4E-11	2.8E-10	9.4E-11	9.4E-11	4.7E-10
HHC-3	L-7	2019-11-19	42	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	4.0E-09	1.1E-10	4.0E-09	3.9E-09	4.6E-11	2.7E-10	3.1E-10	3.1E-10	2.0E-10
HHC-3	L-8	2019-11-26	49	0.076	0.14	0.00065	4355	1.00	4.4	0.043	10	0.87	1333	2.1E-08	2.7E-10	2.1E-08	9.4E-09	1.1E-10	4.8E-10	7.9E-10	7.9E-10	2.6E-10
HHC-3	L-9	2019-12-10	63	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	6.5E-09	1.1E-10	6.5E-09	4.5E-09	3.8E-11	2.9E-10	5.5E-10	5.5E-10	8.0E-11
HHC-3	L-10	2019-12-24	77	0.076	0.14	0.00065	4347	1.00	4.4	0.043	10	0.87	1333	8.1E-09	1.7E-10	8.1E-09	4.3E-09	8.3E-11	3.3E-10	5.3E-10	5.3E-10	2.5E-11
HHC-3	L-11	2020-01-07	91	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	9.8E-09	1.8E-10	9.8E-09	6.8E-09	7.0E-11	3.2E-10	5.9E-10	5.9E-10	3.0E-11
HHC-3	L-12	2020-01-21	105	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	1.1E-08	1.7E-10	1.1E-08	6.8E-09	6.6E-11	3.3E-10	8.6E-10	8.6E-10	1.4E-10
HHC-3	L-13	2020-02-04	119	0.076	0.14	0.00065	4349	1.00	4.4	0.043	10	0.87	1333	1.3E-08	2.9E-10	1.3E-08	1.0E-08	1.2E-10	3.7E-10	8.4E-10	8.3E-10	1.6E-10
HHC-3	L-14	2020-02-18	133	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	1.5E-08	1.3E-10	1.5E-08	6.5E-09	3.5E-11	3.5E-10	9.1E-10	9.1E-10	4.5E-11
HHC-3	L-15	2020-03-03	147	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	1.6E-08	2.1E-10	1.6E-08	9.2E-09	7.0E-11	4.4E-10	1.0E-09	1.0E-09	5.0E-11
HHC-3	L-16	2020-03-17	161	0.076	0.14	0.00065	4350	1.00	4.4	0.043	10	0.87	1333	1.8E-08	1.4E-10	1.8E-08	1.1E-08	2.6E-11	5.2E-10	9.8E-10	9.8E-10	2.2E-10
HHC-3	L-17	2020-03-31	175	0.076	0.14	0.00065	4351	1.00	4.4	0.043	10	0.87	1333	2.0E-08	1.4E-10	2.0E-08	9.8E-09	2.9E-11	4.6E-10	8.3E-10	8.2E-10	6.1E-11
HHC-4	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4020	1.00	4.0	0.043	9.4	0.84	1319	6.4E-08	9.0E-13	0.0000064	7.0E-12	1.4E-13	1.1E-11	8.5E-12	7.6E-12	1.0E-11
HHC-4	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4275	1.00	4.3	0.043	10	0.84	1319	1.1E-08	4.8E-12	0.0000045	3.1E-10	2.5E-14	8.5E-10	1.8E-10	1.5E-10	7.1E-10
HHC-4	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	3.4E-08	2.2E-11	0.000060	5.3E-10	7.5E-14	1.6E-09	3.8E-10	3.4E-10	2.1E-09
HHC-4	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4276	1.00	4.3	0.043	10	0.84	1319	3.8E-09	5.1E-12	0.00000098	6.0E-10	8.4E-15	1.3E-09	2.9E-10	2.9E-10	2.2E-09
HHC-4	L-5	2019-10-22	14	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	4.9E-09	7.6E-11	4.9E-09	2.4E-09	2.9E-11	5.5E-10	1.9E-10	1.9E-10	1.9E-09
HHC-4	L-6	2019-11-05	28	0.076	0.14	0.00064	4277	1.00	4.3	0.043	10	0.84	1319	2.4E-09	7.5E-11	2.4E-09	1.1E-09	4.5E-11	3.2E-10	1.1E-10	1.1E-10	3.4E-10
HHC-4	L-7	2019-11-19	42	0.076	0.14	0.00064	4278	1.00	4.3	0.043	10	0.84	1319	4.1E-09	1.2E-10	4.1E-09	2.6E-09	6.1E-11	3.1E-10	2.7E-10	2.7E-10	2.6E-10
HHC-4	L-8	2019-11-26	49	0.076	0.14	0.00064	4282	1.00	4.3	0.043	10	0.84	1319	2.2E-08	4.0E-10	2.2E-08	5.4E-09	2.5E-10	6.1E-10	7.3E-10	7.2E-10	3.4E-10
HHC-4	L-9	2019-12-10	63	0.076	0.14	0.00064	4279	1.00	4.3	0.043	10	0.84	1319	6.6E-09	1.2E-10	6.6E-09	4.6E-09	4.0E-11	3.7E-10	4.9E-10	4.9E-10	1.0E-10
HHC-4	L-10	2019-12-24	77	0.076	0.14	0.00064	4273	1.00	4.3	0.043	10	0.84	1319	8.3E-09	2.0E-10	8.3E-09	4.7E-09	9.5E-11	4.0E-10	5.1E-10	5.1E-10	1.3E-10
HHC-4	L-11	2020-01-07	91	0.076	0.14	0.00064	4280	1.00	4.3	0.043	10	0.84	1319	1.0E-08	2.0E-10	1.0E-08	5.6E-09	8.5E-11	4.0E-10	5.1E-10	5.1E-10	3.9E-11
HHC-4	L-12	2020-01-21	105	0.076	0.14	0.00064	4276	1.00	4.3	0.043	10	0.84	1319	1.2E-08	2.3E-10	1.2E-08	7.3E-09	8.6E-11	4.9E-10	7.3E-10	7.4E-10	1.8E-10
HHC-4	L-13	2020-02-04	119	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	1.3E-08	3.5E-10	1.3E-08	8.4E-09	1.6E-10	5.1E-10	7.5E-10	7.5E-10	2.1E-10
HHC-4	L-14	2020-02-18	133	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	1.5E-08	1.6E-10	1.5E-08	6.7E-09	4.8E-11	4.4E-10	8.4E-10	8.4E-10	5.9E-11
HHC-4	L-15	2020-03-03	147	0.076	0.14	0.00064	4281	1.00	4.3	0.043	10	0.84	1319	1.7E-08	2.7E-10	1.7E-08	1.0E-08	8.5E-11	5.8E-10	9.4E-10	9.4E-10	6.5E-11
HHC-4	L-16	2020-03-17	161	0.076	0.14	0.00064	4280	1.00	4.3	0.043	10	0.84	1319	1.8E-08	1.7E-10	1.8E-08	1.0E-08	3.2E-11	6.2E-10	8.9E-10	8.9E-10	7.2E-11
HHC-4	L-17	2020-03-31	175	0.076	0.14	0.00064	4282	1.00	4.3	0.043	10	0.84	1319	2.0E-08	1.5E-10	2.0E-08	7.3E-09	4.5E-11	6.2E-10	7.6E-10	7.6E-10	7.8E-11

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-1	L-1	5.2E-09	5.6E-11	0.00000026	2.9E-10	1.6E-10	6.5E-08	3.9E-09	6.4E-08	2.0E-09	6.4E-10	0.00000037	2.1E-09	1.6E-08	4.1E-11	6.4E-08	6.4E-10	6.4E-08	1.7E-09	0.00000014	0.00026	6.4E-08
HHC-1	L-2	7.2E-08	5.1E-10	0.0000098	3.7E-09	1.7E-09	1.1E-08	6.6E-10	1.1E-08	3.0E-08	1.1E-10	0.0000011	9.1E-09	0.00000022	5.7E-11	1.1E-08	4.3E-10	1.1E-08	2.4E-08	1.1E-08	0.000039	1.1E-08
HHC-1	L-3	0.00000013	6.8E-10	0.0000047	7.5E-09	1.3E-09	3.3E-08	2.0E-09	3.3E-08	5.1E-08	3.3E-10	0.0000055	1.1E-08	0.0000004	1.1E-10	3.3E-08	1.3E-09	3.3E-08	3.3E-08	5.1E-08	0.00012	0.00000013
HHC-1	L-4	3.6E-08	4.0E-10	1.5E-08	5.8E-09	1.3E-09	3.8E-09	2.2E-10	3.7E-09	2.8E-08	3.7E-11	0.000020	5.5E-09	3.3E-08	6.0E-11	3.7E-09	3.7E-09	3.7E-09	2.5E-08	5.8E-09	0.0000019	3.7E-09
HHC-1	L-5	2.4E-08	2.2E-10	4.7E-09	3.0E-09	1.2E-09	4.8E-09	2.8E-10	4.7E-09	1.0E-08	4.7E-11	0.000062	3.0E-09	1.2E-09	1.3E-10	4.7E-09	3.0E-09	4.7E-09	1.7E-08	4.7E-09	0.0000023	0.00000017
HHC-1	L-6	1.4E-08	5.8E-11	2.3E-09	8.9E-10	5.2E-09	2.4E-09	1.4E-10	2.3E-09	4.1E-09	2.3E-11	0.000035	2.0E-09	1.5E-10	2.1E-10	2.3E-09	8.4E-10	2.3E-09	9.7E-09	7.1E-09	0.00000072	3.7E-08
HHC-1	L-7	1.8E-08	1.7E-11	4.0E-09	2.2E-10	2.5E-09	4.0E-09	2.4E-10	4.0E-09	2.7E-09	4.0E-11	0.000053	1.5E-09	2.5E-10	5.8E-10	4.0E-09	6.3E-10	4.0E-09	9.8E-09	8.9E-09	0.00000087	4.0E-09
HHC-1	L-8	2.1E-08	1.0E-11	2.1E-08	7.6E-11	5.2E-09	2.1E-08	2.6E-08	8.3E-08	3.8E-09	2.1E-10	0.00016	1.3E-09	1.3E-09	1.7E-09	2.1E-08	8.3E-10	2.1E-08	1.0E-08	2.1E-08	0.000065	2.1E-08
HHC-1	L-9	1.9E-08	2.2E-12	6.4E-09	1.6E-11	6.4E-09	6.5E-09	3.9E-10	6.4E-09	2.6E-09	6.4E-11	0.000073	8.3E-10	4.0E-10	1.2E-09	6.4E-09	4.1E-09	6.4E-09	7.4E-09	1.0E-08	0.0000014	6.4E-09
HHC-1	L-10	2.3E-08	1.2E-12	8.0E-09	5.2E-12	2.0E-09	8.1E-09	4.8E-10	8.0E-09	2.7E-09	8.0E-11	0.000086	6.1E-10	5.0E-10	1.6E-09	8.0E-09	3.2E-10	8.0E-09	7.4E-09	1.2E-08	0.0000029	8.0E-09
HHC-1	L-11	2.0E-08	8.1E-13	9.6E-09	1.8E-12	2.4E-09	9.8E-09	5.8E-10	3.8E-08	2.7E-09	9.6E-11	0.000092	6.0E-10	6.0E-10	2.9E-09	9.6E-09	3.5E-09	9.6E-09	7.5E-09	2.2E-08	0.000011	9.6E-09
HHC-1	L-12	2.3E-08	5.9E-13	1.1E-08	1.3E-12	2.8E-11	1.1E-08	6.8E-10	1.1E-08	2.7E-09	1.1E-10	0.00010	5.2E-10	7.0E-10	3.3E-09	1.1E-08	4.5E-10	1.1E-08	8.0E-09	1.7E-08	0.0000071	4.5E-08
HHC-1	L-13	1.7E-08	4.5E-13	1.3E-08	5.2E-13	4.6E-09	1.3E-08	7.8E-10	1.3E-08	2.7E-09	1.3E-10	0.00010	4.6E-10	8.0E-10	3.8E-09	1.3E-08	5.1E-10	1.3E-08	6.8E-09	2.9E-08	0.000029	1.3E-08
HHC-1	L-14	4.7E-09	3.1E-13	1.4E-08	5.9E-13	1.7E-08	1.5E-08	8.7E-10	1.4E-08	2.5E-09	1.4E-10	0.00012	4.3E-10	9.0E-10	4.3E-09	1.4E-08	2.3E-09	1.4E-08	6.9E-09	1.4E-08	0.000011	1.4E-08
HHC-1	L-15	3.3E-08	3.4E-13	1.6E-08	2.9E-13	5.8E-09	1.6E-08	9.7E-10	1.6E-08	2.8E-09	1.6E-10	0.00013	4.0E-10	1.0E-09	4.8E-09	1.6E-08	2.6E-09	1.6E-08	7.7E-09	1.6E-08	0.000024	1.6E-08
HHC-1	L-16	2.3E-08	1.9E-13	1.8E-08	3.2E-13	7.0E-10	1.8E-08	1.1E-09	1.8E-08	2.7E-09	1.8E-10	0.00013	4.0E-10	1.1E-09	5.2E-09	1.8E-08	2.8E-09	1.8E-08	7.5E-09	4.0E-08	0.000041	1.8E-08
HHC-1	L-17	1.4E-08	2.1E-13	1.9E-08	2.0E-13	4.8E-09	2.0E-08	1.1E-08	1.9E-08	2.8E-09	1.9E-10	0.00014	4.0E-10	1.2E-09	5.7E-09	1.9E-08	3.1E-09	1.9E-08	9.2E-09	1.9E-08	0.000037	1.9E-08
HHC-1	L-18	1.1E-08	1.5E-13	5.4E-09	1.5E-13	1.3E-11	5.5E-09	3.3E-10	2.2E-08	1.7E-09	5.4E-11	0.000052	3.2E-10	3.4E-10	2.5E-09	5.4E-09	5.4E-11	5.4E-09	5.4E-09	1.2E-08	0.0000070	5.4E-09
HHC-1	L-19	1.3E-08	1.3E-13	6.2E-09	2.5E-13	2.5E-10	6.3E-09	3.8E-10	6.2E-09	1.8E-09	6.2E-11	0.000051	3.0E-10	3.9E-10	2.5E-09	6.2E-09	2.5E-10	6.2E-09	6.2E-09	1.4E-08	0.0000070	6.2E-09
HHC-1	L-20	1.4E-08	1.1E-13	7.0E-09	2.0E-13	2.8E-10	7.2E-09	8.7E-09	7.0E-09	1.9E-09	7.0E-11	0.000056	3.0E-10	4.4E-10	2.8E-09	7.0E-09	0.00000015	7.0E-09	6.5E-09	1.1E-08	0.0000085	7.0E-09
HHC-1	L-21	1.3E-08	1.4E-13	6.4E-09	1.8E-13	1.6E-11	6.5E-09	3.9E-10	6.4E-09	1.8E-09	6.4E-11	0.000049	3.0E-10	4.0E-10	2.6E-09	6.4E-09	0.00000016	6.4E-09	6.4E-09	1.4E-08	0.000012	6.4E-09
HHC-1	L-22	1.1E-08	9.4E-14	8.7E-09	1.6E-13	3.5E-10	8.9E-09	5.3E-10	8.7E-09	2.1E-09	8.7E-11	0.000054	3.5E-10	5.4E-10	3.0E-09	8.7E-09	1.4E-09	8.7E-09	6.2E-09	2.7E-08	0.000023	8.7E-09
HHC-1	L-23	3.1E-09	6.6E-14	9.5E-09	4.3E-14	9.5E-11	9.7E-09	5.7E-10	9.5E-09	2.4E-09	9.5E-11	0.000068	4.0E-10	5.9E-10	3.3E-09	9.5E-09	9.5E-11	9.5E-09	8.1E-09	2.1E-08	0.000011	9.5E-09
HHC-1	L-24	5.2E-09	1.1E-13	1.0E-08	1.0E-13	1.0E-10	1.1E-08	6.2E-10	1.0E-08	2.4E-09	1.0E-10	0.000061	3.7E-10	6.4E-10	3.1E-09	1.0E-08	4.1E-10	1.0E-08	7.4E-09	1.6E-08	0.000016	1.0E-08
HHC-2	L-1	5.3E-09	4.9E-11	0.00000026	3.1E-10	1.1E-10	6.6E-08	3.9E-09	6.5E-08	2.6E-09	6.5E-10	0.0000017	2.3E-09	6.5E-08	4.0E-11	6.5E-08	6.5E-10	6.5E-08	2.6E-09	4.2E-08	0.00027	6.5E-08
HHC-2	L-2	6.5E-08	3.4E-10	0.000018	3.1E-09	1.2E-09	1.1E-08	6.7E-10	1.1E-08	3.7E-08	1.1E-10	0.0000044	7.6E-09	0.0000004	6.4E-11	1.1E-08	1.1E-10	1.1E-08	3.3E-08	1.1E-08	0.000051	1.1E-08
HHC-2	L-3	0.00000015	5.0E-10	0.000013	6.4E-09	2.1E-09	3.4E-08	2.0E-09	3.3E-08	6.7E-08	3.3E-10	0.000019	8.0E-09	0.00000053	1.5E-10	3.3E-08	1.3E-09	3.3E-08	4.4E-08	3.3E-08	0.00014	0.00000013
HHC-2	L-4	5.2E-08	3.2E-10	0.00000024	5.9E-09	1.7E-09	3.9E-09	2.3E-10	3.8E-09	5.1E-08	3.8E-11	0.000044	6.6E-09	9.4E-08	7.2E-11	3.8E-09	1.4E-09	3.8E-09	3.7E-08	5.4E-09	0.0000021	3.8E-09
HHC-2	L-5	2.8E-08	1.9E-10	4.8E-09	3.5E-09	1.2E-09	4.9E-09	2.9E-10	4.8E-09	1.6E-08	4.8E-11	0.00028	3.3E-09	4.8E-09	1.0E-10	4.8E-09	7.6E-10	4.8E-09	2.3E-08	4.8E-09	0.0000025	4.8E-09
HHC-2	L-6	1.6E-08	5.5E-11	2.4E-09	1.1E-09	2.8E-09	2.4E-09	1.4E-10	2.4E-09	4.2E-09	2.4E-11	0.00020	1.9E-09	1.5E-10	1.6E-10	2.4E-09	1.5E-09	2.4E-09	1.2E-08	4.7E-09	0.00000084	2.4E-09
HHC-2	L-7	1.6E-08	2.0E-11	4.1E-09	3.0E-10	2.3E-09	4.1E-09	2.5E-10	4.1E-09	2.8E-09	4.1E-11	0.00031	1.4E-09	2.5E-10	4.9E-10	4.1E-09	1.5E-09	4.1E-09	1.2E-08	5.8E-09	0.0000015	4.1E-09
HHC-2	L-8	2.1E-08	1.2E-11	2.1E-08	1.1E-10	1.3E-09	2.2E-08	2.6E-08	8.5E-08	3.1E-09	2.1E-10	0.00094	1.2E-09	1.3E-09	1.5E-09	2.1E-08	2.1E-10	2.1E-08	1.2E-08	2.1E-08	0.000012	2.1E-08
HHC-2	L-9	2.6E-08	2.4E-12	6.5E-09	2.2E-11	3.7E-09	6.7E-09	4.0E-10	6.5E-09	2.1E-09	6.5E-11	0.00038	7.6E-10	4.1E-10	1.1E-09	6.5E-09	2.3E-09	6.5E-09	8.0E-09	6.5E-09	0.0000019	6.5E-09
HHC-2	L-10	2.4E-08	1.3E-12	8.2E-09	6.8E-12	5.1E-10	8.3E-09	5.0E-10	0.00000013	2.2E-09	8.2E-11	0.00049	5.9E-10	5.1E-10	1.6E-09	8.2E-09	3.3E-10	8.2E-09	8.2E-09	1.2E-08	0.0000071	8.2E-09
HHC-2	L-11	2.0E-08	8.6E-13	9.8E-09	2.2E-12	1.1E-09	1.0E-08	6.0E-10	9.8E-09	2.1E-09	9.8E-11	0.00052	5.4E-10	6.1E-10	2.2E-09	9.8E-09	1.6E-09	9.8E-09	8.5E-09	1.4E-08	0.000019	9.8E-09
HHC-2	L-12	2.3E-08	5.6E-13	1.1E-08	1.2E-12	2.0E-11	1.2E-08	7.0E-10	1.1E-08	2.0E-09	1.1E-10	0.00057	4.6E-10	7.2E-10	3.1E-09	1.1E-08	1.1E-10	1.1E-08	9.1E-09	1.6E-08	0.000018	1.1E-08
HHC-2	L-13	1.3E-08	4.5E-13	1.3E-08	5.6E-13	9.1E-09	1.3E-08	7.9E-10	1.3E-08	2.0E-09	1.3E-10	0.00058	4.3E-10	8.2E-10	3.6E-09	1.3E-08	5.2E-10	1.3E-08	8.1E-09	1.9E-08	0.000054	1.3E-08
HHC-2	L-14	4.8E-09	3.2E-13	1.5E-08	6.3E-13	6.6E-09	1.5E-08	9.0E-10	5.9E-08	1.9E-09	1.5E-10	0.00070	3.7E-10	9.2E-10	4.0E-09	1.5E-08	2.4E-09	1.5E-08	8.3E-09	9.4E-09	0.000012	1.5E-08
HHC-2	L-15	1.2E-08	2.7E-13	1.6E-08	3.6E-13	4.1E-09	1.7E-08	9.9E-10	1.6E-08	2.2E-09	1.6E-10	0.00075	3.6E-10	1.0E-09	4.5E-09	1.6E-08	1.6E-10	1.6E-08	9.2E-09	1.0E-08	0.000032	1.6E-08
HHC-2	L-16	1.3E-08	2.2E-13	1.8E-08	2.5E-13	5.0E-10	1.8E-08	1.1E-09	1.8E-08	2.0E-09	1.8E-10	0.00078	3.6E-10	1.1E-09	5.9E-09	1.8E-08	2.9E-09	1.8E-08	8.3E-09	2.6E-08	0.000074	1.8E-08
HHC-2	L-17	1.0E-08	1.7E-13	2.0E-08	1.5E-13	1.4E-10	2.0E-08	7.5E-09	2.0E-08	2.1E-09	2.0E-10	0.00080	3.4E-10	1.2E-09	6.4E-09	2.0E-08	2.0E-10	2.0E-08	9.1E-09	2.0E-08	0.000045	2.0E-08
HHC-2	L-18	1.1E-08	9.3E-14	5.5E-09	1.2E-13	9.6E-12	5.6E-09	3.4E-10	2.2E-08	1.3E-09	5.5E-11	0.00032	2.7E-10	3.5E-10	2.8E-09	5.5E-09	5.5E-11	5.5E-09	5.5E-09	5.5E-09	0.0000057	5.5E-09
HHC-2	L-19	1.3E-08	1.1E-13	6.3E-09	1.4E-13	1.8E-10	6.5E-09	3.8E-10	6.3E-09	1.3E-09	6.3E-11	0.00032	2.6E-10	4.0E-10	2.8E-09	6.3E-09	2.5E-10	6.3E-09	6.3E-09	1.2E-08	0.000017	6.3E-09
HHC-2	L-20	1.5E-08	8.8E-14	7.2E-09	1.6E-13	5.0E-11	7.3E-09	7.0E-09	7.2E-09	1.2E-09	7.2E-11	0.00037	2.5E-10	4.5E-10	3.2E-09	7.2E-09	0.00000014	7.2E-09	6.2E-09	1.0E-08	0.000011	7.2E-09
HHC-2	L-21	1.3E-08	1.1E-13	6.5E-09	1.4E-13	1.8E-10	6.7E-09	4.0E-10	6.5E-09	1.2E-09	6.5E-11	0.00034	2.2E-10	4.1E-10	3.3E-09	6.5E-09	0.00000012	6.5E-09	5.6E-09	0.00000019	0.000042	6.5E-09
HHC-2	L-22	1.8E-08	7.6E-14	8.9E-09	1.2E-13	2.5E-10	9.1E-09	5.4E-10	0.00000014	1.3E-09	8.9E-11	0.00042	2.4E-10	5.6E-10	4.0E-09	8.9E-09	8.9E-11	8.9E-09	6.0E-09	1.7E-08	0.000036	8.9E-09
HHC-2	L-23	1.8E-09	5.3E-14	9.7E-09	3.4E-14	6.7E-11	9.9E-09	5.9E-10	9.7E-09	1.3E-09	9.7E-11	0.00045	2.3E-10	6.1E-10	4.3E-09	9.7E-09	9.7E-11	9.7E-09	6.0E-09	2.5E-08	0.000062	9.7E-09
HHC-2	L-24	3.4E-09	9.0E-14	1.1E-08	8.3E-14	7.3E-11	1.1E-08	1.3E-08	4.2E-08	1.2E-09	1.1E-10	0.00042	2.1E-10	6.6E-10	4.0E-09	1.1E-08	1.7E-09	4.2E-08	5.4E-09	4.2E-08	0.00023	1.1E-08
HHC-3	L-1	4.0E-09	5.2E-11	0.0000010	3.2E-10	5.5E-11	6.6E-08	2.2E-09	6.4E-08	2.4E-09	6.4E-10	0.0000092	1.9E-09	0.0000010	6.2E-11	6.4E-08	6.4E-10	0.0000010	1.8E-09	0.00000037	0.0030	6.4E-08
HHC-3	L-2	6.9E-08	3.1E-10	0.000022	2.7E-09	6.1E-10	1.1E-08	3.8E-10	1.1E-08	2.8E-08	1.1E-10	0.0000069	6.8E-09	0.0000075	1.0E-10	1.1E-08	1.1E-10	4.4E-08	2.1E-08	2.8E-08	0.00016	1.1E-08
HHC-3	L-3	0.00000012	4.6E-10	0.000016	5.4E-09	2.9E-09	3.4E-08	1.1E-09	3.3E-08	4.8E-08	3.3E-10	0.000028	6.9E-09	0.000011	2.1E-10	3.3E-08	8.3E-11	3.3E-08	2.8E-08	4.8E-08	0.00026	3.3E-08
HHC-3	L-4	3.7E-08	2.9E-10	0.00000024	4.7E-09	1.1E-09	3.9E-09	1.3E-10	3.8E-09	3.9E-08	3.8E-11	0.000056	5.4E-09	0.0000015	9.6E-11	3.8E-09	3.8E-11	3.8E-09	2.2E-08	5.4E-09	0.0000037	3.8E-09
HHC-3	L-5	1.3E-08	1.6E-10	4.8E-09	2.6E-09	5.9E-10	4.9E-09	1.6E-10	4.8E-09	1.1E-08	4.8E-11	0.00032	2.8E-09	7.6E-08	1.5E-10	4.8E-09	4.8E-11	4.8E-09	1.4E-08	4.8E-09	0.0000037	4.8E-09
HHC-3	L-6	1.3E-08	5.0E-11	2.4E-09	9.0E-10	2.1E-09	2.4E-09	8.1E-11	2.4E-09	3.4E-09	2.4E-11	0.00023	1.5E-09	2.4E-09	2.0E-10	2.4E-09	9.5E-11	2.4E-09	7.4E-09	4.7E-09	0.0000007	2.4E-09
HHC-3	L-7	1.4E-08	1.8E-11	4.0E-09	2.3E-10	6.9E-10	4.1E-09	1.4E-10	4.0E-09	1.8E-09	4.0E-11	0.00037	1.1E-09	4.0E-09	5.8E-10	4.0E-09	1.6E-10	4.0E-09	6.9E-09	7.9E-09	0.0000050	4.0E-09
HHC-3	L-8	2.1E-08	1.2E-11	2.1E-08	9.0E-11	1.2E-09	2.2E-08	1.5E-08	2.1E-08	2.3E-09	2.1E-10	0.0011	1.0E-09	2.1E-08	1.8E-09	2.1E-08	2.1E-10	2.1E-08	7.0E-09	1.4E-08	0.000013	2.1E-08
HHC-3	L-9	1.7E-08	2.3E-12	6.5E-09	2.0E-11	1.8E-09	6.7E-09	2.2E-10	6.5E-09	1.5E-09	6.5E-11	0.00050	6.0E-10	6.5E-09	1.3E-09	6.5E-09	5.9E-10	6.5E-09	4.7E-09	9.4E-09	0.0000023	6.5E-09
HHC-3	L-10	1.8E-08	1.2E-12	8.1E-09	6.1E-12	2.5E-10	8.3E-09	2.8E-10	3.3E-08	1.5E-09	8.1E-11	0.00058	5.5E-10	8.1E-09	1.8E-09	8.1E-09	2.0E-09	8.1E-09	4.7E-09	8.1E-09	0.0000045	8.1E-09
HHC-3	L-11	1.9E-08	7.8E-13	9.8E-09	2.1E-12	8.5E-10	1.0E-08	3.3E-10	9.8E-09	1.5E-09	9.8E-11	0.00062	4.4E-10	9.8E-09	2.4E-09	9.8E-09	9.8E-11	9.8E-09	5.2E-09	1.4E-08	0.000019	9.8E-09
HHC-3	L-12	1.8E-08	5.1E-13	1.1E-08	1.2E-12	3.6E-10	1.2E-08	3.9E-10	1.1E-08	1.5E-09	1.1E-10	0.00070	4.1E-10	1.1E-08	3.5E-09	1.1E-08	1.1E-10	1.1E-08	5.1E-09	1.6E-08	0.000018	1.1E-08
HHC-3	L-13	1.0E-08	4.1E-13	1.3E-08	6.1E-13	3.7E-09	1.3E-08	4.5E-10	1.3E-08	1.5E-09	1.3E-10	0.00071	3.6E-10	1.3E-08	3.9E-09	1.3E-08	3.3E-11	1.3E-08	4.8E-09	2.6E-08	0.000075	1.3E-08
HHC-3	L-14	3.7E-09	3.7E-13	1.5E-08	5.3E-13	3.3E-09	1.5E-08	5.0E-10	1.5E-08	1.4E-09	1.5E-10	0.00086	3.2E-10	1.5E-08	4.4E-09	1.5E-08	1.5E-10	1.5E-08	4.9E-09	9.4E-09	0.000015	1.5E-08
HHC-3	L-15	9.2E-09	2.5E-13	1.6E-08	3.0E-13	2.0E-09	1.7E-08	5.6E-10	1.6E-08	1.6E-09	1.6E-10	0.00092	3.2E-10	1.6E-08	4.9E-09	1.6E-08	6.5E-10	1.6E-08	5.4E-09	1.6E-08	0.000051	1.6E-08
HHC-3	L-16	7.0E-09	2.0E-13	1.8E-08	2.1E-13	5.6E-10	1.8E-08	6.1E-10	1.8E-08	1.5E-09	1.8E-10	0.00097	3.0E-10	1.8E-08	6.5E-09	1.8E-08	1.8E-10	1.8E-08	4.8E-09	1.8E-08	0.000041	1.8E-08
HHC-3	L-17	1.1E-08	1.5E-13	2.0E-08	1.3E-13	2.7E-10	2.0E-08	4.2E-09	2.0E-08	1.5E-09	2.0E-10	0.00095	3.1E-10	2.0E-08	7.1E-09	2.0E-08	2.0E-10	2.0E-08	5.2E-09	1.3E-08	0.000024	2.0E-08
HHC-4	L-1	5.3E-09	6.4E-11	0.0000010	2.5E-10	1.3E-10	6.6E-08	2.9E-09	6.4E-08	8.6E-10	6.4E-10	0.0000003	2.2E-09	0.0000010	5.6E-11	6.4E-08	2.6E-09	6.4E-08	1.6E-09	0.00000033	0.00026	6.4E-08
HHC-4	L-2	7.5E-08	5.0E-10	0.000024	3.1E-09	2.3E-09	1.2E-08	5.1E-10	1.1E-08	1.5E-08	1.1E-10	0.0000006	8.5E-09	0.0000055	1.3E-10	1.1E-08	4.5E-10	1.1E-08	2.5E-08	1.1E-08	0.000036	1.1E-08
HHC-4	L-3	0.00000014	7.3E-10	0.000020	6.5E-09	2.8E-10	3.5E-08	1.5E-09	3.4E-08	3.1E-08	3.4E-10	0.0000024	8.0E-09	0.0000087	2.6E-10	3.4E-08	5.4E-09	3.4E-08	3.2E-08	3.4E-08	0.000026	3.4E-08
HHC-4	L-4	4.5E-08	4.7E-10	0.00000038	6.0E-09	2.0E-09	3.9E-09	1.7E-10	3.8E-09	2.3E-08	3.8E-11	0.0000055	6.2E-09	0.0000012	1.3E-10	3.8E-09	1.4E-09	3.8E-09	2.6E-08	6.0E-09	0.0000012	3.8E-09
HHC-4	L-5	2.9E-08	2.7E-10	4.9E-09	3.4E-09	2.6E-09	5.0E-09	2.2E-10	4.9E-09	7.1E-09	4.9E-11	0.000039	3.4E-09	7.8E-08	2.1E-10	4.9E-09	4.9E-11	4.9E-09	1.7E-08	7.6E-09	0.0000013	4.9E-09
HHC-4	L-6	1.6E-08	7.4E-11	2.4E-09	1.1E-09	1.6E-09	2.5E-09	1.1E-10	2.4E-09	1.9E-09	2.4E-11	0.000031	2.0E-09	9.7E-09	2.8E-10	2.4E-09	1.6E-09	2.4E-09	8.7E-09	9.7E-09	0.0000011	2.4E-09
HHC-4	L-7	2.2E-08	2.4E-11	4.1E-09	2.5E-10	1.7E-09	4.2E-09	1.8E-10	4.1E-09	1.1E-09	4.1E-11	0.000049	1.5E-09	4.1E-09	8.0E-10	4.1E-09	1.6E-10	4.1E-09	8.6E-09	1.3E-08	0.0000025	4.1E-09
HHC-4	L-8	2.2E-08	1.5E-11	2.2E-08	8.8E-11	4.5E-09	2.2E-08	2.0E-08	0.00000035	1.4E-09	2.2E-10	0.00016	1.3E-09	2.2E-08	2.4E-09	2.2E-08	2.2E-10	2.2E-08	9.3E-09	3.4E-08	0.000012	2.2E-08
HHC-4	L-9	2.3E-08	3.1E-12	6.6E-09	1.7E-11	4.4E-09	6.8E-09	2.7E-09	6.6E-09	1.0E-09	6.6E-11	0.000064	8.2E-10	6.6E-09	1.7E-09	6.6E-09	2.4E-09	6.6E-09	6.2E-09	1.0E-08	0.0000011	6.6E-09
HHC-4	L-10	2.4E-08	1.6E-12	8.3E-09	5.4E-12	1.7E-09	8.5E-09	3.7E-10	8.3E-09	1.1E-09	8.3E-11	0.000085	6.1E-10	8.3E-09	2.5E-09	8.3E-09	1.3E-09	8.3E-09	6.7E-09	1.9E-08	0.000010	8.3E-09
HHC-4	L-11	2.0E-08	1.1E-12	1.0E-08	1.9E-12	1.3E-09	1.0E-08	4.5E-10	1.0E-08	1.1E-09	1.0E-10	0.000092	5.8E-10	1.0E-08	3.5E-09	1.0E-08	1.6E-09	1.0E-08	6.8E-09	2.2E-08	0.000012	1.0E-08
HHC-4	L-12	2.4E-08	8.2E-13	1.2E-08	1.3E-12	1.5E-09	1.2E-08	5.2E-10	1.2E-08	1.0E-09	1.2E-10	0.00010	5.2E-10	1.2E-08	4.9E-09	1.2E-08	1.2E-10	1.2E-08	7.3E-09	1.8E-08	0.000010	1.2E-08
HHC-4	L-13	1.7E-08	6.5E-13	1.3E-08	5.4E-13	5.4E-09	1.4E-08	6.0E-10	1.3E-08	1.0E-09	1.3E-10	0.00010	4.6E-10	1.3E-08	5.6E-09	1.3E-08	2.1E-09	1.3E-08	6.3E-09	2.1E-08	0.000017	1.3E-08
HHC-4	L-14	4.9E-09	4.7E-13	1.5E-08	6.1E-13	1.2E-08	1.5E-08	6.7E-10	1.5E-08	1.0E-09	1.5E-10	0.00013	4.5E-10	1.5E-08	6.3E-09	1.5E-08	6.0E-10	1.5E-08	7.1E-09	1.5E-08	0.000013	1.5E-08
HHC-4	L-15	1.2E-08	4.0E-13	1.7E-08	3.0E-13	5.0E-09	1.7E-08	7.4E-10	1.7E-08	1.2E-09	1.7E-10	0.00014	4.2E-10	1.7E-08	7.0E-09	1.7E-08	1.7E-10	1.7E-08	7.9E-09	2.6E-08	0.000045	1.7E-08
HHC-4	L-16	1.3E-08	3.2E-13	1.8E-08	3.3E-13	6.1E-10	1.9E-08	8.2E-10	1.8E-08	1.1E-09	1.8E-10	0.00015	4.2E-10	1.8E-08	7.7E-09	1.8E-08	1.8E-10	1.8E-08	7.1E-09	4.1E-08	0.000066	1.8E-08
HHC-4	L-17	1.0E-08	3.5E-13	2.0E-08	2.0E-13	6.6E-10	2.0E-08	5.6E-09	2.0E-08	1.1E-09	2.0E-10	0.00015	4.3E-10	2.0E-08	1.0E-08	2.0E-08	2.0E-10	2.0E-08	7.7E-09	2.0E-08	0.000023	2.0E-08

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-1	L-1	6.4E-08	2.0E-11	0.00000014	1.8E-12	0.00000058	3.8E-11	0.00000026	1.5E-13	5.4E-10	8.2E-11	4.0E-09	0.00000058	0.00000083	0.00000032	0.00000092	1.9E-11	2.8E-10
HHC-1	L-2	1.1E-08	3.8E-10	2.7E-09	2.2E-13	0.0000043	1.9E-10	1.1E-08	1.2E-12	1.0E-09	1.4E-11	1.1E-08	0.0000059	1.1E-08	-	-	-	-
HHC-1	L-3	3.3E-08	5.5E-10	8.2E-09	6.7E-13	0.0000074	4.5E-10	3.3E-08	2.6E-12	1.3E-09	4.2E-11	5.0E-09	0.000029	0.00000019	4.3E-08	0.00000011	3.8E-11	3.6E-11
HHC-1	L-4	3.7E-09	5.2E-10	2.3E-10	6.8E-14	0.0000023	1.8E-10	3.7E-09	4.1E-12	1.0E-09	4.2E-11	8.0E-10	0.00010	3.7E-09	-	-	-	-
HHC-1	L-5	4.7E-09	4.1E-10	2.9E-10	2.4E-13	0.00000056	6.2E-11	4.7E-09	1.2E-11	7.2E-10	5.4E-11	1.4E-09	0.000048	4.7E-09	-	-	-	-
HHC-1	L-6	2.3E-09	2.7E-10	5.8E-10	3.7E-13	0.00000015	2.2E-11	2.3E-09	2.8E-11	2.7E-10	2.7E-11	5.8E-10	0.000011	1.8E-08	3.7E-08	1.1E-09	6.8E-11	8.4E-12
HHC-1	L-7	4.0E-09	2.6E-10	2.5E-10	9.2E-13	0.00000014	2.0E-11	4.0E-09	7.2E-11	5.0E-10	4.5E-11	1.2E-09	0.0000086	4.0E-09	-	-	-	-
HHC-1	L-8	2.1E-08	3.3E-10	1.3E-09	1.9E-12	0.00000052	2.6E-11	2.1E-08	1.6E-10	6.5E-10	2.7E-11	3.3E-09	0.000015	2.1E-08	-	-	-	-
HHC-1	L-9	6.4E-09	2.7E-10	4.0E-10	1.6E-12	0.00000016	1.7E-11	6.4E-09	1.0E-10	5.7E-10	3.3E-11	1.5E-09	0.0000071	6.4E-09	7.8E-08	1.6E-09	2.4E-10	2.6E-10
HHC-1	L-10	8.0E-09	2.5E-10	5.0E-10	2.2E-12	0.0000002	1.7E-11	8.0E-09	1.1E-10	4.8E-10	1.0E-11	2.4E-09	0.0000072	8.0E-09	-	-	-	-
HHC-1	L-11	9.6E-09	2.5E-10	6.0E-10	3.5E-12	0.00000035	2.1E-11	9.6E-09	1.2E-10	4.1E-10	1.2E-11	3.5E-09	0.0000068	9.6E-09	-	-	-	-
HHC-1	L-12	1.1E-08	2.5E-10	7.0E-10	3.9E-12	0.00000055	2.2E-11	1.1E-08	1.2E-10	3.8E-10	1.4E-11	4.0E-09	0.0000080	6.4E-08	0.00000014	1.1E-08	6.7E-10	4.5E-10
HHC-1	L-13	1.3E-08	2.2E-10	8.0E-10	5.2E-12	0.00000063	2.0E-11	1.3E-08	1.1E-10	4.4E-10	1.6E-11	3.9E-09	0.0000070	1.3E-08	-	-	-	-
HHC-1	L-14	1.4E-08	2.0E-10	9.0E-10	5.5E-12	0.00000092	2.3E-11	1.4E-08	1.1E-10	5.8E-10	1.8E-11	5.2E-09	0.0000078	1.4E-08	-	-	-	-
HHC-1	L-15	1.6E-08	2.0E-10	1.0E-09	6.1E-12	0.0000010	2.6E-11	1.6E-08	1.0E-10	5.4E-10	2.0E-11	6.8E-09	0.0000087	1.6E-08	0.00000026	1.6E-08	9.5E-10	8.7E-10
HHC-1	L-16	1.8E-08	1.8E-10	1.1E-09	7.2E-12	0.0000011	2.8E-11	1.8E-08	1.0E-10	6.5E-10	2.2E-11	7.4E-09	0.0000083	1.8E-08	-	-	-	-
HHC-1	L-17	1.9E-08	1.8E-10	1.2E-09	7.7E-12	0.0000016	3.4E-11	1.9E-08	9.6E-11	1.6E-10	2.5E-11	8.1E-09	0.0000090	1.9E-08	0.00000039	7.7E-08	1.4E-09	1.0E-09
HHC-1	L-18	5.4E-09	1.5E-10	3.4E-10	4.4E-12	0.00000044	1.3E-11	5.4E-09	5.4E-11	1.5E-10	6.9E-12	2.6E-09	0.0000038	0.00000012	0.00000011	5.4E-09	4.6E-10	2.2E-10
HHC-1	L-19	6.2E-09	1.4E-10	3.9E-10	5.1E-12	0.00000062	1.2E-11	6.2E-09	5.3E-11	1.8E-10	7.9E-12	3.0E-09	0.0000034	6.2E-09	0.00000015	1.4E-08	5.3E-10	2.5E-10
HHC-1	L-20	7.0E-09	1.4E-10	4.4E-10	5.7E-12	0.0000010	1.2E-11	7.0E-09	5.8E-11	1.5E-10	8.9E-12	3.4E-09	0.0000033	7.0E-09	0.00000051	8.6E-08	8.2E-10	2.8E-10
HHC-1	L-21	6.4E-09	1.4E-10	4.0E-10	5.2E-12	0.00000092	1.1E-11	6.4E-09	5.5E-11	1.7E-10	8.2E-12	2.7E-09	0.0000035	2.6E-08	0.00000021	2.6E-08	8.0E-10	2.6E-10
HHC-1	L-22	8.7E-09	1.4E-10	0.00000018	7.1E-12	0.0000010	1.4E-11	8.7E-09	5.5E-11	1.0E-10	1.1E-11	4.3E-09	0.0000041	8.9E-08	0.00000046	0.00000014	7.4E-10	4.7E-10
HHC-1	L-23	9.5E-09	1.6E-10	3.8E-08	6.5E-12	0.0000011	1.5E-11	9.5E-09	5.4E-11	2.2E-10	1.2E-11	4.0E-09	0.0000044	5.5E-08	0.00000034	3.8E-08	5.6E-10	3.8E-10
HHC-1	L-24	1.0E-08	1.6E-10	6.4E-10	5.8E-12	0.0000010	1.5E-11	1.0E-08	4.5E-11	2.2E-10	1.3E-11	3.7E-09	0.0000048	1.0E-08	0.00000026	2.3E-08	7.4E-10	4.1E-10
HHC-2	L-1	6.5E-08	2.1E-11	1.6E-08	1.1E-12	0.00000058	5.1E-11	6.5E-08	1.9E-13	2.7E-10	7.2E-11	8.3E-09	0.00000058	0.00000066	0.00000023	0.00000044	8.5E-12	2.9E-10
HHC-2	L-2	1.1E-08	3.5E-10	2.8E-09	2.0E-13	0.0000049	2.7E-10	1.1E-08	1.1E-12	1.0E-09	1.2E-11	3.0E-08	0.0000044	1.1E-08	-	-	-	-
HHC-2	L-3	3.3E-08	5.0E-10	8.4E-09	6.1E-13	0.0000097	5.3E-10	3.3E-08	3.7E-12	1.1E-09	3.7E-11	1.7E-08	0.000013	0.00000019	3.7E-08	6.1E-08	4.2E-11	3.7E-11
HHC-2	L-4	3.8E-09	5.3E-10	2.4E-10	3.6E-14	0.0000039	2.9E-10	3.8E-09	4.4E-12	8.4E-10	3.8E-11	1.1E-09	0.000074	3.8E-09	-	-	-	-
HHC-2	L-5	4.8E-09	4.6E-10	3.0E-10	1.6E-13	0.0000012	1.5E-10	4.8E-09	7.9E-12	7.1E-10	4.8E-11	2.9E-09	0.000075	4.8E-09	-	-	-	-
HHC-2	L-6	2.4E-09	2.6E-10	6.0E-10	2.5E-13	0.00000029	4.2E-11	2.4E-09	1.7E-11	3.8E-10	2.4E-11	1.5E-09	0.000019	2.4E-09	3.8E-08	1.2E-09	4.3E-11	1.1E-11
HHC-2	L-7	4.1E-09	2.4E-10	2.5E-10	6.2E-13	0.00000026	3.3E-11	4.1E-09	5.0E-11	5.2E-10	4.1E-11	3.5E-09	0.000013	4.1E-09	-	-	-	-
HHC-2	L-8	2.1E-08	2.8E-10	5.3E-09	1.4E-12	0.00000053	4.2E-11	2.1E-08	1.3E-10	6.8E-10	2.4E-11	7.8E-09	0.000019	0.0000031	-	-	-	-
HHC-2	L-9	6.5E-09	2.4E-10	4.1E-10	1.1E-12	0.00000023	2.6E-11	6.5E-09	8.4E-11	5.1E-10	7.2E-12	3.3E-09	0.0000088	6.5E-09	6.9E-08	1.0E-09	1.9E-10	2.6E-10
HHC-2	L-10	8.2E-09	2.2E-10	5.1E-10	1.7E-12	0.00000029	2.3E-11	8.2E-09	8.9E-11	5.4E-10	9.1E-12	4.2E-09	0.0000091	8.2E-09	-	-	-	-
HHC-2	L-11	9.8E-09	2.2E-10	6.1E-10	2.6E-12	0.00000048	2.8E-11	9.8E-09	1.0E-10	5.1E-10	1.1E-11	7.2E-09	0.0000098	9.8E-09	-	-	-	-
HHC-2	L-12	1.1E-08	2.3E-10	7.2E-10	3.1E-12	0.00000056	3.0E-11	1.1E-08	1.1E-10	3.9E-10	1.3E-11	8.4E-09	0.000010	1.1E-08	0.00000021	7.2E-08	6.1E-10	4.6E-10
HHC-2	L-13	1.3E-08	1.9E-10	8.2E-10	4.2E-12	0.00000047	3.1E-11	1.3E-08	1.1E-10	5.2E-10	1.5E-11	9.6E-09	0.0000093	1.3E-08	-	-	-	-
HHC-2	L-14	1.5E-08	1.8E-10	9.2E-10	4.0E-12	0.00000094	3.2E-11	1.5E-08	1.0E-10	5.9E-10	1.6E-11	1.1E-08	0.000010	1.5E-08	-	-	-	-
HHC-2	L-15	1.6E-08	1.7E-10	1.0E-09	4.7E-12	0.0000010	3.5E-11	1.6E-08	9.7E-11	5.2E-10	1.8E-11	1.4E-08	0.000012	1.6E-08	0.00000037	3.7E-08	9.7E-10	8.9E-10
HHC-2	L-16	1.8E-08	1.6E-10	1.1E-09	6.2E-12	0.0000012	3.9E-11	1.8E-08	9.5E-11	6.2E-10	2.0E-11	1.8E-08	0.000011	1.8E-08	-	-	-	-
HHC-2	L-17	2.0E-08	1.5E-10	1.2E-09	5.8E-12	0.0000016	4.3E-11	2.0E-08	9.2E-11	2.0E-10	2.2E-11	2.0E-08	0.000012	2.0E-08	0.0000009	4.4E-08	1.2E-09	1.1E-09
HHC-2	L-18	5.5E-09	1.2E-10	3.5E-10	3.1E-12	0.00000055	1.9E-11	5.5E-09	4.9E-11	1.2E-10	6.1E-12	5.5E-09	0.0000050	5.7E-08	1.0E-07	5.5E-09	5.5E-10	2.2E-10
HHC-2	L-19	6.3E-09	1.1E-10	4.0E-10	3.6E-12	0.00000063	2.0E-11	6.3E-09	4.9E-11	1.9E-10	7.0E-12	7.3E-09	0.0000045	3.6E-08	0.00000019	2.5E-08	5.0E-10	2.5E-10
HHC-2	L-20	7.2E-09	1.0E-10	4.5E-10	4.9E-12	0.0000010	1.7E-11	7.2E-09	5.8E-11	1.1E-10	8.0E-12	7.2E-09	0.0000045	2.9E-08	0.00000038	0.00000011	9.0E-10	2.9E-10
HHC-2	L-21	6.5E-09	9.8E-11	1.6E-09	5.3E-12	0.00000094	1.7E-11	6.5E-09	4.8E-11	1.3E-10	7.3E-12	7.5E-09	0.0000041	0.00000027	0.00000015	4.1E-08	7.1E-10	3.6E-10
HHC-2	L-22	8.9E-09	9.2E-11	2.0E-08	6.1E-12	0.0000013	1.9E-11	8.9E-09	5.0E-11	1.2E-10	9.9E-12	1.0E-08	0.0000056	7.0E-08	0.00000064	0.00000014	8.9E-10	4.8E-10
HHC-2	L-23	9.7E-09	8.5E-11	2.4E-09	6.7E-12	0.0000014	2.5E-11	9.7E-09	4.5E-11	1.6E-10	1.1E-11	1.1E-08	0.0000053	5.6E-08	0.00000058	8.7E-08	7.6E-10	3.9E-10
HHC-2	L-24	6.1E-08	7.9E-11	1.1E-08	8.6E-12	0.0000013	2.5E-11	1.1E-08	3.8E-11	3.4E-10	1.2E-11	1.4E-08	0.0000057	0.00000017	0.00000067	0.00000044	8.3E-10	4.2E-10
HHC-3	L-1	0.00000083	2.3E-11	0.00000014	1.7E-11	0.00000058	1.4E-10	0.00000026	1.9E-13	1.2E-09	6.7E-11	3.4E-08	0.0000018	0.0000017	-	-	-	-
HHC-3	L-2	6.4E-08	3.7E-10	1.1E-08	9.0E-13	0.0000054	6.9E-10	1.1E-08	1.9E-12	1.4E-09	4.6E-11	6.0E-08	0.0000100	6.4E-08	-	-	-	-
HHC-3	L-3	3.3E-08	5.1E-10	3.3E-08	1.5E-12	0.0000096	1.4E-09	3.3E-08	4.9E-12	1.5E-09	3.5E-11	3.3E-08	0.000030	0.00000019	-	-	-	-
HHC-3	L-4	3.8E-09	5.4E-10	9.4E-10	6.8E-14	0.0000041	8.1E-10	3.8E-09	6.8E-12	1.2E-09	6.3E-11	1.1E-09	0.00014	3.8E-09	-	-	-	-
HHC-3	L-5	4.8E-09	4.7E-10	3.0E-10	2.0E-13	0.0000012	3.3E-10	4.8E-09	1.1E-11	1.1E-09	4.5E-11	2.6E-09	0.00015	4.8E-09	-	-	-	-
HHC-3	L-6	2.4E-09	2.9E-10	6.0E-10	2.8E-13	0.00000029	1.1E-10	2.4E-09	1.8E-11	4.4E-10	4.0E-11	1.3E-09	0.000045	2.4E-09	-	-	-	-
HHC-3	L-7	4.0E-09	2.6E-10	1.0E-09	8.2E-13	0.00000026	8.7E-11	4.0E-09	5.0E-11	5.4E-10	3.8E-11	2.6E-09	0.000033	4.0E-09	-	-	-	-
HHC-3	L-8	2.1E-08	3.2E-10	1.3E-09	1.8E-12	0.00000077	1.2E-10	2.1E-08	1.3E-10	6.2E-10	2.2E-11	7.5E-09	0.000048	0.00000049	-	-	-	-
HHC-3	L-9	6.5E-09	2.7E-10	4.1E-10	1.3E-12	0.00000023	7.0E-11	6.5E-09	8.0E-11	8.0E-11	2.7E-11	2.9E-09	0.000022	2.6E-08	-	-	-	-
HHC-3	L-10	8.1E-09	2.3E-10	5.1E-10	1.8E-12	0.00000029	6.5E-11	8.1E-09	8.8E-11	6.6E-10	8.5E-12	3.6E-09	0.000022	8.1E-09	-	-	-	-
HHC-3	L-11	9.8E-09	2.4E-10	6.1E-10	3.2E-12	0.00000048	7.2E-11	9.8E-09	1.0E-10	5.8E-10	1.0E-11	7.4E-09	0.000024	9.8E-09	-	-	-	-
HHC-3	L-12	1.1E-08	2.4E-10	7.1E-10	3.6E-12	0.00000056	7.7E-11	1.1E-08	1.0E-10	3.9E-10	1.2E-11	7.3E-09	0.000026	1.1E-08	-	-	-	-
HHC-3	L-13	1.3E-08	2.2E-10	3.3E-09	5.6E-12	0.00000064	8.1E-11	1.3E-08	1.0E-10	9.1E-10	1.4E-11	9.8E-09	0.000024	5.2E-08	-	-	-	-
HHC-3	L-14	1.5E-08	1.9E-10	9.2E-10	4.8E-12	0.00000094	8.3E-11	1.5E-08	1.0E-10	5.1E-10	1.5E-11	1.1E-08	0.000027	1.5E-08	-	-	-	-
HHC-3	L-15	1.6E-08	1.9E-10	4.1E-09	6.2E-12	0.0000010	1.0E-10	1.6E-08	9.6E-11	5.6E-10	1.7E-11	1.4E-08	0.000026	1.6E-08	-	-	-	-
HHC-3	L-16	1.8E-08	1.7E-10	1.1E-09	6.7E-12	0.0000015	1.1E-10	1.8E-08	9.4E-11	8.3E-10	1.9E-11	1.6E-08	0.000029	1.8E-08	-	-	-	-
HHC-3	L-17	2.0E-08	1.7E-10	1.2E-09	6.4E-12	0.0000016	1.2E-10	2.0E-08	9.7E-11	3.2E-10	2.0E-11	1.7E-08	0.000028	2.0E-08	-	-	-	-
HHC-4	L-1	6.4E-08	2.4E-11	6.4E-08	3.0E-12	0.00000026	1.1E-10	6.4E-08	3.1E-13	6.4E-10	1.2E-10	1.6E-08	0.00000079	0.00000066	-	-	-	-
HHC-4	L-2	1.1E-08	5.2E-10	2.8E-09	4.0E-13	0.0000045	8.4E-10	1.1E-08	3.3E-12	1.7E-09	8.6E-11	7.6E-08	0.0000071	1.1E-08	-	-	-	-
HHC-4	L-3	3.4E-08	6.8E-10	2.1E-09	4.0E-13	0.0000087	1.8E-09	3.4E-08	9.3E-12	1.5E-09	6.4E-11	2.9E-08	0.000026	3.4E-08	-	-	-	-
HHC-4	L-4	3.8E-09	6.8E-10	2.4E-10	5.4E-14	0.0000037	9.6E-10	3.8E-09	1.3E-11	1.4E-09	1.2E-10	1.2E-09	0.00013	3.8E-09	-	-	-	-
HHC-4	L-5	4.9E-09	6.0E-10	3.0E-10	2.5E-13	0.0000011	4.6E-10	4.9E-09	2.2E-11	9.5E-10	8.3E-11	3.3E-09	0.00016	4.9E-09	-	-	-	-
HHC-4	L-6	2.4E-09	3.8E-10	6.1E-10	4.4E-13	0.00000024	1.3E-10	2.4E-09	3.9E-11	4.6E-10	4.1E-11	2.4E-09	0.000041	2.4E-09	-	-	-	-
HHC-4	L-7	4.1E-09	3.6E-10	2.6E-10	1.2E-12	0.00000026	1.1E-10	4.1E-09	1.1E-10	7.2E-10	7.0E-11	3.5E-09	0.000030	4.1E-09	-	-	-	-
HHC-4	L-8	2.2E-08	4.5E-10	1.4E-09	2.7E-12	0.00000054	1.6E-10	2.2E-08	2.9E-10	7.3E-10	4.1E-11	1.2E-08	0.000044	0.00000035	-	-	-	-
HHC-4	L-9	6.6E-09	3.8E-10	4.2E-10	2.0E-12	0.00000024	1.0E-10	6.6E-09	1.8E-10	1.2E-09	5.0E-11	4.6E-09	0.000020	6.6E-09	-	-	-	-
HHC-4	L-10	8.3E-09	3.4E-10	5.2E-10	3.3E-12	0.00000021	9.1E-11	8.3E-09	1.8E-10	8.8E-10	1.6E-11	5.8E-09	0.000021	8.3E-09	-	-	-	-
HHC-4	L-11	1.0E-08	3.5E-10	6.2E-10	4.9E-12	0.00000049	1.1E-10	1.0E-08	2.2E-10	8.5E-10	1.9E-11	1.2E-08	0.000023	1.0E-08	-	-	-	-
HHC-4	L-12	1.2E-08	3.6E-10	7.3E-10	5.7E-12	0.00000057	1.1E-10	1.2E-08	2.2E-10	4.3E-10	2.2E-11	1.2E-08	0.000024	1.2E-08	-	-	-	-
HHC-4	L-13	1.3E-08	3.4E-10	8.3E-10	7.5E-12	0.00000065	1.1E-10	1.3E-08	2.3E-10	9.5E-10	2.5E-11	1.3E-08	0.000021	1.3E-08	-	-	-	-
HHC-4	L-14	1.5E-08	2.9E-10	9.4E-10	8.5E-12	0.00000096	1.2E-10	1.5E-08	2.2E-10	7.6E-10	2.8E-11	1.8E-08	0.000024	1.5E-08	-	-	-	-
HHC-4	L-15	1.7E-08	2.8E-10	1.0E-09	1.0E-11	0.0000011	1.5E-10	1.7E-08	2.0E-10	9.1E-10	3.2E-11	2.3E-08	0.000027	1.7E-08	-	-	-	-
HHC-4	L-16	1.8E-08	2.5E-10	1.1E-09	1.3E-11	0.0000015	1.7E-10	1.8E-08	2.1E-10	1.2E-09	3.5E-11	2.5E-08	0.000026	1.8E-08	-	-	-	-
HHC-4	L-17	2.0E-08	2.5E-10	1.3E-09	1.2E-11	0.0000016	1.8E-10	2.0E-08	2.0E-10	3.1E-10	3.8E-11	2.7E-08	0.000028	2.0E-08	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	599	1.00	0.60	0.0082	7.3	0.76	1637	-	9.4E-10	1.6E-09	4.0E-10	2.5E-08	4.0E-11	3.9E-11	4.0E-11	4.2E-14
HPLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.76	1637	-	1.0E-10	1.9E-10	6.7E-11	4.3E-09	5.1E-11	3.9E-11	4.0E-11	7.1E-11
HPLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	652	1.00	0.65	0.0082	8.0	0.76	1637	-	3.3E-10	6.1E-10	2.2E-10	1.4E-08	1.8E-10	1.1E-10	1.1E-10	4.5E-10
HPLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	1.1E-10	1.7E-10	2.4E-11	1.5E-09	1.5E-10	6.6E-11	6.5E-11	1.0E-09
HPLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1637	-	3.5E-10	5.7E-10	3.0E-11	1.9E-09	2.5E-10	1.1E-10	1.1E-10	1.7E-09
HPLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1637	-	5.2E-10	9.0E-10	1.5E-11	9.8E-10	2.5E-10	1.1E-10	1.1E-10	1.4E-09
HPLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1637	-	1.4E-09	2.4E-09	2.6E-11	1.7E-09	3.9E-10	1.8E-10	1.8E-10	1.3E-09
HPLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.76	1637	-	2.1E-10	3.8E-10	1.4E-10	8.8E-09	7.1E-10	3.8E-10	3.8E-10	1.3E-09
HPLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	2.5E-09	4.2E-09	4.2E-11	2.7E-09	4.7E-10	2.6E-10	2.5E-10	6.3E-10
HPLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1637	-	3.2E-10	5.8E-10	5.2E-11	3.3E-09	5.4E-10	3.0E-10	3.0E-10	4.3E-10
HPLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	644	1.00	0.65	0.0082	7.9	0.76	1637	-	1.7E-09	3.1E-09	6.3E-11	4.0E-09	5.7E-10	3.5E-10	3.5E-10	3.2E-10
HPLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	1.8E-09	3.3E-09	7.3E-11	4.7E-09	6.3E-10	3.7E-10	3.7E-10	2.0E-10
HPLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.76	1637	-	3.8E-10	5.8E-10	8.2E-11	5.2E-09	6.4E-10	3.9E-10	3.9E-10	1.2E-10
HPLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1637	-	7.1E-10	1.3E-09	9.3E-11	6.0E-09	6.9E-10	4.5E-10	4.5E-10	6.3E-11
HPLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1637	-	1.2E-09	2.0E-09	1.0E-10	6.7E-09	5.8E-10	4.8E-10	4.8E-10	7.0E-11
HPLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1637	-	1.1E-09	1.8E-09	1.2E-10	7.4E-09	6.4E-10	5.0E-10	5.0E-10	4.4E-11
HPLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1637	-	9.6E-10	1.7E-09	1.3E-10	8.0E-09	6.5E-10	5.1E-10	5.1E-10	4.7E-11
HPLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	562	1.0	0.56	0.0082	6.9	0.76	1638	-	4.0E-09	6.5E-09	3.5E-10	2.2E-08	4.1E-10	4.5E-10	4.5E-10	4.8E-12
HPLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	650	1.00	0.65	0.0082	8.0	0.76	1638	-	1.1E-10	2.0E-10	7.2E-11	4.6E-09	1.3E-10	1.2E-10	1.2E-10	1.0E-10
HPLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1638	-	7.2E-10	1.2E-09	2.1E-10	1.4E-08	3.4E-10	2.4E-10	2.4E-10	4.2E-10
HPLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.76	1638	-	3.8E-10	6.7E-10	2.4E-11	1.5E-09	1.8E-10	9.3E-11	9.2E-11	1.1E-09
HPLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1638	-	2.9E-10	4.8E-10	3.0E-11	1.9E-09	3.1E-10	1.4E-10	1.4E-10	2.1E-09
HPLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1638	-	4.2E-10	7.4E-10	1.5E-11	9.7E-10	2.8E-10	1.3E-10	1.3E-10	1.9E-09
HPLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	1.9E-09	3.3E-09	2.6E-11	1.7E-09	4.4E-10	2.1E-10	2.1E-10	1.7E-09
HPLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1638	-	1.9E-09	3.4E-09	1.4E-10	8.7E-09	8.5E-10	4.8E-10	4.8E-10	1.9E-09
HPLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1638	-	2.1E-09	3.6E-09	4.2E-11	2.7E-09	5.2E-10	3.0E-10	3.0E-10	1.0E-09
HPLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1638	-	3.3E-09	6.0E-09	5.2E-11	3.3E-09	6.1E-10	3.6E-10	3.6E-10	7.4E-10
HPLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	1.2E-09	2.0E-09	6.2E-11	4.0E-09	6.6E-10	4.2E-10	4.2E-10	5.8E-10
HPLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.76	1638	-	9.9E-10	1.8E-09	7.2E-11	4.6E-09	6.9E-10	4.3E-10	4.2E-10	4.8E-10
HPLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	628	1.00	0.63	0.0082	7.7	0.76	1638	-	1.5E-09	2.6E-09	7.9E-11	5.1E-09	6.9E-10	4.3E-10	4.3E-10	2.8E-10
HPLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.76	1638	-	1.5E-09	2.7E-09	9.4E-11	6.0E-09	8.0E-10	5.3E-10	5.3E-10	1.9E-10
HPLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1638	-	3.9E-09	6.7E-09	1.0E-10	6.7E-09	6.7E-10	5.5E-10	5.5E-10	1.4E-10
HPLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1638	-	4.8E-09	8.7E-09	1.2E-10	7.4E-09	7.2E-10	5.7E-10	5.7E-10	1.0E-10
HPLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1638	-	2.3E-09	4.0E-09	1.3E-10	8.1E-09	7.4E-10	5.4E-10	5.4E-10	1.1E-10
HPLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	567	1.0	0.57	0.0082	6.9	0.76	1635	-	4.2E-09	8.9E-09	2.3E-10	2.3E-08	8.9E-10	1.1E-09	1.1E-09	2.9E-12
HPLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	1.5E-10	2.9E-10	4.6E-11	4.6E-09	1.7E-10	1.6E-10	1.6E-10	8.5E-11
HPLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.76	1635	-	1.4E-09	2.8E-09	1.3E-10	1.3E-08	3.9E-10	3.2E-10	3.2E-10	2.5E-10
HPLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	636	1.00	0.64	0.0082	7.8	0.76	1635	-	2.8E-10	5.9E-10	1.5E-11	1.5E-09	1.8E-10	1.1E-10	1.1E-10	7.0E-10
HPLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.76	1635	-	3.6E-10	7.6E-10	1.9E-11	1.9E-09	3.1E-10	1.7E-10	1.7E-10	1.3E-09
HPLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.76	1635	-	7.8E-10	1.5E-09	9.8E-12	9.8E-10	2.8E-10	1.4E-10	1.4E-10	1.2E-09
HPLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	1.1E-09	2.3E-09	1.7E-11	1.7E-09	4.3E-10	2.3E-10	2.3E-10	1.1E-09
HPLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.76	1635	-	6.9E-09	1.4E-08	8.6E-11	8.6E-09	8.2E-10	5.2E-10	5.1E-10	1.1E-09
HPLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	2.3E-09	4.8E-09	2.7E-11	2.7E-09	5.2E-10	3.2E-10	3.2E-10	6.1E-10
HPLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	3.1E-09	6.3E-09	3.3E-11	3.3E-09	6.0E-10	3.9E-10	3.9E-10	4.4E-10
HPLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.76	1635	-	2.9E-09	5.8E-09	4.0E-11	4.0E-09	6.1E-10	4.4E-10	4.4E-10	3.5E-10
HPLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.76	1635	-	1.0E-09	2.1E-09	4.7E-11	4.7E-09	6.1E-10	4.6E-10	4.6E-10	2.4E-10
HPLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.76	1635	-	3.0E-09	6.3E-09	5.3E-11	5.3E-09	6.9E-10	4.8E-10	4.8E-10	1.8E-10
HPLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	3.1E-09	6.1E-09	6.1E-11	6.1E-09	7.5E-10	5.6E-10	5.6E-10	1.1E-10
HPLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	3.8E-09	7.9E-09	6.7E-11	6.7E-09	6.4E-10	5.8E-10	5.7E-10	1.2E-10
HPLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.76	1635	-	1.6E-09	3.3E-09	7.4E-11	7.4E-09	7.0E-10	7.0E-10	7.0E-10	6.1E-11
HPLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.76	1635	-	3.0E-09	6.2E-09	8.1E-11	8.1E-09	7.2E-10	5.8E-10	5.7E-10	6.7E-11
HPLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	555	1.0	0.55	0.0082	6.8	0.75	1619	-	8.4E-09	1.8E-08	2.2E-10	2.2E-08	4.5E-10	5.7E-10	5.7E-10	2.7E-12
HPLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.75	1619	-	5.3E-10	1.1E-09	4.4E-11	4.4E-09	2.7E-10	2.8E-10	2.8E-10	7.8E-11
HPLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.75	1619	-	4.0E-09	8.2E-09	1.4E-10	1.4E-08	5.5E-10	5.2E-10	5.2E-10	2.4E-10
HPLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	626	1.00	0.63	0.0082	7.7	0.75	1619	-	3.2E-10	6.9E-10	1.5E-11	1.5E-09	1.8E-10	1.1E-10	1.1E-10	7.1E-10
HPLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.75	1619	-	8.4E-10	1.8E-09	2.0E-11	2.0E-09	4.1E-10	1.7E-10	1.6E-10	1.4E-09
HPLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	6.5E-10	1.4E-09	1.0E-11	1.0E-09	2.8E-10	1.4E-10	1.3E-10	1.3E-09
HPLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	4.9E-10	1.0E-09	1.7E-11	1.7E-09	4.5E-10	2.5E-10	2.4E-10	1.1E-09
HPLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.75	1619	-	1.9E-09	4.1E-09	8.9E-11	8.9E-09	8.4E-10	5.2E-10	5.1E-10	1.1E-09
HPLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	2.5E-09	5.1E-09	2.7E-11	2.7E-09	4.9E-10	3.4E-10	3.3E-10	5.9E-10
HPLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.75	1619	-	2.6E-09	5.4E-09	3.4E-11	3.4E-09	5.9E-10	4.0E-10	3.9E-10	4.2E-10
HPLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.75	1619	-	1.9E-09	4.1E-09	4.1E-11	4.1E-09	6.4E-10	4.6E-10	4.5E-10	3.4E-10
HPLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.75	1619	-	3.4E-09	7.1E-09	4.7E-11	4.7E-09	6.5E-10	4.6E-10	4.6E-10	2.3E-10
HPLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.75	1619	-	3.2E-09	6.4E-09	5.4E-11	5.4E-09	6.9E-10	5.1E-10	5.0E-10	1.7E-10
HPLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	4.4E-09	9.3E-09	6.2E-11	6.2E-09	7.6E-10	5.9E-10	5.9E-10	1.1E-10
HPLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.75	1619	-	2.0E-09	4.1E-09	6.8E-11	6.8E-09	6.3E-10	6.2E-10	6.1E-10	8.4E-11
HPLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.75	1619	-	1.9E-09	4.0E-09	7.5E-11	7.5E-09	6.8E-10	8.0E-10	7.8E-10	6.0E-11
HPLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.75	1619	-	3.1E-09	6.8E-09	8.3E-11	8.3E-09	7.3E-10	6.3E-10	6.3E-10	6.5E-11

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPLC-1	L-1	2.4E-10	1.6E-11	1.8E-10	6.7E-13	-	-	0.0000004	-	2.7E-11	2.5E-10	9.1E-10	2.9E-12	3.6E-11	1.8E-08	2.5E-08	2.5E-10	0.0000004	3.0E-11	2.5E-08	0.000015	2.5E-08
HPLC-1	L-2	5.4E-10	1.2E-10	4.8E-10	4.6E-11	-	-	4.2E-09	-	4.1E-11	4.3E-11	1.2E-10	1.6E-11	1.9E-10	3.6E-10	4.3E-09	1.7E-10	1.7E-08	3.0E-11	3.6E-09	0.00000079	4.3E-09
HPLC-1	L-3	1.9E-09	5.3E-10	1.6E-09	3.3E-10	-	-	1.4E-08	-	1.5E-10	5.6E-10	4.8E-10	1.0E-10	7.2E-10	1.3E-09	1.4E-08	1.4E-10	1.4E-08	2.7E-10	4.2E-09	0.00000039	1.4E-08
HPLC-1	L-4	2.3E-09	6.0E-10	1.5E-09	7.2E-10	-	-	1.5E-09	-	1.3E-10	5.6E-10	2.0E-10	3.0E-10	6.4E-10	1.6E-10	1.5E-09	2.5E-10	6.2E-09	5.8E-11	6.8E-09	0.00000013	1.5E-09
HPLC-1	L-5	3.2E-09	1.1E-09	2.6E-09	1.3E-09	-	-	1.9E-09	-	2.2E-10	7.8E-11	2.2E-10	6.7E-10	9.0E-10	1.8E-10	1.9E-09	1.9E-09	1.9E-09	4.5E-11	5.2E-09	1.4E-08	1.9E-09
HPLC-1	L-6	3.1E-09	1.1E-09	2.7E-09	1.4E-09	-	-	9.6E-10	-	2.3E-10	1.0E-10	1.7E-10	8.0E-10	1.2E-09	1.4E-10	9.8E-10	1.9E-09	9.8E-10	2.7E-11	3.9E-09	3.1E-09	9.8E-10
HPLC-1	L-7	5.2E-09	1.5E-09	3.7E-09	1.8E-09	-	-	1.6E-09	-	3.5E-10	1.7E-10	2.7E-10	1.2E-09	1.7E-09	2.3E-10	1.7E-09	4.3E-09	6.7E-09	2.6E-11	7.3E-09	0.00000012	1.7E-09
HPLC-1	L-8	8.5E-09	2.3E-09	8.8E-09	2.5E-09	-	-	0.00000087	-	6.3E-10	8.8E-11	7.4E-10	1.5E-09	3.4E-09	8.4E-10	8.8E-09	3.2E-09	3.5E-08	4.2E-11	1.4E-08	0.0000011	8.8E-09
HPLC-1	L-9	2.7E-09	1.3E-09	4.7E-09	1.6E-09	-	-	0.00000026	-	4.1E-10	1.1E-10	4.3E-10	1.2E-09	1.9E-09	4.6E-10	2.7E-09	2.7E-09	4.3E-08	2.5E-11	8.8E-09	0.00000085	2.7E-09
HPLC-1	L-10	2.9E-09	1.6E-09	5.9E-09	1.7E-09	-	-	0.00000033	-	4.7E-10	1.3E-10	4.2E-10	1.2E-09	2.1E-09	5.1E-10	3.3E-09	3.3E-11	1.3E-08	2.3E-11	7.1E-09	0.00000033	3.3E-09
HPLC-1	L-11	5.3E-09	1.6E-09	7.2E-09	1.6E-09	-	-	0.0000004	-	5.3E-10	4.0E-11	3.8E-10	1.2E-09	2.3E-09	6.6E-10	4.0E-09	1.6E-10	4.0E-09	4.9E-12	4.0E-09	4.0E-09	4.0E-09
HPLC-1	L-12	4.8E-09	1.5E-09	6.4E-09	1.4E-09	-	-	0.00000046	-	5.4E-10	4.7E-11	4.5E-10	1.1E-09	2.3E-09	7.7E-10	4.7E-09	4.7E-11	4.7E-09	5.6E-12	2.5E-09	8.6E-10	4.7E-09
HPLC-1	L-13	8.1E-09	1.5E-09	7.1E-09	1.2E-09	-	-	0.00000052	-	5.6E-10	5.2E-11	4.3E-10	9.6E-10	2.4E-09	8.0E-10	5.2E-09	5.2E-09	5.2E-09	6.3E-12	3.5E-09	3.2E-09	5.2E-09
HPLC-1	L-14	4.5E-09	1.7E-09	8.1E-09	1.1E-09	-	-	0.00000059	-	6.4E-10	6.0E-11	4.0E-10	8.9E-10	2.3E-09	9.7E-10	6.0E-09	6.0E-11	6.0E-09	7.2E-12	3.2E-09	3.7E-09	6.0E-09
HPLC-1	L-15	9.3E-09	1.6E-09	6.7E-09	9.4E-10	-	-	0.000065	-	6.1E-10	6.7E-11	3.5E-10	6.9E-10	2.0E-09	1.2E-09	6.7E-09	2.7E-10	6.7E-09	8.1E-12	2.7E-09	4.1E-09	6.7E-09
HPLC-1	L-16	8.4E-09	1.6E-09	1.0E-08	7.4E-10	-	-	0.00000073	-	6.3E-10	7.4E-11	3.7E-10	6.3E-10	2.5E-09	1.3E-09	7.4E-09	7.4E-11	7.4E-09	8.9E-12	3.0E-09	5.4E-09	7.4E-09
HPLC-1	L-17	6.1E-09	1.5E-09	8.0E-09	6.3E-10	-	-	0.00000079	-	6.8E-10	8.0E-11	2.3E-10	5.3E-10	2.4E-09	1.7E-09	8.0E-09	1.3E-09	8.0E-09	3.9E-11	5.4E-09	8.0E-09	3.2E-08
HPLC-2	L-1	8.1E-10	2.5E-11	1.8E-09	1.6E-12	-	-	0.00000035	-	3.2E-10	2.2E-10	2.7E-09	1.9E-11	1.4E-10	2.4E-08	2.2E-08	2.2E-10	0.00000036	3.2E-11	7.3E-09	0.0000047	2.2E-08
HPLC-2	L-2	9.8E-10	1.9E-10	8.5E-10	5.6E-11	-	-	4.5E-09	-	1.0E-10	4.6E-11	4.4E-10	2.8E-11	3.5E-10	9.0E-10	4.6E-09	7.4E-10	4.6E-09	3.8E-11	3.0E-09	0.00000017	4.6E-09
HPLC-2	L-3	2.3E-09	5.8E-10	2.5E-09	3.5E-10	-	-	1.3E-08	-	2.4E-10	1.4E-10	2.1E-09	1.3E-10	8.8E-10	6.3E-09	1.4E-08	4.9E-09	1.4E-08	1.9E-11	1.1E-09	0.00000015	1.4E-08
HPLC-2	L-4	2.1E-09	6.7E-10	1.5E-09	8.2E-10	-	-	1.5E-09	-	1.5E-10	7.0E-10	4.3E-10	3.1E-10	7.1E-10	4.1E-10	1.5E-09	5.4E-10	0.0000003	1.7E-10	1.2E-08	0.0000085	1.5E-09
HPLC-2	L-5	4.0E-09	1.2E-09	1.9E-09	1.7E-09	-	-	1.9E-09	-	2.6E-10	1.1E-10	3.3E-10	7.7E-10	1.1E-09	3.1E-10	1.9E-09	7.0E-10	1.9E-09	5.4E-11	1.1E-09	2.5E-08	1.9E-09
HPLC-2	L-6	3.5E-09	1.1E-09	2.4E-09	1.7E-09	-	-	9.5E-10	-	2.5E-10	7.6E-11	2.5E-10	9.4E-10	1.3E-09	1.9E-10	9.7E-10	3.5E-10	3.9E-09	4.4E-11	9.7E-10	4.1E-08	9.7E-10
HPLC-2	L-7	4.0E-09	1.7E-09	3.4E-09	2.3E-09	-	-	1.6E-09	-	3.9E-10	9.5E-11	3.3E-10	1.4E-09	2.0E-09	2.6E-10	1.7E-09	2.6E-10	1.7E-09	3.8E-11	1.1E-09	3.2E-09	1.7E-09
HPLC-2	L-8	1.0E-08	2.8E-09	6.4E-09	3.4E-09	-	-	0.00000086	-	7.2E-10	8.7E-11	1.2E-09	2.0E-09	3.9E-09	2.0E-09	8.7E-09	3.5E-10	0.00000031	9.8E-11	1.0E-08	0.0000052	8.7E-09
HPLC-2	L-9	3.0E-09	1.7E-09	4.4E-09	2.1E-09	-	-	0.00000026	-	4.5E-10	2.7E-11	5.5E-10	1.5E-09	2.2E-09	6.1E-10	2.7E-09	1.1E-10	2.7E-09	3.9E-11	1.0E-09	4.2E-09	2.7E-09
HPLC-2	L-10	2.7E-09	1.8E-09	4.4E-09	2.2E-09	-	-	0.00000033	-	5.2E-10	3.3E-11	4.9E-10	1.6E-09	2.5E-09	7.7E-10	3.3E-09	1.2E-09	3.3E-09	3.8E-11	1.1E-09	1.4E-08	3.3E-09
HPLC-2	L-11	6.0E-09	1.8E-09	5.2E-09	2.1E-09	-	-	0.00000039	-	5.9E-10	4.0E-11	5.6E-10	1.6E-09	3.0E-09	1.3E-09	4.0E-09	4.0E-11	4.0E-09	3.3E-11	9.1E-10	2.2E-09	4.0E-09
HPLC-2	L-12	5.7E-09	1.7E-09	4.6E-09	1.8E-09	-	-	0.00000046	-	6.0E-10	4.6E-11	5.9E-10	1.5E-09	2.7E-09	1.3E-09	4.6E-09	4.6E-11	4.6E-09	3.8E-11	6.7E-10	5.1E-09	4.6E-09
HPLC-2	L-13	7.2E-09	1.7E-09	5.1E-09	1.5E-09	-	-	0.0000005	-	5.9E-10	5.1E-11	5.7E-10	1.3E-09	2.5E-09	1.4E-09	5.1E-09	3.3E-09	5.1E-09	2.9E-11	9.3E-10	3.7E-08	5.1E-09
HPLC-2	L-14	5.8E-09	1.9E-09	6.0E-09	1.5E-09	-	-	0.00000059	-	7.0E-10	6.0E-11	6.9E-10	1.2E-09	2.8E-09	1.9E-09	6.0E-09	6.0E-11	2.4E-08	8.6E-12	1.6E-09	0.00000025	6.0E-09
HPLC-2	L-15	8.9E-09	1.7E-09	6.7E-09	1.2E-09	-	-	0.000065	-	6.7E-10	6.7E-11	7.0E-10	1.0E-09	2.3E-09	2.1E-09	6.7E-09	1.1E-09	6.7E-09	9.6E-12	7.4E-10	2.0E-09	6.7E-09
HPLC-2	L-16	5.8E-09	1.8E-09	7.4E-09	1.1E-09	-	-	0.00000073	-	7.2E-10	7.4E-11	5.3E-10	9.7E-10	2.9E-09	1.7E-09	7.4E-09	7.4E-11	7.4E-09	1.1E-11	8.2E-10	3.6E-09	7.4E-09
HPLC-2	L-17	7.3E-09	1.7E-09	5.9E-09	8.4E-10	-	-	0.00000079	-	6.7E-10	8.1E-11	4.0E-10	8.4E-10	2.8E-09	2.2E-09	8.1E-09	8.1E-11	3.2E-08	4.6E-11	2.2E-09	0.00000024	3.2E-08
HPLC-3	L-1	1.4E-09	2.8E-11	1.9E-09	1.3E-12	-	-	0.00000036	-	7.5E-10	2.3E-10	6.0E-09	2.4E-11	1.7E-10	3.4E-08	2.3E-08	9.1E-10	0.0000033	1.8E-10	5.1E-08	0.00010	2.3E-08
HPLC-3	L-2	1.1E-09	1.8E-10	1.5E-09	5.7E-11	-	-	4.5E-09	-	1.4E-10	4.6E-11	5.6E-10	2.9E-11	3.1E-10	1.7E-09	4.6E-09	4.6E-11	4.6E-09	4.7E-12	5.1E-10	0.00000014	4.6E-09
HPLC-3	L-3	3.0E-09	5.1E-10	2.5E-09	2.9E-10	-	-	1.3E-08	-	3.1E-10	1.3E-10	2.8E-09	1.2E-10	7.8E-10	9.2E-09	1.3E-08	1.3E-10	1.3E-08	1.4E-11	8.4E-10	0.00000037	1.3E-08
HPLC-3	L-4	2.2E-09	5.2E-10	1.5E-09	5.6E-10	-	-	1.5E-09	-	1.6E-10	3.5E-10	3.5E-10	2.2E-10	6.1E-10	5.6E-10	1.5E-09	2.4E-10	6.0E-09	4.9E-11	1.2E-09	0.00000021	1.5E-09
HPLC-3	L-5	4.1E-09	9.7E-10	2.5E-09	1.2E-09	-	-	1.9E-09	-	2.6E-10	1.9E-10	3.5E-10	5.4E-10	9.2E-10	6.2E-10	1.9E-09	7.0E-10	7.8E-09	4.6E-11	1.3E-09	8.6E-08	1.9E-09
HPLC-3	L-6	3.4E-09	9.8E-10	2.4E-09	1.2E-09	-	-	9.6E-10	-	2.5E-10	7.7E-11	2.3E-10	6.8E-10	1.1E-09	3.1E-10	9.8E-10	3.5E-10	9.8E-10	3.6E-11	4.4E-10	1.7E-09	9.8E-10
HPLC-3	L-7	4.9E-09	1.5E-09	3.4E-09	1.7E-09	-	-	1.6E-09	-	3.7E-10	9.6E-11	3.4E-10	1.0E-09	1.6E-09	4.5E-10	1.7E-09	6.7E-11	1.7E-09	4.0E-11	6.5E-10	3.2E-09	1.7E-09
HPLC-3	L-8	9.8E-09	2.3E-09	6.4E-09	2.3E-09	-	-	0.00000085	-	7.1E-10	8.6E-11	1.1E-09	1.4E-09	2.8E-09	2.4E-09	8.6E-09	8.6E-11	3.5E-08	5.1E-11	1.8E-09	0.00000045	8.6E-09
HPLC-3	L-9	1.4E-09	1.3E-09	4.4E-09	1.4E-09	-	-	0.00000026	-	4.5E-10	2.7E-11	5.3E-10	1.0E-09	1.6E-09	8.5E-10	2.7E-09	1.7E-09	2.7E-09	2.8E-11	5.6E-10	4.0E-09	2.7E-09
HPLC-3	L-10	3.6E-09	1.4E-09	5.5E-09	1.5E-09	-	-	0.00000033	-	5.1E-10	1.3E-10	5.9E-10	1.1E-09	2.0E-09	1.1E-09	3.3E-09	1.2E-09	0.00000012	4.5E-11	3.1E-09	0.0000021	3.3E-09
HPLC-3	L-11	7.7E-09	1.4E-09	5.2E-09	1.4E-09	-	-	0.00000039	-	5.7E-10	4.0E-11	5.4E-10	1.1E-09	2.3E-09	1.5E-09	4.0E-09	4.0E-11	4.0E-09	2.3E-11	6.9E-10	8.9E-09	4.0E-09
HPLC-3	L-12	5.5E-09	1.4E-09	6.1E-09	1.2E-09	-	-	0.00000046	-	5.8E-10	4.7E-11	6.6E-10	1.0E-09	2.2E-09	1.7E-09	4.7E-09	4.7E-09	4.7E-09	6.3E-11	8.2E-10	0.00000012	4.7E-09
HPLC-3	L-13	8.8E-09	1.4E-09	5.3E-09	1.1E-09	-	-	0.00000053	-	5.9E-10	5.3E-11	6.2E-10	9.0E-10	2.2E-09	2.0E-09	5.3E-09	2.1E-10	5.3E-09	3.2E-11	7.5E-10	7.4E-08	5.3E-09
HPLC-3	L-14	5.4E-09	1.5E-09	6.1E-09	9.9E-10	-	-	0.0000006	-	6.8E-10	6.1E-11	7.7E-10	8.7E-10	2.3E-09	2.3E-09	6.1E-09	6.1E-11	6.1E-09	6.3E-12	6.8E-10	3.0E-08	6.1E-09
HPLC-3	L-15	8.7E-09	1.3E-09	6.7E-09	8.1E-10	-	-	0.000066	-	6.2E-10	6.7E-11	5.9E-10	6.5E-10	1.8E-09	2.1E-09	6.7E-09	4.3E-09	6.7E-09	6.9E-12	5.7E-10	5.3E-09	6.7E-09
HPLC-3	L-16	8.9E-09	1.5E-09	7.4E-09	7.9E-10	-	-	0.00000073	-	7.4E-10	7.4E-11	8.3E-10	6.6E-10	2.3E-09	2.4E-09	7.4E-09	7.4E-11	7.4E-09	7.6E-12	6.3E-10	8.3E-09	7.4E-09
HPLC-3	L-17	7.1E-09	1.3E-09	5.9E-09	5.3E-10	-	-	0.0000008	-	6.6E-10	8.1E-11	4.3E-10	5.7E-10	2.2E-09	3.0E-09	8.1E-09	1.3E-09	8.1E-09	3.3E-11	9.0E-10	1.6E-08	3.2E-08
HPLC-4	L-1	1.4E-12	2.5E-11	2.5E-09	9.0E-13	-	-	0.000092	-	3.6E-10	1.7E-11	4.2E-09	1.5E-11	1.0E-10	2.2E-08	2.2E-08	2.2E-10	0.0000032	1.5E-10	0.00000012	0.00022	2.2E-08
HPLC-4	L-2	1.6E-09	1.9E-10	2.0E-09	5.2E-11	-	-	4.3E-09	-	2.2E-10	1.4E-11	9.0E-10	3.7E-11	4.1E-10	1.5E-09	4.4E-09	1.6E-09	4.4E-09	1.6E-11	1.3E-09	0.00000044	4.4E-09
HPLC-4	L-3	3.2E-09	4.3E-10	6.1E-09	1.8E-10	-	-	1.3E-08	-	4.1E-10	1.1E-11	4.5E-09	1.0E-10	8.9E-10	2.0E-08	1.4E-08	2.2E-09	1.4E-08	1.2E-11	2.2E-09	0.00000067	1.4E-08
HPLC-4	L-4	2.4E-09	4.6E-10	2.0E-09	4.8E-10	-	-	1.5E-09	-	1.6E-10	3.1E-11	4.2E-10	1.9E-10	5.5E-10	5.1E-10	1.5E-09	9.5E-10	1.5E-09	4.1E-11	2.6E-09	0.00000021	1.5E-09
HPLC-4	L-5	3.9E-09	1.0E-09	2.7E-09	1.1E-09	-	-	1.9E-09	-	2.7E-10	8.7E-12	4.8E-10	5.0E-10	8.5E-10	6.6E-10	2.0E-09	3.1E-10	7.0E-08	6.2E-11	8.9E-09	0.0000058	2.0E-09
HPLC-4	L-6	3.1E-09	8.9E-10	3.4E-09	1.1E-09	-	-	9.8E-10	-	2.5E-10	7.9E-12	2.9E-10	6.2E-10	1.0E-09	2.9E-10	1.0E-09	3.6E-10	6.4E-08	4.6E-11	4.5E-09	0.0000032	1.0E-09
HPLC-4	L-7	5.3E-09	1.3E-09	4.7E-09	1.6E-09	-	-	1.7E-09	-	3.9E-10	1.0E-11	3.8E-10	9.8E-10	1.6E-09	5.0E-10	1.7E-09	1.1E-09	1.7E-09	2.9E-11	1.5E-09	1.9E-08	1.7E-09
HPLC-4	L-8	1.1E-08	2.2E-09	8.9E-09	2.2E-09	-	-	0.00000087	-	7.4E-10	6.8E-12	1.2E-09	1.3E-09	3.1E-09	2.2E-09	8.9E-09	5.7E-09	8.9E-09	4.5E-11	3.2E-09	0.00000046	8.9E-09
HPLC-4	L-9	4.0E-09	1.2E-09	6.1E-09	1.3E-09	-	-	0.00000027	-	4.5E-10	8.4E-12	5.9E-10	9.3E-10	1.6E-09	9.3E-10	2.7E-09	9.8E-10	2.7E-09	3.1E-11	1.5E-09	7.3E-08	2.7E-09
HPLC-4	L-10	4.2E-09	1.3E-09	7.6E-09	1.3E-09	-	-	0.00000033	-	5.2E-10	1.5E-11	7.0E-10	9.9E-10	2.1E-09	1.3E-09	3.4E-09	5.4E-10	0.00000012	4.8E-11	1.1E-08	0.0000097	3.4E-09
HPLC-4	L-11	5.3E-09	1.3E-09	7.2E-09	1.2E-09	-	-	0.0000004	-	5.7E-10	3.1E-12	9.4E-10	9.4E-10	2.8E-09	1.2E-09	4.1E-09	1.6E-10	4.1E-09	2.1E-11	1.8E-09	4.6E-08	4.1E-09
HPLC-4	L-12	6.3E-09	1.3E-09	6.4E-09	1.0E-09	-	-	0.00000046	-	5.6E-10	3.6E-12	1.0E-09	8.5E-10	2.2E-09	1.8E-09	4.7E-09	7.5E-10	4.7E-09	2.4E-11	2.5E-09	0.00000056	4.7E-09
HPLC-4	L-13	7.9E-09	1.3E-09	7.4E-09	8.4E-10	-	-	0.00000053	-	5.9E-10	4.2E-12	7.6E-10	7.5E-10	2.2E-09	1.8E-09	5.4E-09	2.2E-10	5.4E-09	1.9E-11	1.9E-09	4.6E-08	5.4E-09
HPLC-4	L-14	4.9E-09	1.4E-09	8.4E-09	7.9E-10	-	-	0.00000061	-	6.7E-10	4.8E-12	8.0E-10	7.0E-10	2.4E-09	2.4E-09	6.2E-09	6.2E-09	6.2E-09	2.2E-11	2.2E-09	0.00000028	6.2E-09
HPLC-4	L-15	9.5E-09	1.3E-09	9.3E-09	6.1E-10	-	-	0.000067	-	6.2E-10	5.3E-12	1.0E-09	5.4E-10	1.9E-09	2.3E-09	6.8E-09	6.8E-11	6.8E-09	6.1E-12	1.9E-09	8.2E-08	6.8E-09
HPLC-4	L-16	9.9E-09	1.5E-09	1.3E-08	6.5E-10	-	-	0.00000074	-	7.6E-10	5.8E-12	1.1E-09	5.2E-10	2.4E-09	2.6E-09	7.5E-09	7.5E-11	7.5E-09	6.7E-12	2.1E-09	6.8E-08	7.5E-09
HPLC-4	L-17	7.0E-09	1.2E-09	1.1E-08	4.1E-10	-	-	0.00000081	-	6.6E-10	6.4E-12	5.4E-10	4.4E-10	2.3E-09	3.2E-09	8.3E-09	8.3E-11	8.3E-09	7.3E-12	5.3E-09	8.3E-09	3.3E-08

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPLC-1	L-1	0.00000015	1.1E-11	5.7E-08	0.0000020	1.2E-10	5.2E-11	2.5E-08	4.0E-11	1.6E-10	2.5E-10	2.6E-10	1.0E-10	5.3E-08	-	-	2.6E-10	-
HPLC-1	L-2	4.3E-09	5.6E-11	9.7E-09	0.00000019	1.9E-10	6.5E-11	4.3E-09	6.4E-11	1.2E-10	1.7E-10	2.0E-10	2.0E-11	1.4E-08	-	-	2.9E-11	-
HPLC-1	L-3	1.4E-08	3.4E-10	3.5E-09	8.1E-08	5.2E-10	3.2E-10	1.4E-08	2.0E-10	4.5E-10	5.6E-10	2.9E-10	7.4E-11	6.2E-09	-	-	5.4E-11	-
HPLC-1	L-4	1.5E-09	7.2E-10	6.2E-09	5.2E-08	3.7E-10	4.0E-10	1.5E-09	1.5E-10	8.0E-10	9.9E-10	3.6E-10	5.4E-11	1.9E-09	-	-	1.6E-11	-
HPLC-1	L-5	1.9E-09	1.2E-09	4.4E-09	7.8E-09	5.7E-10	6.6E-10	1.9E-09	2.5E-10	1.8E-09	1.2E-09	6.3E-10	9.2E-11	7.8E-09	-	-	1.6E-11	-
HPLC-1	L-6	9.8E-10	1.6E-09	2.2E-09	1.4E-09	6.6E-10	7.7E-10	9.8E-10	2.8E-10	1.4E-09	1.4E-09	1.4E-09	9.1E-11	1.7E-09	-	-	8.4E-12	-
HPLC-1	L-7	1.7E-09	2.1E-09	3.7E-09	3.5E-08	1.0E-09	1.4E-09	1.7E-09	4.0E-10	1.4E-09	2.0E-09	2.0E-09	1.7E-10	7.4E-10	-	-	1.3E-11	-
HPLC-1	L-8	8.8E-09	2.7E-09	2.0E-08	0.00000026	1.8E-09	1.8E-09	8.8E-09	7.3E-10	3.7E-09	3.2E-09	2.5E-09	3.4E-10	1.6E-08	-	-	3.8E-11	-
HPLC-1	L-9	1.5E-08	2.2E-09	6.0E-09	0.0000002	1.3E-09	1.6E-09	2.7E-09	5.8E-10	2.6E-09	2.7E-09	2.9E-09	2.5E-10	3.3E-09	-	-	2.7E-11	-
HPLC-1	L-10	3.3E-09	2.3E-09	1.3E-08	0.00000012	1.6E-09	1.5E-09	3.3E-09	6.0E-10	3.1E-09	3.3E-09	2.8E-09	2.8E-10	5.4E-08	-	-	1.8E-11	-
HPLC-1	L-11	4.0E-09	2.3E-09	9.1E-09	2.3E-08	1.9E-09	1.7E-09	4.0E-09	6.5E-10	3.1E-09	3.3E-09	2.9E-09	3.0E-10	2.4E-09	-	-	2.4E-11	-
HPLC-1	L-12	4.7E-09	2.6E-09	4.7E-09	4.7E-09	2.2E-09	1.7E-09	4.7E-09	7.5E-10	3.8E-09	3.8E-09	2.6E-09	3.5E-10	2.1E-09	-	-	2.4E-11	-
HPLC-1	L-13	5.2E-09	2.1E-09	5.2E-09	1.7E-08	2.3E-09	1.6E-09	5.2E-09	8.4E-10	1.8E-09	5.2E-09	2.8E-09	3.8E-10	5.2E-09	-	-	4.3E-11	-
HPLC-1	L-14	6.0E-09	2.2E-09	6.0E-09	1.2E-08	2.5E-09	1.4E-09	6.0E-09	8.5E-10	2.6E-09	6.0E-09	2.4E-09	3.9E-10	1.7E-08	-	-	4.0E-11	-
HPLC-1	L-15	6.7E-09	2.0E-09	6.7E-09	4.3E-09	2.4E-09	1.4E-09	6.7E-09	8.5E-10	2.4E-09	4.3E-09	2.0E-09	3.7E-10	4.0E-09	-	-	5.9E-11	-
HPLC-1	L-16	7.4E-09	2.1E-09	7.4E-09	1.4E-08	2.6E-09	1.1E-09	7.4E-09	9.3E-10	1.4E-09	4.7E-09	2.0E-09	4.3E-10	7.2E-08	-	-	6.7E-11	-
HPLC-1	L-17	8.0E-09	2.1E-09	8.0E-09	1.6E-08	2.9E-09	1.4E-09	8.0E-09	1.0E-09	1.2E-09	5.1E-09	1.8E-09	4.1E-10	7.8E-08	-	-	5.2E-11	-
HPLC-2	L-1	2.2E-08	4.1E-11	5.0E-08	0.00000028	4.0E-10	2.9E-10	2.2E-08	3.1E-10	0.00000024	2.7E-10	7.8E-10	3.1E-10	2.0E-09	-	-	4.8E-10	-
HPLC-2	L-2	2.7E-08	1.1E-10	9.4E-08	1.2E-08	2.5E-10	1.4E-10	4.6E-09	1.6E-10	1.4E-10	2.3E-10	2.1E-10	6.5E-11	0.0000034	-	-	4.1E-11	-
HPLC-2	L-3	1.4E-08	4.7E-10	1.4E-08	1.1E-08	7.4E-10	4.8E-10	1.4E-08	3.5E-10	4.6E-10	1.5E-09	3.5E-10	2.2E-10	1.7E-09	-	-	1.9E-10	-
HPLC-2	L-4	8.7E-08	8.4E-10	7.4E-08	0.00000045	3.8E-10	4.2E-10	1.5E-09	1.9E-10	1.6E-09	1.2E-09	8.4E-10	1.3E-10	4.1E-09	-	-	2.7E-11	-
HPLC-2	L-5	1.9E-09	1.7E-09	1.9E-09	4.1E-09	6.2E-10	7.1E-10	1.9E-09	3.1E-10	2.0E-09	1.5E-09	5.5E-10	1.3E-10	3.9E-10	-	-	2.1E-11	-
HPLC-2	L-6	5.6E-09	2.1E-09	2.2E-09	3.9E-09	6.2E-10	8.3E-10	9.7E-10	3.0E-10	1.5E-09	1.7E-09	1.3E-09	1.1E-10	3.5E-10	-	-	1.0E-11	-
HPLC-2	L-7	1.7E-09	3.0E-09	6.6E-09	1.4E-09	1.0E-09	1.4E-09	1.7E-09	4.7E-10	1.6E-09	2.5E-09	1.7E-09	2.0E-10	1.0E-10	-	-	1.8E-11	-
HPLC-2	L-8	8.9E-08	4.0E-09	5.4E-08	0.00000053	2.0E-09	2.1E-09	8.7E-09	8.4E-10	6.9E-09	5.3E-09	3.1E-09	5.2E-10	5.6E-09	-	-	1.1E-10	-
HPLC-2	L-9	2.7E-09	3.1E-09	2.7E-09	1.4E-09	1.4E-09	1.7E-09	2.7E-09	6.4E-10	2.8E-09	3.3E-09	1.7E-09	2.8E-10	3.3E-10	-	-	2.9E-11	-
HPLC-2	L-10	3.3E-09	3.5E-09	1.3E-08	5.4E-09	1.6E-09	1.6E-09	3.3E-09	6.6E-10	3.5E-09	4.1E-09	1.9E-09	3.5E-10	1.9E-09	-	-	5.0E-11	-
HPLC-2	L-11	4.0E-09	3.5E-09	4.0E-09	4.8E-09	2.0E-09	1.9E-09	4.0E-09	7.9E-10	3.6E-09	4.0E-09	1.9E-09	4.4E-10	6.2E-11	-	-	4.7E-11	-
HPLC-2	L-12	4.6E-09	3.7E-09	4.6E-09	2.4E-09	2.3E-09	1.9E-09	4.6E-09	9.1E-10	5.8E-09	5.7E-09	1.8E-09	4.8E-10	1.2E-09	-	-	5.2E-11	-
HPLC-2	L-13	5.1E-09	3.1E-09	5.1E-09	9.5E-09	2.4E-09	1.7E-09	5.1E-09	1.0E-09	2.7E-09	5.1E-09	2.1E-09	5.0E-10	7.9E-11	-	-	5.9E-11	-
HPLC-2	L-14	6.0E-09	3.3E-09	6.0E-09	4.2E-08	2.7E-09	1.7E-09	6.0E-09	1.1E-09	3.5E-09	7.4E-09	2.2E-09	5.9E-10	9.4E-11	-	-	7.7E-11	-
HPLC-2	L-15	6.7E-09	3.0E-09	6.7E-09	1.4E-09	2.3E-09	1.5E-09	6.7E-09	9.5E-10	3.0E-09	5.3E-09	1.6E-09	5.3E-10	1.0E-10	-	-	7.0E-11	-
HPLC-2	L-16	7.4E-09	3.2E-09	7.4E-09	2.2E-09	2.5E-09	1.3E-09	7.4E-09	1.1E-09	1.6E-09	5.8E-09	1.9E-09	5.9E-10	2.7E-09	-	-	5.9E-11	-
HPLC-2	L-17	8.1E-09	3.2E-09	1.8E-08	2.7E-08	2.7E-09	1.7E-09	8.1E-09	1.0E-09	1.3E-09	6.4E-09	2.2E-09	5.8E-10	8.1E-09	-	-	8.5E-11	-
HPLC-3	L-1	0.00000071	4.5E-11	0.00000012	0.00000033	6.9E-10	3.7E-10	2.3E-08	6.1E-10	1.7E-09	2.3E-10	7.5E-09	9.1E-10	2.3E-09	-	-	5.7E-10	-
HPLC-3	L-2	4.6E-09	1.1E-10	4.6E-09	5.9E-10	3.0E-10	1.4E-10	4.6E-09	2.0E-10	7.9E-11	4.1E-10	4.0E-10	7.8E-11	4.6E-08	-	-	6.0E-11	-
HPLC-3	L-3	1.3E-08	4.0E-10	8.4E-10	1.7E-09	8.7E-10	4.7E-10	1.3E-08	4.2E-10	3.5E-10	1.2E-09	6.6E-10	3.3E-10	5.8E-11	-	-	2.0E-10	-
HPLC-3	L-4	6.0E-09	6.3E-10	1.5E-09	1.1E-09	3.7E-10	2.7E-10	1.5E-09	2.1E-10	4.6E-10	9.7E-10	3.6E-10	8.6E-11	3.4E-10	-	-	1.6E-11	-
HPLC-3	L-5	7.8E-09	1.2E-09	1.1E-09	4.8E-10	6.0E-10	5.5E-10	1.9E-09	3.0E-10	1.1E-09	1.6E-09	8.9E-10	1.5E-10	6.6E-11	-	-	3.5E-11	-
HPLC-3	L-6	9.8E-10	1.6E-09	5.5E-10	2.7E-11	6.2E-10	6.2E-10	9.8E-10	3.1E-10	9.8E-10	1.7E-09	1.5E-09	1.2E-10	5.5E-11	-	-	1.5E-11	-
HPLC-3	L-7	1.7E-09	2.1E-09	9.4E-10	7.7E-11	9.7E-10	1.1E-09	1.7E-09	4.5E-10	9.5E-10	2.4E-09	2.0E-09	2.0E-10	7.2E-12	-	-	2.1E-11	-
HPLC-3	L-8	8.6E-09	2.9E-09	8.6E-09	3.1E-09	2.0E-09	1.5E-09	8.6E-09	8.0E-10	3.4E-09	4.2E-09	2.7E-09	4.4E-10	8.2E-09	-	-	1.1E-10	-
HPLC-3	L-9	2.7E-09	2.2E-09	6.7E-10	9.7E-11	1.3E-09	1.2E-09	2.7E-09	6.7E-10	1.6E-09	3.2E-09	2.0E-09	2.8E-10	6.7E-11	-	-	4.0E-11	-
HPLC-3	L-10	4.3E-08	2.5E-09	5.2E-09	9.8E-09	1.6E-09	1.2E-09	3.3E-09	7.0E-10	2.9E-09	3.3E-09	2.9E-09	4.2E-10	2.3E-10	-	-	3.1E-11	-
HPLC-3	L-11	4.0E-09	2.3E-09	2.2E-09	2.3E-10	1.8E-09	1.3E-09	4.0E-09	7.5E-10	2.1E-09	3.2E-09	2.1E-09	4.1E-10	7.0E-10	-	-	5.0E-11	-
HPLC-3	L-12	1.9E-08	2.7E-09	7.4E-09	6.8E-10	2.2E-09	1.4E-09	4.7E-09	8.9E-10	4.0E-09	4.7E-09	2.2E-09	5.1E-10	3.3E-09	-	-	6.6E-11	-
HPLC-3	L-13	5.3E-09	2.3E-09	1.3E-09	9.8E-10	2.4E-09	1.3E-09	5.3E-09	1.0E-09	1.5E-09	5.3E-09	2.3E-09	4.9E-10	2.3E-11	-	-	6.7E-11	-
HPLC-3	L-14	6.1E-09	2.3E-09	1.5E-09	5.0E-10	2.5E-09	1.2E-09	6.1E-09	1.0E-09	1.8E-09	6.1E-09	1.7E-09	5.5E-10	2.6E-11	-	-	6.7E-11	-
HPLC-3	L-15	6.7E-09	2.1E-09	4.2E-10	1.4E-10	2.2E-09	1.0E-09	6.7E-09	9.2E-10	1.5E-09	4.3E-09	1.7E-09	4.9E-10	2.9E-11	-	-	5.9E-11	-
HPLC-3	L-16	7.4E-09	2.3E-09	4.6E-10	1.5E-10	2.6E-09	8.8E-10	7.4E-09	1.0E-09	1.1E-09	4.8E-09	1.6E-09	6.1E-10	1.7E-09	-	-	7.6E-11	-
HPLC-3	L-17	8.1E-09	2.4E-09	2.0E-09	2.9E-10	2.6E-09	1.1E-09	8.1E-09	1.1E-09	6.5E-10	5.2E-09	2.0E-09	5.5E-10	2.2E-09	-	-	9.7E-11	-
HPLC-4	L-1	0.0000006	2.7E-11	0.00000016	0.000010	5.0E-10	2.2E-10	2.2E-08	3.2E-10	1.1E-09	1.8E-10	4.2E-09	6.1E-10	1.4E-08	-	-	5.6E-10	-
HPLC-4	L-2	4.4E-09	1.4E-10	2.0E-09	2.3E-08	4.9E-10	2.1E-10	4.4E-09	2.9E-10	1.1E-10	3.3E-10	5.2E-10	1.5E-10	1.8E-08	-	-	6.5E-11	-
HPLC-4	L-3	1.4E-08	3.6E-10	1.5E-09	4.7E-08	1.2E-09	6.6E-10	1.4E-08	6.0E-10	2.3E-10	1.0E-09	1.1E-09	5.0E-10	4.4E-10	-	-	5.2E-10	-
HPLC-4	L-4	1.5E-09	5.3E-10	2.6E-09	1.3E-08	4.0E-10	2.9E-10	1.5E-09	1.9E-10	4.2E-10	7.9E-10	2.9E-10	9.5E-11	4.0E-09	-	-	1.3E-11	-
HPLC-4	L-5	3.8E-08	1.1E-09	7.8E-09	0.00000029	6.3E-10	6.2E-10	2.0E-09	2.9E-10	1.2E-09	1.3E-09	1.2E-09	1.8E-10	8.1E-10	-	-	2.8E-11	-
HPLC-4	L-6	1.9E-08	1.2E-09	5.4E-09	0.00000017	6.9E-10	6.1E-10	4.0E-09	2.8E-10	1.0E-09	1.4E-09	2.3E-09	1.4E-10	1.0E-09	-	-	1.8E-11	-
HPLC-4	L-7	1.7E-09	2.0E-09	7.5E-10	4.2E-09	1.1E-09	1.1E-09	1.7E-09	4.4E-10	1.0E-09	2.0E-09	2.7E-09	2.0E-10	5.4E-11	-	-	2.5E-11	-
HPLC-4	L-8	8.9E-09	2.5E-09	3.9E-09	4.1E-08	2.2E-09	1.6E-09	8.9E-09	7.9E-10	3.1E-09	3.6E-09	3.3E-09	4.7E-10	1.6E-09	-	-	1.1E-10	-
HPLC-4	L-9	2.7E-09	1.9E-09	2.7E-09	5.6E-09	1.5E-09	1.2E-09	2.7E-09	6.5E-10	1.7E-09	2.7E-09	2.6E-09	3.0E-10	6.8E-10	-	-	4.9E-11	-
HPLC-4	L-10	5.4E-08	2.1E-09	1.3E-08	0.00000057	1.7E-09	1.2E-09	3.4E-09	6.7E-10	2.9E-09	2.8E-09	3.4E-09	4.5E-10	2.5E-09	-	-	6.0E-11	-
HPLC-4	L-11	4.1E-09	2.1E-09	4.1E-09	1.0E-08	2.0E-09	1.4E-09	4.1E-09	7.4E-10	2.0E-09	2.7E-09	2.0E-09	4.6E-10	2.5E-09	-	-	5.2E-11	-
HPLC-4	L-12	4.7E-09	2.2E-09	4.7E-09	4.6E-08	2.4E-09	1.3E-09	4.7E-09	8.5E-10	2.9E-09	3.9E-09	2.3E-09	5.4E-10	2.4E-09	-	-	5.6E-11	-
HPLC-4	L-13	5.4E-09	1.9E-09	2.4E-09	8.9E-09	2.7E-09	1.3E-09	5.4E-09	9.8E-10	1.3E-09	4.5E-09	2.6E-09	5.3E-10	9.9E-10	-	-	8.0E-11	-
HPLC-4	L-14	6.2E-09	2.0E-09	2.7E-09	3.6E-08	3.0E-09	1.2E-09	6.2E-09	1.0E-09	1.7E-09	5.1E-09	2.3E-09	6.2E-10	3.8E-09	-	-	8.8E-11	-
HPLC-4	L-15	6.8E-09	1.8E-09	3.0E-09	1.1E-08	2.5E-09	1.1E-09	6.8E-09	1.0E-09	1.4E-09	3.6E-09	1.6E-09	6.0E-10	1.3E-09	-	-	7.4E-11	-
HPLC-4	L-16	7.5E-09	1.9E-09	8.4E-10	7.5E-09	2.9E-09	9.7E-10	7.5E-09	1.1E-09	1.0E-09	4.0E-09	1.9E-09	6.6E-10	9.9E-09	-	-	9.7E-11	-
HPLC-4	L-17	8.3E-09	1.9E-09	3.7E-09	6.1E-09	3.1E-09	1.2E-09	8.3E-09	1.1E-09	7.8E-10	4.4E-09	2.5E-09	5.8E-10	1.2E-08	-	-	9.1E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPHC-1	L-1	2019-10-08	0.080	0.076	0.14	0.00065	4075	1.00	4.1	0.043	9.4	0.83	1277	6.9E-08	2.6E-11	0.000062	3.4E-12	6.5E-13	3.7E-12	3.5E-13	5.4E-13	6.8E-13
HPHC-1	L-2	2019-10-09	1.0	0.076	0.14	0.00065	4323	1.00	4.3	0.043	10	0.83	1277	1.2E-08	1.2E-10	1.2E-08	7.8E-10	4.1E-12	3.7E-11	1.8E-12	2.0E-12	1.1E-12
HPHC-1	L-3	2019-10-10	2.0	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	3.6E-08	3.6E-10	3.6E-08	2.9E-09	5.5E-12	7.1E-11	5.5E-12	5.7E-12	1.4E-12
HPHC-1	L-4	2019-10-15	7.0	0.076	0.14	0.00065	4324	1.00	4.3	0.043	10	0.83	1277	4.1E-09	2.1E-10	4.1E-09	7.3E-10	6.2E-11	4.0E-11	4.6E-12	4.6E-12	4.0E-12
HPHC-1	L-5	2019-10-22	14	0.076	0.14	0.00065	4323	1.00	4.3	0.043	10	0.83	1277	5.2E-09	2.5E-10	5.2E-09	3.1E-10	2.1E-10	1.7E-11	3.7E-11	3.6E-11	2.0E-11
HPHC-1	L-6	2019-11-05	28	0.076	0.14	0.00065	4326	1.00	4.3	0.043	10	0.83	1277	2.6E-09	1.7E-10	2.6E-09	1.5E-10	1.8E-10	1.8E-11	5.2E-11	5.3E-11	6.3E-13
HPHC-1	L-7	2019-11-19	42	0.076	0.14	0.00065	4331	1.00	4.3	0.043	10	0.83	1277	4.4E-09	2.4E-10	4.4E-09	3.2E-10	2.0E-10	2.3E-11	1.1E-10	1.1E-10	1.1E-12
HPHC-1	L-8	2019-11-26	49	0.076	0.14	0.00065	4330	1.00	4.3	0.043	10	0.83	1277	2.3E-08	5.1E-10	2.3E-08	1.2E-09	2.8E-10	5.8E-11	2.6E-10	2.6E-10	5.7E-12
HPHC-1	L-9	2019-12-10	63	0.076	0.14	0.00065	4330	1.00	4.3	0.043	10	0.83	1277	7.1E-09	2.5E-10	7.1E-09	4.6E-10	1.8E-10	3.0E-11	1.6E-10	1.6E-10	1.7E-12
HPHC-1	L-10	2019-12-24	77	0.076	0.14	0.00065	4325	1.00	4.3	0.043	10	0.83	1277	8.9E-09	3.4E-10	8.9E-09	5.7E-10	2.6E-10	3.3E-11	1.6E-10	1.6E-10	2.2E-12
HPHC-1	L-11	2020-01-07	91	0.076	0.14	0.00065	4329	1.00	4.3	0.043	10	0.83	1277	1.1E-08	3.5E-10	1.1E-08	6.9E-10	2.1E-10	3.1E-11	2.1E-10	2.1E-10	2.6E-12
HPHC-1	L-12	2020-01-21	105	0.076	0.14	0.00065	4325	1.00	4.3	0.043	10	0.83	1277	1.2E-08	3.6E-10	1.2E-08	6.3E-10	2.5E-10	3.3E-11	2.7E-10	2.7E-10	3.0E-12
HPHC-1	L-13	2020-02-04	119	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	1.4E-08	5.5E-10	1.4E-08	8.2E-10	4.5E-10	3.6E-11	2.8E-10	2.8E-10	3.5E-12
HPHC-1	L-14	2020-02-18	133	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	1.6E-08	2.3E-10	1.6E-08	5.4E-10	1.2E-10	4.4E-11	3.2E-10	3.3E-10	1.6E-13
HPHC-1	L-15	2020-03-03	147	0.076	0.14	0.00065	4331	1.00	4.3	0.043	10	0.83	1277	1.8E-08	4.9E-10	1.8E-08	1.0E-09	3.0E-10	5.1E-11	3.5E-10	3.5E-10	4.4E-12
HPHC-1	L-16	2020-03-17	161	0.076	0.14	0.00065	4328	1.00	4.3	0.043	10	0.83	1277	2.0E-08	3.0E-10	2.0E-08	1.2E-09	7.4E-11	5.8E-11	3.1E-10	3.1E-10	1.9E-13
HPHC-1	L-17	2020-03-31	175	0.076	0.14	0.00065	4327	1.00	4.3	0.043	10	0.83	1277	2.1E-08	3.5E-10	2.1E-08	1.0E-09	1.6E-10	6.2E-11	2.7E-10	2.7E-10	2.1E-13
HPHC-2	L-1	2019-10-08	0.080	0.076	0.14	0.00064	3997	1.00	4.0	0.042	9.4	0.80	1266	7.0E-08	6.7E-12	0.000028	1.9E-12	3.1E-13	3.2E-12	2.0E-13	3.1E-13	1.0E-13
HPHC-2	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	1.2E-08	4.8E-11	1.2E-08	4.1E-10	8.7E-13	1.7E-11	1.1E-12	1.1E-12	1.2E-12
HPHC-2	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4256	1.00	4.3	0.042	10	0.80	1266	3.7E-08	1.4E-10	3.7E-08	1.3E-09	1.6E-13	4.0E-11	2.7E-12	2.9E-12	8.8E-13
HPHC-2	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	4.2E-09	1.0E-10	4.2E-09	4.2E-10	2.7E-11	2.5E-11	2.2E-12	2.3E-12	2.5E-12
HPHC-2	L-5	2019-10-22	14	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	5.3E-09	1.2E-10	5.3E-09	1.9E-10	9.5E-11	1.2E-11	1.9E-11	1.9E-11	7.8E-13
HPHC-2	L-6	2019-11-05	28	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	2.6E-09	7.9E-11	2.6E-09	8.3E-11	7.8E-11	9.3E-12	3.2E-11	3.2E-11	3.9E-13
HPHC-2	L-7	2019-11-19	42	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	4.5E-09	1.1E-10	4.5E-09	1.5E-10	9.7E-11	1.4E-11	6.5E-11	6.5E-11	6.7E-13
HPHC-2	L-8	2019-11-26	49	0.076	0.14	0.00064	4260	1.00	4.3	0.042	10	0.80	1266	2.4E-08	2.8E-10	2.4E-08	7.8E-10	1.3E-10	3.7E-11	1.9E-10	1.9E-10	3.5E-12
HPHC-2	L-9	2019-12-10	63	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	7.2E-09	1.1E-10	7.2E-09	2.0E-10	8.0E-11	1.4E-11	1.0E-10	1.0E-10	1.1E-12
HPHC-2	L-10	2019-12-24	77	0.076	0.14	0.00064	4252	1.00	4.3	0.042	10	0.80	1266	9.0E-09	1.8E-10	9.0E-09	4.1E-10	1.1E-10	2.1E-11	1.2E-10	1.2E-10	1.3E-12
HPHC-2	L-11	2020-01-07	91	0.076	0.14	0.00064	4254	1.00	4.3	0.042	10	0.80	1266	1.1E-08	1.8E-10	1.1E-08	4.7E-10	9.3E-11	1.9E-11	1.3E-10	1.3E-10	1.6E-12
HPHC-2	L-12	2020-01-21	105	0.076	0.14	0.00064	4256	1.00	4.3	0.042	10	0.80	1266	1.3E-08	2.0E-10	1.3E-08	3.5E-10	1.4E-10	1.8E-11	1.7E-10	1.7E-10	1.9E-12
HPHC-2	L-13	2020-02-04	119	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	1.4E-08	2.9E-10	1.4E-08	5.7E-10	1.9E-10	3.1E-11	1.8E-10	1.8E-10	2.2E-12
HPHC-2	L-14	2020-02-18	133	0.076	0.14	0.00064	4257	1.00	4.3	0.042	10	0.80	1266	1.6E-08	1.2E-10	1.6E-08	3.7E-10	4.9E-11	2.4E-11	1.7E-10	1.8E-10	9.7E-14
HPHC-2	L-15	2020-03-03	147	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	1.8E-08	2.3E-10	1.8E-08	5.0E-10	1.4E-10	3.3E-11	1.6E-10	1.6E-10	2.7E-12
HPHC-2	L-16	2020-03-17	161	0.076	0.14	0.00064	4258	1.00	4.3	0.042	10	0.80	1266	2.0E-08	1.2E-10	2.0E-08	4.6E-10	4.3E-11	3.4E-11	1.9E-10	1.9E-10	4.7E-13
HPHC-2	L-17	2020-03-31	175	0.076	0.14	0.00064	4258	0.98	4.3	0.042	10	0.80	1266	2.2E-08	1.8E-10	2.2E-08	7.9E-10	4.8E-11	3.9E-11	1.6E-10	1.6E-10	1.3E-13
HPHC-3	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4036	1.00	4.0	0.043	9.4	0.82	1279	6.8E-08	3.1E-11	0.000089	4.9E-13	9.8E-13	3.2E-13	2.1E-14	4.6E-14	1.9E-13
HPHC-3	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4300	1.00	4.3	0.043	10	0.82	1279	1.2E-08	8.6E-11	1.2E-08	4.3E-10	1.7E-13	3.3E-11	1.5E-12	1.4E-12	1.2E-12
HPHC-3	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.82	1279	3.6E-08	3.1E-10	0.0000023	1.4E-09	5.2E-13	7.3E-11	3.6E-12	3.7E-12	1.6E-12
HPHC-3	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4299	1.00	4.3	0.043	10	0.82	1279	4.1E-09	2.3E-10	4.1E-09	5.3E-10	7.6E-11	4.2E-11	2.6E-12	2.6E-12	4.5E-12
HPHC-3	L-5	2019-10-22	14	0.076	0.14	0.00064	4302	1.00	4.3	0.043	10	0.82	1279	5.2E-09	2.5E-10	5.2E-09	2.4E-10	2.7E-10	2.7E-11	2.6E-11	2.6E-11	1.4E-12
HPHC-3	L-6	2019-11-05	28	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.82	1279	2.6E-09	1.7E-10	2.6E-09	9.7E-11	2.4E-10	2.0E-11	5.3E-11	5.3E-11	7.2E-13
HPHC-3	L-7	2019-11-19	42	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	4.4E-09	2.2E-10	4.4E-09	1.5E-10	3.1E-10	2.1E-11	1.1E-10	1.1E-10	1.2E-12
HPHC-3	L-8	2019-11-26	49	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	2.3E-08	5.9E-10	2.3E-08	7.7E-10	4.8E-10	6.5E-11	2.9E-10	2.9E-10	6.4E-12
HPHC-3	L-9	2019-12-10	63	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	7.1E-09	2.2E-10	7.1E-09	2.5E-10	2.0E-10	3.5E-11	1.6E-10	1.6E-10	2.0E-12
HPHC-3	L-10	2019-12-24	77	0.076	0.14	0.00064	4300	1.00	4.3	0.043	10	0.82	1279	8.8E-09	3.6E-10	8.8E-09	3.1E-10	4.0E-10	3.6E-11	1.8E-10	1.8E-10	2.5E-12
HPHC-3	L-11	2020-01-07	91	0.076	0.14	0.00064	4305	1.00	4.3	0.043	10	0.82	1279	1.1E-08	3.6E-10	1.1E-08	4.9E-10	2.7E-10	2.9E-11	1.9E-10	1.9E-10	3.0E-12
HPHC-3	L-12	2020-01-21	105	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.82	1279	1.2E-08	3.4E-10	1.2E-08	4.1E-10	2.8E-10	4.5E-11	2.6E-10	2.6E-10	3.4E-12
HPHC-3	L-13	2020-02-04	119	0.076	0.14	0.00064	4305	1.00	4.3	0.043	10	0.82	1279	1.4E-08	5.9E-10	1.4E-08	5.9E-10	5.5E-10	5.8E-11	2.7E-10	2.7E-10	3.9E-12
HPHC-3	L-14	2020-02-18	133	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	1.6E-08	2.1E-10	1.6E-08	3.6E-10	1.3E-10	4.3E-11	3.0E-10	3.0E-10	1.8E-13
HPHC-3	L-15	2020-03-03	147	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	1.8E-08	4.5E-10	1.8E-08	6.3E-10	3.3E-10	5.5E-11	3.2E-10	3.2E-10	4.9E-12
HPHC-3	L-16	2020-03-17	161	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.82	1279	2.0E-08	2.4E-10	2.0E-08	5.4E-10	9.1E-11	5.5E-11	3.1E-10	3.1E-10	2.2E-13
HPHC-3	L-17	2020-03-31	175	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.82	1279	2.1E-08	3.4E-10	2.1E-08	7.1E-10	1.5E-10	6.3E-11	2.9E-10	2.8E-10	2.4E-13
HPHC-4	L-1	2019-10-08	0.080	0.076	0.14	0.00064	4034	1.00	4.0	0.043	9.4	0.80	1236	7.3E-08	6.0E-12	0.000029	1.1E-12	3.5E-13	1.4E-12	1.7E-13	1.7E-13	1.0E-13
HPHC-4	L-2	2019-10-09	1.0	0.076	0.14	0.00064	4296	1.00	4.3	0.043	10	0.80	1236	5.2E-08	3.2E-11	1.3E-08	2.1E-10	6.1E-14	1.6E-11	9.0E-13	7.4E-13	1.2E-12
HPHC-4	L-3	2019-10-10	2.0	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.80	1236	3.9E-08	1.0E-10	3.9E-08	7.0E-10	1.8E-13	3.4E-11	2.7E-12	2.3E-12	2.0E-12
HPHC-4	L-4	2019-10-15	7.0	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.80	1236	4.4E-09	8.3E-11	4.4E-09	2.5E-10	2.4E-11	2.2E-11	1.6E-12	1.6E-12	2.5E-12
HPHC-4	L-5	2019-10-22	14	0.076	0.14	0.00064	4302	1.00	4.3	0.043	10	0.80	1236	5.5E-09	9.8E-11	5.5E-09	1.1E-10	8.8E-11	1.3E-11	1.3E-11	1.3E-11	7.8E-13
HPHC-4	L-6	2019-11-05	28	0.076	0.14	0.00064	4304	1.00	4.3	0.043	10	0.80	1236	2.8E-09	6.9E-11	2.8E-09	5.6E-11	7.6E-11	9.8E-12	2.5E-11	2.5E-11	3.9E-13
HPHC-4	L-7	2019-11-19	42	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	4.7E-09	8.8E-11	4.7E-09	9.0E-11	8.6E-11	1.3E-11	4.9E-11	4.9E-11	6.7E-13
HPHC-4	L-8	2019-11-26	49	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	2.5E-08	2.4E-10	2.5E-08	4.7E-10	1.4E-10	3.6E-11	1.3E-10	1.3E-10	3.5E-12
HPHC-4	L-9	2019-12-10	63	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	7.6E-09	9.3E-11	7.6E-09	1.6E-10	5.7E-11	1.6E-11	7.9E-11	7.9E-11	1.1E-12
HPHC-4	L-10	2019-12-24	77	0.076	0.14	0.00064	4301	1.00	4.3	0.043	10	0.80	1236	9.5E-09	1.3E-10	9.5E-09	1.4E-10	1.3E-10	1.7E-11	9.9E-11	9.9E-11	1.3E-12
HPHC-4	L-11	2020-01-07	91	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	1.1E-08	1.4E-10	1.1E-08	2.9E-10	8.6E-11	1.7E-11	1.1E-10	1.1E-10	1.6E-12
HPHC-4	L-12	2020-01-21	105	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.80	1236	1.3E-08	1.4E-10	1.3E-08	2.0E-10	1.0E-10	2.5E-11	1.3E-10	1.3E-10	1.9E-12
HPHC-4	L-13	2020-02-04	119	0.076	0.14	0.00064	4303	1.00	4.3	0.043	10	0.80	1236	1.5E-08	2.2E-10	1.5E-08	2.3E-10	2.1E-10	3.2E-11	1.4E-10	1.4E-10	2.2E-12
HPHC-4	L-14	2020-02-18	133	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	1.7E-08	8.8E-11	1.7E-08	1.7E-10	4.7E-11	2.2E-11	1.5E-10	1.5E-10	9.7E-14
HPHC-4	L-15	2020-03-03	147	0.076	0.14	0.00064	4308	1.00	4.3	0.043	10	0.80	1236	1.9E-08	1.7E-10	1.9E-08	2.7E-10	1.2E-10	2.9E-11	1.7E-10	1.7E-10	2.7E-12
HPHC-4	L-16	2020-03-17	161	0.076	0.14	0.00064	4307	1.00	4.3	0.043	10	0.80	1236	2.1E-08	1.1E-10	2.1E-08	3.4E-10	3.2E-11	3.5E-11	1.6E-10	1.6E-10	1.2E-13
HPHC-4	L-17	2020-03-31	175	0.076	0.14	0.00064	4306	1.00	4.3	0.043	10	0.80	1236	2.3E-08	1.3E-10	2.3E-08	3.4E-10	5.2E-11	3.1E-11	1.4E-10	1.4E-10	1.3E-13

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPHC-1	L-1	1.7E-10	2.7E-11	6.9E-08	3.9E-12	8.8E-11	7.1E-08	6.8E-08	6.9E-08	1.5E-13	6.9E-10	1.3E-08	5.8E-12	6.9E-08	2.0E-10	6.9E-08	2.8E-09	1.1E-09	1.2E-12	3.1E-10	0.00000068	6.9E-08
HPHC-1	L-2	7.7E-09	1.9E-10	1.2E-08	3.4E-11	1.5E-11	1.2E-08	1.2E-08	1.2E-08	4.1E-12	1.2E-10	3.2E-08	1.6E-11	0.0000017	2.9E-10	1.2E-08	1.9E-09	1.9E-10	1.4E-11	9.6E-11	0.0000012	1.2E-08
HPHC-1	L-3	5.8E-09	4.9E-10	3.6E-08	5.8E-11	4.6E-11	3.7E-08	3.6E-08	3.6E-08	1.8E-12	3.6E-10	0.00000011	9.9E-12	0.0000013	1.0E-09	3.6E-08	1.5E-09	5.7E-10	6.6E-12	7.2E-11	0.0000012	3.6E-08
HPHC-1	L-4	1.7E-09	3.9E-10	4.1E-09	2.2E-11	1.9E-10	4.2E-09	4.0E-09	1.6E-08	4.0E-13	4.1E-11	0.00000087	3.3E-12	0.00000015	1.8E-10	4.1E-09	1.6E-10	6.4E-11	1.6E-12	8.1E-12	8.3E-08	4.1E-09
HPHC-1	L-5	8.3E-10	2.0E-10	5.2E-09	5.0E-12	4.2E-10	5.3E-09	5.1E-09	5.2E-09	1.1E-13	5.2E-11	0.0000050	1.0E-12	8.3E-08	2.6E-10	5.2E-09	5.2E-11	8.1E-11	3.3E-13	2.6E-12	6.1E-08	5.2E-09
HPHC-1	L-6	6.5E-10	3.5E-11	2.6E-09	8.3E-13	1.3E-09	2.7E-09	2.5E-09	2.6E-09	5.3E-14	2.6E-11	0.0000049	3.6E-13	1.0E-08	1.9E-10	2.6E-09	2.6E-11	4.1E-11	1.0E-13	2.1E-11	7.6E-09	1.0E-08
HPHC-1	L-7	4.0E-10	1.1E-11	4.4E-09	2.1E-13	1.1E-09	4.5E-09	4.3E-09	4.4E-09	6.0E-14	4.4E-11	0.000011	2.1E-13	4.4E-09	3.5E-10	4.4E-09	4.4E-11	6.9E-11	7.6E-14	2.0E-11	2.6E-08	4.4E-09
HPHC-1	L-8	2.3E-10	1.0E-11	2.3E-08	1.1E-13	1.1E-09	2.4E-08	0.00000037	2.3E-08	7.3E-14	2.3E-10	0.000035	2.1E-13	2.3E-08	1.2E-09	2.3E-08	2.3E-10	3.6E-10	1.7E-14	4.6E-11	0.00000033	2.3E-08
HPHC-1	L-9	4.4E-10	2.5E-12	7.1E-09	3.5E-14	1.3E-09	7.3E-09	7.0E-09	0.00000011	6.9E-14	7.1E-11	0.000016	1.6E-13	7.1E-09	6.8E-10	7.1E-09	7.1E-11	1.1E-10	3.0E-14	1.4E-11	3.7E-08	7.1E-09
HPHC-1	L-10	2.0E-10	1.8E-12	8.9E-09	2.1E-14	1.8E-10	9.1E-09	8.7E-09	3.6E-08	4.3E-14	8.9E-11	0.000022	1.7E-13	8.9E-09	1.1E-09	8.9E-09	8.9E-11	1.4E-10	2.6E-14	3.9E-11	0.00000011	8.9E-09
HPHC-1	L-11	1.1E-10	1.4E-12	1.1E-08	1.3E-14	1.4E-11	1.1E-08	1.0E-08	1.1E-08	5.8E-14	1.1E-10	0.000024	1.6E-13	1.1E-08	1.8E-09	1.1E-08	1.1E-10	1.7E-10	4.6E-14	2.1E-11	0.00000015	1.1E-08
HPHC-1	L-12	1.2E-10	1.0E-12	1.2E-08	9.7E-15	5.7E-10	1.3E-08	1.2E-08	1.2E-08	4.6E-14	1.2E-10	0.000027	1.9E-13	1.2E-08	2.7E-09	1.2E-08	5.0E-10	1.9E-10	3.7E-14	2.5E-11	0.00000015	1.2E-08
HPHC-1	L-13	3.6E-11	9.2E-13	1.4E-08	6.3E-15	1.2E-09	1.5E-08	1.4E-08	1.4E-08	6.4E-14	1.4E-10	0.000027	1.7E-13	1.4E-08	3.7E-09	1.4E-08	1.4E-10	2.2E-10	1.1E-14	6.3E-11	0.0000005	1.4E-08
HPHC-1	L-14	1.0E-11	7.9E-13	1.6E-08	7.1E-15	2.0E-09	1.6E-08	1.6E-08	1.6E-08	5.4E-14	1.6E-10	0.000033	1.9E-13	1.6E-08	5.1E-09	1.6E-08	1.6E-10	2.5E-10	1.2E-14	7.9E-12	0.00000029	1.6E-08
HPHC-1	L-15	1.8E-10	8.8E-13	1.8E-08	7.9E-15	3.3E-09	1.8E-08	1.7E-08	1.8E-08	7.0E-14	1.8E-10	0.000035	2.2E-13	1.8E-08	6.8E-09	1.8E-08	1.8E-10	2.8E-10	1.3E-14	8.8E-12	0.00000018	1.8E-08
HPHC-1	L-16	4.9E-11	6.0E-13	2.0E-08	3.8E-15	1.6E-09	2.0E-08	1.9E-08	2.0E-08	7.7E-14	2.0E-10	0.000036	2.4E-13	2.0E-08	9.0E-09	2.0E-08	2.0E-10	3.1E-10	1.5E-14	8.7E-11	0.00000062	2.0E-08
HPHC-1	L-17	5.3E-11	6.5E-13	2.1E-08	4.2E-15	1.7E-09	2.2E-08	0.00000019	2.1E-08	9.0E-14	2.1E-10	0.000038	2.6E-13	2.1E-08	1.1E-08	2.1E-08	8.6E-10	3.3E-10	1.6E-14	1.1E-11	0.00000019	2.1E-08
HPHC-2	L-1	1.7E-10	1.6E-11	1.7E-08	2.6E-12	3.6E-11	7.2E-08	6.8E-08	7.0E-08	1.5E-13	7.0E-12	0.0000019	2.8E-12	7.0E-10	2.7E-10	7.0E-10	7.0E-12	7.0E-10	8.1E-13	2.5E-10	0.0000007	7.0E-08
HPHC-2	L-2	6.9E-09	1.0E-10	1.2E-08	2.0E-11	6.4E-12	1.3E-08	1.2E-08	1.2E-08	3.5E-12	1.2E-12	0.0000023	5.9E-12	1.8E-08	2.9E-10	1.2E-10	4.9E-12	1.2E-10	7.1E-12	4.4E-11	0.00000016	1.2E-08
HPHC-2	L-3	7.5E-09	2.4E-10	9.2E-09	3.0E-11	1.9E-11	3.8E-08	3.6E-08	3.7E-08	1.4E-12	3.7E-12	0.0000085	3.7E-12	2.4E-08	8.6E-10	3.7E-10	3.7E-12	3.7E-10	3.0E-12	1.5E-11	0.00000023	3.7E-08
HPHC-2	L-4	2.0E-09	2.0E-10	1.0E-09	1.4E-11	1.4E-10	4.3E-09	4.1E-09	1.7E-08	3.8E-13	4.2E-13	0.000049	1.4E-12	2.7E-09	1.6E-10	4.2E-11	6.7E-12	4.2E-11	7.3E-13	1.7E-12	2.2E-08	4.2E-09
HPHC-2	L-5	8.4E-10	1.2E-10	1.3E-09	3.4E-12	1.7E-10	5.4E-09	5.2E-09	5.3E-09	9.4E-14	5.3E-13	0.00030	5.0E-13	8.4E-10	2.6E-10	5.3E-11	2.1E-12	5.3E-11	2.3E-13	2.1E-12	9.8E-09	5.3E-09
HPHC-2	L-6	5.3E-10	2.2E-11	6.6E-10	4.8E-13	5.4E-10	2.7E-09	2.6E-09	2.6E-09	4.1E-14	2.6E-13	0.00039	1.8E-13	4.2E-10	1.8E-10	2.6E-11	2.6E-13	2.6E-11	5.1E-14	4.2E-12	7.8E-09	2.6E-09
HPHC-2	L-7	5.5E-10	7.9E-12	1.1E-09	1.2E-13	3.3E-10	4.6E-09	4.4E-09	0.00000029	4.4E-14	4.5E-13	0.00084	1.0E-13	4.5E-11	3.5E-10	4.5E-11	4.5E-13	4.5E-11	3.5E-14	1.6E-11	4.1E-08	4.5E-09
HPHC-2	L-8	2.4E-10	7.0E-12	5.9E-09	6.7E-14	1.2E-09	2.4E-08	0.00000037	0.00000085	4.3E-14	2.4E-12	0.0028	1.0E-13	2.4E-10	8.9E-10	2.4E-10	2.4E-12	2.4E-10	4.6E-14	9.4E-12	0.00000014	2.4E-08
HPHC-2	L-9	4.5E-10	1.5E-12	1.8E-09	2.1E-14	3.7E-10	7.4E-09	2.8E-08	7.2E-09	5.5E-14	7.2E-13	0.0013	8.5E-14	7.2E-11	6.1E-10	7.2E-11	7.2E-13	7.2E-11	1.8E-14	2.9E-12	3.1E-08	7.2E-09
HPHC-2	L-10	2.0E-10	1.1E-12	2.3E-09	9.3E-15	7.5E-11	9.2E-09	8.8E-09	0.00000014	3.3E-14	9.0E-13	0.0019	6.2E-14	9.0E-11	9.2E-10	9.0E-11	9.0E-13	9.0E-11	1.3E-14	3.6E-12	7.5E-08	9.0E-09
HPHC-2	L-11	2.4E-10	8.4E-13	2.7E-09	7.7E-15	9.0E-11	1.1E-08	1.1E-08	1.1E-08	4.4E-14	1.1E-12	0.0019	6.1E-14	1.1E-10	1.5E-09	1.1E-10	1.1E-12	1.1E-10	1.6E-14	1.7E-11	5.8E-08	1.1E-08
HPHC-2	L-12	1.3E-10	6.0E-13	3.2E-09	5.8E-15	2.6E-11	1.3E-08	5.0E-08	1.3E-08	3.8E-14	1.3E-12	0.0022	5.6E-14	1.3E-10	2.5E-09	1.3E-10	1.3E-12	1.3E-10	1.8E-14	5.1E-12	6.6E-08	1.3E-08
HPHC-2	L-13	3.6E-11	6.1E-13	3.6E-09	3.7E-15	1.1E-09	1.5E-08	1.4E-08	1.4E-08	5.3E-14	1.4E-12	0.0023	8.1E-14	1.4E-10	3.2E-09	1.4E-10	5.8E-12	1.4E-10	1.4E-14	2.3E-11	0.00000016	1.4E-08
HPHC-2	L-14	1.0E-11	4.7E-13	4.1E-09	4.2E-15	8.4E-10	1.7E-08	1.6E-08	1.6E-08	4.3E-14	1.6E-12	0.0028	7.2E-14	1.6E-10	4.5E-09	1.6E-10	1.6E-12	1.6E-10	1.6E-14	2.6E-11	0.00000022	1.6E-08
HPHC-2	L-15	1.8E-10	3.8E-13	4.5E-09	2.1E-15	9.4E-10	1.9E-08	1.8E-08	1.8E-08	5.5E-14	1.8E-12	0.0030	8.0E-14	1.8E-10	6.5E-09	1.8E-10	1.8E-12	1.8E-10	1.8E-14	2.9E-11	0.00000021	1.8E-08
HPHC-2	L-16	5.0E-11	3.5E-13	5.0E-09	2.3E-15	6.6E-10	2.0E-08	2.0E-08	2.0E-08	5.3E-14	2.0E-12	0.0031	8.8E-14	2.0E-10	8.1E-09	2.0E-10	2.0E-12	2.0E-10	5.0E-15	3.2E-11	0.00000021	2.0E-08
HPHC-2	L-17	5.6E-11	4.0E-13	5.6E-09	2.6E-15	1.9E-10	2.3E-08	0.00000014	2.2E-08	6.4E-14	2.2E-12	0.0032	9.9E-14	2.2E-10	1.0E-08	2.2E-10	9.0E-12	2.2E-10	2.2E-14	9.0E-12	0.0000001	2.2E-08
HPHC-3	L-1	6.8E-10	3.1E-11	6.8E-08	5.0E-12	2.7E-11	7.0E-08	6.7E-08	6.8E-08	1.6E-13	6.8E-12	0.0000001	2.2E-12	6.8E-10	1.7E-10	6.8E-10	9.8E-10	6.8E-10	5.1E-13	6.8E-10	0.0000006	6.8E-08
HPHC-3	L-2	2.7E-08	2.2E-10	4.8E-08	4.1E-11	4.8E-12	1.2E-08	1.2E-08	1.2E-08	5.9E-12	1.2E-12	0.00000012	5.7E-12	1.7E-08	2.9E-10	1.2E-10	1.2E-12	1.2E-10	6.2E-12	3.0E-11	6.3E-08	1.2E-08
HPHC-3	L-3	3.6E-08	4.6E-10	3.6E-08	5.9E-11	1.4E-11	3.7E-08	3.5E-08	3.6E-08	2.4E-12	3.6E-12	0.00000068	4.3E-12	2.3E-08	7.2E-10	3.6E-10	5.8E-11	3.6E-10	3.0E-12	2.3E-11	0.00000019	3.6E-08
HPHC-3	L-4	8.0E-09	4.7E-10	4.1E-09	3.0E-11	5.9E-11	4.2E-09	4.0E-09	1.6E-08	5.0E-13	4.1E-13	0.0000037	1.8E-12	2.6E-09	1.2E-10	4.1E-11	6.5E-12	4.1E-11	7.1E-13	2.6E-12	2.3E-08	4.1E-09
HPHC-3	L-5	3.3E-09	2.9E-10	5.2E-09	8.4E-12	1.3E-10	5.3E-09	5.1E-09	5.2E-09	1.4E-13	5.2E-13	0.000025	6.8E-13	8.3E-10	2.0E-10	5.2E-11	8.3E-12	5.2E-11	1.5E-13	3.2E-12	8.5E-09	5.2E-09
HPHC-3	L-6	2.1E-09	5.2E-11	2.6E-09	1.1E-12	2.0E-10	2.6E-09	2.5E-09	2.6E-09	7.0E-14	2.6E-13	0.000027	2.2E-13	1.0E-10	1.7E-10	2.6E-11	2.6E-13	2.6E-11	5.3E-14	1.6E-12	4.0E-09	2.6E-09
HPHC-3	L-7	2.2E-09	1.7E-11	4.4E-09	2.4E-13	4.5E-10	4.5E-09	4.3E-09	7.0E-08	8.6E-14	4.4E-13	0.0000062	1.3E-13	4.4E-11	3.5E-10	4.4E-11	4.4E-13	4.4E-11	3.3E-14	1.1E-11	2.1E-08	4.4E-09
HPHC-3	L-8	9.2E-10	1.5E-11	2.3E-08	1.2E-13	1.3E-09	2.4E-08	0.0000011	2.3E-08	9.8E-14	2.3E-12	0.00022	1.2E-13	2.3E-10	9.0E-10	2.3E-10	2.3E-12	2.3E-10	4.3E-14	1.4E-11	1.0E-07	2.3E-08
HPHC-3	L-9	2.5E-09	3.3E-12	7.1E-09	4.5E-14	2.8E-10	7.2E-09	6.9E-09	7.1E-09	8.1E-14	7.1E-13	0.00011	7.0E-14	2.8E-10	5.6E-10	7.1E-11	7.1E-13	7.1E-11	2.3E-14	4.4E-12	2.2E-08	7.1E-09
HPHC-3	L-10	8.0E-10	2.2E-12	8.8E-09	2.0E-14	2.3E-10	9.0E-09	8.6E-09	0.00000014	6.9E-14	8.8E-13	0.00014	7.2E-14	8.8E-11	9.3E-10	8.8E-11	8.8E-13	8.8E-11	1.6E-14	5.5E-12	4.1E-08	8.8E-09
HPHC-3	L-11	9.6E-10	1.6E-12	1.1E-08	1.7E-14	1.7E-11	1.1E-08	1.0E-08	4.3E-08	7.5E-14	1.1E-12	0.00014	8.7E-14	1.1E-10	1.5E-09	1.1E-10	1.1E-12	1.1E-10	2.0E-14	6.6E-12	5.0E-08	1.1E-08
HPHC-3	L-12	5.0E-10	1.3E-12	1.2E-08	1.3E-14	7.9E-11	1.3E-08	1.2E-08	1.2E-08	7.8E-14	1.2E-12	0.00016	8.2E-14	1.2E-10	2.4E-09	1.2E-10	1.2E-12	1.2E-10	1.6E-14	3.1E-11	8.9E-08	1.2E-08
HPHC-3	L-13	1.4E-10	1.2E-12	1.4E-08	8.1E-15	3.6E-10	1.5E-08	1.4E-08	1.4E-08	9.9E-14	1.4E-12	0.00016	9.4E-14	1.4E-10	3.4E-09	1.4E-10	1.4E-12	1.4E-10	4.6E-15	8.9E-12	0.00000012	1.4E-08
HPHC-3	L-14	4.0E-11	1.0E-12	1.6E-08	9.2E-15	1.3E-09	1.6E-08	1.6E-08	1.6E-08	8.8E-14	1.6E-12	0.00020	8.3E-14	1.6E-10	4.8E-09	1.6E-10	1.6E-12	1.6E-10	5.2E-15	1.0E-11	0.00000014	1.6E-08
HPHC-3	L-15	7.1E-10	9.6E-13	1.8E-08	4.5E-15	1.0E-09	1.8E-08	1.7E-08	1.8E-08	1.2E-13	1.8E-12	0.00022	9.3E-14	1.8E-10	6.8E-09	1.8E-10	1.8E-12	1.8E-10	5.7E-15	1.1E-11	0.00000016	1.8E-08
HPHC-3	L-16	2.0E-10	9.0E-13	2.0E-08	5.0E-15	5.0E-10	2.0E-08	1.9E-08	2.0E-08	1.0E-13	2.0E-12	0.00023	1.0E-13	2.0E-10	8.6E-09	2.0E-10	2.0E-12	2.0E-10	6.3E-15	4.9E-11	0.00000031	2.0E-08
HPHC-3	L-17	2.1E-10	8.2E-13	2.1E-08	5.4E-15	5.5E-10	2.2E-08	0.00000013	2.1E-08	1.3E-13	2.1E-12	0.00023	1.1E-13	2.1E-10	1.1E-08	2.1E-10	8.5E-12	2.1E-10	6.9E-15	1.3E-11	6.6E-08	2.1E-08
HPHC-4	L-1	1.8E-10	1.4E-11	1.8E-08	2.1E-12	1.1E-11	7.5E-08	7.2E-08	7.3E-08	1.1E-13	7.3E-12	0.0000017	2.0E-12	7.3E-10	2.5E-10	7.3E-10	2.9E-11	7.3E-10	3.4E-13	2.6E-10	0.00000056	7.3E-08
HPHC-4	L-2	6.3E-09	9.9E-11	5.2E-08	1.9E-11	2.0E-12	1.3E-08	1.3E-08	1.3E-08	3.9E-12	1.3E-12	0.0000020	4.9E-12	1.3E-08	2.2E-10	1.3E-10	5.2E-12	1.3E-10	6.0E-12	2.1E-11	8.5E-08	1.3E-08
HPHC-4	L-3	9.7E-09	2.0E-10	3.9E-08	2.5E-11	6.1E-12	4.0E-08	3.8E-08	3.9E-08	1.3E-12	3.9E-12	0.0000090	3.1E-12	2.5E-08	8.1E-10	3.9E-10	1.6E-11	3.9E-10	2.3E-12	1.6E-11	0.00000017	3.9E-08
HPHC-4	L-4	2.5E-09	2.0E-10	1.1E-09	1.4E-11	1.8E-10	4.5E-09	4.3E-09	1.8E-08	3.1E-13	4.4E-13	0.000037	1.3E-12	4.4E-09	1.1E-10	4.4E-11	7.0E-12	4.4E-11	5.7E-13	1.8E-12	1.0E-08	4.4E-09
HPHC-4	L-5	1.1E-09	1.3E-10	1.4E-09	4.0E-12	5.5E-11	5.7E-09	5.4E-09	5.5E-09	8.3E-14	5.5E-13	0.00028	5.3E-13	8.9E-10	2.2E-10	5.5E-11	5.5E-13	5.5E-11	1.3E-13	2.2E-12	1.1E-08	5.5E-09
HPHC-4	L-6	5.6E-10	2.5E-11	6.9E-10	5.4E-13	1.7E-10	2.8E-09	2.7E-09	2.8E-09	3.9E-14	2.8E-13	0.00036	1.7E-13	4.4E-10	1.6E-10	2.8E-11	1.1E-12	2.8E-11	3.5E-14	1.1E-12	2.6E-09	2.8E-09
HPHC-4	L-7	5.8E-10	8.2E-12	1.2E-09	1.2E-13	1.4E-10	4.8E-09	4.6E-09	1.9E-08	5.1E-14	4.7E-13	0.00078	9.5E-14	1.9E-10	2.9E-10	4.7E-11	4.7E-13	4.7E-11	3.6E-14	7.5E-12	1.7E-08	4.7E-09
HPHC-4	L-8	1.5E-09	7.6E-12	6.2E-09	7.1E-14	5.6E-10	2.5E-08	0.00000039	2.5E-08	6.2E-14	2.5E-12	0.0028	9.9E-14	2.5E-10	8.4E-10	2.5E-10	2.5E-12	2.5E-10	2.4E-14	9.9E-12	0.00000014	2.5E-08
HPHC-4	L-9	6.8E-10	1.7E-12	1.9E-09	2.2E-14	4.3E-11	7.8E-09	7.4E-09	7.6E-09	7.6E-14	7.6E-13	0.0013	6.8E-14	7.6E-11	5.3E-10	7.6E-11	3.0E-12	7.6E-11	1.4E-14	3.0E-12	1.4E-08	7.6E-09
HPHC-4	L-10	3.8E-10	1.2E-12	2.4E-09	1.3E-14	1.5E-12	9.7E-09	9.3E-09	0.00000015	4.2E-14	9.5E-13	0.0017	5.9E-14	9.5E-11	8.7E-10	9.5E-11	9.5E-13	9.5E-11	1.3E-14	3.8E-12	3.2E-08	9.5E-09
HPHC-4	L-11	2.6E-10	8.7E-13	2.9E-09	8.1E-15	3.5E-10	1.2E-08	1.1E-08	1.1E-08	5.6E-14	1.1E-12	0.0020	7.1E-14	1.1E-10	1.5E-09	1.1E-10	1.1E-12	1.1E-10	1.6E-14	1.8E-11	6.6E-08	1.1E-08
HPHC-4	L-12	1.3E-10	6.2E-13	3.3E-09	6.1E-15	8.3E-12	1.4E-08	1.3E-08	1.3E-08	4.8E-14	1.3E-12	0.0022	8.3E-14	1.3E-10	2.4E-09	1.3E-10	1.3E-12	1.3E-10	2.5E-14	2.1E-11	6.0E-08	1.3E-08
HPHC-4	L-13	3.8E-11	5.6E-13	3.8E-09	3.9E-15	2.4E-10	1.6E-08	1.5E-08	1.5E-08	6.8E-14	1.5E-12	0.0024	6.1E-14	1.5E-10	3.6E-09	1.5E-10	1.5E-12	1.5E-10	1.5E-14	5.5E-11	0.00000024	1.5E-08
HPHC-4	L-14	1.1E-11	4.9E-13	4.3E-09	4.4E-15	3.9E-10	1.8E-08	1.7E-08	1.7E-08	5.5E-14	1.7E-12	0.0028	6.9E-14	1.7E-10	5.0E-09	1.7E-10	6.9E-12	1.7E-10	1.6E-14	6.9E-12	0.00000015	1.7E-08
HPHC-4	L-15	1.9E-10	4.7E-13	4.8E-09	2.2E-15	1.9E-10	1.9E-08	1.9E-08	1.9E-08	7.3E-14	1.9E-12	0.0030	7.6E-14	1.9E-10	7.3E-09	1.9E-10	1.9E-12	1.9E-10	1.8E-14	3.0E-11	0.00000037	1.9E-08
HPHC-4	L-16	2.1E-10	4.4E-13	5.2E-09	2.4E-15	2.1E-10	2.1E-08	2.0E-08	2.1E-08	6.8E-14	2.1E-12	0.0029	8.4E-14	2.1E-10	9.1E-09	2.1E-10	2.1E-12	2.1E-10	5.0E-15	3.4E-11	0.00000018	2.1E-08
HPHC-4	L-17	5.7E-11	4.0E-13	5.7E-09	2.6E-15	1.3E-10	2.3E-08	0.00000014	2.3E-08	8.3E-14	2.3E-12	0.0031	7.0E-14	2.3E-10	1.2E-08	2.3E-10	9.1E-12	2.3E-10	2.2E-14	9.1E-12	6.1E-08	2.3E-08

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HPHC-1	L-1	6.9E-08	4.9E-12	1.7E-10	7.4E-11	0.0000084	3.6E-10	6.9E-08	1.5E-12	1.9E-11	4.3E-11	6.9E-08	2.1E-10	0.0000004	3.9E-08	0.00000012	7.6E-12	3.1E-10
HPHC-1	L-2	1.2E-08	5.0E-11	3.0E-11	8.1E-11	0.00012	5.0E-09	1.2E-08	1.0E-11	1.1E-10	7.6E-12	0.00000011	9.4E-09	1.2E-08	-	-	-	-
HPHC-1	L-3	3.6E-08	3.1E-11	2.3E-11	8.1E-11	0.000095	1.3E-09	3.6E-08	2.1E-11	6.8E-11	2.3E-11	4.2E-08	6.9E-09	0.00000021	0.00000013	0.00000042	7.8E-11	4.0E-11
HPHC-1	L-4	4.1E-09	1.3E-11	2.6E-12	2.2E-11	0.000033	2.2E-10	4.1E-09	8.7E-12	1.2E-11	2.6E-12	2.1E-09	1.6E-09	4.1E-09	-	-	-	-
HPHC-1	L-5	5.2E-09	3.7E-12	3.2E-12	5.4E-11	0.0000083	9.0E-11	5.2E-09	5.5E-11	2.1E-12	3.2E-12	1.0E-09	5.0E-10	5.2E-09	-	-	-	-
HPHC-1	L-6	2.6E-09	1.5E-12	1.6E-12	8.4E-11	0.0000022	8.4E-11	2.6E-09	1.7E-10	1.0E-12	1.6E-12	6.3E-10	2.3E-10	2.6E-09	0.00000014	7.5E-09	3.3E-11	4.6E-11
HPHC-1	L-7	4.4E-09	6.6E-13	2.8E-12	2.1E-10	0.0000032	1.4E-10	4.4E-09	4.3E-10	1.2E-12	2.8E-12	1.3E-09	4.2E-10	4.4E-09	-	-	-	-
HPHC-1	L-8	2.3E-08	4.5E-13	1.4E-11	5.0E-10	0.0000084	2.0E-10	2.3E-08	1.2E-09	1.0E-12	1.4E-11	6.5E-09	7.7E-10	2.3E-08	-	-	-	-
HPHC-1	L-9	7.1E-09	2.9E-13	4.4E-12	2.8E-10	0.0000038	1.8E-10	7.1E-09	6.3E-10	1.3E-12	4.4E-12	2.1E-09	4.0E-10	7.1E-09	0.00000024	1.6E-08	5.9E-11	2.8E-10
HPHC-1	L-10	8.9E-09	2.6E-13	5.5E-12	4.2E-10	0.0000043	2.2E-10	8.9E-09	8.2E-10	8.9E-13	5.5E-12	3.2E-09	5.0E-10	8.9E-09	-	-	-	-
HPHC-1	L-11	1.1E-08	2.9E-13	6.7E-12	6.0E-10	0.0000056	2.9E-10	1.1E-08	9.5E-10	4.7E-13	6.7E-12	5.7E-09	5.5E-10	1.1E-08	-	-	-	-
HPHC-1	L-12	1.2E-08	3.1E-13	7.8E-12	6.9E-10	0.0000060	2.7E-10	1.2E-08	1.1E-09	2.2E-12	7.8E-12	5.8E-09	6.4E-10	1.2E-08	0.00000061	0.00000015	1.6E-10	5.0E-10
HPHC-1	L-13	1.4E-08	3.4E-13	8.9E-12	9.2E-10	0.0000057	3.1E-10	1.4E-08	1.2E-09	7.8E-12	8.9E-12	7.6E-09	5.2E-10	1.4E-08	-	-	-	-
HPHC-1	L-14	1.6E-08	3.6E-13	1.0E-11	1.0E-09	0.0000071	3.5E-10	1.6E-08	1.3E-09	2.8E-12	1.0E-11	9.5E-09	6.4E-10	1.6E-08	-	-	-	-
HPHC-1	L-15	1.8E-08	3.5E-13	1.1E-11	1.2E-09	0.0000071	3.7E-10	1.8E-08	1.2E-09	1.8E-12	1.1E-11	1.0E-08	6.5E-10	1.8E-08	0.0000012	0.00000011	3.2E-10	9.7E-10
HPHC-1	L-16	2.0E-08	3.6E-13	1.2E-11	1.5E-09	0.0000078	4.1E-10	2.0E-08	1.3E-09	5.4E-12	1.2E-11	1.4E-08	6.5E-10	2.0E-08	-	-	-	-
HPHC-1	L-17	2.1E-08	4.2E-13	1.3E-11	1.4E-09	0.0000086	4.7E-10	2.1E-08	1.4E-09	2.4E-13	1.3E-11	1.3E-08	5.7E-10	2.1E-08	0.0000011	0.00000013	5.4E-10	4.7E-09
HPHC-2	L-1	7.0E-10	1.5E-11	7.8E-11	2.8E-11	8.5E-08	1.5E-10	7.0E-10	3.8E-13	3.3E-11	1.4E-11	2.1E-08	3.4E-10	7.2E-09	0.00000015	0.00000039	1.8E-11	3.1E-10
HPHC-2	L-2	1.2E-10	2.1E-11	3.4E-12	8.2E-12	0.0000012	2.1E-09	1.2E-10	2.9E-12	3.0E-11	2.5E-12	2.6E-08	1.0E-08	4.9E-10	-	-	-	-
HPHC-2	L-3	3.7E-10	1.3E-11	1.0E-11	1.5E-11	0.0000010	9.0E-10	3.7E-10	5.8E-12	1.7E-11	7.5E-12	2.0E-08	1.2E-08	3.7E-10	0.00000011	0.00000025	7.5E-11	4.1E-11
HPHC-2	L-4	4.2E-11	5.6E-12	1.2E-12	4.0E-12	0.00000042	1.3E-10	4.2E-11	2.2E-12	5.8E-12	8.5E-13	8.3E-10	2.5E-09	4.2E-11	-	-	-	-
HPHC-2	L-5	5.3E-11	2.1E-12	1.5E-12	9.9E-12	0.00000011	5.0E-11	5.3E-11	1.3E-11	2.5E-12	1.1E-12	3.8E-10	8.0E-10	5.3E-11	-	-	-	-
HPHC-2	L-6	2.6E-11	8.3E-13	7.3E-13	1.8E-11	2.7E-08	3.8E-11	2.6E-11	5.0E-11	6.5E-13	5.4E-13	2.2E-10	3.2E-10	2.6E-11	0.00000018	1.2E-08	2.9E-11	1.1E-10
HPHC-2	L-7	4.5E-11	4.0E-13	1.2E-12	5.3E-11	3.5E-08	6.0E-11	4.5E-11	1.4E-10	1.7E-12	9.2E-13	9.3E-10	4.9E-10	4.5E-11	-	-	-	-
HPHC-2	L-8	2.4E-10	2.4E-13	6.5E-12	1.2E-10	8.5E-08	8.9E-11	2.4E-10	3.9E-10	1.4E-12	4.8E-12	2.1E-09	8.5E-10	2.4E-10	-	-	-	-
HPHC-2	L-9	7.2E-11	1.4E-13	2.0E-12	7.2E-11	4.2E-08	7.6E-11	7.2E-11	2.1E-10	4.4E-13	1.5E-12	9.3E-10	5.7E-10	2.9E-10	0.00000028	2.9E-08	5.3E-11	2.9E-10
HPHC-2	L-10	9.0E-11	1.2E-13	2.5E-12	1.1E-10	4.4E-08	9.0E-11	9.0E-11	2.6E-10	3.1E-13	1.8E-12	1.3E-09	6.6E-10	9.0E-11	-	-	-	-
HPHC-2	L-11	1.1E-10	1.2E-13	3.0E-12	1.5E-10	6.2E-08	1.1E-10	1.1E-10	3.0E-10	3.8E-13	2.2E-12	2.2E-09	7.3E-10	1.1E-10	-	-	-	-
HPHC-2	L-12	1.3E-10	1.2E-13	3.5E-12	1.7E-10	6.1E-08	1.2E-10	1.3E-10	3.2E-10	4.4E-13	2.6E-12	2.4E-09	7.9E-10	1.3E-10	0.00000076	0.0000011	1.8E-10	5.1E-10
HPHC-2	L-13	1.4E-10	1.2E-13	4.0E-12	2.3E-10	7.0E-08	1.3E-10	1.4E-10	3.7E-10	1.4E-12	3.0E-12	2.9E-09	6.4E-10	1.4E-10	-	-	-	-
HPHC-2	L-14	1.6E-10	1.2E-13	4.5E-12	2.5E-10	8.6E-08	1.5E-10	1.6E-10	3.8E-10	4.0E-12	3.3E-12	4.1E-09	8.6E-10	1.6E-10	-	-	-	-
HPHC-2	L-15	1.8E-10	1.3E-13	5.0E-12	2.8E-10	8.0E-08	1.6E-10	1.8E-10	3.7E-10	1.7E-12	3.7E-12	4.5E-09	8.8E-10	3.5E-09	0.0000012	0.00000022	3.3E-10	9.9E-10
HPHC-2	L-16	2.0E-10	1.4E-13	5.5E-12	3.1E-10	8.8E-08	1.8E-10	2.0E-10	3.9E-10	2.8E-12	4.1E-12	5.0E-09	9.7E-10	2.0E-10	-	-	-	-
HPHC-2	L-17	2.2E-10	1.6E-13	6.2E-12	3.5E-10	9.9E-08	2.1E-10	2.2E-10	4.2E-10	1.4E-12	4.6E-12	5.6E-09	9.0E-10	2.2E-10	0.0000013	0.00000027	-	-
HPHC-3	L-1	6.8E-10	4.2E-12	7.6E-11	6.5E-11	6.8E-08	1.1E-10	6.8E-10	2.3E-13	1.8E-11	2.7E-11	2.3E-08	1.5E-10	1.1E-08	-	-	-	-
HPHC-3	L-2	1.2E-10	2.3E-11	3.4E-12	9.6E-12	0.0000012	2.8E-09	1.2E-10	7.3E-12	3.4E-11	4.8E-12	3.4E-08	6.2E-09	1.2E-10	-	-	-	-
HPHC-3	L-3	3.6E-10	1.5E-11	1.0E-11	3.1E-11	0.0000011	1.2E-09	3.6E-10	1.2E-11	2.5E-11	1.4E-11	2.3E-08	7.7E-09	3.6E-10	-	-	-	-
HPHC-3	L-4	4.1E-11	7.2E-12	1.1E-12	7.8E-12	0.00000041	1.7E-10	4.1E-11	3.5E-12	6.8E-12	1.6E-12	1.1E-09	1.6E-09	4.1E-11	-	-	-	-
HPHC-3	L-5	5.2E-11	3.0E-12	1.4E-12	1.9E-11	0.0000001	6.1E-11	5.2E-11	2.1E-11	1.7E-12	2.1E-12	4.3E-10	4.4E-10	5.2E-11	-	-	-	-
HPHC-3	L-6	2.6E-11	9.4E-13	7.2E-13	3.8E-11	2.3E-08	4.9E-11	2.6E-11	1.1E-10	6.9E-13	1.0E-12	2.4E-10	2.0E-10	2.6E-11	-	-	-	-
HPHC-3	L-7	4.4E-11	4.8E-13	1.2E-12	1.0E-10	3.4E-08	7.6E-11	4.4E-11	3.0E-10	6.6E-13	1.8E-12	6.7E-10	3.2E-10	4.4E-11	-	-	-	-
HPHC-3	L-8	2.3E-10	3.3E-13	6.4E-12	2.7E-10	9.2E-08	1.1E-10	2.3E-10	8.4E-10	8.6E-13	9.2E-12	2.5E-09	5.5E-10	2.3E-10	-	-	-	-
HPHC-3	L-9	7.1E-11	1.9E-13	2.0E-12	1.7E-10	4.1E-08	1.0E-10	7.1E-11	4.3E-10	7.4E-13	2.8E-12	1.1E-09	3.3E-10	7.1E-11	-	-	-	-
HPHC-3	L-10	8.8E-11	1.7E-13	2.5E-12	2.1E-10	4.7E-08	1.2E-10	8.8E-11	5.3E-10	9.2E-13	3.5E-12	1.5E-09	4.1E-10	8.8E-11	-	-	-	-
HPHC-3	L-11	1.1E-10	1.6E-13	3.0E-12	3.0E-10	6.6E-08	1.5E-10	1.1E-10	6.4E-10	4.0E-13	4.3E-12	2.7E-09	4.6E-10	1.1E-10	-	-	-	-
HPHC-3	L-12	1.2E-10	1.5E-13	3.4E-12	4.0E-10	6.6E-08	1.8E-10	1.2E-10	6.9E-10	8.3E-13	5.0E-12	3.0E-09	5.0E-10	1.2E-10	-	-	-	-
HPHC-3	L-13	1.4E-10	1.4E-13	3.9E-12	4.6E-10	7.5E-08	1.9E-10	1.4E-10	7.6E-10	3.8E-12	5.7E-12	3.4E-09	4.4E-10	1.4E-10	-	-	-	-
HPHC-3	L-14	1.6E-10	1.4E-13	4.4E-12	5.1E-10	8.5E-08	2.2E-10	1.6E-10	8.3E-10	2.4E-12	6.4E-12	4.4E-09	5.0E-10	1.6E-10	-	-	-	-
HPHC-3	L-15	1.8E-10	1.5E-13	4.9E-12	5.7E-10	8.6E-08	2.4E-10	1.8E-10	8.1E-10	2.7E-12	7.1E-12	4.9E-09	5.6E-10	1.8E-10	-	-	-	-
HPHC-3	L-16	2.0E-10	1.5E-13	5.4E-12	7.2E-10	0.0000001	2.6E-10	2.0E-10	8.5E-10	2.9E-12	7.8E-12	6.6E-09	5.6E-10	2.0E-10	-	-	-	-
HPHC-3	L-17	2.1E-10	1.6E-13	5.9E-12	6.9E-10	9.4E-08	3.1E-10	2.1E-10	8.9E-10	8.0E-13	8.5E-12	7.2E-09	5.1E-10	2.1E-10	-	-	-	-
HPHC-4	L-1	7.3E-10	4.5E-12	8.1E-11	1.5E-11	5.9E-08	7.7E-11	7.3E-10	2.3E-13	1.5E-11	1.5E-11	1.2E-08	3.3E-10	4.2E-09	-	-	-	-
HPHC-4	L-2	1.3E-10	2.1E-11	3.6E-12	3.2E-12	0.0000011	2.1E-09	1.3E-10	2.1E-12	2.8E-11	2.6E-12	1.9E-08	1.0E-08	1.3E-10	-	-	-	-
HPHC-4	L-3	3.9E-10	1.2E-11	1.1E-11	8.7E-12	0.0000012	1.4E-09	3.9E-10	4.3E-12	1.5E-11	7.9E-12	1.4E-08	2.0E-08	3.9E-10	-	-	-	-
HPHC-4	L-4	4.4E-11	5.8E-12	1.2E-12	1.8E-12	0.00000053	1.8E-10	4.4E-11	1.5E-12	5.6E-12	8.9E-13	5.2E-10	4.2E-09	4.4E-11	-	-	-	-
HPHC-4	L-5	5.5E-11	2.3E-12	1.5E-12	6.0E-12	0.00000014	6.1E-11	5.5E-11	9.6E-12	2.1E-12	1.1E-12	2.7E-10	1.3E-09	2.2E-10	-	-	-	-
HPHC-4	L-6	2.8E-11	6.2E-13	7.7E-13	9.7E-12	3.2E-08	4.3E-11	2.8E-11	4.1E-11	3.2E-13	5.7E-13	1.3E-10	5.2E-10	2.8E-11	-	-	-	-
HPHC-4	L-7	4.7E-11	3.4E-13	1.3E-12	2.9E-11	4.2E-08	6.8E-11	4.7E-11	1.1E-10	5.4E-13	9.6E-13	3.5E-10	8.0E-10	4.7E-11	-	-	-	-
HPHC-4	L-8	2.5E-10	2.4E-13	6.9E-12	6.9E-11	9.9E-08	9.7E-11	2.5E-10	3.4E-10	3.2E-13	5.0E-12	1.3E-09	1.3E-09	2.5E-10	-	-	-	-
HPHC-4	L-9	7.6E-11	1.4E-13	2.1E-12	4.7E-11	4.7E-08	8.4E-11	7.6E-11	1.8E-10	3.9E-13	1.5E-12	8.4E-10	7.9E-10	7.6E-11	-	-	-	-
HPHC-4	L-10	9.5E-11	1.2E-13	2.6E-12	7.0E-11	5.0E-08	1.0E-10	9.5E-11	2.1E-10	7.6E-13	1.9E-12	9.2E-10	9.2E-10	9.5E-11	-	-	-	-
HPHC-4	L-11	1.1E-10	1.3E-13	3.2E-12	9.8E-11	7.1E-08	1.2E-10	1.1E-10	2.7E-10	9.1E-13	2.3E-12	1.8E-09	1.1E-09	5.9E-09	-	-	-	-
HPHC-4	L-12	1.3E-10	1.3E-13	3.7E-12	1.3E-10	8.3E-08	1.4E-10	1.3E-10	2.9E-10	1.5E-12	2.7E-12	1.6E-09	1.2E-09	1.3E-10	-	-	-	-
HPHC-4	L-13	1.5E-10	1.1E-13	4.2E-12	1.7E-10	8.0E-08	1.5E-10	1.5E-10	3.3E-10	3.1E-12	3.1E-12	2.3E-09	1.1E-09	8.8E-10	-	-	-	-
HPHC-4	L-14	1.7E-10	1.1E-13	4.8E-12	1.7E-10	9.1E-08	1.8E-10	1.7E-10	3.4E-10	8.7E-13	3.5E-12	2.7E-09	1.2E-09	1.7E-10	-	-	-	-
HPHC-4	L-15	1.9E-10	1.2E-13	5.3E-12	2.2E-10	0.0000001	2.1E-10	1.9E-10	3.2E-10	3.0E-12	3.9E-12	3.7E-09	1.2E-09	1.1E-09	-	-	-	-
HPHC-4	L-16	2.1E-10	1.2E-13	5.8E-12	2.1E-10	0.0000001	2.3E-10	2.1E-10	3.4E-10	1.1E-12	4.3E-12	4.1E-09	1.3E-09	2.1E-10	-	-	-	-
HPHC-4	L-17	2.3E-10	1.3E-13	6.3E-12	2.3E-10	0.00000011	2.5E-10	2.3E-10	3.6E-10	6.6E-13	4.7E-12	3.7E-09	1.1E-09	2.3E-10	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPLC-1	L-1	2019-12-11	0.080	0.10	0.057	0.00047	503	1.0	0.50	0.0082	6.1	0.69	1471	-	4.5E-10	4.4E-10	2.2E-08	2.2E-08	6.5E-10	1.8E-09	1.8E-09	2.5E-12
HHGPLC-1	L-2	2019-12-12	1.0	0.10	0.057	0.00047	620	1.00	0.62	0.0082	7.6	0.69	1471	-	3.8E-11	3.5E-11	5.2E-09	5.2E-09	2.8E-10	6.2E-10	6.1E-10	2.1E-11
HHGPLC-1	L-3	2019-12-13	2.0	0.10	0.057	0.00047	630	1.00	0.63	0.0082	7.7	0.69	1471	-	8.5E-10	9.0E-10	1.6E-08	1.6E-08	6.8E-10	1.4E-09	1.4E-09	2.9E-11
HHGPLC-1	L-4	2019-12-18	7.0	0.10	0.057	0.00047	621	1.00	0.62	0.0082	7.6	0.69	1471	-	5.2E-11	5.5E-11	1.8E-09	1.8E-09	1.8E-10	2.8E-10	2.7E-10	1.6E-10
HHGPLC-1	L-5	2019-12-25	14	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	7.1E-11	7.5E-11	2.4E-09	2.4E-09	3.5E-10	4.1E-10	4.1E-10	5.8E-10
HHGPLC-1	L-6	2020-01-08	28	0.10	0.057	0.00047	638	1.0	0.64	0.0082	7.8	0.69	1471	-	9.7E-11	9.5E-11	1.2E-09	1.2E-09	3.2E-10	2.6E-10	2.6E-10	9.0E-10
HHGPLC-1	L-7	2020-01-22	42	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.8	0.69	1471	-	3.0E-10	3.1E-10	2.0E-09	2.0E-09	6.1E-10	4.7E-10	4.7E-10	1.2E-09
HHGPLC-1	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1471	-	1.4E-10	1.5E-10	1.1E-08	1.1E-08	1.2E-09	1.3E-09	1.3E-09	1.6E-09
HHGPLC-1	L-9	2020-02-12	63	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1471	-	5.3E-10	5.3E-10	3.3E-09	3.3E-09	7.7E-10	6.8E-10	6.7E-10	8.6E-10
HHGPLC-1	L-10	2020-02-26	77	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1471	-	4.1E-10	4.2E-10	4.1E-09	4.1E-09	8.8E-10	8.4E-10	8.3E-10	6.7E-10
HHGPLC-1	L-11	2020-03-11	91	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1471	-	2.9E-10	3.0E-10	4.9E-09	4.9E-09	9.4E-10	9.7E-10	9.7E-10	5.0E-10
HHGPLC-1	L-12	2020-03-25	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1471	-	3.0E-10	3.2E-10	5.8E-09	5.8E-09	1.0E-09	1.1E-09	1.1E-09	4.4E-10
HHGPLC-1	L-13	2020-04-08	119	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.69	1471	-	1.9E-10	2.0E-10	6.5E-09	6.5E-09	1.0E-09	1.2E-09	1.2E-09	2.4E-10
HHGPLC-1	L-14	2020-04-22	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1471	-	2.2E-09	2.2E-09	7.4E-09	7.4E-09	1.1E-09	1.4E-09	1.4E-09	1.6E-10
HHGPLC-1	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	1.1E-09	1.0E-09	8.3E-09	8.3E-09	9.4E-10	1.5E-09	1.5E-09	1.3E-10
HHGPLC-1	L-16	2020-05-20	161	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1471	-	5.4E-10	5.6E-10	9.1E-09	9.1E-09	9.8E-10	2.1E-09	2.1E-09	6.6E-11
HHGPLC-1	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.64	0.0082	7.9	0.69	1471	-	1.1E-09	1.1E-09	1.0E-08	1.0E-08	1.1E-09	1.8E-09	1.7E-09	7.2E-11
HHGPLC-1	L-18	2020-07-01	203	0.10	0.057	0.00047	631	1.00	0.63	0.0082	7.7	0.69	1471	-	1.1E-10	1.1E-10	2.7E-09	2.7E-09	6.5E-10	1.1E-09	1.1E-09	6.0E-11
HHGPLC-1	L-19	2020-07-29	231	0.10	0.057	0.00047	640	1.0	0.64	0.0082	7.8	0.69	1471	-	1.1E-10	1.1E-10	3.2E-09	3.2E-09	6.7E-10	1.3E-09	1.3E-09	5.2E-11
HHGPLC-1	L-20	2020-08-26	259	0.10	0.057	0.00047	638	1.0	0.64	0.0082	7.8	0.69	1471	-	1.4E-10	1.4E-10	3.5E-09	3.5E-09	6.4E-10	1.4E-09	1.4E-09	2.6E-11
HHGPLC-1	L-21	2020-09-23	287	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.69	1471	-	3.6E-10	3.7E-10	4.0E-09	4.0E-09	6.2E-10	1.5E-09	1.5E-09	1.6E-11
HHGPLC-2	L-1	2019-12-11	0.080	0.10	0.057	0.00047	488	1.0	0.49	0.0082	6.0	0.69	1477	-	2.0E-09	2.1E-09	2.1E-08	2.1E-08	1.9E-09	4.7E-09	4.7E-09	2.7E-12
HHGPLC-2	L-2	2019-12-12	1.0	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1477	-	6.1E-11	5.3E-11	5.6E-09	5.6E-09	3.3E-10	7.0E-10	7.0E-10	1.2E-11
HHGPLC-2	L-3	2019-12-13	2.0	0.10	0.057	0.00047	631	1.00	0.63	0.0082	7.7	0.69	1477	-	6.1E-10	6.1E-10	1.6E-08	1.6E-08	7.9E-10	1.7E-09	1.7E-09	3.3E-11
HHGPLC-2	L-4	2019-12-18	7.0	0.10	0.057	0.00047	622	1.00	0.62	0.0082	7.6	0.69	1477	-	6.7E-11	6.7E-11	1.8E-09	1.8E-09	2.3E-10	2.8E-10	2.8E-10	3.7E-10
HHGPLC-2	L-5	2019-12-25	14	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.69	1477	-	4.3E-11	4.3E-11	2.4E-09	2.4E-09	4.6E-10	3.9E-10	3.9E-10	1.3E-09
HHGPLC-2	L-6	2020-01-08	28	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.69	1477	-	1.6E-10	1.6E-10	1.2E-09	1.2E-09	4.4E-10	2.7E-10	2.7E-10	1.8E-09
HHGPLC-2	L-7	2020-01-22	42	0.10	0.057	0.00047	649	1.0	0.65	0.0082	7.9	0.69	1477	-	2.9E-10	2.8E-10	2.1E-09	2.1E-09	7.6E-10	4.8E-10	4.7E-10	1.6E-09
HHGPLC-2	L-8	2020-01-29	49	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	6.1E-10	6.4E-10	1.1E-08	1.1E-08	1.5E-09	1.2E-09	1.2E-09	1.8E-09
HHGPLC-2	L-9	2020-02-12	63	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.69	1477	-	3.2E-10	3.3E-10	3.3E-09	3.3E-09	8.7E-10	6.6E-10	6.6E-10	8.9E-10
HHGPLC-2	L-10	2020-02-26	77	0.10	0.057	0.00047	647	1.0	0.65	0.0082	7.9	0.69	1477	-	5.3E-10	5.2E-10	4.1E-09	4.1E-09	9.4E-10	8.6E-10	8.6E-10	6.2E-10
HHGPLC-2	L-11	2020-03-11	91	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.69	1477	-	5.3E-10	5.3E-10	4.9E-09	4.9E-09	9.8E-10	1.0E-09	1.0E-09	4.3E-10
HHGPLC-2	L-12	2020-03-25	105	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	3.7E-10	3.8E-10	5.8E-09	5.8E-09	1.1E-09	1.1E-09	1.1E-09	3.0E-10
HHGPLC-2	L-13	2020-04-08	119	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.69	1477	-	3.3E-10	3.1E-10	6.5E-09	6.5E-09	1.0E-09	1.2E-09	1.2E-09	2.1E-10
HHGPLC-2	L-14	2020-04-22	133	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	6.7E-10	6.4E-10	7.5E-09	7.5E-09	1.1E-09	1.5E-09	1.5E-09	1.4E-10
HHGPLC-2	L-15	2020-05-06	147	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1477	-	1.3E-09	9.6E-10	0.00000013	8.2E-09	9.9E-10	1.6E-09	1.6E-09	6.8E-11
HHGPLC-2	L-16	2020-05-20	161	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.69	1477	-	1.4E-09	1.4E-09	9.1E-09	9.1E-09	1.0E-09	2.2E-09	2.2E-09	4.2E-11
HHGPLC-2	L-17	2020-06-03	175	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1477	-	2.7E-10	2.5E-10	9.9E-09	9.9E-09	1.1E-09	1.8E-09	1.8E-09	4.6E-11
HHGPLC-2	L-18	2020-07-01	203	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1477	-	1.2E-10	1.2E-10	2.8E-09	2.8E-09	5.3E-10	1.1E-09	1.1E-09	3.6E-11
HHGPLC-2	L-19	2020-07-29	231	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1477	-	1.8E-10	1.9E-10	3.2E-09	3.2E-09	6.2E-10	1.3E-09	1.3E-09	2.6E-11
HHGPLC-2	L-20	2020-08-26	259	0.10	0.057	0.00047	645	1.0	0.64	0.0082	7.9	0.69	1477	-	2.0E-10	2.1E-10	3.6E-09	3.6E-09	6.4E-10	1.5E-09	1.5E-09	1.7E-11
HHGPLC-2	L-21	2020-09-23	287	0.10	0.057	0.00047	640	1.0	0.64	0.0082	7.8	0.69	1477	-	5.5E-10	5.3E-10	4.0E-09	4.0E-09	6.3E-10	1.5E-09	1.5E-09	8.2E-12
HHGPLC-3	L-1	2019-12-11	0.080	0.10	0.057	0.00047	480	1.0	0.48	0.0082	5.9	0.68	1461	-	4.8E-10	4.7E-10	2.0E-08	2.0E-08	1.8E-09	5.0E-09	5.0E-09	2.0E-12
HHGPLC-3	L-2	2019-12-12	1.0	0.10	0.057	0.00047	633	1.00	0.63	0.0082	7.8	0.68	1461	-	5.8E-10	6.0E-10	5.5E-09	5.5E-09	2.9E-10	7.5E-10	7.5E-10	8.5E-12
HHGPLC-3	L-3	2019-12-13	2.0	0.10	0.057	0.00047	622	1.00	0.62	0.0082	7.6	0.68	1461	-	2.0E-09	2.0E-09	1.6E-08	1.6E-08	9.2E-10	2.2E-09	2.2E-09	5.5E-11
HHGPLC-3	L-4	2019-12-18	7.0	0.10	0.057	0.00047	618	1.00	0.62	0.0082	7.6	0.68	1461	-	8.3E-11	8.3E-11	1.8E-09	1.8E-09	2.3E-10	3.2E-10	3.2E-10	2.2E-10
HHGPLC-3	L-5	2019-12-25	14	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	1.1E-10	1.1E-10	2.4E-09	2.4E-09	3.9E-10	4.4E-10	4.4E-10	5.4E-10
HHGPLC-3	L-6	2020-01-08	28	0.10	0.057	0.00047	635	1.0	0.63	0.0082	7.8	0.68	1461	-	8.1E-11	8.4E-11	1.2E-09	1.2E-09	3.3E-10	2.9E-10	2.9E-10	7.3E-10
HHGPLC-3	L-7	2020-01-22	42	0.10	0.057	0.00047	646	1.0	0.65	0.0082	7.9	0.68	1461	-	6.0E-11	4.0E-11	8.4E-09	2.1E-09	5.7E-10	5.4E-10	5.4E-10	9.3E-10
HHGPLC-3	L-8	2020-01-29	49	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.68	1461	-	5.1E-10	5.1E-10	1.1E-08	1.1E-08	1.3E-09	1.5E-09	1.5E-09	1.1E-09
HHGPLC-3	L-9	2020-02-12	63	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.68	1461	-	5.7E-10	5.8E-10	3.3E-09	3.3E-09	7.3E-10	7.5E-10	7.5E-10	6.2E-10
HHGPLC-3	L-10	2020-02-26	77	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.68	1461	-	5.7E-10	5.6E-10	4.2E-09	4.2E-09	8.4E-10	9.1E-10	9.1E-10	5.2E-10
HHGPLC-3	L-11	2020-03-11	91	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.68	1461	-	4.8E-10	4.6E-10	5.0E-09	5.0E-09	9.1E-10	1.1E-09	1.1E-09	4.3E-10
HHGPLC-3	L-12	2020-03-25	105	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	3.5E-10	3.7E-10	5.8E-09	5.8E-09	9.8E-10	1.2E-09	1.2E-09	3.2E-10
HHGPLC-3	L-13	2020-04-08	119	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.68	1461	-	4.1E-10	4.3E-10	6.7E-09	6.7E-09	1.0E-09	1.3E-09	1.3E-09	2.6E-10
HHGPLC-3	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.68	1461	-	1.3E-09	1.3E-09	7.6E-09	7.6E-09	1.0E-09	1.5E-09	1.5E-09	1.4E-10
HHGPLC-3	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.68	1461	-	1.6E-09	1.1E-09	0.00000013	8.4E-09	9.8E-10	1.6E-09	1.6E-09	1.2E-10
HHGPLC-3	L-16	2020-05-20	161	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.68	1461	-	9.5E-10	9.8E-10	9.1E-09	9.1E-09	1.0E-09	2.2E-09	2.1E-09	5.6E-11
HHGPLC-3	L-17	2020-06-03	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.68	1461	-	1.6E-09	1.7E-09	1.0E-08	1.0E-08	1.1E-09	1.7E-09	1.7E-09	6.2E-11
HHGPLC-3	L-18	2020-07-01	203	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.68	1461	-	1.3E-10	1.3E-10	2.8E-09	2.8E-09	5.7E-10	1.1E-09	1.1E-09	5.3E-11
HHGPLC-3	L-19	2020-07-29	231	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.68	1461	-	2.0E-10	2.1E-10	3.2E-09	3.2E-09	6.3E-10	1.3E-09	1.3E-09	3.1E-11
HHGPLC-3	L-20	2020-08-26	259	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.68	1461	-	2.2E-10	2.3E-10	3.6E-09	3.6E-09	6.4E-10	1.4E-09	1.4E-09	3.5E-11
HHGPLC-3	L-21	2020-09-23	287	0.10	0.057	0.00047	643	1.0	0.64	0.0082	7.9	0.68	1461	-	4.3E-10	4.4E-10	4.1E-09	4.1E-09	6.2E-10	1.6E-09	1.6E-09	1.4E-11
HHGPLC-4	L-1	2019-12-11	0.080	0.10	0.057	0.00047	490	1.0	0.49	0.0082	6.0	0.69	1485	-	8.0E-10	8.2E-10	2.1E-08	2.1E-08	5.7E-10	1.3E-09	1.3E-09	2.7E-12
HHGPLC-4	L-2	2019-12-12	1.0	0.10	0.057	0.00047	614	1.00	0.61	0.0082	7.5	0.69	1485	-	5.6E-10	5.7E-10	5.0E-09	5.0E-09	3.7E-10	7.9E-10	7.9E-10	2.6E-12
HHGPLC-4	L-3	2019-12-13	2.0	0.10	0.057	0.00047	620	1.00	0.62	0.0082	7.6	0.69	1485	-	1.4E-11	9.6E-12	1.5E-08	1.5E-08	1.1E-09	2.2E-09	2.2E-09	3.2E-11
HHGPLC-4	L-4	2019-12-18	7.0	0.10	0.057	0.00047	612	1.00	0.61	0.0082	7.5	0.69	1485	-	7.6E-11	7.7E-11	1.7E-09	1.7E-09	2.5E-10	3.0E-10	3.0E-10	3.2E-10
HHGPLC-4	L-5	2019-12-25	14	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.69	1485	-	5.4E-11	5.3E-11	2.3E-09	2.3E-09	4.4E-10	3.9E-10	3.9E-10	9.5E-10
HHGPLC-4	L-6	2020-01-08	28	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.69	1485	-	1.3E-10	1.3E-10	1.2E-09	1.2E-09	4.1E-10	2.9E-10	2.9E-10	1.3E-09
HHGPLC-4	L-7	2020-01-22	42	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1485	-	2.2E-10	1.8E-10	8.0E-09	2.0E-09	6.4E-10	4.6E-10	4.6E-10	1.4E-09
HHGPLC-4	L-8	2020-01-29	49	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.69	1485	-	6.2E-10	6.6E-10	1.1E-08	1.1E-08	1.5E-09	1.3E-09	1.3E-09	1.6E-09
HHGPLC-4	L-9	2020-02-12	63	0.10	0.057	0.00047	634	1.0	0.63	0.0082	7.8	0.69	1485	-	3.2E-10	3.3E-10	3.1E-09	3.1E-09	8.1E-10	7.0E-10	7.0E-10	8.6E-10
HHGPLC-4	L-10	2020-02-26	77	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.69	1485	-	4.5E-10	4.6E-10	4.1E-09	4.1E-09	9.7E-10	8.7E-10	8.7E-10	6.8E-10
HHGPLC-4	L-11	2020-03-11	91	0.10	0.057	0.00047	645	1.0	0.64	0.0082	7.9	0.69	1485	-	4.5E-10	4.4E-10	4.9E-09	4.9E-09	1.0E-09	1.0E-09	1.0E-09	4.9E-10
HHGPLC-4	L-12	2020-03-25	105	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.69	1485	-	7.5E-10	7.4E-10	5.6E-09	5.6E-09	1.1E-09	1.1E-09	1.1E-09	4.2E-10
HHGPLC-4	L-13	2020-04-08	119	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.69	1485	-	2.5E-10	2.6E-10	6.4E-09	6.4E-09	1.1E-09	1.2E-09	1.2E-09	3.3E-10
HHGPLC-4	L-14	2020-04-22	133	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1485	-	1.7E-09	1.7E-09	7.3E-09	7.3E-09	1.2E-09	1.4E-09	1.4E-09	1.9E-10
HHGPLC-4	L-15	2020-05-06	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1485	-	6.0E-10	3.7E-10	0.00000013	8.1E-09	1.1E-09	1.5E-09	1.5E-09	1.0E-10
HHGPLC-4	L-16	2020-05-20	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.69	1485	-	6.0E-10	6.2E-10	9.0E-09	9.0E-09	1.1E-09	2.0E-09	2.0E-09	7.4E-11
HHGPLC-4	L-17	2020-06-03	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.69	1485	-	9.9E-10	1.0E-09	9.8E-09	9.8E-09	1.2E-09	1.5E-09	1.5E-09	8.1E-11
HHGPLC-4	L-18	2020-07-01	203	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.69	1485	-	2.5E-10	2.4E-10	2.7E-09	2.7E-09	6.4E-10	1.0E-09	1.0E-09	5.0E-11
HHGPLC-4	L-19	2020-07-29	231	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.69	1485	-	1.6E-10	1.6E-10	3.1E-09	3.1E-09	6.8E-10	1.2E-09	1.2E-09	4.1E-11
HHGPLC-4	L-20	2020-08-26	259	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.8	0.69	1485	-	1.8E-10	1.4E-10	1.4E-08	3.5E-09	6.6E-10	1.4E-09	1.4E-09	2.9E-11
HHGPLC-4	L-21	2020-09-23	287	0.10	0.057	0.00047	642	1.0	0.64	0.0082	7.9	0.69	1485	-	6.1E-10	6.3E-10	3.9E-09	3.9E-09	6.7E-10	1.5E-09	1.5E-09	1.8E-11

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPLC-1	L-1	2.7E-08	1.1E-11	9.8E-09	5.0E-13	-	-	0.00000035	-	5.3E-10	2.2E-10	1.4E-09	6.9E-12	1.3E-10	3.0E-08	2.2E-08	2.2E-10	0.0000002	3.1E-11	2.5E-09	0.000024	3.4E-10
HHGPLC-1	L-2	1.7E-08	7.9E-11	9.3E-09	2.0E-11	-	-	5.1E-09	-	2.3E-10	5.2E-11	2.2E-10	2.1E-11	1.9E-10	2.0E-09	5.2E-09	5.2E-11	1.3E-09	1.1E-11	4.5E-11	0.00000023	8.2E-11
HHGPLC-1	L-3	3.6E-08	1.7E-10	1.6E-08	5.7E-11	-	-	1.6E-08	-	5.3E-10	1.6E-10	1.1E-09	4.2E-11	3.8E-10	2.0E-08	1.6E-08	2.6E-09	4.0E-09	3.1E-11	9.6E-11	0.00000034	2.5E-10
HHGPLC-1	L-4	2.1E-08	1.7E-10	7.1E-09	7.8E-11	-	-	1.7E-09	-	1.6E-10	1.8E-11	1.0E-10	4.0E-11	2.1E-10	6.1E-10	1.8E-09	2.8E-10	7.1E-09	3.8E-11	1.4E-10	0.00000037	1.1E-10
HHGPLC-1	L-5	2.8E-08	3.6E-10	9.7E-09	2.2E-10	-	-	2.4E-09	-	2.8E-10	2.4E-11	1.4E-10	1.1E-10	2.6E-10	1.2E-09	2.4E-09	3.9E-10	9.7E-09	7.9E-11	2.8E-10	0.00000086	3.8E-11
HHGPLC-1	L-6	1.9E-08	3.6E-10	6.5E-09	3.8E-10	-	-	1.2E-09	-	2.8E-10	6.8E-11	1.1E-10	2.0E-10	3.9E-10	5.9E-10	1.2E-09	3.0E-09	1.9E-08	1.7E-10	3.8E-10	0.0000016	1.9E-11
HHGPLC-1	L-7	2.0E-08	6.1E-10	8.1E-09	7.8E-10	-	-	2.0E-09	-	5.0E-10	2.0E-11	1.7E-10	4.3E-10	5.9E-10	1.0E-09	2.0E-09	2.9E-09	5.1E-10	2.9E-10	1.2E-10	4.9E-09	3.2E-11
HHGPLC-1	L-8	3.5E-08	1.1E-09	1.9E-08	1.3E-09	-	-	0.0000011	-	1.1E-09	1.1E-10	6.0E-10	7.2E-10	1.1E-09	4.2E-09	1.1E-08	1.1E-10	2.7E-09	4.3E-10	2.5E-10	3.6E-08	1.7E-10
HHGPLC-1	L-9	9.5E-09	6.7E-10	9.1E-09	7.9E-10	-	-	0.00000032	-	6.4E-10	3.3E-11	2.7E-10	5.4E-10	6.4E-10	1.8E-09	3.3E-09	2.1E-09	8.2E-10	3.0E-10	1.7E-10	9.1E-09	5.1E-11
HHGPLC-1	L-10	1.1E-08	7.2E-10	1.1E-08	8.8E-10	-	-	0.00000041	-	7.5E-10	4.1E-11	2.9E-10	5.8E-10	7.4E-10	1.8E-09	4.1E-09	1.5E-09	1.6E-08	3.3E-10	4.3E-10	0.00000033	6.4E-11
HHGPLC-1	L-11	1.4E-08	7.4E-10	1.4E-08	8.1E-10	-	-	0.00000049	-	7.9E-10	4.9E-11	4.0E-10	5.9E-10	8.8E-10	2.8E-09	4.9E-09	4.9E-09	2.0E-08	2.9E-10	7.9E-10	0.0000020	7.7E-11
HHGPLC-1	L-12	1.7E-08	7.3E-10	1.0E-08	6.9E-10	-	-	0.00000057	-	8.3E-10	5.8E-11	4.7E-10	5.7E-10	8.6E-10	4.9E-09	5.8E-09	5.8E-11	1.5E-09	2.4E-10	3.1E-10	3.2E-08	9.1E-11
HHGPLC-1	L-13	1.5E-08	6.8E-10	1.2E-08	5.8E-10	-	-	0.00000064	-	8.4E-10	6.5E-11	4.7E-10	5.1E-10	7.8E-10	4.1E-09	6.5E-09	2.6E-10	1.6E-09	2.1E-10	4.0E-10	3.4E-08	1.0E-10
HHGPLC-1	L-14	1.7E-08	7.3E-10	1.3E-08	5.4E-10	-	-	0.00000073	-	9.3E-10	7.4E-11	4.1E-10	4.4E-10	8.9E-10	4.7E-09	7.4E-09	7.4E-11	3.0E-08	1.7E-10	5.7E-10	0.00000083	1.2E-10
HHGPLC-1	L-15	1.9E-08	6.2E-10	1.5E-08	4.3E-10	-	-	0.000081	-	8.9E-10	8.3E-11	4.9E-10	3.6E-10	6.9E-10	5.2E-09	8.3E-09	8.3E-11	2.1E-09	1.2E-10	3.8E-10	2.6E-08	1.3E-10
HHGPLC-1	L-16	9.1E-09	7.7E-10	2.5E-08	4.6E-10	-	-	0.0000009	-	1.1E-09	9.1E-11	4.9E-10	3.5E-10	7.6E-10	4.6E-09	9.1E-09	9.1E-11	2.3E-09	1.3E-10	4.2E-10	6.0E-08	1.4E-10
HHGPLC-1	L-17	1.4E-08	5.7E-10	1.8E-08	2.8E-10	-	-	0.00000098	-	9.0E-10	1.0E-10	4.9E-10	3.0E-10	8.3E-10	5.6E-09	1.0E-08	1.6E-09	2.5E-09	1.1E-10	3.4E-10	1.4E-08	6.2E-10
HHGPLC-1	L-18	6.0E-09	4.0E-10	1.1E-08	2.0E-10	-	-	0.00000026	-	5.5E-10	2.7E-11	2.0E-10	1.9E-10	5.7E-10	2.1E-09	2.7E-09	0.0000013	6.7E-10	6.8E-11	1.6E-10	1.6E-09	1.7E-10
HHGPLC-1	L-19	5.4E-09	4.8E-10	1.3E-08	1.4E-10	-	-	0.00000031	-	6.0E-10	3.2E-11	1.9E-10	1.9E-10	6.2E-10	2.4E-09	3.2E-09	0.0000013	7.9E-10	6.6E-11	1.7E-10	6.1E-09	2.0E-10
HHGPLC-1	L-20	1.3E-09	4.4E-10	1.4E-08	9.2E-11	-	-	0.00000035	-	5.9E-10	3.5E-11	1.1E-10	1.4E-10	6.3E-10	2.2E-09	3.5E-09	3.5E-09	8.8E-10	5.8E-11	1.0E-10	5.3E-09	2.2E-10
HHGPLC-1	L-21	4.0E-09	3.7E-10	1.6E-08	5.4E-11	-	-	0.00000039	-	6.1E-10	4.0E-11	2.5E-10	1.3E-10	6.5E-10	2.5E-09	4.0E-09	6.4E-10	1.0E-09	7.6E-11	2.4E-10	0.00000012	6.3E-11
HHGPLC-2	L-1	1.3E-08	1.6E-11	2.1E-08	2.6E-13	-	-	0.00000033	-	1.5E-09	2.1E-10	3.3E-09	2.0E-11	1.9E-10	2.2E-08	2.1E-08	2.1E-10	0.00000019	7.3E-11	4.8E-09	0.000010	8.1E-11
HHGPLC-2	L-2	5.0E-09	9.6E-11	9.9E-09	1.4E-11	-	-	5.5E-09	-	2.7E-10	5.6E-11	2.6E-10	2.1E-11	2.1E-10	2.6E-09	5.6E-09	2.2E-10	1.4E-09	7.9E-12	3.6E-11	2.4E-08	2.2E-11
HHGPLC-2	L-3	1.0E-08	2.0E-10	1.6E-08	4.1E-11	-	-	1.6E-08	-	6.6E-10	1.6E-10	1.4E-09	4.0E-11	3.8E-10	2.3E-08	1.6E-08	6.4E-10	0.00000014	1.4E-10	1.7E-09	0.0000069	6.3E-11
HHGPLC-2	L-4	4.8E-09	2.5E-10	7.1E-09	1.5E-10	-	-	1.7E-09	-	2.0E-10	1.8E-11	1.1E-10	6.1E-11	2.4E-10	6.4E-10	1.8E-09	2.5E-09	7.1E-09	4.7E-11	1.5E-10	0.00000012	6.9E-12
HHGPLC-2	L-5	6.9E-09	5.5E-10	9.5E-09	5.0E-10	-	-	2.3E-09	-	3.9E-10	2.4E-11	1.5E-10	2.2E-10	3.2E-10	1.2E-09	2.4E-09	8.6E-10	9.5E-09	1.5E-10	4.2E-10	0.0000001	9.3E-12
HHGPLC-2	L-6	4.3E-09	6.2E-10	6.4E-09	8.1E-10	-	-	1.2E-09	-	3.7E-10	4.7E-11	9.5E-11	3.5E-10	4.5E-10	4.8E-10	1.2E-09	3.0E-09	1.2E-09	2.6E-10	1.6E-10	1.4E-08	4.6E-12
HHGPLC-2	L-7	5.6E-09	1.1E-09	1.1E-08	1.4E-09	-	-	2.0E-09	-	6.9E-10	1.2E-10	1.7E-10	6.7E-10	6.9E-10	6.5E-10	2.1E-09	3.0E-09	8.3E-09	4.5E-10	2.1E-10	2.0E-08	8.1E-12
HHGPLC-2	L-8	1.2E-08	1.5E-09	1.9E-08	1.8E-09	-	-	0.0000011	-	1.3E-09	1.1E-10	4.8E-10	9.5E-10	1.3E-09	2.1E-09	1.1E-08	1.1E-10	2.7E-09	5.1E-10	4.0E-10	8.2E-09	4.2E-11
HHGPLC-2	L-9	2.6E-09	8.7E-10	9.1E-09	1.1E-09	-	-	0.00000032	-	7.2E-10	3.3E-11	3.0E-10	6.7E-10	6.4E-10	1.2E-09	3.3E-09	8.4E-09	3.3E-09	3.2E-10	3.1E-10	1.2E-08	1.3E-11
HHGPLC-2	L-10	2.3E-09	9.6E-10	1.1E-08	1.1E-09	-	-	0.00000041	-	8.4E-10	4.1E-11	2.4E-10	6.8E-10	8.1E-10	1.7E-09	4.1E-09	1.5E-09	4.1E-09	3.3E-10	3.5E-10	1.1E-08	1.6E-11
HHGPLC-2	L-11	2.7E-09	9.8E-10	1.4E-08	8.9E-10	-	-	0.00000048	-	8.5E-10	4.9E-11	3.0E-10	6.3E-10	1.0E-09	2.0E-09	4.9E-09	4.9E-11	4.9E-09	2.5E-10	4.6E-10	2.9E-08	1.9E-11
HHGPLC-2	L-12	3.7E-09	8.3E-10	1.0E-08	7.0E-10	-	-	0.00000057	-	8.6E-10	5.8E-11	4.7E-10	6.0E-10	9.5E-10	3.0E-09	5.8E-09	5.8E-11	1.4E-09	2.3E-10	4.4E-10	4.3E-08	2.3E-11
HHGPLC-2	L-13	4.2E-09	7.7E-10	1.2E-08	5.5E-10	-	-	0.00000064	-	8.5E-10	6.5E-11	4.6E-10	4.8E-10	8.7E-10	2.7E-09	6.5E-09	2.3E-09	1.6E-09	1.8E-10	4.3E-10	1.7E-08	2.5E-11
HHGPLC-2	L-14	2.7E-09	8.5E-10	2.1E-08	4.6E-10	-	-	0.00000074	-	9.5E-10	7.5E-11	4.3E-10	4.3E-10	9.0E-10	4.3E-09	7.5E-09	2.7E-09	1.9E-09	1.4E-10	4.4E-10	3.6E-08	2.9E-11
HHGPLC-2	L-15	4.6E-09	7.4E-10	1.5E-08	3.5E-10	-	-	0.000081	-	8.9E-10	8.2E-11	5.2E-10	3.4E-10	7.8E-10	5.3E-09	8.2E-09	1.2E-08	2.1E-09	1.0E-10	3.1E-10	5.4E-09	3.2E-11
HHGPLC-2	L-16	1.5E-09	8.8E-10	2.5E-08	3.5E-10	-	-	0.0000009	-	1.1E-09	9.1E-11	5.2E-10	3.0E-10	9.8E-10	4.7E-09	9.1E-09	9.1E-11	2.3E-09	1.1E-10	4.0E-10	4.0E-08	3.6E-11
HHGPLC-2	L-17	3.0E-09	6.5E-10	1.8E-08	2.1E-10	-	-	0.00000098	-	9.0E-10	9.9E-11	5.0E-10	2.7E-10	8.2E-10	5.1E-09	9.9E-09	9.9E-09	2.5E-09	9.3E-11	4.4E-10	2.0E-08	6.2E-10
HHGPLC-2	L-18	1.6E-09	4.0E-10	1.1E-08	1.1E-10	-	-	0.00000027	-	5.4E-10	2.8E-11	2.1E-10	1.4E-10	5.9E-10	1.8E-09	2.8E-09	0.0000011	6.9E-10	5.0E-11	1.8E-10	9.4E-09	4.3E-11
HHGPLC-2	L-19	9.6E-10	3.8E-10	1.7E-08	8.0E-11	-	-	0.00000031	-	5.8E-10	3.2E-11	1.1E-10	1.2E-10	5.7E-10	2.0E-09	3.2E-09	0.00000096	7.9E-10	5.0E-11	2.1E-10	2.0E-08	2.0E-10
HHGPLC-2	L-20	5.7E-10	3.9E-10	1.9E-08	5.0E-11	-	-	0.00000035	-	6.1E-10	3.6E-11	1.6E-10	1.1E-10	6.4E-10	2.3E-09	3.6E-09	5.7E-10	9.0E-10	4.0E-11	9.3E-11	1.4E-09	1.4E-11
HHGPLC-2	L-21	6.3E-10	3.3E-10	1.6E-08	2.9E-11	-	-	0.00000039	-	6.2E-10	4.0E-11	3.1E-10	1.1E-10	6.5E-10	2.5E-09	4.0E-09	4.0E-09	9.9E-10	4.7E-11	1.7E-10	1.5E-08	1.5E-11
HHGPLC-3	L-1	5.2E-08	1.2E-11	2.0E-08	1.9E-13	-	-	0.00000032	-	1.4E-09	5.1E-11	4.2E-09	1.6E-11	1.7E-10	2.4E-08	2.0E-08	2.0E-10	0.00000073	3.7E-11	9.0E-09	0.000033	1.4E-10
HHGPLC-3	L-2	2.2E-08	5.9E-11	9.8E-09	5.2E-12	-	-	5.4E-09	-	2.4E-10	1.4E-11	2.8E-10	1.3E-11	1.9E-10	1.9E-09	5.5E-09	8.9E-10	1.4E-09	3.7E-12	2.9E-11	4.4E-08	3.8E-11
HHGPLC-3	L-3	4.1E-08	1.7E-10	1.6E-08	3.7E-11	-	-	1.6E-08	-	7.2E-10	4.0E-11	1.7E-09	4.2E-11	4.5E-10	2.8E-08	1.6E-08	2.6E-09	0.00000026	2.6E-11	2.1E-09	0.000012	1.1E-10
HHGPLC-3	L-4	2.2E-08	2.0E-10	7.2E-09	1.1E-10	-	-	1.7E-09	-	2.0E-10	4.5E-12	1.4E-10	5.5E-11	2.2E-10	1.2E-09	1.8E-09	6.4E-10	4.5E-10	3.9E-11	6.3E-11	2.4E-08	1.2E-11
HHGPLC-3	L-5	2.8E-08	3.8E-10	9.7E-09	2.6E-10	-	-	2.4E-09	-	3.1E-10	6.1E-12	1.4E-10	1.3E-10	2.7E-10	9.5E-10	2.4E-09	8.8E-10	9.2E-11	2.3E-10	0.00000014	1.7E-11	
HHGPLC-3	L-6	1.5E-08	3.5E-10	6.5E-09	3.3E-10	-	-	1.2E-09	-	2.8E-10	3.0E-12	8.6E-11	1.8E-10	3.7E-10	4.0E-10	1.2E-09	4.8E-11	1.2E-09	1.4E-10	1.3E-10	2.2E-08	8.3E-12
HHGPLC-3	L-7	1.9E-08	6.2E-10	8.4E-09	6.3E-10	-	-	2.0E-09	-	5.2E-10	5.2E-12	1.7E-10	3.5E-10	5.6E-10	9.3E-10	2.1E-09	6.8E-09	5.2E-10	2.5E-10	1.4E-10	4.7E-09	1.5E-11
HHGPLC-3	L-8	3.9E-08	9.8E-10	1.9E-08	9.7E-10	-	-	0.0000011	-	1.1E-09	2.7E-11	6.6E-10	5.3E-10	1.1E-09	4.9E-09	1.1E-08	3.9E-09	2.7E-09	3.2E-10	2.8E-10	6.4E-09	7.6E-11
HHGPLC-3	L-9	1.2E-08	5.1E-10	9.2E-09	6.1E-10	-	-	0.00000033	-	6.0E-10	8.3E-12	3.5E-10	4.0E-10	5.5E-10	2.8E-09	3.3E-09	3.3E-09	8.3E-10	2.3E-10	1.8E-10	1.1E-08	2.3E-11
HHGPLC-3	L-10	1.2E-08	5.5E-10	1.2E-08	6.5E-10	-	-	0.00000041	-	7.0E-10	1.0E-11	3.2E-10	4.6E-10	6.9E-10	2.1E-09	4.2E-09	1.7E-10	4.2E-09	2.6E-10	2.8E-10	3.2E-08	2.9E-11
HHGPLC-3	L-11	1.3E-08	6.6E-10	1.4E-08	6.1E-10	-	-	0.00000049	-	7.6E-10	1.3E-11	3.3E-10	4.6E-10	7.6E-10	3.5E-09	5.0E-09	3.2E-09	5.0E-09	2.2E-10	3.4E-10	4.6E-08	3.5E-11
HHGPLC-3	L-12	1.1E-08	5.4E-10	1.0E-08	5.3E-10	-	-	0.00000058	-	7.7E-10	1.5E-11	4.7E-10	4.5E-10	8.0E-10	3.3E-09	5.8E-09	2.1E-09	1.5E-09	2.1E-10	2.1E-10	3.4E-08	4.1E-11
HHGPLC-3	L-13	1.7E-08	5.6E-10	1.2E-08	4.6E-10	-	-	0.00000066	-	8.2E-10	1.7E-11	5.0E-10	4.2E-10	7.4E-10	4.2E-09	6.7E-09	6.7E-09	1.7E-09	1.8E-10	1.7E-10	3.4E-08	4.7E-11
HHGPLC-3	L-14	1.1E-08	5.8E-10	1.4E-08	4.3E-10	-	-	0.00000075	-	9.1E-10	1.9E-11	5.5E-10	3.9E-10	9.4E-10	4.3E-09	7.6E-09	1.2E-09	1.9E-09	1.6E-10	1.3E-10	4.0E-08	5.3E-11
HHGPLC-3	L-15	1.6E-08	5.2E-10	1.5E-08	3.6E-10	-	-	0.000082	-	8.8E-10	2.1E-11	4.9E-10	3.2E-10	6.5E-10	4.7E-09	8.4E-09	1.3E-09	2.1E-09	1.2E-10	1.4E-10	2.4E-09	5.8E-11
HHGPLC-3	L-16	9.1E-09	6.2E-10	2.5E-08	3.8E-10	-	-	0.00000089	-	1.1E-09	2.3E-11	3.4E-10	2.9E-10	8.0E-10	5.1E-09	9.1E-09	1.3E-08	2.3E-09	1.2E-10	1.2E-10	6.8E-09	6.3E-11
HHGPLC-3	L-17	1.7E-08	4.6E-10	1.8E-08	2.4E-10	-	-	0.0000010	-	9.2E-10	2.5E-11	5.4E-10	2.6E-10	7.8E-10	5.7E-09	1.0E-08	6.5E-09	4.1E-08	1.1E-10	5.5E-10	0.00000088	2.8E-10
HHGPLC-3	L-18	6.3E-09	3.1E-10	1.1E-08	1.6E-10	-	-	0.00000028	-	5.4E-10	7.0E-12	2.3E-10	1.5E-10	5.6E-10	1.8E-09	2.8E-09	0.0000011	7.0E-10	5.7E-11	7.1E-11	1.6E-08	2.0E-11
HHGPLC-3	L-19	3.9E-09	3.6E-10	1.3E-08	1.3E-10	-	-	0.00000032	-	5.7E-10	8.1E-12	1.8E-10	1.4E-10	4.9E-10	2.2E-09	3.2E-09	0.0000012	3.2E-09	5.3E-11	1.3E-10	7.0E-08	9.0E-11
HHGPLC-3	L-20	9.0E-10	3.3E-10	1.4E-08	9.2E-11	-	-	0.00000035	-	6.0E-10	9.0E-12	1.9E-10	1.3E-10	4.9E-10	2.3E-09	3.6E-09	2.3E-09	9.0E-10	4.5E-11	9.1E-11	9.6E-09	2.5E-11
HHGPLC-3	L-21	2.6E-09	3.1E-10	1.6E-08	5.9E-11	-	-	0.0000004	-	6.0E-10	1.0E-11	2.9E-10	1.1E-10	5.6E-10	2.8E-09	4.1E-09	6.5E-10	1.0E-09	6.2E-11	1.2E-10	2.4E-08	2.8E-11
HHGPLC-4	L-1	4.2E-09	8.2E-12	9.2E-09	1.9E-13	-	-	0.00000032	-	4.4E-10	2.1E-10	1.2E-09	6.1E-12	7.7E-11	2.1E-08	2.1E-08	8.2E-10	5.2E-09	1.7E-11	1.1E-09	0.0000019	2.3E-11
HHGPLC-4	L-2	4.1E-09	7.2E-11	8.9E-09	8.1E-12	-	-	4.9E-09	-	3.0E-10	5.0E-11	3.5E-10	1.7E-11	2.1E-10	2.5E-09	5.0E-09	2.0E-10	5.0E-09	7.5E-12	1.4E-10	0.0000005	5.6E-12
HHGPLC-4	L-3	9.8E-09	1.9E-10	1.5E-08	3.9E-11	-	-	1.5E-08	-	8.8E-10	1.5E-10	2.1E-09	4.6E-11	5.2E-10	3.3E-08	1.5E-08	6.2E-10	6.2E-08	2.7E-11	1.1E-09	0.0000059	1.7E-11
HHGPLC-4	L-4	4.3E-09	2.3E-10	6.8E-09	1.4E-10	-	-	1.7E-09	-	2.2E-10	1.7E-11	1.2E-10	6.8E-11	2.5E-10	7.5E-10	1.7E-09	2.7E-10	4.2E-10	4.4E-11	5.7E-11	1.6E-08	1.9E-12
HHGPLC-4	L-5	5.6E-09	4.4E-10	9.3E-09	3.9E-10	-	-	2.3E-09	-	3.6E-10	2.3E-11	1.5E-10	2.1E-10	3.2E-10	9.1E-10	2.3E-09	2.3E-11	2.3E-09	1.2E-10	2.3E-10	0.00000013	2.6E-12
HHGPLC-4	L-6	4.0E-09	4.7E-10	6.3E-09	5.6E-10	-	-	1.1E-09	-	3.5E-10	4.7E-11	1.1E-10	2.9E-10	4.4E-10	5.9E-10	1.2E-09	3.8E-09	1.2E-09	1.7E-10	2.0E-10	9.9E-09	1.3E-12
HHGPLC-4	L-7	5.1E-09	7.2E-10	8.0E-09	9.1E-10	-	-	2.0E-09	-	5.2E-10	2.0E-11	1.9E-10	5.3E-10	6.5E-10	8.9E-10	2.0E-09	1.3E-09	2.0E-09	3.0E-10	2.4E-10	3.2E-08	2.2E-12
HHGPLC-4	L-8	9.5E-09	1.2E-09	1.9E-08	1.4E-09	-	-	0.0000010	-	1.2E-09	1.1E-10	8.0E-10	7.8E-10	1.3E-09	5.9E-09	1.1E-08	4.2E-10	9.5E-08	4.5E-10	1.8E-09	0.0000045	1.2E-11
HHGPLC-4	L-9	1.3E-09	6.8E-10	8.7E-09	8.6E-10	-	-	0.00000031	-	6.9E-10	3.1E-11	4.2E-10	5.9E-10	6.9E-10	3.1E-09	3.1E-09	2.0E-09	2.8E-08	3.1E-10	8.4E-10	0.0000017	3.5E-12
HHGPLC-4	L-10	2.3E-09	7.6E-10	1.1E-08	9.0E-10	-	-	0.0000004	-	8.1E-10	4.1E-11	3.8E-10	6.5E-10	8.2E-10	2.5E-09	4.1E-09	6.5E-10	1.6E-08	3.3E-10	7.6E-10	0.00000071	4.5E-12
HHGPLC-4	L-11	2.4E-09	7.8E-10	1.4E-08	8.1E-10	-	-	0.00000048	-	8.7E-10	4.9E-11	4.0E-10	6.5E-10	9.8E-10	3.4E-09	4.9E-09	7.8E-10	1.2E-09	2.7E-10	3.5E-10	2.5E-08	5.4E-12
HHGPLC-4	L-12	3.6E-09	7.6E-10	1.6E-08	6.8E-10	-	-	0.00000056	-	8.8E-10	5.6E-11	4.6E-10	6.0E-10	8.5E-10	3.2E-09	5.6E-09	3.6E-09	1.4E-09	2.6E-10	4.0E-10	5.6E-08	6.3E-12
HHGPLC-4	L-13	3.2E-09	6.7E-10	1.1E-08	5.8E-10	-	-	0.00000064	-	8.9E-10	6.4E-11	4.7E-10	5.4E-10	8.7E-10	3.2E-09	6.4E-09	6.4E-09	1.6E-09	2.2E-10	2.2E-10	1.8E-08	7.2E-12
HHGPLC-4	L-14	2.6E-09	7.4E-10	1.3E-08	5.5E-10	-	-	0.00000072	-	9.8E-10	7.3E-11	5.7E-10	4.8E-10	8.8E-10	5.6E-09	7.3E-09	7.3E-09	1.8E-09	1.8E-10	2.0E-10	5.8E-08	8.2E-12
HHGPLC-4	L-15	4.0E-09	5.9E-10	1.4E-08	4.2E-10	-	-	0.000079	-	9.5E-10	8.1E-11	5.7E-10	3.8E-10	8.7E-10	6.2E-09	8.1E-09	5.2E-09	2.0E-09	1.4E-10	1.8E-10	2.8E-08	9.0E-12
HHGPLC-4	L-16	1.8E-09	7.4E-10	1.6E-08	4.5E-10	-	-	0.00000088	-	1.2E-09	9.0E-11	5.9E-10	3.8E-10	9.6E-10	5.6E-09	9.0E-09	1.4E-09	2.2E-09	1.4E-10	2.5E-10	0.00000014	1.0E-11
HHGPLC-4	L-17	3.5E-09	5.3E-10	1.7E-08	2.8E-10	-	-	0.00000096	-	1.0E-09	9.8E-11	6.0E-10	3.2E-10	9.2E-10	6.1E-09	9.8E-09	3.5E-09	9.8E-09	1.2E-10	4.6E-10	0.00000045	1.7E-10
HHGPLC-4	L-18	1.3E-09	3.6E-10	1.1E-08	1.8E-10	-	-	0.00000027	-	5.7E-10	2.7E-11	1.7E-10	1.7E-10	6.0E-10	2.1E-09	2.7E-09	0.0000011	1.1E-08	7.0E-11	1.5E-10	0.00000021	1.1E-10
HHGPLC-4	L-19	1.1E-09	4.2E-10	1.3E-08	1.5E-10	-	-	0.00000031	-	6.3E-10	3.1E-11	2.4E-10	1.7E-10	6.3E-10	2.4E-09	3.1E-09	0.0000011	3.1E-09	6.3E-11	2.5E-10	0.00000016	1.4E-11
HHGPLC-4	L-20	7.1E-10	3.9E-10	1.4E-08	1.1E-10	-	-	0.00000035	-	6.5E-10	3.5E-11	2.3E-10	1.5E-10	7.1E-10	2.4E-09	3.5E-09	6.9E-09	8.8E-10	5.3E-11	1.4E-10	5.7E-09	3.9E-12
HHGPLC-4	L-21	6.3E-10	3.9E-10	1.6E-08	6.7E-11	-	-	0.00000039	-	6.7E-10	3.9E-11	2.9E-10	1.3E-10	5.9E-10	3.0E-09	3.9E-09	3.9E-11	9.8E-10	5.3E-11	1.3E-10	1.0E-08	4.4E-12

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPLC-1	L-1	0.00000029	3.0E-11	1.7E-08	0.0000038	2.2E-08	2.7E-11	2.2E-08	2.8E-10	6.9E-10	7.6E-11	0.00000029	2.3E-10	0.000018	-	-	6.4E-10	-
HHGPLC-1	L-2	5.2E-09	1.8E-10	3.3E-10	4.2E-08	1.4E-08	1.4E-11	5.2E-09	1.9E-10	2.1E-10	2.9E-10	4.5E-08	8.0E-11	3.0E-08	-	-	5.2E-11	-
HHGPLC-1	L-3	1.6E-08	4.9E-10	2.5E-10	8.8E-08	4.3E-08	4.5E-11	1.6E-08	4.2E-10	4.2E-10	9.0E-10	9.0E-08	2.9E-10	1.6E-08	-	-	3.5E-10	-
HHGPLC-1	L-4	1.8E-09	4.8E-10	1.0E-09	8.3E-08	1.2E-08	1.4E-11	1.8E-09	1.2E-10	5.5E-10	5.0E-10	8.7E-09	7.4E-11	0.00000026	-	-	3.8E-11	-
HHGPLC-1	L-5	1.4E-08	1.2E-09	6.0E-10	0.00000022	2.0E-08	3.5E-11	2.4E-09	1.9E-10	1.7E-09	8.4E-10	1.6E-08	1.4E-10	2.5E-08	-	-	3.2E-11	-
HHGPLC-1	L-6	1.5E-08	2.4E-09	1.5E-09	0.00000028	1.9E-08	5.0E-11	1.2E-09	1.7E-10	2.0E-09	1.1E-09	2.6E-08	1.6E-10	0.0000016	-	-	2.1E-11	-
HHGPLC-1	L-7	2.0E-09	4.3E-09	5.1E-10	2.8E-09	3.3E-08	9.5E-11	2.0E-09	2.5E-10	2.4E-09	1.6E-09	2.0E-08	2.8E-10	2.0E-09	-	-	3.7E-11	-
HHGPLC-1	L-8	1.1E-08	6.8E-09	1.5E-09	1.5E-08	6.5E-08	1.6E-10	1.1E-08	5.9E-10	7.7E-09	3.0E-09	2.2E-08	6.1E-10	1.1E-08	-	-	1.4E-10	-
HHGPLC-1	L-9	3.3E-09	4.7E-09	8.2E-10	4.5E-09	4.1E-08	1.1E-10	3.3E-09	3.8E-10	4.4E-09	2.2E-09	2.7E-08	4.0E-10	3.3E-09	-	-	7.0E-11	-
HHGPLC-1	L-10	4.1E-09	5.6E-09	1.6E-09	7.7E-08	4.9E-08	1.1E-10	4.1E-09	3.9E-10	5.5E-09	2.4E-09	2.7E-08	5.0E-10	1.6E-08	-	-	7.4E-11	-
HHGPLC-1	L-11	4.9E-09	5.0E-09	4.9E-09	0.00000038	5.6E-08	1.3E-10	4.9E-09	4.3E-10	5.7E-09	2.5E-09	2.9E-08	6.0E-10	0.00000066	-	-	7.3E-11	-
HHGPLC-1	L-12	5.8E-09	5.3E-09	1.5E-09	1.6E-08	6.6E-08	1.3E-10	5.8E-09	5.5E-10	7.7E-09	2.9E-09	2.2E-08	7.0E-10	5.8E-09	-	-	1.2E-10	-
HHGPLC-1	L-13	6.5E-09	4.1E-09	9.2E-10	5.3E-08	7.0E-08	1.0E-10	6.5E-09	6.2E-10	3.2E-09	3.3E-09	1.9E-08	7.9E-10	3.8E-08	-	-	9.0E-11	-
HHGPLC-1	L-14	7.4E-09	3.9E-09	1.9E-09	0.00000024	7.5E-08	1.0E-10	7.4E-09	6.4E-10	4.1E-09	3.7E-09	4.6E-08	6.9E-10	4.3E-08	-	-	1.3E-10	-
HHGPLC-1	L-15	8.3E-09	3.6E-09	1.2E-09	1.9E-08	6.6E-08	8.3E-11	8.3E-09	6.5E-10	2.6E-09	2.9E-09	2.4E-08	6.6E-10	0.00000097	-	-	1.2E-10	-
HHGPLC-1	L-16	9.1E-09	3.7E-09	2.3E-09	2.1E-08	7.2E-08	6.5E-11	9.1E-09	7.1E-10	1.9E-09	3.2E-09	2.1E-08	7.3E-10	0.0000016	-	-	9.8E-11	-
HHGPLC-1	L-17	1.0E-08	3.4E-09	1.4E-09	1.0E-08	7.4E-08	8.0E-11	1.0E-08	7.0E-10	9.0E-10	2.8E-09	1.8E-08	8.0E-10	0.0000014	-	-	1.1E-10	-
HHGPLC-1	L-18	2.7E-09	2.7E-09	6.7E-10	1.2E-09	4.5E-08	3.9E-11	2.7E-09	4.2E-10	9.7E-10	1.3E-09	1.5E-08	3.7E-10	1.5E-08	-	-	6.7E-11	-
HHGPLC-1	L-19	3.2E-09	2.4E-09	7.9E-10	3.2E-09	5.8E-08	4.6E-11	3.2E-09	5.4E-10	1.0E-09	1.6E-09	1.0E-08	4.3E-10	9.9E-08	-	-	6.8E-11	-
HHGPLC-1	L-20	3.5E-09	2.2E-09	3.5E-09	2.5E-09	4.2E-08	3.9E-11	3.5E-09	5.6E-10	4.7E-09	1.5E-09	2.0E-08	4.3E-10	3.6E-08	-	-	1.0E-10	-
HHGPLC-1	L-21	4.0E-09	2.3E-09	1.6E-08	4.0E-09	4.8E-08	4.4E-11	1.6E-08	6.3E-10	8.2E-10	1.7E-09	1.5E-08	4.8E-10	0.00000021	-	-	8.6E-11	-
HHGPLC-2	L-1	0.00000033	5.9E-11	3.2E-08	0.0000029	3.2E-08	5.7E-11	2.1E-08	8.0E-10	1.2E-09	8.1E-11	0.0000011	5.6E-10	0.000040	-	-	2.7E-10	-
HHGPLC-2	L-2	5.6E-09	1.7E-10	8.7E-11	8.7E-09	1.4E-08	1.9E-11	5.6E-09	2.5E-10	1.3E-10	3.5E-10	4.6E-08	1.0E-10	4.4E-08	-	-	5.2E-11	-
HHGPLC-2	L-3	0.00000016	3.7E-10	2.5E-08	0.0000021	3.6E-08	5.4E-11	1.6E-08	5.3E-10	8.8E-10	1.0E-09	0.00000017	4.1E-10	9.3E-08	-	-	4.0E-10	-
HHGPLC-2	L-4	1.8E-09	7.3E-10	6.9E-10	3.6E-08	1.1E-08	2.0E-11	1.8E-09	1.5E-10	9.9E-10	6.9E-10	1.1E-08	1.0E-10	0.00000012	-	-	3.8E-11	-
HHGPLC-2	L-5	2.4E-09	2.3E-09	5.9E-10	6.6E-08	1.8E-08	5.2E-11	2.4E-09	2.2E-10	2.8E-09	1.3E-09	1.7E-08	1.9E-10	2.4E-08	-	-	3.5E-11	-
HHGPLC-2	L-6	1.2E-09	3.8E-09	6.6E-10	7.4E-09	1.8E-08	6.9E-11	1.2E-09	1.8E-10	3.0E-09	1.5E-09	2.6E-08	1.8E-10	0.00000016	-	-	1.6E-11	-
HHGPLC-2	L-7	2.1E-09	6.1E-09	1.2E-09	1.0E-08	2.8E-08	1.3E-10	2.1E-09	2.7E-10	4.1E-09	2.3E-09	2.6E-08	3.5E-10	2.1E-09	-	-	2.8E-11	-
HHGPLC-2	L-8	1.1E-08	7.7E-09	2.7E-09	8.2E-09	5.4E-08	1.7E-10	1.1E-08	5.6E-10	1.1E-08	4.2E-09	2.9E-08	6.2E-10	0.00000076	-	-	9.0E-11	-
HHGPLC-2	L-9	3.3E-09	5.1E-09	1.3E-09	8.6E-09	3.6E-08	1.2E-10	3.3E-09	4.3E-10	5.8E-09	2.9E-09	1.8E-08	4.5E-10	1.3E-08	-	-	4.9E-11	-
HHGPLC-2	L-10	4.1E-09	5.6E-09	1.6E-09	9.3E-09	4.1E-08	1.1E-10	4.1E-09	4.6E-10	6.5E-09	3.2E-09	2.7E-08	5.0E-10	4.1E-09	-	-	7.4E-11	-
HHGPLC-2	L-11	4.9E-09	4.5E-09	2.7E-09	2.5E-08	4.6E-08	1.1E-10	4.9E-09	4.5E-10	5.7E-09	2.7E-09	2.9E-08	5.9E-10	0.00000023	-	-	6.1E-11	-
HHGPLC-2	L-12	5.8E-09	4.8E-09	1.4E-09	2.0E-08	5.8E-08	1.2E-10	5.8E-09	6.4E-10	7.9E-09	3.3E-09	2.7E-08	7.0E-10	5.8E-09	-	-	8.6E-11	-
HHGPLC-2	L-13	6.5E-09	3.7E-09	9.1E-10	1.0E-08	5.5E-08	9.5E-11	6.5E-09	7.2E-10	2.9E-09	3.7E-09	1.6E-08	7.9E-10	3.7E-08	-	-	8.4E-11	-
HHGPLC-2	L-14	7.5E-09	3.6E-09	1.1E-09	3.8E-08	6.0E-08	1.0E-10	7.5E-09	7.6E-10	5.0E-09	4.2E-09	3.7E-08	6.9E-10	4.3E-08	-	-	1.3E-10	-
HHGPLC-2	L-15	8.2E-09	3.2E-09	5.2E-10	8.2E-09	5.5E-08	7.4E-11	8.2E-09	7.6E-10	3.5E-09	3.2E-09	1.5E-08	6.6E-10	4.7E-08	-	-	1.1E-10	-
HHGPLC-2	L-16	9.1E-09	3.2E-09	1.3E-09	1.2E-08	5.7E-08	6.5E-11	9.1E-09	8.4E-10	2.1E-09	2.9E-09	1.5E-08	8.5E-10	0.00000091	-	-	9.3E-11	-
HHGPLC-2	L-17	9.9E-09	3.0E-09	6.2E-10	5.6E-09	6.2E-08	7.0E-11	9.9E-09	8.2E-10	1.6E-09	2.5E-09	1.6E-08	7.9E-10	0.00000091	-	-	1.5E-10	-
HHGPLC-2	L-18	2.8E-09	2.1E-09	3.9E-10	4.3E-09	3.7E-08	3.1E-11	2.8E-09	4.6E-10	9.1E-10	1.3E-09	8.8E-09	3.8E-10	1.6E-08	-	-	5.9E-11	-
HHGPLC-2	L-19	3.2E-09	1.8E-09	7.9E-10	8.4E-09	4.5E-08	4.3E-11	3.2E-09	5.7E-10	9.6E-10	1.5E-09	2.7E-08	3.4E-10	3.3E-08	-	-	6.8E-11	-
HHGPLC-2	L-20	3.6E-09	2.0E-09	2.0E-09	1.4E-09	3.6E-08	3.6E-11	5.7E-08	6.0E-10	3.6E-09	1.4E-09	2.2E-08	4.3E-10	3.6E-09	-	-	7.7E-11	-
HHGPLC-2	L-21	4.0E-09	2.0E-09	3.0E-09	5.0E-09	4.0E-08	4.4E-11	4.0E-09	7.1E-10	9.9E-10	1.5E-09	9.8E-09	4.8E-10	0.00000043	-	-	5.9E-11	-
HHGPLC-3	L-1	0.00000073	4.2E-11	4.9E-08	0.000014	4.3E-08	6.2E-11	5.1E-09	7.2E-10	9.3E-10	6.3E-11	0.0000018	6.5E-10	0.0000032	-	-	2.9E-10	-
HHGPLC-3	L-2	5.5E-09	1.0E-10	2.7E-10	2.2E-08	1.8E-08	1.4E-11	1.4E-09	2.3E-10	1.2E-10	2.7E-10	6.4E-08	8.6E-11	1.4E-09	-	-	3.0E-11	-
HHGPLC-3	L-3	0.00000026	3.5E-10	7.1E-09	0.0000064	5.3E-08	5.8E-11	4.0E-09	5.7E-10	9.5E-10	7.9E-10	0.00000025	4.8E-10	4.1E-08	-	-	5.4E-10	-
HHGPLC-3	L-4	1.8E-09	6.6E-10	2.0E-10	1.3E-08	1.5E-08	1.8E-11	4.5E-10	1.5E-10	5.7E-10	5.5E-10	8.7E-09	1.1E-10	1.8E-08	-	-	3.2E-11	-
HHGPLC-3	L-5	2.4E-09	1.4E-09	4.8E-10	0.00000011	2.1E-08	4.1E-11	6.1E-10	2.0E-10	1.5E-09	9.1E-10	9.1E-09	1.5E-10	6.1E-10	-	-	2.4E-11	-
HHGPLC-3	L-6	1.2E-09	2.0E-09	3.7E-10	2.4E-08	1.9E-08	4.5E-11	3.0E-10	1.8E-10	1.6E-09	1.1E-09	1.7E-08	1.5E-10	3.0E-09	-	-	1.5E-11	-
HHGPLC-3	L-7	2.1E-09	3.3E-09	4.1E-10	4.7E-09	3.2E-08	7.9E-11	5.2E-10	3.0E-10	2.1E-09	1.5E-09	1.6E-08	2.9E-10	5.2E-10	-	-	2.9E-11	-
HHGPLC-3	L-8	1.1E-08	4.8E-09	1.2E-09	1.1E-08	6.1E-08	1.2E-10	2.7E-09	5.9E-10	5.6E-09	2.7E-09	2.3E-08	6.8E-10	0.00000037	-	-	1.6E-10	-
HHGPLC-3	L-9	3.3E-09	3.7E-09	1.0E-09	9.2E-09	4.0E-08	9.0E-11	8.3E-10	4.0E-10	3.3E-09	2.0E-09	2.2E-08	4.2E-10	4.8E-09	-	-	1.3E-10	-
HHGPLC-3	L-10	4.2E-09	4.2E-09	8.2E-10	3.3E-08	5.2E-08	8.7E-11	1.0E-09	4.2E-10	4.2E-09	2.2E-09	2.3E-08	5.2E-10	4.2E-09	-	-	7.5E-11	-
HHGPLC-3	L-11	5.0E-09	3.8E-09	1.5E-09	4.0E-08	5.7E-08	9.8E-11	1.3E-09	4.7E-10	4.3E-09	2.2E-09	3.6E-08	5.6E-10	1.3E-08	-	-	9.0E-11	-
HHGPLC-3	L-12	5.8E-09	4.2E-09	1.2E-09	3.2E-08	6.6E-08	9.9E-11	1.5E-09	5.9E-10	5.8E-09	2.6E-09	1.5E-08	7.3E-10	1.5E-09	-	-	8.7E-11	-
HHGPLC-3	L-13	6.7E-09	3.4E-09	1.3E-09	3.6E-08	7.6E-08	9.7E-11	1.7E-09	6.8E-10	2.5E-09	3.0E-09	3.6E-08	7.4E-10	1.7E-09	-	-	1.2E-10	-
HHGPLC-3	L-14	7.6E-09	3.3E-09	8.4E-10	1.7E-08	7.7E-08	8.4E-11	1.9E-09	7.0E-10	3.2E-09	3.4E-09	1.5E-08	8.4E-10	1.9E-09	-	-	1.1E-10	-
HHGPLC-3	L-15	8.4E-09	3.0E-09	9.3E-10	1.5E-08	7.1E-08	7.6E-11	2.1E-09	6.4E-10	3.2E-09	2.6E-09	1.3E-08	7.1E-10	0.00000039	-	-	9.7E-11	-
HHGPLC-3	L-16	9.1E-09	3.0E-09	1.0E-09	1.2E-08	8.2E-08	5.8E-11	2.3E-09	6.9E-10	1.8E-09	2.8E-09	3.2E-08	6.7E-10	0.0000001	-	-	1.3E-10	-
HHGPLC-3	L-17	1.0E-08	3.0E-09	2.0E-09	0.00000045	8.6E-08	8.2E-11	2.5E-09	7.7E-10	1.5E-09	2.5E-09	4.1E-08	7.4E-10	5.8E-08	-	-	1.5E-10	-
HHGPLC-3	L-18	2.8E-09	2.1E-09	5.6E-10	1.1E-08	4.9E-08	3.4E-11	7.0E-10	4.0E-10	8.3E-10	1.3E-09	6.6E-09	4.0E-10	7.0E-10	-	-	7.1E-11	-
HHGPLC-3	L-19	3.2E-09	1.9E-09	6.4E-10	4.8E-08	5.7E-08	4.3E-11	8.1E-10	4.6E-10	8.6E-10	1.4E-09	2.5E-08	3.6E-10	1.0E-08	-	-	8.1E-11	-
HHGPLC-3	L-20	3.6E-09	1.8E-09	1.6E-09	4.9E-09	4.5E-08	3.6E-11	9.0E-10	5.1E-10	4.1E-09	1.3E-09	2.0E-08	4.5E-10	9.0E-10	-	-	9.0E-11	-
HHGPLC-3	L-21	4.1E-09	1.9E-09	1.3E-09	1.4E-08	5.7E-08	4.5E-11	4.1E-09	5.8E-10	9.1E-10	1.5E-09	1.9E-08	4.5E-10	2.3E-08	-	-	6.1E-11	-
HHGPLC-4	L-1	2.1E-08	2.1E-11	8.1E-09	0.00000042	2.5E-08	2.5E-11	2.1E-08	2.4E-10	9.2E-11	8.1E-11	0.00000011	1.6E-10	0.000012	-	-	3.0E-10	-
HHGPLC-4	L-2	5.0E-09	1.2E-10	3.1E-10	0.00000016	2.2E-08	1.9E-11	5.0E-09	2.6E-10	2.0E-10	3.1E-10	5.5E-08	1.3E-10	5.1E-08	-	-	5.2E-11	-
HHGPLC-4	L-3	8.9E-08	4.0E-10	3.8E-09	0.0000020	8.1E-08	6.8E-11	1.5E-08	6.9E-10	1.0E-09	9.6E-10	0.00000019	5.3E-10	6.2E-08	-	-	6.6E-10	-
HHGPLC-4	L-4	1.7E-09	7.8E-10	2.4E-10	5.7E-09	1.5E-08	2.1E-11	1.7E-09	1.6E-10	7.5E-10	6.6E-10	7.9E-09	9.7E-11	1.7E-08	-	-	1.7E-11	-
HHGPLC-4	L-5	2.3E-09	2.0E-09	3.3E-10	6.2E-08	2.5E-08	4.9E-11	2.3E-09	2.1E-10	2.7E-09	1.1E-09	1.1E-08	1.9E-10	9.3E-09	-	-	2.8E-11	-
HHGPLC-4	L-6	1.2E-09	3.0E-09	2.9E-10	5.5E-09	2.4E-08	6.7E-11	1.2E-09	2.0E-10	2.6E-09	1.3E-09	1.6E-08	2.0E-10	9.1E-09	-	-	1.7E-11	-
HHGPLC-4	L-7	2.0E-09	4.9E-09	3.8E-09	1.2E-08	3.9E-08	1.1E-10	2.0E-09	2.9E-10	3.6E-09	2.0E-09	1.5E-08	3.4E-10	2.0E-09	-	-	3.0E-11	-
HHGPLC-4	L-8	6.1E-08	6.6E-09	5.9E-09	0.0000017	8.2E-08	1.6E-10	1.1E-08	6.2E-10	1.1E-08	4.1E-09	4.9E-08	8.4E-10	0.00000024	-	-	1.6E-10	-
HHGPLC-4	L-9	2.5E-08	4.6E-09	3.1E-09	0.00000066	5.0E-08	1.3E-10	3.1E-09	4.2E-10	6.3E-09	2.8E-09	3.4E-08	5.4E-10	6.1E-08	-	-	1.1E-10	-
HHGPLC-4	L-10	4.1E-09	5.7E-09	2.3E-09	0.00000029	6.2E-08	1.2E-10	4.1E-09	4.9E-10	6.3E-09	3.1E-09	2.5E-08	6.9E-10	5.3E-08	-	-	7.3E-11	-
HHGPLC-4	L-11	4.9E-09	4.8E-09	1.2E-09	2.3E-08	6.3E-08	1.3E-10	4.9E-09	5.4E-10	4.9E-09	2.7E-09	2.3E-08	6.7E-10	2.0E-08	-	-	8.8E-11	-
HHGPLC-4	L-12	5.6E-09	5.3E-09	1.4E-09	4.0E-08	8.1E-08	1.2E-10	5.6E-09	6.3E-10	8.8E-09	3.7E-09	2.3E-08	7.7E-10	5.6E-09	-	-	8.4E-11	-
HHGPLC-4	L-13	6.4E-09	4.1E-09	9.1E-10	1.8E-08	8.8E-08	1.1E-10	6.4E-09	7.2E-10	3.2E-09	3.6E-09	1.5E-08	7.8E-10	3.7E-08	-	-	9.6E-11	-
HHGPLC-4	L-14	7.3E-09	4.0E-09	1.0E-09	5.2E-08	9.5E-08	1.0E-10	7.3E-09	7.4E-10	5.1E-09	4.1E-09	2.1E-08	8.9E-10	7.3E-09	-	-	1.6E-10	-
HHGPLC-4	L-15	8.1E-09	3.7E-09	1.1E-09	2.7E-08	8.8E-08	9.1E-11	8.1E-09	7.5E-10	3.3E-09	3.2E-09	1.7E-08	7.5E-10	0.00000013	-	-	1.2E-10	-
HHGPLC-4	L-16	9.0E-09	3.8E-09	1.3E-09	5.6E-08	9.2E-08	7.1E-11	9.0E-09	8.2E-10	2.1E-09	3.5E-09	1.7E-08	9.5E-10	0.00000028	-	-	1.1E-10	-
HHGPLC-4	L-17	9.8E-09	3.7E-09	1.4E-09	0.00000028	9.4E-08	9.8E-11	9.8E-09	8.1E-10	1.6E-09	3.1E-09	2.1E-08	9.1E-10	0.00000016	-	-	1.5E-10	-
HHGPLC-4	L-18	2.7E-09	2.6E-09	1.1E-09	7.7E-08	5.7E-08	3.7E-11	2.7E-09	4.2E-10	1.2E-09	1.5E-09	2.6E-08	4.1E-10	2.7E-09	-	-	7.9E-11	-
HHGPLC-4	L-19	3.1E-09	2.3E-09	7.9E-10	6.9E-08	7.0E-08	5.1E-11	3.1E-09	5.3E-10	1.2E-09	1.8E-09	1.1E-08	4.8E-10	9.9E-08	-	-	4.7E-11	-
HHGPLC-4	L-20	3.5E-09	2.3E-09	8.8E-10	4.8E-09	5.3E-08	4.3E-11	3.5E-09	5.4E-10	3.5E-09	1.7E-09	1.0E-08	5.4E-10	3.5E-09	-	-	1.0E-10	-
HHGPLC-4	L-21	3.9E-09	2.4E-09	1.5E-09	7.0E-09	6.0E-08	4.9E-11	3.9E-09	6.6E-10	9.5E-10	1.9E-09	2.4E-08	4.8E-10	7.6E-08	-	-	8.4E-11	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPHC-1	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4233	1.00	4.2	0.044	9.6	0.85	1260	7.3E-08	2.8E-11	0.000035	6.5E-12	1.6E-12	6.7E-11	5.1E-11	5.1E-11	2.4E-11
HHGPHC-1	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4437	1.00	4.4	0.044	10	0.85	1260	1.2E-08	1.9E-10	1.2E-08	3.4E-10	7.2E-11	3.1E-10	2.7E-10	2.6E-10	9.2E-10
HHGPHC-1	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4443	1.00	4.4	0.044	10	0.85	1260	3.7E-08	1.7E-09	3.7E-08	9.6E-10	3.0E-09	5.8E-10	4.6E-10	4.5E-10	3.1E-10
HHGPHC-1	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1260	4.2E-09	8.2E-10	4.2E-09	1.2E-10	2.4E-09	4.5E-10	3.9E-10	3.8E-10	5.6E-10
HHGPHC-1	L-5	2019-11-12	21	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.85	1260	1.7E-09	1.1E-09	1.7E-09	3.9E-11	4.1E-09	3.0E-10	3.9E-10	3.9E-10	1.3E-10
HHGPHC-1	L-6	2019-11-26	35	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.85	1260	3.6E-09	1.2E-09	3.6E-09	9.8E-11	3.9E-09	3.1E-10	7.3E-10	7.3E-10	1.2E-10
HHGPHC-1	L-7	2019-12-10	49	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	5.4E-09	1.0E-09	5.4E-09	2.7E-10	2.5E-09	3.2E-10	1.1E-09	1.1E-09	4.5E-11
HHGPHC-1	L-8	2019-12-17	56	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.85	1260	2.7E-08	3.4E-09	2.7E-08	7.5E-10	8.9E-09	5.4E-10	2.0E-09	2.0E-09	5.7E-11
HHGPHC-1	L-9	2019-12-31	70	0.076	0.15	0.00067	4443	1.00	4.4	0.044	10	0.85	1260	8.2E-09	9.1E-10	8.2E-09	1.7E-10	2.4E-09	3.1E-10	1.2E-09	1.2E-09	1.7E-11
HHGPHC-1	L-10	2020-01-14	84	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	1.0E-08	1.3E-09	1.0E-08	2.9E-10	3.4E-09	3.2E-10	1.2E-09	1.2E-09	2.1E-11
HHGPHC-1	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	1.2E-08	1.6E-09	1.2E-08	1.1E-10	5.4E-09	3.5E-10	1.5E-09	1.5E-09	9.8E-11
HHGPHC-1	L-12	2020-02-11	112	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	1.4E-08	9.2E-10	1.4E-08	5.4E-10	1.5E-09	3.5E-10	1.4E-09	1.4E-09	2.8E-11
HHGPHC-1	L-13	2020-02-25	126	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.85	1260	1.6E-08	1.5E-09	1.6E-08	3.1E-10	3.8E-09	3.9E-10	1.5E-09	1.5E-09	3.2E-11
HHGPHC-1	L-14	2020-03-10	140	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1260	1.7E-08	1.3E-09	1.7E-08	2.6E-10	3.5E-09	3.6E-10	1.3E-09	1.3E-09	3.6E-11
HHGPHC-1	L-15	2020-03-24	154	0.076	0.15	0.00067	4444	1.00	4.5	0.044	10	0.85	1260	1.9E-08	1.8E-09	1.9E-08	2.5E-10	5.5E-09	3.7E-10	1.4E-09	1.4E-09	4.0E-11
HHGPHC-1	L-16	2020-04-07	168	0.076	0.15	0.00067	4447	1.00	4.5	0.044	10	0.85	1260	2.1E-08	1.7E-09	2.1E-08	8.3E-10	3.1E-09	3.8E-10	1.3E-09	1.3E-09	4.3E-11
HHGPHC-1	L-17	2020-04-21	182	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1260	2.3E-08	1.6E-09	2.3E-08	8.1E-10	2.8E-09	4.6E-10	1.5E-09	1.5E-09	4.7E-11
HHGPHC-2	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4229	1.00	4.2	0.044	9.5	0.84	1251	7.3E-08	2.8E-11	0.000029	9.6E-12	1.6E-12	5.5E-11	6.1E-11	6.0E-11	9.7E-11
HHGPHC-2	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4439	1.00	4.4	0.044	10	0.84	1251	1.3E-08	2.1E-10	1.3E-08	3.9E-10	8.7E-11	3.3E-10	3.2E-10	3.1E-10	4.2E-10
HHGPHC-2	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4445	1.00	4.4	0.044	10	0.84	1251	3.8E-08	1.9E-09	3.8E-08	1.6E-09	2.2E-09	6.0E-10	4.8E-10	4.8E-10	1.3E-09
HHGPHC-2	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.84	1251	4.3E-09	9.0E-10	4.3E-09	1.9E-10	2.0E-09	4.7E-10	3.7E-10	3.7E-10	3.2E-10
HHGPHC-2	L-5	2019-11-12	21	0.076	0.15	0.00067	4447	1.00	4.4	0.044	10	0.84	1251	1.7E-09	1.2E-09	1.7E-09	6.9E-11	3.4E-09	3.1E-10	3.8E-10	3.8E-10	1.3E-10
HHGPHC-2	L-6	2019-11-26	35	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	3.6E-09	1.2E-09	3.6E-09	1.2E-10	3.3E-09	3.2E-10	7.9E-10	7.8E-10	1.2E-10
HHGPHC-2	L-7	2019-12-10	49	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.84	1251	5.5E-09	1.1E-09	5.5E-09	1.8E-10	2.5E-09	3.3E-10	1.1E-09	1.1E-09	1.1E-11
HHGPHC-2	L-8	2019-12-17	56	0.076	0.15	0.00067	4446	1.00	4.5	0.044	10	0.84	1251	2.8E-08	3.8E-09	2.8E-08	7.6E-10	8.6E-09	5.3E-10	2.1E-09	2.1E-09	5.7E-11
HHGPHC-2	L-9	2019-12-31	70	0.076	0.15	0.00067	4446	1.00	4.4	0.044	10	0.84	1251	8.3E-09	1.1E-09	8.3E-09	4.3E-10	2.1E-09	3.2E-10	1.2E-09	1.2E-09	1.7E-11
HHGPHC-2	L-10	2020-01-14	84	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.84	1251	1.0E-08	1.4E-09	1.0E-08	2.8E-10	3.2E-09	3.1E-10	1.2E-09	1.2E-09	2.1E-11
HHGPHC-2	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	1.2E-08	1.8E-09	1.2E-08	2.5E-10	4.4E-09	3.5E-10	1.5E-09	1.5E-09	2.5E-11
HHGPHC-2	L-12	2020-02-11	112	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	1.4E-08	9.3E-10	1.4E-08	5.3E-10	1.5E-09	3.5E-10	1.4E-09	1.4E-09	2.9E-11
HHGPHC-2	L-13	2020-02-25	126	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.84	1251	1.6E-08	1.7E-09	1.6E-08	5.3E-10	3.4E-09	3.9E-10	1.5E-09	1.5E-09	3.3E-11
HHGPHC-2	L-14	2020-03-10	140	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	1.8E-08	1.7E-09	1.8E-08	5.5E-10	3.2E-09	3.7E-10	1.3E-09	1.3E-09	1.5E-10
HHGPHC-2	L-15	2020-03-24	154	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	2.0E-08	2.0E-09	2.0E-08	3.1E-10	5.1E-09	4.0E-10	1.4E-09	1.4E-09	4.0E-11
HHGPHC-2	L-16	2020-04-07	168	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.84	1251	2.1E-08	1.6E-09	2.1E-08	1.1E-09	2.2E-09	4.0E-10	1.3E-09	1.3E-09	4.4E-11
HHGPHC-2	L-17	2020-04-21	182	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.84	1251	2.3E-08	1.8E-09	2.3E-08	1.0E-09	2.7E-09	4.2E-10	1.5E-09	1.5E-09	4.8E-11
HHGPHC-3	L-1	2019-10-22	0.080	0.076	0.15	0.00067	4234	1.00	4.2	0.044	9.6	0.85	1261	7.2E-08	2.0E-11	0.0000046	2.9E-11	2.6E-12	6.2E-11	5.4E-11	5.3E-11	2.9E-11
HHGPHC-3	L-2	2019-10-23	1.0	0.076	0.15	0.00067	4442	1.00	4.4	0.044	10	0.85	1261	1.2E-08	1.2E-10	1.2E-08	1.5E-10	6.3E-11	3.7E-10	2.8E-10	2.8E-10	5.0E-10
HHGPHC-3	L-3	2019-10-24	2.0	0.076	0.15	0.00067	4446	1.00	4.5	0.044	10	0.85	1261	3.7E-08	1.4E-09	3.7E-08	5.6E-10	3.6E-09	6.5E-10	4.2E-10	4.2E-10	3.7E-10
HHGPHC-3	L-4	2019-10-29	7.0	0.076	0.15	0.00067	4444	1.00	4.4	0.044	10	0.85	1261	4.2E-09	7.3E-10	4.2E-09	9.1E-11	3.2E-09	4.8E-10	3.3E-10	3.3E-10	3.8E-10
HHGPHC-3	L-5	2019-11-12	21	0.076	0.15	0.00067	4447	1.00	4.4	0.044	10	0.85	1261	1.7E-09	9.9E-10	1.7E-09	4.9E-11	5.3E-09	3.3E-10	3.3E-10	3.3E-10	1.5E-10
HHGPHC-3	L-6	2019-11-26	35	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	3.6E-09	1.2E-09	3.6E-09	6.5E-11	6.3E-09	3.3E-10	7.1E-10	7.1E-10	1.4E-10
HHGPHC-3	L-7	2019-12-10	49	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	5.4E-09	8.9E-10	5.4E-09	1.1E-10	3.9E-09	3.6E-10	9.8E-10	9.8E-10	1.4E-11
HHGPHC-3	L-8	2019-12-17	56	0.076	0.15	0.00067	4447	1.00	4.5	0.044	10	0.85	1261	2.7E-08	3.0E-09	2.7E-08	2.7E-10	1.4E-08	5.7E-10	1.9E-09	1.9E-09	6.8E-11
HHGPHC-3	L-9	2019-12-31	70	0.076	0.15	0.00067	4444	1.00	4.4	0.044	10	0.85	1261	8.2E-09	9.7E-10	8.2E-09	1.9E-10	3.6E-09	3.5E-10	1.1E-09	1.1E-09	2.0E-11
HHGPHC-3	L-10	2020-01-14	84	0.076	0.15	0.00067	4438	1.00	4.4	0.044	10	0.85	1261	1.0E-08	1.2E-09	1.0E-08	1.2E-10	5.4E-09	3.5E-10	1.0E-09	1.0E-09	2.5E-11
HHGPHC-3	L-11	2020-01-28	98	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	1.2E-08	1.6E-09	1.2E-08	1.6E-10	7.3E-09	3.9E-10	1.3E-09	1.3E-09	3.0E-11
HHGPHC-3	L-12	2020-02-11	112	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	1.4E-08	7.4E-10	1.4E-08	2.2E-10	2.2E-09	4.2E-10	1.4E-09	1.4E-09	3.4E-11
HHGPHC-3	L-13	2020-02-25	126	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	1.6E-08	1.5E-09	1.6E-08	3.9E-10	5.3E-09	4.5E-10	1.4E-09	1.4E-09	3.9E-11
HHGPHC-3	L-14	2020-03-10	140	0.076	0.15	0.00067	4449	1.00	4.5	0.044	10	0.85	1261	1.7E-08	1.4E-09	1.7E-08	2.3E-10	5.4E-09	4.2E-10	1.2E-09	1.2E-09	4.3E-11
HHGPHC-3	L-15	2020-03-24	154	0.076	0.15	0.00067	4450	1.00	4.5	0.044	10	0.85	1261	1.9E-08	1.8E-09	1.9E-08	2.0E-10	7.9E-09	4.3E-10	1.3E-09	1.3E-09	4.8E-11
HHGPHC-3	L-16	2020-04-07	168	0.076	0.15	0.00067	4448	1.00	4.5	0.044	10	0.85	1261	2.1E-08	1.3E-09	2.1E-08	3.4E-10	4.1E-09	4.4E-10	1.2E-09	1.2E-09	5.2E-11
HHGPHC-3	L-17	2020-04-21	182	0.076	0.15	0.00067	4452	1.00	4.5	0.044	10	0.85	1261	2.3E-08	1.6E-09	2.3E-08	4.9E-10	4.7E-09	5.4E-10	1.3E-09	1.3E-09	5.7E-11
HHGPHC-4	L-1	2019-10-22	0.080	0.076	0.15	0.00068	4275	1.00	4.3	0.045	9.5	0.85	1252	7.3E-08	1.1E-11	7.3E-08	2.9E-11	2.9E-12	7.4E-11	4.6E-11	4.8E-11	2.9E-11
HHGPHC-4	L-2	2019-10-23	1.0	0.076	0.15	0.00068	4489	1.00	4.5	0.045	10	0.85	1252	1.3E-08	2.3E-10	1.3E-08	1.7E-10	3.8E-10	3.2E-10	2.5E-10	2.5E-10	5.0E-10
HHGPHC-4	L-3	2019-10-24	2.0	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	3.8E-08	1.9E-09	3.8E-08	7.2E-10	5.7E-09	6.3E-10	4.5E-10	4.5E-10	1.5E-09
HHGPHC-4	L-4	2019-10-29	7.0	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	4.3E-09	7.3E-10	4.3E-09	7.7E-11	3.6E-09	4.9E-10	3.7E-10	3.7E-10	6.8E-10
HHGPHC-4	L-5	2019-11-12	21	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	1.7E-09	1.2E-09	1.7E-09	2.6E-11	7.6E-09	3.4E-10	3.8E-10	3.8E-10	1.6E-10
HHGPHC-4	L-6	2019-11-26	35	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	3.6E-09	1.3E-09	3.6E-09	5.8E-11	7.7E-09	3.6E-10	7.4E-10	7.4E-10	1.5E-10
HHGPHC-4	L-7	2019-12-10	49	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	5.5E-09	9.2E-10	5.5E-09	8.8E-11	4.6E-09	3.6E-10	1.0E-09	1.0E-09	1.4E-11
HHGPHC-4	L-8	2019-12-17	56	0.076	0.15	0.00068	4494	1.00	4.5	0.045	10	0.85	1252	2.8E-08	3.4E-09	2.8E-08	5.3E-10	1.5E-08	5.8E-10	1.9E-09	1.9E-09	6.9E-11
HHGPHC-4	L-9	2019-12-31	70	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	8.3E-09	8.5E-10	8.3E-09	1.3E-10	3.6E-09	3.5E-10	1.1E-09	1.1E-09	2.1E-11
HHGPHC-4	L-10	2020-01-14	84	0.076	0.15	0.00068	4486	1.00	4.5	0.045	10	0.85	1252	1.0E-08	1.3E-09	1.0E-08	1.5E-10	5.9E-09	3.3E-10	1.1E-09	1.1E-09	2.5E-11
HHGPHC-4	L-11	2020-01-28	98	0.076	0.15	0.00068	4780	1.00	4.8	0.045	11	0.85	1252	1.4E-08	1.8E-09	1.4E-08	2.2E-10	8.7E-09	4.2E-10	1.5E-09	1.5E-09	3.4E-11
HHGPHC-4	L-12	2020-02-11	112	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	1.4E-08	7.4E-10	1.4E-08	2.1E-10	2.5E-09	3.8E-10	1.3E-09	1.3E-09	1.4E-10
HHGPHC-4	L-13	2020-02-25	126	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	1.6E-08	1.5E-09	1.6E-08	3.2E-10	5.9E-09	4.5E-10	1.4E-09	1.4E-09	3.9E-11
HHGPHC-4	L-14	2020-03-10	140	0.076	0.15	0.00068	4495	1.00	4.5	0.045	10	0.85	1252	1.8E-08	1.4E-09	1.8E-08	2.6E-10	5.8E-09	4.1E-10	1.2E-09	1.2E-09	4.4E-11
HHGPHC-4	L-15	2020-03-24	154	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	1.9E-08	1.8E-09	1.9E-08	2.1E-10	8.9E-09	4.3E-10	1.3E-09	1.3E-09	4.9E-11
HHGPHC-4	L-16	2020-04-07	168	0.076	0.15	0.00068	4496	1.00	4.5	0.045	10	0.85	1252	2.1E-08	1.3E-09	2.1E-08	3.8E-10	4.6E-09	4.3E-10	1.3E-09	1.3E-09	5.3E-11
HHGPHC-4	L-17	2020-04-21	182	0.076	0.15	0.00068	4497	1.00	4.5	0.045	10	0.85	1252	2.3E-08	1.9E-09	2.3E-08	6.4E-10	5.8E-09	5.0E-10	1.3E-09	1.3E-09	5.8E-11

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPHC-1	L-1	2.9E-09	2.4E-10	7.3E-08	4.5E-11	1.1E-11	7.4E-08	7.1E-08	7.3E-08	6.6E-11	7.3E-10	0.0000041	4.1E-10	1.8E-08	1.5E-09	7.3E-08	7.3E-10	4.5E-09	1.7E-10	8.6E-09	0.000018	4.1E-11
HHGPHC-1	L-2	6.1E-09	1.0E-09	5.0E-08	3.2E-10	3.6E-10	1.3E-08	1.2E-08	1.2E-08	2.5E-10	1.2E-10	0.000017	2.8E-10	3.1E-09	6.3E-09	1.2E-08	1.2E-08	7.7E-10	3.8E-10	1.5E-09	0.0000018	7.0E-12
HHGPHC-1	L-3	9.3E-09	1.4E-09	3.7E-08	6.9E-10	2.0E-10	3.8E-08	3.6E-08	3.7E-08	3.0E-10	3.7E-10	0.000029	2.6E-10	9.3E-09	1.5E-08	3.7E-08	6.0E-09	5.8E-10	5.4E-10	1.1E-09	0.0000010	2.1E-11
HHGPHC-1	L-4	1.1E-08	9.1E-10	4.2E-09	6.2E-10	2.0E-10	4.3E-09	4.1E-09	4.2E-09	2.4E-10	4.2E-11	0.00000077	3.9E-10	1.1E-09	4.9E-09	4.2E-09	4.2E-09	6.6E-11	8.1E-10	8.4E-10	3.1E-08	2.4E-12
HHGPHC-1	L-5	6.1E-09	2.9E-10	1.7E-09	2.5E-10	3.7E-10	1.7E-09	1.7E-09	1.7E-09	1.8E-10	1.7E-11	1.1E-08	2.8E-10	4.3E-10	2.3E-09	1.7E-09	5.5E-09	1.1E-10	5.3E-10	9.8E-10	6.2E-09	3.9E-12
HHGPHC-1	L-6	7.0E-09	6.6E-11	3.6E-09	7.1E-11	4.8E-10	3.7E-09	5.7E-08	3.6E-09	1.6E-10	3.6E-11	3.0E-08	2.1E-10	9.0E-10	6.1E-09	3.6E-09	3.6E-09	5.6E-11	4.0E-10	1.7E-09	1.3E-08	2.0E-12
HHGPHC-1	L-7	1.1E-08	1.3E-11	5.4E-09	1.3E-11	3.2E-10	5.6E-09	5.3E-09	8.7E-08	1.4E-10	5.4E-11	8.1E-08	1.4E-10	1.4E-09	1.1E-08	5.4E-09	2.2E-10	8.5E-11	3.0E-10	1.7E-09	2.4E-08	3.1E-12
HHGPHC-1	L-8	1.8E-08	5.7E-12	2.7E-08	4.3E-12	1.3E-09	2.8E-08	2.7E-08	0.00000044	1.8E-10	2.7E-10	0.0000050	1.2E-10	6.8E-09	5.6E-08	2.7E-08	2.7E-10	4.3E-10	3.7E-10	3.3E-09	0.00000025	1.6E-11
HHGPHC-1	L-9	9.9E-09	1.7E-12	8.2E-09	9.4E-13	7.8E-11	8.4E-09	8.0E-09	0.00000052	1.4E-10	8.2E-11	0.00000029	7.9E-11	2.0E-09	1.5E-08	8.2E-09	1.3E-09	1.3E-10	2.3E-10	1.9E-09	5.8E-08	4.6E-12
HHGPHC-1	L-10	1.0E-08	1.0E-12	1.0E-08	2.7E-13	1.3E-09	1.0E-08	9.8E-09	1.0E-08	1.5E-10	1.0E-10	0.00000049	5.8E-11	2.5E-09	2.2E-08	1.0E-08	3.6E-09	1.6E-10	2.4E-10	2.0E-09	7.5E-08	5.7E-12
HHGPHC-1	L-11	9.6E-09	6.9E-13	1.2E-08	9.9E-14	1.8E-10	1.2E-08	0.00000011	1.2E-08	1.6E-10	1.2E-10	0.00000096	5.5E-11	3.0E-09	2.5E-08	1.2E-08	1.2E-10	1.9E-10	2.5E-10	2.0E-09	0.00000018	6.7E-12
HHGPHC-1	L-12	1.4E-08	4.8E-13	1.4E-08	4.7E-14	2.1E-09	1.4E-08	1.3E-08	1.4E-08	1.5E-10	1.4E-10	0.0000015	4.9E-11	3.4E-09	3.0E-08	1.4E-08	1.4E-10	2.1E-10	2.2E-10	2.3E-09	9.6E-08	7.8E-12
HHGPHC-1	L-13	1.9E-08	4.0E-13	1.6E-08	4.2E-14	1.3E-09	1.6E-08	1.5E-08	1.6E-08	1.6E-10	1.6E-10	0.0000024	4.6E-11	3.9E-09	3.2E-08	1.6E-08	1.6E-10	2.4E-10	2.2E-10	2.2E-09	0.00000016	8.8E-12
HHGPHC-1	L-14	6.2E-09	4.5E-13	1.7E-08	2.7E-14	2.6E-09	1.8E-08	1.7E-08	1.7E-08	1.6E-10	1.7E-10	0.0000034	4.2E-11	4.3E-09	4.0E-08	1.7E-08	6.9E-10	2.7E-10	2.0E-10	3.0E-09	0.00000032	9.8E-12
HHGPHC-1	L-15	1.2E-08	3.4E-13	1.9E-08	2.0E-14	1.8E-10	2.0E-08	1.9E-08	1.9E-08	1.7E-10	1.9E-10	0.0000049	3.6E-11	4.8E-09	3.7E-08	1.9E-08	3.1E-09	3.0E-10	1.9E-10	2.3E-09	0.00000017	1.1E-11
HHGPHC-1	L-16	1.3E-08	2.4E-13	2.1E-08	1.4E-14	3.1E-12	2.1E-08	2.1E-08	0.00000034	1.7E-10	2.1E-10	0.0000072	4.3E-11	5.3E-09	4.2E-08	2.1E-08	3.4E-09	3.3E-10	2.1E-10	2.5E-09	0.00000017	1.2E-11
HHGPHC-1	L-17	1.5E-08	2.6E-13	2.3E-08	1.6E-14	3.4E-12	2.3E-08	2.2E-08	2.3E-08	1.9E-10	2.3E-10	0.0000096	4.0E-11	5.7E-09	4.7E-08	2.3E-08	9.1E-10	3.6E-10	2.1E-10	2.7E-09	0.00000038	1.3E-11
HHGPHC-2	L-1	2.9E-09	2.0E-10	7.3E-08	3.2E-11	1.3E-11	7.5E-08	7.2E-08	7.3E-08	5.8E-11	7.3E-10	0.000027	4.6E-10	1.8E-08	1.7E-09	7.3E-08	1.2E-08	1.8E-08	1.8E-10	1.3E-08	0.00013	4.6E-11
HHGPHC-2	L-2	6.2E-09	1.0E-09	5.0E-08	3.2E-10	4.3E-10	1.3E-08	1.2E-08	1.3E-08	2.9E-10	1.3E-10	0.000087	3.4E-10	1.3E-08	6.1E-09	1.3E-08	2.0E-09	2.0E-10	4.8E-10	9.6E-10	0.0000017	7.9E-12
HHGPHC-2	L-3	9.5E-09	1.4E-09	3.8E-08	7.1E-10	2.4E-10	3.9E-08	3.7E-08	3.8E-08	3.6E-10	3.8E-10	0.00017	2.3E-10	9.5E-09	1.5E-08	3.8E-08	6.1E-09	5.9E-10	6.3E-10	1.1E-09	0.0000038	2.4E-11
HHGPHC-2	L-4	8.4E-09	9.1E-10	4.3E-09	6.4E-10	3.0E-10	4.4E-09	4.2E-09	6.8E-08	2.5E-10	4.3E-11	0.0000051	4.0E-10	1.1E-09	5.2E-09	4.3E-09	1.5E-09	6.7E-11	9.0E-10	8.6E-10	0.00000022	2.7E-12
HHGPHC-2	L-5	6.9E-09	3.0E-10	1.7E-09	2.7E-10	3.5E-10	1.8E-09	1.5E-08	1.7E-09	1.8E-10	1.7E-11	6.9E-08	3.1E-10	4.3E-10	2.4E-09	1.7E-09	4.4E-09	1.1E-10	6.8E-10	9.9E-10	3.1E-08	1.7E-11
HHGPHC-2	L-6	5.3E-09	7.1E-11	3.6E-09	7.5E-11	5.0E-10	3.7E-09	0.00000013	3.6E-09	1.6E-10	3.6E-11	0.00000019	2.2E-10	9.1E-10	6.4E-09	3.6E-09	1.3E-09	5.7E-11	5.0E-10	1.6E-09	7.7E-08	2.3E-12
HHGPHC-2	L-7	1.2E-08	1.4E-11	5.5E-09	1.5E-11	4.6E-10	5.7E-09	5.4E-09	5.5E-09	1.5E-10	5.5E-11	0.00000054	1.4E-10	1.4E-09	1.2E-08	5.5E-09	2.0E-09	8.6E-11	3.9E-10	1.7E-09	9.2E-08	3.5E-12
HHGPHC-2	L-8	2.3E-08	6.1E-12	2.8E-08	4.5E-12	1.6E-09	2.8E-08	2.7E-08	2.8E-08	1.9E-10	2.8E-10	0.000031	1.2E-10	6.9E-09	5.8E-08	2.8E-08	1.1E-09	4.3E-10	4.6E-10	2.7E-09	0.0000019	1.7E-11
HHGPHC-2	L-9	8.3E-09	1.8E-12	8.3E-09	1.0E-12	1.4E-10	8.5E-09	8.1E-09	0.00000083	1.5E-10	8.3E-11	0.0000023	8.7E-11	2.1E-09	1.6E-08	8.3E-09	1.3E-09	1.3E-10	3.1E-10	1.9E-09	0.00000041	5.2E-12
HHGPHC-2	L-10	8.2E-09	9.3E-13	1.0E-08	2.7E-13	1.4E-09	1.0E-08	9.9E-09	4.1E-08	1.5E-10	1.0E-10	0.0000037	7.6E-11	2.5E-09	2.2E-08	1.0E-08	4.1E-10	1.6E-10	3.3E-10	2.0E-09	0.00000033	6.3E-12
HHGPHC-2	L-11	7.7E-09	9.1E-13	1.2E-08	1.1E-13	4.1E-10	1.2E-08	7.4E-08	1.2E-08	1.8E-10	1.2E-10	0.0000055	5.9E-11	3.0E-09	2.5E-08	1.2E-08	1.2E-10	1.9E-10	3.0E-10	2.1E-09	0.00000084	7.5E-12
HHGPHC-2	L-12	1.7E-08	5.2E-13	1.4E-08	5.2E-14	2.2E-09	1.4E-08	1.4E-08	1.4E-08	1.8E-10	1.4E-10	0.0000095	5.5E-11	3.5E-09	3.0E-08	1.4E-08	5.6E-10	2.2E-10	3.0E-10	2.0E-09	0.00000049	8.7E-12
HHGPHC-2	L-13	7.7E-09	4.3E-13	1.6E-08	4.6E-14	2.1E-09	1.6E-08	1.5E-08	1.6E-08	1.6E-10	1.6E-10	0.000014	4.9E-11	3.9E-09	3.2E-08	1.6E-08	6.3E-10	2.5E-10	3.0E-10	2.7E-09	0.0000013	9.9E-12
HHGPHC-2	L-14	4.4E-09	4.8E-13	1.8E-08	2.9E-14	9.9E-10	1.8E-08	1.7E-08	1.8E-08	1.7E-10	1.8E-10	0.000020	4.5E-11	4.4E-09	3.8E-08	1.8E-08	2.8E-09	2.8E-10	2.8E-10	2.1E-09	0.00000065	1.1E-11
HHGPHC-2	L-15	9.6E-09	3.7E-13	2.0E-08	2.2E-14	3.4E-12	2.0E-08	1.9E-08	2.0E-08	1.8E-10	2.0E-10	0.000028	4.4E-11	4.9E-09	3.8E-08	2.0E-08	2.0E-10	3.0E-10	2.7E-10	1.9E-09	0.00000066	1.2E-11
HHGPHC-2	L-16	1.4E-08	2.6E-13	2.1E-08	1.6E-14	3.7E-12	2.2E-08	2.1E-08	0.00000034	1.8E-10	2.1E-10	0.000044	4.5E-11	5.3E-09	4.4E-08	2.1E-08	2.1E-10	3.3E-10	2.9E-10	2.5E-09	0.0000015	1.3E-11
HHGPHC-2	L-17	1.5E-08	2.8E-13	2.3E-08	1.7E-14	4.0E-12	2.4E-08	2.3E-08	2.3E-08	2.0E-10	2.3E-10	0.000058	4.0E-11	5.8E-09	4.7E-08	2.3E-08	3.7E-09	3.6E-10	2.9E-10	2.2E-09	0.00000084	1.5E-11
HHGPHC-3	L-1	2.9E-09	2.5E-10	7.2E-08	5.2E-11	4.9E-12	7.4E-08	7.1E-08	7.2E-08	6.5E-11	7.2E-10	0.000020	1.8E-10	1.8E-08	1.7E-09	7.2E-08	7.2E-10	1.5E-09	6.3E-11	2.3E-09	0.000023	1.5E-10
HHGPHC-3	L-2	6.1E-09	1.3E-09	5.0E-08	3.8E-10	2.1E-10	1.3E-08	1.2E-08	1.2E-08	3.1E-10	1.2E-10	0.000068	1.4E-10	3.1E-09	5.6E-09	1.2E-08	1.2E-10	6.3E-11	1.9E-10	2.5E-10	0.0000034	2.6E-11
HHGPHC-3	L-3	9.3E-09	1.6E-09	3.7E-08	9.3E-10	1.6E-10	3.8E-08	3.6E-08	3.7E-08	3.7E-10	3.7E-10	0.00016	1.1E-10	9.3E-09	1.4E-08	3.7E-08	1.5E-09	1.9E-10	2.5E-10	3.0E-10	0.0000010	7.7E-11
HHGPHC-3	L-4	1.1E-08	1.0E-09	4.2E-09	8.0E-10	5.5E-11	4.3E-09	4.1E-09	4.2E-09	2.6E-10	4.2E-11	0.0000049	1.6E-10	1.1E-09	5.1E-09	4.2E-09	6.7E-10	2.1E-11	3.2E-10	1.9E-10	3.5E-08	8.7E-12
HHGPHC-3	L-5	6.8E-09	3.3E-10	1.7E-09	3.2E-10	1.0E-10	1.7E-09	1.7E-09	1.7E-09	1.8E-10	1.7E-11	5.6E-08	1.2E-10	4.2E-10	2.4E-09	1.7E-09	2.7E-10	3.5E-11	2.5E-10	2.2E-10	1.9E-08	1.4E-11
HHGPHC-3	L-6	8.1E-09	7.3E-11	3.6E-09	9.2E-11	1.9E-10	3.7E-09	7.2E-08	3.6E-09	1.7E-10	3.6E-11	0.00000018	8.8E-11	9.0E-10	6.3E-09	3.6E-09	1.3E-09	1.8E-11	1.7E-10	4.1E-10	2.4E-08	7.4E-12
HHGPHC-3	L-7	1.2E-08	1.5E-11	5.4E-09	1.7E-11	2.5E-10	5.6E-09	5.3E-09	5.4E-09	1.5E-10	5.4E-11	0.00000051	5.5E-11	1.4E-09	1.1E-08	5.4E-09	2.0E-09	2.8E-11	1.2E-10	4.4E-10	9.7E-08	1.1E-11
HHGPHC-3	L-8	2.2E-08	7.2E-12	2.7E-08	5.4E-12	7.3E-10	2.8E-08	2.7E-08	2.7E-08	1.9E-10	2.7E-10	0.000030	5.0E-11	6.8E-09	5.9E-08	2.7E-08	4.4E-09	1.4E-10	1.5E-10	7.1E-10	0.00000063	5.6E-11
HHGPHC-3	L-9	9.9E-09	2.1E-12	8.2E-09	1.2E-12	1.4E-10	8.4E-09	8.0E-09	8.2E-09	1.5E-10	8.2E-11	0.0000022	3.5E-11	2.0E-09	1.6E-08	8.2E-09	3.3E-10	4.2E-11	9.7E-11	4.4E-10	6.1E-08	1.7E-11
HHGPHC-3	L-10	6.4E-09	1.3E-12	1.0E-08	3.4E-13	6.9E-10	1.0E-08	9.8E-09	1.0E-08	1.6E-10	1.0E-10	0.0000031	2.5E-11	2.5E-09	2.2E-08	1.0E-08	1.0E-10	5.1E-11	1.0E-10	6.2E-10	0.00000023	2.1E-11
HHGPHC-3	L-11	7.6E-09	1.1E-12	1.2E-08	1.4E-13	2.0E-10	1.2E-08	4.7E-08	1.2E-08	1.7E-10	1.2E-10	0.0000053	2.4E-11	3.0E-09	2.5E-08	1.2E-08	4.7E-10	6.0E-11	9.2E-11	5.4E-10	0.00000015	2.4E-11
HHGPHC-3	L-12	1.4E-08	6.1E-13	1.4E-08	6.5E-14	8.3E-10	1.4E-08	1.3E-08	1.4E-08	1.8E-10	1.4E-10	0.0000084	2.1E-11	3.4E-09	3.0E-08	1.4E-08	1.4E-10	7.0E-11	9.3E-11	5.3E-10	0.00000015	4.5E-10
HHGPHC-3	L-13	5.6E-09	5.1E-13	1.6E-08	5.8E-14	7.0E-10	1.6E-08	1.5E-08	1.6E-08	1.7E-10	1.6E-10	0.000012	1.9E-11	3.9E-09	3.0E-08	1.6E-08	6.2E-10	7.9E-11	8.4E-11	6.0E-10	0.00000015	3.2E-11
HHGPHC-3	L-14	6.2E-09	3.9E-13	1.7E-08	3.7E-14	4.7E-10	1.8E-08	1.7E-08	1.9E-10	1.7E-10	1.8E-10	0.000017	1.8E-11	4.3E-09	3.6E-08	1.7E-08	1.7E-10	8.8E-11	7.9E-11	6.7E-10	0.00000017	3.6E-11
HHGPHC-3	L-15	9.4E-09	4.4E-13	1.9E-08	1.8E-14	1.3E-12	2.0E-08	1.9E-08	1.9E-08	1.9E-10	1.9E-10	0.000026	1.8E-11	4.8E-09	3.7E-08	1.9E-08	7.7E-10	9.8E-11	7.3E-11	6.1E-10	0.00000044	4.0E-11
HHGPHC-3	L-16	1.3E-08	3.0E-13	2.1E-08	2.0E-14	1.4E-12	2.1E-08	2.1E-08	0.00000034	1.9E-10	2.1E-10	0.000038	1.8E-11	5.2E-09	4.3E-08	2.1E-08	2.1E-10	1.1E-10	8.0E-11	8.1E-10	0.00000057	4.3E-11
HHGPHC-3	L-17	1.1E-08	3.3E-13	2.3E-08	2.2E-14	1.5E-12	2.3E-08	2.2E-08	2.3E-08	2.1E-10	2.3E-10	0.000056	1.6E-11	5.7E-09	4.7E-08	2.3E-08	2.3E-10	1.2E-10	7.9E-11	5.9E-10	0.00000031	4.7E-11
HHGPHC-4	L-1	7.3E-10	2.3E-10	7.3E-08	6.6E-11	5.1E-12	7.5E-08	7.2E-08	7.3E-08	6.3E-11	7.3E-10	0.000013	3.0E-10	1.8E-08	1.9E-09	7.3E-08	2.9E-09	1.8E-08	1.8E-10	1.3E-08	0.00057	7.3E-10
HHGPHC-4	L-2	6.2E-09	1.1E-09	1.3E-08	3.3E-10	2.2E-09	1.3E-08	1.2E-08	1.3E-08	2.2E-10	1.3E-10	0.000025	2.4E-10	3.1E-09	6.6E-09	1.3E-08	1.3E-10	2.0E-10	3.8E-10	8.4E-10	0.000017	1.3E-10
HHGPHC-4	L-3	1.4E-08	1.7E-09	3.8E-08	8.5E-10	2.6E-10	3.9E-08	3.7E-08	3.8E-08	2.9E-10	3.8E-10	0.000042	2.3E-10	9.4E-09	1.4E-08	3.8E-08	3.8E-10	5.9E-10	5.1E-10	9.8E-10	0.000015	3.8E-10
HHGPHC-4	L-4	1.2E-08	1.0E-09	4.3E-09	7.3E-10	5.8E-11	4.4E-09	4.2E-09	4.3E-09	2.4E-10	4.3E-11	0.00000096	4.1E-10	1.1E-09	4.3E-09	4.3E-09	6.1E-09	6.7E-11	6.5E-10	7.5E-10	0.0000010	4.3E-11
HHGPHC-4	L-5	6.9E-09	3.4E-10	1.7E-09	3.3E-10	1.4E-10	1.8E-09	1.7E-09	1.7E-09	2.0E-10	1.7E-11	1.6E-08	3.4E-10	4.3E-10	2.2E-09	1.7E-09	1.7E-09	1.1E-10	5.1E-10	7.2E-10	0.00000021	6.9E-11
HHGPHC-4	L-6	7.1E-09	7.7E-11	3.6E-09	9.0E-11	2.6E-10	3.7E-09	4.4E-08	3.6E-09	1.8E-10	3.6E-11	6.3E-08	2.4E-10	9.1E-10	6.1E-09	3.6E-09	1.5E-10	5.7E-11	3.7E-10	1.4E-09	0.0000002	3.6E-11
HHGPHC-4	L-7	1.1E-08	1.5E-11	5.5E-09	1.6E-11	2.2E-10	5.6E-09	5.4E-09	5.5E-09	1.6E-10	5.5E-11	0.00000018	1.5E-10	1.4E-09	1.1E-08	5.5E-09	2.2E-10	8.6E-11	2.6E-10	1.5E-09	0.00000025	5.5E-11
HHGPHC-4	L-8	1.4E-08	6.6E-12	2.8E-08	5.2E-12	7.7E-10	2.8E-08	2.7E-08	0.00000044	2.1E-10	2.8E-10	0.000012	1.3E-10	6.9E-09	5.5E-08	2.8E-08	1.1E-09	4.3E-10	3.3E-10	2.3E-09	0.0000058	2.8E-10
HHGPHC-4	L-9	8.3E-09	1.8E-12	8.3E-09	1.1E-12	8.3E-11	8.5E-09	8.1E-09	3.3E-08	1.6E-10	8.3E-11	0.00000083	8.4E-11	2.1E-09	1.5E-08	8.3E-09	3.3E-10	1.3E-10	2.0E-10	1.7E-09	0.00000055	8.3E-11
HHGPHC-4	L-10	6.5E-09	1.2E-12	1.0E-08	3.1E-13	7.2E-10	1.0E-08	9.9E-09	1.0E-08	1.7E-10	1.0E-10	0.0000014	7.4E-11	2.5E-09	2.1E-08	1.0E-08	1.6E-09	1.6E-10	2.2E-10	2.1E-09	0.00000095	1.0E-10
HHGPHC-4	L-11	1.1E-08	1.1E-12	1.4E-08	1.4E-13	2.4E-10	1.4E-08	0.00000012	1.4E-08	2.1E-10	1.4E-10	0.0000024	6.9E-11	3.4E-09	2.8E-08	1.4E-08	2.2E-09	2.1E-10	2.3E-10	2.0E-09	0.0000011	1.4E-10
HHGPHC-4	L-12	1.1E-08	5.6E-13	1.4E-08	6.0E-14	7.5E-10	1.4E-08	1.4E-08	1.4E-08	1.8E-10	1.4E-10	0.0000039	5.5E-11	3.5E-09	2.8E-08	1.4E-08	5.5E-10	2.2E-10	1.9E-10	2.1E-09	0.0000035	1.4E-10
HHGPHC-4	L-13	5.7E-09	4.7E-13	1.6E-08	4.1E-14	8.6E-10	1.6E-08	1.5E-08	1.6E-08	1.8E-10	1.6E-10	0.0000053	5.0E-11	3.9E-09	3.0E-08	1.6E-08	1.6E-10	2.5E-10	1.8E-10	2.0E-09	0.0000020	1.6E-10
HHGPHC-4	L-14	6.3E-09	5.2E-13	1.8E-08	3.4E-14	4.9E-10	1.8E-08	1.7E-08	1.8E-08	1.8E-10	1.8E-10	0.0000083	4.3E-11	4.4E-09	3.7E-08	1.8E-08	7.0E-10	2.7E-10	1.6E-10	2.2E-09	0.0000025	1.8E-10
HHGPHC-4	L-15	7.0E-09	4.0E-13	1.9E-08	1.7E-14	1.4E-12	2.0E-08	1.9E-08	1.9E-08	1.8E-10	1.9E-10	0.000012	4.4E-11	4.9E-09	3.7E-08	1.9E-08	1.9E-10	3.0E-10	1.5E-10	2.4E-09	0.0000038	1.9E-10
HHGPHC-4	L-16	1.4E-08	4.4E-13	2.1E-08	1.8E-14	1.5E-12	2.2E-08	2.1E-08	0.00000034	1.8E-10	2.1E-10	0.000017	4.6E-11	5.3E-09	4.2E-08	2.1E-08	2.1E-10	3.3E-10	1.6E-10	2.2E-09	0.0000040	2.1E-10
HHGPHC-4	L-17	1.1E-08	3.1E-13	2.3E-08	1.1E-14	1.6E-12	2.4E-08	2.3E-08	2.3E-08	2.0E-10	2.3E-10	0.000028	3.8E-11	5.8E-09	4.5E-08	2.3E-08	2.3E-10	3.6E-10	1.6E-10	2.0E-09	0.0000025	2.3E-10

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHGPHC-1	L-1	0.00000042	8.2E-10	5.6E-10	5.8E-10	0.00000065	1.2E-10	7.3E-08	1.7E-11	1.6E-09	4.8E-11	1.9E-08	6.5E-09	0.00000029	0.00000022	0.00000038	1.6E-11	8.1E-11
HHGPHC-1	L-2	1.2E-08	1.3E-09	4.3E-11	1.5E-10	0.00000011	1.1E-10	1.2E-08	1.3E-10	1.1E-09	2.9E-10	3.5E-09	5.0E-08	3.4E-08	-	-	-	-
HHGPHC-1	L-3	3.7E-08	1.5E-09	3.2E-11	4.4E-10	3.7E-08	1.7E-10	3.7E-08	3.1E-10	1.3E-09	8.8E-10	7.5E-09	4.4E-08	5.1E-08	0.00000011	2.4E-08	1.2E-10	4.1E-11
HHGPHC-1	L-4	4.2E-09	1.8E-09	1.5E-11	1.4E-09	4.2E-09	2.6E-10	1.7E-08	4.1E-10	1.1E-09	1.0E-09	3.5E-09	8.4E-09	2.9E-09	-	-	-	-
HHGPHC-1	L-5	1.7E-09	1.4E-09	2.4E-11	2.7E-09	1.7E-09	2.0E-10	1.7E-09	5.4E-10	7.6E-10	4.5E-10	2.7E-09	1.7E-09	3.0E-09	-	-	-	-
HHGPHC-1	L-6	3.6E-09	8.9E-10	2.8E-11	3.4E-09	3.6E-09	1.4E-10	3.6E-09	9.2E-10	7.5E-10	4.0E-10	3.0E-09	2.5E-09	3.6E-09	9.0E-12	2.3E-09	3.2E-11	1.3E-11
HHGPHC-1	L-7	5.4E-09	6.5E-10	1.9E-11	3.3E-09	5.4E-09	1.1E-10	5.4E-09	1.0E-09	7.3E-10	2.9E-10	3.3E-09	3.3E-09	7.4E-09	-	-	-	-
HHGPHC-1	L-8	2.7E-08	6.2E-10	2.4E-11	4.7E-09	0.00000044	1.2E-10	2.7E-08	1.5E-09	4.9E-10	4.5E-10	8.8E-09	1.2E-08	3.7E-08	-	-	-	-
HHGPHC-1	L-9	8.2E-09	4.2E-10	2.8E-11	2.2E-09	3.3E-08	7.1E-11	8.2E-09	8.5E-10	5.1E-10	1.3E-10	3.0E-09	5.7E-09	1.4E-09	0.00000056	8.2E-09	1.1E-10	1.5E-08
HHGPHC-1	L-10	1.0E-08	3.8E-10	3.5E-11	2.5E-09	4.0E-08	1.0E-10	1.0E-08	9.0E-10	2.8E-10	1.1E-10	4.5E-09	7.0E-09	7.0E-09	-	-	-	-
HHGPHC-1	L-11	1.2E-08	3.5E-10	4.1E-11	3.0E-09	4.7E-08	7.6E-11	1.2E-08	9.7E-10	2.7E-10	7.0E-11	4.6E-09	1.0E-08	2.1E-09	-	-	-	-
HHGPHC-1	L-12	1.4E-08	3.0E-10	4.7E-11	2.9E-09	0.00000012	7.4E-11	1.4E-08	9.4E-10	2.9E-10	8.1E-11	5.2E-09	1.2E-08	2.4E-08	0.00000041	3.4E-09	2.0E-10	5.5E-10
HHGPHC-1	L-13	1.6E-08	2.9E-10	1.3E-11	2.6E-09	0.00000014	6.9E-11	1.6E-08	8.3E-10	3.8E-10	9.2E-11	5.7E-09	1.3E-08	2.7E-09	-	-	-	-
HHGPHC-1	L-14	1.7E-08	2.6E-10	6.0E-11	2.7E-09	0.00000028	7.7E-11	1.7E-08	7.5E-10	2.4E-10	4.6E-11	5.6E-09	1.5E-08	3.0E-09	-	-	-	-
HHGPHC-1	L-15	1.9E-08	2.4E-10	1.7E-11	2.3E-09	0.00000031	6.9E-11	1.9E-08	7.8E-10	2.6E-10	5.0E-11	6.0E-09	1.9E-08	3.3E-09	0.0000012	1.9E-08	2.9E-10	1.0E-09
HHGPHC-1	L-16	2.1E-08	2.4E-10	1.8E-11	2.5E-09	0.00000034	6.0E-11	2.1E-08	8.0E-10	2.6E-10	5.5E-11	6.8E-09	2.5E-08	3.7E-09	-	-	-	-
HHGPHC-1	L-17	2.3E-08	2.3E-10	2.0E-11	2.1E-09	0.00000057	8.2E-11	2.3E-08	7.1E-10	1.8E-10	6.0E-11	6.7E-09	2.3E-08	4.0E-09	0.00000075	2.3E-08	3.3E-10	1.2E-09
HHGPHC-2	L-1	0.00000075	9.3E-10	6.5E-10	1.1E-09	0.0000012	1.3E-10	7.3E-08	1.9E-11	2.4E-09	4.8E-11	2.4E-08	5.9E-09	0.0000001	0.00000019	0.00000056	2.1E-11	8.2E-11
HHGPHC-2	L-2	1.3E-08	1.5E-09	1.2E-11	1.0E-10	0.0000002	1.3E-10	1.3E-08	1.5E-10	1.2E-09	3.0E-10	2.3E-09	5.9E-08	1.5E-08	-	-	-	-
HHGPHC-2	L-3	3.8E-08	1.5E-09	3.7E-11	4.9E-10	3.8E-08	1.9E-10	3.8E-08	3.2E-10	9.7E-10	9.0E-10	8.1E-09	5.9E-08	2.0E-09	0.0000001	2.1E-08	1.1E-10	4.2E-11
HHGPHC-2	L-4	4.3E-09	1.9E-09	1.7E-11	1.5E-09	4.3E-09	3.0E-10	4.3E-09	4.2E-10	8.7E-10	1.0E-09	4.3E-09	1.1E-08	1.3E-09	-	-	-	-
HHGPHC-2	L-5	1.7E-09	1.4E-09	2.7E-11	2.8E-09	1.7E-09	2.4E-10	1.7E-09	5.4E-10	6.2E-10	5.0E-10	2.4E-09	2.0E-09	5.1E-10	-	-	-	-
HHGPHC-2	L-6	3.6E-09	9.1E-10	3.2E-11	3.5E-09	3.6E-09	1.7E-10	3.6E-09	9.2E-10	5.8E-10	4.1E-10	3.0E-09	2.5E-09	1.1E-09	2.3E-12	2.1E-09	3.6E-11	1.0E-11
HHGPHC-2	L-7	5.5E-09	6.5E-10	2.2E-11	3.5E-09	2.2E-08	1.2E-10	5.5E-09	1.0E-09	5.5E-10	2.9E-10	3.5E-09	3.6E-09	3.7E-09	-	-	-	-
HHGPHC-2	L-8	2.8E-08	6.3E-10	2.7E-11	5.2E-09	0.00000044	1.7E-10	2.8E-08	1.5E-09	6.3E-10	4.6E-10	1.1E-08	1.3E-08	8.3E-09	-	-	-	-
HHGPHC-2	L-9	8.3E-09	4.4E-10	3.2E-11	2.3E-09	3.3E-08	8.3E-11	8.3E-09	8.8E-10	3.3E-10	1.4E-10	3.6E-09	5.8E-09	2.5E-09	0.0000005	8.3E-09	1.1E-10	1.5E-08
HHGPHC-2	L-10	1.0E-08	3.8E-10	4.0E-11	2.8E-09	9.1E-08	1.0E-10	1.0E-08	9.2E-10	2.3E-10	1.1E-10	5.4E-09	8.5E-09	3.0E-09	-	-	-	-
HHGPHC-2	L-11	1.2E-08	3.6E-10	1.2E-11	3.0E-09	4.8E-08	8.8E-11	1.2E-08	9.6E-10	2.2E-10	7.1E-11	5.3E-09	1.0E-08	6.2E-10	-	-	-	-
HHGPHC-2	L-12	1.4E-08	3.0E-10	5.4E-11	3.2E-09	0.00000013	7.1E-11	1.4E-08	9.7E-10	2.2E-10	8.2E-11	6.1E-09	1.2E-08	2.9E-09	0.0000005	1.4E-08	2.0E-10	5.6E-10
HHGPHC-2	L-13	1.6E-08	2.9E-10	6.2E-11	2.9E-09	0.00000014	8.0E-11	1.6E-08	8.6E-10	2.9E-10	9.3E-11	6.8E-09	1.3E-08	8.1E-10	-	-	-	-
HHGPHC-2	L-14	1.8E-08	2.7E-10	1.7E-11	2.6E-09	0.00000028	7.3E-11	1.8E-08	7.7E-10	2.5E-10	4.6E-11	6.0E-09	1.5E-08	9.1E-10	-	-	-	-
HHGPHC-2	L-15	2.0E-08	2.4E-10	4.8E-12	2.6E-09	0.00000031	8.1E-11	2.0E-08	7.5E-10	2.8E-10	5.1E-11	7.7E-09	1.6E-08	1.0E-09	0.00000076	2.0E-08	2.8E-10	1.1E-09
HHGPHC-2	L-16	2.1E-08	2.5E-10	2.1E-11	2.8E-09	0.00000034	7.0E-11	2.1E-08	8.2E-10	1.7E-10	5.6E-11	8.6E-09	2.1E-08	1.1E-09	-	-	-	-
HHGPHC-2	L-17	2.3E-08	2.3E-10	5.7E-12	2.4E-09	0.00000058	9.6E-11	2.3E-08	7.4E-10	1.5E-10	6.1E-11	7.9E-09	2.7E-08	1.2E-09	0.00000077	2.3E-08	3.5E-10	1.3E-09
HHGPHC-3	L-1	0.00000057	2.9E-10	1.8E-10	4.1E-10	0.00000065	3.7E-11	7.2E-08	1.3E-11	5.0E-10	3.4E-11	9.6E-09	5.1E-09	0.0000012	-	-	-	-
HHGPHC-3	L-2	1.2E-08	4.9E-10	3.3E-12	7.0E-11	0.0000002	5.0E-11	1.2E-08	1.1E-10	4.6E-10	2.1E-10	1.6E-09	6.3E-08	7.1E-08	-	-	-	-
HHGPHC-3	L-3	3.7E-08	5.6E-10	1.0E-11	3.0E-10	3.7E-08	7.7E-11	3.7E-08	2.2E-10	6.6E-10	6.3E-10	6.6E-09	6.6E-08	0.00000021	-	-	-	-
HHGPHC-3	L-4	4.2E-09	6.5E-10	4.5E-12	8.4E-10	4.2E-09	1.1E-10	4.2E-09	2.8E-10	3.3E-10	7.2E-10	2.6E-09	1.1E-08	4.2E-09	-	-	-	-
HHGPHC-3	L-5	1.7E-09	4.5E-10	7.3E-12	1.7E-09	1.7E-09	9.1E-11	1.7E-09	3.8E-10	2.7E-10	3.5E-10	1.7E-09	2.0E-09	1.3E-08	-	-	-	-
HHGPHC-3	L-6	3.6E-09	3.2E-10	8.7E-12	2.1E-09	3.6E-09	6.7E-11	3.6E-09	6.6E-10	2.8E-10	2.4E-10	1.8E-09	2.5E-09	2.8E-08	-	-	-	-
HHGPHC-3	L-7	5.4E-09	2.2E-10	5.8E-12	2.2E-09	2.2E-08	4.5E-11	5.4E-09	7.1E-10	2.8E-10	1.6E-10	2.2E-09	3.3E-09	3.1E-08	-	-	-	-
HHGPHC-3	L-8	2.7E-08	2.2E-10	7.3E-12	3.1E-09	0.00000044	5.6E-11	2.7E-08	1.0E-09	1.6E-10	2.1E-10	6.8E-09	1.3E-08	0.00000016	-	-	-	-
HHGPHC-3	L-9	8.2E-09	1.5E-10	8.8E-12	1.5E-09	3.3E-08	3.3E-11	8.2E-09	6.3E-10	1.8E-10	9.7E-11	2.1E-09	5.7E-09	8.2E-09	-	-	-	-
HHGPHC-3	L-10	1.0E-08	1.3E-10	1.1E-11	1.8E-09	9.0E-08	3.5E-11	1.0E-08	6.6E-10	9.3E-11	7.5E-11	3.5E-09	8.4E-09	5.7E-08	-	-	-	-
HHGPHC-3	L-11	1.2E-08	1.3E-10	3.2E-12	2.0E-09	4.7E-08	3.5E-11	1.2E-08	7.2E-10	8.2E-11	5.0E-11	3.5E-09	9.9E-09	1.2E-08	-	-	-	-
HHGPHC-3	L-12	1.4E-08	1.1E-10	1.5E-11	1.9E-09	0.00000012	3.4E-11	1.4E-08	7.0E-10	1.1E-10	5.8E-11	3.6E-09	1.1E-08	1.4E-08	-	-	-	-
HHGPHC-3	L-13	1.6E-08	1.0E-10	4.2E-12	2.0E-09	0.00000014	3.2E-11	1.6E-08	6.3E-10	1.1E-10	6.6E-11	3.9E-09	1.3E-08	1.6E-08	-	-	-	-
HHGPHC-3	L-14	1.7E-08	9.5E-11	4.7E-12	1.6E-09	0.00000028	2.9E-11	1.7E-08	5.3E-10	7.7E-11	3.3E-11	3.5E-09	1.5E-08	1.7E-08	-	-	-	-
HHGPHC-3	L-15	1.9E-08	8.4E-11	5.2E-12	1.8E-09	0.00000031	3.2E-11	1.9E-08	5.6E-10	1.7E-10	3.6E-11	4.9E-09	1.6E-08	7.7E-08	-	-	-	-
HHGPHC-3	L-16	2.1E-08	9.3E-11	5.6E-12	1.9E-09	0.00000034	2.8E-11	2.1E-08	6.1E-10	9.3E-11	4.0E-11	5.4E-09	2.1E-08	2.1E-08	-	-	-	-
HHGPHC-3	L-17	2.3E-08	8.2E-11	6.1E-12	1.4E-09	0.00000057	3.0E-11	2.3E-08	4.8E-10	6.5E-11	4.3E-11	4.5E-09	2.3E-08	2.3E-08	-	-	-	-
HHGPHC-4	L-1	0.00000095	6.5E-10	6.1E-10	1.4E-09	0.00000066	8.2E-11	7.3E-08	2.1E-11	1.8E-09	5.1E-11	3.3E-08	4.9E-09	0.0000023	-	-	-	-
HHGPHC-4	L-2	1.3E-08	1.1E-09	4.6E-11	2.3E-10	0.00000011	1.1E-10	1.3E-08	1.5E-10	8.3E-10	4.3E-10	5.3E-09	3.5E-08	0.0000008	-	-	-	-
HHGPHC-4	L-3	3.8E-08	1.3E-09	8.7E-12	9.3E-10	3.8E-08	1.7E-10	3.8E-08	3.5E-10	8.2E-10	1.3E-09	1.5E-08	3.8E-08	0.00000015	-	-	-	-
HHGPHC-4	L-4	4.3E-09	1.6E-09	1.6E-11	2.6E-09	4.3E-09	2.5E-10	4.3E-09	4.1E-10	6.2E-10	1.1E-09	8.2E-09	7.6E-09	3.3E-08	-	-	-	-
HHGPHC-4	L-5	1.7E-09	1.3E-09	2.5E-11	4.0E-09	1.7E-09	2.1E-10	1.7E-09	5.7E-10	5.6E-10	4.8E-10	4.4E-09	1.7E-09	2.2E-08	-	-	-	-
HHGPHC-4	L-6	3.6E-09	8.2E-10	3.0E-11	4.8E-09	3.6E-09	1.5E-10	3.6E-09	9.2E-10	5.7E-10	4.3E-10	5.9E-09	2.5E-09	2.1E-08	-	-	-	-
HHGPHC-4	L-7	5.5E-09	5.7E-10	2.0E-11	4.5E-09	5.5E-09	9.8E-11	5.5E-09	1.0E-09	5.4E-10	2.4E-10	6.0E-09	3.5E-09	7.1E-08	-	-	-	-
HHGPHC-4	L-8	2.8E-08	5.8E-10	2.5E-11	6.3E-09	0.00000025	1.2E-10	2.8E-08	1.4E-09	3.6E-10	4.8E-10	1.7E-08	1.3E-08	0.00000016	-	-	-	-
HHGPHC-4	L-9	8.3E-09	3.7E-10	3.1E-11	3.2E-09	3.3E-08	7.2E-11	8.3E-09	8.7E-10	3.2E-10	1.4E-10	5.4E-09	5.8E-09	8.3E-09	-	-	-	-
HHGPHC-4	L-10	1.0E-08	3.3E-10	3.7E-11	3.6E-09	4.0E-08	7.6E-11	1.0E-08	9.1E-10	1.7E-10	1.1E-10	8.1E-09	8.5E-09	4.0E-08	-	-	-	-
HHGPHC-4	L-11	1.4E-08	3.6E-10	5.0E-11	4.1E-09	5.4E-08	7.3E-11	1.4E-08	1.1E-09	1.5E-10	8.5E-11	8.9E-09	1.1E-08	0.00000056	-	-	-	-
HHGPHC-4	L-12	1.4E-08	2.6E-10	5.1E-11	3.8E-09	0.00000012	7.5E-11	1.4E-08	9.2E-10	3.6E-10	8.6E-11	8.8E-09	1.2E-08	1.4E-08	-	-	-	-
HHGPHC-4	L-13	1.6E-08	2.6E-10	1.4E-11	3.6E-09	0.00000014	7.0E-11	1.6E-08	8.6E-10	2.2E-10	4.4E-11	8.7E-09	1.6E-08	1.6E-08	-	-	-	-
HHGPHC-4	L-14	1.8E-08	2.4E-10	1.6E-11	3.2E-09	0.00000016	6.3E-11	1.8E-08	7.7E-10	2.3E-10	4.9E-11	7.6E-09	1.8E-08	1.8E-08	-	-	-	-
HHGPHC-4	L-15	1.9E-08	2.1E-10	1.8E-11	3.2E-09	0.00000031	7.0E-11	1.9E-08	7.6E-10	2.1E-10	5.4E-11	1.1E-08	1.9E-08	1.9E-08	-	-	-	-
HHGPHC-4	L-16	2.1E-08	2.2E-10	2.0E-11	3.5E-09	0.00000034	6.1E-11	2.1E-08	7.8E-10	1.6E-10	5.9E-11	1.1E-08	2.5E-08	2.1E-08	-	-	-	-
HHGPHC-4	L-17	2.3E-08	1.9E-10	2.1E-11	2.6E-09	0.00000058	6.6E-11	2.3E-08	6.5E-10	1.0E-10	1.6E-11	9.8E-09	2.7E-08	2.3E-08	-	-	-	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-S-1	L-1	2020-01-13	0.080	0.10	0.057	0.00047	573	1.00	0.57	0.0082	7.0	0.86	1842	-	1.9E-11	2.2E-11	1.8E-08	1.8E-08	3.1E-12	1.3E-11	1.3E-11	1.1E-13
HLC-S-1	L-2	2020-01-14	1.0	0.10	0.057	0.00047	635	1.00	0.64	0.0082	7.8	0.86	1842	-	6.3E-12	6.6E-12	3.5E-09	3.5E-09	5.3E-11	3.5E-11	3.5E-11	1.3E-10
HLC-S-1	L-3	2020-01-15	2.0	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.86	1842	-	3.0E-11	2.8E-11	1.0E-08	1.0E-08	9.4E-11	4.5E-11	4.4E-11	2.6E-10
HLC-S-1	L-4	2020-01-20	7.0	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	1.4E-11	1.3E-11	1.2E-09	1.2E-09	8.5E-11	2.9E-11	2.8E-11	4.2E-10
HLC-S-1	L-5	2020-01-27	14	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	3.9E-11	7.3E-12	0.00000015	1.5E-09	1.3E-10	4.5E-11	4.4E-11	5.5E-10
HLC-S-1	L-6	2020-02-10	28	0.10	0.057	0.00047	636	1.0	0.64	0.0082	7.8	0.86	1842	-	8.7E-11	4.8E-11	7.5E-08	7.5E-10	1.2E-10	4.1E-11	4.1E-11	3.4E-10
HLC-S-1	L-7	2020-02-24	42	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	1.6E-10	7.6E-11	0.00000019	1.3E-09	1.4E-10	5.6E-11	5.5E-11	5.3E-10
HLC-S-1	L-8	2020-03-02	49	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.86	1842	-	6.5E-10	3.5E-10	0.00000068	6.8E-09	2.1E-10	8.3E-11	8.3E-11	6.7E-10
HLC-S-1	L-9	2020-03-16	63	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.86	1842	-	2.7E-10	1.3E-10	0.0000003	2.1E-09	1.3E-10	6.3E-11	6.3E-11	4.4E-10
HLC-S-1	L-10	2020-03-30	77	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	2.0E-10	9.5E-11	0.00000026	2.6E-09	1.4E-10	6.5E-11	6.4E-11	3.3E-10
HLC-S-1	L-11	2020-04-13	91	0.10	0.057	0.00047	633	1.00	0.63	0.0082	7.7	0.86	1842	-	1.7E-10	1.1E-10	4.9E-08	3.1E-09	1.5E-10	6.6E-11	6.5E-11	2.3E-10
HLC-S-1	L-12	2020-04-27	105	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.86	1842	-	4.7E-10	2.3E-10	0.00000052	3.6E-09	1.4E-10	6.8E-11	6.7E-11	1.3E-10
HLC-S-1	L-13	2020-05-11	119	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.86	1842	-	4.9E-10	2.3E-10	0.00000061	4.2E-09	1.1E-10	6.9E-11	6.9E-11	8.8E-11
HLC-S-1	L-14	2020-05-25	133	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1842	-	3.4E-10	1.6E-10	0.00000047	4.7E-09	1.2E-10	7.6E-11	7.6E-11	6.9E-11
HLC-S-1	L-15	2020-06-08	147	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.86	1842	-	6.5E-10	2.7E-10	0.0000010	5.2E-09	1.1E-10	7.7E-11	7.7E-11	4.9E-11
HLC-S-1	L-16	2020-06-22	161	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.86	1842	-	2.6E-10	1.3E-10	0.00000037	5.8E-09	9.7E-11	7.7E-11	7.7E-11	3.5E-11
HLC-S-1	L-17	2020-07-06	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.86	1842	-	1.4E-10	2.3E-11	0.00000063	6.3E-09	1.0E-10	8.5E-11	8.5E-11	2.3E-11
HLC-S-1	L-18	2020-08-03	203	0.10	0.057	0.00047	638	1.00	0.64	0.0082	7.8	0.86	1842	-	1.2E-10	1.2E-10	1.8E-09	1.8E-09	6.9E-11	6.8E-11	6.8E-11	1.2E-11
HLC-S-1	L-19	2020-08-31	231	0.10	0.057	0.00047	639	1.0	0.64	0.0082	7.8	0.86	1842	-	1.4E-10	1.8E-11	0.0000008	2.0E-09	6.2E-11	7.7E-11	7.6E-11	7.3E-12
HLC-S-1	L-20	2020-09-28	259	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.86	1842	-	1.4E-10	1.4E-10	2.3E-09	2.3E-09	4.6E-11	8.4E-11	8.3E-11	3.0E-12
HLC-S-2	L-1	2020-01-13	0.080	0.10	0.057	0.00047	587	1.00	0.59	0.0082	7.2	0.85	1828	-	4.4E-11	4.7E-11	2.0E-08	2.0E-08	1.0E-11	3.6E-11	3.6E-11	1.6E-13
HLC-S-2	L-2	2020-01-14	1.0	0.10	0.057	0.00047	625	1.00	0.63	0.0082	7.7	0.85	1828	-	7.8E-12	8.3E-12	3.4E-09	3.4E-09	3.9E-11	2.8E-11	2.8E-11	8.3E-11
HLC-S-2	L-3	2020-01-15	2.0	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	3.9E-11	3.8E-11	1.1E-08	1.1E-08	7.7E-11	3.4E-11	3.4E-11	2.1E-10
HLC-S-2	L-4	2020-01-20	7.0	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.8	0.85	1828	-	6.3E-11	6.2E-11	1.2E-09	1.2E-09	8.6E-11	2.8E-11	2.7E-11	3.7E-10
HLC-S-2	L-5	2020-01-27	14	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	1.2E-10	6.5E-11	9.9E-08	1.5E-09	1.2E-10	3.9E-11	3.8E-11	4.3E-10
HLC-S-2	L-6	2020-02-10	28	0.10	0.057	0.00047	645	1.0	0.65	0.0082	7.9	0.85	1828	-	7.0E-11	2.4E-11	0.00000011	7.8E-10	9.6E-11	4.1E-11	4.1E-11	3.2E-10
HLC-S-2	L-7	2020-02-24	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	1.9E-10	1.1E-10	0.00000013	1.3E-09	1.2E-10	5.3E-11	5.3E-11	3.5E-10
HLC-S-2	L-8	2020-03-02	49	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.85	1828	-	4.4E-10	2.2E-10	0.00000045	7.1E-09	1.7E-10	8.2E-11	8.2E-11	4.7E-10
HLC-S-2	L-9	2020-03-16	63	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	3.1E-10	1.0E-10	0.00000055	2.2E-09	1.1E-10	6.2E-11	6.1E-11	3.3E-10
HLC-S-2	L-10	2020-03-30	77	0.10	0.057	0.00047	640	1.00	0.64	0.0082	7.8	0.85	1828	-	3.8E-10	1.0E-10	0.0000011	2.6E-09	1.2E-10	5.8E-11	5.7E-11	2.9E-10
HLC-S-2	L-11	2020-04-13	91	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	2.6E-10	8.9E-11	0.00000046	3.2E-09	1.4E-10	6.3E-11	6.3E-11	2.5E-10
HLC-S-2	L-12	2020-04-27	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	6.9E-10	3.0E-10	0.00000074	3.8E-09	1.3E-10	6.5E-11	6.5E-11	1.6E-10
HLC-S-2	L-13	2020-05-11	119	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	3.5E-10	6.0E-11	0.0000011	4.3E-09	1.1E-10	6.1E-11	6.1E-11	1.2E-10
HLC-S-2	L-14	2020-05-25	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	5.8E-10	2.5E-10	0.0000007	4.9E-09	1.2E-10	6.9E-11	6.8E-11	5.8E-11
HLC-S-2	L-15	2020-06-08	147	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	4.0E-10	6.2E-11	0.0000014	5.4E-09	1.1E-10	7.1E-11	7.1E-11	7.8E-11
HLC-S-2	L-16	2020-06-22	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	1.2E-10	1.4E-11	0.00000059	5.9E-09	1.1E-10	7.6E-11	7.6E-11	6.3E-11
HLC-S-2	L-17	2020-07-06	175	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	4.4E-10	3.0E-10	0.0000001	6.4E-09	1.2E-10	8.2E-11	8.2E-11	4.8E-11
HLC-S-2	L-18	2020-08-03	203	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.85	1828	-	1.6E-10	5.6E-11	0.00000026	1.8E-09	8.0E-11	6.8E-11	6.8E-11	2.9E-11
HLC-S-2	L-19	2020-08-31	231	0.10	0.057	0.00047	635	1.0	0.63	0.0082	7.8	0.85	1828	-	1.8E-10	2.3E-11	0.0000008	2.0E-09	7.1E-11	6.6E-11	6.6E-11	1.5E-11
HLC-S-2	L-20	2020-09-28	259	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	2.1E-10	1.2E-10	0.00000015	2.3E-09	7.1E-11	8.3E-11	8.3E-11	7.7E-12
HLC-S-3	L-1	2020-01-13	0.080	0.10	0.057	0.00047	600	1.00	0.60	0.0082	7.4	0.85	1825	-	2.2E-11	2.6E-11	2.0E-08	2.0E-08	7.2E-12	7.7E-12	7.4E-12	8.7E-13
HLC-S-3	L-2	2020-01-14	1.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.85	1825	-	1.1E-11	1.0E-11	3.6E-09	3.6E-09	3.1E-11	1.6E-11	1.6E-11	9.9E-11
HLC-S-3	L-3	2020-01-15	2.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1825	-	3.2E-11	3.1E-11	1.1E-08	1.1E-08	7.5E-11	2.2E-11	2.2E-11	2.2E-10
HLC-S-3	L-4	2020-01-20	7.0	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1825	-	3.7E-11	3.9E-11	1.2E-09	1.2E-09	7.6E-11	2.3E-11	2.2E-11	3.5E-10
HLC-S-3	L-5	2020-01-27	14	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	4.2E-11	4.5E-12	0.00000023	1.6E-09	1.1E-10	3.5E-11	3.5E-11	4.6E-10
HLC-S-3	L-6	2020-02-10	28	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.85	1825	-	9.5E-11	4.6E-11	0.00000011	7.8E-10	9.5E-11	3.5E-11	3.5E-11	3.8E-10
HLC-S-3	L-7	2020-02-24	42	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1825	-	9.8E-11	5.6E-11	8.5E-08	1.3E-09	1.1E-10	4.7E-11	4.6E-11	3.9E-10
HLC-S-3	L-8	2020-03-02	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	4.8E-10	3.2E-10	0.0000011	7.0E-09	1.5E-10	7.1E-11	7.1E-11	5.2E-10
HLC-S-3	L-9	2020-03-16	63	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	1.1E-10	6.2E-12	0.00000086	2.2E-09	1.1E-10	5.5E-11	5.5E-11	3.8E-10
HLC-S-3	L-10	2020-03-30	77	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.85	1825	-	2.5E-10	6.2E-11	0.00000069	2.7E-09	1.2E-10	5.5E-11	5.5E-11	3.3E-10
HLC-S-3	L-11	2020-04-13	91	0.10	0.057	0.00047	641	1.00	0.64	0.0082	7.9	0.85	1825	-	3.2E-10	1.7E-10	0.00000032	3.2E-09	1.3E-10	5.7E-11	5.7E-11	3.0E-10
HLC-S-3	L-12	2020-04-27	105	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	5.5E-10	1.6E-10	0.0000015	3.8E-09	1.3E-10	5.6E-11	5.5E-11	1.8E-10
HLC-S-3	L-13	2020-05-11	119	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	2.7E-10	1.1E-10	0.00000043	4.3E-09	1.1E-10	5.8E-11	5.8E-11	1.4E-10
HLC-S-3	L-14	2020-05-25	133	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1825	-	3.9E-10	4.0E-10	4.9E-09	4.9E-09	1.2E-10	6.1E-11	6.1E-11	1.1E-10
HLC-S-3	L-15	2020-06-08	147	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	6.1E-10	2.9E-10	0.00000078	5.4E-09	1.2E-10	6.4E-11	6.4E-11	7.6E-11
HLC-S-3	L-16	2020-06-22	161	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1825	-	2.8E-10	1.9E-10	9.5E-08	5.9E-09	1.1E-10	6.6E-11	6.6E-11	6.7E-11
HLC-S-3	L-17	2020-07-06	175	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1825	-	3.4E-10	3.5E-10	6.5E-09	6.5E-09	1.2E-10	7.2E-11	7.2E-11	5.1E-11
HLC-S-3	L-18	2020-08-03	203	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1825	-	1.4E-10	4.2E-11	0.00000036	1.8E-09	7.6E-11	6.2E-11	6.2E-11	2.5E-11
HLC-S-3	L-19	2020-08-31	231	0.10	0.057	0.00047	637	1.0	0.64	0.0082	7.8	0.85	1825	-	1.7E-10	5.2E-11	0.0000004	2.0E-09	6.7E-11	6.6E-11	6.6E-11	1.4E-11
HLC-S-3	L-20	2020-09-28	259	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1825	-	1.6E-10	1.6E-10	2.3E-09	2.3E-09	6.5E-11	7.4E-11	7.3E-11	5.3E-12
HLC-S-4	L-1	2020-01-13	0.080	0.10	0.057	0.00047	574	1.00	0.58	0.0082	7.0	0.85	1828	-	3.5E-11	3.7E-11	1.9E-08	1.9E-08	8.7E-12	3.1E-11	3.0E-11	1.2E-13
HLC-S-4	L-2	2020-01-14	1.0	0.10	0.057	0.00047	637	1.00	0.64	0.0082	7.8	0.85	1828	-	3.4E-11	3.4E-11	3.6E-09	3.6E-09	4.9E-11	5.0E-11	5.0E-11	7.9E-11
HLC-S-4	L-3	2020-01-15	2.0	0.10	0.057	0.00047	634	1.00	0.63	0.0082	7.8	0.85	1828	-	4.5E-11	4.1E-11	1.1E-08	1.1E-08	9.6E-11	5.9E-11	5.9E-11	2.0E-10
HLC-S-4	L-4	2020-01-20	7.0	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	9.7E-11	8.2E-11	4.9E-09	1.2E-09	9.6E-11	3.6E-11	3.6E-11	4.7E-10
HLC-S-4	L-5	2020-01-27	14	0.10	0.057	0.00047	647	1.00	0.65	0.0082	7.9	0.85	1828	-	1.8E-10	9.9E-11	0.00000016	1.6E-09	1.5E-10	5.3E-11	5.3E-11	6.3E-10
HLC-S-4	L-6	2020-02-10	28	0.10	0.057	0.00047	644	1.0	0.64	0.0082	7.9	0.85	1828	-	1.1E-10	5.6E-11	0.00000011	7.8E-10	1.3E-10	4.7E-11	4.7E-11	3.8E-10
HLC-S-4	L-7	2020-02-24	42	0.10	0.057	0.00047	639	1.00	0.64	0.0082	7.8	0.85	1828	-	1.6E-10	6.0E-11	0.00000026	1.3E-09	1.5E-10	6.2E-11	6.2E-11	5.2E-10
HLC-S-4	L-8	2020-03-02	49	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	5.6E-10	3.2E-10	0.00000045	7.0E-09	2.5E-10	9.8E-11	9.8E-11	7.6E-10
HLC-S-4	L-9	2020-03-16	63	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	3.9E-10	1.3E-10	0.00000086	2.1E-09	1.6E-10	7.2E-11	7.2E-11	4.8E-10
HLC-S-4	L-10	2020-03-30	77	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1828	-	3.0E-10	9.4E-11	0.00000068	2.7E-09	1.6E-10	7.2E-11	7.2E-11	3.7E-10
HLC-S-4	L-11	2020-04-13	91	0.10	0.057	0.00047	642	1.00	0.64	0.0082	7.9	0.85	1828	-	3.4E-10	1.9E-10	0.00000032	3.2E-09	1.7E-10	8.0E-11	8.0E-11	2.7E-10
HLC-S-4	L-12	2020-04-27	105	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	4.5E-10	6.7E-11	0.0000022	3.8E-09	1.5E-10	8.7E-11	8.7E-11	1.6E-10
HLC-S-4	L-13	2020-05-11	119	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	3.2E-10	4.1E-11	0.0000017	4.3E-09	1.3E-10	8.3E-11	8.3E-11	1.0E-10
HLC-S-4	L-14	2020-05-25	133	0.10	0.057	0.00047	646	1.00	0.65	0.0082	7.9	0.85	1828	-	3.0E-10	6.5E-11	0.00000095	4.9E-09	1.4E-10	8.7E-11	8.7E-11	7.5E-11
HLC-S-4	L-15	2020-06-08	147	0.10	0.057	0.00047	645	1.00	0.65	0.0082	7.9	0.85	1828	-	7.4E-10	2.5E-10	0.0000014	5.4E-09	1.2E-10	9.3E-11	9.3E-11	5.3E-11
HLC-S-4	L-16	2020-06-22	161	0.10	0.057	0.00047	643	1.00	0.64	0.0082	7.9	0.85	1828	-	5.1E-10	2.1E-10	0.00000085	5.9E-09	1.1E-10	9.3E-11	9.3E-11	3.3E-11
HLC-S-4	L-17	2020-07-06	175	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	4.0E-10	2.3E-10	0.00000041	6.5E-09	1.2E-10	1.1E-10	1.1E-10	2.5E-11
HLC-S-4	L-18	2020-08-03	203	0.10	0.057	0.00047	648	1.00	0.65	0.0082	7.9	0.85	1828	-	1.4E-10	3.7E-11	0.00000036	1.8E-09	7.5E-11	9.3E-11	9.3E-11	1.2E-11
HLC-S-4	L-19	2020-08-31	231	0.10	0.057	0.00047	641	1.0	0.64	0.0082	7.8	0.85	1828	-	1.2E-10	1.2E-10	2.1E-09	2.1E-09	6.8E-11	9.7E-11	9.7E-11	5.1E-12
HLC-S-4	L-20	2020-09-28	259	0.10	0.057	0.00047	644	1.00	0.64	0.0082	7.9	0.85	1828	-	1.2E-10	1.3E-10	2.3E-09	2.3E-09	5.6E-11	1.0E-10	1.0E-10	2.3E-12

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-S-1	L-1	1.5E-11	3.2E-11	2.9E-10	1.6E-12	-	-	1.8E-08	-	3.6E-12	4.2E-11	5.8E-09	5.5E-12	2.0E-11	7.1E-10	1.8E-10	7.3E-12	1.8E-10	1.8E-10	2.0E-09	3.0E-08	7.3E-08
HLC-S-1	L-2	5.2E-11	1.4E-10	8.8E-10	6.2E-11	-	-	3.4E-09	-	4.0E-11	4.1E-09	2.6E-10	6.9E-11	1.4E-10	1.2E-09	3.5E-11	2.2E-11	3.5E-11	3.5E-11	6.6E-10	1.4E-09	0.00000069
HLC-S-1	L-3	1.0E-10	2.4E-10	6.5E-10	1.3E-10	-	-	1.0E-08	-	6.9E-11	6.0E-09	2.0E-09	1.5E-10	1.9E-10	2.6E-09	1.0E-10	1.0E-10	4.2E-10	1.0E-10	9.4E-10	0.00000015	0.00000017
HLC-S-1	L-4	9.8E-11	2.3E-10	3.0E-10	1.5E-10	-	-	0.000012	-	6.8E-11	6.9E-10	4.1E-10	1.7E-10	1.1E-10	7.1E-10	1.2E-11	4.3E-12	4.8E-11	1.2E-11	1.1E-10	9.4E-09	1.2E-09
HLC-S-1	L-5	1.5E-10	3.9E-10	3.8E-10	2.4E-10	-	-	0.000015	-	1.1E-10	3.5E-10	2.0E-10	2.9E-10	2.0E-10	1.1E-09	1.5E-11	5.4E-12	6.0E-11	1.5E-11	1.1E-10	7.0E-10	1.5E-09
HLC-S-1	L-6	1.2E-10	3.4E-10	1.9E-10	2.0E-10	-	-	0.0000073	-	9.5E-11	1.7E-10	1.7E-10	2.8E-10	3.3E-10	8.1E-10	7.5E-10	1.2E-10	7.5E-10	7.5E-10	8.3E-11	7.5E-10	7.5E-10
HLC-S-1	L-7	1.2E-10	4.3E-10	3.2E-10	2.4E-10	-	-	0.000013	-	1.1E-10	7.4E-11	3.6E-10	3.8E-10	1.4E-10	1.0E-09	1.3E-09	1.3E-11	1.3E-09	1.3E-09	1.4E-10	1.3E-09	1.3E-09
HLC-S-1	L-8	1.4E-10	7.2E-10	4.3E-10	3.3E-10	-	-	0.00000067	-	1.5E-10	4.8E-11	1.5E-09	6.4E-10	6.1E-10	2.3E-09	6.8E-11	6.8E-13	6.8E-11	6.8E-11	2.7E-10	2.1E-09	6.8E-09
HLC-S-1	L-9	9.6E-11	4.4E-10	5.2E-10	2.1E-10	-	-	0.00000021	-	1.0E-10	3.0E-11	5.8E-10	4.3E-10	3.3E-10	1.5E-09	2.1E-11	6.8E-11	2.1E-11	2.1E-11	8.3E-11	1.3E-09	2.1E-09
HLC-S-1	L-10	2.4E-10	4.3E-10	6.5E-10	2.0E-10	-	-	0.00000026	-	1.0E-10	2.0E-11	7.7E-10	4.7E-10	4.2E-10	1.7E-09	2.6E-11	6.6E-11	2.6E-11	2.6E-11	1.0E-10	1.5E-09	2.6E-09
HLC-S-1	L-11	3.7E-10	4.5E-10	1.9E-10	1.8E-10	-	-	0.0000003	-	9.7E-11	1.8E-11	3.3E-08	4.3E-10	4.1E-10	1.6E-09	3.1E-11	3.1E-11	1.2E-10	3.1E-11	2.2E-10	1.1E-08	3.1E-09
HLC-S-1	L-12	1.1E-10	4.2E-10	2.2E-10	1.7E-10	-	-	0.0000014	-	8.8E-11	6.9E-12	9.3E-10	4.3E-10	4.8E-10	1.7E-09	3.6E-11	5.2E-11	3.6E-11	3.6E-11	6.4E-11	3.9E-09	3.6E-09
HLC-S-1	L-13	2.2E-10	3.8E-10	2.6E-10	1.5E-10	-	-	0.00000041	-	8.3E-11	5.5E-12	1.3E-09	4.0E-10	3.8E-10	1.6E-09	4.2E-11	1.5E-11	4.2E-11	4.2E-11	7.5E-11	1.5E-09	4.2E-09
HLC-S-1	L-14	2.2E-10	4.3E-10	1.2E-09	1.4E-10	-	-	0.00000047	-	8.2E-11	3.7E-12	1.4E-09	3.9E-10	4.3E-10	1.8E-09	4.7E-11	1.7E-11	4.7E-11	4.7E-11	1.3E-10	9.2E-10	4.7E-09
HLC-S-1	L-15	2.2E-10	4.0E-10	8.2E-11	1.2E-10	-	-	0.00000052	-	7.0E-11	4.1E-12	1.4E-09	3.7E-10	4.7E-10	2.0E-09	5.2E-11	8.4E-12	5.2E-11	5.2E-11	2.1E-10	1.6E-09	2.1E-08
HLC-S-1	L-16	2.6E-10	3.6E-10	9.0E-11	1.0E-10	-	-	0.00000057	-	6.9E-11	2.3E-12	1.4E-09	3.1E-10	5.2E-10	2.2E-09	5.8E-11	5.8E-13	5.8E-11	5.8E-11	2.3E-10	9.2E-10	2.3E-08
HLC-S-1	L-17	2.5E-10	3.7E-10	9.9E-11	9.9E-11	-	-	0.00011	-	6.3E-11	6.3E-13	2.0E-09	3.1E-10	5.7E-10	2.1E-09	6.3E-11	1.2E-10	6.3E-11	6.3E-11	6.3E-11	1.2E-09	6.3E-09
HLC-S-1	L-18	9.7E-11	2.4E-10	1.1E-10	6.0E-11	-	-	0.00000017	-	4.6E-11	1.4E-12	5.2E-10	1.8E-10	2.8E-10	1.8E-09	1.8E-11	3.4E-11	1.8E-11	1.8E-11	4.9E-11	1.0E-09	2.8E-08
HLC-S-1	L-19	9.2E-11	2.5E-10	1.3E-10	5.1E-11	-	-	0.0000002	-	4.5E-11	2.0E-13	8.1E-10	2.1E-10	4.4E-10	1.7E-09	2.0E-11	1.2E-10	2.0E-11	2.0E-11	3.6E-11	1.6E-10	2.0E-09
HLC-S-1	L-20	1.6E-10	2.7E-10	1.4E-10	3.7E-11	-	-	0.000065	-	3.9E-11	2.3E-13	1.3E-09	1.7E-10	3.6E-10	1.6E-09	2.3E-11	9.1E-11	2.3E-11	2.3E-11	2.5E-10	5.2E-10	2.3E-09
HLC-S-2	L-1	4.3E-11	4.9E-11	1.2E-09	3.6E-12	-	-	1.9E-08	-	1.3E-11	8.0E-11	4.6E-10	1.1E-11	8.7E-11	1.4E-09	2.0E-10	2.0E-12	3.1E-09	2.0E-10	1.5E-09	0.00000025	7.8E-08
HLC-S-2	L-2	3.4E-11	1.1E-10	8.6E-10	4.3E-11	-	-	3.4E-09	-	3.2E-11	1.6E-09	1.2E-10	4.4E-11	9.6E-11	9.9E-10	3.4E-11	5.5E-12	5.5E-10	3.4E-11	7.8E-10	0.00000016	0.00000022
HLC-S-2	L-3	9.5E-11	2.2E-10	6.8E-10	1.1E-10	-	-	1.1E-08	-	7.0E-11	2.5E-09	6.4E-11	1.1E-10	1.9E-10	2.0E-09	1.1E-10	7.0E-11	1.1E-10	1.1E-10	4.4E-10	7.6E-08	1.1E-08
HLC-S-2	L-4	7.5E-11	2.3E-10	3.1E-10	1.4E-10	-	-	1.2E-09	-	7.9E-11	3.3E-10	6.6E-12	1.5E-10	1.1E-10	6.9E-10	1.2E-11	3.1E-11	4.9E-11	1.2E-11	4.9E-11	5.1E-09	1.2E-09
HLC-S-2	L-5	1.3E-10	3.2E-10	3.8E-10	1.8E-10	-	-	0.000015	-	1.0E-10	1.2E-10	4.9E-12	2.4E-10	1.7E-10	9.5E-10	1.5E-11	5.0E-11	6.2E-11	1.5E-11	6.2E-11	1.5E-09	1.5E-09
HLC-S-2	L-6	1.0E-10	3.0E-10	2.0E-10	1.5E-10	-	-	0.0000077	-	8.5E-11	3.1E-11	1.1E-11	2.1E-10	3.5E-10	6.8E-10	7.8E-10	3.1E-11	7.8E-10	7.8E-10	4.9E-11	3.1E-09	7.8E-10
HLC-S-2	L-7	6.4E-11	3.5E-10	3.3E-10	1.6E-10	-	-	0.000013	-	9.6E-11	3.9E-11	9.2E-12	2.7E-10	2.5E-10	8.2E-10	1.3E-10	3.4E-11	1.3E-11	1.3E-11	3.0E-11	1.4E-09	1.3E-09
HLC-S-2	L-8	1.4E-10	5.7E-10	4.4E-10	2.3E-10	-	-	0.0000007	-	1.3E-10	4.1E-11	5.3E-11	4.9E-10	5.0E-10	2.0E-09	7.1E-11	2.3E-10	7.1E-11	7.1E-11	1.6E-10	1.6E-09	7.1E-09
HLC-S-2	L-9	1.1E-10	3.6E-10	1.3E-10	1.5E-10	-	-	0.00000021	-	9.5E-11	2.2E-11	1.9E-11	3.2E-10	2.9E-10	1.5E-09	2.2E-11	4.2E-11	2.2E-11	2.2E-11	8.6E-11	5.8E-10	2.2E-09
HLC-S-2	L-10	1.8E-10	3.6E-10	6.6E-10	1.5E-10	-	-	0.00000026	-	9.6E-11	1.1E-11	3.0E-11	3.9E-10	2.9E-10	1.4E-09	2.6E-11	4.2E-12	2.6E-11	2.6E-11	4.1E-11	3.3E-09	2.6E-09
HLC-S-2	L-11	2.1E-10	3.6E-10	2.0E-10	1.6E-10	-	-	0.00000032	-	1.0E-10	8.7E-12	4.6E-11	3.7E-10	4.3E-10	1.6E-09	3.2E-11	3.2E-11	3.2E-11	3.2E-11	7.2E-11	3.7E-09	3.2E-09
HLC-S-2	L-12	4.8E-11	3.8E-10	5.9E-11	1.6E-10	-	-	0.00000037	-	9.7E-11	7.3E-12	4.6E-11	4.1E-10	4.2E-10	1.6E-09	3.8E-11	3.8E-13	3.8E-11	3.8E-11	1.4E-09	3.8E-09	3.8E-09
HLC-S-2	L-13	1.7E-10	3.3E-10	2.7E-10	1.4E-10	-	-	0.00000043	-	8.9E-11	8.4E-12	4.6E-11	3.7E-10	3.9E-10	1.4E-09	4.3E-11	6.9E-12	4.3E-11	4.3E-11	1.4E-09	4.3E-09	4.3E-09
HLC-S-2	L-14	1.8E-10	3.5E-10	1.2E-09	1.4E-10	-	-	0.00000048	-	9.1E-11	6.3E-12	6.3E-11	3.7E-10	3.5E-10	1.8E-09	4.9E-11	1.9E-12	4.9E-11	4.9E-11	7.6E-11	2.0E-09	4.9E-09
HLC-S-2	L-15	1.9E-10	3.4E-10	8.4E-11	1.3E-10	-	-	0.00000053	-	8.6E-11	5.5E-12	7.7E-11	3.9E-10	4.8E-10	2.0E-09	5.4E-11	3.4E-11	5.4E-11	5.4E-11	8.4E-11	1.0E-09	2.1E-08
HLC-S-2	L-16	2.1E-10	3.7E-10	9.3E-11	1.3E-10	-	-	0.00000058	-	9.5E-11	4.7E-12	6.3E-11	5.6E-10	5.3E-10	1.5E-09	5.9E-11	8.5E-11	5.9E-11	5.9E-11	9.3E-11	3.1E-09	2.4E-08
HLC-S-2	L-17	2.1E-10	3.5E-10	1.0E-10	1.3E-10	-	-	0.00012	-	8.7E-11	5.0E-12	7.3E-11	3.8E-10	5.8E-10	2.1E-09	6.4E-11	9.2E-11	6.4E-11	6.4E-11	2.3E-09	2.6E-08
HLC-S-2	L-18	8.7E-11	2.3E-10	1.1E-10	8.8E-11	-	-	0.00000018	-	6.7E-11	2.9E-12	2.0E-11	2.3E-10	3.4E-10	1.7E-09	1.8E-11	3.5E-11	1.8E-11	1.8E-11	2.8E-11	7.4E-10	2.9E-08
HLC-S-2	L-19	8.0E-11	2.5E-10	3.1E-11	7.2E-11	-	-	0.0000002	-	5.4E-11	1.6E-12	2.6E-11	2.4E-10	3.8E-10	1.5E-09	2.0E-11	3.2E-12	2.0E-11	2.0E-11	3.1E-11	1.2E-10	2.0E-09
HLC-S-2	L-20	7.6E-11	2.9E-10	1.5E-10	6.0E-11	-	-	0.000059	-	6.0E-11	1.4E-12	1.1E-10	2.1E-10	3.8E-10	1.6E-09	2.3E-11	2.3E-13	2.3E-11	2.3E-11	9.4E-11	9.6E-10	2.3E-09
HLC-S-3	L-1	3.3E-11	3.6E-11	1.3E-09	9.3E-12	-	-	5.0E-09	-	7.2E-12	7.6E-10	1.4E-08	1.2E-11	2.3E-11	7.9E-10	2.0E-10	2.0E-12	3.3E-09	2.0E-10	5.1E-09	0.00000017	0.0000013
HLC-S-3	L-2	3.6E-11	1.1E-10	5.6E-11	4.8E-11	-	-	8.7E-10	-	2.9E-11	8.3E-10	2.3E-09	3.6E-11	6.4E-11	4.6E-10	3.6E-11	1.3E-11	5.7E-10	3.6E-11	1.3E-09	5.2E-08	5.7E-08
HLC-S-3	L-3	6.9E-11	3.6E-10	6.8E-10	9.6E-11	-	-	2.6E-09	-	5.4E-11	7.1E-10	2.0E-09	8.3E-11	1.1E-10	8.8E-10	1.1E-10	1.1E-10	1.1E-10	1.1E-10	6.8E-10	2.8E-08	1.1E-08
HLC-S-3	L-4	7.9E-11	2.2E-10	3.1E-10	1.2E-10	-	-	3.0E-10	-	6.5E-11	8.9E-11	4.1E-10	1.3E-10	8.8E-11	2.7E-10	1.2E-11	4.0E-11	4.9E-11	1.2E-11	1.5E-10	4.0E-09	1.2E-09
HLC-S-3	L-5	1.1E-10	3.4E-10	3.9E-10	1.7E-10	-	-	0.0000038	-	9.7E-11	7.4E-11	3.4E-10	2.1E-10	1.8E-10	3.9E-10	1.6E-11	7.6E-11	2.5E-10	1.6E-11	3.9E-10	1.6E-08	6.3E-09
HLC-S-3	L-6	9.4E-11	3.0E-10	2.0E-10	1.5E-10	-	-	0.0000019	-	8.0E-11	3.1E-11	1.8E-10	2.1E-10	3.5E-10	3.2E-10	7.8E-10	3.1E-11	7.8E-10	7.8E-10	2.0E-10	7.8E-10	7.8E-10
HLC-S-3	L-7	7.6E-11	3.7E-10	3.3E-10	1.7E-10	-	-	0.0000032	-	9.5E-11	3.2E-11	1.8E-10	2.7E-10	2.5E-10	4.9E-10	1.3E-11	1.9E-11	5.3E-11	1.3E-11	8.3E-11	1.7E-09	1.3E-09
HLC-S-3	L-8	1.4E-10	6.0E-10	4.4E-10	2.4E-10	-	-	0.00000017	-	1.2E-10	3.6E-11	1.2E-09	4.6E-10	5.0E-10	1.3E-09	7.0E-11	2.3E-10	7.0E-11	7.0E-11	4.4E-10	8.8E-09	7.0E-09
HLC-S-3	L-9	9.8E-11	3.7E-10	1.3E-10	1.6E-10	-	-	5.3E-08	-	9.2E-11	1.4E-11	4.6E-10	3.2E-10	3.4E-10	9.9E-10	2.2E-11	8.6E-13	2.2E-11	2.2E-11	8.6E-11	6.8E-10	2.2E-09
HLC-S-3	L-10	1.8E-10	3.6E-10	1.7E-10	1.6E-10	-	-	6.6E-08	-	9.8E-11	6.2E-12	6.8E-10	3.8E-10	3.6E-10	1.1E-09	2.7E-11	3.9E-11	2.7E-11	2.7E-11	1.1E-10	1.7E-09	2.7E-09
HLC-S-3	L-11	2.2E-10	3.7E-10	5.0E-11	1.6E-10	-	-	7.8E-08	-	9.7E-11	6.2E-12	8.0E-10	3.8E-10	5.1E-10	1.3E-09	3.2E-11	1.3E-12	3.2E-11	3.2E-11	1.3E-10	1.7E-09	3.2E-09
HLC-S-3	L-12	7.4E-11	3.8E-10	2.4E-10	1.5E-10	-	-	9.2E-08	-	9.1E-11	3.9E-12	1.0E-09	4.1E-10	5.1E-10	1.4E-09	3.8E-11	3.8E-11	3.8E-11	3.8E-11	1.5E-10	2.2E-09	3.8E-09
HLC-S-3	L-13	1.9E-10	3.5E-10	6.8E-11	1.5E-10	-	-	0.00000011	-	9.1E-11	6.9E-12	8.6E-10	3.7E-10	3.9E-10	1.2E-09	4.3E-11	2.5E-10	4.3E-11	4.3E-11	1.7E-10	8.4E-10	4.3E-09
HLC-S-3	L-14	1.9E-10	3.7E-10	3.0E-10	1.5E-10	-	-	0.00000012	-	9.3E-11	6.3E-12	1.4E-09	3.8E-10	4.4E-10	1.4E-09	4.9E-11	4.9E-13	4.9E-11	4.9E-11	3.0E-10	2.2E-09	4.9E-09
HLC-S-3	L-15	1.9E-10	3.8E-10	8.5E-11	1.4E-10	-	-	0.00000013	-	8.6E-11	7.0E-12	1.4E-09	4.1E-10	6.0E-10	1.8E-09	5.4E-11	8.7E-12	5.4E-11	5.4E-11	3.4E-10	3.8E-09	5.4E-09
HLC-S-3	L-16	2.2E-10	3.7E-10	9.3E-11	1.4E-10	-	-	0.00000015	-	8.9E-11	3.4E-12	1.4E-09	3.7E-10	5.3E-10	1.7E-09	5.9E-11	1.2E-10	5.9E-11	5.9E-11	3.7E-10	3.1E-09	5.9E-09
HLC-S-3	L-17	2.3E-10	4.1E-10	1.0E-10	1.3E-10	-	-	0.000029	-	8.3E-11	5.1E-12	3.7E-09	3.5E-10	5.8E-10	1.9E-09	6.5E-11	6.5E-13	6.5E-11	6.5E-11	1.0E-09	4.6E-09	0.0000001
HLC-S-3	L-18	8.2E-11	2.5E-10	1.1E-10	8.5E-11	-	-	4.4E-08	-	6.3E-11	1.0E-12	6.4E-10	2.4E-10	3.9E-10	1.3E-09	1.8E-11	2.6E-11	1.8E-11	1.8E-11	1.1E-10	4.2E-09	7.2E-09
HLC-S-3	L-19	6.1E-11	2.7E-10	1.3E-10	6.7E-11	-	-	5.0E-08	-	5.5E-11	8.1E-13	8.5E-10	2.3E-10	3.8E-10	1.5E-09	2.0E-11	2.0E-13	2.0E-11	2.0E-11	3.2E-10	1.5E-08	2.0E-09
HLC-S-3	L-20	1.5E-11	2.9E-10	1.5E-10	5.0E-11	-	-	0.000015	-	4.9E-11	2.3E-13	1.9E-09	1.8E-10	3.8E-10	1.4E-09	2.3E-11	2.3E-13	2.3E-11	2.3E-11	2.1E-10	4.5E-10	2.3E-09
HLC-S-4	L-1	3.4E-11	3.9E-11	1.2E-09	3.0E-12	-	-	1.8E-08	-	8.5E-12	7.7E-11	3.4E-09	1.1E-11	8.3E-11	1.4E-09	1.9E-10	1.9E-12	7.5E-10	1.9E-10	5.7E-09	0.0000001	7.5E-08
HLC-S-4	L-2	4.7E-11	1.4E-10	8.9E-10	5.1E-11	-	-	3.5E-09	-	4.1E-11	2.5E-09	6.4E-10	5.7E-11	9.9E-11	1.4E-09	3.6E-11	1.4E-12	1.4E-10	3.6E-11	7.2E-10	2.1E-08	0.00000036
HLC-S-4	L-3	1.2E-10	2.8E-10	6.6E-10	1.2E-10	-	-	1.0E-08	-	7.4E-11	2.9E-09	1.2E-09	1.4E-10	1.9E-10	3.1E-09	1.1E-10	6.8E-11	1.1E-10	1.1E-10	6.6E-10	6.7E-08	1.1E-08
HLC-S-4	L-4	8.5E-11	2.8E-10	3.0E-10	1.7E-10	-	-	1.2E-09	-	8.0E-11	7.8E-10	1.1E-10	1.8E-10	1.1E-10	1.0E-09	1.2E-11	7.8E-12	4.9E-11	1.2E-11	1.9E-10	2.3E-09	1.2E-09
HLC-S-4	L-5	1.6E-10	4.9E-10	3.9E-10	2.9E-10	-	-	0.000015	-	1.4E-10	3.6E-10	1.2E-10	3.2E-10	2.1E-10	1.3E-09	1.6E-11	6.3E-11	6.3E-11	1.6E-11	1.9E-10	4.0E-09	1.6E-09
HLC-S-4	L-6	1.3E-10	4.0E-10	2.0E-10	2.4E-10	-	-	0.0000076	-	1.1E-10	8.0E-11	1.1E-10	3.2E-10	3.5E-10	9.1E-10	7.8E-10	3.1E-11	7.8E-10	7.8E-10	2.0E-10	7.8E-10	7.8E-10
HLC-S-4	L-7	1.0E-10	5.0E-10	3.3E-10	2.6E-10	-	-	0.000013	-	1.3E-10	7.5E-11	1.7E-10	3.9E-10	1.5E-10	1.3E-09	1.3E-09	5.2E-11	1.3E-09	1.3E-09	3.3E-10	1.3E-09	1.3E-09
HLC-S-4	L-8	1.3E-10	8.8E-10	4.4E-10	4.2E-10	-	-	0.00000069	-	1.8E-10	7.0E-11	1.3E-09	7.8E-10	6.3E-10	3.4E-09	7.0E-11	3.4E-10	7.0E-11	7.0E-11	4.4E-10	4.0E-10	7.0E-09
HLC-S-4	L-9	9.9E-11	5.2E-10	5.4E-10	2.6E-10	-	-	0.00000021	-	1.2E-10	2.1E-11	3.2E-10	4.8E-10	3.4E-10	2.0E-09	2.1E-11	3.4E-12	2.1E-11	2.1E-11	8.6E-11	1.2E-09	2.1E-09
HLC-S-4	L-10	2.5E-10	5.3E-10	1.7E-10	2.3E-10	-	-	0.00000026	-	1.2E-10	1.2E-11	4.5E-10	5.2E-10	3.6E-10	1.9E-09	2.7E-11	8.6E-11	2.7E-11	2.7E-11	1.1E-10	4.9E-09	2.7E-09
HLC-S-4	L-11	2.9E-10	5.4E-10	2.0E-10	2.3E-10	-	-	0.00000032	-	1.2E-10	1.2E-11	5.4E-10	4.9E-10	5.1E-10	2.1E-09	3.2E-11	4.6E-11	3.2E-11	3.2E-11	2.0E-10	2.5E-09	3.2E-09
HLC-S-4	L-12	1.2E-10	6.0E-10	2.3E-10	2.3E-10	-	-	0.00000037	-	1.2E-10	7.3E-12	9.1E-10	5.0E-10	5.0E-10	2.2E-09	3.8E-11	5.4E-11	3.8E-11	3.8E-11	1.5E-10	1.5E-09	3.8E-09
HLC-S-4	L-13	2.5E-10	5.1E-10	2.7E-10	1.8E-10	-	-	0.00000042	-	1.0E-10	5.6E-12	9.3E-10	4.4E-10	3.9E-10	1.8E-09	4.3E-11	4.3E-11	4.3E-11	4.4E-10	1.7E-10	1.1E-08	4.3E-09
HLC-S-4	L-14	2.5E-10	4.9E-10	3.0E-10	1.6E-10	-	-	0.00000048	-	9.5E-11	5.0E-12	1.2E-09	4.4E-10	4.4E-10	2.3E-09	4.9E-11	4.9E-11	4.9E-11	4.9E-11	3.0E-10	1.3E-09	4.9E-09
HLC-S-4	L-15	2.3E-10	4.8E-10	8.4E-11	1.4E-10	-	-	0.00000053	-	8.6E-11	3.1E-12	1.1E-09	4.2E-10	4.8E-10	2.6E-09	5.4E-11	5.4E-11	5.4E-11	5.4E-11	4.8E-10	1.7E-09	2.2E-08
HLC-S-4	L-16	2.9E-10	5.0E-10	3.7E-10	1.2E-10	-	-	0.00000058	-	8.5E-11	5.9E-13	1.6E-09	3.8E-10	5.3E-10	2.8E-09	5.9E-11	9.4E-12	5.9E-11	5.9E-11	3.7E-10	9.6E-09	5.9E-09
HLC-S-4	L-17	2.8E-10	4.8E-10	4.0E-10	1.2E-10	-	-	0.000092	-	7.8E-11	2.6E-12	2.7E-09	3.5E-10	5.8E-10	2.8E-09	6.5E-11	6.5E-13	6.5E-11	6.5E-11	4.0E-10	4.6E-09	0.0000001
HLC-S-4	L-18	1.4E-10	2.9E-10	4.6E-10	6.9E-11	-	-	0.00000018	-	5.7E-11	7.3E-13	4.5E-10	2.2E-10	3.4E-10	2.3E-09	1.8E-11	7.3E-13	1.8E-11	1.8E-11	1.1E-10	1.4E-09	2.9E-08
HLC-S-4	L-19	8.2E-11	3.1E-10	1.3E-10	5.6E-11	-	-	0.0000002	-	5.2E-11	1.6E-12	3.9E-10	1.7E-10	3.3E-10	2.6E-09	2.1E-11	4.0E-11	2.1E-11	2.1E-11	1.8E-10	1.2E-09	8.2E-09
HLC-S-4	L-20	3.9E-11	3.1E-10	1.5E-10	3.9E-11	-	-	0.000059	-	4.6E-11	2.3E-13	8.9E-10	1.6E-10	3.8E-10	2.3E-09	2.3E-11	1.6E-10	2.3E-11	2.3E-11	5.9E-10	2.3E-11	2.3E-09

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HLC-S-1	L-1	1.8E-10	6.8E-12	7.3E-10	1.2E-08	4.8E-12	1.0E-11	1.8E-10	7.3E-12	1.4E-11	1.8E-10	0.00000055	1.1E-12	1.7E-08	-	-	8.0E-11	-
HLC-S-1	L-2	3.5E-11	4.4E-10	1.4E-10	2.0E-09	3.3E-11	8.2E-11	3.5E-11	3.0E-11	3.0E-10	8.8E-10	0.00000035	8.3E-12	1.6E-09	-	-	3.3E-10	-
HLC-S-1	L-3	4.2E-10	1.0E-09	9.4E-10	8.2E-08	5.2E-11	1.9E-10	1.0E-10	4.2E-11	6.9E-10	1.7E-09	0.00000076	2.0E-11	2.4E-08	-	-	5.0E-10	-
HLC-S-1	L-4	1.2E-11	1.4E-09	1.1E-10	1.9E-09	2.4E-11	1.9E-10	1.2E-11	3.1E-11	8.4E-10	9.7E-10	2.5E-08	2.2E-11	2.8E-10	-	-	2.8E-10	-
HLC-S-1	L-5	1.5E-11	2.4E-09	2.4E-10	8.5E-10	3.3E-11	2.6E-10	1.5E-11	5.2E-11	1.3E-09	1.8E-09	7.4E-08	4.7E-11	1.5E-11	-	-	3.4E-10	-
HLC-S-1	L-6	7.5E-10	2.2E-09	1.9E-10	7.5E-10	2.3E-11	1.4E-10	7.5E-10	5.1E-11	2.1E-09	7.5E-10	4.8E-08	3.2E-11	7.5E-10	-	-	2.9E-10	-
HLC-S-1	L-7	1.3E-09	2.8E-09	3.2E-10	1.3E-09	2.8E-11	2.1E-10	1.3E-09	6.4E-11	2.8E-09	1.3E-09	6.3E-08	8.5E-11	1.3E-09	-	-	3.2E-10	-
HLC-S-1	L-8	6.8E-11	4.3E-09	2.7E-10	4.4E-09	5.5E-11	3.8E-10	6.8E-11	1.0E-10	3.5E-09	4.4E-09	0.00000017	1.7E-10	1.6E-09	-	-	4.9E-10	-
HLC-S-1	L-9	2.1E-11	2.6E-09	1.9E-10	2.1E-09	3.6E-11	2.0E-10	2.1E-11	6.5E-11	2.1E-09	2.5E-09	0.00000015	9.4E-11	2.1E-11	-	-	4.0E-10	-
HLC-S-1	L-10	2.6E-11	2.5E-09	2.3E-10	3.1E-09	4.0E-11	1.2E-10	2.6E-11	8.1E-11	1.5E-09	3.1E-09	0.00000023	1.1E-10	9.3E-10	-	-	4.5E-10	-
HLC-S-1	L-11	3.1E-11	2.3E-09	7.6E-10	1.1E-08	4.1E-11	1.2E-10	3.1E-11	8.0E-11	1.3E-09	3.1E-09	0.00000025	1.1E-10	6.0E-09	-	-	4.7E-10	-
HLC-S-1	L-12	3.6E-11	2.1E-09	3.2E-10	2.3E-09	4.5E-11	1.2E-10	3.6E-11	7.7E-11	1.5E-09	2.9E-09	0.0000002	1.4E-10	1.5E-09	-	-	3.6E-10	-
HLC-S-1	L-13	4.2E-11	1.8E-09	1.7E-10	2.7E-09	3.6E-11	1.1E-10	4.2E-11	7.2E-11	1.1E-09	2.1E-09	0.00000018	1.4E-10	2.4E-09	-	-	3.0E-10	-
HLC-S-1	L-14	4.7E-11	1.9E-09	1.9E-10	2.3E-09	4.1E-11	9.5E-11	4.7E-11	8.1E-11	7.3E-10	3.0E-09	0.0000002	1.5E-10	1.9E-09	-	-	2.5E-10	-
HLC-S-1	L-15	5.2E-11	1.7E-09	4.7E-10	3.4E-09	4.1E-11	1.3E-10	5.2E-11	7.9E-11	5.6E-10	2.6E-09	0.00000042	1.6E-10	1.6E-08	-	-	3.1E-10	-
HLC-S-1	L-16	5.8E-11	1.6E-09	2.3E-10	2.4E-09	5.3E-11	1.1E-10	5.8E-11	7.7E-11	9.2E-10	2.1E-09	0.00000017	1.5E-10	8.8E-09	-	-	2.5E-10	-
HLC-S-1	L-17	6.3E-11	1.6E-09	2.5E-10	2.7E-09	5.3E-11	9.1E-11	6.3E-11	8.4E-11	4.6E-10	2.3E-09	0.00000012	8.1E-11	3.7E-09	-	-	2.4E-10	-
HLC-S-1	L-18	1.8E-11	6.8E-10	2.8E-10	1.3E-09	2.4E-11	4.4E-11	1.8E-11	6.5E-11	1.5E-09	1.4E-09	0.00000032	9.3E-11	6.3E-10	-	-	2.7E-10	-
HLC-S-1	L-19	2.0E-11	1.0E-09	1.8E-10	1.3E-09	2.7E-11	6.1E-11	2.0E-11	7.4E-11	3.9E-10	1.6E-09	8.5E-08	1.3E-10	2.0E-11	-	-	2.2E-10	-
HLC-S-1	L-20	2.3E-11	8.8E-10	3.6E-10	2.1E-09	2.7E-11	4.9E-11	2.3E-11	7.8E-11	2.7E-10	1.5E-09	0.00000025	9.8E-11	1.2E-09	-	-	3.0E-10	-
HLC-S-2	L-1	2.0E-10	1.5E-11	7.8E-10	0.00000031	1.5E-11	3.0E-11	2.0E-10	2.0E-11	1.4E-10	2.0E-10	0.0000020	2.8E-12	8.0E-09	-	-	1.8E-10	-
HLC-S-2	L-2	2.7E-10	2.9E-10	1.7E-09	0.00000019	2.7E-11	9.6E-11	3.4E-11	2.5E-11	4.1E-10	5.5E-10	0.0000011	7.8E-12	0.00000032	-	-	2.7E-10	-
HLC-S-2	L-3	1.1E-10	8.0E-10	4.4E-10	1.1E-08	4.2E-11	1.8E-10	1.1E-10	3.5E-11	6.2E-10	9.8E-10	0.00000053	1.8E-11	1.3E-08	-	-	4.7E-10	-
HLC-S-2	L-4	1.2E-11	1.2E-09	4.9E-11	5.5E-10	2.4E-11	2.0E-10	1.2E-11	2.9E-11	8.5E-10	9.9E-10	2.2E-08	2.1E-11	1.3E-10	-	-	2.8E-10	-
HLC-S-2	L-5	1.5E-11	1.7E-09	6.2E-11	4.9E-10	3.0E-11	3.0E-10	1.5E-11	4.4E-11	1.2E-09	1.5E-09	4.7E-08	4.0E-11	1.5E-11	-	-	3.7E-10	-
HLC-S-2	L-6	7.8E-10	1.4E-09	2.0E-10	4.3E-09	2.2E-11	1.3E-10	7.8E-10	4.8E-11	1.7E-09	7.8E-10	6.4E-08	2.8E-11	7.8E-10	-	-	2.9E-10	-
HLC-S-2	L-7	1.3E-11	1.8E-09	1.2E-10	1.5E-09	2.9E-11	2.0E-10	1.3E-11	5.7E-11	2.4E-09	1.9E-09	7.4E-08	5.8E-11	1.0E-10	-	-	3.3E-10	-
HLC-S-2	L-8	7.1E-11	2.9E-09	2.8E-10	3.1E-09	6.0E-11	3.5E-10	7.1E-11	9.4E-11	2.8E-09	3.5E-09	0.00000025	1.4E-10	2.8E-10	-	-	4.6E-10	-
HLC-S-2	L-9	2.2E-11	1.9E-09	8.6E-11	9.6E-10	3.9E-11	1.9E-10	2.2E-11	6.2E-11	2.0E-09	2.2E-09	0.00000012	7.8E-11	2.2E-11	-	-	4.4E-10	-
HLC-S-2	L-10	2.6E-11	2.0E-09	1.1E-10	2.0E-09	4.0E-11	1.3E-10	2.6E-11	7.6E-11	1.5E-09	2.6E-09	0.00000011	9.6E-11	2.6E-11	-	-	4.0E-10	-
HLC-S-2	L-11	3.2E-11	2.0E-09	1.3E-10	3.4E-09	4.6E-11	1.6E-10	3.2E-11	7.6E-11	1.4E-09	2.6E-09	0.00000014	1.1E-10	3.0E-09	-	-	3.7E-10	-
HLC-S-2	L-12	3.8E-11	1.9E-09	1.5E-10	1.4E-09	4.6E-11	1.6E-10	3.8E-11	8.1E-11	1.9E-09	2.4E-09	0.00000031	1.3E-10	3.8E-11	-	-	3.2E-10	-
HLC-S-2	L-13	4.3E-11	1.7E-09	1.7E-10	1.7E-09	3.8E-11	1.3E-10	4.3E-11	6.5E-11	1.3E-09	2.1E-09	0.00000024	1.3E-10	4.3E-11	-	-	2.8E-10	-
HLC-S-2	L-14	4.9E-11	1.6E-09	1.9E-10	3.1E-09	4.6E-11	1.1E-10	4.9E-11	7.4E-11	1.0E-09	2.4E-09	0.00000035	1.4E-10	6.5E-09	-	-	3.5E-10	-
HLC-S-2	L-15	5.4E-11	1.7E-09	2.1E-10	2.9E-09	4.4E-11	1.5E-10	5.4E-11	8.1E-11	7.5E-10	2.6E-09	0.0000003	1.5E-10	4.9E-09	-	-	3.2E-10	-
HLC-S-2	L-16	1.7E-08	1.8E-09	5.3E-10	2.1E-09	5.9E-11	1.4E-10	5.9E-11	9.0E-11	1.5E-09	2.1E-09	0.00000033	1.6E-10	4.7E-10	-	-	3.5E-10	-
HLC-S-2	L-17	6.4E-11	1.6E-09	2.6E-10	3.1E-09	5.5E-11	1.1E-10	6.4E-11	8.5E-11	5.3E-10	3.1E-09	0.00000092	1.1E-10	3.5E-08	-	-	3.1E-10	-
HLC-S-2	L-18	1.8E-11	8.8E-10	7.2E-11	9.7E-10	2.7E-11	5.2E-11	1.8E-11	6.6E-11	2.1E-09	1.8E-09	0.00000033	9.6E-11	2.3E-10	-	-	3.1E-10	-
HLC-S-2	L-19	2.0E-11	1.0E-09	8.0E-11	8.9E-10	3.0E-11	7.5E-11	2.0E-11	7.4E-11	5.9E-10	2.0E-09	0.00000015	1.1E-10	2.0E-11	-	-	2.7E-10	-
HLC-S-2	L-20	2.3E-11	9.3E-10	3.8E-10	1.4E-09	2.9E-11	6.5E-11	2.3E-11	8.0E-11	4.1E-10	1.9E-09	0.00000053	1.1E-10	4.1E-09	-	-	2.9E-10	-
HLC-S-3	L-1	2.0E-10	5.2E-11	3.3E-09	0.00000022	6.1E-12	2.5E-11	2.0E-10	5.9E-12	2.4E-10	2.0E-10	0.0000015	2.0E-12	5.5E-09	-	-	1.3E-10	-
HLC-S-3	L-2	3.6E-11	3.4E-10	1.3E-09	9.0E-08	1.4E-11	8.9E-11	3.6E-11	1.5E-11	4.2E-10	5.7E-10	0.00000047	8.5E-12	8.7E-09	-	-	1.4E-10	-
HLC-S-3	L-3	6.2E-10	7.3E-10	6.9E-09	6.9E-09	2.2E-11	1.5E-10	1.1E-10	2.6E-11	5.7E-10	9.7E-10	0.0000002	1.6E-11	8.5E-08	-	-	3.6E-10	-
HLC-S-3	L-4	1.2E-11	1.2E-09	2.0E-10	4.9E-10	1.6E-11	1.9E-10	1.2E-11	2.6E-11	7.5E-10	1.0E-09	1.0E-08	2.1E-11	2.8E-10	-	-	1.5E-10	-
HLC-S-3	L-5	1.6E-11	1.9E-09	5.7E-10	1.2E-08	2.3E-11	2.4E-10	1.6E-11	4.5E-11	1.6E-09	1.6E-09	7.7E-08	4.1E-11	6.3E-11	-	-	2.4E-10	-
HLC-S-3	L-6	7.8E-10	1.7E-09	1.3E-08	7.8E-10	1.6E-11	1.3E-10	7.8E-10	4.5E-11	2.1E-09	7.8E-10	2.0E-08	3.0E-11	7.8E-10	-	-	1.4E-10	-
HLC-S-3	L-7	1.3E-11	2.0E-09	4.8E-10	1.1E-09	2.5E-11	1.8E-10	1.3E-11	5.7E-11	2.7E-09	1.9E-09	3.3E-08	6.0E-11	3.6E-10	-	-	2.0E-10	-
HLC-S-3	L-8	7.0E-11	3.2E-09	1.1E-09	4.9E-09	5.2E-11	2.9E-10	7.0E-11	9.3E-11	3.8E-09	3.4E-09	0.0000001	1.3E-10	5.5E-10	-	-	3.0E-10	-
HLC-S-3	L-9	2.2E-11	2.2E-09	3.4E-10	4.0E-10	3.6E-11	1.7E-10	2.2E-11	6.2E-11	2.3E-09	2.2E-09	2.1E-08	8.0E-11	2.2E-11	-	-	2.9E-10	-
HLC-S-3	L-10	2.7E-11	2.3E-09	4.3E-10	1.3E-09	4.0E-11	1.3E-10	2.7E-11	7.8E-11	1.8E-09	2.7E-09	5.5E-08	1.0E-10	2.7E-11	-	-	3.4E-10	-
HLC-S-3	L-11	3.2E-11	2.3E-09	5.1E-10	1.3E-09	4.3E-11	1.3E-10	3.2E-11	7.6E-11	1.5E-09	2.6E-09	0.00000012	1.1E-10	5.1E-10	-	-	3.7E-10	-
HLC-S-3	L-12	3.8E-11	2.2E-09	6.0E-10	7.1E-10	4.7E-11	1.3E-10	3.8E-11	7.2E-11	2.1E-09	2.4E-09	8.0E-08	1.4E-10	2.2E-10	-	-	3.8E-10	-
HLC-S-3	L-13	4.3E-11	1.9E-09	6.9E-10	9.4E-10	3.8E-11	1.2E-10	4.3E-11	6.6E-11	1.2E-09	2.1E-09	0.00000013	1.3E-10	1.6E-09	-	-	2.8E-10	-
HLC-S-3	L-14	4.9E-11	1.9E-09	7.8E-10	2.2E-09	4.4E-11	1.1E-10	4.9E-11	7.3E-11	1.1E-09	3.1E-09	0.00000017	1.4E-10	1.1E-09	-	-	2.9E-10	-
HLC-S-3	L-15	5.4E-11	2.0E-09	8.7E-10	4.4E-09	4.6E-11	1.4E-10	5.4E-11	8.2E-11	9.4E-10	2.7E-09	0.00000027	1.6E-10	8.7E-10	-	-	3.6E-10	-
HLC-S-3	L-16	5.9E-11	1.9E-09	9.5E-10	2.6E-09	6.3E-11	1.3E-10	5.9E-11	7.9E-11	1.4E-09	2.1E-09	0.00000033	1.5E-10	2.4E-09	-	-	2.9E-10	-
HLC-S-3	L-17	6.5E-11	1.9E-09	6.5E-09	1.4E-09	6.5E-11	1.2E-10	6.5E-11	8.7E-11	3.2E-10	2.3E-09	0.00000079	1.1E-10	9.8E-08	-	-	3.5E-10	-
HLC-S-3	L-18	1.8E-11	8.1E-10	2.9E-10	1.9E-09	3.3E-11	5.5E-11	1.8E-11	6.2E-11	2.1E-09	1.8E-09	0.00000016	1.1E-10	7.2E-11	-	-	2.8E-10	-
HLC-S-3	L-19	2.0E-11	1.1E-09	2.1E-08	3.8E-09	3.0E-11	7.0E-11	2.0E-11	6.9E-11	6.5E-10	1.6E-09	0.00000032	1.2E-10	2.1E-08	-	-	3.1E-10	-
HLC-S-3	L-20	2.3E-11	1.0E-09	6.0E-09	1.0E-09	3.1E-11	5.5E-11	2.3E-11	8.0E-11	3.7E-10	1.9E-09	0.00000046	9.2E-11	3.8E-09	-	-	3.1E-10	-
HLC-S-4	L-1	1.9E-10	1.4E-11	3.0E-09	0.00000029	1.7E-11	2.8E-11	1.9E-10	1.9E-11	9.2E-11	1.9E-10	0.0000017	2.3E-12	6.7E-09	-	-	1.7E-10	-
HLC-S-4	L-2	3.6E-11	3.1E-10	5.7E-10	6.2E-08	5.6E-11	1.1E-10	3.6E-11	4.2E-11	3.8E-10	5.7E-10	0.00000051	1.1E-11	1.5E-09	-	-	2.6E-10	-
HLC-S-4	L-3	1.1E-10	7.7E-10	1.7E-09	2.5E-08	7.8E-11	2.0E-10	1.1E-10	5.7E-11	7.2E-10	1.7E-09	0.00000045	2.7E-11	3.3E-09	-	-	5.7E-10	-
HLC-S-4	L-4	1.2E-11	1.5E-09	1.9E-10	3.9E-09	3.6E-11	2.4E-10	1.2E-11	4.1E-11	1.3E-09	1.2E-09	3.7E-08	3.2E-11	1.6E-10	-	-	3.7E-10	-
HLC-S-4	L-5	1.6E-11	2.8E-09	2.5E-10	6.0E-09	3.9E-11	3.7E-10	1.6E-11	6.3E-11	2.5E-09	1.9E-09	8.9E-08	6.3E-11	1.6E-11	-	-	4.8E-10	-
HLC-S-4	L-6	7.8E-10	2.4E-09	3.1E-09	7.8E-10	2.7E-11	2.0E-10	7.8E-10	5.9E-11	3.1E-09	7.8E-10	3.8E-08	4.9E-11	7.8E-10	-	-	3.5E-10	-
HLC-S-4	L-7	1.3E-09	2.7E-09	1.3E-09	1.3E-09	3.9E-11	2.8E-10	1.3E-09	7.6E-11	4.7E-09	1.3E-09	0.00000011	1.0E-10	1.3E-09	-	-	3.8E-10	-
HLC-S-4	L-8	7.0E-11	4.6E-09	1.1E-09	9.3E-09	7.4E-11	5.1E-10	7.0E-11	1.2E-10	5.7E-09	4.5E-09	0.00000063	2.4E-10	7.0E-11	-	-	7.0E-10	-
HLC-S-4	L-9	2.1E-11	3.0E-09	3.4E-10	2.6E-09	4.3E-11	2.6E-10	2.1E-11	7.9E-11	3.6E-09	2.6E-09	0.00000011	1.3E-10	1.2E-10	-	-	4.9E-10	-
HLC-S-4	L-10	2.7E-11	2.7E-09	9.6E-10	8.6E-09	4.7E-11	1.7E-10	2.7E-11	9.8E-11	2.7E-09	3.2E-09	0.00000019	1.6E-10	2.7E-11	-	-	4.9E-10	-
HLC-S-4	L-11	3.2E-11	2.5E-09	5.1E-10	5.4E-09	5.3E-11	1.7E-10	3.2E-11	9.8E-11	2.6E-09	3.2E-09	0.00000039	1.8E-10	5.1E-10	-	-	4.0E-10	-
HLC-S-4	L-12	3.8E-11	2.3E-09	6.0E-10	4.1E-09	5.3E-11	1.7E-10	3.8E-11	1.0E-10	2.4E-09	3.0E-09	0.00000016	2.0E-10	3.8E-11	-	-	4.4E-10	-
HLC-S-4	L-13	4.3E-11	2.0E-09	1.5E-09	7.8E-09	4.9E-11	1.4E-10	4.3E-11	9.7E-11	1.5E-09	2.8E-09	0.00000015	2.1E-10	2.5E-10	-	-	3.7E-10	-
HLC-S-4	L-14	4.9E-11	2.0E-09	7.8E-10	8.9E-09	5.2E-11	1.2E-10	4.9E-11	1.1E-10	1.5E-09	3.1E-09	0.00000039	2.1E-10	1.3E-09	-	-	3.5E-10	-
HLC-S-4	L-15	5.4E-11	2.0E-09	8.6E-10	9.1E-09	5.6E-11	1.6E-10	5.4E-11	1.1E-10	1.2E-09	2.6E-09	0.00000059	2.5E-10	8.6E-10	-	-	3.9E-10	-
HLC-S-4	L-16	5.9E-11	1.8E-09	2.1E-09	2.1E-08	7.2E-11	1.4E-10	5.9E-11	1.0E-10	2.1E-09	2.9E-09	0.00000025	2.4E-10	9.4E-10	-	-	3.2E-10	-
HLC-S-4	L-17	6.5E-11	1.8E-09	1.0E-09	1.2E-08	7.3E-11	1.2E-10	6.5E-11	1.1E-10	8.6E-10	2.3E-09	0.0000017	1.7E-10	1.6E-08	-	-	4.2E-10	-
HLC-S-4	L-18	1.8E-11	9.0E-10	2.9E-10	6.6E-09	3.5E-11	6.1E-11	1.8E-11	9.3E-11	3.3E-09	1.8E-09	0.00000053	1.4E-10	1.8E-11	-	-	1.7E-09	-
HLC-S-4	L-19	2.1E-11	1.2E-09	3.0E-09	4.6E-09	3.8E-11	7.0E-11	2.1E-11	1.0E-10	7.4E-10	2.1E-09	0.0000020	1.2E-10	3.0E-08	-	-	4.0E-10	-
HLC-S-4	L-20	2.3E-11	1.1E-09	3.4E-09	2.3E-09	4.5E-11	6.9E-11	2.3E-11	1.0E-10	5.6E-10	1.9E-09	0.00000094	1.2E-10	1.8E-09	-	-	4.0E-10	-

- Parameter not analyzed

Sample Identification	Time Interval	Date	Cumulative Leaching Time	Sample Diameter	Sample Height	Sample Volume	Eluate Mass	Eluate Density	Eluate volume	Surface Area Exposed to Eluent	Liquid:Surface Area Ratio	Sample mass before test	Sample dry density	Acidity	Total Alkalinity	Bicarbonate	Carbonate	Hydroxide	Total Dissolved Solids	Total Hardness	Ca	Cl
			d	m	m	m^3	g	g/cm^3	L	m^2	mL/cm^2	kg	kg/m^3	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-S-1	L-1	2020-01-13	0.080	0.076	0.15	0.00067	4262	1.00	4.3	0.044	9.7	0.98	1472	5.5E-08	7.0E-11	5.5E-08	1.1E-10	6.2E-12	6.2E-11	3.7E-11	5.1E-11	9.8E-14
HHC-S-1	L-2	2020-01-14	1.0	0.076	0.15	0.00067	4403	1.00	4.4	0.044	10.0	0.98	1472	9.0E-09	1.9E-10	9.0E-09	1.3E-10	3.7E-10	2.5E-10	8.3E-11	7.9E-11	3.3E-11
HHC-S-1	L-3	2020-01-15	2.0	0.076	0.15	0.00067	4416	1.00	4.4	0.044	10	0.98	1472	2.7E-08	2.2E-10	2.7E-08	1.9E-10	3.1E-10	3.6E-10	2.5E-10	2.5E-10	4.4E-13
HHC-S-1	L-4	2020-01-20	7.0	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	3.1E-09	1.5E-10	3.1E-09	4.6E-11	6.5E-10	1.6E-10	2.1E-10	2.1E-10	1.7E-11
HHC-S-1	L-5	2020-01-27	14	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	3.9E-09	1.5E-10	3.9E-09	3.3E-11	7.8E-10	1.4E-10	6.5E-10	6.7E-10	8.6E-12
HHC-S-1	L-6	2020-02-10	28	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	2.0E-09	6.9E-11	2.0E-09	2.7E-11	2.6E-10	7.5E-11	9.9E-10	1.0E-09	5.6E-12
HHC-S-1	L-7	2020-02-24	42	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	3.3E-09	8.5E-11	3.3E-09	3.8E-11	2.7E-10	1.0E-10	2.0E-09	2.0E-09	5.4E-12
HHC-S-1	L-8	2020-03-02	49	0.076	0.15	0.00067	4427	1.00	4.4	0.044	10	0.98	1472	1.7E-08	2.2E-10	1.7E-08	1.4E-10	5.1E-10	1.8E-10	7.4E-09	7.4E-09	7.1E-12
HHC-S-1	L-9	2020-03-16	63	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	5.3E-09	1.2E-10	5.3E-09	7.0E-11	2.9E-10	6.3E-11	3.3E-09	3.3E-09	3.9E-12
HHC-S-1	L-10	2020-03-30	77	0.076	0.15	0.00067	4426	1.00	4.4	0.044	10	0.98	1472	6.7E-09	1.3E-10	6.7E-09	4.0E-11	5.1E-10	1.0E-10	4.6E-09	4.6E-09	4.8E-12
HHC-S-1	L-11	2020-04-13	91	0.076	0.15	0.00067	4426	1.00	4.4	0.044	10	0.98	1472	8.1E-09	1.2E-10	8.1E-09	5.7E-11	3.6E-10	1.4E-10	5.7E-09	5.8E-09	3.3E-12
HHC-S-1	L-12	2020-04-27	105	0.076	0.15	0.00067	4422	1.00	4.4	0.044	10	0.98	1472	9.4E-09	1.8E-10	9.4E-09	5.5E-11	7.7E-10	1.2E-10	6.7E-09	6.7E-09	3.8E-12
HHC-S-1	L-13	2020-05-11	119	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	1.1E-08	1.6E-10	1.1E-08	2.6E-11	9.5E-10	7.0E-11	6.6E-09	6.6E-09	1.9E-12
HHC-S-1	L-14	2020-05-25	133	0.076	0.15	0.00067	4428	1.00	4.4	0.044	10	0.98	1472	1.2E-08	1.7E-10	1.2E-08	7.2E-11	6.0E-10	2.6E-10	5.4E-09	5.5E-09	2.2E-12
HHC-S-1	L-15	2020-06-08	147	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	1.3E-08	1.7E-10	1.3E-08	4.8E-11	8.0E-10	1.2E-10	6.5E-09	6.5E-09	2.4E-12
HHC-S-1	L-16	2020-06-22	161	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	1.5E-08	1.6E-10	1.5E-08	7.1E-11	5.4E-10	9.8E-11	8.1E-09	8.1E-09	2.7E-12
HHC-S-1	L-17	2020-07-06	175	0.076	0.15	0.00067	4425	1.00	4.4	0.044	10	0.98	1472	1.6E-08	1.8E-10	1.6E-08	4.8E-11	8.0E-10	2.2E-10	7.2E-09	7.3E-09	6.5E-14
HHC-S-1	L-18	2020-08-03	203	0.076	0.15	0.00067	4423	1.00	4.4	0.044	10	0.98	1472	4.5E-09	5.9E-11	4.5E-09	2.8E-11	1.7E-10	7.6E-11	3.6E-09	3.6E-09	1.8E-12
HHC-S-1	L-19	2020-08-31	231	0.076	0.15	0.00067	4423	1.0	4.4	0.044	10.0	0.98	1472	5.2E-09	8.8E-11	5.2E-09	3.3E-11	3.4E-10	7.1E-11	5.6E-09	5.6E-09	2.1E-12
HHC-S-1	L-20	2020-09-28	259	0.076	0.15	0.00067	4424	1.00	4.4	0.044	10	0.98	1472	5.9E-09	7.0E-11	5.9E-09	4.4E-11	1.7E-10	9.7E-11	4.7E-09	4.7E-09	1.1E-12
HHC-S-2	L-1	2020-01-13	0.080	0.076	0.15	0.00066	4266	1.00	4.3	0.044	9.7	0.96	1451	5.7E-08	1.1E-10	0.00000091	2.2E-10	1.1E-12	5.9E-11	5.3E-11	6.3E-11	1.7E-13
HHC-S-2	L-2	2020-01-14	1.0	0.076	0.15	0.00066	4387	1.00	4.4	0.044	10	0.96	1451	9.3E-09	1.4E-10	9.3E-09	1.1E-10	2.3E-10	2.0E-10	9.7E-11	9.3E-11	7.2E-11
HHC-S-2	L-3	2020-01-15	2.0	0.076	0.15	0.00066	4395	1.00	4.4	0.044	10	0.96	1451	2.8E-08	2.1E-10	2.8E-08	1.9E-10	2.2E-10	2.2E-10	2.9E-10	3.1E-10	7.8E-13
HHC-S-2	L-4	2020-01-20	7.0	0.076	0.15	0.00066	4396	1.00	4.4	0.044	10	0.96	1451	3.2E-09	1.5E-10	3.2E-09	5.8E-11	4.7E-10	1.3E-10	3.0E-10	3.0E-10	3.5E-11
HHC-S-2	L-5	2020-01-27	14	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	4.0E-09	1.4E-10	4.0E-09	3.1E-11	5.7E-10	1.1E-10	8.5E-10	8.6E-10	1.5E-11
HHC-S-2	L-6	2020-02-10	28	0.076	0.15	0.00066	4398	1.00	4.4	0.044	10	0.96	1451	2.0E-09	8.0E-11	2.0E-09	5.2E-11	1.5E-10	5.6E-11	1.2E-09	1.2E-09	9.9E-12
HHC-S-2	L-7	2020-02-24	42	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	3.4E-09	8.9E-11	3.4E-09	5.1E-11	1.9E-10	6.9E-11	2.9E-09	2.9E-09	9.5E-12
HHC-S-2	L-8	2020-03-02	49	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	1.8E-08	2.1E-10	1.8E-08	1.7E-10	2.7E-10	1.4E-10	9.7E-09	9.9E-09	1.2E-11
HHC-S-2	L-9	2020-03-16	63	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	5.5E-09	9.9E-11	5.5E-09	6.9E-11	1.7E-10	4.1E-11	4.3E-09	4.4E-09	6.8E-12
HHC-S-2	L-10	2020-03-30	77	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	6.9E-09	1.2E-10	6.9E-09	4.8E-11	3.6E-10	7.0E-11	6.1E-09	6.2E-09	8.5E-12
HHC-S-2	L-11	2020-04-13	91	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	8.3E-09	1.2E-10	8.3E-09	7.6E-11	2.1E-10	1.1E-10	5.5E-09	5.6E-09	5.7E-12
HHC-S-2	L-12	2020-04-27	105	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	9.7E-09	1.5E-10	9.7E-09	3.4E-11	5.8E-10	9.8E-11	8.5E-09	8.7E-09	6.7E-12
HHC-S-2	L-13	2020-05-11	119	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	1.1E-08	1.5E-10	1.1E-08	3.6E-11	5.7E-10	4.8E-11	9.3E-09	9.4E-09	3.4E-12
HHC-S-2	L-14	2020-05-25	133	0.076	0.15	0.00066	4401	1.00	4.4	0.044	10	0.96	1451	1.2E-08	1.6E-10	1.2E-08	5.7E-11	4.6E-10	1.1E-10	7.3E-09	7.4E-09	3.8E-12
HHC-S-2	L-15	2020-06-08	147	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	1.4E-08	2.0E-10	1.4E-08	1.3E-10	3.8E-10	8.6E-11	1.2E-08	1.2E-08	4.2E-12
HHC-S-2	L-16	2020-06-22	161	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	1.5E-08	1.7E-10	1.5E-08	1.0E-10	3.4E-10	7.1E-11	1.0E-08	1.0E-08	4.7E-12
HHC-S-2	L-17	2020-07-06	175	0.076	0.15	0.00066	4400	1.00	4.4	0.044	10	0.96	1451	1.7E-08	1.7E-10	1.7E-08	7.0E-11	4.6E-10	1.6E-10	1.2E-08	1.2E-08	5.1E-14
HHC-S-2	L-18	2020-08-03	203	0.076	0.15	0.00066	4402	1.00	4.4	0.044	10	0.96	1451	4.7E-09	5.7E-11	4.7E-09	3.6E-11	1.2E-10	5.5E-11	4.9E-09	4.9E-09	3.2E-12
HHC-S-2	L-19	2020-08-31	231	0.076	0.15	0.00066	4399	1.0	4.4	0.044	10	0.96	1451	5.3E-09	8.8E-11	5.3E-09	4.1E-11	2.4E-10	5.4E-11	7.3E-09	7.4E-09	1.0E-11
HHC-S-2	L-20	2020-09-28	259	0.076	0.15	0.00066	4398	1.00	4.4	0.044	10	0.96	1451	6.0E-09	6.4E-11	6.0E-09	5.3E-11	9.1E-11	6.6E-11	7.0E-09	7.0E-09	4.2E-12
HHC-S-3	L-1	2020-01-13	0.080	0.076	0.15	0.00066	4288	1.00	4.3	0.044	9.8	0.99	1498	5.4E-08	1.3E-10	5.4E-08	1.7E-10	1.5E-11	9.3E-11	3.7E-11	5.0E-11	2.5E-13
HHC-S-3	L-2	2020-01-14	1.0	0.076	0.15	0.00066	4359	1.00	4.4	0.044	10.0	0.99	1498	8.7E-09	1.9E-10	8.7E-09	1.1E-10	7.9E-10	3.2E-10	6.6E-11	6.9E-11	6.5E-11
HHC-S-3	L-3	2020-01-15	2.0	0.076	0.15	0.00066	4373	1.00	4.4	0.044	10	0.99	1498	2.6E-08	2.4E-10	2.6E-08	1.7E-10	7.3E-10	3.2E-10	2.0E-10	2.0E-10	1.1E-12
HHC-S-3	L-4	2020-01-20	7.0	0.076	0.15	0.00066	4376	1.00	4.4	0.044	10	0.99	1498	3.0E-09	1.6E-10	3.0E-09	4.5E-11	1.3E-09	1.8E-10	2.0E-10	2.0E-10	4.2E-11
HHC-S-3	L-5	2020-01-27	14	0.076	0.15	0.00066	4376	1.00	4.4	0.044	10	0.99	1498	3.8E-09	1.5E-10	3.8E-09	2.4E-11	1.8E-09	1.4E-10	7.1E-10	7.1E-10	1.6E-11
HHC-S-3	L-6	2020-02-10	28	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	1.9E-09	8.2E-11	1.9E-09	2.9E-11	5.7E-10	8.8E-11	1.0E-09	1.0E-09	1.4E-11
HHC-S-3	L-7	2020-02-24	42	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	3.2E-09	1.0E-10	3.2E-09	3.5E-11	7.0E-10	1.1E-10	2.3E-09	2.3E-09	1.3E-11
HHC-S-3	L-8	2020-03-02	49	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	1.7E-08	2.4E-10	1.7E-08	1.3E-10	1.1E-09	2.2E-10	7.2E-09	7.2E-09	7.8E-12
HHC-S-3	L-9	2020-03-16	63	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	5.2E-09	1.2E-10	5.2E-09	6.1E-11	5.7E-10	6.8E-11	3.3E-09	3.3E-09	9.6E-12
HHC-S-3	L-10	2020-03-30	77	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	6.5E-09	1.5E-10	6.5E-09	4.4E-11	1.2E-09	5.6E-11	2.5E-09	2.6E-09	6.7E-12
HHC-S-3	L-11	2020-04-13	91	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	7.8E-09	1.4E-10	7.8E-09	5.9E-11	7.8E-10	1.6E-10	3.9E-09	4.0E-09	8.1E-12
HHC-S-3	L-12	2020-04-27	105	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	9.1E-09	1.8E-10	9.1E-09	2.7E-11	2.1E-09	1.5E-10	6.2E-09	6.2E-09	4.2E-12
HHC-S-3	L-13	2020-05-11	119	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	1.0E-08	1.8E-10	1.0E-08	3.3E-11	1.9E-09	1.2E-10	6.6E-09	6.7E-09	4.8E-12
HHC-S-3	L-14	2020-05-25	133	0.076	0.15	0.00066	4378	1.00	4.4	0.044	10	0.99	1498	1.2E-08	1.7E-10	1.2E-08	5.5E-11	1.3E-09	1.7E-10	5.2E-09	5.3E-09	5.4E-12
HHC-S-3	L-15	2020-06-08	147	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	1.3E-08	2.1E-10	1.3E-08	7.4E-11	1.4E-09	9.5E-11	7.9E-09	7.9E-09	6.0E-12
HHC-S-3	L-16	2020-06-22	161	0.076	0.15	0.00066	4377	1.00	4.4	0.044	10	0.99	1498	1.4E-08	2.1E-10	1.4E-08	1.1E-10	8.9E-10	9.9E-11	7.8E-09	7.8E-09	6.6E-12
HHC-S-3	L-17	2020-07-06	175	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	1.6E-08	2.0E-10	1.6E-08	4.6E-11	1.9E-09	2.3E-10	7.9E-09	8.0E-09	1.8E-14
HHC-S-3	L-18	2020-08-03	203	0.076	0.15	0.00066	4379	1.00	4.4	0.044	10	0.99	1498	4.4E-09	5.6E-11	4.4E-09	2.0E-11	3.9E-10	8.0E-11	3.1E-09	3.1E-09	4.5E-12
HHC-S-3	L-19	2020-08-31	231	0.076	0.15	0.00066	4376	1.0	4.4	0.044	10	0.99	1498	5.0E-09	1.0E-10	5.0E-09	3.4E-11	7.3E-10	7.2E-11	4.7E-09	4.8E-09	5.2E-12
HHC-S-3	L-20	2020-09-28	259	0.076	0.15	0.00066	4374	1.00	4.4	0.044	10	0.99	1498	5.6E-09	7.4E-11	5.6E-09	3.8E-11	3.5E-10	1.0E-10	4.4E-09	4.5E-09	2.6E-12
HHC-S-4	L-1	2020-01-13	0.080	0.076	0.15	0.00068	4275	1.00	4.3	0.045	9.6	1.00	1477	5.3E-08	8.5E-11	5.3E-08	1.5E-10	1.5E-12	7.8E-11	6.3E-11	5.7E-11	1.9E-13
HHC-S-4	L-2	2020-01-14	1.0	0.076	0.15	0.00068	4456	1.00	4.5	0.045	10.0	1.00	1477	9.0E-09	1.8E-10	9.0E-09	1.5E-10	2.6E-10	2.5E-10	8.1E-11	8.6E-11	6.6E-11
HHC-S-4	L-3	2020-01-15	2.0	0.076	0.15	0.00068	4467	1.00	4.5	0.045	10	1.00	1477	2.7E-08	2.5E-10	2.7E-08	2.0E-10	3.6E-10	2.3E-10	2.4E-10	2.7E-10	6.1E-13
HHC-S-4	L-4	2020-01-20	7.0	0.076	0.15	0.00068	4467	1.00	4.5	0.045	10	1.00	1477	3.1E-09	1.6E-10	3.1E-09	6.2E-11	5.7E-10	1.7E-10	2.3E-10	2.4E-10	3.4E-11
HHC-S-4	L-5	2020-01-27	14	0.076	0.15	0.00068	4471	1.00	4.5	0.045	10	1.00	1477	3.9E-09	1.6E-10	3.9E-09	4.0E-11	7.2E-10	1.3E-10	7.2E-10	7.3E-10	1.7E-11
HHC-S-4	L-6	2020-02-10	28	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	1.9E-09	8.2E-11	1.9E-09	4.2E-11	2.2E-10	6.9E-11	9.7E-10	1.0E-09	8.6E-12
HHC-S-4	L-7	2020-02-24	42	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	3.3E-09	9.9E-11	3.3E-09	5.0E-11	2.7E-10	8.8E-11	2.2E-09	2.3E-09	7.5E-12
HHC-S-4	L-8	2020-03-02	49	0.076	0.15	0.00068	4474	1.00	4.5	0.045	10	1.00	1477	1.7E-08	2.8E-10	1.7E-08	2.9E-10	2.8E-10	1.9E-10	7.6E-09	7.9E-09	6.3E-12
HHC-S-4	L-9	2020-03-16	63	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	5.3E-09	1.2E-10	5.3E-09	8.1E-11	2.4E-10	6.0E-11	3.6E-09	3.6E-09	7.7E-12
HHC-S-4	L-10	2020-03-30	77	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	6.7E-09	1.5E-10	6.7E-09	7.7E-11	3.9E-10	9.1E-11	4.7E-09	4.8E-09	5.4E-12
HHC-S-4	L-11	2020-04-13	91	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	8.0E-09	1.3E-10	8.0E-09	7.0E-11	3.2E-10	1.5E-10	4.3E-09	4.4E-09	6.5E-12
HHC-S-4	L-12	2020-04-27	105	0.076	0.15	0.00068	4472	1.00	4.5	0.045	10	1.00	1477	9.3E-09	1.7E-10	9.3E-09	3.9E-11	8.1E-10	1.1E-10	6.2E-09	6.4E-09	3.4E-12
HHC-S-4	L-13	2020-05-11	119	0.076	0.15	0.00068	4474	1.00	4.5	0.045	10	1.00	1477	1.1E-08	1.7E-10	1.1E-08	4.4E-11	7.4E-10	8.7E-11	6.7E-09	6.9E-09	3.9E-12
HHC-S-4	L-14	2020-05-25	133	0.076	0.15	0.00068	4475	1.00	4.5	0.045	10	1.00	1477	1.2E-08	1.9E-10	1.2E-08	1.0E-10	5.3E-10	1.4E-10	6.7E-09	6.9E-09	4.4E-12
HHC-S-4	L-15	2020-06-08	147	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	1.3E-08	2.1E-10	1.3E-08	8.6E-11	7.1E-10	9.7E-11	7.5E-09	7.7E-09	4.8E-12
HHC-S-4	L-16	2020-06-22	161	0.076	0.15	0.00068	4473	1.00	4.5	0.045	10	1.00	1477	1.5E-08	2.1E-10	1.5E-08	1.5E-10	3.7E-10	9.9E-11	8.8E-09	9.0E-09	5.3E-12
HHC-S-4	L-17	2020-07-06	175	0.076	0.15	0.00068	4475	1.00	4.5	0.045	10	1.00	1477	1.6E-08	1.9E-10	1.6E-08	6.6E-11	7.1E-10	2.1E-10	8.6E-09	8.7E-09	5.8E-14
HHC-S-4	L-18	2020-08-03	203	0.076	0.15	0.00068	4476	1.00	4.5	0.045	10	1.00	1477	4.5E-09	5.8E-11	4.5E-09	2.9E-11	1.6E-10	6.8E-11	3.0E-09	3.1E-09	3.7E-12
HHC-S-4	L-19	2020-08-31	231	0.076	0.15	0.00068	4467	1.0	4.5	0.045	10.0	1.00	1477	5.1E-09	1.0E-10	5.1E-09	4.5E-11	3.0E-10	6.1E-11	5.0E-09	5.1E-09	4.2E-12
HHC-S-4	L-20	2020-09-28	259	0.076	0.15	0.00068	4469	1.00	4.5	0.045	10	1.00	1477	5.8E-09	7.7E-11	5.8E-09	5.7E-11	1.3E-10	9.6E-11	4.8E-09	4.8E-09	2.1E-12

- Parameter not analyzed

Sample Identification	Time Interval	F	K	Mg	Na	NH_3	NO_2	NO_3	PO_4	SO_4	Ag	Al	As	B	Ba	Be	Cd	Co	Cr	Cu	Fe	Hg
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-S-1	L-1	8.5E-10	6.6E-11	1.4E-08	1.2E-10	2.8E-10	5.6E-08	5.3E-08	5.5E-08	1.2E-10	5.5E-12	1.8E-10	4.2E-11	2.2E-09	9.3E-11	5.5E-10	5.5E-12	1.4E-10	2.0E-11	3.4E-09	3.7E-09	5.5E-08
HHC-S-1	L-2	1.3E-09	1.5E-10	2.3E-09	2.9E-10	1.7E-09	9.2E-09	8.8E-09	3.6E-08	2.3E-10	9.0E-13	1.0E-09	1.5E-10	3.3E-09	1.8E-11	9.0E-11	3.3E-11	9.0E-11	7.7E-11	5.7E-10	1.1E-09	9.0E-09
HHC-S-1	L-3	4.3E-10	1.9E-10	6.8E-09	2.4E-10	1.9E-09	2.8E-08	2.7E-08	0.00000044	8.2E-11	2.7E-12	1.8E-09	1.2E-10	1.1E-09	3.6E-11	2.7E-10	2.7E-10	6.8E-11	7.9E-11	6.1E-10	1.6E-09	2.7E-08
HHC-S-1	L-4	4.3E-10	1.2E-10	7.7E-10	1.3E-10	1.4E-09	3.2E-09	3.0E-09	1.2E-08	1.6E-11	3.1E-13	1.6E-09	7.2E-11	4.9E-10	7.5E-12	3.1E-11	3.1E-13	1.2E-10	5.3E-11	2.8E-10	5.1E-10	3.1E-09
HHC-S-1	L-5	2.4E-10	1.4E-10	9.8E-10	7.6E-11	2.4E-09	4.0E-09	3.8E-09	0.00000014	8.0E-12	3.9E-13	1.5E-09	4.0E-11	1.6E-10	1.3E-11	3.9E-11	1.4E-11	3.9E-11	1.9E-11	1.6E-10	1.9E-10	0.00000025
HHC-S-1	L-6	3.5E-10	6.8E-11	4.9E-10	3.2E-11	1.5E-09	2.0E-09	0.00000019	2.0E-09	5.9E-12	2.0E-13	9.3E-10	2.6E-11	7.8E-11	1.4E-11	2.0E-11	7.8E-13	2.0E-11	7.4E-12	2.4E-10	1.3E-10	2.0E-09
HHC-S-1	L-7	1.3E-10	5.4E-11	8.3E-10	2.0E-11	1.5E-09	3.4E-09	3.2E-09	3.3E-09	6.8E-12	3.3E-13	1.1E-09	1.9E-11	3.3E-11	2.7E-11	3.3E-11	2.1E-11	3.3E-11	1.2E-12	2.1E-10	1.4E-10	3.3E-09
HHC-S-1	L-8	2.7E-10	7.4E-11	4.4E-09	2.1E-11	6.3E-10	1.8E-08	1.7E-08	7.0E-08	5.8E-12	1.7E-12	2.9E-09	2.5E-11	1.7E-10	9.7E-11	1.7E-10	1.7E-12	4.4E-11	6.5E-12	7.0E-10	4.3E-10	1.7E-08
HHC-S-1	L-9	1.2E-10	2.5E-11	1.3E-09	9.3E-12	6.8E-10	5.5E-09	5.2E-09	5.3E-09	6.7E-12	5.3E-13	1.3E-09	1.6E-11	5.3E-11	4.7E-11	5.3E-11	2.1E-12	1.3E-11	2.0E-12	1.2E-10	9.5E-11	2.1E-08
HHC-S-1	L-10	3.4E-10	2.1E-11	1.7E-09	7.9E-12	3.8E-10	6.9E-09	6.6E-09	0.00000011	1.2E-11	6.7E-13	1.5E-09	1.6E-11	6.7E-11	6.5E-11	6.7E-11	2.7E-12	1.7E-11	2.5E-12	1.5E-10	1.4E-10	6.7E-09
HHC-S-1	L-11	3.2E-10	1.7E-11	2.0E-09	5.9E-12	4.6E-10	8.2E-09	7.9E-09	8.1E-09	1.0E-11	8.1E-13	1.7E-09	1.6E-11	8.1E-11	7.5E-11	8.1E-11	8.1E-13	2.0E-11	3.0E-12	1.8E-10	9.9E-11	8.1E-09
HHC-S-1	L-12	2.1E-10	1.6E-11	2.3E-09	5.6E-12	3.4E-10	9.6E-09	9.2E-09	3.8E-08	1.7E-11	9.4E-13	1.8E-09	1.7E-11	9.4E-11	9.1E-11	9.4E-11	3.8E-12	2.3E-11	3.5E-12	2.1E-10	1.6E-10	9.4E-09
HHC-S-1	L-13	2.4E-10	9.8E-12	2.7E-09	3.9E-12	3.0E-10	1.1E-08	1.0E-08	1.1E-08	1.1E-11	1.1E-12	1.6E-09	1.4E-11	1.1E-10	8.8E-11	1.1E-10	1.7E-11	2.7E-11	4.0E-12	1.1E-10	2.0E-10	1.1E-08
HHC-S-1	L-14	1.9E-10	9.4E-12	3.0E-09	3.4E-12	4.4E-10	1.2E-08	1.2E-08	0.00000044	1.9E-11	1.2E-12	1.9E-09	1.6E-11	1.2E-10	1.1E-10	1.2E-10	1.2E-12	3.0E-11	4.5E-12	2.7E-10	2.3E-10	1.2E-08
HHC-S-1	L-15	2.1E-10	8.0E-12	3.4E-09	3.0E-12	2.7E-10	1.4E-08	1.3E-08	5.4E-08	2.1E-11	1.3E-12	2.1E-09	1.6E-11	1.3E-10	1.2E-10	1.3E-10	1.3E-12	3.4E-11	5.0E-12	3.4E-11	8.9E-11	1.3E-08
HHC-S-1	L-16	2.3E-10	7.2E-12	3.7E-09	2.8E-12	3.0E-10	1.5E-08	1.4E-08	5.9E-08	2.3E-11	1.5E-12	2.0E-09	1.6E-11	1.5E-10	1.3E-10	1.5E-10	1.5E-12	3.7E-11	5.5E-12	3.3E-10	4.1E-10	1.5E-08
HHC-S-1	L-17	2.5E-10	6.3E-12	4.0E-09	2.6E-12	2.3E-10	1.6E-08	1.6E-08	0.0000016	1.6E-11	1.6E-12	2.4E-09	1.7E-11	1.6E-10	1.5E-10	1.6E-10	1.6E-12	4.0E-11	6.0E-12	3.6E-10	3.3E-10	1.6E-08
HHC-S-1	L-18	7.1E-11	3.2E-12	1.1E-09	1.8E-12	6.4E-11	4.6E-09	4.4E-09	0.00000045	1.2E-11	4.5E-13	8.5E-10	1.0E-11	1.8E-10	7.3E-11	4.5E-11	4.5E-13	1.1E-11	1.7E-12	1.0E-10	4.9E-11	4.5E-09
HHC-S-1	L-19	1.2E-10	3.7E-12	1.3E-09	1.8E-12	1.4E-10	5.3E-09	5.0E-09	5.2E-09	2.2E-11	5.2E-13	1.1E-09	1.1E-11	5.2E-11	9.8E-11	5.2E-11	5.2E-13	1.3E-11	1.9E-12	1.2E-10	3.4E-11	5.2E-09
HHC-S-1	L-20	3.3E-11	3.5E-12	2.3E-08	1.5E-12	5.3E-11	6.0E-09	5.7E-09	9.4E-08	1.8E-11	5.9E-13	1.2E-09	9.1E-12	5.9E-11	1.1E-10	5.9E-11	5.9E-13	1.5E-11	2.2E-12	1.3E-10	2.3E-11	5.9E-09
HHC-S-2	L-1	8.9E-10	5.7E-11	3.6E-09	1.1E-10	3.9E-10	5.8E-08	5.6E-08	0.00000023	1.6E-10	5.7E-12	1.4E-10	3.7E-11	5.7E-10	6.3E-11	5.7E-10	2.0E-10	3.6E-11	1.2E-11	1.0E-09	2.6E-09	5.7E-08
HHC-S-2	L-2	9.9E-10	1.2E-10	5.8E-10	2.0E-10	1.2E-09	9.5E-09	9.1E-09	9.3E-09	1.8E-10	9.3E-13	6.4E-10	8.9E-11	1.5E-09	2.4E-12	9.3E-11	9.3E-11	2.3E-11	3.9E-11	2.6E-10	6.6E-10	9.3E-09
HHC-S-2	L-3	6.3E-10	1.4E-10	1.8E-09	1.7E-10	1.8E-09	2.9E-08	2.7E-08	0.00000011	5.6E-11	2.8E-12	1.4E-09	6.7E-11	4.5E-09	8.6E-12	2.8E-10	1.1E-11	1.8E-11	4.8E-11	2.8E-10	9.8E-10	2.8E-08
HHC-S-2	L-4	4.5E-10	9.6E-11	2.0E-10	1.0E-10	1.2E-09	3.2E-09	3.1E-09	3.2E-09	1.1E-11	3.2E-13	1.2E-09	4.7E-11	5.1E-10	2.6E-12	3.2E-11	1.1E-11	7.9E-12	3.2E-11	5.7E-11	1.4E-10	3.2E-09
HHC-S-2	L-5	3.0E-10	1.1E-10	2.5E-10	6.6E-11	1.6E-09	4.1E-09	3.9E-09	1.6E-08	5.2E-12	4.0E-13	1.2E-09	2.8E-11	1.6E-10	5.8E-12	4.0E-11	2.6E-11	2.5E-12	1.1E-11	7.1E-11	7.1E-11	4.0E-09
HHC-S-2	L-6	2.8E-10	6.0E-11	1.3E-10	2.6E-11	1.1E-09	2.1E-09	0.0000002	2.0E-09	3.8E-12	2.0E-13	6.8E-10	1.5E-11	8.0E-11	8.1E-12	2.0E-11	3.2E-12	5.0E-12	4.4E-12	5.6E-11	2.3E-11	2.0E-09
HHC-S-2	L-7	1.0E-10	5.1E-11	2.1E-10	1.6E-11	8.5E-10	3.5E-09	3.3E-09	3.4E-09	4.0E-12	3.4E-13	7.8E-10	1.1E-11	3.4E-11	1.9E-11	3.4E-11	2.2E-11	2.1E-12	7.4E-13	3.4E-11	2.5E-11	3.4E-09
HHC-S-2	L-8	2.8E-10	6.7E-11	1.1E-09	1.5E-11	6.3E-10	1.8E-08	1.8E-08	1.8E-08	4.0E-12	1.8E-12	2.2E-09	1.5E-11	1.8E-10	6.9E-11	1.8E-10	7.2E-12	1.1E-11	3.9E-12	8.0E-11	9.0E-11	1.8E-08
HHC-S-2	L-9	8.6E-11	2.3E-11	3.4E-10	7.6E-12	6.9E-10	5.6E-09	5.4E-09	5.5E-09	4.0E-12	5.5E-13	9.2E-10	9.5E-12	5.5E-11	3.6E-11	5.5E-11	5.5E-13	3.4E-12	1.2E-12	2.4E-11	3.0E-11	5.5E-09
HHC-S-2	L-10	2.8E-10	1.9E-11	4.3E-10	5.8E-12	3.0E-10	7.0E-09	6.7E-09	0.00000011	7.4E-12	6.9E-13	1.2E-09	1.1E-11	6.9E-11	4.9E-11	6.9E-11	6.9E-13	4.3E-12	1.5E-12	6.9E-11	3.8E-11	6.9E-09
HHC-S-2	L-11	2.5E-10	1.4E-11	5.2E-10	4.3E-12	3.6E-10	8.5E-09	8.1E-09	8.3E-09	6.0E-12	8.3E-13	1.3E-09	9.0E-12	8.3E-11	7.0E-11	8.3E-11	8.3E-13	5.2E-12	1.8E-12	3.7E-11	3.4E-11	8.3E-09
HHC-S-2	L-12	2.2E-10	1.3E-11	6.0E-10	4.0E-12	2.1E-10	9.9E-09	9.4E-09	3.9E-08	1.1E-11	9.7E-13	1.4E-09	9.7E-12	9.7E-11	7.9E-11	9.7E-11	3.9E-12	6.0E-12	2.1E-12	4.3E-11	3.6E-11	9.7E-09
HHC-S-2	L-13	2.5E-10	9.0E-12	6.9E-10	2.7E-12	4.8E-10	1.1E-08	1.1E-08	4.4E-08	6.3E-12	1.1E-12	1.3E-09	8.7E-12	1.1E-10	7.8E-11	1.1E-10	1.1E-12	6.9E-12	2.4E-12	1.2E-11	5.5E-11	1.1E-08
HHC-S-2	L-14	1.9E-10	7.5E-12	7.8E-10	2.4E-12	1.9E-10	1.3E-08	1.2E-08	0.0000002	1.3E-11	1.2E-12	1.5E-09	8.9E-12	1.2E-10	9.5E-11	1.2E-10	2.0E-11	7.8E-12	2.7E-12	1.4E-11	5.7E-11	1.2E-08
HHC-S-2	L-15	2.2E-10	7.0E-12	8.6E-10	2.1E-12	1.5E-10	1.4E-08	1.4E-08	0.0000005	1.4E-11	1.4E-12	1.6E-09	9.1E-12	1.4E-10	1.1E-10	1.4E-10	1.4E-12	8.6E-12	3.0E-12	1.5E-11	5.2E-11	1.4E-08
HHC-S-2	L-16	2.4E-10	5.7E-12	9.5E-10	1.8E-12	1.1E-10	1.6E-08	1.5E-08	0.00000055	1.6E-11	1.5E-12	1.5E-09	1.0E-11	1.5E-10	1.2E-10	1.5E-10	1.5E-12	9.5E-12	3.3E-12	1.7E-11	7.0E-11	1.5E-08
HHC-S-2	L-17	2.6E-10	5.0E-12	1.0E-09	1.7E-12	1.2E-10	1.7E-08	1.6E-08	0.00000026	1.2E-11	1.7E-12	1.8E-09	9.9E-12	1.7E-10	1.4E-10	1.7E-10	1.7E-12	1.0E-11	3.6E-12	1.8E-11	4.9E-11	1.7E-08
HHC-S-2	L-18	7.3E-11	2.6E-12	2.9E-10	1.2E-12	5.1E-11	4.8E-09	4.6E-09	7.4E-08	7.6E-12	4.7E-13	6.7E-10	6.2E-12	4.7E-11	6.4E-11	4.7E-11	4.7E-13	2.9E-12	1.0E-12	2.1E-11	1.5E-11	4.7E-09
HHC-S-2	L-19	8.3E-11	2.9E-12	3.3E-10	1.1E-12	3.7E-11	5.4E-09	5.2E-09	5.3E-09	1.4E-11	5.3E-13	9.3E-10	6.2E-12	5.3E-11	8.3E-11	5.3E-11	8.5E-12	3.3E-12	1.1E-12	2.4E-11	1.2E-11	5.3E-09
HHC-S-2	L-20	1.8E-10	2.8E-12	6.0E-09	9.6E-13	2.4E-11	6.2E-09	5.9E-09	6.0E-09	1.1E-11	6.0E-13	9.3E-10	6.5E-12	6.0E-11	9.7E-11	6.0E-11	6.0E-11	3.8E-12	1.3E-12	2.7E-11	7.2E-12	6.0E-09
HHC-S-3	L-1	8.5E-10	1.0E-10	1.4E-08	1.7E-10	2.6E-10	5.6E-08	5.3E-08	5.4E-08	1.8E-10	5.4E-12	2.3E-10	6.9E-11	5.4E-10	8.8E-11	5.4E-10	5.4E-12	1.4E-10	2.0E-11	2.2E-09	2.3E-09	2.1E-10
HHC-S-3	L-2	7.9E-10	2.1E-10	2.2E-09	3.2E-10	1.5E-09	8.9E-09	8.6E-09	8.7E-09	2.3E-10	8.7E-13	1.1E-09	1.3E-10	3.1E-09	1.4E-11	8.7E-11	1.7E-10	8.7E-11	7.4E-11	5.5E-10	1.2E-09	3.4E-11
HHC-S-3	L-3	2.6E-10	2.2E-10	6.6E-09	2.5E-10	1.7E-09	2.7E-08	2.6E-08	0.00000011	8.1E-11	2.6E-12	1.8E-09	1.0E-10	1.1E-09	3.0E-11	2.6E-10	4.2E-11	6.6E-11	7.6E-11	5.9E-10	1.5E-09	1.0E-10
HHC-S-3	L-4	3.2E-10	1.4E-10	7.5E-10	1.4E-10	1.8E-09	3.1E-09	2.9E-09	3.0E-09	1.9E-11	3.0E-13	1.6E-09	7.3E-11	4.8E-10	6.5E-12	3.0E-11	1.2E-12	3.0E-11	5.7E-11	1.2E-10	2.6E-10	1.2E-11
HHC-S-3	L-5	2.4E-10	1.4E-10	9.4E-10	8.6E-11	2.0E-09	3.9E-09	3.7E-09	6.0E-08	8.3E-12	3.8E-13	1.5E-09	4.6E-11	1.5E-10	1.4E-11	3.8E-11	3.8E-13	3.8E-11	2.2E-11	1.5E-10	1.6E-10	5.3E-10
HHC-S-3	L-6	2.3E-10	7.9E-11	4.7E-10	3.6E-11	1.3E-09	1.9E-09	0.00000019	1.9E-09	6.7E-12	1.9E-13	9.1E-10	2.5E-11	7.5E-11	1.5E-11	1.9E-11	1.9E-13	1.9E-11	7.1E-12	1.2E-10	5.0E-11	7.4E-12
HHC-S-3	L-7	1.6E-10	6.4E-11	8.0E-10	2.2E-11	1.4E-09	3.3E-09	3.1E-09	3.2E-09	7.0E-12	3.2E-13	1.1E-09	1.9E-11	3.2E-11	3.2E-11	3.2E-11	1.3E-12	8.0E-12	4.7E-12	1.3E-10	5.4E-11	1.3E-11
HHC-S-3	L-8	1.7E-10	8.1E-11	4.2E-09	2.1E-11	5.8E-10	1.7E-08	1.6E-08	0.00000027	7.6E-12	1.7E-12	2.8E-09	2.3E-11	1.7E-10	1.1E-10	1.7E-10	2.7E-11	4.2E-11	6.2E-12	1.7E-10	1.4E-10	6.6E-11
HHC-S-3	L-9	1.2E-10	2.9E-11	1.3E-09	1.1E-11	5.5E-10	5.3E-09	5.1E-09	5.2E-09	7.6E-12	5.2E-13	1.3E-09	1.5E-11	5.2E-11	6.0E-11	5.2E-11	2.1E-12	1.3E-11	1.9E-12	1.2E-10	8.9E-11	8.1E-11
HHC-S-3	L-10	2.6E-10	2.3E-11	1.6E-09	9.2E-12	3.5E-10	6.6E-09	6.3E-09	0.00000023	1.3E-11	6.5E-13	1.5E-09	1.7E-11	6.5E-11	8.0E-11	6.5E-11	6.5E-13	1.6E-11	2.4E-12	6.5E-11	8.3E-11	2.5E-11
HHC-S-3	L-11	2.4E-10	1.8E-11	1.9E-09	6.8E-12	4.2E-10	7.9E-09	7.6E-09	7.8E-09	1.1E-11	7.8E-13	1.7E-09	1.6E-11	7.8E-11	1.0E-10	7.8E-11	7.8E-13	1.9E-11	2.9E-12	7.8E-11	8.4E-11	3.0E-11
HHC-S-3	L-12	2.0E-10	1.7E-11	2.3E-09	6.6E-12	3.1E-10	9.3E-09	8.9E-09	3.6E-08	2.0E-11	9.1E-13	1.8E-09	1.6E-11	9.1E-11	1.2E-10	9.1E-11	9.1E-13	2.3E-11	3.4E-12	9.1E-11	1.2E-10	3.5E-11
HHC-S-3	L-13	1.6E-10	1.2E-11	2.6E-09	4.7E-12	6.8E-10	1.1E-08	1.0E-08	1.0E-08	1.1E-11	1.0E-12	1.5E-09	1.4E-11	1.0E-10	1.2E-10	1.0E-10	1.0E-12	2.6E-11	3.8E-12	2.6E-11	1.2E-10	4.0E-11
HHC-S-3	L-14	1.8E-10	1.1E-11	2.9E-09	4.3E-12	3.1E-10	1.2E-08	1.1E-08	0.00000019	2.1E-11	1.2E-12	1.8E-09	1.6E-11	1.2E-10	1.6E-10	1.2E-10	1.2E-12	2.9E-11	4.3E-12	1.2E-10	1.3E-10	4.6E-11
HHC-S-3	L-15	1.3E-10	1.0E-11	3.2E-09	3.7E-12	3.4E-10	1.3E-08	1.3E-08	0.00000047	1.9E-11	1.3E-12	2.0E-09	1.5E-11	1.3E-10	1.7E-10	1.3E-10	5.2E-12	3.2E-11	4.8E-12	3.2E-11	1.3E-10	5.1E-11
HHC-S-3	L-16	2.2E-10	8.4E-12	3.6E-09	3.2E-12	1.9E-10	1.5E-08	1.4E-08	0.0000014	2.6E-11	1.4E-12	1.8E-09	1.3E-11	1.4E-10	1.9E-10	1.4E-10	1.4E-12	3.6E-11	5.3E-12	1.4E-10	2.0E-10	5.6E-11
HHC-S-3	L-17	1.6E-10	7.4E-12	3.9E-09	3.2E-12	2.1E-10	1.6E-08	1.5E-08	1.6E-08	1.8E-11	1.6E-12	2.2E-09	1.4E-11	1.6E-10	2.0E-10	1.6E-10	6.2E-12	3.9E-11	5.8E-12	3.9E-11	2.0E-10	6.1E-11
HHC-S-3	L-18	4.4E-11	4.1E-12	1.1E-09	2.2E-12	1.9E-10	4.5E-09	4.3E-09	4.4E-09	1.2E-11	4.4E-13	8.2E-10	9.8E-12	4.4E-11	9.8E-11	4.4E-11	4.4E-13	1.1E-11	1.6E-12	9.8E-11	6.1E-11	1.7E-11
HHC-S-3	L-19	1.1E-10	4.3E-12	1.2E-09	2.1E-12	9.7E-11	5.1E-09	4.9E-09	5.0E-09	2.3E-11	5.0E-13	1.1E-09	1.1E-11	5.0E-11	1.3E-10	5.0E-11	5.0E-13	1.2E-11	1.8E-12	1.1E-10	1.6E-11	1.9E-11
HHC-S-3	L-20	3.2E-11	4.5E-12	1.4E-09	1.9E-12	4.9E-11	5.8E-09	5.5E-09	0.0000002	1.7E-11	5.6E-13	1.1E-09	1.0E-11	5.6E-11	1.8E-10	5.6E-11	9.0E-12	1.4E-11	2.1E-12	1.3E-10	2.1E-11	2.2E-11
HHC-S-4	L-1	1.5E-09	7.3E-11	3.3E-09	1.2E-10	2.2E-10	5.5E-08	5.2E-08	5.3E-08	1.5E-10	5.3E-12	2.3E-10	4.7E-11	5.3E-10	3.2E-11	5.3E-10	2.1E-11	1.3E-10	2.0E-11	2.1E-09	1.5E-09	3.3E-09
HHC-S-4	L-2	2.0E-09	1.5E-10	5.6E-10	2.6E-10	6.8E-10	9.2E-09	8.8E-09	9.0E-09	2.0E-10	9.0E-13	1.0E-09	9.3E-11	1.4E-09	1.4E-11	9.0E-11	1.3E-10	9.0E-11	9.0E-11	3.6E-10	8.3E-10	5.6E-10
HHC-S-4	L-3	7.5E-10	1.8E-10	1.7E-09	2.2E-10	1.6E-09	2.8E-08	2.7E-08	0.00000098	6.8E-11	2.7E-12	1.8E-09	7.7E-11	1.1E-09	2.8E-11	2.7E-10	4.3E-11	6.8E-11	1.0E-10	6.1E-10	1.2E-09	1.7E-09
HHC-S-4	L-4	6.7E-10	1.3E-10	1.9E-10	1.3E-10	7.7E-10	3.1E-09	3.0E-09	0.00000011	1.5E-11	3.1E-13	1.5E-09	6.1E-11	4.9E-10	7.0E-12	3.1E-11	3.1E-13	3.1E-11	7.3E-11	1.2E-10	1.7E-10	1.9E-10
HHC-S-4	L-5	4.3E-10	1.4E-10	2.4E-10	8.2E-11	7.9E-10	4.0E-09	3.8E-09	3.9E-09	7.6E-12	3.9E-13	1.5E-09	4.0E-11	3.9E-11	1.4E-11	3.9E-11	1.4E-11	9.7E-12	2.3E-11	1.6E-10	1.1E-10	3.9E-09
HHC-S-4	L-6	3.1E-10	7.0E-11	1.2E-10	3.5E-11	8.9E-10	2.0E-09	0.00000019	1.9E-09	5.6E-12	1.9E-13	8.9E-10	2.3E-11	7.8E-11	1.6E-11	1.9E-11	7.0E-12	1.9E-11	7.3E-12	1.2E-10	3.9E-11	1.2E-10
HHC-S-4	L-7	1.8E-10	5.7E-11	2.1E-10	2.1E-11	2.2E-10	3.4E-09	3.2E-09	3.3E-09	5.9E-12	3.3E-13	1.0E-09	1.7E-11	3.3E-11	3.2E-11	3.3E-11	5.3E-12	8.2E-12	4.9E-12	7.4E-11	3.9E-11	2.1E-10
HHC-S-4	L-8	4.8E-10	7.7E-11	1.1E-09	1.8E-11	2.2E-10	1.8E-08	1.7E-08	1.7E-08	6.4E-12	1.7E-12	2.7E-09	2.2E-11	1.7E-10	1.2E-10	1.7E-10	6.9E-12	4.3E-11	6.4E-12	1.7E-10	1.3E-10	1.1E-09
HHC-S-4	L-9	1.5E-10	2.7E-11	3.3E-10	9.6E-12	2.7E-10	5.4E-09	5.2E-09	5.3E-09	6.4E-12	5.3E-13	1.2E-09	1.4E-11	5.3E-11	5.8E-11	5.3E-11	2.1E-12	1.3E-11	2.0E-12	1.2E-10	5.7E-11	3.3E-10
HHC-S-4	L-10	4.7E-10	2.4E-11	4.2E-10	8.2E-12	2.1E-10	6.8E-09	6.5E-09	0.00000043	1.2E-11	6.7E-13	1.4E-09	1.5E-11	6.7E-11	8.2E-11	6.7E-11	6.7E-13	1.7E-11	2.5E-12	1.5E-10	7.1E-11	4.2E-10
HHC-S-4	L-11	4.4E-10	1.7E-11	5.0E-10	6.0E-12	2.1E-10	8.2E-09	7.8E-09	8.0E-09	9.6E-12	8.0E-13	1.6E-09	1.5E-11	8.0E-11	1.1E-10	8.0E-11	1.3E-11	2.0E-11	3.0E-12	8.0E-11	5.9E-11	5.0E-10
HHC-S-4	L-12	2.6E-10	1.6E-11	5.8E-10	5.8E-12	1.6E-10	9.5E-09	9.1E-09	3.7E-08	1.8E-11	9.3E-13	1.8E-09	1.5E-11	9.3E-11	1.2E-10	9.3E-11	9.3E-13	2.3E-11	2.0E-11	2.1E-10	1.5E-10	5.8E-10
HHC-S-4	L-13	3.0E-10	1.1E-11	6.7E-10	4.2E-12	4.7E-10	1.1E-08	1.0E-08	1.1E-08	1.0E-11	1.1E-12	1.5E-09	1.3E-11	1.1E-10	1.2E-10	1.1E-10	1.7E-11	2.7E-11	3.9E-12	2.7E-11	8.5E-11	6.7E-10
HHC-S-4	L-14	3.3E-10	9.8E-12	7.5E-10	3.7E-12	1.1E-10	1.2E-08	1.2E-08	1.2E-08	2.0E-11	1.2E-12	1.8E-09	1.4E-11	1.2E-10	1.4E-10	1.2E-10	4.8E-12	3.0E-11	4.4E-12	3.0E-11	8.8E-11	7.5E-10
HHC-S-4	L-15	2.4E-10	8.3E-12	8.3E-10	3.2E-12	8.7E-11	1.4E-08	1.3E-08	1.3E-08	1.8E-11	1.3E-12	1.9E-09	1.4E-11	1.3E-10	1.6E-10	1.3E-10	5.3E-12	3.3E-11	4.9E-12	3.3E-11	7.9E-11	8.3E-10
HHC-S-4	L-16	4.1E-10	7.5E-12	9.2E-10	2.9E-12	6.1E-11	1.5E-08	1.4E-08	5.9E-08	2.2E-11	1.5E-12	1.7E-09	1.4E-11	1.5E-10	1.8E-10	1.5E-10	5.9E-12	3.7E-11	5.4E-12	3.7E-11	9.5E-11	9.2E-10
HHC-S-4	L-17	2.8E-10	6.6E-12	1.0E-09	2.7E-12	1.0E-10	1.6E-08	1.6E-08	0.00000026	1.5E-11	1.6E-12	2.0E-09	1.4E-11	1.6E-10	2.0E-10	1.6E-10	6.4E-12	4.0E-11	5.9E-12	4.0E-11	4.0E-10	1.0E-09
HHC-S-4	L-18	1.2E-10	3.4E-12	2.8E-10	1.9E-12	9.5E-11	4.6E-09	4.4E-09	0.00000016	1.0E-11	4.5E-13	8.0E-10	8.6E-12	4.5E-11	9.4E-11	4.5E-11	1.8E-12	1.1E-11	1.7E-12	1.0E-10	4.2E-11	2.8E-10
HHC-S-4	L-19	9.1E-11	4.2E-12	3.2E-10	1.9E-12	4.8E-11	5.2E-09	5.0E-09	5.1E-09	1.9E-11	5.1E-13	1.0E-09	9.1E-12	5.1E-11	1.2E-10	5.1E-11	5.1E-13	1.3E-11	1.9E-12	1.2E-10	2.9E-11	3.2E-10
HHC-S-4	L-20	5.8E-11	4.0E-12	3.6E-10	1.6E-12	2.4E-11	5.9E-09	5.7E-09	5.8E-09	1.3E-11	5.8E-13	1.1E-09	8.9E-12	5.8E-11	1.4E-10	5.8E-11	5.8E-13	1.5E-11	2.1E-12	5.8E-11	1.5E-11	3.6E-10

- Parameter not analyzed

Sample Identification	Time Interval	Mn	Mo	Ni	Pb	Sb	Se	Sn	Sr	Ti	Tl	U	V	Zn	Pb-210	Po-210	Ra-226	Ra-228
		m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s	m^2/s
HHC-S-1	L-1	3.1E-09	2.0E-10	5.5E-10	1.4E-10	2.0E-08	1.4E-09	5.5E-10	5.7E-12	4.3E-10	5.5E-10	5.3E-09	7.5E-08	3.1E-09	0.00000049	0.0000020	1.8E-11	2.2E-09
HHC-S-1	L-2	9.0E-11	2.9E-10	9.0E-11	1.3E-11	2.9E-08	1.7E-09	9.0E-11	7.5E-12	2.1E-10	9.0E-11	7.4E-09	0.00000014	3.6E-10	-	-	-	-
HHC-S-1	L-3	2.7E-10	9.5E-11	2.7E-10	2.3E-11	1.7E-08	8.2E-10	2.7E-10	1.2E-11	8.8E-11	2.7E-10	7.7E-09	5.5E-08	1.6E-09	0.00000011	0.00000017	5.8E-12	1.5E-09
HHC-S-1	L-4	1.2E-08	5.7E-11	3.1E-11	2.6E-11	4.8E-09	2.7E-10	3.1E-11	6.6E-12	4.6E-11	1.2E-10	3.5E-09	2.8E-08	3.1E-11	-	-	-	-
HHC-S-1	L-5	3.9E-11	2.9E-11	3.9E-11	3.3E-11	2.2E-09	9.1E-11	3.9E-11	2.3E-11	2.1E-11	3.5E-10	1.8E-09	1.2E-08	3.9E-11	-	-	-	-
HHC-S-1	L-6	1.1E-10	2.1E-11	7.8E-11	3.3E-11	1.3E-09	5.9E-11	2.0E-11	6.3E-11	2.7E-11	3.1E-10	9.2E-10	6.0E-09	1.1E-10	0.00000024	8.3E-08	5.4E-12	7.8E-11
HHC-S-1	L-7	3.3E-11	1.6E-11	3.3E-11	4.4E-11	1.2E-09	5.6E-11	3.3E-11	2.1E-10	2.9E-11	5.3E-10	1.1E-09	5.6E-09	3.3E-11	-	-	-	-
HHC-S-1	L-8	1.7E-10	1.8E-11	1.7E-10	9.3E-11	2.8E-09	7.9E-11	1.7E-10	7.8E-10	3.0E-11	1.6E-09	3.3E-09	9.8E-09	1.7E-10	-	-	-	-
HHC-S-1	L-9	5.3E-11	1.4E-11	5.3E-11	4.6E-11	1.9E-09	6.3E-11	5.3E-11	5.1E-10	1.2E-11	4.8E-10	1.2E-09	5.3E-09	5.3E-11	0.00000043	4.8E-08	1.5E-11	2.1E-10
HHC-S-1	L-10	6.7E-11	1.4E-11	6.7E-11	6.7E-11	2.0E-09	6.7E-11	6.7E-11	8.0E-10	1.6E-11	6.0E-10	1.7E-09	5.7E-09	6.7E-11	-	-	-	-
HHC-S-1	L-11	8.1E-11	1.3E-11	8.1E-11	6.9E-11	2.4E-09	8.8E-11	8.1E-11	1.1E-09	1.1E-11	7.2E-10	1.5E-09	6.5E-09	8.1E-11	-	-	-	-
HHC-S-1	L-12	9.4E-11	1.3E-11	9.4E-11	6.7E-11	2.8E-09	1.1E-10	9.4E-11	1.3E-09	1.3E-11	8.4E-10	1.8E-09	6.0E-09	9.4E-11	0.00000076	3.8E-08	2.2E-11	5.1E-10
HHC-S-1	L-13	1.1E-10	1.0E-11	1.1E-10	7.7E-11	2.7E-09	9.2E-11	1.1E-10	1.3E-09	1.1E-11	4.3E-10	1.8E-09	5.6E-09	1.1E-10	-	-	-	-
HHC-S-1	L-14	1.2E-10	9.4E-12	1.2E-10	8.7E-11	3.7E-09	9.6E-11	1.2E-10	1.4E-09	9.4E-12	4.8E-10	2.3E-09	5.5E-09	1.2E-10	-	-	-	-
HHC-S-1	L-15	1.3E-10	9.6E-12	1.3E-10	7.0E-11	4.1E-09	1.3E-10	1.3E-10	1.6E-09	7.0E-12	5.4E-10	2.2E-09	6.6E-09	1.1E-09	0.00000066	3.0E-08	2.2E-11	5.4E-10
HHC-S-1	L-16	1.5E-10	8.6E-12	1.5E-10	1.1E-10	6.2E-09	1.5E-10	1.5E-10	1.6E-09	1.7E-11	5.9E-10	2.8E-09	6.2E-09	1.5E-10	-	-	-	-
HHC-S-1	L-17	1.6E-10	9.7E-12	1.6E-10	1.2E-10	6.8E-09	1.4E-10	1.6E-10	1.7E-09	8.4E-12	6.4E-10	3.1E-09	5.8E-09	1.6E-10	0.0000012	0.00000026	3.6E-11	8.8E-10
HHC-S-1	L-18	4.5E-11	7.7E-12	4.5E-11	4.5E-11	1.9E-09	6.5E-11	4.5E-11	8.1E-10	1.5E-11	4.1E-10	8.6E-10	3.5E-09	4.5E-11	0.00000073	5.5E-08	1.4E-11	2.5E-10
HHC-S-1	L-19	5.2E-11	8.5E-12	5.2E-11	6.0E-11	2.5E-09	1.0E-10	5.2E-11	1.1E-09	4.8E-12	4.6E-10	9.9E-10	3.5E-09	5.2E-11	0.00000065	4.6E-08	1.6E-11	2.8E-10
HHC-S-1	L-20	5.9E-11	6.4E-12	5.9E-11	6.8E-11	3.3E-09	1.0E-10	5.9E-11	1.1E-09	3.4E-12	5.3E-10	1.1E-09	2.9E-09	5.9E-11	0.00000074	3.7E-08	2.3E-11	2.3E-10
HHC-S-2	L-1	3.3E-09	1.9E-10	5.7E-10	8.1E-11	2.0E-08	1.1E-09	5.7E-10	1.1E-12	4.1E-10	1.4E-10	4.8E-09	8.2E-08	3.3E-09	0.00000051	0.00000091	8.5E-12	2.3E-09
HHC-S-2	L-2	9.3E-11	2.3E-10	9.3E-11	1.1E-11	2.7E-08	1.1E-09	9.3E-11	1.4E-12	1.6E-10	2.3E-11	4.4E-09	0.00000011	9.3E-11	-	-	-	-
HHC-S-2	L-3	2.8E-10	7.4E-11	2.8E-10	2.2E-11	1.6E-08	4.5E-10	2.8E-10	4.4E-12	5.9E-11	7.0E-11	4.4E-09	5.2E-08	2.8E-10	0.00000014	0.0000007	2.0E-12	1.5E-09
HHC-S-2	L-4	1.1E-09	4.3E-11	3.2E-11	1.4E-11	3.8E-09	2.1E-10	3.2E-11	4.9E-12	2.9E-11	3.2E-11	2.3E-09	2.5E-08	3.2E-11	-	-	-	-
HHC-S-2	L-5	4.0E-11	1.9E-11	4.0E-11	2.1E-11	2.0E-09	7.5E-11	4.0E-11	2.0E-11	1.4E-11	9.0E-11	1.3E-09	1.1E-08	4.0E-11	-	-	-	-
HHC-S-2	L-6	2.0E-11	1.3E-11	8.0E-11	1.7E-11	8.5E-10	4.2E-11	2.0E-11	4.6E-11	1.5E-11	8.0E-11	6.1E-10	4.8E-09	5.4E-10	9.2E-08	1.3E-08	2.7E-12	8.0E-11
HHC-S-2	L-7	3.4E-11	9.8E-12	3.4E-11	2.5E-11	1.2E-09	4.1E-11	3.4E-11	1.6E-10	1.3E-11	1.4E-10	6.8E-10	4.1E-09	3.4E-11	-	-	-	-
HHC-S-2	L-8	1.8E-10	1.1E-11	1.8E-10	5.3E-11	2.9E-09	5.7E-11	1.8E-10	6.2E-10	1.6E-11	1.8E-10	2.4E-09	7.3E-09	1.8E-10	-	-	-	-
HHC-S-2	L-9	5.5E-11	8.8E-12	5.5E-11	2.8E-11	1.7E-09	4.5E-11	5.5E-11	4.1E-10	8.8E-12	1.2E-10	7.5E-10	3.9E-09	5.5E-11	0.00000031	3.4E-08	8.4E-12	2.2E-10
HHC-S-2	L-10	6.9E-11	8.4E-12	6.9E-11	4.3E-11	2.1E-09	4.6E-11	6.9E-11	6.8E-10	8.9E-12	1.6E-10	1.2E-09	4.2E-09	6.9E-11	-	-	-	-
HHC-S-2	L-11	8.3E-11	8.1E-12	8.3E-11	4.2E-11	2.5E-09	6.3E-11	8.3E-11	9.2E-10	5.2E-12	1.9E-10	1.3E-09	4.5E-09	8.3E-11	-	-	-	-
HHC-S-2	L-12	9.7E-11	7.9E-12	9.7E-11	4.6E-11	3.5E-09	8.0E-11	9.7E-11	1.2E-09	8.7E-12	9.7E-11	1.3E-09	4.5E-09	9.7E-11	0.0000007	2.2E-08	1.4E-11	5.3E-10
HHC-S-2	L-13	1.1E-10	6.5E-12	1.1E-10	5.0E-11	3.3E-09	7.4E-11	1.1E-10	1.2E-09	6.9E-12	1.1E-10	1.3E-09	4.2E-09	1.1E-10	-	-	-	-
HHC-S-2	L-14	1.2E-10	5.8E-12	1.2E-10	6.1E-11	4.5E-09	7.8E-11	1.2E-10	1.4E-09	5.0E-12	1.2E-10	1.7E-09	4.2E-09	1.2E-10	-	-	-	-
HHC-S-2	L-15	1.4E-10	6.1E-12	1.4E-10	5.8E-11	5.8E-09	1.1E-10	1.4E-10	1.5E-09	4.0E-12	1.4E-10	1.6E-09	4.3E-09	1.4E-10	0.00000078	3.1E-08	2.5E-11	5.5E-10
HHC-S-2	L-16	1.5E-10	5.2E-12	1.5E-10	6.4E-11	7.4E-09	1.3E-10	1.5E-10	1.5E-09	6.7E-12	3.8E-11	1.8E-09	4.1E-09	1.5E-10	-	-	-	-
HHC-S-2	L-17	1.7E-10	6.0E-12	1.7E-10	6.2E-11	8.1E-09	1.2E-10	1.7E-10	1.6E-09	2.0E-12	4.1E-11	1.7E-09	3.8E-09	9.5E-10	0.00000081	6.6E-08	3.2E-11	3.6E-09
HHC-S-2	L-18	4.7E-11	4.7E-12	4.7E-11	3.4E-11	2.3E-09	4.7E-11	4.7E-11	8.7E-10	1.4E-11	4.7E-11	6.3E-10	2.3E-09	4.7E-11	0.00000082	2.9E-08	1.3E-11	2.5E-10
HHC-S-2	L-19	5.3E-11	5.0E-12	5.3E-11	4.6E-11	2.6E-09	7.4E-11	5.3E-11	1.1E-09	2.8E-12	1.2E-10	8.3E-10	2.6E-09	5.3E-11	0.00000064	2.1E-08	1.7E-11	2.9E-10
HHC-S-2	L-20	6.0E-11	4.1E-12	6.0E-11	5.2E-11	3.4E-09	8.4E-11	6.0E-11	1.2E-09	1.5E-12	1.4E-10	8.2E-10	1.9E-09	6.0E-11	0.00000052	2.4E-08	2.6E-11	2.4E-10
HHC-S-3	L-1	2.2E-09	1.7E-10	2.2E-09	1.1E-10	2.0E-08	1.7E-09	5.4E-10	7.1E-12	2.8E-10	5.4E-10	6.2E-09	6.6E-08	5.6E-09	-	-	-	-
HHC-S-3	L-2	8.7E-11	2.7E-10	8.7E-11	2.1E-11	3.0E-08	2.1E-09	8.7E-11	6.4E-12	1.8E-10	8.7E-11	8.7E-09	0.00000011	6.9E-10	-	-	-	-
HHC-S-3	L-3	2.6E-10	1.0E-10	2.6E-10	3.3E-11	1.5E-08	6.3E-10	2.6E-10	1.1E-11	6.8E-11	2.6E-10	7.1E-09	4.8E-08	2.6E-10	-	-	-	-
HHC-S-3	L-4	1.7E-10	6.5E-11	3.0E-11	2.5E-11	4.3E-09	2.6E-10	3.0E-11	8.8E-12	4.0E-11	2.7E-10	3.2E-09	2.3E-08	3.0E-11	-	-	-	-
HHC-S-3	L-5	3.8E-11	3.4E-11	3.8E-11	4.5E-11	2.4E-09	1.0E-10	3.8E-11	3.9E-11	2.6E-11	3.4E-10	2.0E-09	1.1E-08	3.8E-11	-	-	-	-
HHC-S-3	L-6	1.9E-11	2.4E-11	1.9E-11	3.5E-11	1.1E-09	6.8E-11	1.9E-11	9.9E-11	2.0E-11	3.0E-10	7.3E-10	5.6E-09	1.9E-11	-	-	-	-
HHC-S-3	L-7	3.2E-11	1.9E-11	3.2E-11	4.5E-11	1.4E-09	5.5E-11	3.2E-11	2.7E-10	1.9E-11	5.1E-10	9.8E-10	5.4E-09	3.2E-11	-	-	-	-
HHC-S-3	L-8	1.7E-10	2.0E-11	1.7E-10	1.0E-10	2.7E-09	8.9E-11	1.7E-10	1.1E-09	2.7E-11	1.5E-09	3.4E-09	9.5E-09	1.7E-10	-	-	-	-
HHC-S-3	L-9	5.2E-11	1.6E-11	5.2E-11	6.1E-11	1.6E-09	7.3E-11	5.2E-11	5.7E-10	1.3E-11	4.6E-10	1.2E-09	5.4E-09	5.2E-11	-	-	-	-
HHC-S-3	L-10	6.5E-11	1.5E-11	6.5E-11	7.7E-11	2.3E-09	7.4E-11	6.5E-11	1.0E-09	1.4E-11	5.8E-10	1.7E-09	5.8E-09	6.5E-11	-	-	-	-
HHC-S-3	L-11	7.8E-11	1.4E-11	7.8E-11	9.2E-11	2.8E-09	9.1E-11	7.8E-11	1.2E-09	1.3E-11	7.0E-10	1.8E-09	6.3E-09	7.8E-11	-	-	-	-
HHC-S-3	L-12	9.1E-11	1.4E-11	9.1E-11	9.1E-11	2.7E-09	1.1E-10	9.1E-11	1.4E-09	1.1E-11	8.2E-10	1.8E-09	6.2E-09	9.1E-11	-	-	-	-
HHC-S-3	L-13	1.0E-10	1.2E-11	1.0E-10	8.6E-11	2.6E-09	9.9E-11	1.0E-10	1.3E-09	8.5E-12	4.1E-10	2.1E-09	5.8E-09	1.0E-10	-	-	-	-
HHC-S-3	L-14	1.2E-10	1.0E-11	1.2E-10	9.6E-11	3.5E-09	1.1E-10	1.2E-10	1.6E-09	6.4E-12	4.7E-10	2.0E-09	5.7E-09	1.2E-10	-	-	-	-
HHC-S-3	L-15	1.3E-10	1.0E-11	1.3E-10	1.1E-10	3.9E-09	1.3E-10	1.3E-10	1.6E-09	4.3E-12	5.2E-10	2.6E-09	5.9E-09	1.3E-10	-	-	-	-
HHC-S-3	L-16	1.4E-10	9.0E-12	1.4E-10	1.2E-10	6.0E-09	1.6E-10	1.4E-10	1.6E-09	1.9E-11	5.7E-10	2.4E-09	6.0E-09	1.4E-10	-	-	-	-
HHC-S-3	L-17	1.6E-10	1.0E-11	1.6E-10	1.3E-10	5.6E-09	1.5E-10	1.6E-10	1.7E-09	5.9E-12	6.2E-10	3.1E-09	4.7E-09	1.6E-10	-	-	-	-
HHC-S-3	L-18	4.4E-11	8.2E-12	4.4E-11	7.1E-11	1.8E-09	7.5E-11	4.4E-11	8.4E-10	2.0E-11	3.9E-10	1.0E-09	3.5E-09	4.4E-11	0.00000055	7.0E-08	1.7E-11	2.4E-10
HHC-S-3	L-19	5.0E-11	8.6E-12	5.0E-11	8.1E-11	2.1E-09	1.2E-10	5.0E-11	1.0E-09	3.7E-12	4.5E-10	1.2E-09	3.4E-09	5.0E-11	0.00000066	4.5E-08	2.3E-11	2.7E-10
HHC-S-3	L-20	5.6E-11	7.0E-12	5.6E-11	9.2E-11	2.8E-09	1.2E-10	5.6E-11	1.2E-09	5.5E-12	5.1E-10	1.3E-09	2.8E-09	5.6E-11	0.00000062	3.5E-08	2.5E-11	2.3E-10
HHC-S-4	L-1	5.3E-10	1.6E-10	2.1E-09	4.6E-11	2.3E-08	1.3E-09	5.3E-10	7.4E-12	2.4E-10	5.3E-10	3.7E-09	6.2E-08	5.5E-09	-	-	-	-
HHC-S-4	L-2	9.0E-11	2.7E-10	9.0E-11	8.1E-12	2.6E-08	1.6E-09	9.0E-11	7.8E-12	1.6E-10	9.0E-11	5.5E-09	0.00000011	9.0E-11	-	-	-	-
HHC-S-4	L-3	2.7E-10	8.7E-11	2.7E-10	1.7E-11	1.5E-08	5.5E-10	2.7E-10	1.3E-11	4.9E-11	2.7E-10	5.2E-09	5.5E-08	2.7E-10	-	-	-	-
HHC-S-4	L-4	3.1E-11	5.3E-11	3.1E-11	1.7E-11	3.7E-09	2.1E-10	3.1E-11	9.2E-12	2.5E-11	1.2E-10	2.3E-09	2.8E-08	3.1E-11	-	-	-	-
HHC-S-4	L-5	3.9E-11	2.6E-11	3.9E-11	2.8E-11	1.6E-09	7.9E-11	3.9E-11	3.7E-11	1.5E-11	3.5E-10	1.5E-09	1.3E-08	3.9E-11	-	-	-	-
HHC-S-4	L-6	1.9E-11	1.8E-11	1.9E-11	2.3E-11	1.1E-09	5.3E-11	1.9E-11	7.5E-11	1.5E-11	3.1E-10	6.8E-10	6.1E-09	1.9E-11	-	-	-	-
HHC-S-4	L-7	3.3E-11	1.4E-11	3.3E-11	3.3E-11	1.2E-09	4.8E-11	3.3E-11	2.5E-10	1.5E-11	5.3E-10	8.2E-10	5.6E-09	3.3E-11	-	-	-	-
HHC-S-4	L-8	1.7E-10	1.6E-11	6.2E-09	6.9E-11	3.5E-09	8.0E-11	1.7E-10	8.1E-10	1.7E-11	1.6E-09	2.9E-09	1.0E-08	1.7E-10	-	-	-	-
HHC-S-4	L-9	5.3E-11	1.2E-11	5.3E-11	3.8E-11	1.6E-09	6.4E-11	5.3E-11	5.2E-10	9.7E-12	4.8E-10	1.0E-09	5.6E-09	5.3E-11	-	-	-	-
HHC-S-4	L-10	6.7E-11	1.2E-11	6.7E-11	5.7E-11	2.0E-09	7.0E-11	6.7E-11	8.3E-10	9.1E-12	6.0E-10	1.3E-09	5.7E-09	6.7E-11	-	-	-	-
HHC-S-4	L-11	8.0E-11	1.1E-11	8.0E-11	5.7E-11	2.9E-09	8.7E-11	8.0E-11	1.0E-09	5.8E-12	7.2E-10	1.5E-09	6.1E-09	8.0E-11	-	-	-	-
HHC-S-4	L-12	9.3E-11	1.1E-11	1.5E-09	5.5E-11	3.4E-09	1.1E-10	9.3E-11	1.2E-09	9.2E-12	8.4E-10	1.5E-09	6.3E-09	9.3E-11	-	-	-	-
HHC-S-4	L-13	1.1E-10	8.8E-12	1.1E-10	6.2E-11	3.2E-09	1.0E-10	1.1E-10	1.2E-09	9.1E-12	4.3E-10	1.5E-09	6.0E-09	1.1E-10	-	-	-	-
HHC-S-4	L-14	1.2E-10	8.3E-12	1.2E-10	6.8E-11	4.3E-09	1.0E-10	1.2E-10	1.5E-09	4.9E-12	4.8E-10	2.0E-09	5.9E-09	1.2E-10	-	-	-	-
HHC-S-4	L-15	1.3E-10	8.2E-12	1.3E-10	7.3E-11	4.8E-09	1.3E-10	1.3E-10	1.5E-09	3.3E-12	5.3E-10	2.2E-09	6.5E-09	1.3E-10	-	-	-	-
HHC-S-4	L-16	1.5E-10	7.2E-12	1.5E-10	7.0E-11	5.3E-09	1.5E-10	1.5E-10	1.4E-09	7.4E-12	1.5E-10	2.1E-09	6.2E-09	1.5E-10	-	-	-	-
HHC-S-4	L-17	1.6E-10	8.4E-12	1.6E-10	8.4E-11	6.8E-09	1.5E-10	1.6E-10	1.6E-09	2.9E-12	6.4E-10	2.3E-09	5.3E-09	1.6E-10	-	-	-	-
HHC-S-4	L-18	4.5E-11	6.4E-12	4.5E-11	4.5E-11	1.9E-09	6.6E-11	4.5E-11	7.6E-10	1.2E-11	4.0E-10	8.6E-10	3.6E-09	4.5E-11	0.00000062	9.1E-08	2.3E-11	2.4E-10
HHC-S-4	L-19	5.1E-11	6.7E-12	5.1E-11	5.9E-11	2.5E-09	1.0E-10	5.1E-11	1.0E-09	3.4E-12	4.6E-10	9.8E-10	3.7E-09	5.1E-11	0.00000056	6.3E-08	2.0E-11	2.8E-10
HHC-S-4	L-20	5.8E-11	5.7E-12	5.8E-11	5.8E-11	2.5E-09	1.0E-10	5.8E-11	1.1E-09	1.4E-12	5.2E-10	1.1E-09	2.6E-09	5.8E-11	0.00000084	3.6E-08	2.2E-11	2.3E-10

- Parameter not analyzed

APPENDIX F

Kinetic Test Figures

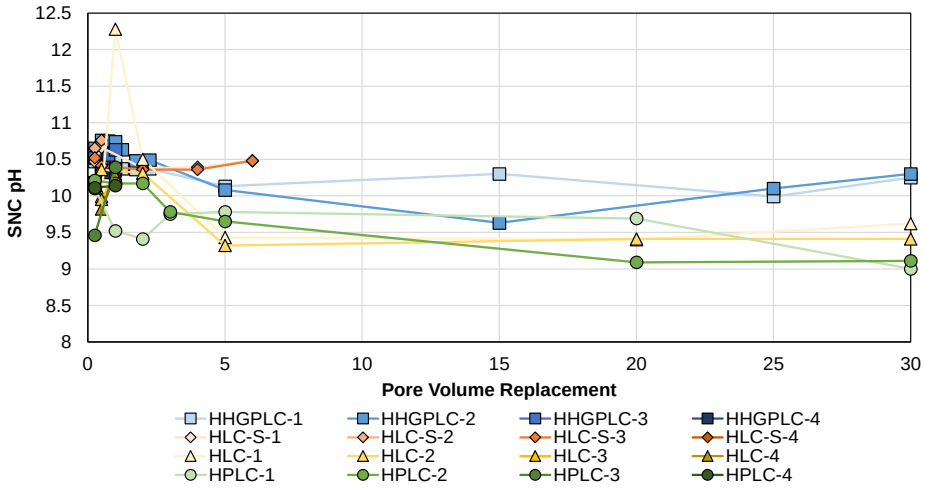


Figure F1-1: pH Measured at SNC-Lavalin Laboratory vs Pore Volume Replacement

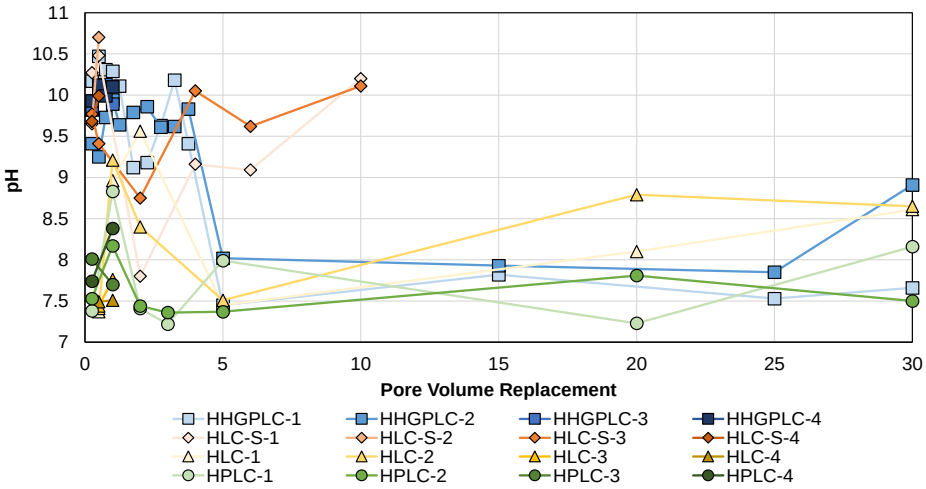


Figure F1-2: pH Measured at SRC Laboratory vs Pore Volume Replacement

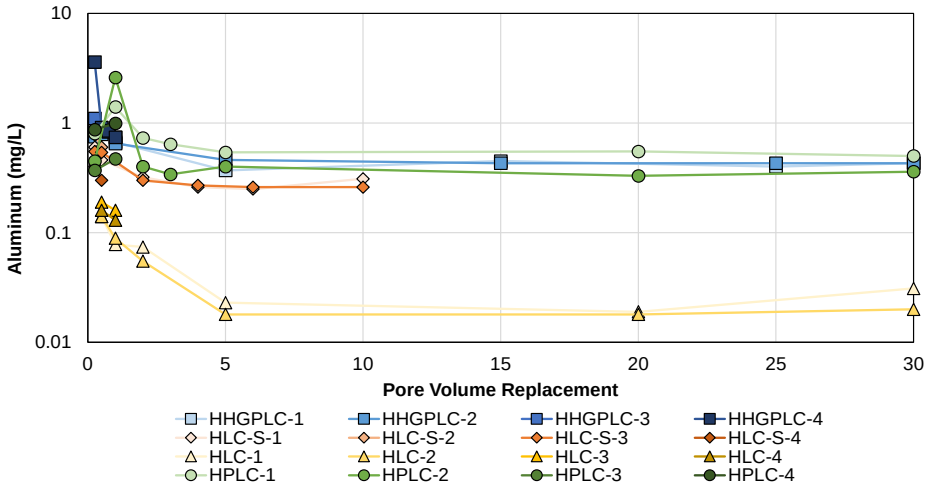


Figure F1-3: Aluminum Concentration vs Pore Volume Replacement

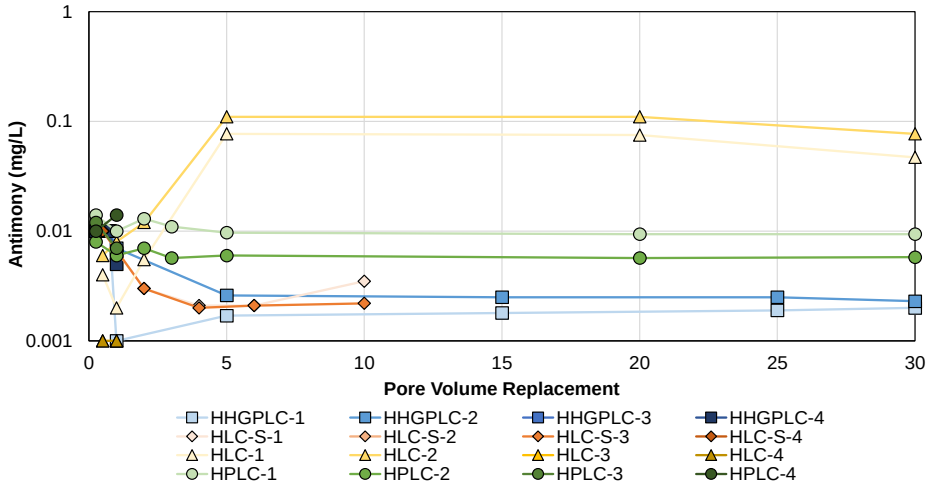


Figure F1-4: Antmony Concentration vs Pore Volume Replacement

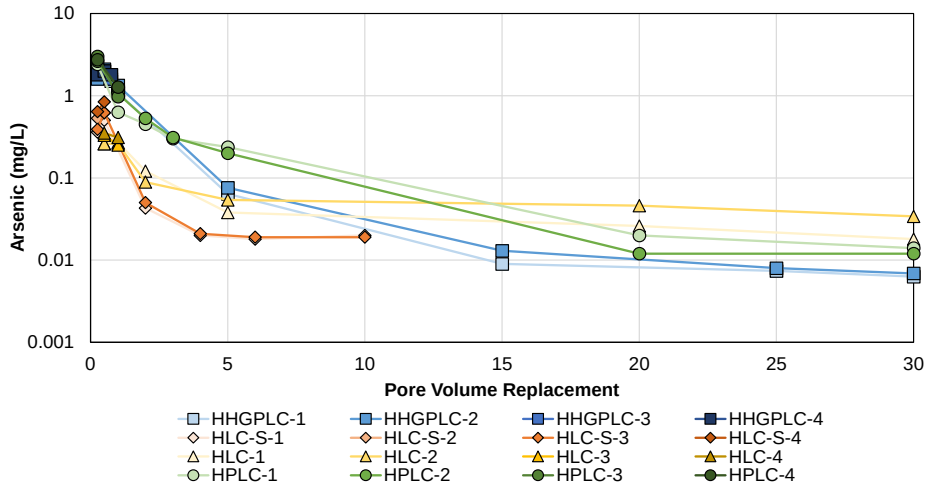


Figure F1-5: Arsenic Concentration vs Pore Volume Replacement

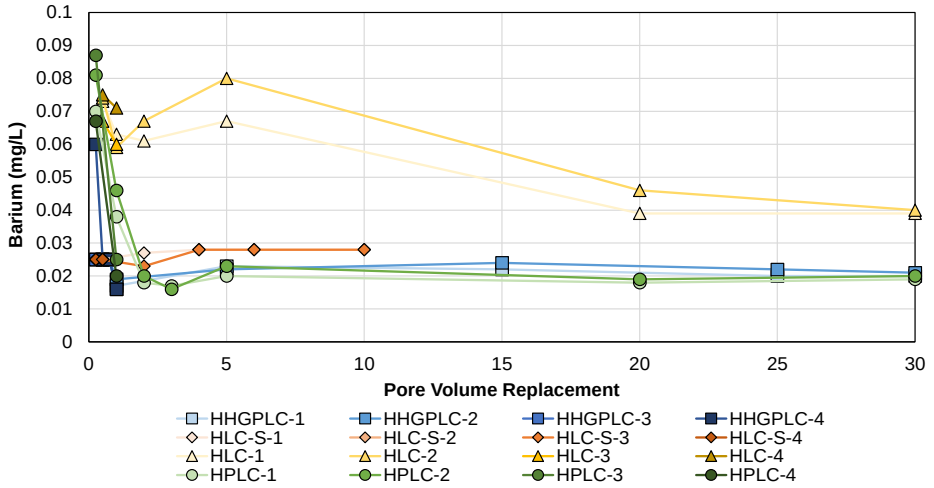


Figure F1-6: Barium Concentration vs Pore Volume Replacement

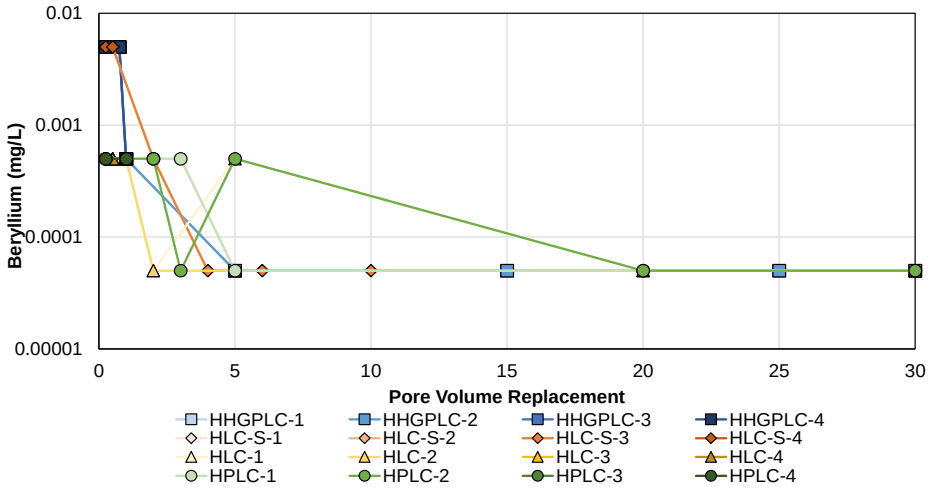


Figure F1-7: Beryllium Concentration vs Pore Volume Replacement

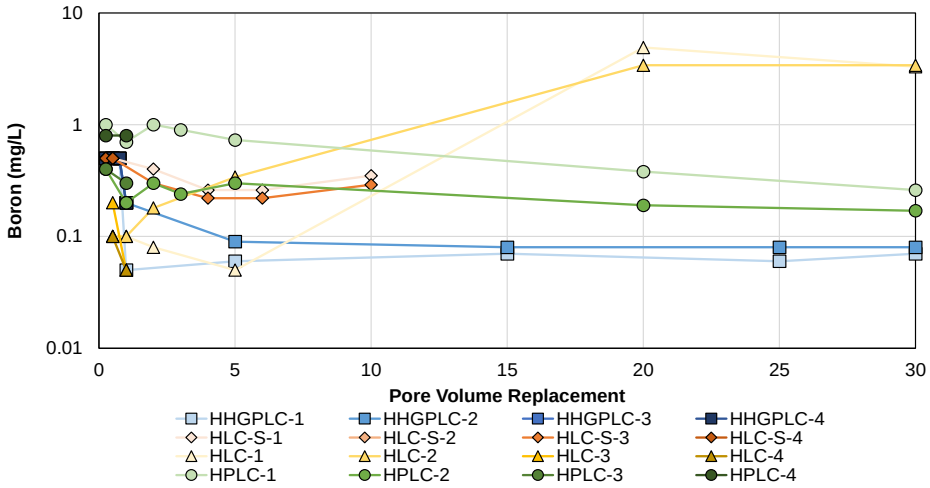


Figure F1-8: Boron Concentration vs Pore Volume Replacement

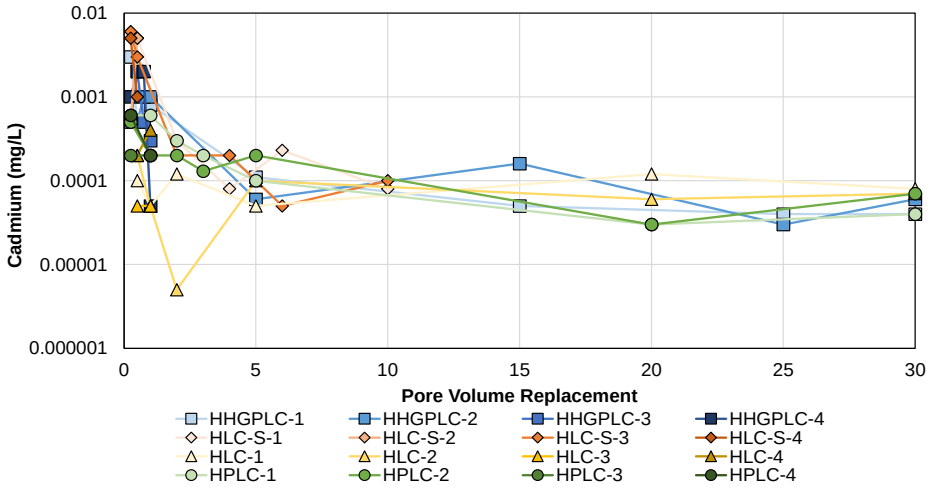


Figure F1-9: Cadmium Concentration vs Pore Volume Replacement

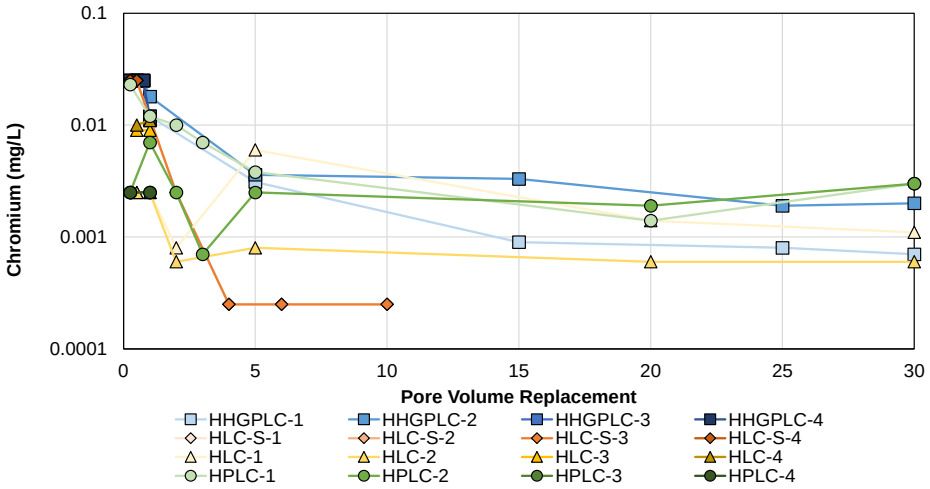


Figure F1-10: Chromium Concentration vs Pore Volume Replacement

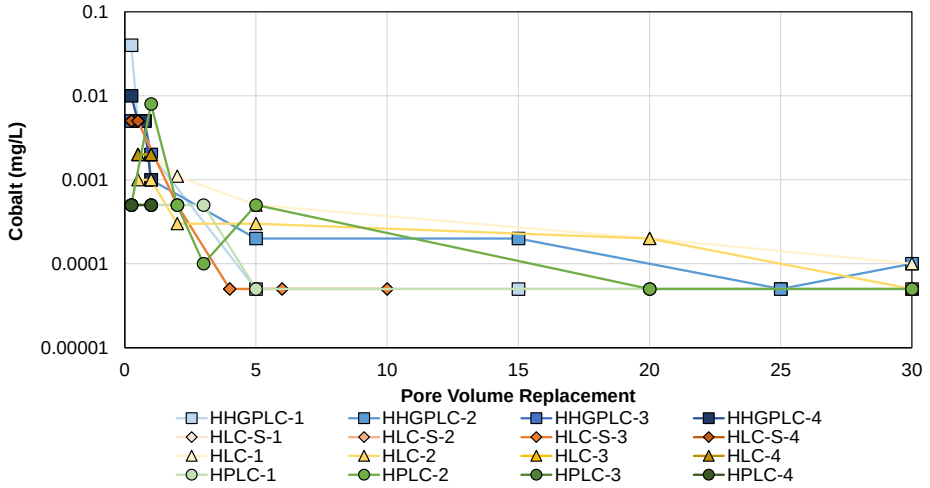


Figure F1-11: Cobalt Concentration vs Pore Volume Replacement

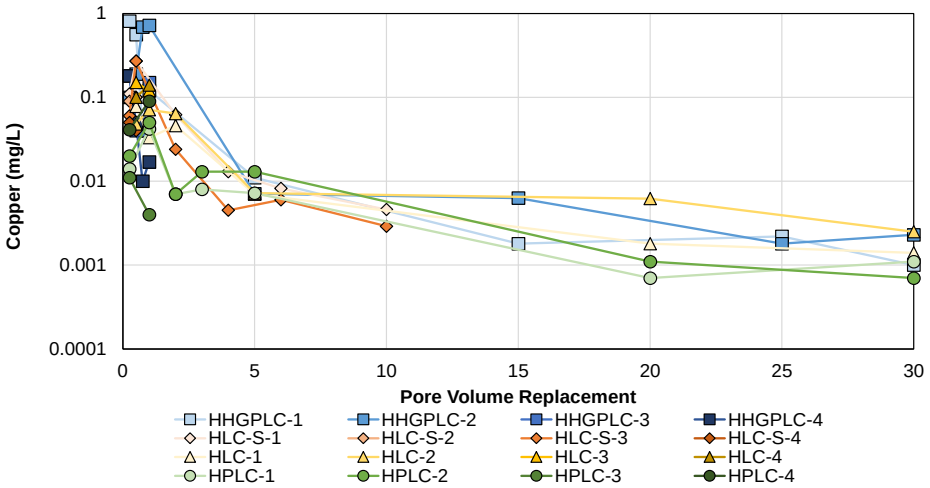


Figure F1-12: Copper Concentration vs Pore Volume Replacement

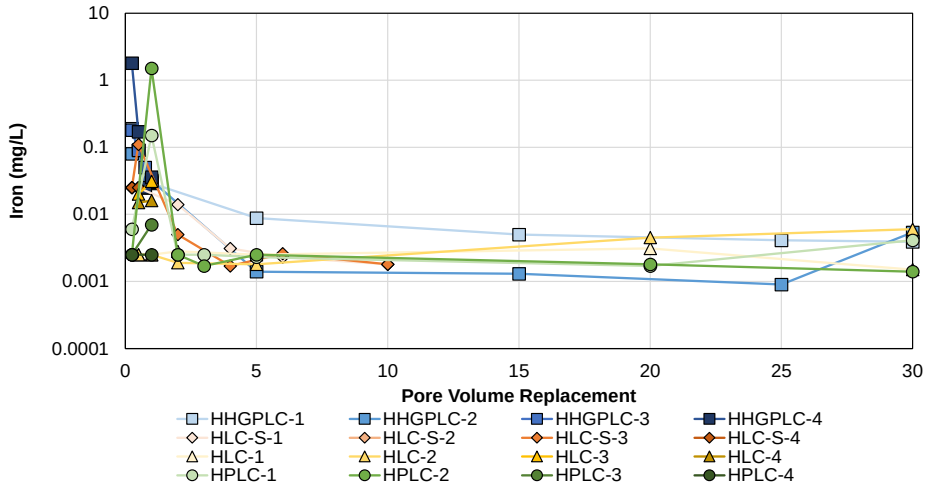


Figure F1-13: Iron Concentration vs Pore Volume Replacement

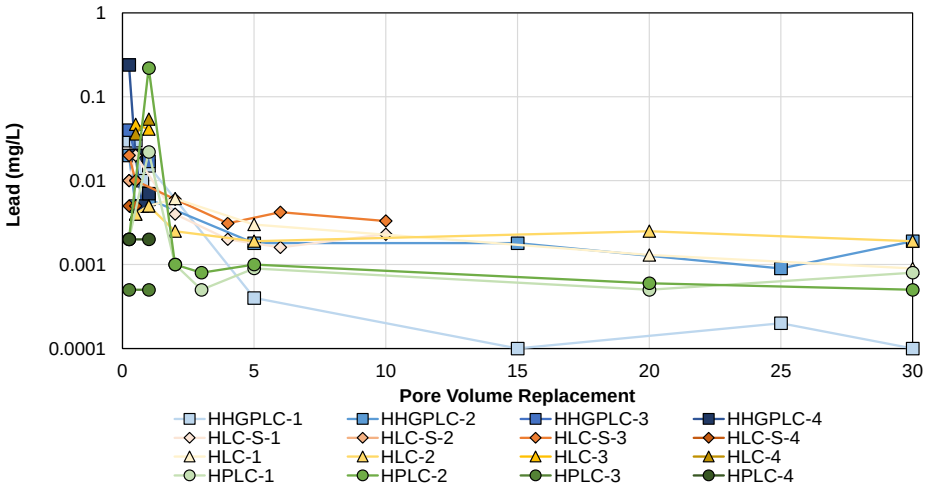


Figure F1-14: Lead Concentration vs Pore Volume Replacement

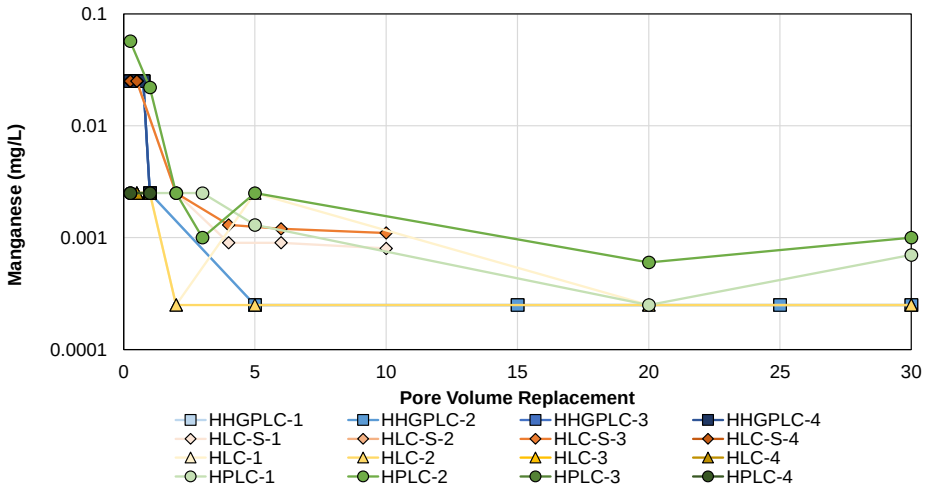


Figure F1-15: Manganese Concentration vs Pore Volume Replacement

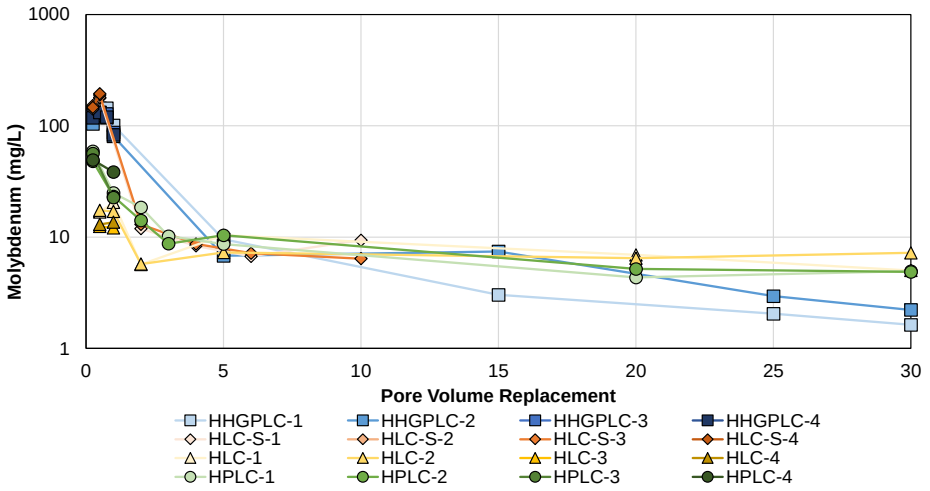


Figure F1-16: Molybdenum Concentration vs Pore Volume Replacement

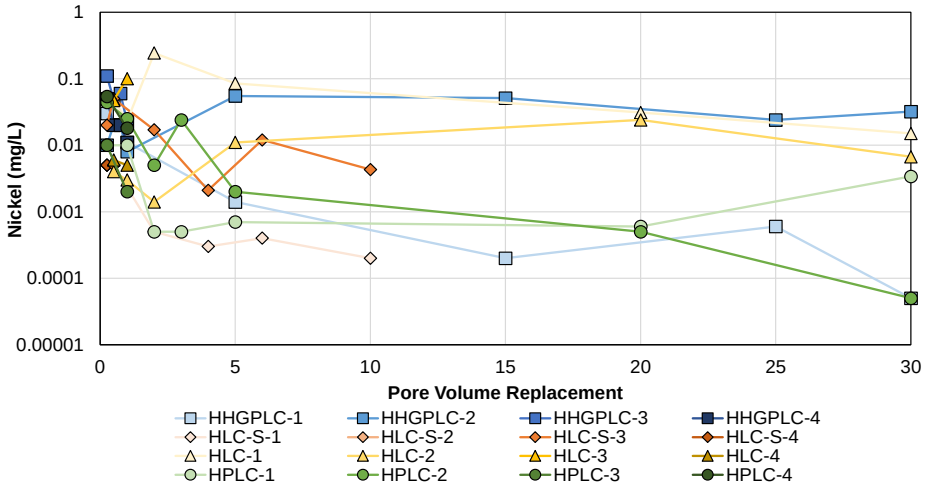


Figure F1-17: Nickel Concentration vs Pore Volume Replacement

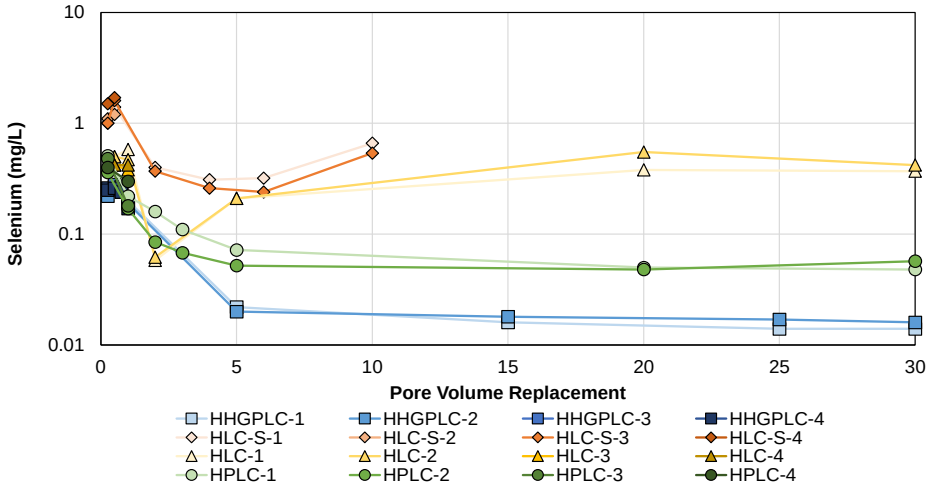


Figure F1-18: Selenium Concentration vs Pore Volume Replacement

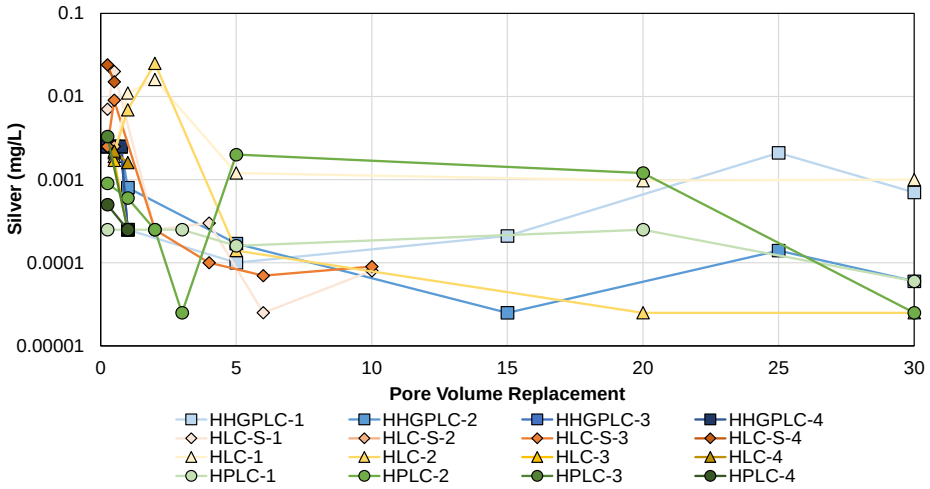


Figure F1-19: Silver Concentration vs Pore Volume Replacement

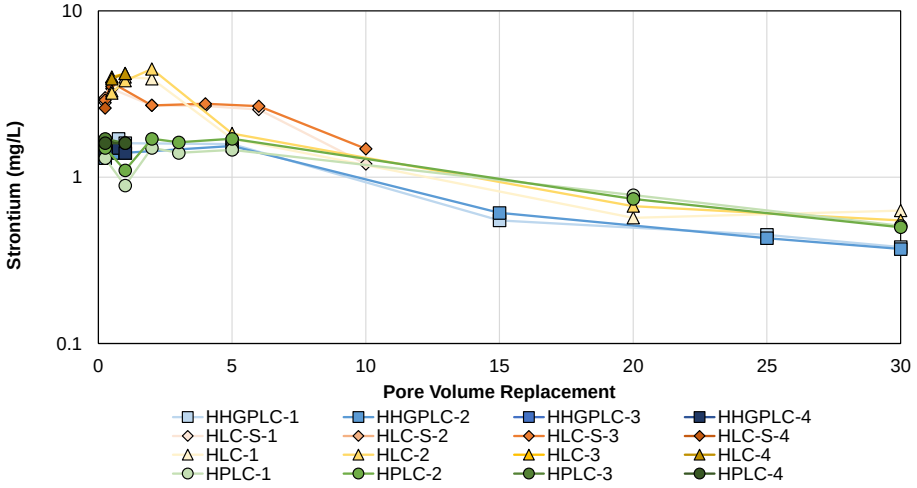


Figure F1-20: Strontium Concentration vs Pore Volume Replacement

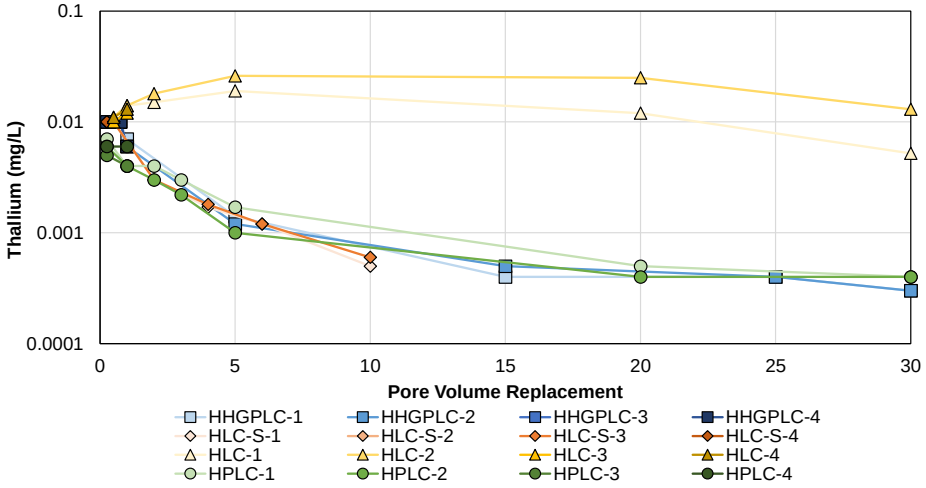


Figure F1-21: Thallium Concentration vs Pore Volume Replacement

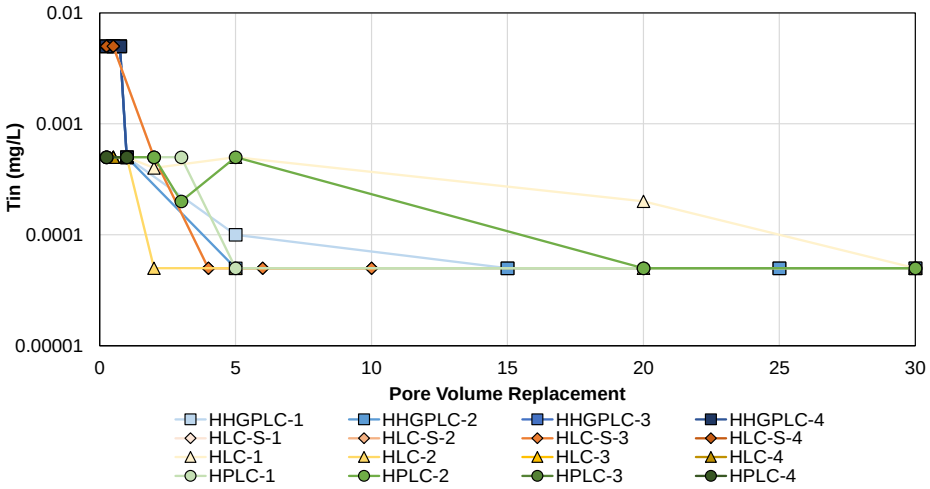


Figure F1-22: Tin Concentration vs Pore Volume Replacement

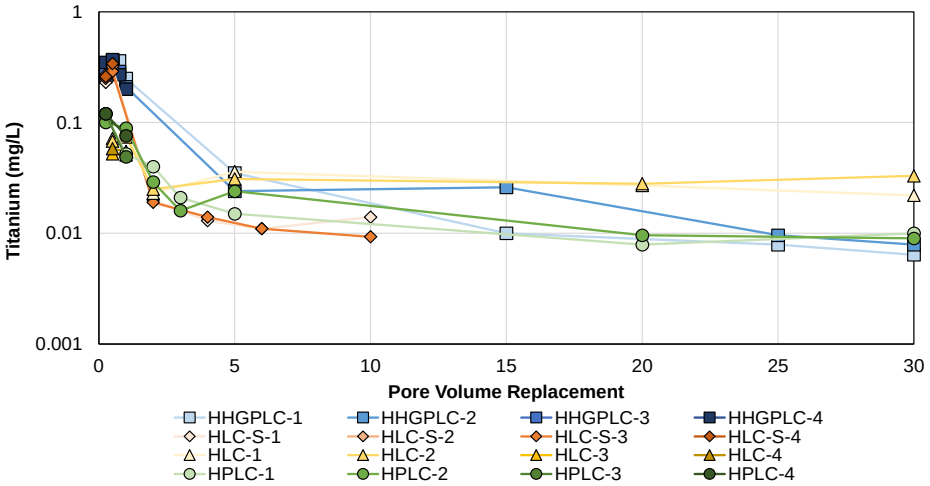


Figure F1-23: Titanium Concentration vs Pore Volume Replacement

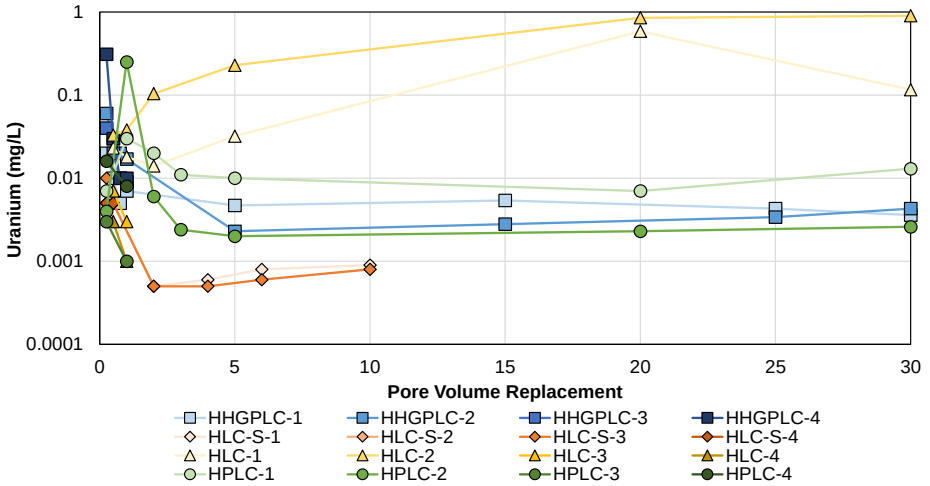


Figure F1-24: Uranium Concentration vs Pore Volume Replacement

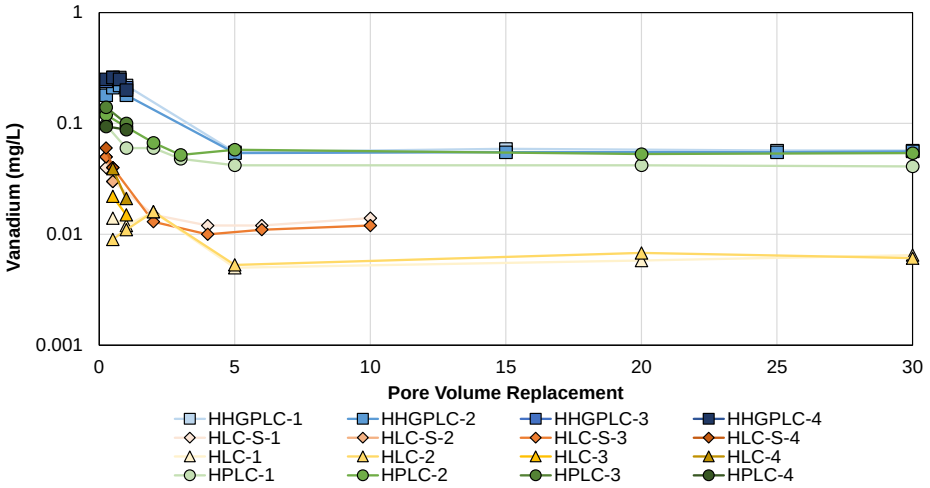


Figure F1-25: Vanadium Concentration vs Pore Volume Replacement

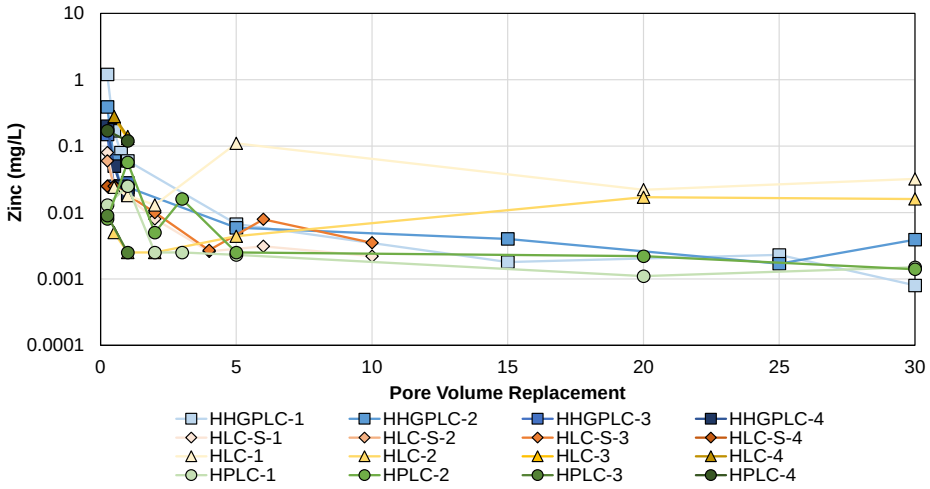


Figure F1-26: Zinc Concentration vs Pore Volume Replacement

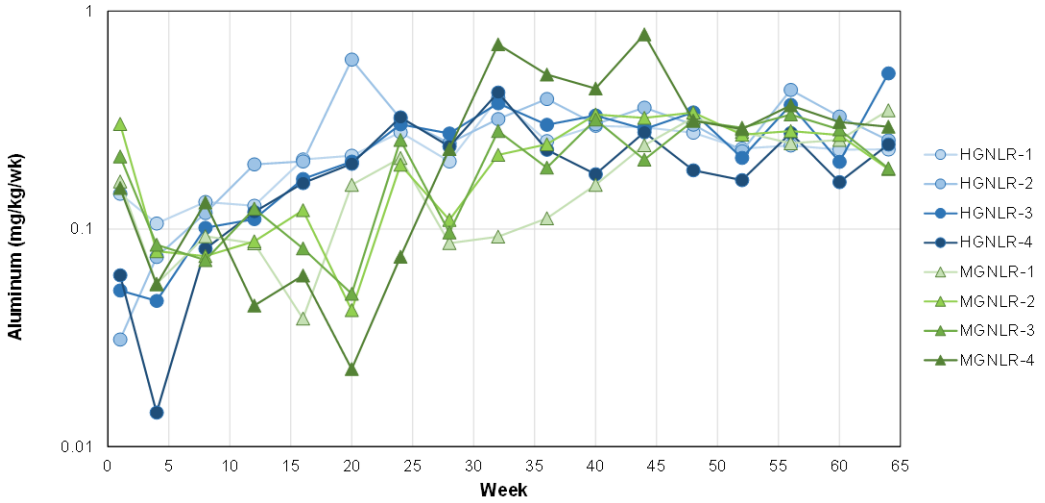


Figure F2-1: HCT Aluminum Mass Loading vs Time

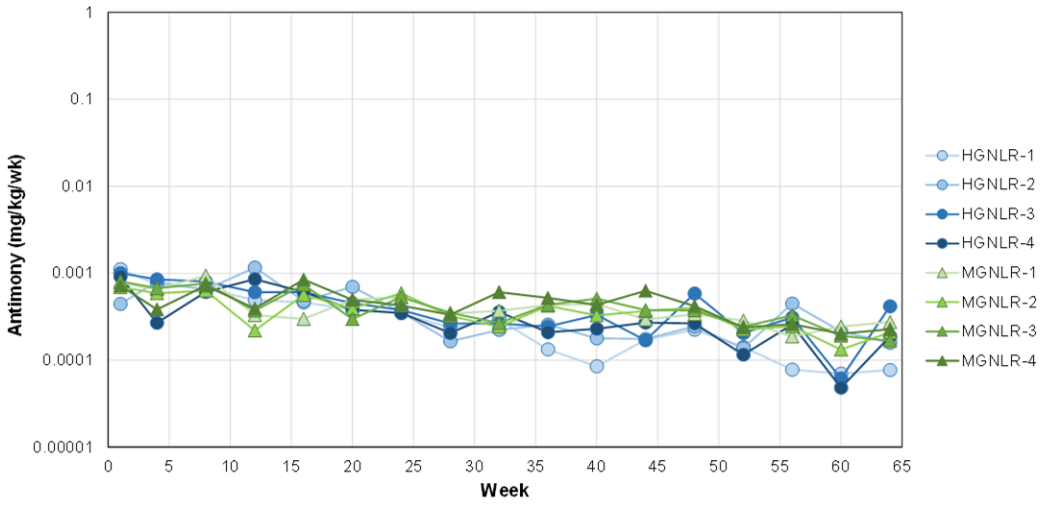


Figure F2-2: HCT Antimony Mass Loading vs Time

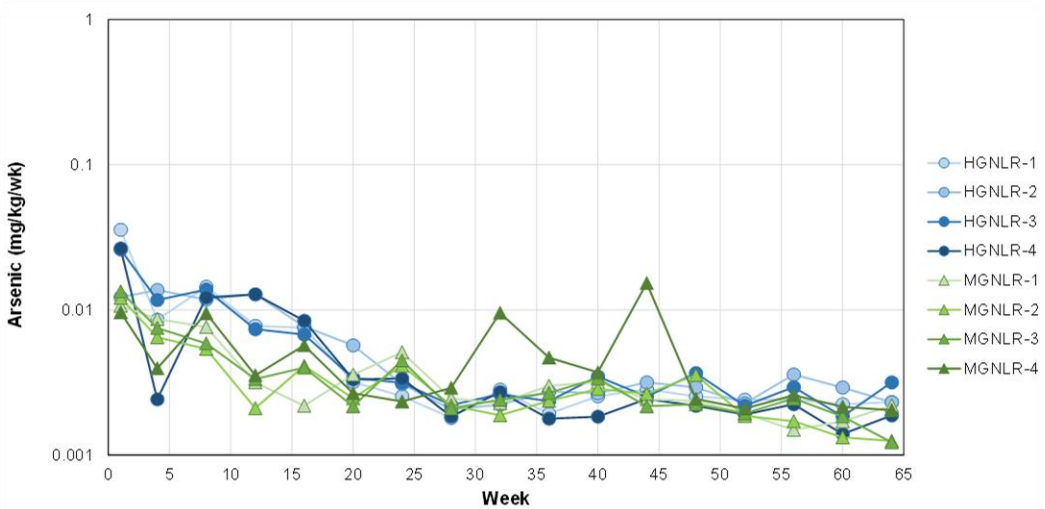


Figure F2-3: HCT Arsenic Mass Loading vs Time

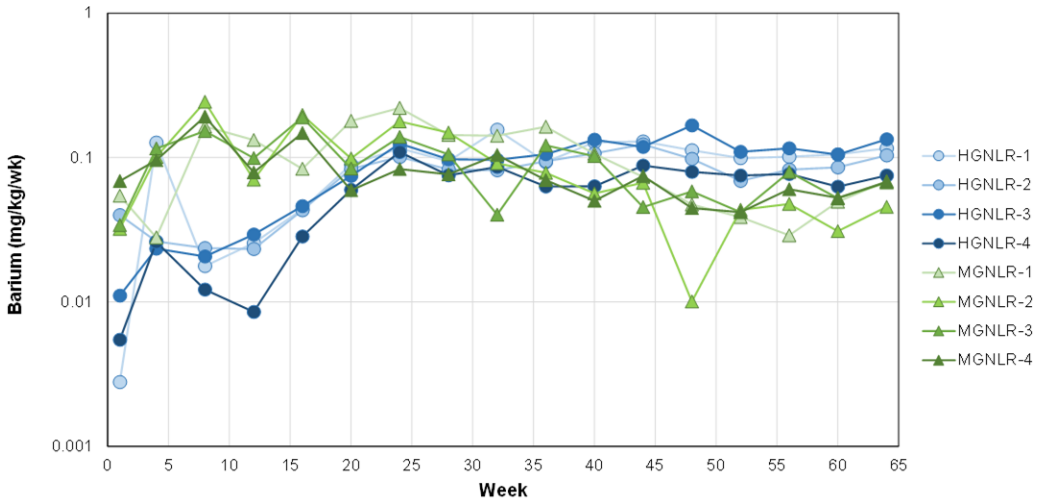


Figure F2-4: HCT Barium Mass Loading vs Time

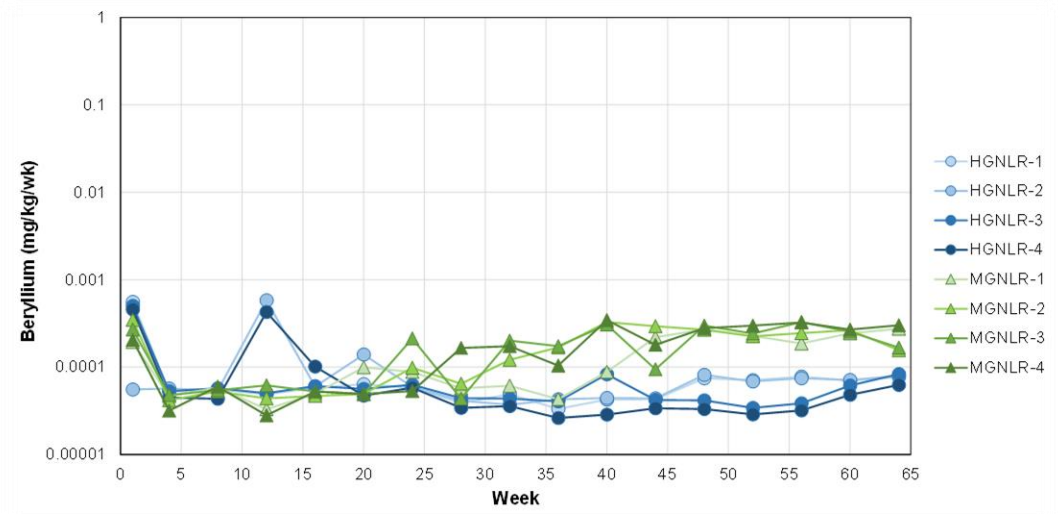


Figure F2-5: HCT Beryllium Mass Loading vs Time

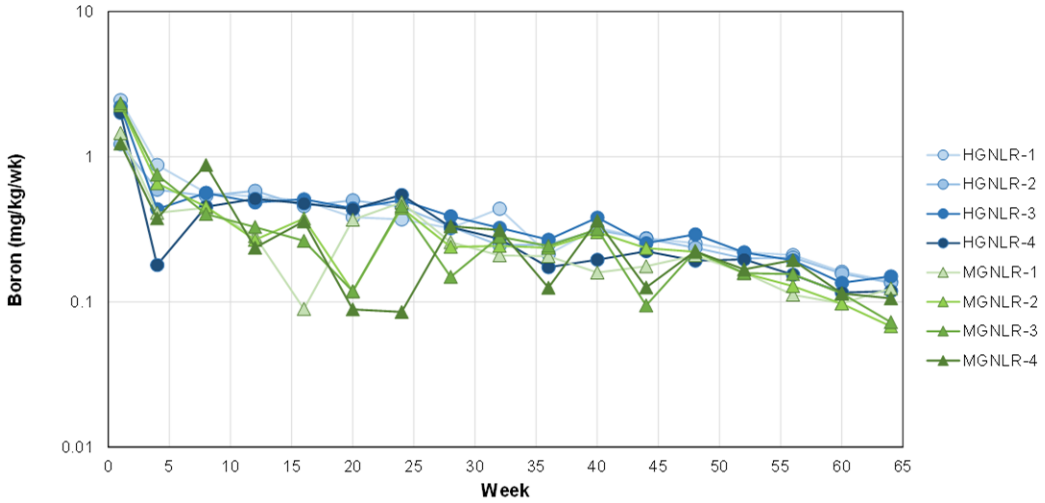


Figure F2-6: HCT Boron Mass Loading vs Time

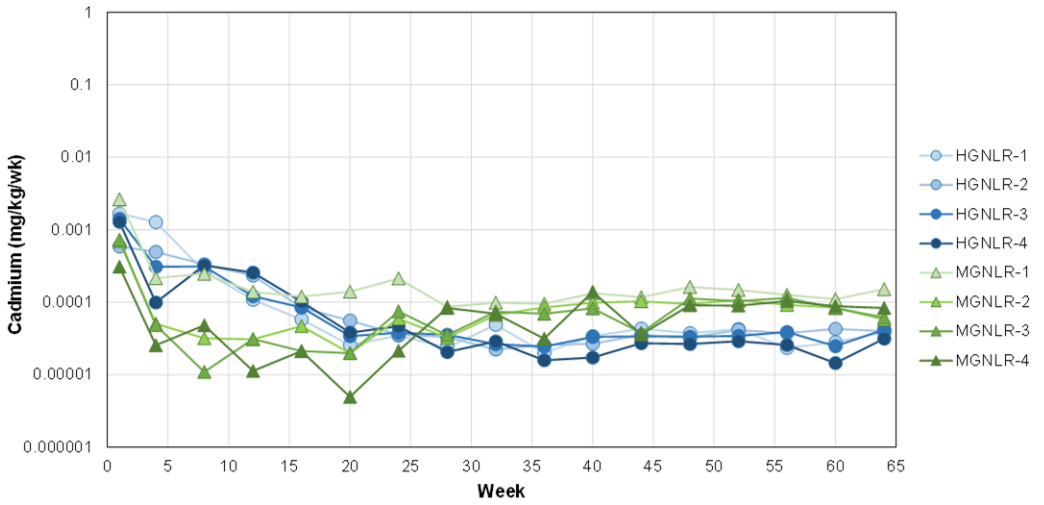


Figure F2-7: HCT Cadmium Mass Loading vs Time

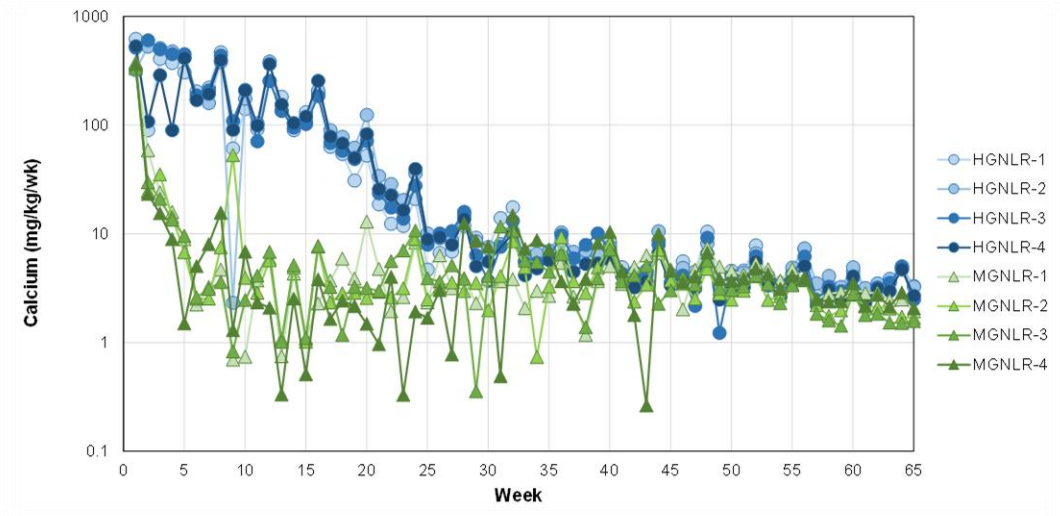


Figure F2-8: HCT Calcium Mass Loading vs Time

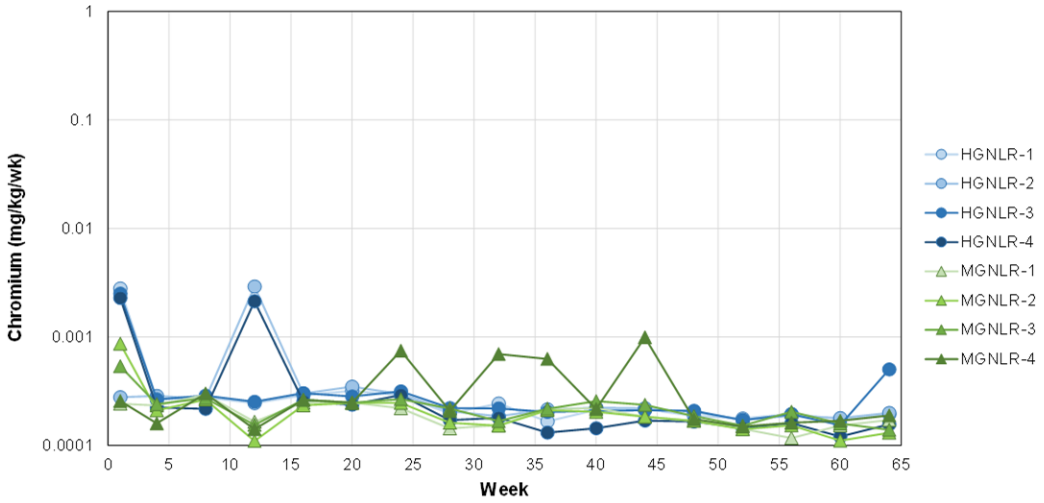


Figure F2-9: HCT Chromium Mass Loading vs Time

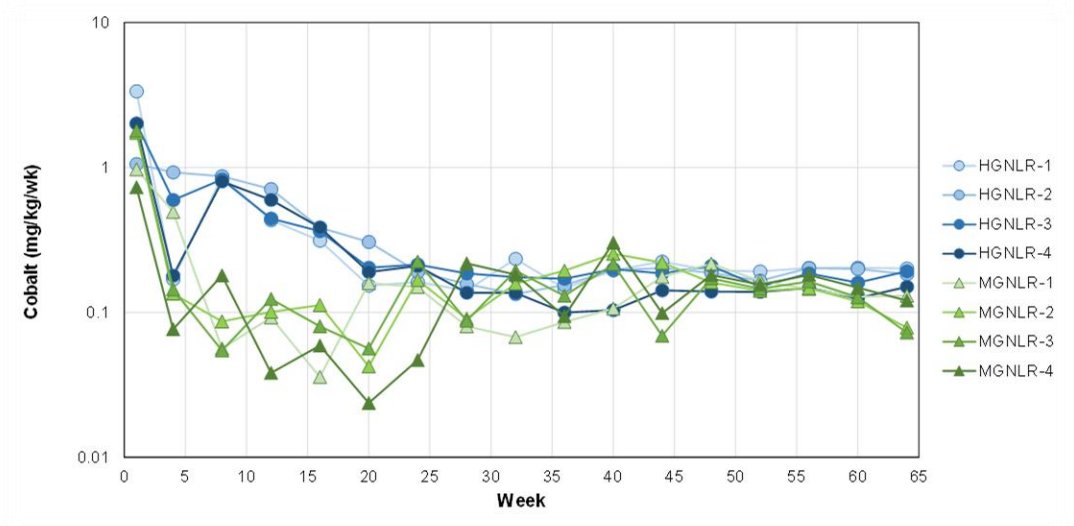


Figure F2-10: HCT Cobalt Mass Loading vs Time

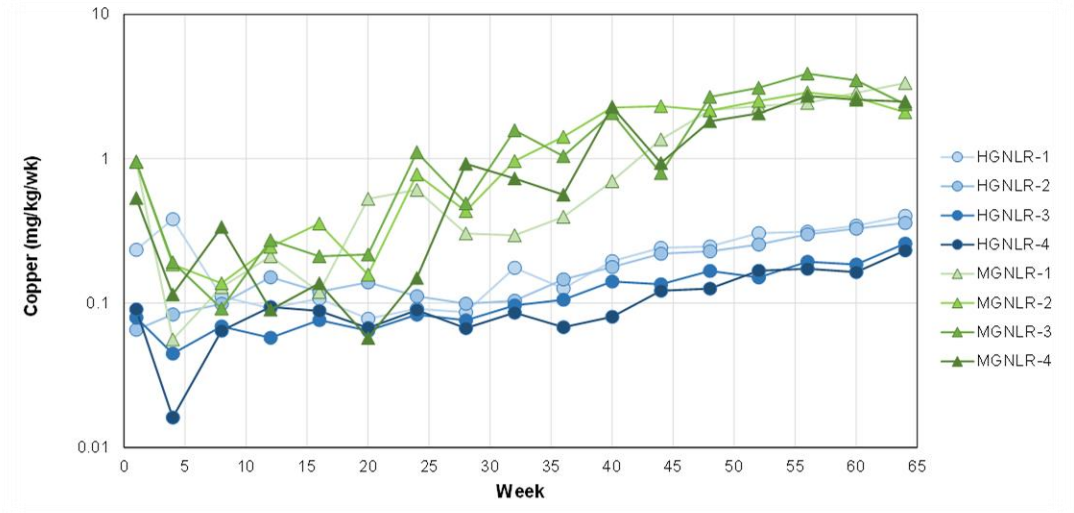


Figure F2-11: HCT Copper Mass Loading vs Time

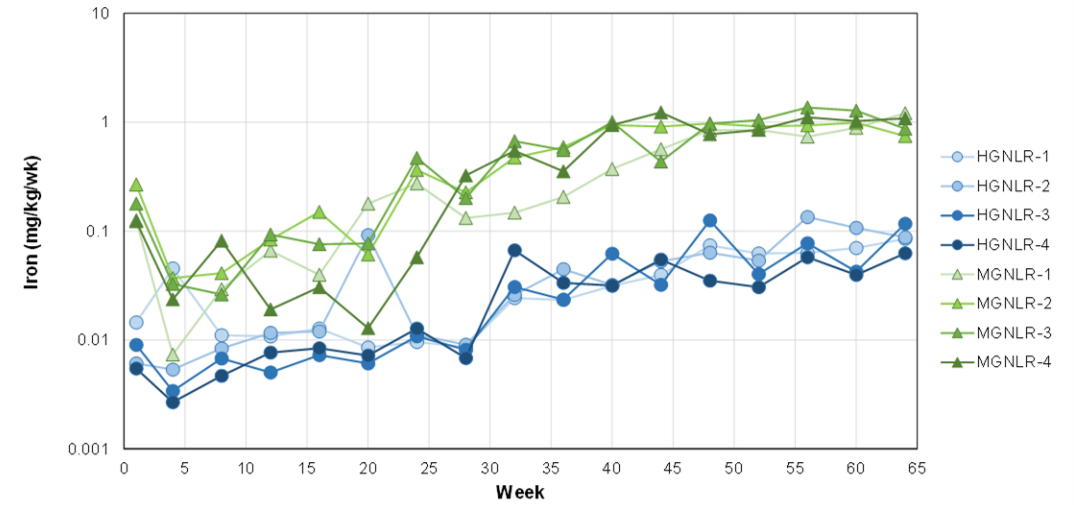


Figure F2-12: HCT Iron Mass Loading vs Time

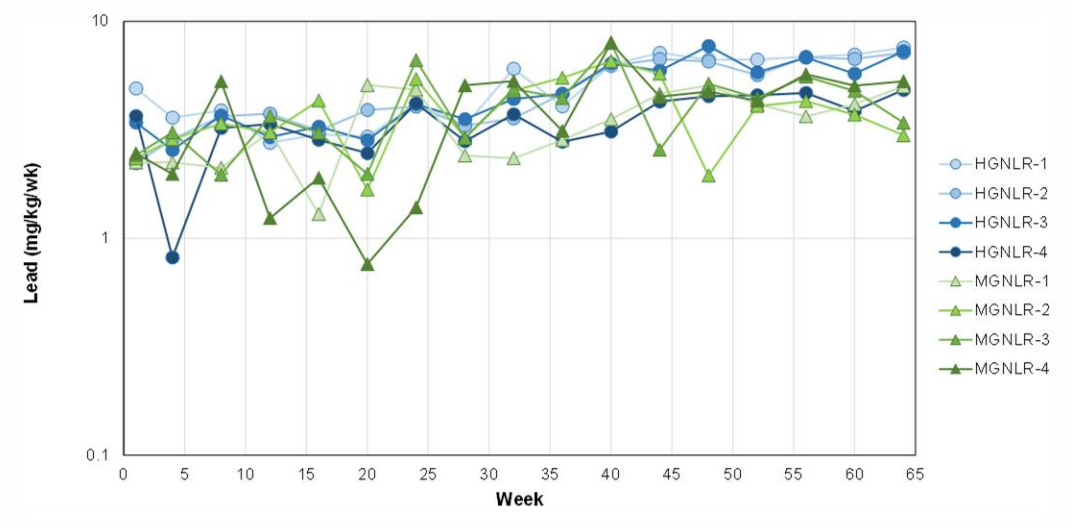


Figure F2-13: HCT Lead Mass Loading vs Time

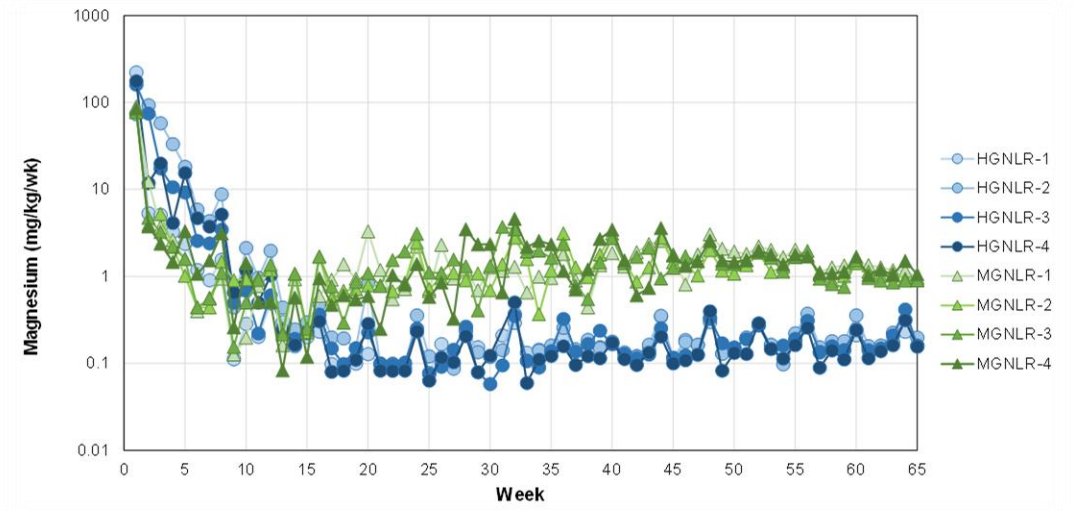


Figure F2-14: HCT Magnesium Mass Loading vs Time

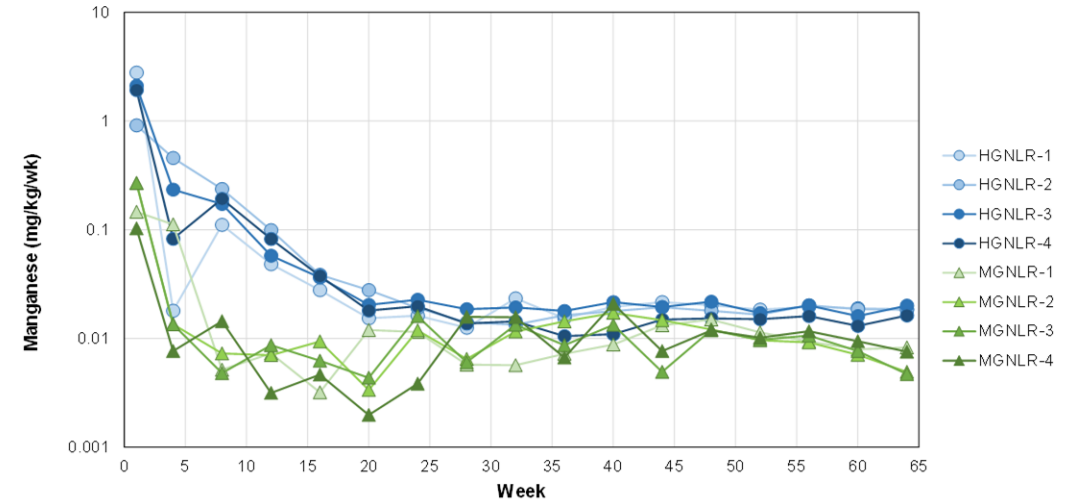


Figure F2-15: HCT Manganese Mass Loading vs Time

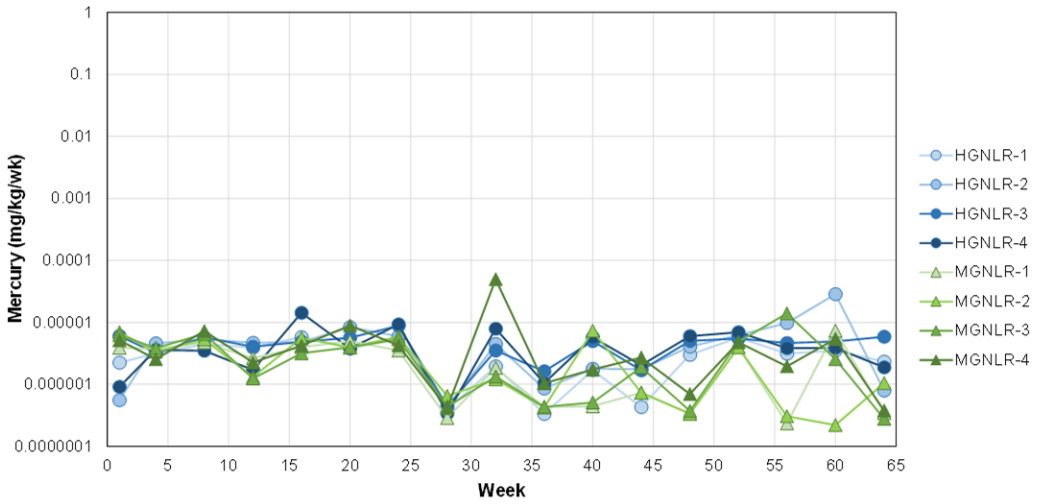


Figure F2-16: HCT Mercury Mass Loading vs Time

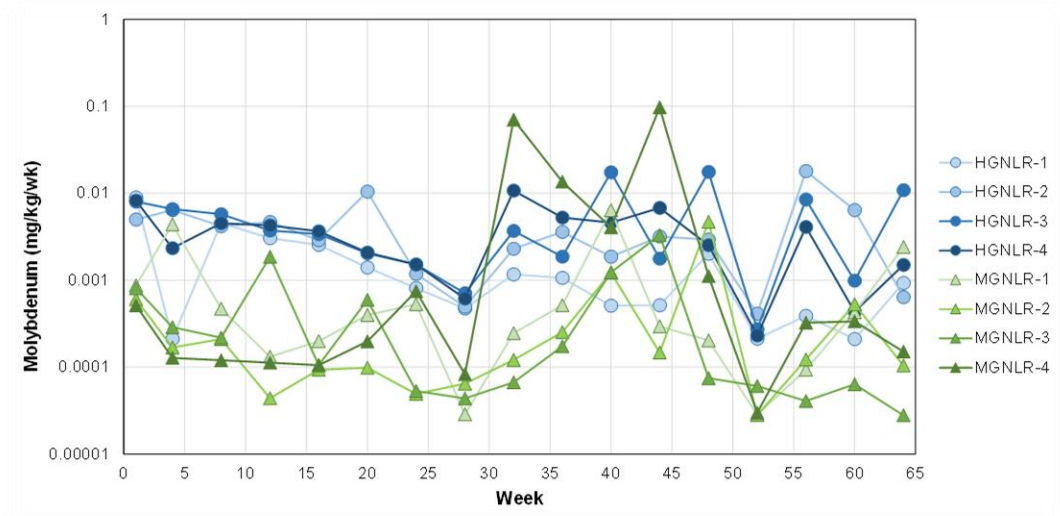


Figure F2-17: HCT Molybdenum Mass Loading vs Time

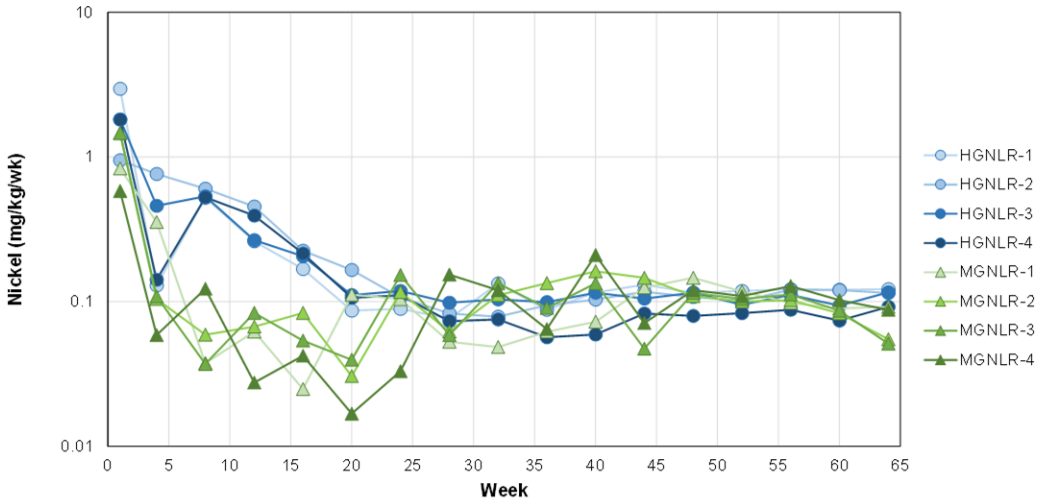


Figure F2-18: HCT Nickel Mass Loading vs Time

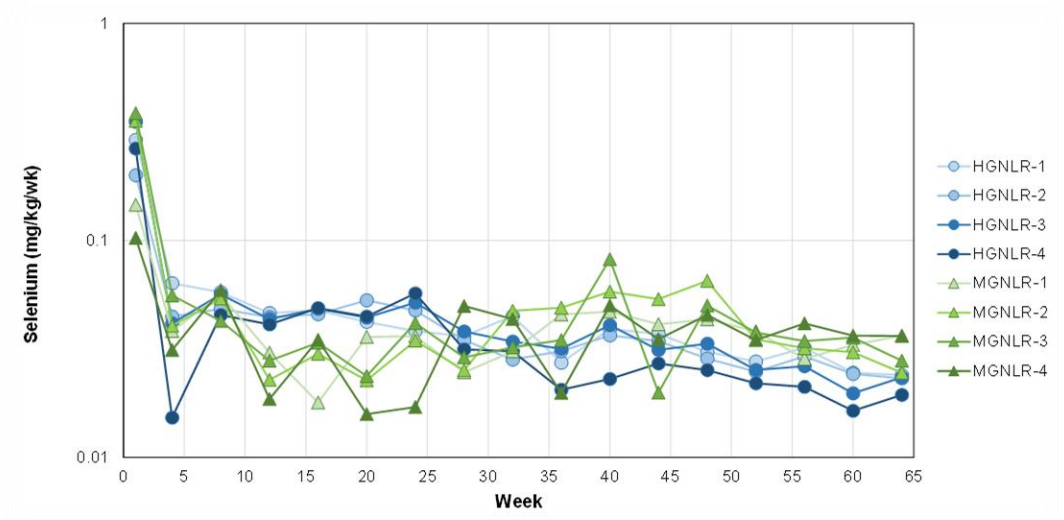


Figure F2-19: HCT Selenium Mass Loading vs Time

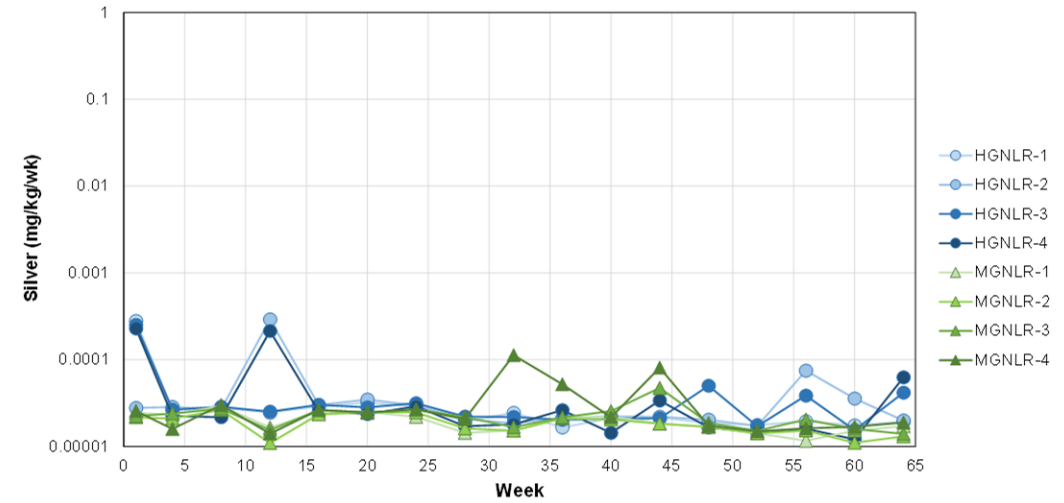


Figure F2-20: HCT Silver Mass Loading vs Time

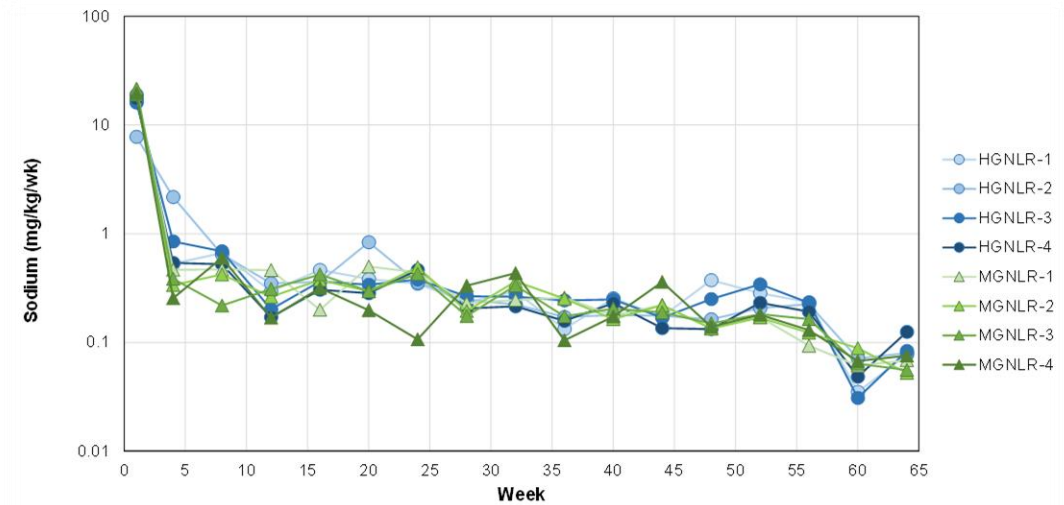


Figure F2-21: HCT Sodium Mass Loading vs Time

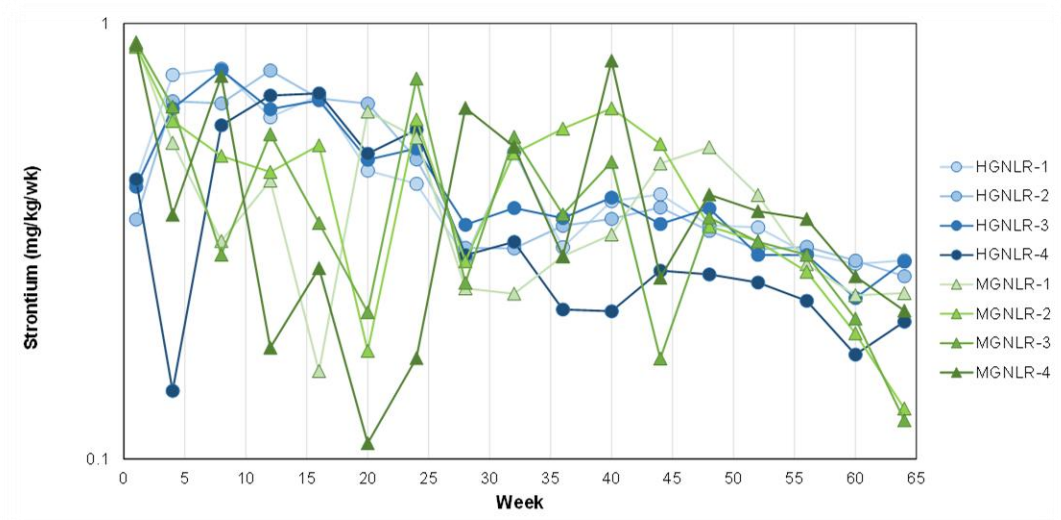


Figure F2-22: HCT Strontium Mass Loading vs Time

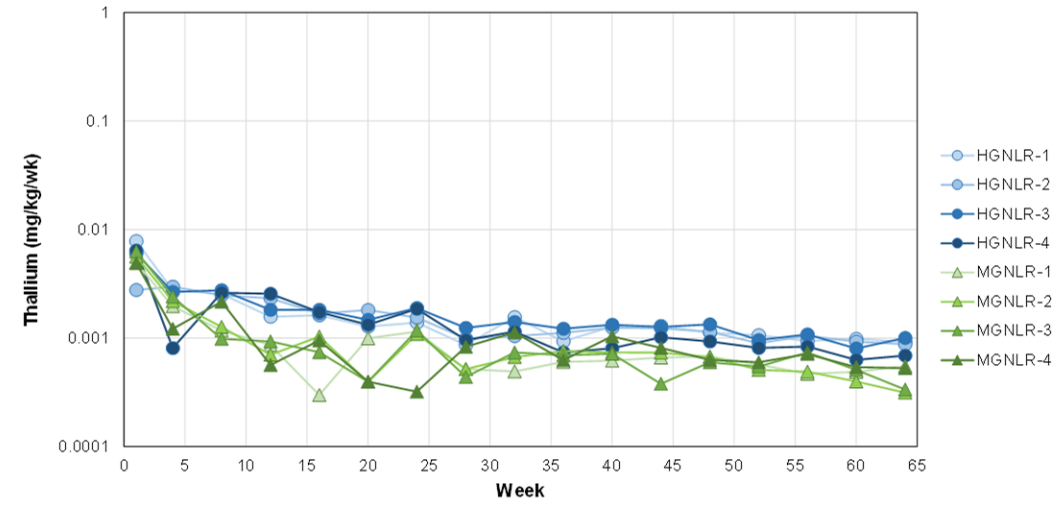


Figure F2-23: HCT Thallium Mass Loading vs Time

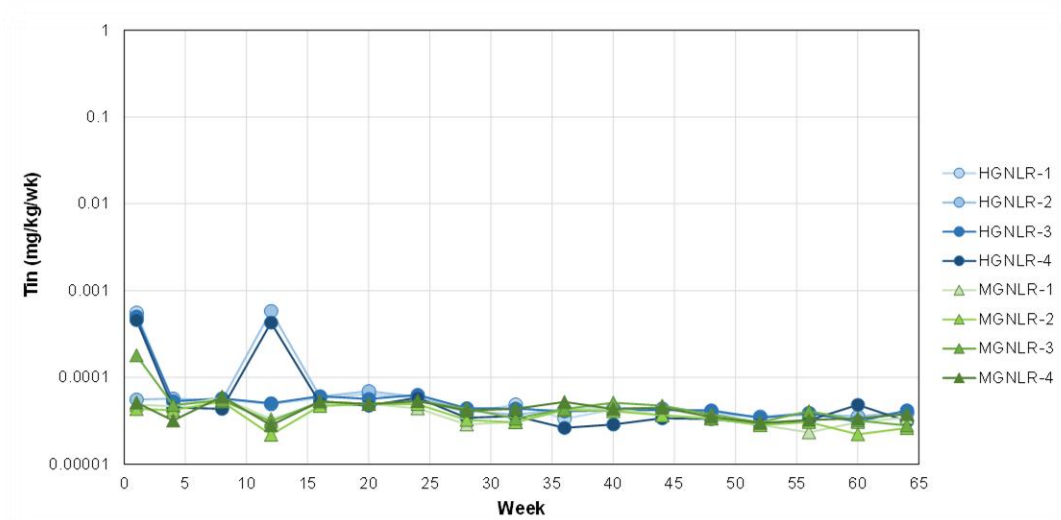


Figure F2-24: HCT Tin Mass Loading vs Time

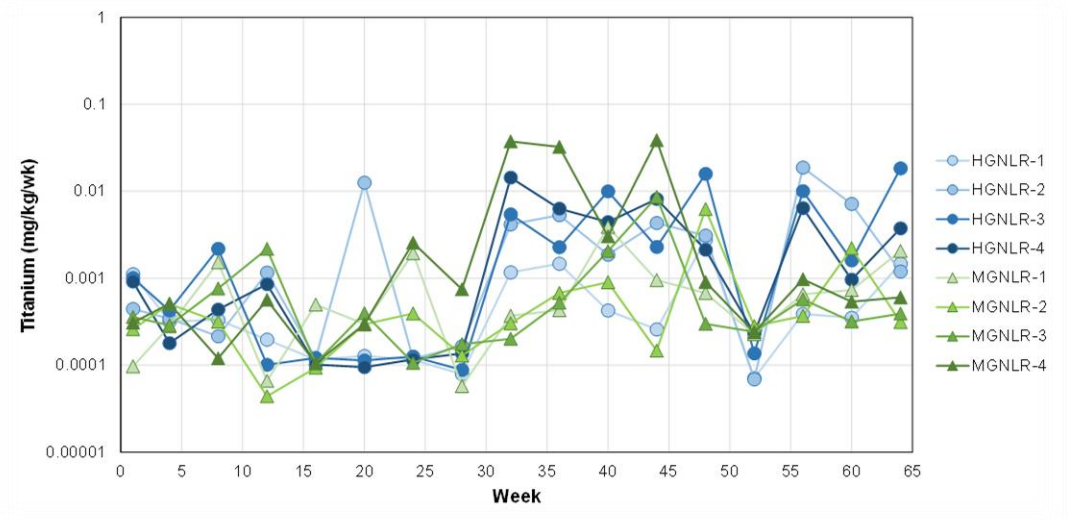


Figure F2-25: HCT Titanium Mass Loading vs Time

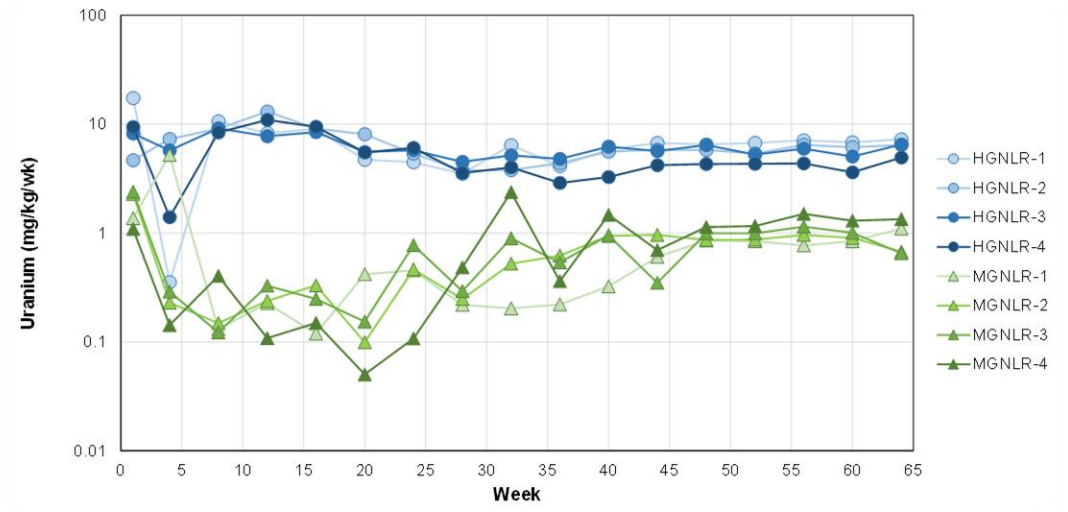


Figure F2-26: HCT Uranium Mass Loading vs Time

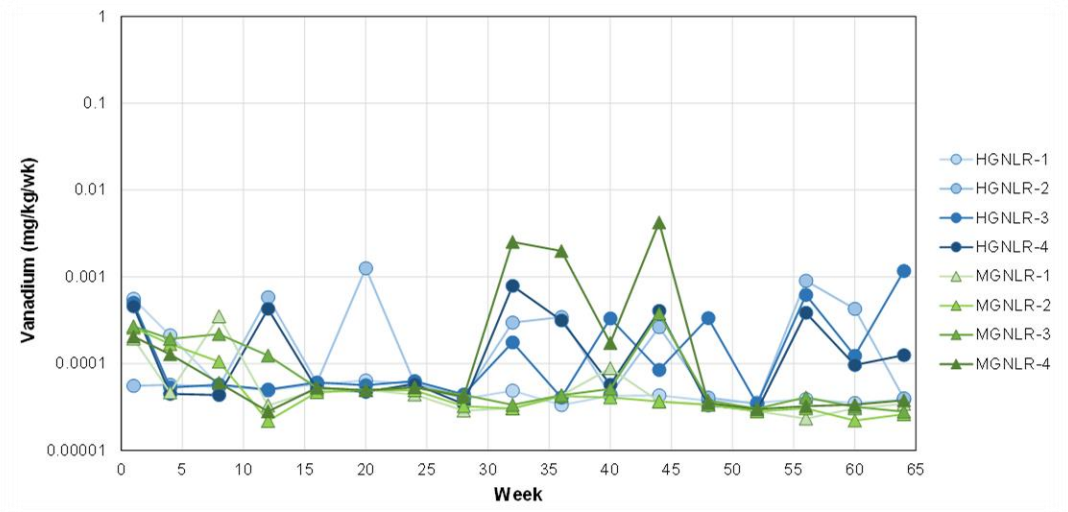


Figure F2-27: HCT Vanadium Mass Loading vs Time

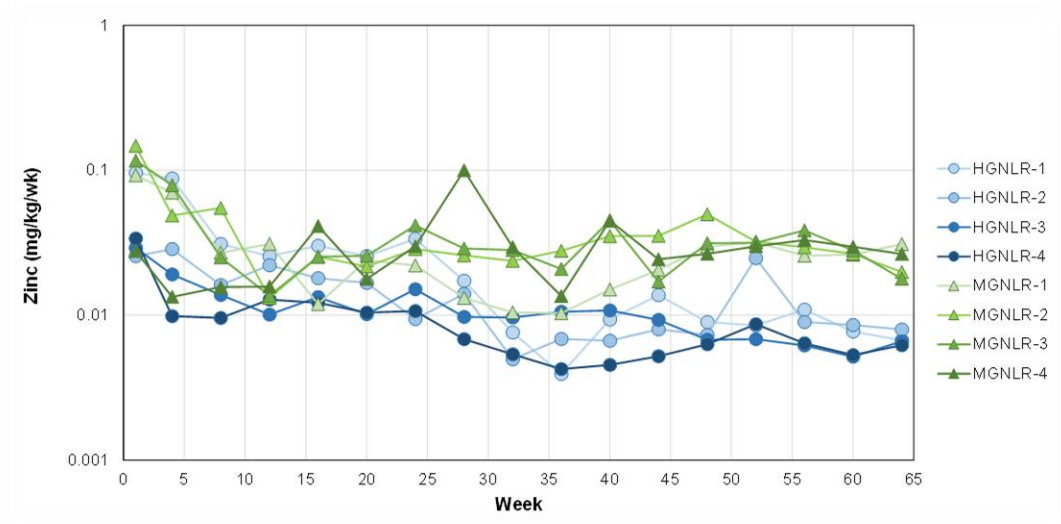


Figure F2-28: HCT Zinc Mass Loading vs Time

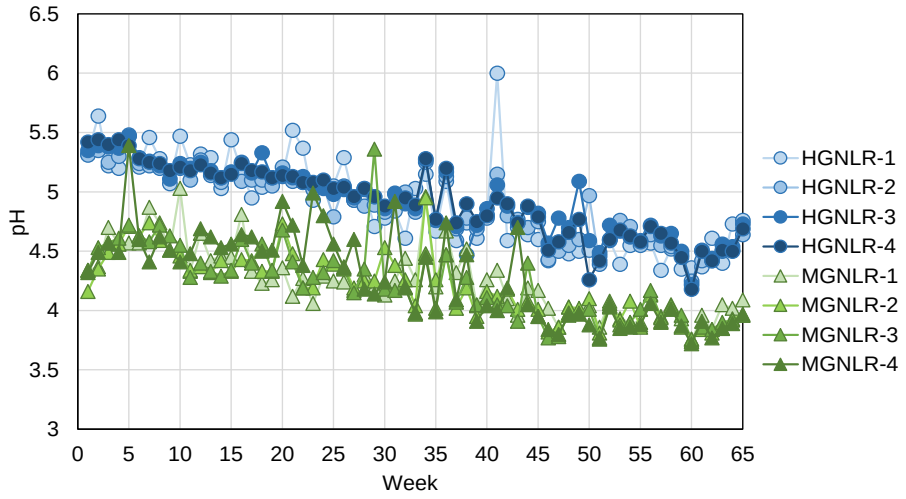


Figure F2-29: HCT Leachate pH vs Time

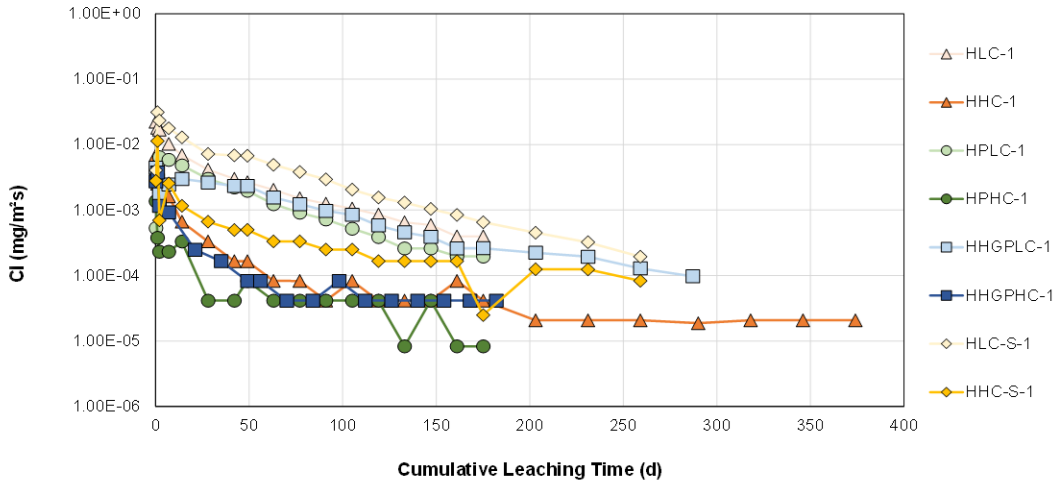


Figure F3-1: Chloride Interval Mass Flux vs Cumulative Leaching Time

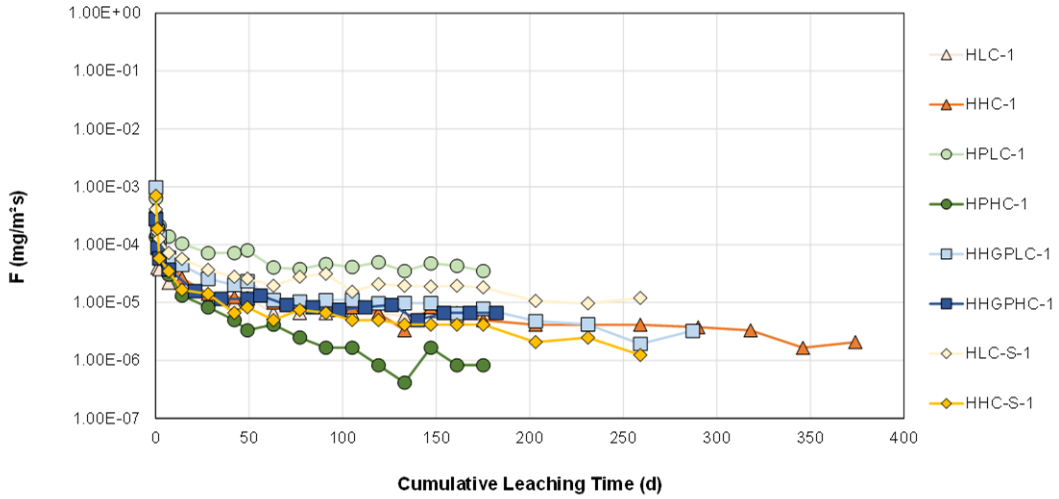


Figure F3-2: Fluoride Interval Mass Flux vs Cumulative Leaching Time

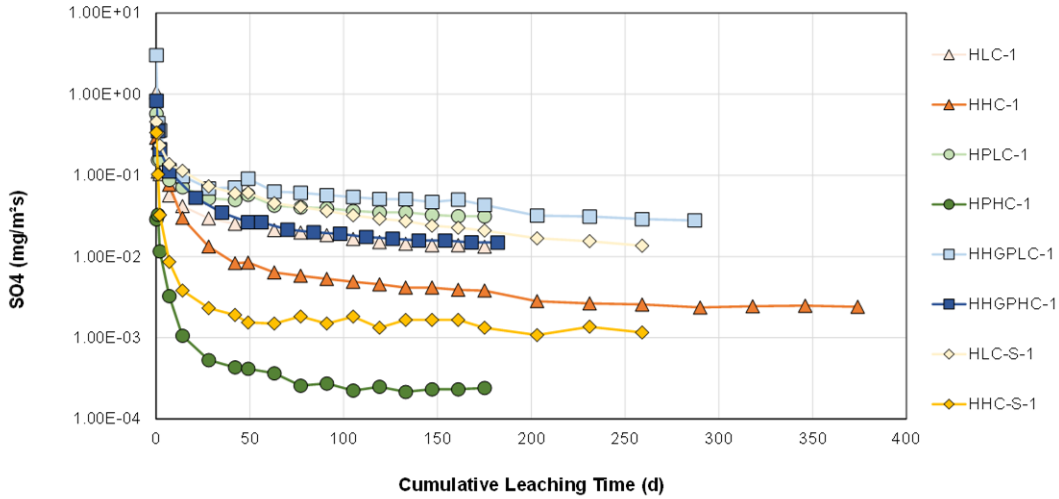


Figure F3-3: Sulphate Interval Mass Flux vs Cumulative Leaching Time

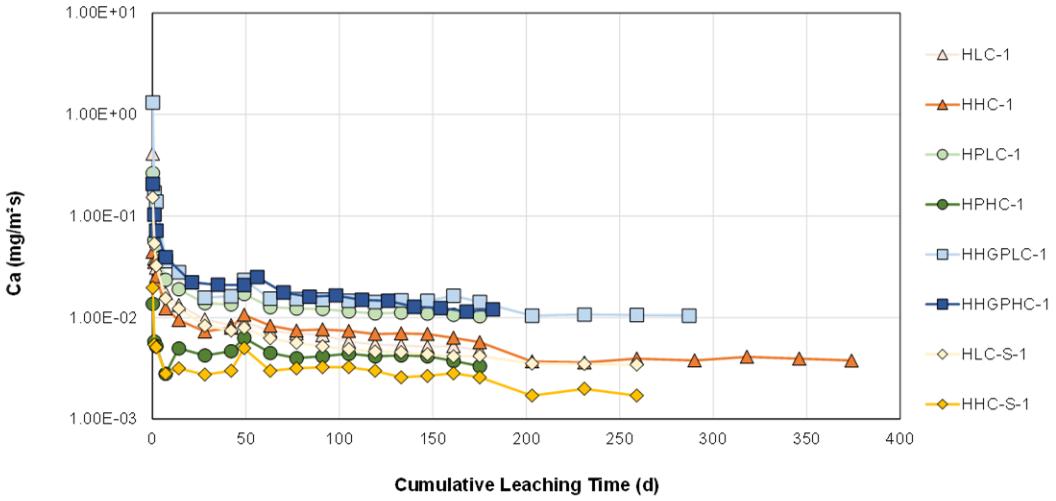


Figure F3-4: Calcium Interval Mass Flux vs Cumulative Leaching Time

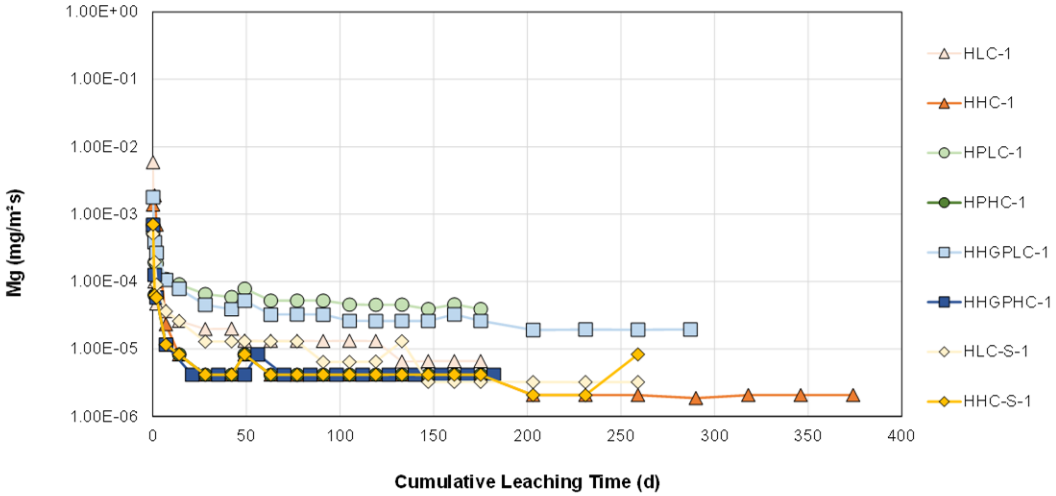


Figure F3-5: Magnesium Interval Mass Flux vs Cumulative Leaching Time

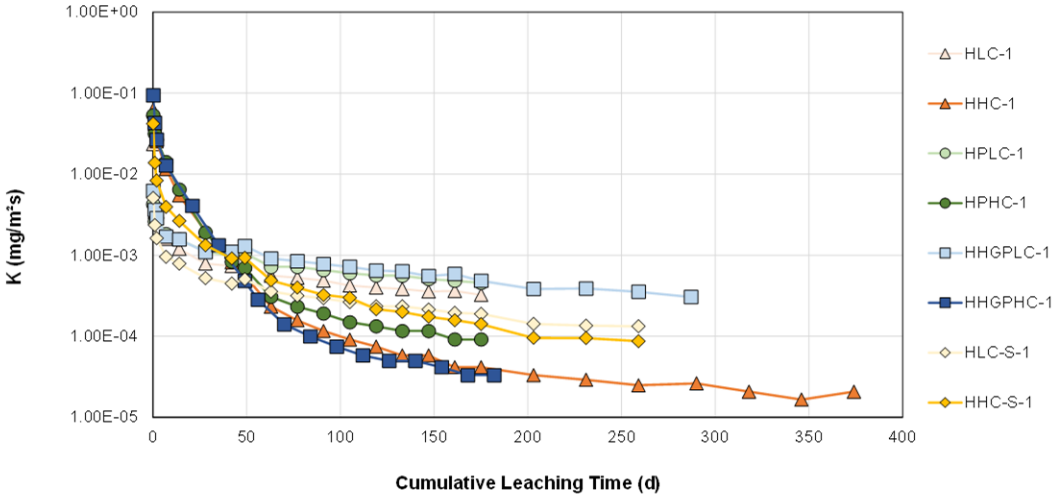


Figure F3-6: Potassium Interval Mass Flux vs Cumulative Leaching Time

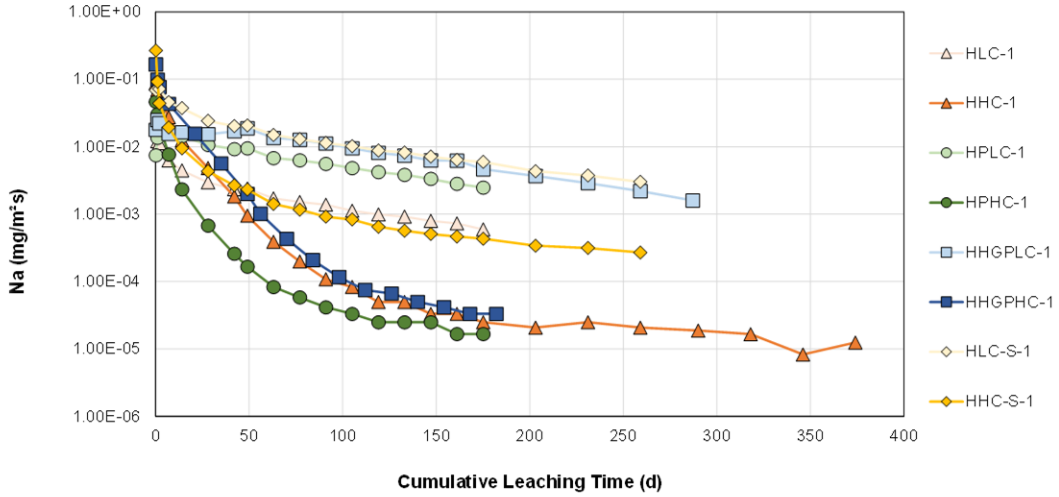


Figure F3-7: Sodium Interval Mass Flux vs Cumulative Leaching Time

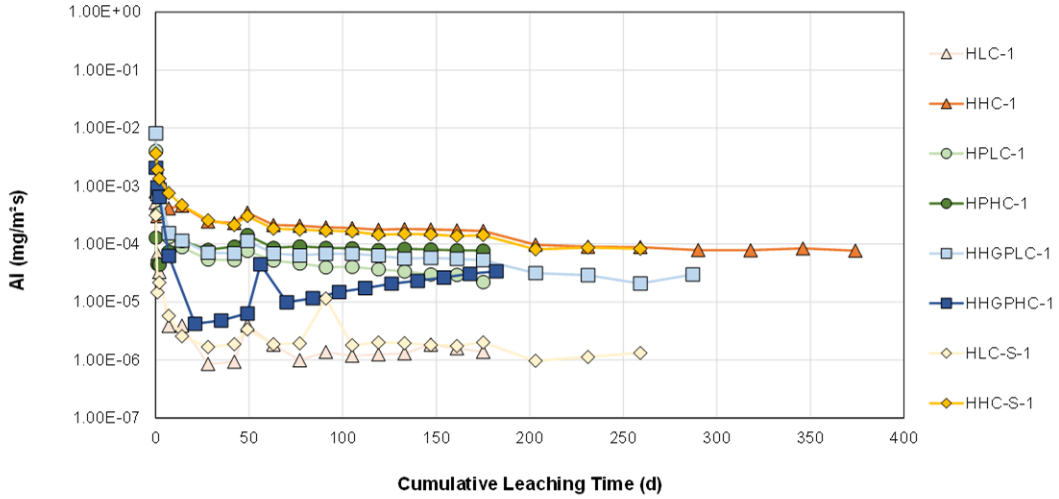


Figure F3-8: Aluminum Interval Mass Flux vs Cumulative Leaching Time

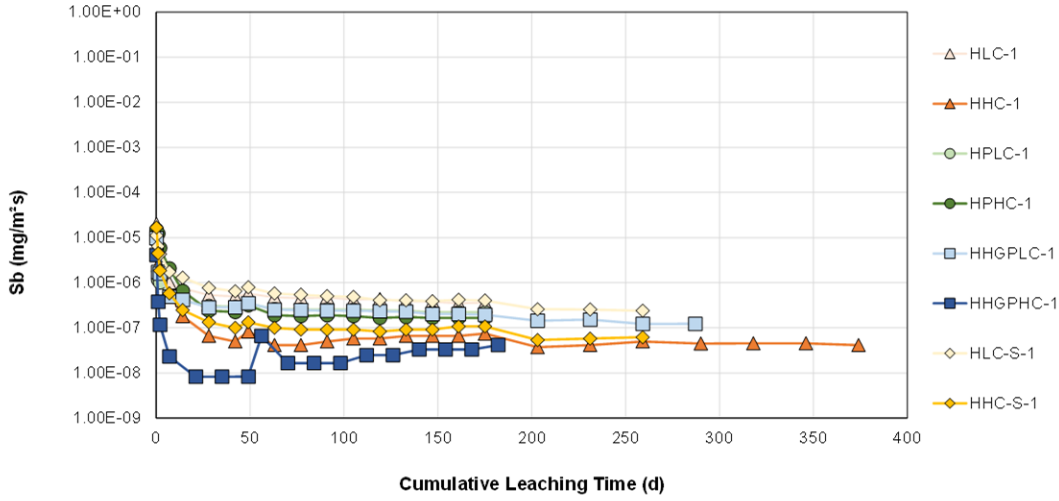


Figure F3-9: Antimony Interval Mass Flux vs Cumulative Leaching Time

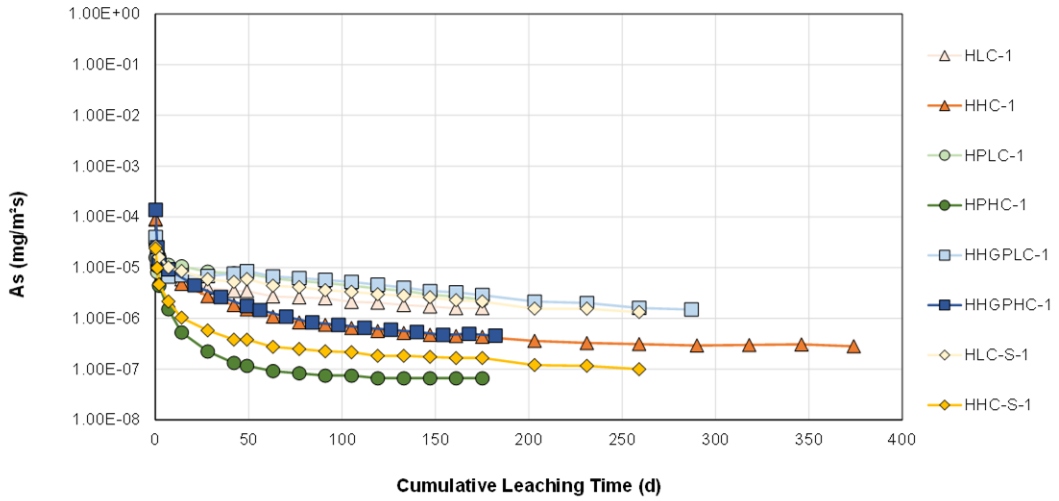


Figure F3-10: Arsenic Interval Mass Flux vs Cumulative Leaching Time

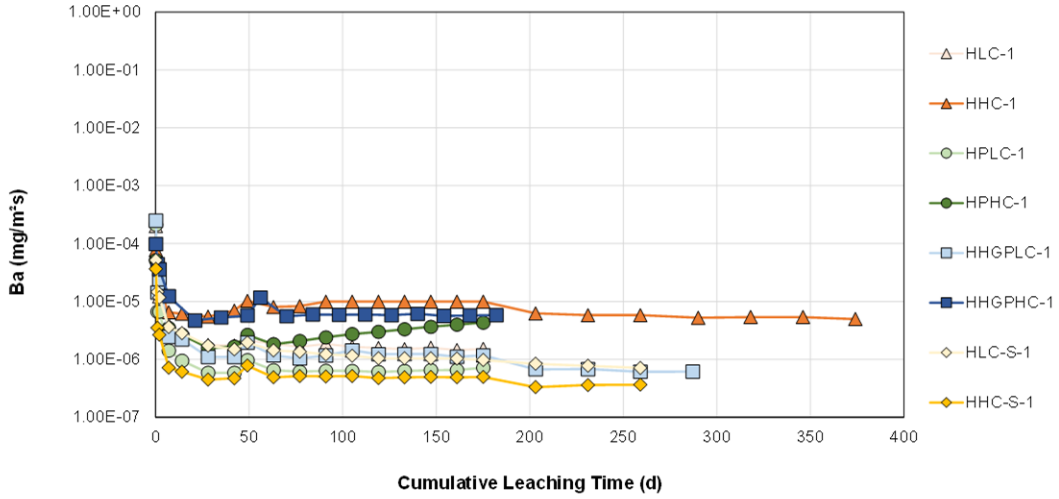


Figure F3-11: Barium Interval Mass Flux vs Cumulative Leaching Time

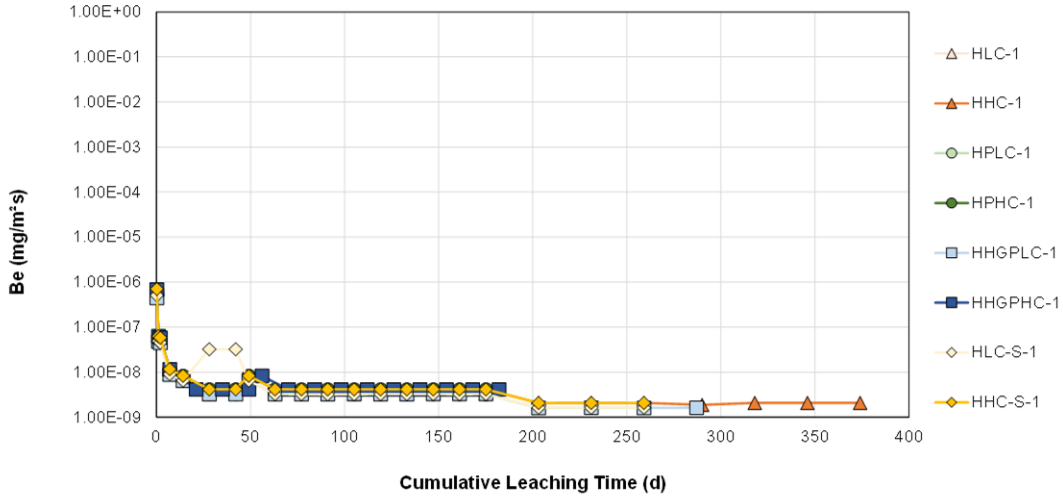


Figure F3-12: Beryllium Interval Mass Flux vs Cumulative Leaching Time

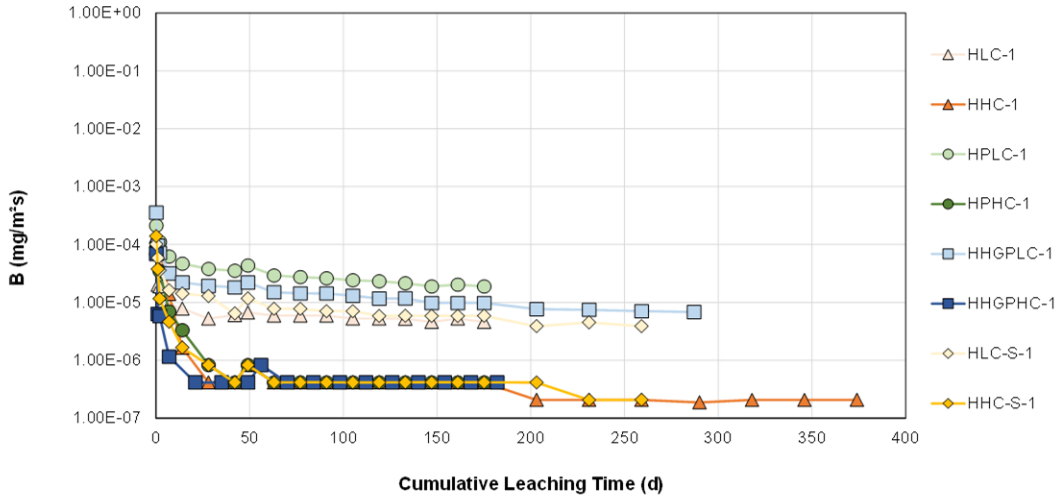


Figure F3-13: Boron Interval Mass Flux vs Cumulative Leaching Time

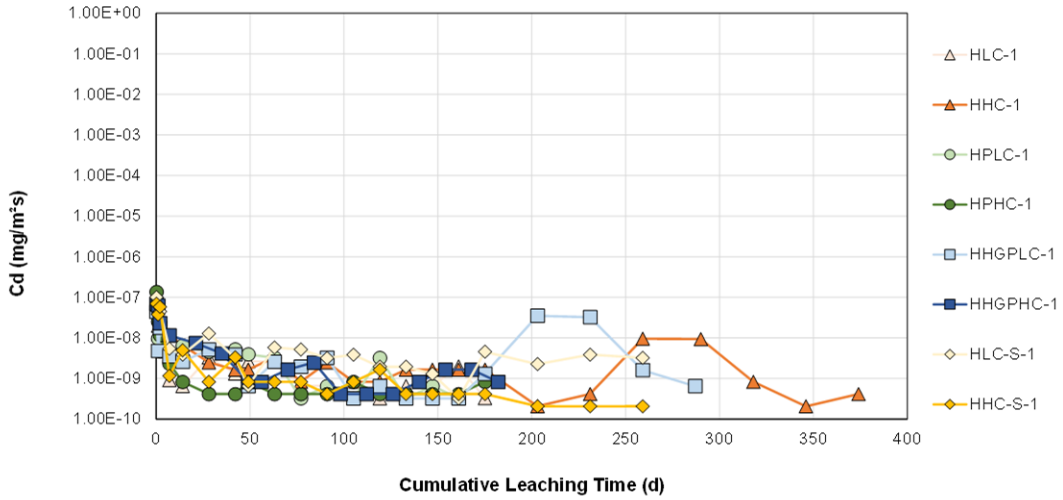


Figure F3-14: Cadmium Interval Mass Flux vs Cumulative Leaching Time

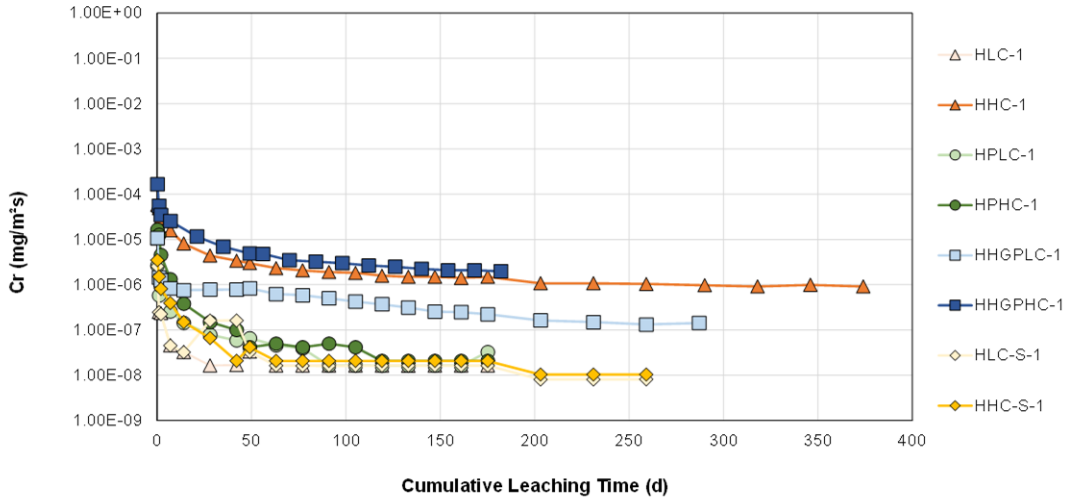


Figure F3-15: Chromium Interval Mass Flux vs Cumulative Leaching Time

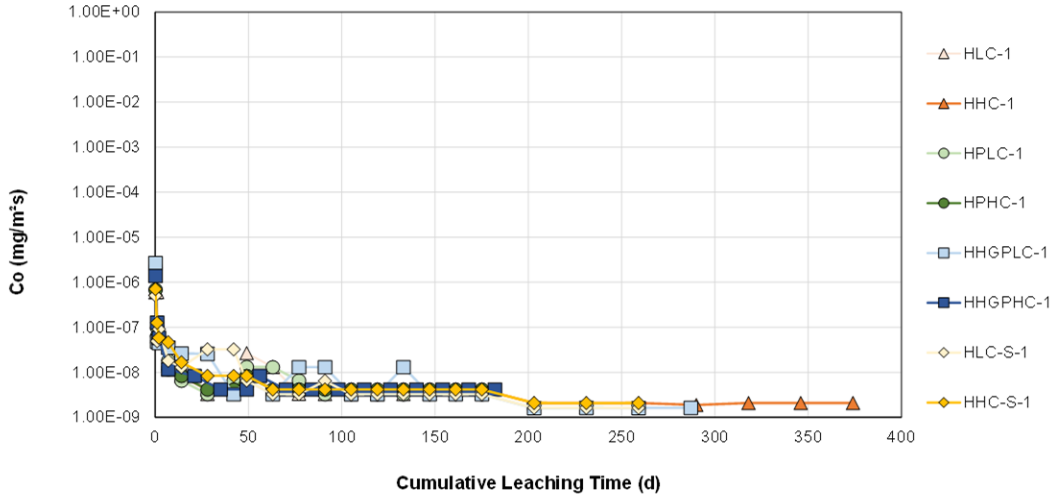


Figure F3-16: Cobalt Interval Mass Flux vs Cumulative Leaching Time

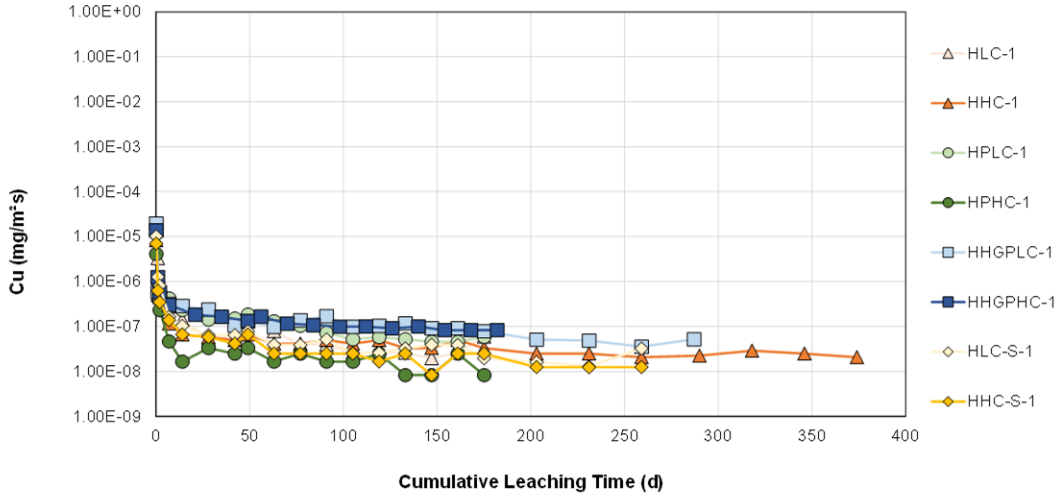


Figure F3-17: Copper Interval Mass Flux vs Cumulative Leaching Time

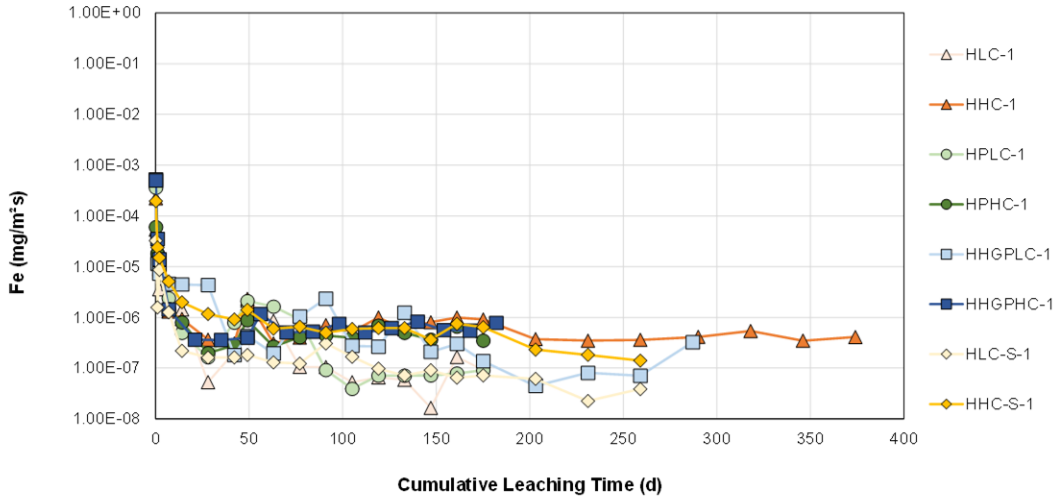


Figure F3-18: Iron Interval Mass Flux vs Cumulative Leaching Time

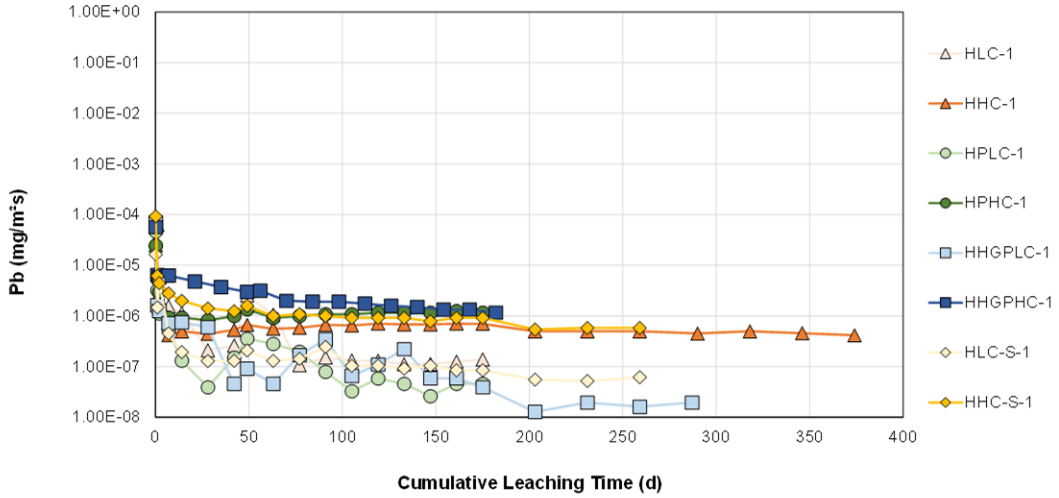


Figure F3-19: Lead Interval Mass Flux vs Cumulative Leaching Time

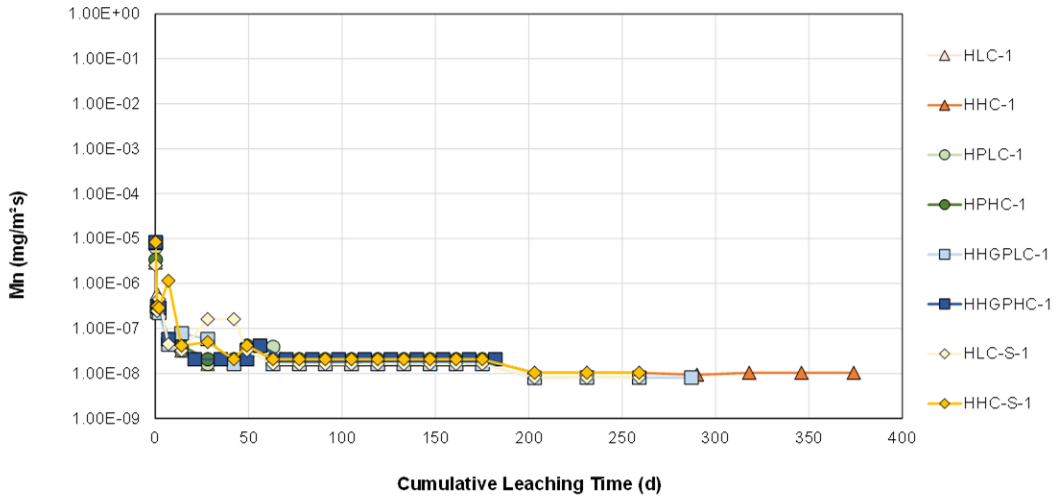


Figure F3-20: Manganese Interval Mass Flux vs Cumulative Leaching Time

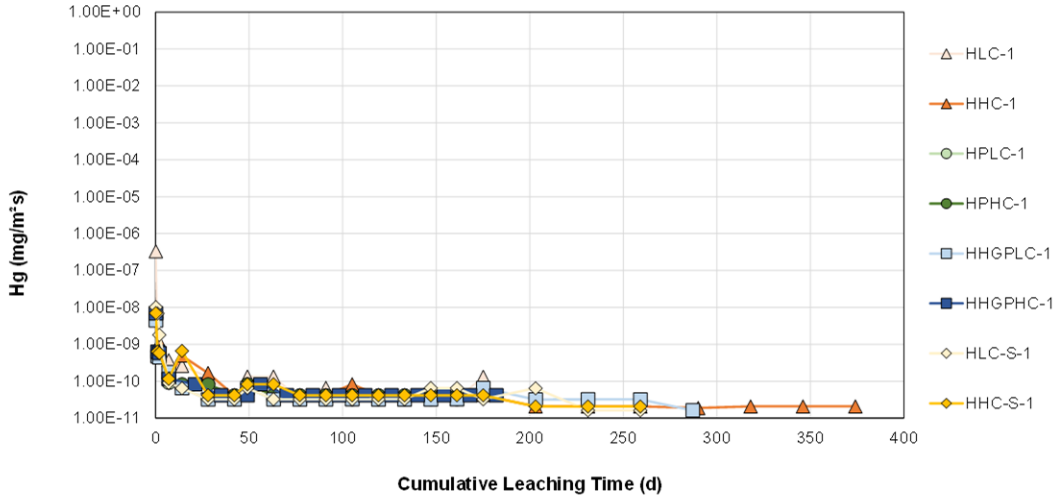


Figure F3-21: Mercury Interval Mass Flux vs Cumulative Leaching Time

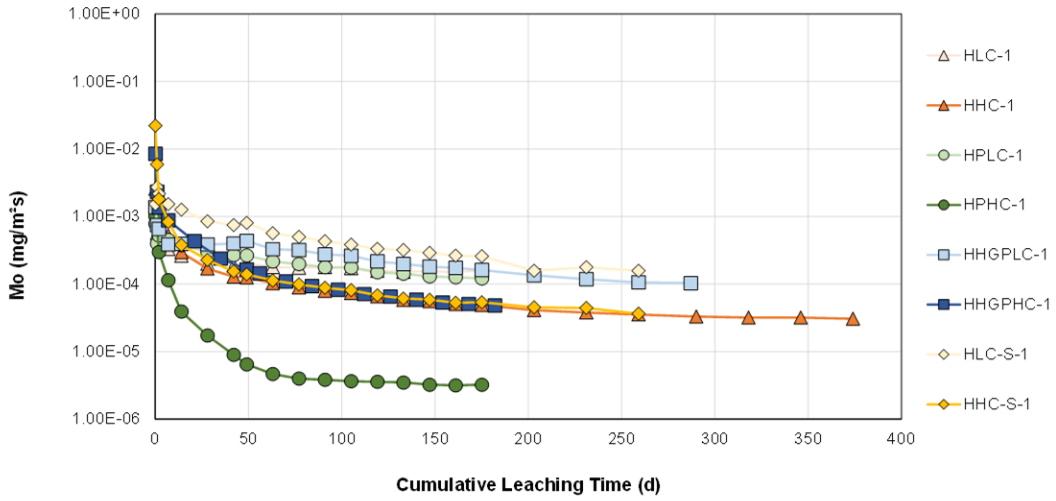


Figure F3-22: Molybdenum Interval Mass Flux vs Cumulative Leaching Time

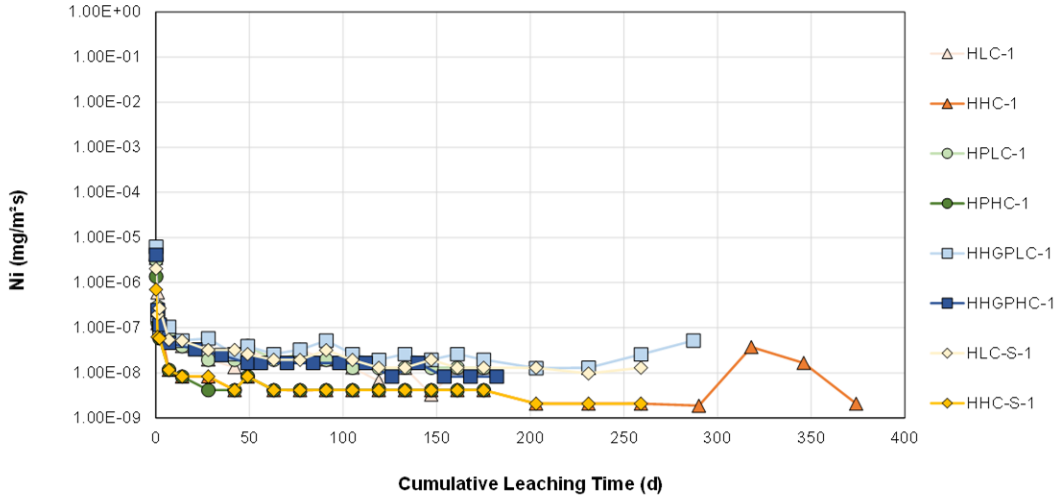


Figure F3-23: Nickel Interval Mass Flux vs Cumulative Leaching Time

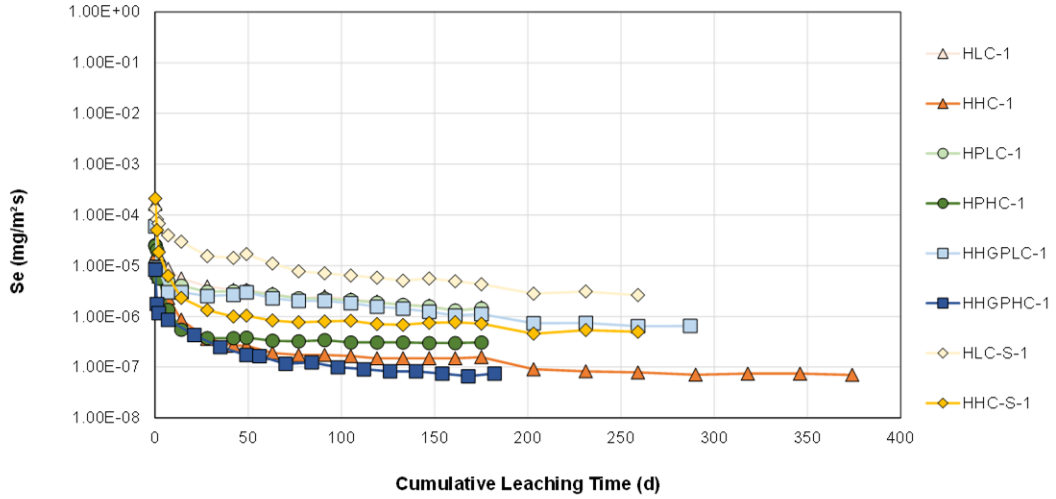


Figure F3-24: Selenium Interval Mass Flux vs Cumulative Leaching Time

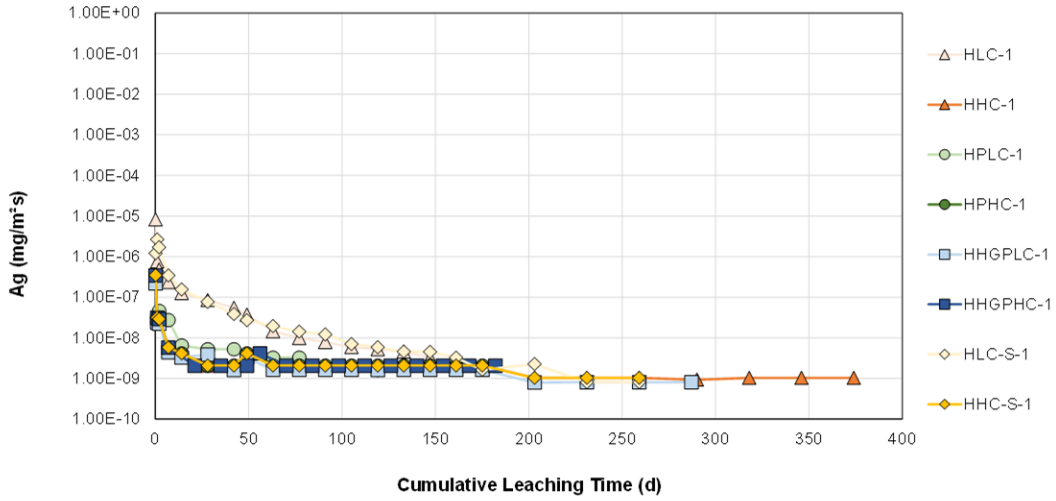


Figure F3-25: Silver Interval Mass Flux vs Cumulative Leaching Time

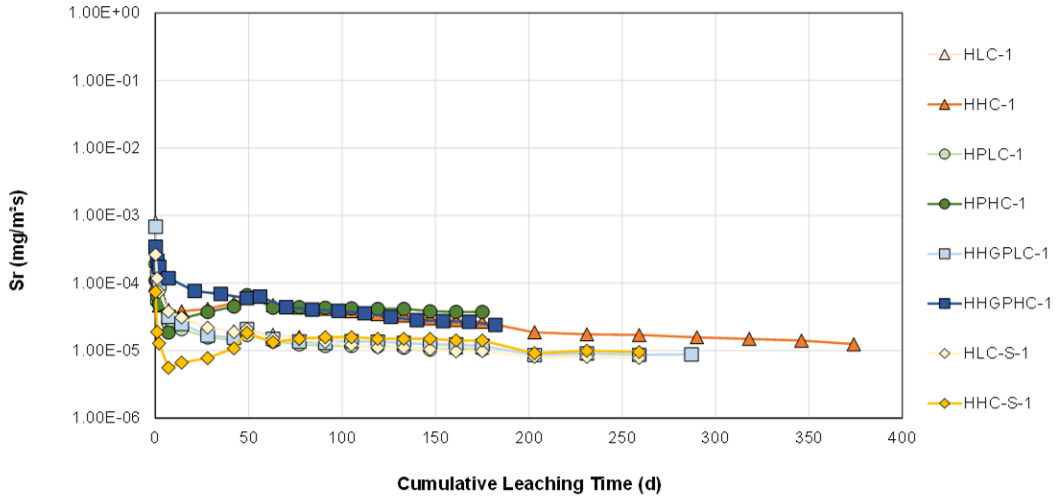


Figure F3-26: Strontium Interval Mass Flux vs Cumulative Leaching Time

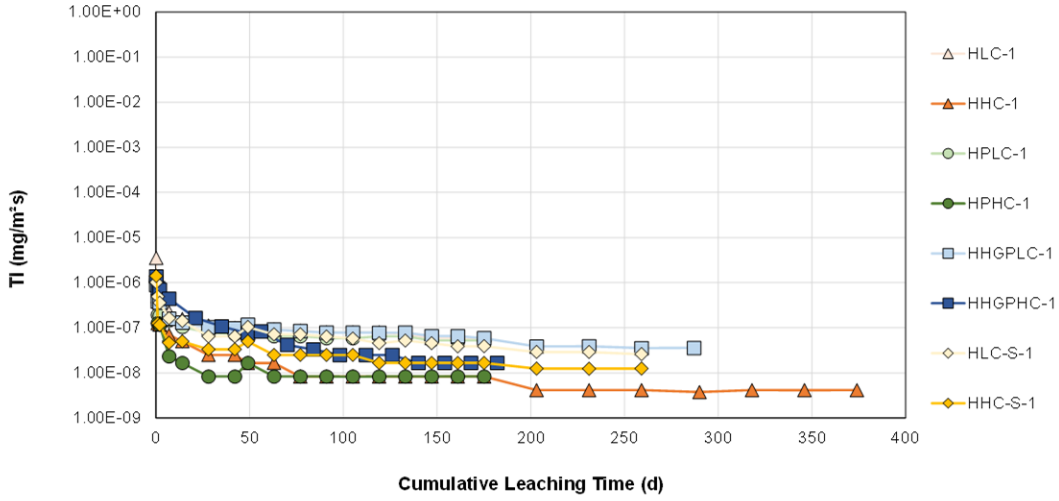


Figure F3-27: Thallium Interval Mass Flux vs Cumulative Leaching Time

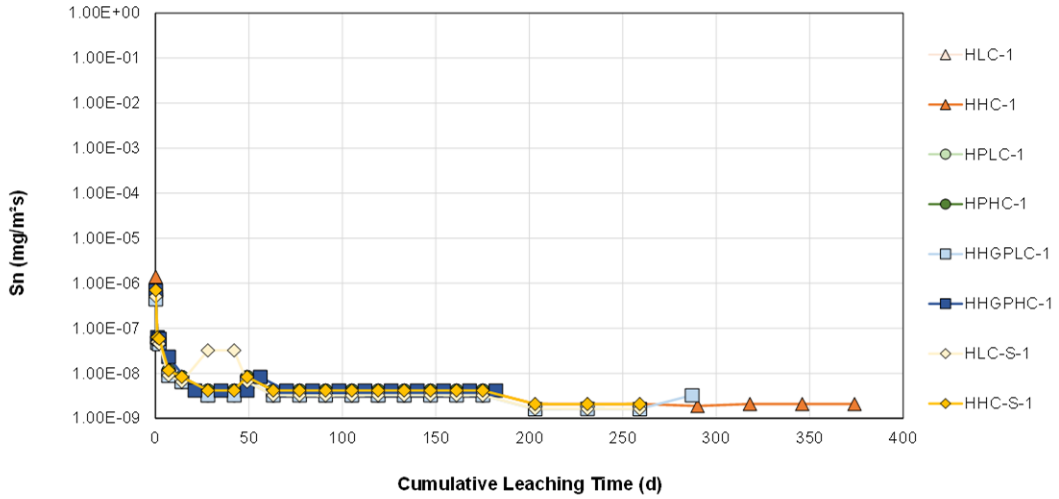


Figure F3-28: Tin Interval Mass Flux vs Cumulative Leaching Time

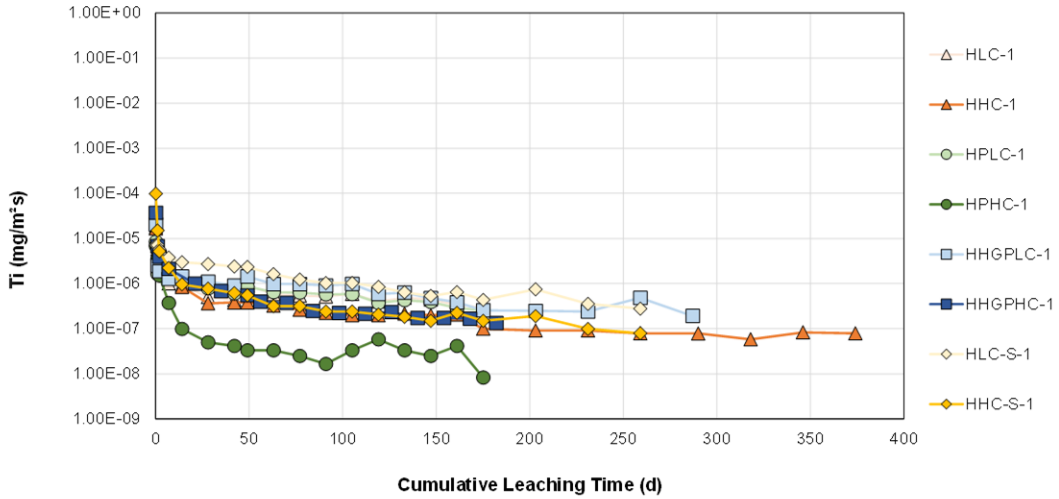


Figure F3-29: Titanium Interval Mass Flux vs Cumulative Leaching Time

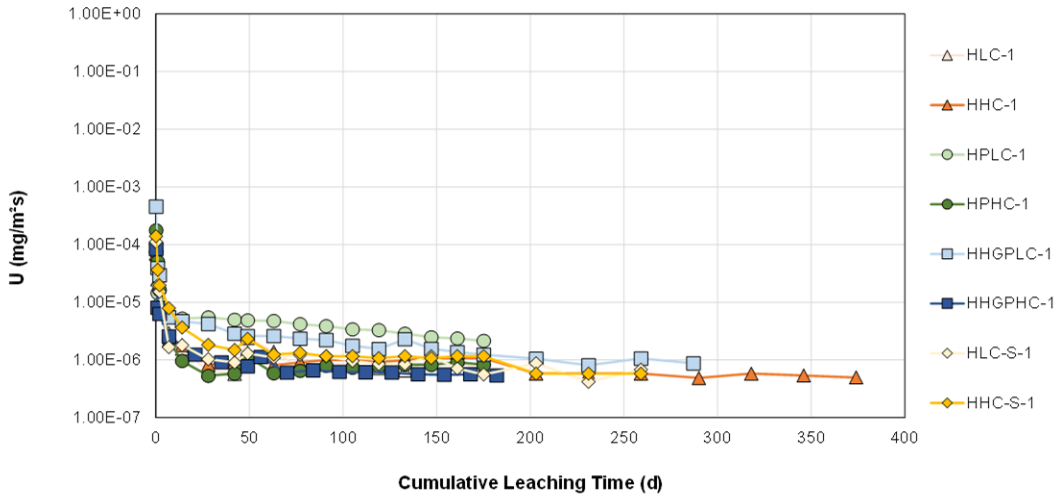


Figure F3-30: Uranium Interval Mass Flux vs Cumulative Leaching Time

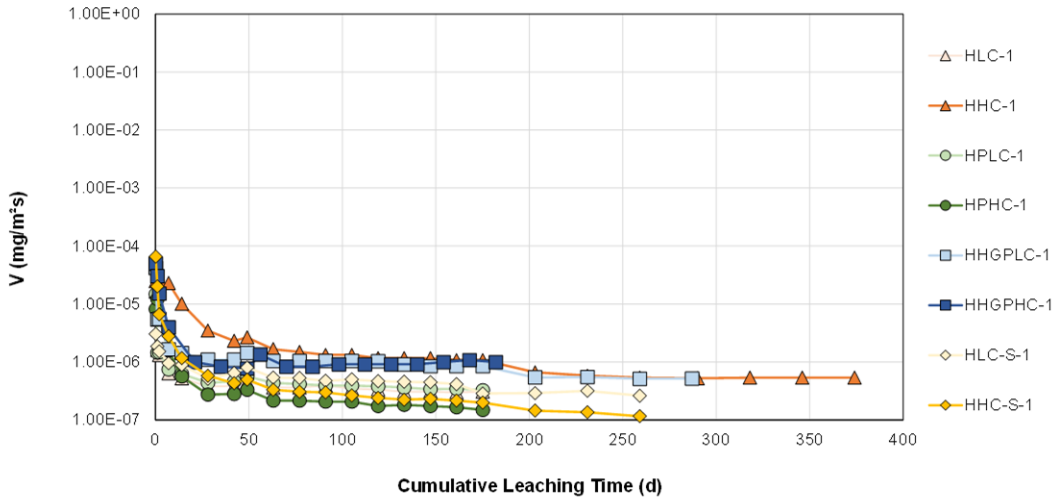


Figure F3-31: Vanadium Interval Mass Flux vs Cumulative Leaching Time

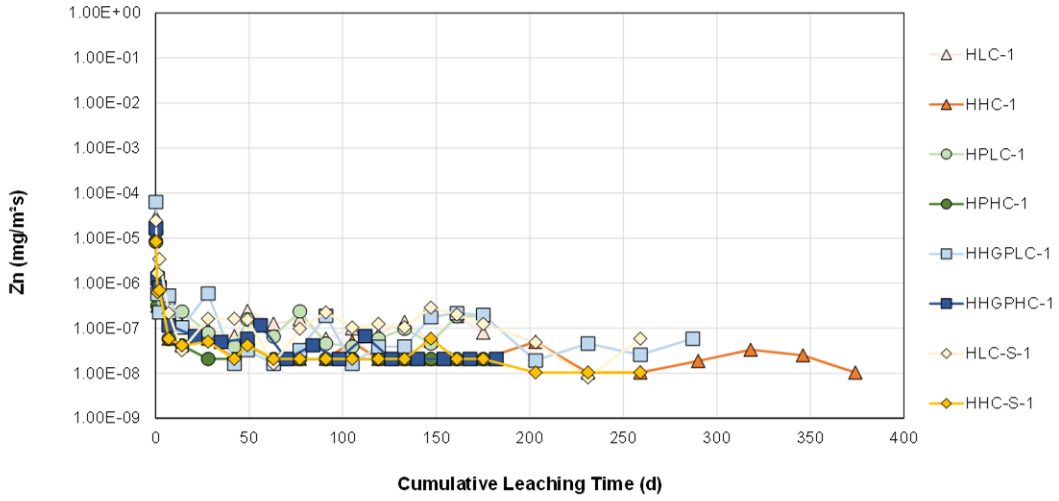


Figure F3-32: Zinc Interval Mass Flux vs Cumulative Leaching Time

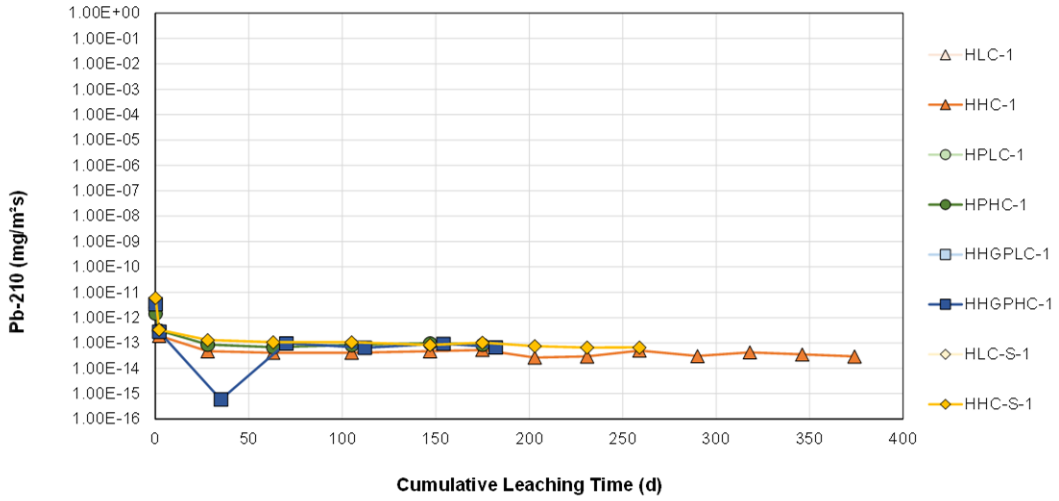


Figure F3-33: Lead-210 Interval Mass Flux vs Cumulative Leaching Time

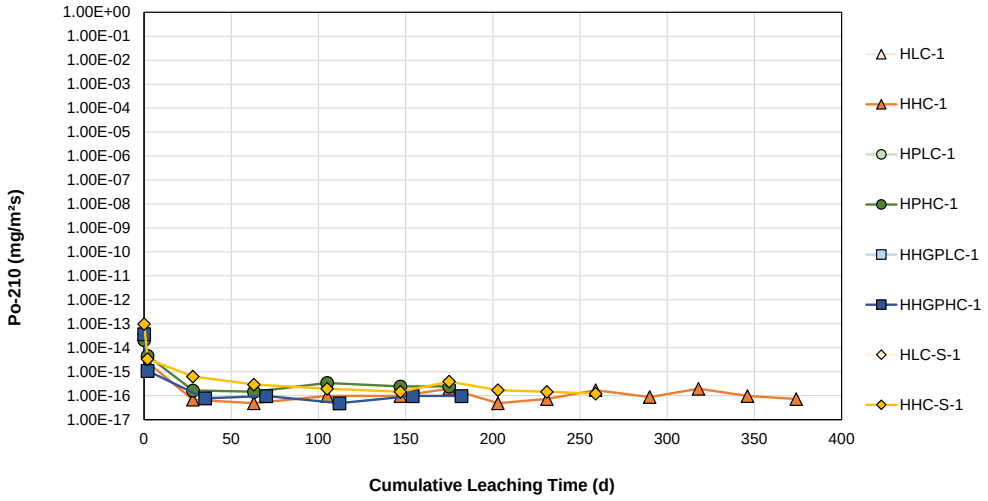


Figure F3-34: Polonium-210 Interval Mass Flux vs Cumulative Leaching Time

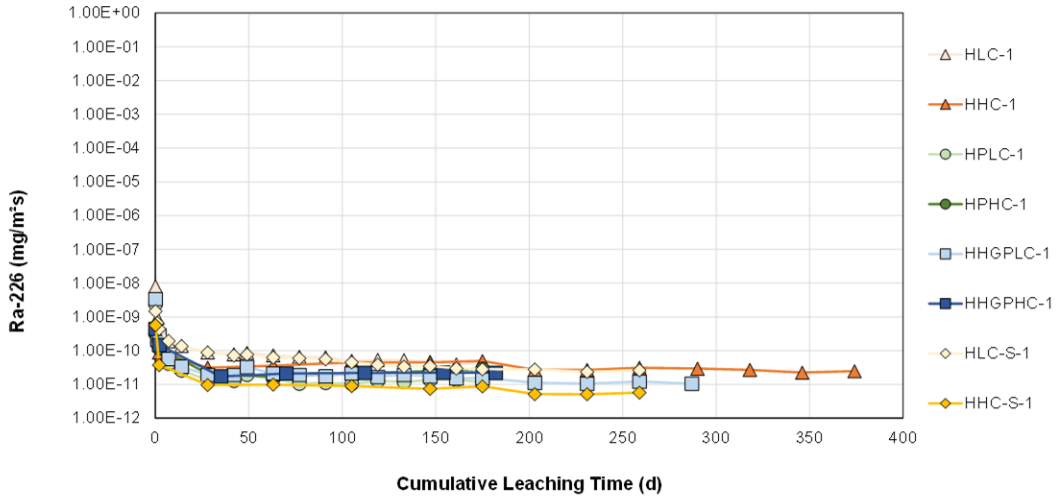


Figure F3-35: Radium-226 Interval Mass Flux vs Cumulative Leaching Time

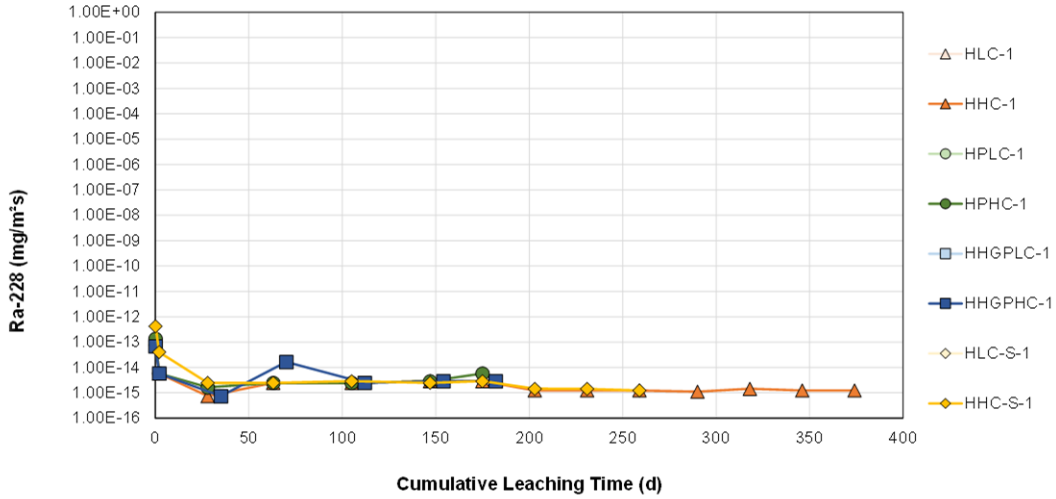


Figure F3-36: Radium-228 Interval Mass Flux vs Cumulative Leaching Time

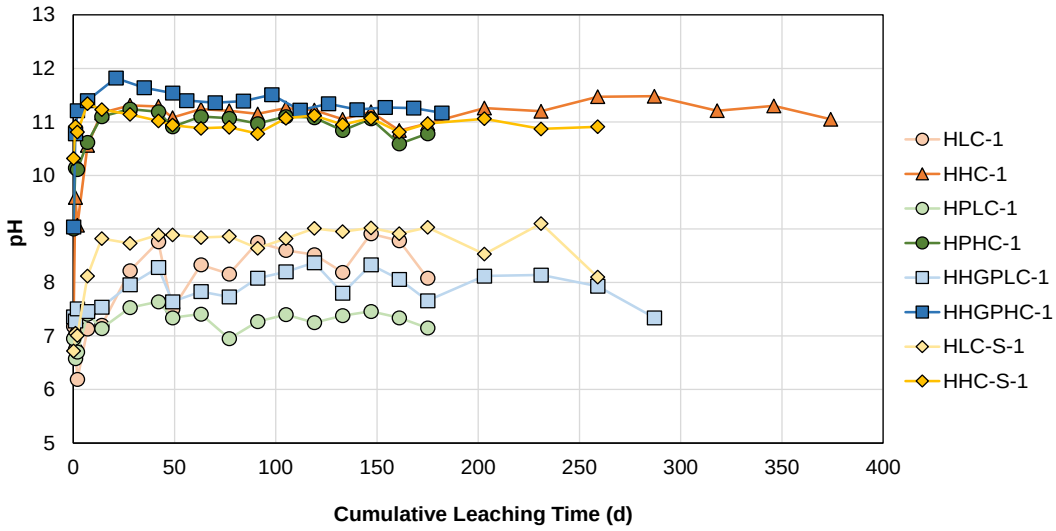


Figure F3-37: pH vs Cumulative Leaching Time

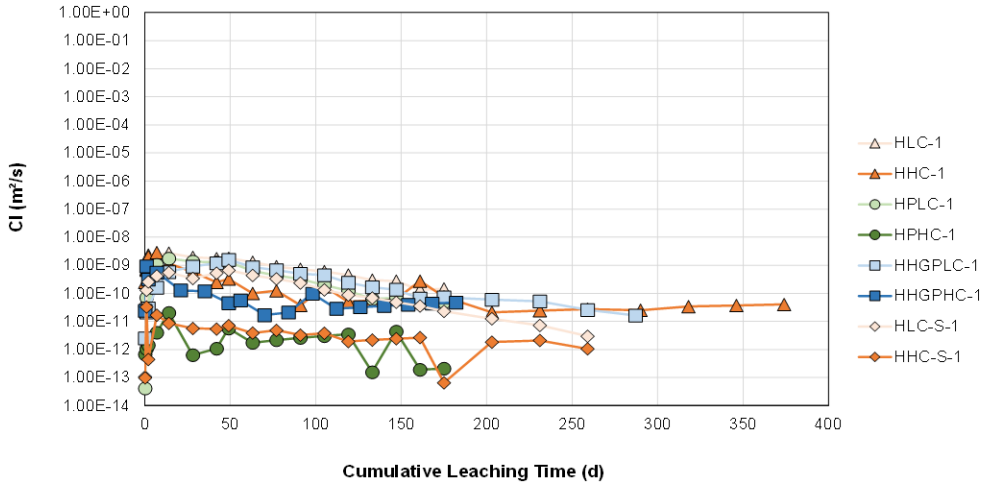
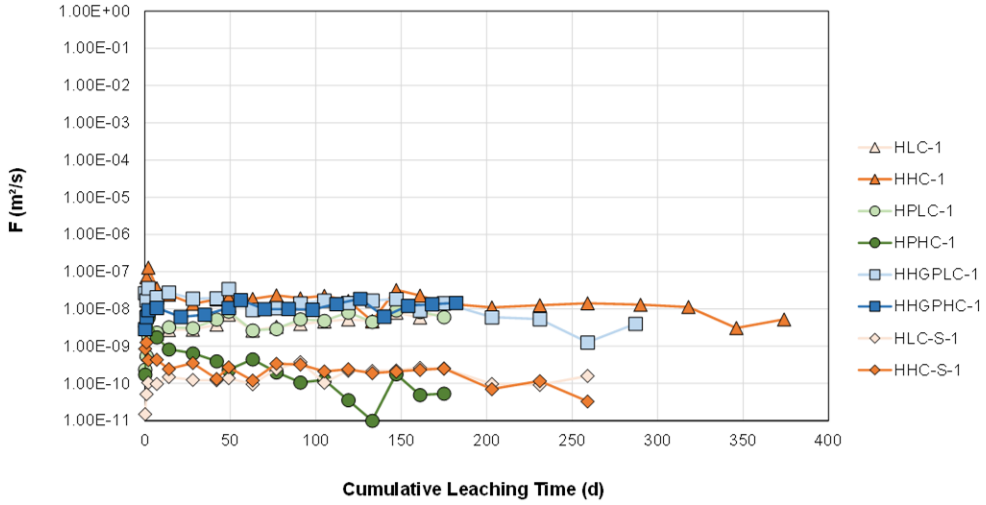


Figure F4-1: Chloride Diffusivity vs Cumulative Leaching Time



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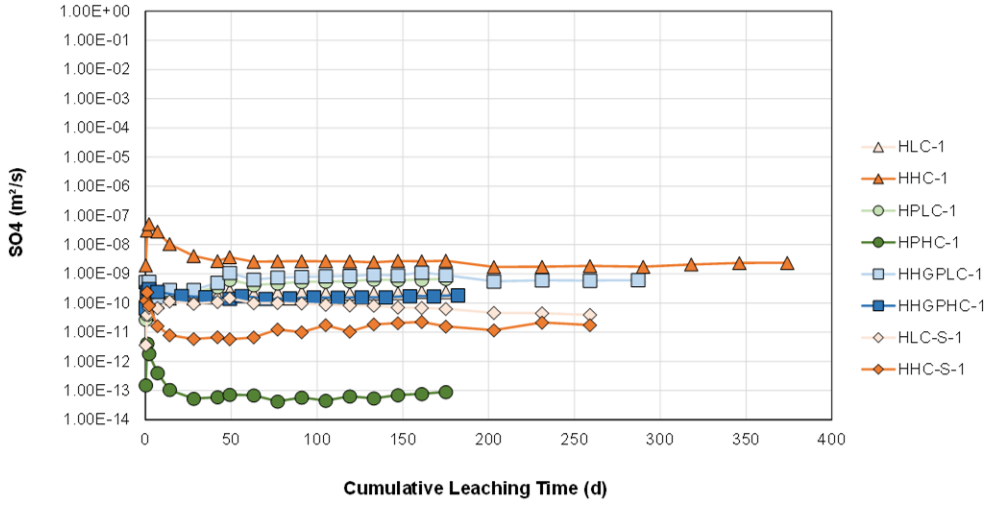

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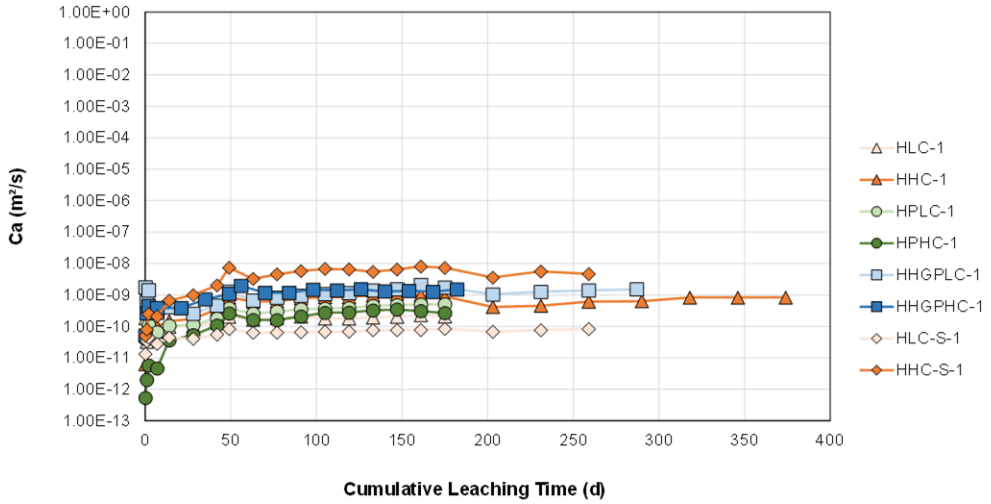

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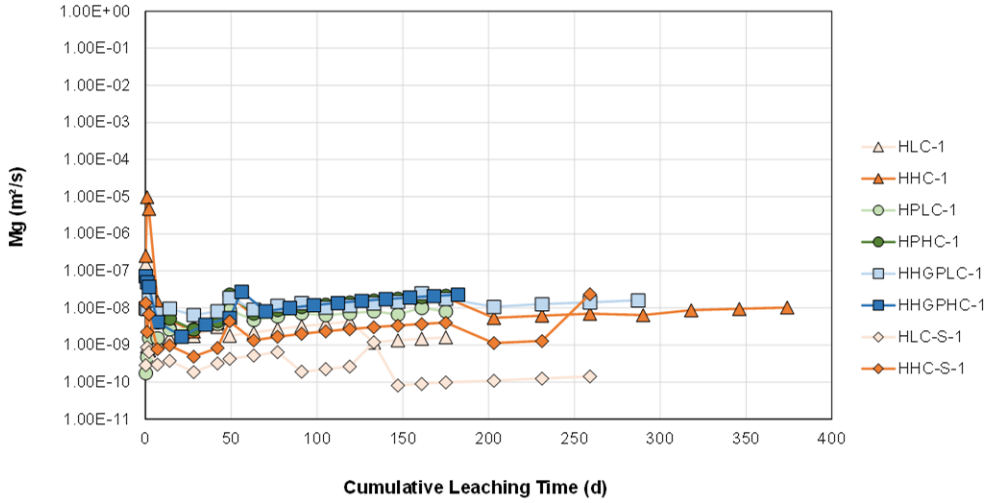

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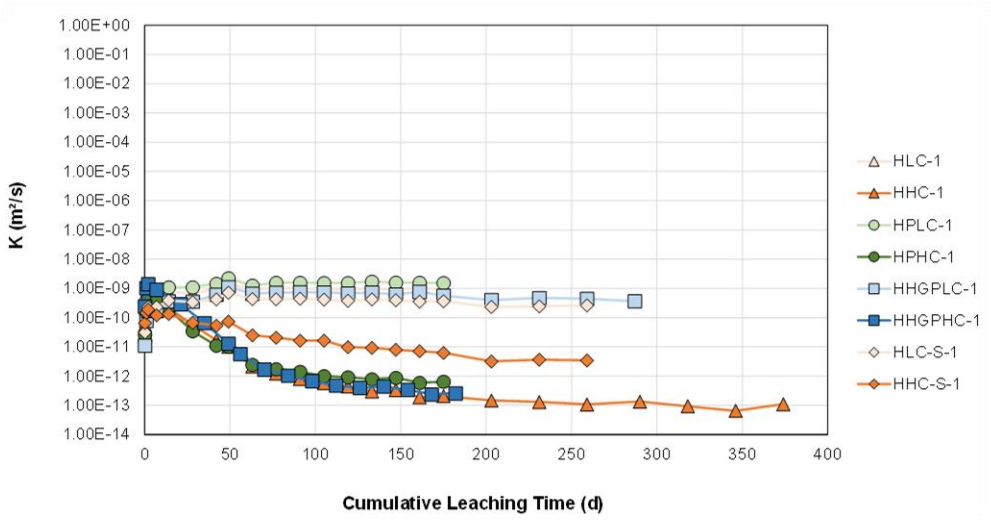

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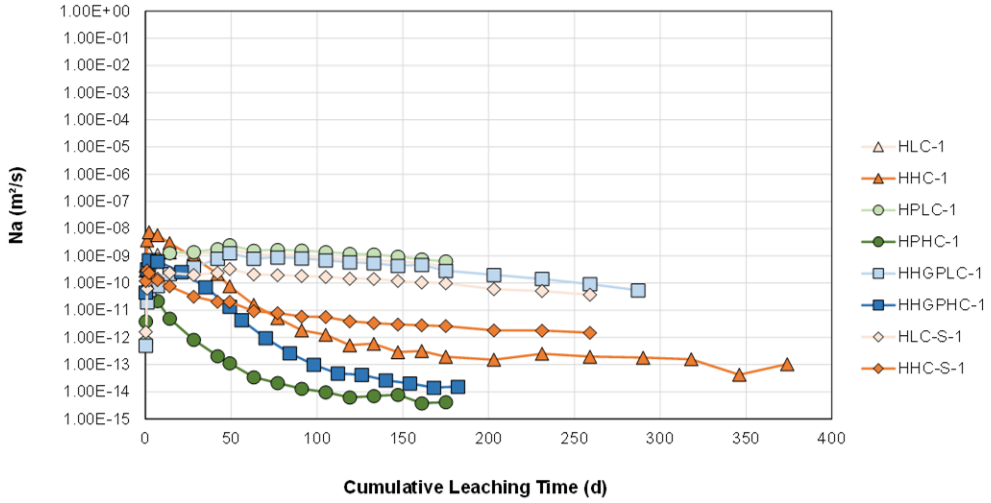

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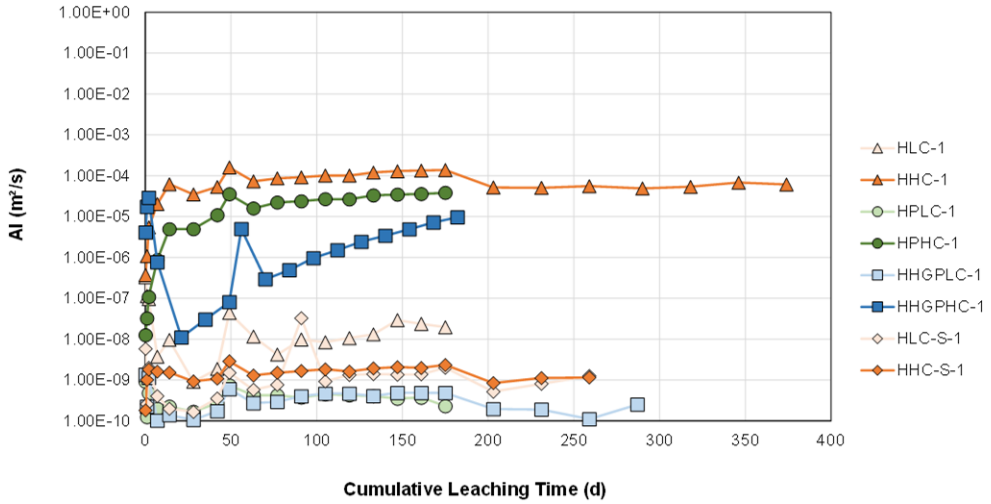

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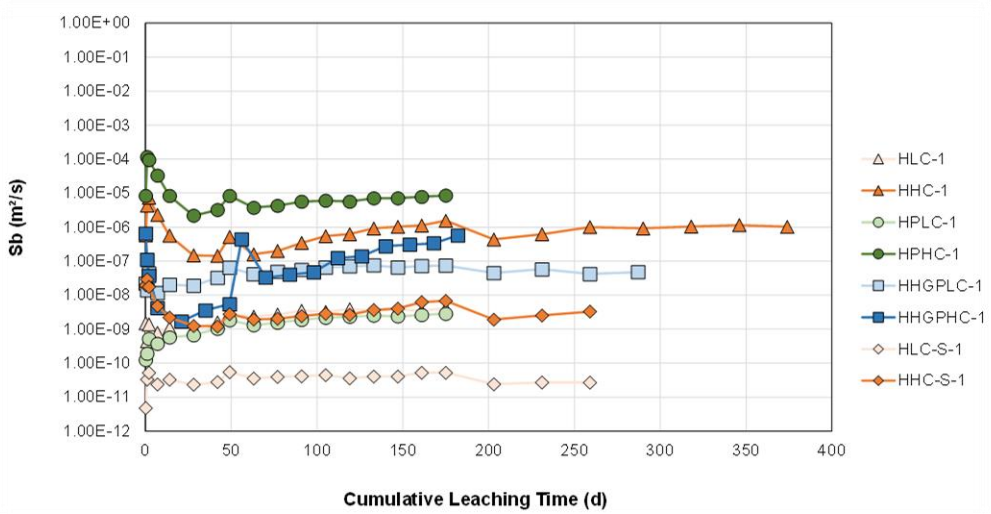

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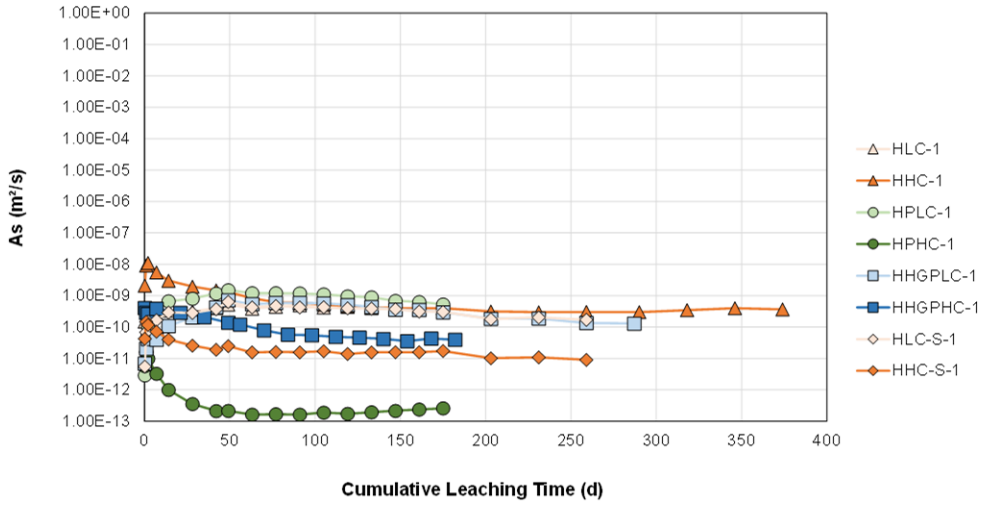

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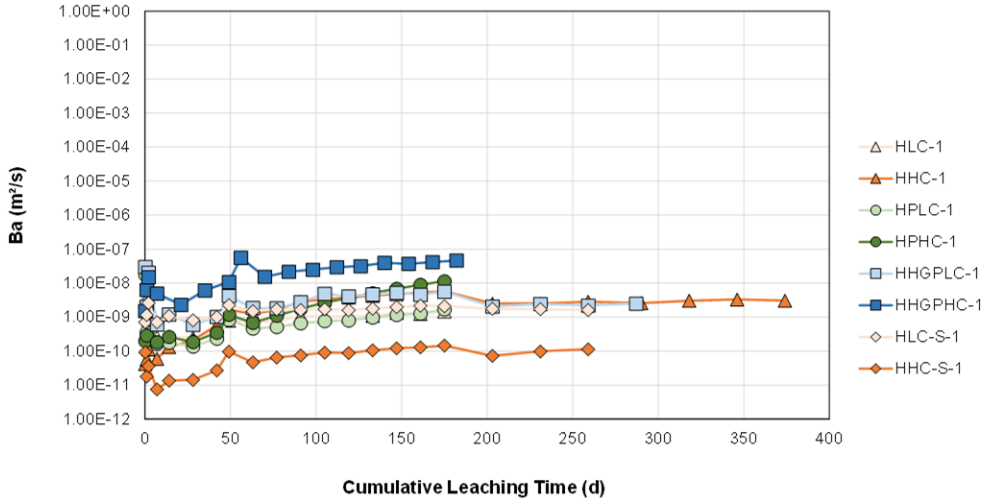

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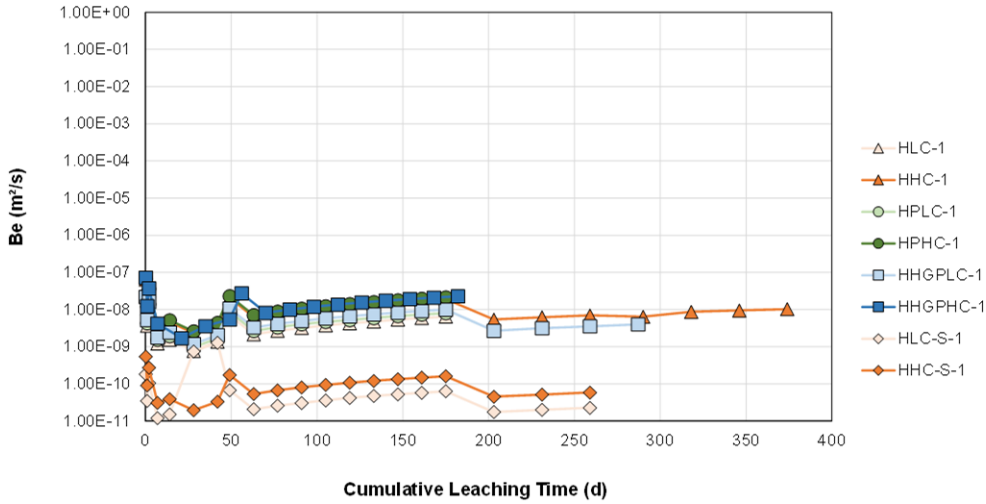

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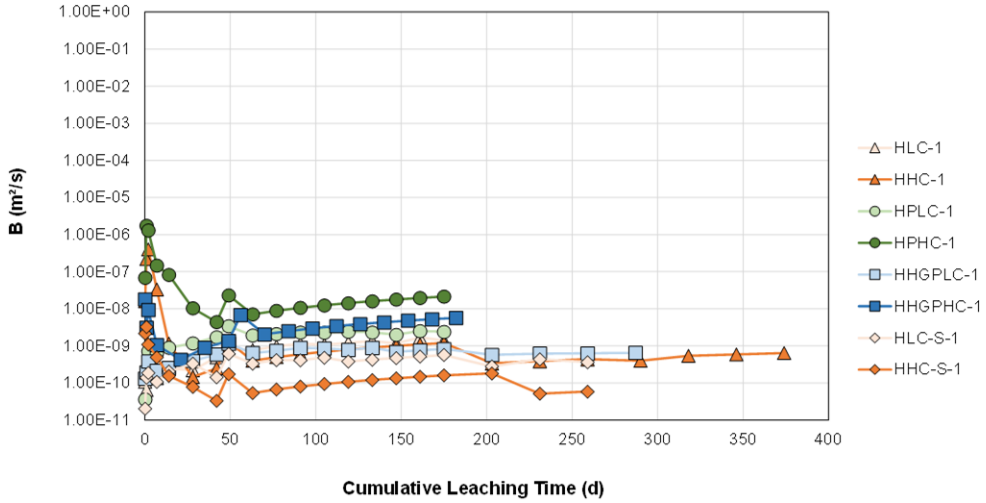

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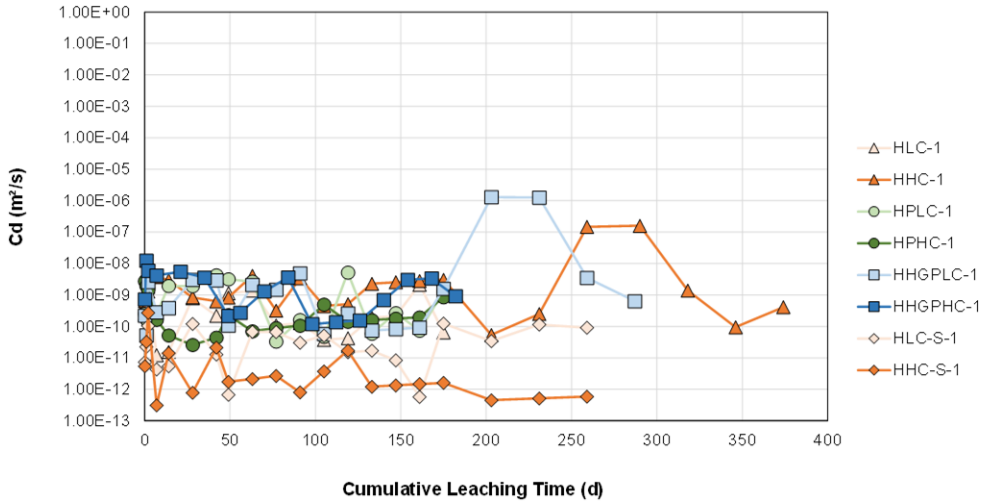

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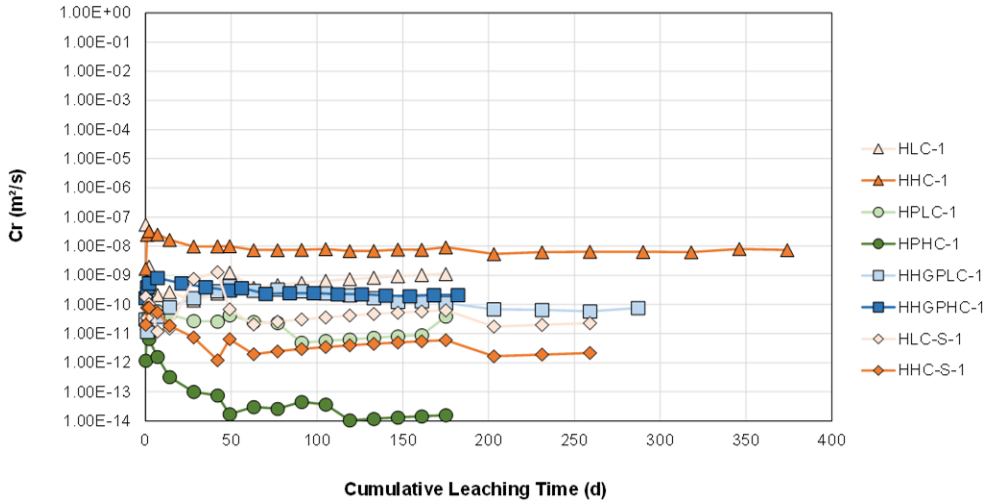

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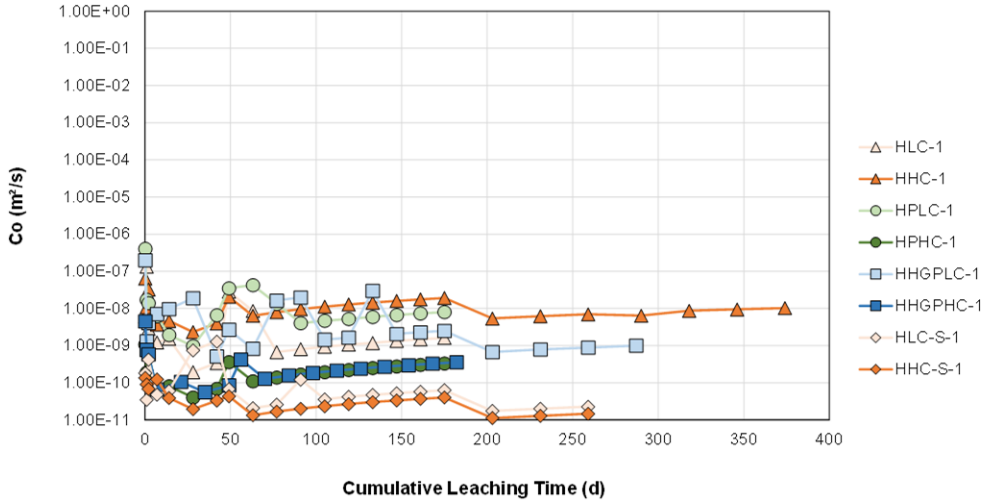

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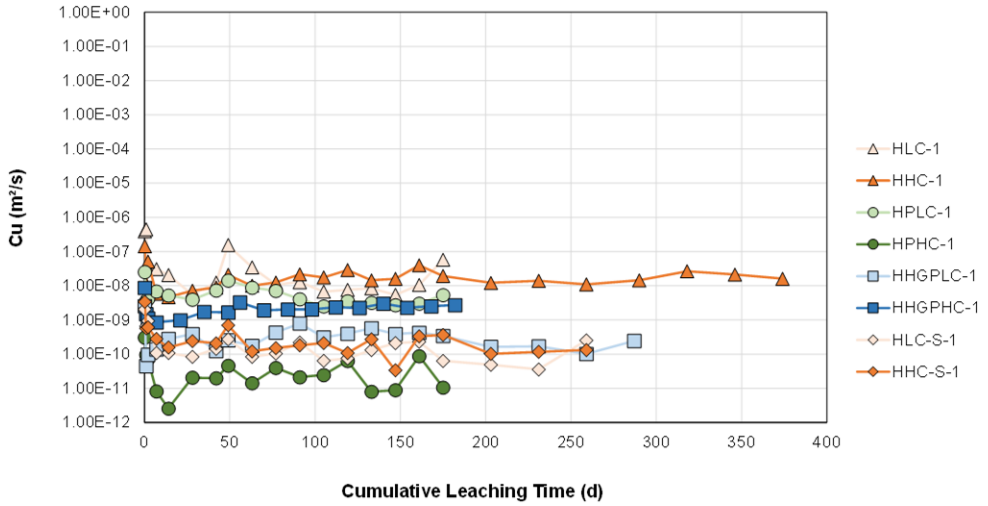

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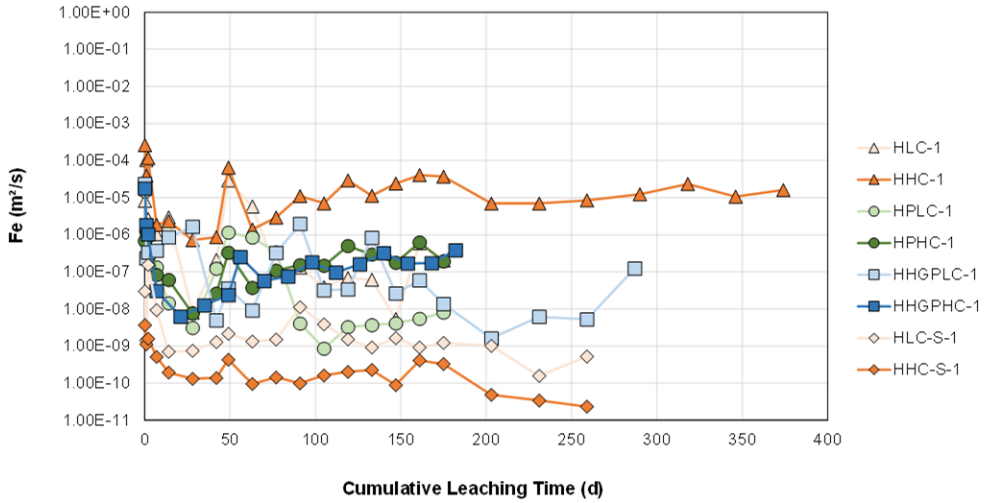

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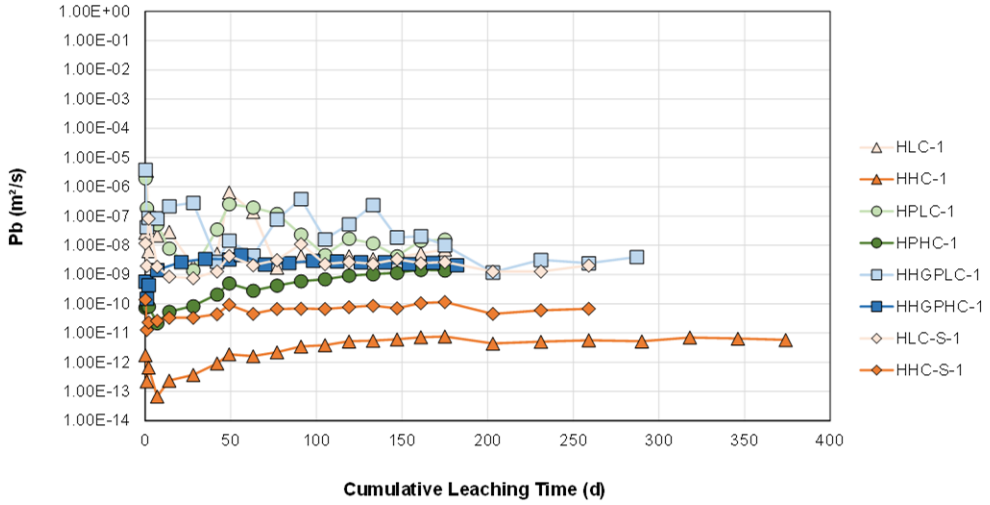

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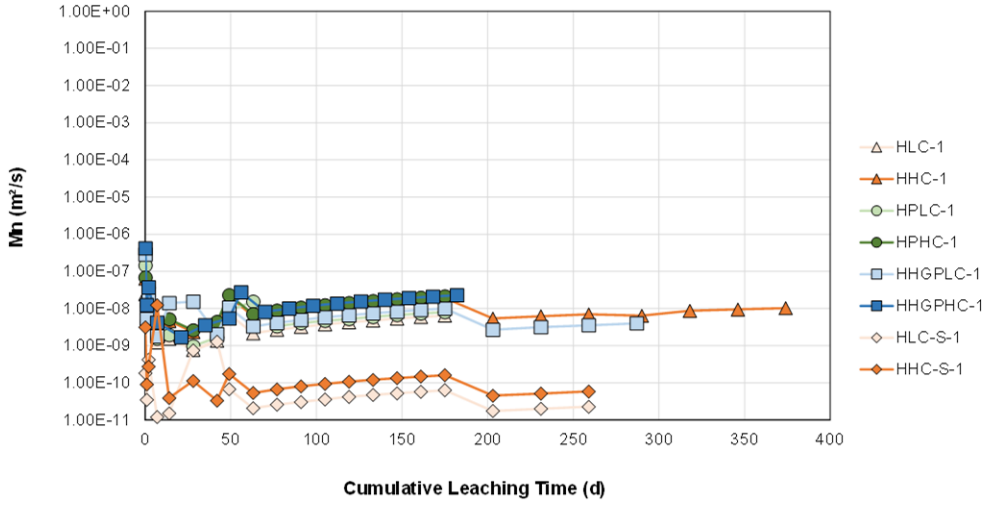

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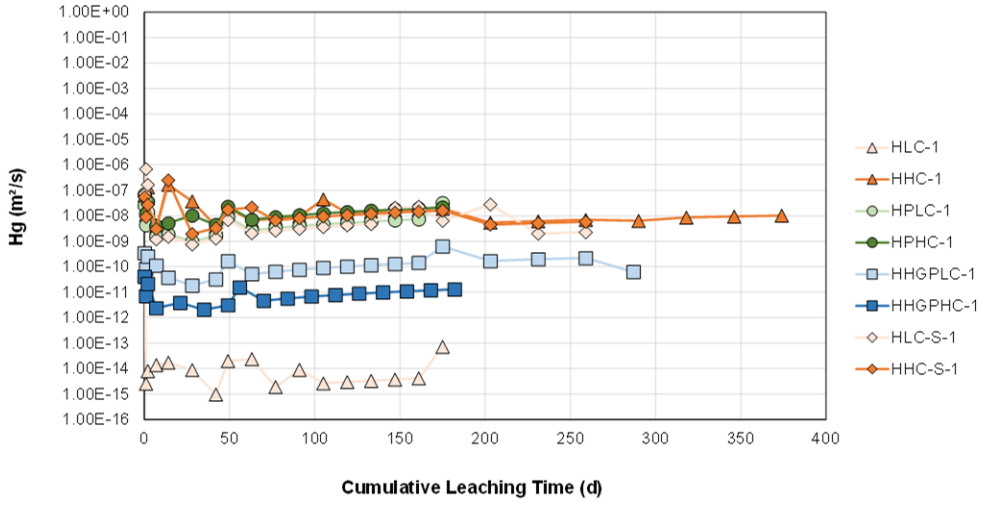

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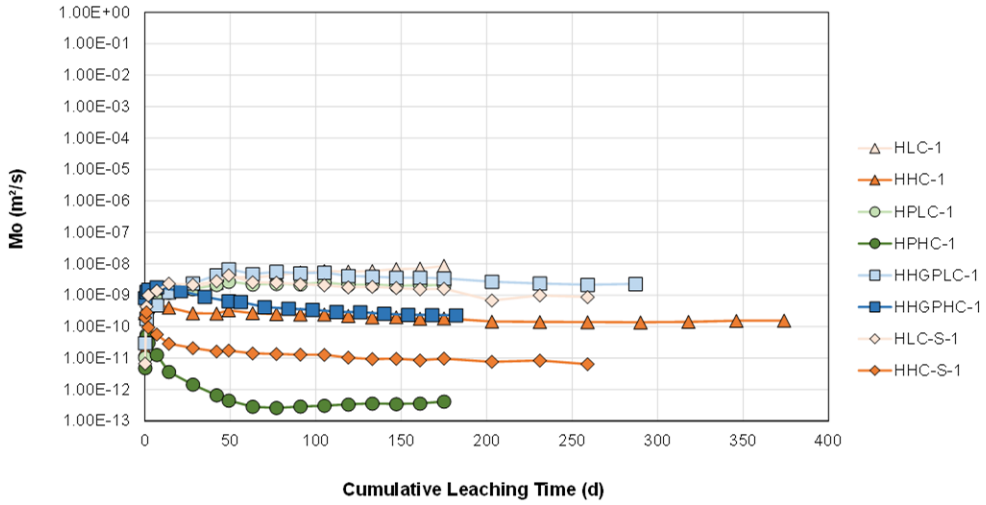

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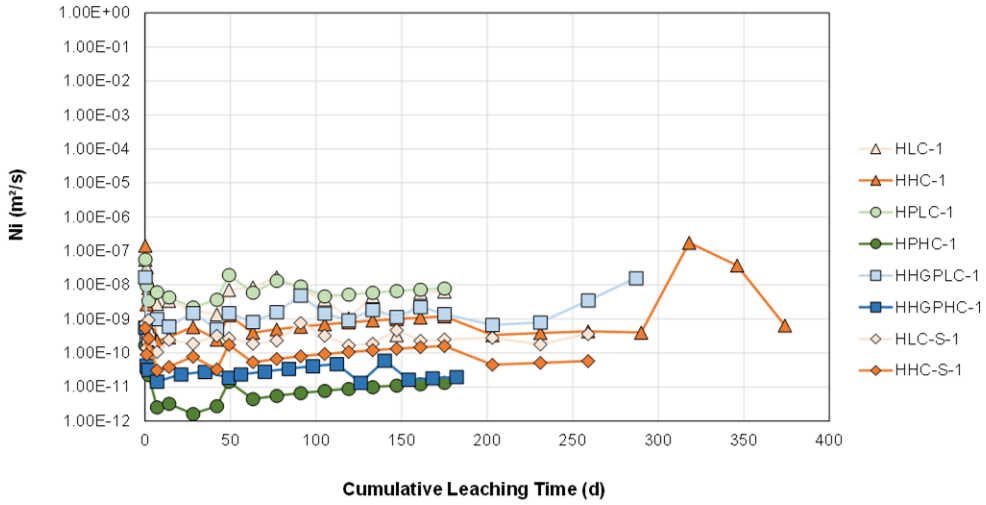

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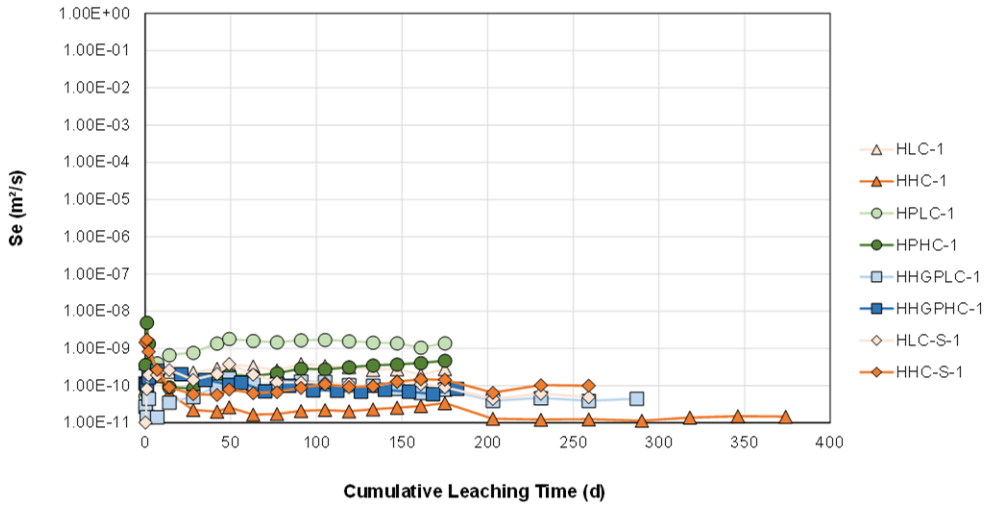

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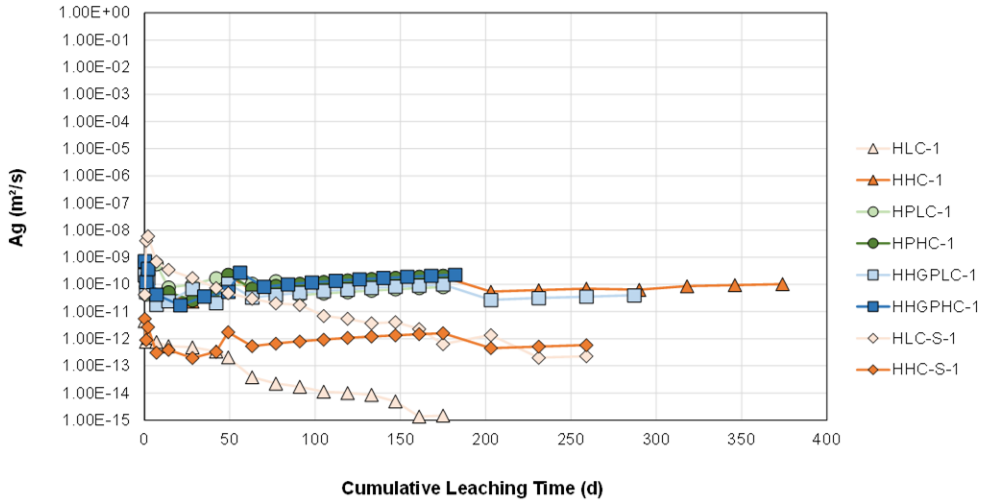

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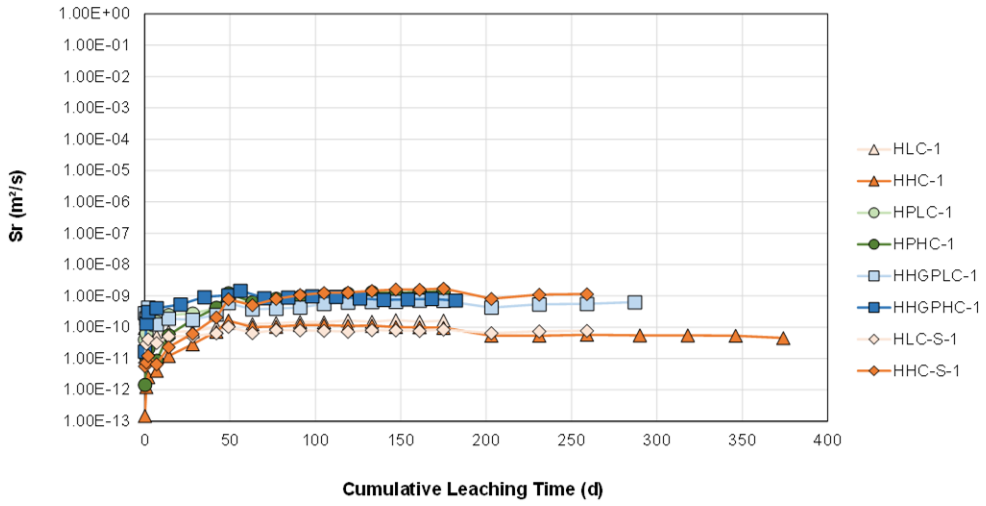

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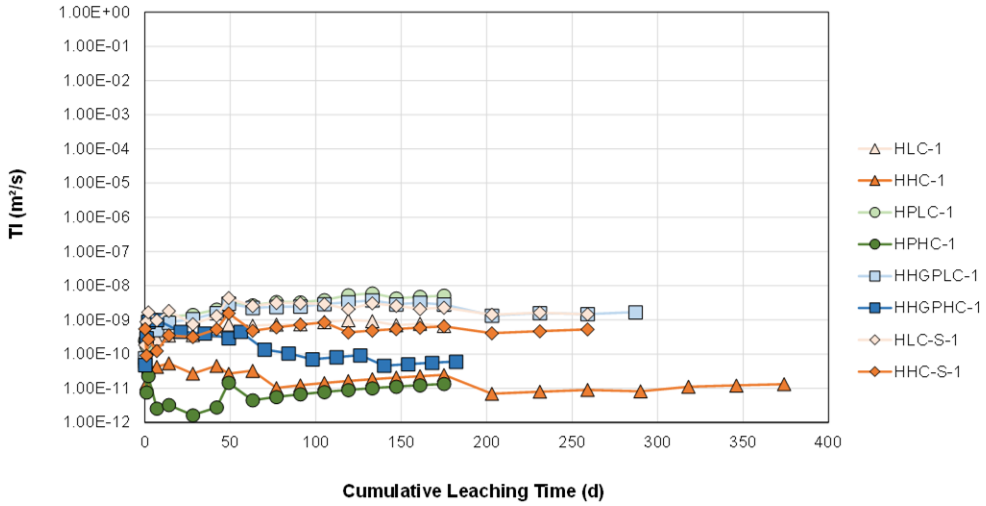

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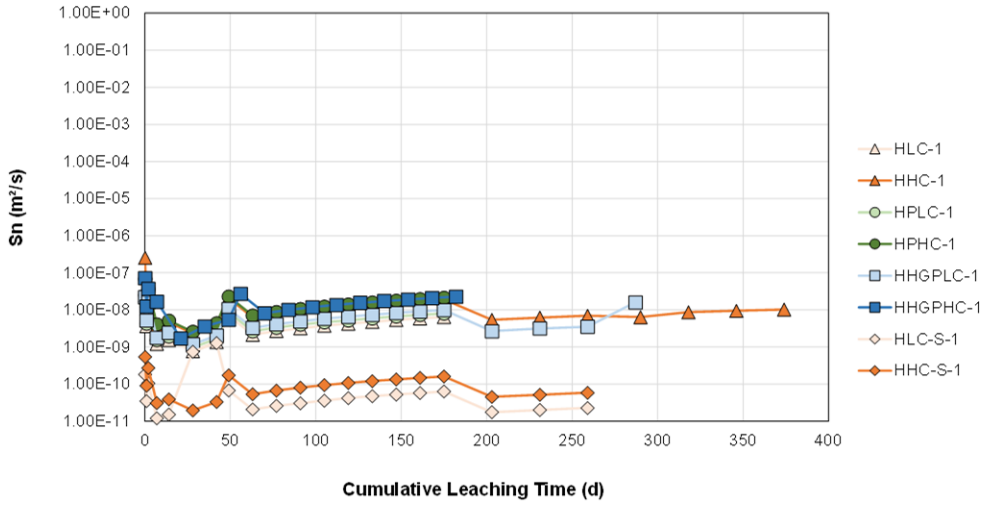

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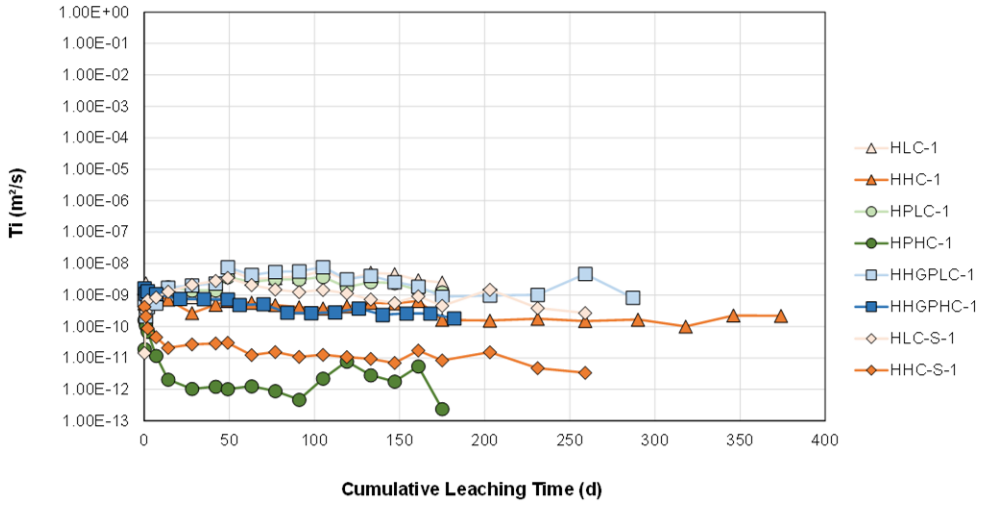

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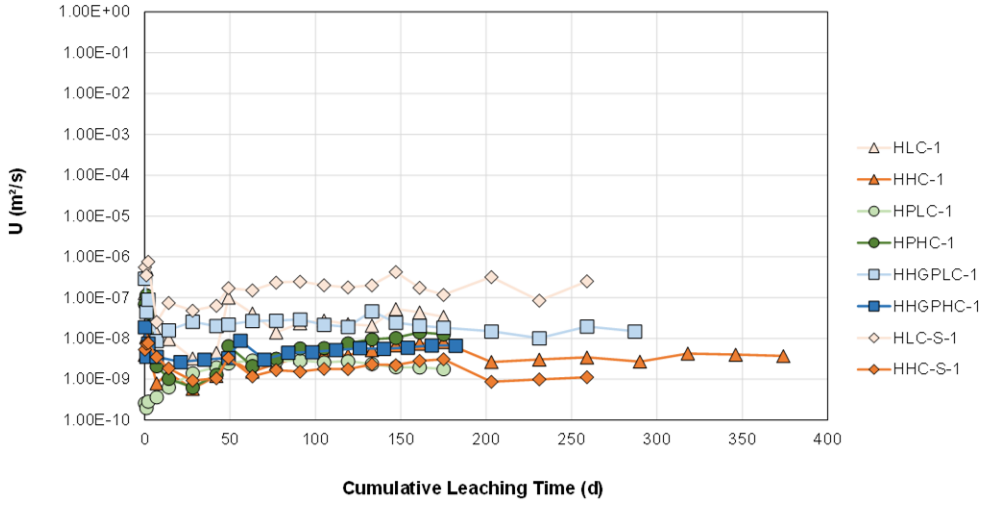

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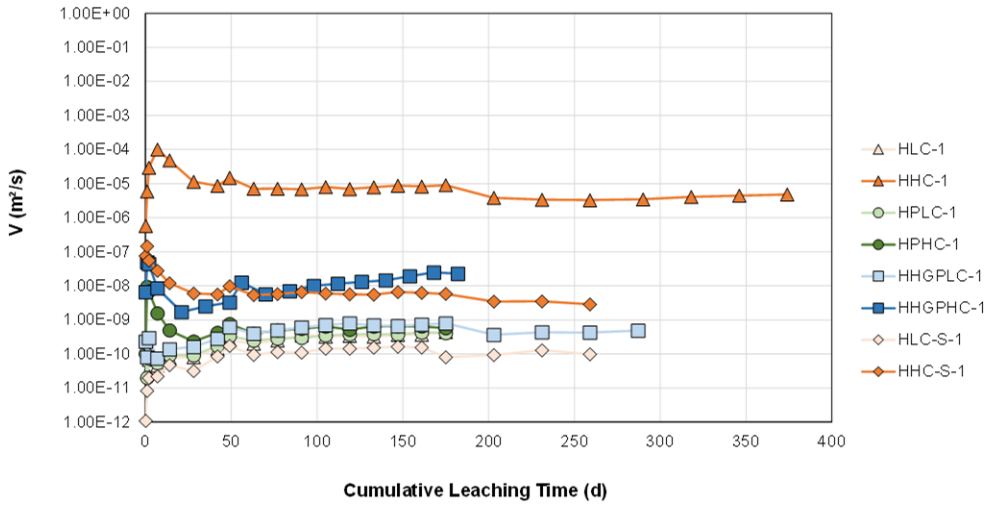

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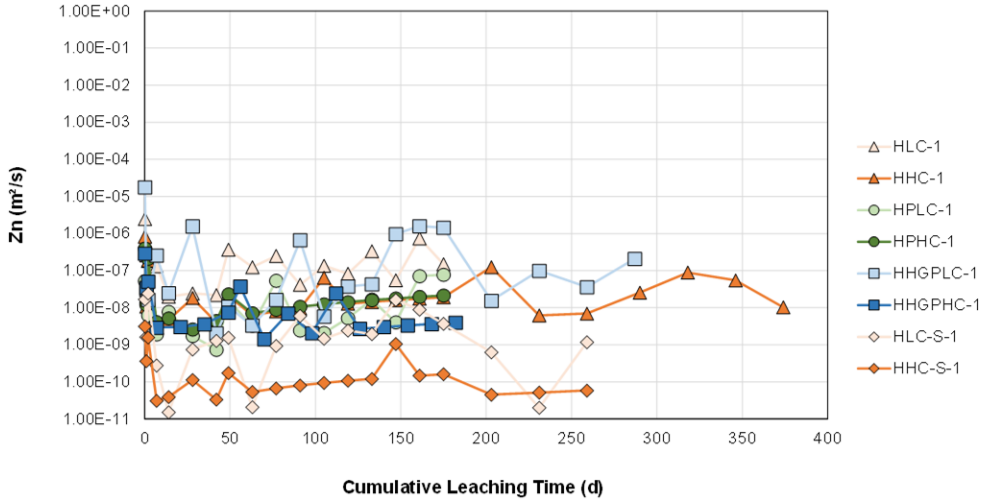

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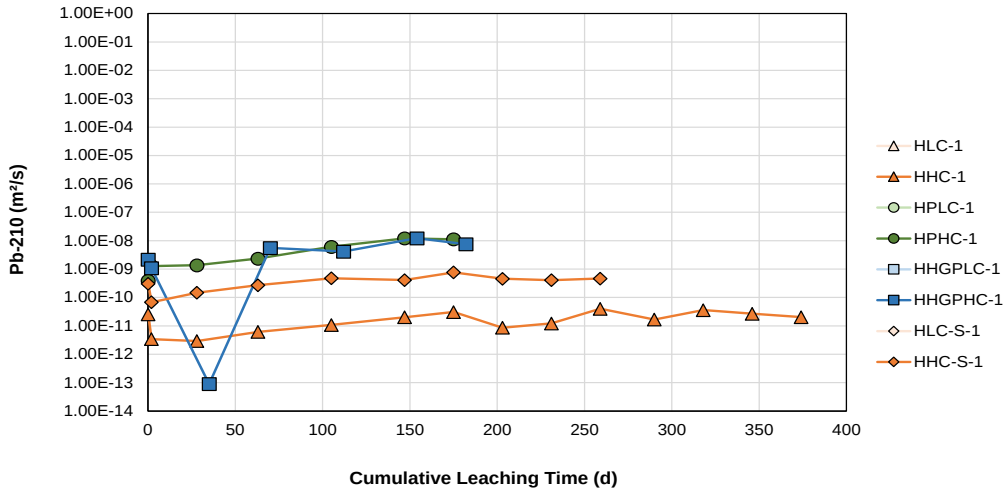

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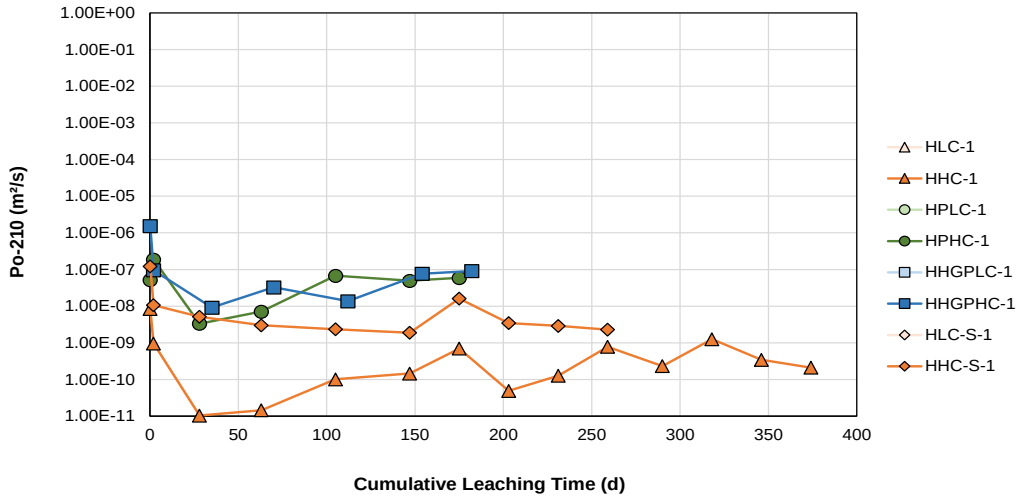

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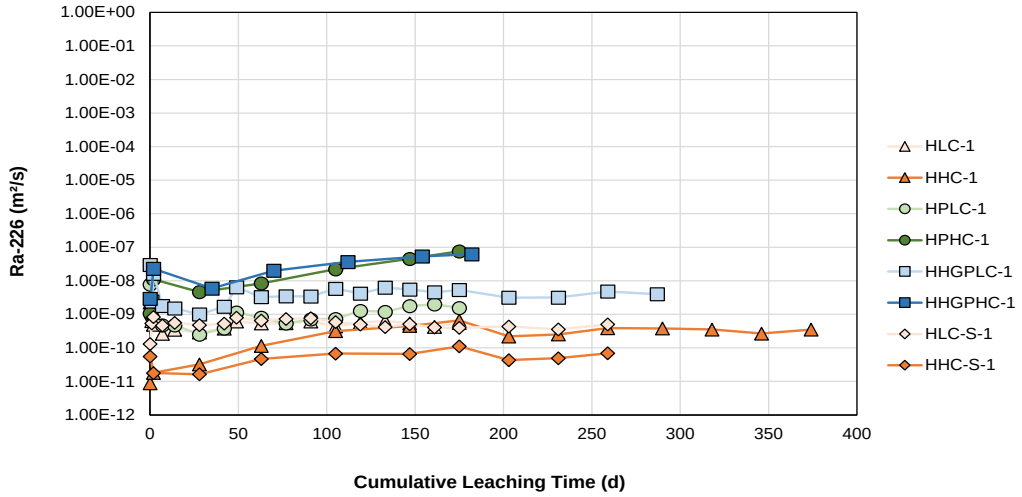

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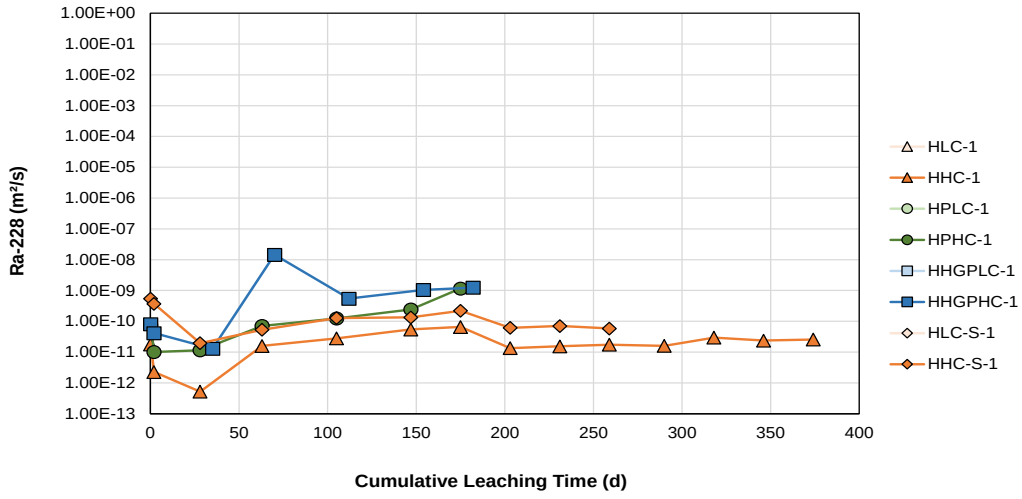

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Rook I Project

Environmental Impact Statement

TSD XVII: Waste Rock and Underground Wall Rock Source Term Predictions Report

FINAL

Waste Rock and Underground Wall Rock Source Term Predictions – Rook 1 Project

Rook I, Saskatchewan, Canada
NexGen Energy Ltd.

SRK Consulting (Canada) Inc. ■ 1CN034.002 ■ March 2022

FINAL

Waste Rock and Underground Wall Rock Source Term Predictions – Rook 1 Project

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Useful Definitions

This list contains definitions of symbols, units, abbreviations, and terminology that may be unfamiliar to the reader.

ABA	Acid-base accounting
AG	Acid generating
EA	Environmental assessment
EIS	Environmental impact statement
HCT	Humidity cell test
INT	Intrusive
ML/ARD	Metal Leaching/Acid Rock Drainage
NPAG	Non-potentially acid generating
PAG	Potentially acid generating
SFE	Shake flask extraction test
SPGN	Semi-pelitic gneiss
SPR	Source pathway receptor
UGTMF	Underground tailings management facility
WRSA	Waste rock storage area

1 Introduction

The Rook I Project (the Project) is a proposed uranium mining and milling operation in northern Saskatchewan that is 100% owned by NexGen Energy Ltd. NexGen is preparing an Environmental Assessment (EA) for the Project

The development of the mine will require management of various mine waste materials, which include waste rock and underground wall rock. NexGen proposes to store the waste rock produced from development of the proposed underground mine workings and the underground tailings management facility (UGTMF) at surface in waste rock storage area(s) (WRSA(s)). In addition, the development of the underground mine and UGTMF will produce exposed wall rock. These materials will produce mine affected drainage which may require management as part of site-wide water management. Additionally, potential effects of the drainage need to be considered in the EA. Accordingly, source terms were derived for input into solute transport models for the Project.

NexGen retained SRK Consulting (Canada) Inc. to characterize the geochemical properties of waste rock and to evaluate the drainage chemistry from the WRSA and underground wall rock. This included development of source term water quality predictions (source terms) for the WRSAs and underground mine workings. This report presents the inputs, assumptions and methods used to develop source terms for the WRSAs, as well as the source term results.

2 Background and Conceptual Geochemical Model

2.1 Deposit Geology

The geological description for the Project is summarized from RPA (2016).

The Arrow uranium deposit is located within the western margins of the Athabasca Basin in northern Saskatchewan. The geology of the Project area is underlain by the Proterozoic Talston Magmatic Zone, which is composed of granitic, granodioritic, tonalitic, dioritic and local gabbroic gneisses. The Arrow uranium deposit occurs within the Proterozoic basement rocks. Overall, the dominant lithology at the Project is semi-pelitic gneiss (SPGN) with lesser intrusive (INT). Other minor lithologies are recognized, including pelitic gneiss and pegmatite. The Proterozoic basement units are covered by thin Devonian mudstone, Cretaceous sandstone and overburden. The majority of the development is planned within the basement Proterozoic rocks (SPGN and INT).

Uranium mineralization at the Arrow deposit is closely associated with narrow, strongly graphitic pelitic, and graphitic semi-pelitic gneiss lithologies thought to represent discrete shear zones. High grade uranium zones often occur immediately adjacent to heavily sheared and strongly graphitic zones, but not within them. Uranium is predominantly present as uraninite (UO_2).

2.2 Geochemical Weathering Concepts

Mining of the Arrow deposit will produce a component of pyrite (FeS_2) bearing potentially acid generating (PAG) waste rock. Mineralogical testing indicates pyrite is the main sulfide mineral at the Arrow deposit. Under natural conditions, the pyrite is stable in bedrock where it is isolated from atmospheric oxygen. However, following blasting of the bedrock, pyrite in the waste rock will be exposed to atmospheric oxygen prior to and after being placed in a WRSA. Pyrite within the waste rock is expected to oxidize in the presence of oxygen and water according to the following reaction:

$$FeS_{2\,(s)} + 7/2O_{2\,(g)} + H_2O_{\,(l)} \leftrightarrow Fe^{2+}{}_{(aq)} + 2SO_4^{2-}{}_{(aq)} + 2H^+{}_{(aq)} \qquad \text{(Reaction 1)}$$

As seen in Reaction 1, pyrite oxidation produces sulfate, iron and acidity. The iron liberated from the sulfide can subsequently oxidize to ferric iron in neutral pH water to produce additional acidity according to the following reaction:

$$4Fe^{2+}{}_{(aq)} + O_{2\,(g)} + 10H_2O_{\,(l)} \leftrightarrow 4Fe(OH)_{3\,(s)} + 8H^+{}_{(aq)} \qquad \text{(Reaction 2)}$$

In waste materials, the onset of acidic conditions will depend on the balance of acid generated and neutralization potential (NP) available. However, acidic conditions will not occur until carbonate minerals are consumed. Based on static geochemical testing, the overall sulfur concentrations associated with pyrite in waste rock are generally low (<0.2%). However, the dominant waste rock units are deficient in carbonate minerals and therefore contain limited buffering capacity. The available carbonate is expected to buffer acid formed early from oxidation of sulfide according to the following reactions:

$$CaCO_{3(s)} + H^{+}_{(aq)} \leftrightarrow HCO_{3}^{-}{}_{(aq)} + Ca^{2+}_{(aq)} \quad \text{(Reaction 3)}$$

$$CaCO_{3(s)} + 2H^{+}_{(aq)} \leftrightarrow H_2CO_{3(aq)} + Ca^{2+}_{(aq)} \quad \text{(Reaction 4)}$$

Acidity can also be neutralized through dissolution of oxyhydroxide and aluminosilicate minerals; however, due to the dissolution kinetics of these minerals, they often produce insufficient neutralization potential to produce neutral drainage.

Similarly, some metal carbonates (e.g., siderite and ankerite) offer limited buffering potential, since during dissolution, oxidation of the metal cation produces acidity, which offsets the neutralization produced from the carbonate ion. Given the limited neutralizing capacity of these minerals, they were conservatively assumed not to provide buffering capacity in source terms.

Release mechanisms from the materials at Rook 1 are assumed to be governed by two main processes. Oxidation of sulfide is assumed to be the dominant mechanism of constituent release for parameters associated with sulfides (e.g., sulfate, copper, cobalt, arsenic). Conversely, dissolution is assumed to be the dominant mechanism of constituent release from oxide, sulfate, and carbonate minerals. As uranium occurs as the oxide species uraninite at the Arrow deposit, uranium and radionuclide release (e.g., radium-226) is expected to result primarily from dissolution. Release from these minerals can also be influenced by pH and redox conditions. Based on this conceptual model, source terms for uranium and radionuclides are derived differently from most other species, as described in this report.

2.3 Unsaturated Waste Rock

All waste rock placement options under consideration will be unsaturated WRSAs with waste rock disposed on surface. Waste rock stored in the WRSA will oxidize according to Reaction 1, and acid production will be neutralized through Reactions 3 and 4. Dissolution of uraninite is expected to be the dominant mechanism for release of uranium and radionuclides into contact water from WRSAs.

The development of acidic conditions of the PAG waste rock will form when carbonate is depleted. Results from ongoing kinetic testing on waste rock samples show that a delay to onset of acidic conditions is expected in PAG waste rock with low sulfide content (below approximately 1% sulfide). Geochemical depletion calculations from ongoing laboratory based kinetic testing indicate that this delay is on the order of decades. These results were used to frame the approach to developing distinct sets of source terms for the conditions during operations (year 0 to 28) and closure (year 28 onward). During operations, the low sulfide PAG waste rock is expected to have near neutral pH with acidic conditions forming at or after closure, if not otherwise mitigated.

Once the predicted acidic conditions form in the PAG waste rock following closure, the mobility of cation species, which are sensitive to pH conditions, will increase (e.g., Cu and Co), resulting in higher concentrations and loadings of these constituents. The conceptual source control being considered for some placement method options (described in Section 2.4) will limit ingress of oxygen available for sulfide oxidation (Reaction 1 and Reaction 2). By limiting oxygen ingress, the reduction in waste rock mass exposed to oxic conditions will have the net effect of reducing loadings of parameters released from sulfide oxidation.

2.4 Waste Rock Management

NexGen is considering different waste rock placement methods to mitigate metal leaching and acid rock drainage (ML/ARD) from PAG materials. To inform the waste rock management multiple accounts analysis completed for the Project, SRK developed source terms for each of the WRSAs representing placement methods being considered. The different WRSA options are presented by Okane Consultants Ltd. (Okane) in an Options Analysis of waste rock placement strategies (Okane 2020a).

The conventional placement methods considered in the Options Analysis includes placement of waste rock by end-dumping. The WRSAs constructed by conventional end-dumping are expected to have a high degree of advective oxygen transport for sulfide oxidation due to the high degrees of particle size segregation and low water contents, allowing oxygen to freely move through the WRSA (Okane 2020a). WRSA placement options considered included both co-mingling and segregation of PAG and NPAG (non-potentially acid generating) material placed by conventional end-dumping.

The placement methods include segregation and co-placement of PAG and NPAG waste rock and using engineered source controls with design of horizontal layering to limit oxygen ingress into the WRSA (engineering layering). The engineered control was designed by Okane. For this design, the waste rock dumps are constructed from the bottom up, with a sequence of 5 m lifts of waste rock followed by 0.5 m thick engineered layers of fine-textured material (Okane 2020b). Okane modelled O_2 transport in this design, which indicated O_2 ingress would be limited to a surficial “skin” in the WRSA. As described previously, limiting O_2 ingress will reduce the reactive mass and in turn reduce geochemical loadings.

The placement methods considered combining or segregating PAG and NPAG material, use of the engineered layering design and use of a liner to capture leachate. These combinations result in five separate WRSAs with source terms developed for each so that each placement method can be evaluated with respect to its runoff water quality (Table 2-1). Note that one or two WRSAs are necessary, depending on the placement method selected.

Table 2-1: Source Terms Modelled

Source Term	Placement Method	Design	Liner
Source Term 1	Combined (conventional co-placement) PAG & NPAG	Conventional waste rock placement	Yes
Source Term 2	Combined (conventional co-placement) PAG & NPAG	Engineer layering	Yes
Source Term 3	Segregated PAG	Conventional waste rock placement	Yes
Source Term 4	Segregated NPAG	Conventional waste rock placement	No
Source Term 5	Segregated PAG	Engineer layering	Yes

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\05_Reporting\03_Final Source Terms_Approach\020_Tables\[Source_Term_Summary_1CN034.002.xlsx

2.5 Underground Wall Rock

Underground wall rock will be exposed to oxic conditions prior to back-filling during operations or flooding in closure and will weather according to the reactions outlined in Section 2.2. Therefore, water contacting underground wall rock represents a source which may require management.

For the development of underground wall rock source terms, wall rock is expected to produce geochemical loading when the wall is exposed to oxic conditions resulting in the oxidation of sulfide. Additionally, the geochemical loading is expected to be stored as secondary mineral precipitates such as sulfate or oxyhydroxides produced from the oxidation reactions that precipitate on the exposed wall rock and fracture surfaces (e.g., ferrihydrite produced in Reaction 2).

During operations, oxygen availability will be limited as underground developments are backfilled with paste-tailings, cave rock or inundated with groundwater. When the exposed face is backfilled or inundated with groundwater, oxygen is limited, and the exposed face no longer accumulates stored geochemical loading.

During closure, the ingress of groundwater into underground workings will return to static conditions, and the accumulated stored geochemical load will be released into the underground mine pool by simple dissolution of readily soluble oxidation products such as sulfates, or by reductive dissolution of oxyhydroxides.

3 Methods

3.1 Model Constituents

The following constituents were modelled in the waste rock and underground wall rock models:

General Chemistry: pH (waste rock only), alkalinity;

Major Ions: calcium, magnesium, sulfate;

Trace Elements: aluminum, antimony, arsenic, barium, boron, cadmium, cobalt, chloride, chromium, copper, iron, lead, lithium, manganese, mercury, molybdenum, nickel, potassium, selenium, silver, sodium, strontium, tin, uranium, vanadium, zinc; and

Radionuclides: radium-226, lead-210, polonium-210, thorium-230.

3.2 Waste Rock Source Term

Waste rock source terms were developed to represent predicted water quality of contact water during operations and closure. The approach and inputs used to develop the waste rock source terms are detailed in the following section.

The source terms are developed for different management options including segregation PAG and NPAG materials, and the use of a liner to capture and manage contact water.

3.2.1 Method Overview

Waste rock source terms were developed by numerical modelling using inputs derived from ongoing laboratory-based kinetic geochemical testing with humidity cell tests (HCTs), available mine plans and water balances provided by BGC Engineering (BGC) and Okane. In general, the model was initially set up as a mass balance model where loadings from HCTs were scaled to field conditions and combined with estimated waste rock tonnages and precipitation infiltration rates. The predicted concentrations were subsequently equilibrated using the geochemical speciation and mass transfer code PHREEQC developed by the USGS (Parkhurst and Appelo 1999) to evaluate if the mass balanced concentrations would be constrained through precipitation of relevant mineral species.

Humidity Cell Test Input

Humidity cell tests (HCTs) on samples collected from the Project have been operating since 2019 at SGS Canada Inc. in Lakefield, Ontario using the standard HCT operation method ASTM D 5744-18 (ASTM 2018).

Average loading rates in milligrams per kilogram per week (mg/kg/week) were calculated from the last eight (8) weekly cycles (up to week 56) in HCTs at the time of model development. Representative HCT loading rates were then assigned to each lithology (SPGN or INT) from each location of the

development (the UGTMF and the Mine area). Criteria to select the representative HCTs included a review of sulfur content, ARD classification, lithology and development location. Input loading rates were then prorated based on their relative compositions for each of the placement methods being considered according to the expected lithological distribution in the WRSA(s). The prorated loading rates were then scaled from laboratory to field conditions to account for differences in temperature, grain size and channelization. The total load from the WRSA was estimated by multiplying the scaled loading rates by the total tonnage stored in the WRSA at the end of the mine life.

Consideration of Liner

The source term models also considered if a liner was used in the waste rock placement method, which determines where contact water is predicted to be released. For Source Term 4 (Table 3-2), representing NPAG material placed with no liner, all contact water reports directly to shallow groundwater as basal seepage. For Source Terms 1, 2, 3 and 5, which represent placement methods of waste rock containing a component of PAG material and use a liner, the majority of the WRSA load was assumed to drain to the toe of the WRSA(s) where it will be captured for treatment with a minor component reporting to shallow groundwater from leakage through the liner during operations. The liner is assumed to fail following closure with the WRSA drainage then reporting to shallow groundwater. Therefore, the modelled closure scenario assumes the liner no longer functions. The total WRSA load on an annual basis is assumed to dissolve in the estimated volume of water in contact with waste rock annually providing a source term in milligrams per litre (mg/L). The use of liner is described in more detail in the following section.

Equilibration Modelling

The predicted concentrations were equilibrated using the geochemical speciation and mass transfer code PHREEQC to evaluate if the mass balanced concentrations would be constrained through precipitation of relevant mineral species. Predicted WRSA water qualities were equilibrated with relevant mineral phases (Table 3-1) using the MinteqV4 library in PHREEQC to provide a final source term (mg/L).

Redox conditions in the PHREEQC model input reflected the predicted conditions of leachate leaving the WRSA. For the source terms representing placement methods using a liner (Source Term 1, 2, 3 and 5), the majority of the seepage will exit at the toe of the WRSA(s) during operations. It is expected that during operations, seepage will be in equilibrium with atmospheric gases. For the unlined placement method (Source Term 4), the seepage is modelled to recharge groundwater at the base of the pile under more reducing conditions. For source terms 1, 2, 3 and 5, a minor component of the contact water is expected to leak through the liner and report to shallow groundwater under more reducing conditions. To account for the different redox conditions in the source terms, the solution oxygen partial pressure was controlled by fixing the oxidation reduction potential (ORP) to oxic conditions for drainage exiting at the toe of the WRSA and to more reducing conditions for water infiltrating at the base of the WRSA. An ORP of 300 millivolts (mV) was assumed for water draining to the toe of the WRSA and 100 mV for WRSA drainage recharging shallow groundwater as basal seepage from the WRSA. The value of 300 mV was used as an assumed redox condition for surface

waters. As there is no data available for ORP from shallow groundwater at the site, a value of 100 mV was used to represent shallow groundwater for leachate released as basal seepage. It is assumed that the shallow groundwater is more reducing than surface waters however there will be some interaction with the atmosphere, and therefore a low oxidizing value was used.

Geochemical modelling requires consideration of temperature. All model equilibrations using PHREEQC were conducted using a reaction temperature of 5°C. This temperature was selected based on SRK project experience from a northern Saskatchewan uranium mine with recorded temperature from instrument bore hole in a waste rock pile which ranged from -3 ºC to 0.3ºC and near surface temperature recorded at site which ranged from 3ºC to 6ºC. Colder temperatures in the pile will limit geochemical kinetics; therefore, a conservative value of 5°C was used in the modelling to account for seasonal warming of the upper areas in the pile.

The pH conditions will influence element mobility and stability of secondary mineral phases. For the equilibration modelling using PHREEQC, pH was fixed based on anticipated conditions described in the conceptual model (Section 2.3) which assumes low-sulfide PAG waste rock will maintain neutral pH during operations and will be acid generating in closure. The following pH values were assumed for the operations and closure scenarios for each WRSA option:

Operations

All Source Terms: pH = 6.5

Closure

Source Term 1, 2, 3 and 5: pH = 3.5

Source Term 4: pH = 6.5

Geochemical models require input solutions to be electrically neutral. Charge imbalances can occur through prorating and mixing loading rates from multiple HCTs that have different individual ionic proportions. Charge imbalances were corrected in the model by adding potassium (K^+) to solutions with negative imbalance or sulfate (SO_4^{2-}) to solutions with positive imbalances. Sulfate was selected because it is expected to be the most abundant anion as a result of sulfide oxidation. Potassium is a relatively inert cation, and addition of this ion is not anticipated to change the outcomes of the geochemical model.

Table 3-1: Mineral Phases used in Equilibration (from PHREEQC Minteq.v4)

Phase Name	Formula
$Al(OH)_{3(am)}$	$Al(OH)_3$
Gibbsite	$Al(OH)_3$
Otavite	$CdCO_3$
Barite	$BaSO_4$
Brochantite	$Cu_4SO_4(OH)_6$
$Cu(OH)_2$	$Cu(OH)_2$
Malachite	$Cu_2CO_3(OH)_2$
Azurite	$Cu_3(CO_3)_2(OH)_2$
Chalcanthite	$CuSO_4 \cdot 5H_2O$.
Ferrihydrite	$Fe(OH)_3$
Melanterite	$FeSO_4 \cdot 7H_2O$
Anglesite	$PbSO_4$
Birnessite	MnO_2
Manganite	MnOOH
$PbMoO_4$	$PbMoO_4$
$CaMoO_4$	$CaMoO_4$
Ni(OH)2	$Ni(OH)_2$
$Co(OH)_2$	$Co(OH)_2$
$Zn(OH)_{2(am)}$	$Zn(OH)_2$
Smithsonite	$ZnCO_3$
Goslarite	$ZnSO_4 \cdot 7H_2O$
$UO_2(OH)_{2(beta)}$	$UO_2(OH)_2$
Gypsum	$CaSO_4 \cdot 2H_2O$
Calcite	$CaCO_3$

Model Scenarios

Multiple source terms were developed to account for variability in the water quality model. For each of the five source terms, a unique water quality prediction was modelled to represent the expected (base case) and upper case. The base and upper case predictions represent different laboratory-to-field scaling factors which ware outlined in Section 3.2.2 (Scaling Factors).

A summary of each of the modelled source terms is provided in Table 3-2.

Table 3-2: Summary of Modelled Source Term Scenarios

Source Term	WRSA Description	Liner	Modelled Source Term
Source Term 1	Single WRSA - Mixed PAG and NPAG – Conventional Construction and Waste Rock Placement	Yes	Operations - Base Case
			Operations - Upper Case
			Closure - Base Case
			Closure - Upper Case
Source Term 2	Single WRSA - Mixed PAG and NPAG with Engineered Layering	Yes	Operations - Base Case
			Operations - Upper Case
			Closure - Base Case
			Closure - Upper Case
Source Term 3	Segregated PAG WRSA – Conventional Construction and Waste Rock Placement	Yes	Operations - Base Case
			Operations - Upper Case
			Closure - Base Case
			Closure - Upper Case
Source Term 4	Segregated NPAG WRSA – Conventional Construction and Waste Rock Placement	No	Operations - Base Case
			Operations - Upper Case
			Closure - Base Case
			Closure - Upper Case
Source Term 5	Segregated PAG WRSA - Engineered Layering	Yes	Operations - Base Case
			Operations - Upper Case
			Closure - Base Case
			Closure - Upper Case

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

3.2.2 Model Inputs & Assumptions

The information used to derive the source terms is described in the following sections.

ARD Classification

The waste rock tonnage modelling included calculations to estimate waste rock by ARD classification (PAG or NPAG). The distribution of PAG and NPAG material was estimated through modelling sulfur content of the assay database and using a low sulfur cutoff criteria provided by SRK. In this criteria, PAG is defined as material having over 0.1% sulfur (total) and NPAG defined as material with less than 0.1% sulfur.

The low-sulfur cut-off criteria to define ARD potential was developed from results of geochemical characterization of drill core samples representing waste rock from the Project. ARD potential was assessed using the results of acid-base accounting (ABA) which were used to calculate the

neutralization potential ratio (NPR). The NPR represents the ratio of neutralization potential (NP), which is determined through the Modified NP analysis, to acid potential (AP), which is calculated based on sulfide content. Samples with an NPR greater than 3 were classified as NPAG, and samples with an NPR less than 1 were classified as PAG. Samples with NPR between 1 and 3 were classified as uncertain (UC). Further details on the ARD classification will be provided in a baseline geochemistry report currently in draft. The geochemical testing results also indicated that the majority of the samples of waste rock with a sulfide concentration greater than 0.1% (equivalent to AP of 0.31 kg $CaCO_3$/t) resulted in an NPR less than 1 and were classified as PAG (Figure 3-1 and Figure 3-2).

The geochemical release rates of the lower sulfur samples are still being evaluated (i.e., it has not yet been determined if low sulfur PAG samples will become acidic in the long-term). As the low sulphur cut-off criteria for the classification has not yet been developed for the Project, a value of 0.1% sulphur has been intermittently used for the classification of ARD potential of waste rock. The use of a low sulfide cut-off of 0.1% to classify all material as NPAG is supported by work conducted by Day and Kennedy (2015) which demonstrated that in many carbonate-deficient systems, the rate of acid generation from low sulfide geological material is sufficiently buffered by bicarbonate produced through meteoric weathering of silicate minerals. Furthermore, Day and Kennedy (2015) also demonstrate that the Modified NP method underestimates the silicate mineral reservoir potentially available to neutralize acidity generated by low sulfide geological materials. NexGen applied the sulfur cut-off of 0.1% to estimate the total tonnage of PAG and NPAG waste rock in the block model for the underground workings.

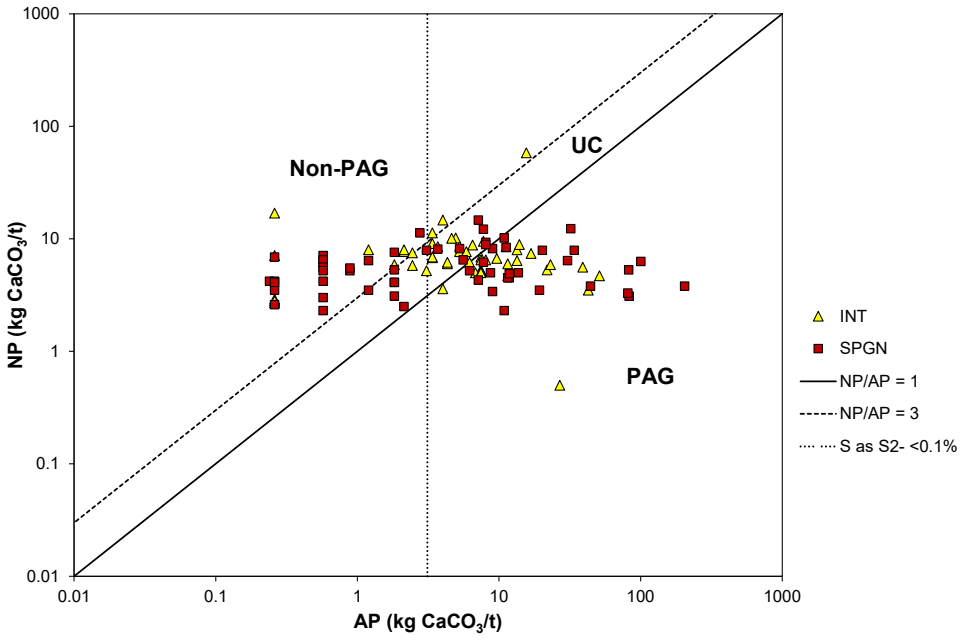

Figure 3-1: NP versus AP – UGTMF

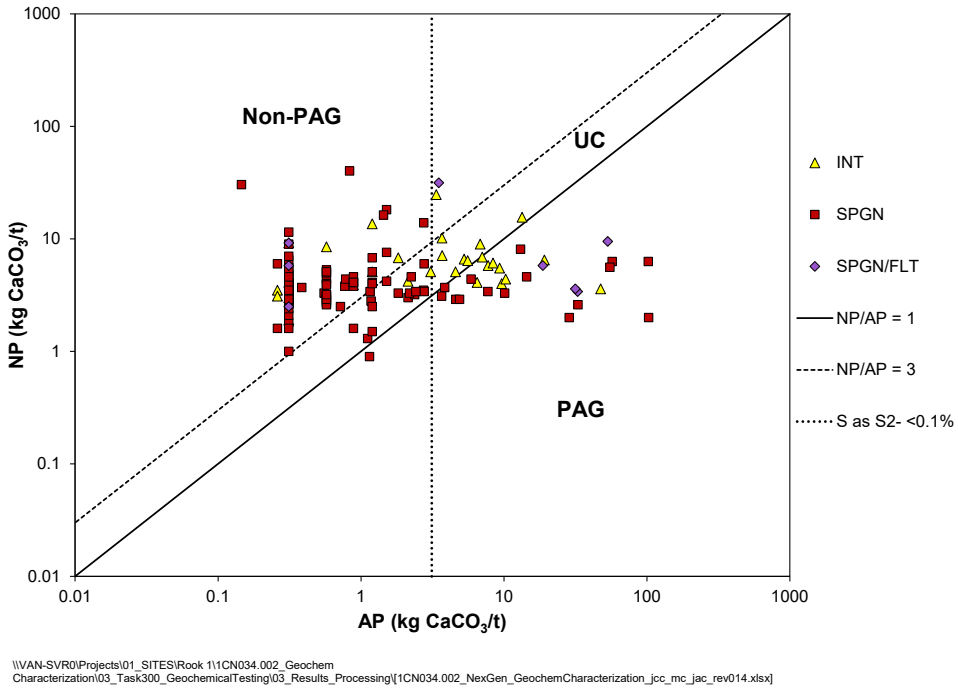

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Figure 3-2: NP vs. AP – Mine Workings

Waste Rock Tonnages

Waste rock tonnage was used as an input in the source term model along with the ARD classification criteria. The waste rock tonnages for the Project were calculated by Roscoe Postle Associates Inc. (RPA; now SLR Consulting Inc.) and provided as an Excel sheet in March 2020 (RPA 2020). The summary provided by RPA included a breakdown of waste rock tonnage by lithology, location (UGTMF or Mine), and ARD potential. For the 28-year mine life, RPA estimated the total waste rock tonnage at 25,378,277 tonnes (t), with 20,588,544 t (81%) being produced from the UGTMF and the remaining 4,789,731 t (19%) from the mine development area (RPA 2020).

The modelled tonnage for each of the waste rock groupings (location, lithology, ARD potential) were used to calculate tonnages representing lithologic grouping. In the context of the source term development, lithologic groupings are defined as groupings of waste rock by location, lithology and ARD potential (e.g., PAG SPGN from the UGTMF). A tonnage representing lithologic grouping was calculated for each WRSA in Source Terms 1 to 5 (Table 3-3).

Table 3-3: Waste Rock Tonnages by Lithological Domain Grouping for Each Source Term for Operations Scenario

Source Term	Placement Method	Lithology Domain Grouping (Location-Lithology-ARD Classification) during Operations								Total
		UGTMF-INT-PAG	UGTMF-INT-NPAG	UGTMF-SPGN-PAG	UGTMF-SPGN-PAG	Mine-INT-PAG	Mine-INT-NPAG	Mine-SPGN-PAG	Mine-SPGN-NPAG	
Source Term 1	Combined (conventional co-placement) PAG & NPAG	4,436,074	4,940,108	5,304,811	5,907,552	109,832	416,525	889,616	3,373,759	25,378,277
Source Term 2	Combined PAG & NPAG with engineered layering	4,436,074	4,940,108	5,304,811	5,907,552	109,832	416,525	889,616	3,373,759	25,378,277
Source Term 3	Segregated PAG with conventional placement	4,436,074	-	5,304,811	-	109,832	-	889,616	-	10,740,333
Source Term 4	Segregated NPAG with conventional placement	-	4,940,108	-	5,907,552	-	416,525	-	3,373,759	14,637,945
Source Term 5	Segregated PAG with engineered layering	4,436,074	-	5,304,811	-	109,832	-	889,616	-	10,740,333

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

Water Balance

Modelled water balances for each of the WRSAs were used to generate infiltration rates, which are inputs in the source term development model. The water balance modelling was completed by Okane for the conventional co-placement of PAG and NPAG waste rock and engineered placement methods (Source Term 1, 2, 5) and by BGC for the segregated PAG and NPAG WRSAs (Source Term 3, 4). The infiltration rates provided by BGC were modelled using a range of cover types with varying permeability.

Golder Associates (Golder) completed a multiple accounts analysis (MAA) to determine a preferred WRSA option for the Project which would be assessed in the EA (see the EIS, Section 4). The segregated PAG and NPAG WRSA with “Option A ablation till infiltration” scenario was carried forward into the source term solute transport model for the EA and was represented by Source Term 3 and 4.

The modelled infiltration rates were combined with the WRSA footprint area provided by Wood (2020) to calculate infiltration volumes through each WRSA (m^3/year). The WRSA areas were generated from the WRSA designs provided by Wood (2020) (Table 3-4).

For the placement methods which would use a liner (Source Term 1, 2, 3 and 5) 5% of the total precipitation is assumed to report to shallow groundwater as basal seepage leaking through the liner during operations (Okane 2020c, *pers. comm.)*, with the remaining volume reporting as toe seepage. For the placement method that does not use a liner (Source Term 4) infiltration will report to shallow groundwater. As the liner used in the lined placement methods (Source Term 1, 2, 3 and 5) is eventually expected to fail, all closure scenarios are modelled assuming all contact water reports to shallow groundwater as basal seepage. A summary of the infiltration rates, surface area and annual flows rates for each Source Term are provided in
Table 3-4.

Table 3-4: Source Term Model Water Balance Inputs

Source Term	Placement Method	Operations or Closure	Net Infiltration (mm/yr)	Pad Footprint (m^2)	Flow Rate (m^3/yr)	Seepage (based on total precipitation)
Source Term 1	Combined (conventional co-placement) PAG & NPAG	Operations	210	1,029,378	216,169	95% toe seepage / 5% basal seepage
		Closure	75	1,029,378	77,203	100% basal seepage
Source Term 2	Combined PAG & NPAG with engineered layering	Operations	120	1,029,378	123,525	95% toe seepage / 5% basal seepage
		Closure	75	1,029,378	77,203	100% basal seepage
Source Term 3	Segregated PAG	Operations	220	457,329	100,612	95% toe seepage / 5% basal seepage
		Closure	75	457,329	32,013	100% basal seepage
Source Term 4	Segregated NPAG	Operations	220	572,049	125,851	100% basal seepage
		Closure	70	572,049	40,043	100% basal seepage
Source Term 5	Segregated PAG with engineered layering	Operations	120	457,329	54,879	95% toe seepage / 5% basal seepage
		Closure	70	457,329	32,013	100% basal seepage

Source: \VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\05_Reporting\03_Final Source Terms_Approach\020_Tables\[Source_Term_Scenario_Compilation_1CN034.002_JAC_REV01.xlsx]Sheet

Oxygen Transport Modelling

Oxygen transport modelling was completed by Okane to assess oxygen availability for sulfide oxidation in the waste rock pile. This was used in the source term development to account for the amount of reactive mass which would be exposed to oxic conditions. The oxygen transport modelling was completed by Okane as a one-dimensional, numerical model of oxygen transport for both operations (no cover system) and closure (with cover system) conditions and for both the waste rock placement methods represented by Source Term 1 and 2 (co-mingled PAG and NPAG material) (Okane 2020b).

The modelling results for the placement method of combined PAG and NPAG material without engineered layering (Source Term 1) indicated that the potential for advective gas transport is greater than oxygen consumption by sulfide; therefore, is it assumed that the entire WRSA will be reactive for both the operations and closure scenarios that have a constant supply of oxygen.

For the engineered layer design (Source Term 2 and 5) during operations (while the waste rock is being placed and the engineered layering is being progressively constructed) it is assumed that the WRSAs have full reactive thickness with oxygen available in the entire WRSA.

The model results for the placement method of combined PAG and NPAG material with horizontal engineered layering (Source Term 2 and 5) indicated the engineered layering will effectively act as a barrier to advective gas transport during closure with oxygen consumption being greater than the rate of advective oxygen supply, which will lead to a diffusion-dominated system. Therefore, only the areas where diffusive gas transport can reach are considered reactive materials in the source term model. The modelling suggests diffusive oxygen transport through the WRSA plateau and slopes will create a reactive zone of approximately 3 m in thickness in the waste rock pile which averages 16 m in height (Okane 2020b). Thus, the reactive waste rock tonnage was scaled using the ratio of 3/16, representing the ratio of reactive thickness to overall average waste rock pile thickness. A summary of the reactive masses at closure for all scenarios is summarized in Table 3-5.

Source terms 1, 3 and 4 are for designs with no engineered layer design, and therefore oxygen ingress is assumed not to be restricted.

Table 3-5: Reactive Waste Rock Tonnages by Lithological Grouping for Each Source Term for Closure Scenario

Source Term	WRSA	Lithology Domain Grouping (Location-Lithology-ARD Classification) at Closure								Total
		UGTMF-INT-PAG	UGTMF-INT-NPAG	UGTMF-SPGN-PAG	UGTMF-SPGN-PAG	Mine-INT-PAG	Mine-INT-NPAG	Mine-SPGN-PAG	Mine-SPGN-NPAG	
Source Term 1	Combined (conventional co-placement) PAG & NPAG	4,436,074	4,940,108	5,304,811	5,907,552	109,832	416,525	889,616	3,373,759	25,378,277
Source Term 2	Combined PAG & NPAG with engineered layering	831,764	926,270	994,652	1,107,666	20,594	78,098	166,803	632,580	4,758,427
Source Term 3	Segregated PAG	4,436,074	-	5,304,811	-	109,832	-	889,616	-	10,740,333
Source Term 4	Segregated NPAG	-	4,940,108	-	5,907,552	-	416,525	-	3,373,759	14,637,945
Source Term 5	Segregated PAG with engineered layering	831,764	-	994,652	-	20,594	-	166,803	-	2,013,812

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

Waste Rock Loading Rates

Geochemical loading rates from HCTs were used as inputs in the source term modelling to represent waste rock lithological groupings. The HCTs represent waste rock material from the different locations, lithologies and classification of ARD potential. Representative HCTs or mixtures of representatives HCTs were selected to provide geochemical loading rate inputs for each of the lithological groupings for both the operation and closure scenarios and for WRSA (Table 3-6 to Table 3-8)

Each of the WRSAs that were modelled in the source term development were represented by different proportions of the lithological groupings. The HCT mixtures used to represent the lithological groupings were developed to represent both operations and closure scenarios for each placement method. For the operations scenario, each lithological grouping was generally represented by a single HCT (primary HCT) with typical sulfide content.

To account for variability in the geochemical characteristics of the lithological groupings, smaller proportions of other HCTs were selected to be mixed in with the primary HCT to represent a range of leachate characteristics. Typically, the additional HCTs mixed with the primary HCTs were represented by a minor component of samples with high proportions of acid-generating (AG) material (samples 39137, 39010 and 39140). These HCTs were selected and mixed with the primary HCT to represent high sulfide material in each lithological grouping.

The proportions of HCT sample representing AG material used in each of the HCT mixtures representing the operations scenario were determined through a review of the static geochemical results. The three samples with acidic pH (pH<5) (sample 39137, 39010 and 39140) all have solid phase sulfide content above 1.06% (Figure 3-3). Results from the static geochemical analysis over 1.06% sulfide were classified as AG, with the proportion of samples in each lithological grouping with sulfide values above this cut-off used to represent the proportion of AG material in the HCT mixtures.

Wherever two HCTs were considered to be representative of the primary lithological grouping, the HCTs were prorated using a 50/50 proportion.

For the WRSAs represented by placement methods containing PAG material (i.e., Source Terms 1, 2, 3 and 5), acidic conditions are expected to form in the closure scenario. During this period, loading rates from HCTs that had become acid generating during the testing period were used as input. For the segregated PAG placement method, this resulted in using only the AG HCT loading rates to represent each lithological grouping, whereas for the co-mingled PAG and NPAG WRSA, the proportion of AG HCTs used in the mixtures was proportional to the amount of PAG material for each lithological grouping.

For the segregated NPAG placement method (Source Term 4), the same HCT mixtures were used to represent the operations and closure scenarios because neutral pH conditions are predicted to persist through operations and closure.

Source terms were iteratively defined and updated as more information and data became available. At the time this iteration of the source term modelling was completed, 56 weeks of HCT results were

available. For each HCT, the average value of the loading rate (mg/kg/week) for each parameter was calculated from the last three cycles of the elemental analysis (analyzed on weeks 48, 52 and 56). The model input loading rates for each lithological grouping generated from the HCT mixtures are provided for operations (Table 3-9) and closure (Table 3-10).

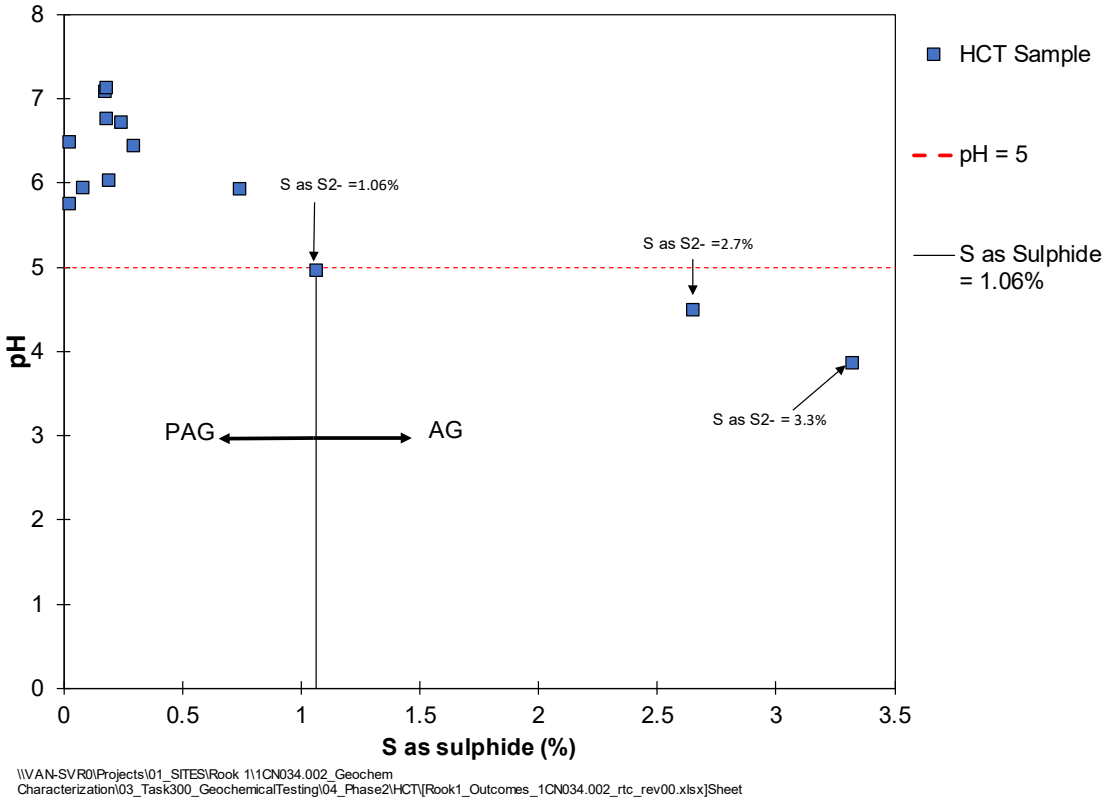

Figure 3-3: Solid phase sulfide content vs. HCT pH (at week 56)

Table 3-6: HCT Mixtures for Co-mingled PAG and NPAG Placement Method (Source Term 1 and 2) for Operations and Closure

	Lithology	Location	HCT Sample	Solid Phase Sulfide (%)	INT - UGTMF	INT - Mine	SPGN - UGTMF	SPGN - Mine
Operations	INT	UGTMF	39032	0.17	52.7%	-	-	-
	INT	UGTMF	39003	0.24	44.8%	-	-	-
	INT	Mine	39186	0.18	-	98.8%	-	-
	SPGN	UGTMF	39023	0.18	-	-	52.7%	-
	SPGN	UGTMF	39015	0.29	-	-	35.1%	-
	SPGN	UGTMF	39010	2.65	2.6%	-	12.2%	-
	SPGN	Mine	39140	1.06	-	1.2%	-	3.3%
	SPGN	Mine	39181	0.02	-	-	-	39.6%
	SPGN	Mine	39076	0.19	-	-	-	53.9%
	SPGN	Mine	39137	3.32	-	-	-	3.3%
	Total				100%	100%	100%	100%
Closure	INT	UGTMF	39032	0.17	52.7%	-	-	-
	INT	UGTMF	39003	0.24	-	-	-	-
	INT	Mine	39186	0.18	-	79.1%	-	-
	SPGN	UGTMF	39023	0.18	-	-	52.7%	-
	SPGN	UGTMF	39015	0.29	-	-	-	-
	SPGN	UGTMF	39010	2.65	47.3%	-	47.3%	-
	SPGN	Mine	39140	1.06	-	20.9%	-	19.5%
	SPGN	Mine	39181	0.02	-	-	-	39.6%
	SPGN	Mine	39076	0.19	-	-	-	39.6%
	SPGN	Mine	39137	3.32	-	-	-	1.4%
	Total				100%	100%	100%	100%

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

Table 3-7: HCT Mixtures for Segregated PAG WRSA Placement Method (Source Term 3 and 5) for Operations and Closure

	Lithology	Location	HCT Sample	Solid Phase Sulfide (%)	INT - UGTMF	INT - Mine	SPGN - UGTMF	SPGN - Mine
Operations	INT	UGTMF	39032	0.17	-	-	-	-
	INT	UGTMF	39003	0.24	94.6%	-	-	-
	INT	Mine	39186	0.18	-	94.1%	-	-
	SPGN	UGTMF	39023	0.18	-	-	-	-
	SPGN	UGTMF	39015	0.29	-	-	74.2%	-
	SPGN	UGTMF	39010	2.65	5.4%	-	25.8%	-
	SPGN	Mine	39140	1.06	-	5.9%	-	15.6%
	SPGN	Mine	39181	0.02	-	-	-	-
	SPGN	Mine	39076	0.19	-	-	-	68.8%
	SPGN	Mine	39137	3.32	-	-	-	15.6%
	Total				100.0%	100.0%	100.0%	100.0%
Closure	INT	UGTMF	39032	0.17	-	-	-	-
	INT	UGTMF	39003	0.24	-	-	-	-
	INT	Mine	39186	0.18	-	-	-	-
	SPGN	UGTMF	39023	0.18	-	-	-	-
	SPGN	UGTMF	39015	0.29	-	-	-	-
	SPGN	UGTMF	39010	2.65	100.0%	-	100.0%	-
	SPGN	Mine	39140	1.06	-	100.0%	-	93.2%
	SPGN	Mine	39181	0.02	-	-	-	-
	SPGN	Mine	39076	0.19	-	-	-	-
	SPGN	Mine	39137	3.32	-	-	-	6.8%
	Total				100.0%	100.0%	100.0%	100.0%

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

Table 3-8: HCT Mixtures for Segregated NPAG WRSA Placement Method (Source Term 4) for Operations and Closure

	Lithology	Location	HCT Sample	Solid Phase Sulfide (%)	INT - UGTMF	INT - Mine	SPGN - UGTMF	SPGN - Mine
Operations and Closure	INT	UGTMF	39032	0.17	100%	-	-	-
	INT	UGTMF	39003	0.24	-	-	-	-
	INT	Mine	39186	0.18	-	100%	-	-
	SPGN	UGTMF	39023	0.18	-	-	100%	-
	SPGN	UGTMF	39015	0.29	-	-	-	-
	SPGN	UGTMF	39010	2.65	-	-	-	-
	SPGN	Mine	39140	1.06	-	-	-	-
	SPGN	Mine	39181	0.02	-	-	-	50%
	SPGN	Mine	39076	0.19	-	-	-	50%
	SPGN	Mine	39137	3.32	-	-	-	-
				Total	100.00%	100.00%	100.00%	100.00%

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste

Table 3-9: Model Input Loading Rates for Operations by Lithological Grouping

Parameter	Units	Co-mingled (conventional placement) PAG and NPAG on single WRSA (with engineered layer design and as conventional placement) Source Term 1 & 2				Segregated PAG (with engineered layer design and as conventional placement) Source Term 3 & 5				Segregated NPAG Source Term 4 (conventional placement)			
		INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine	INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine	INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine
pH	s.u.	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Alkalinity	mg $CaCO_3$/kg/wk	3.1	2	2.5	1.9	2.8	2	1.9	1.9	3.4	2	3.1	1.9
SO4	mg/kg/wk	2.4	2.8	4.5	4	3	3.4	7.5	11	1.9	2.6	1.9	2
Cl	mg/kg/wk	0.96	1.5	0.96	1.2	0.96	1.5	0.96	0.95	0.96	1.5	0.96	1.2
Ag	mg/kg/wk	0.000048	0.000056	0.000048	0.000051	0.000048	0.000056	0.000048	0.000049	0.000048	0.000056	0.000048	0.000051
Al	mg/kg/wk	0.049	0.2	0.14	0.085	0.077	0.19	0.28	0.36	0.023	0.2	0.019	0.012
As	mg/kg/wk	0.00056	0.00029	0.0003	0.00062	0.00019	0.00028	0.00021	0.0004	0.00089	0.00029	0.00038	0.00068
Ba	mg/kg/wk	0.00038	0.00086	0.00048	0.00035	0.00046	0.00093	0.00042	0.00075	0.00032	0.00084	0.00054	0.00025
B	mg/kg/wk	0.002	0.012	0.0026	0.007	0.0022	0.012	0.0033	0.01	0.0019	0.012	0.0019	0.0062
Ca	mg/kg/wk	0.73	0.99	0.54	0.6	0.61	1	0.36	1.1	0.84	0.97	0.71	0.47
Cd	mg/kg/wk	0.0000044	0.0000089	0.00001	0.000066	0.0000061	0.00003	0.000018	0.00031	0.0000029	0.0000034	0.0000029	0.0000031
Co	mg/kg/wk	0.00067	0.0024	0.0031	0.041	0.0014	0.011	0.0066	0.2	0.000025	0.00023	0.000041	0.00013
Cr	mg/kg/wk	0.000078	0.00059	0.000086	0.00024	0.000081	0.00057	0.000097	0.00084	0.000077	0.0006	0.000077	0.000084
Cu	mg/kg/wk	0.0018	0.002	0.0077	0.081	0.0035	0.0057	0.016	0.39	0.00019	0.001	0.00019	0.00024
Fe	mg/kg/wk	0.022	0.43	0.079	0.33	0.039	0.41	0.16	1.2	0.0073	0.43	0.0067	0.092
Hg	mg/kg/wk	0.0000092	0.0000094	0.0000094	0.0000091	0.0000092	0.0000093	0.0000093	0.0000088	0.0000092	0.0000095	0.0000094	0.0000091
K	mg/kg/wk	0.69	0.39	0.48	0.33	0.7	0.38	0.49	0.46	0.69	0.39	0.46	0.29
Li	mg/kg/wk	0.0003	0.00085	0.00096	0.00063	0.00052	0.00097	0.0019	0.0021	0.000096	0.00082	0.000096	0.00025
Mg	mg/kg/wk	0.12	0.38	0.4	0.26	0.19	0.41	0.8	0.71	0.048	0.37	0.045	0.14
Mn	mg/kg/wk	0.0018	0.0016	0.008	0.0027	0.0034	0.0037	0.015	0.0097	0.00041	0.001	0.0015	0.00086
Mo	mg/kg/wk	0.00016	0.0038	0.00021	0.002	0.000077	0.0037	0.00012	0.0051	0.00023	0.0039	0.00029	0.0012
Na	mg/kg/wk	0.035	0.29	0.038	0.029	0.035	0.28	0.048	0.034	0.035	0.29	0.029	0.027
Ni	mg/kg/wk	0.00081	0.0018	0.0035	0.011	0.0016	0.0068	0.0073	0.053	0.000096	0.00054	0.000096	0.00018
Pb	mg/kg/wk	0.000041	0.0003	0.00015	0.000066	0.000069	0.0003	0.0003	0.00017	0.000016	0.00031	0.0000096	0.000038
Sb	mg/kg/wk	0.00086	0.001	0.00086	0.00091	0.00086	0.001	0.00086	0.00085	0.00086	0.001	0.00086	0.00092
Se	mg/kg/wk	0.000051	0.00062	0.000099	0.0011	0.000065	0.0015	0.00017	0.0049	0.000038	0.00039	0.000038	0.000091
Sr	mg/kg/wk	0.0023	0.016	0.0045	0.0088	0.0026	0.016	0.0063	0.018	0.0021	0.016	0.0028	0.0064
Sn	mg/kg/wk	0.000057	0.00026	0.000057	0.00014	0.000057	0.00025	0.000057	0.000059	0.000057	0.00026	0.000058	0.00016
U	mg/kg/wk	0.0011	0.002	0.00031	0.29	0.00089	0.0024	0.00021	0.24	0.0018	0.0019	0.0004	0.3
V	mg/kg/wk	0.00022	0.00047	0.000078	0.00022	0.00022	0.00045	0.000034	0.00021	0.00022	0.00048	0.00012	0.00022
Zn	mg/kg/wk	0.000036	0.000068	0.00016	0.00017	0.0029	0.0036	0.0067	0.019	0.0019	0.0029	0.0019	0.002

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\05_Reporting\03_Final Source Terms_Approach\020_Tables\[Compiled_HCT_Loading_inputs_1CN034.002_JAC_REV01.xlsx]Sheet

Table 3-10: Model Input Loading Rates for Closure by Lithological Grouping

Parameter	Units	Co-mingled (conventional placement) PAG and NPAG on single WRSA (with engineered layer design and as conventional placement) Source Term 1 & 2				Segregated PAG (with engineered layer design and as conventional placement) Source Term 3 & 5				Segregated NPAG Source Term 4 (conventional placement)			
		INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine	INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine	INT – UGTMF	INT – Mine	SPGN – UGTMF	SPGN – Mine
pH	s.u.	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	6.5	6.5	6.5	6.5
Alkalinity	mg $CaCO_3$/kg/wk	2.7	2	2.5	1.9	1.9	1.9	1.9	1.9	3.4	2	3.1	1.9
SO4	mg/kg/wk	12	5.4	12	5	23	16	23	16	1.9	2.6	1.9	2
Cl	mg/kg/wk	0.96	1.4	0.96	1.2	0.95	0.96	0.95	0.97	0.96	1.5	0.96	1.2
Ag	mg/kg/wk	0.000048	0.000055	0.000048	0.00005	0.000048	0.000048	0.000048	0.000047	0.000048	0.000056	0.000048	0.000051
Al	mg/kg/wk	0.53	0.17	0.53	0.036	1.1	0.073	1.1	0.12	0.023	0.2	0.019	0.012
As	mg/kg/wk	0.00056	0.00027	0.00029	0.00059	0.00019	0.00019	0.00019	0.00026	0.00089	0.00029	0.00038	0.00068
Ba	mg/kg/wk	0.00066	0.0012	0.00078	0.00067	0.001	0.0024	0.001	0.0023	0.00032	0.00084	0.00054	0.00025
B	mg/kg/wk	0.0045	0.011	0.0045	0.0062	0.0073	0.0064	0.0073	0.0064	0.0019	0.012	0.0019	0.0062
Ca	mg/kg/wk	0.81	1.2	0.74	0.77	0.78	2	0.78	1.9	0.84	0.97	0.71	0.47
Cd	mg/kg/wk	0.000031	0.000096	0.000031	0.000091	0.000062	0.00045	0.000062	0.00042	0.0000029	0.0000034	0.0000029	0.0000031
Co	mg/kg/wk	0.012	0.038	0.012	0.038	0.025	0.18	0.025	0.18	0.000025	0.00023	0.000041	0.00013
Cr	mg/kg/wk	0.00011	0.00049	0.00011	0.00011	0.00016	0.000077	0.00016	0.00022	0.000077	0.0006	0.000077	0.000084
Cu	mg/kg/wk	0.029	0.018	0.029	0.019	0.062	0.081	0.062	0.092	0.00019	0.001	0.00019	0.00024
Fe	mg/kg/wk	0.29	0.37	0.29	0.17	0.6	0.12	0.6	0.47	0.0073	0.43	0.0067	0.092
Hg	mg/kg/wk	0.0000092	0.0000088	0.0000093	0.0000086	0.0000092	0.0000061	0.0000092	0.0000063	0.0000092	0.0000095	0.0000094	0.0000091
K	mg/kg/wk	0.72	0.38	0.6	0.3	0.75	0.34	0.75	0.32	0.69	0.39	0.46	0.29
Li	mg/kg/wk	0.0033	0.0013	0.0033	0.00087	0.0069	0.0033	0.0069	0.0033	0.000096	0.00082	0.000096	0.00025
Mg	mg/kg/wk	1.3	0.53	1.3	0.34	2.7	1.1	2.7	1.1	0.048	0.37	0.045	0.14
Mn	mg/kg/wk	0.027	0.01	0.028	0.0097	0.057	0.046	0.057	0.043	0.00041	0.001	0.0015	0.00086
Mo	mg/kg/wk	0.00027	0.0033	0.0003	0.0013	0.00031	0.0012	0.00031	0.0017	0.00023	0.0039	0.00029	0.0012
Na	mg/kg/wk	0.032	0.23	0.029	0.025	0.028	0.019	0.028	0.019	0.035	0.29	0.029	0.027
Ni	mg/kg/wk	0.013	0.023	0.013	0.021	0.028	0.11	0.028	0.1	0.000096	0.00054	0.000096	0.00018
Pb	mg/kg/wk	0.00053	0.00029	0.00053	0.000097	0.0011	0.00022	0.0011	0.00032	0.000016	0.00031	0.0000096	0.000038
Sb	mg/kg/wk	0.00086	0.00098	0.00086	0.00091	0.00086	0.00086	0.00086	0.00084	0.00086	0.001	0.00086	0.00092
Se	mg/kg/wk	0.00027	0.0043	0.00028	0.0038	0.00054	0.019	0.00054	0.018	0.000038	0.00039	0.000038	0.000091
Sr	mg/kg/wk	0.0084	0.017	0.0088	0.0096	0.015	0.023	0.015	0.022	0.0021	0.016	0.0028	0.0064
Sn	mg/kg/wk	0.000057	0.00022	0.000057	0.00014	0.000057	0.000057	0.000057	0.000069	0.000057	0.00026	0.000058	0.00016
U	mg/kg/wk	0.001	0.0036	0.00029	0.26	0.00016	0.01	0.00016	0.11	0.0018	0.0019	0.0004	0.3
V	mg/kg/wk	0.00012	0.00038	0.000068	0.0002	0.000013	0.000013	0.000013	0.00014	0.00022	0.00048	0.00012	0.00022
Zn	mg/kg/wk	0.011	0.0055	0.011	0.0047	0.021	0.015	0.021	0.015	0.0019	0.0029	0.0019	0.002

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\05_Reporting\03_Final Source Terms_Approach\020_Tables\[Compiled_HCT_Loading_inputs_1CN034.002_JAC_REV01.xlsx]Sheet

Scaling Factors

Scaling factors were applied to the geochemical loading rates from the HCTs to scale from laboratory to field conditions. Mixed loading rates were scaled to field conditions by applying the following scaling factors:

Temperature – Applied to scale from laboratory-based test (HCTs at 25ºC) to field conditions of waste rock pile (assumed to be at 5ºC). The rate constant for laboratory and field conditions was calculated using the Arrhenius equation (Equation 1) to correct for temperature differences between the lab and the field. The resulting scaling factor was 0.08.

Equation 1 -

$$\frac{k_{field}}{k_{lab}} = e^{-\frac{\mathrm{E}}{\mathrm{R}}/\left(\frac{1}{T_{\mathrm{lab}}}-\frac{1}{T_{\mathrm{field}}}\right)}$$

k	Daily rate constant at temperature T, d^{-1}
E	Activation energy (assumed to be 88,000 J mol^{-1}) (Nicholson et al. 1988)
R	Gas constant (8.31 J K^{-1} mol^{-1})
T_{field}	Field Temperature (degrees Kelvin)
T_{lab}	Laboratory Temperature (degrees Kelvin)

Grain size – Applied to differences in water to waste rock contact from laboratory-based test with grain size of <1/4” to field-scale (mix of fine and coarse material). In the absence of field data to develop site-specific grain size scaling factors, conventional scaling factors developed from project experience at other sites, which are supported by both laboratory and field results, were used for the base case (scaling factor of 0.2). For the upper-case scenario, the grain size scaling factor was increased to 0.3, which assumes there is a greater degree of WRSA drainage in contact with waste rock.

Channelization – Applied to account for difference in water to waste rock contact from fully saturated, laboratory-based tests to field-scale WRSA(s) where preferential flow pathways are expected to form. A channelization factor of 0.5 was used in the both the base and upper cases. Like the grain size scaling factors, the channelization scaling represents a factor developed from other project experience.

3.2.3 Uranium and Radionuclide Source Term Calculations

As outlined in the conceptual geochemical model (Section 2.2) uranium is primarily hosted in the oxide form as uraninite, and therefore the release of uranium is controlled by dissolution as opposed to oxidation. Subsequently, radionuclides on the uranium decay chain are also assumed to be released

by dissolution of uraninite. As the mechanism for release is different than most other constituents, a different approach is used to develop uranium and radionuclide source term predictions.

Elements that are released through dissolution will deplete from their solid phase sources. As the depletion of geochemical constituents from dissolution in a waste rock source is difficult to predict, the model was developed with a conservative assumption that the initial peak concentrations are representative of waste rock over the long term.

It is observed that the peak concentration of source terms occurred in the early period of HCT testing. This provides a conservative representation of leachate characteristics from constituents which are primarily released by dissolution from oxides. However, this approach is not suitable for modelling parameters associated with sulfide release, as oxidation of those phases prior to the initiation of kinetic testing can lead to artificially high concentrations. Therefore, the source term development for these constituents uses stable HCT rates as the primary geochemical input as described in Section 3.2.2.

Uranium mobility is also sensitive to pH conditions. Therefore a HCT sample with acidic pH (Sample 39137) was used to generate a uranium source term for placement methods with PAG material at closure when acidic conditions are expected to form (Source Term 1, 2, 3 and 5) (Figure 3-4). In contrast, a NPAG HCT sample with neutral pH and elevated uranium solid phase content (Sample 39181) was used to generate a source term for waste rock placement methods with non-acidic leachate (all Source Terms during operations and Source Term 4 at closure) (Figure 3-5).

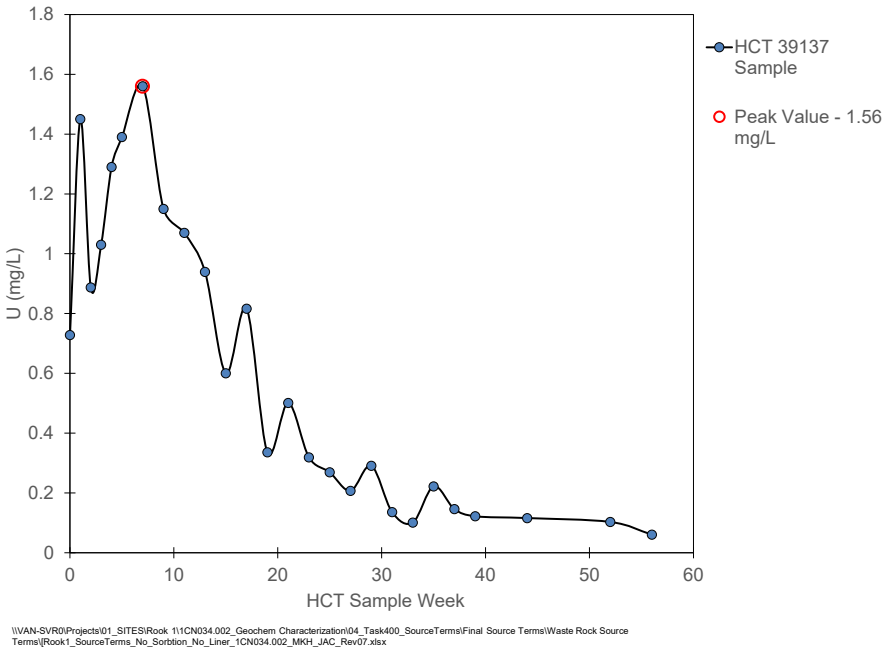

Figure 3-4: Uranium concentration time series from acidic sample 39137

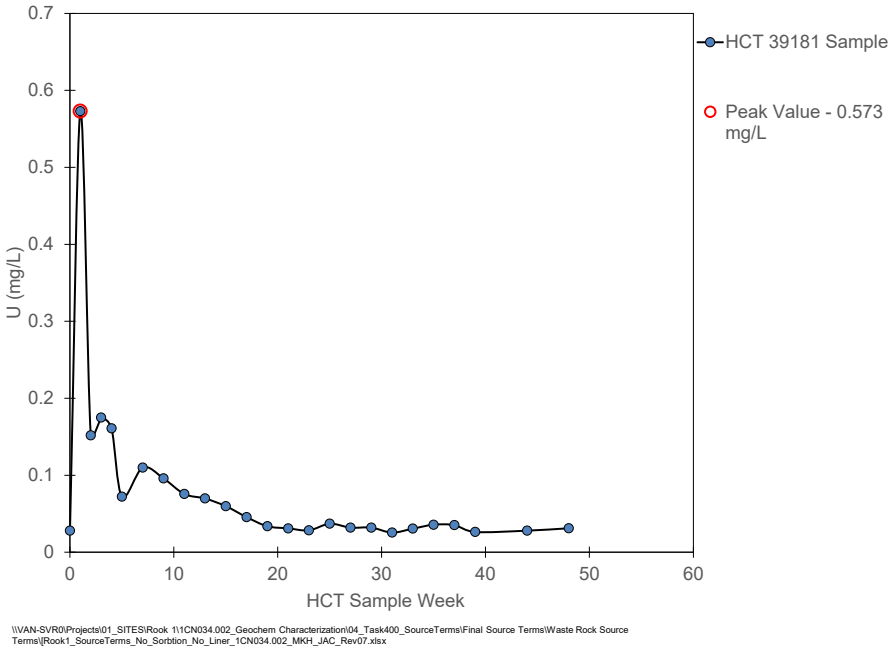

Figure 3-5: Uranium Concentration Time Series from Non-acidic Sample 39181

The radionuclide analysis requires a larger leachate sample size that is generated by monthly composites from the HCTs. Therefore, no initial concentration at 0 weeks is analyzed in the HCT program. To calculate the initial concentration (C_o) of radium-226 (in Bq/L), the test concentrations are plotted on a timeseries, with first-order exponential curve-fitting used to estimate C_o. Radium-226 analysis has been conducted on 4-week composites in three HCTs representing waste rock with elevated solid-phase uranium and radionuclide content (39137, 39181 and 39140), and less frequently in all other HCTs representing waste rock with low solid-phase uranium and radionuclide content. Radium-226 (Bq/L) values from 39137 were highest relative to all other HCTs and were used to generate the radium-226 source term (Figure 3-6).

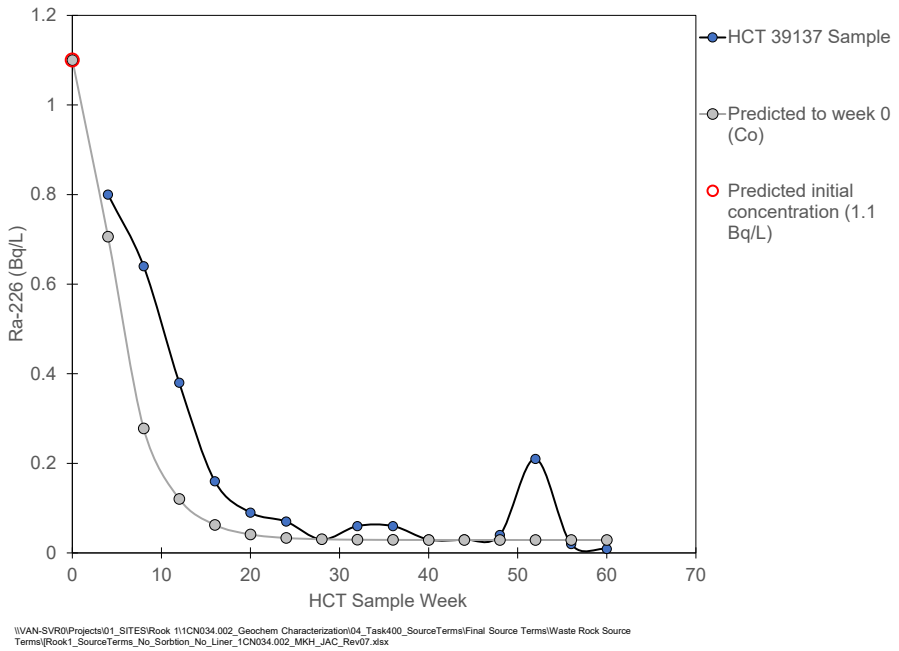

Figure 3-6: Measured Radium-226 (Bq/L) Results and Predicted Concentration to 0 Weeks for Sample 39137

Radionuclide analysis from the HCT and shake-flask extraction testing also included radium-228, thorium-228, thorium-230, thorium-232, lead-210 and polonium-210. Of these, lead-210, polonium-210 and thorium-230 occur on the uranium decay chain and are evaluated in the Environmental Impact Statement (EIS); therefore, source terms were developed for these parameters.

The majority of the results for lead-210, polonium-210 and thorium-230 were reported at or below detection limit, so all HCT and Shake Flask Extraction (SFE) data were pooled for these parameters with the maximum value for each selected to represent the source term.

3.2.4 Conservatism in Model

Conservative assumptions and approaches were applied to different facets of the model development. These are described in the following sections.

Scaling Factors

To address uncertainty in the model, the source term modelling included both a base case and upper-case scenario for each WRSA placement option. The difference in the base and upper-case is based on the scaling factors for grain size applied to scale the HCT data from lab to field conditions described in Section 3.2.2.

Surface Sorption

For the source term scenarios modelled at near neutral pH conditions, the formation of secondary iron-oxyhydroxide (e.g., ferrihydrite) is expected which will provide sites for surface adsorption. Surface sorption has the effect of reducing concentrations of parameters which sorb to ferrihydrite. Modelling the effects of surface sorption to constituent concentrations can be conducted using PHREEQC. The commonly used default values in the double diffusive layer model (Dzombak and Morel 1990) included in PHREEQC are based on laboratory experiments. While this provides a powerful mechanism for modelling sorption to ferrihydrite, in the absence of site specific data, it is unknown if these default values are applicable at the field scale. In the initial setup of the source term model, it was identified that several constituents were highly sensitive when sorption was included in the predictions. To provide a conservative estimate of source term concentrations, sorption was not included in the model. Therefore, actual concentrations for constituents that would sorb to ferrihydrite (such as arsenic, cobalt, copper and selenium) are likely to be lower for scenarios that favour the formation of ferrihydrite than what is predicted in the model.

Input HCT Mixtures

The geochemical loadings derived from the HCTs used as input in the source term model are sensitive to the proportion of high sulfide HCT sample used in the representative HCT mixtures. As acidic conditions have not yet occurred in low sulfide PAG HCTs, AG HCTs were included in the input loading rates. These HCTs all have greater than 1% sulfur, and therefore are representative of leaching characteristics of high sulfide (>1% sulfur) AG material. Enrichment of chalcophile elements (e.g., copper, cobalt, nickel, iron) is higher in the AG HCTs. Therefore, basing the predicted leaching characteristics of PAG material using high sulfide (>1% sulfur) AG HCTs will overestimate concentrations of several constituents. Revising the HCT mixtures using AG waste rock with lower sulfide concentrations can be considered if an HCT representing low-sulfide material (<1% sulfur) becomes acidic.

The geochemical loadings derived from the HCT mixtures are particularly sensitive to the proportion of sample 39137. This HCT is representative of the highest sulfide sample for the mine area and has loading rates over an order of magnitude higher for many elements in comparison to all other HCTs. The proportion of this sample in the HCT mixtures used to represent the SPGN lithology from the mine

in placement methods with PAG material (Source Terms 1, 2, 3 and 5) ranged from 3.4 to 15.6%. This is considered a conservative estimate as the model input assumes between 3.4 to 15.6% of the bulk rock has high sulfide equivalent to the highest sulfide sample from the static geochemical data set.

Modelled pH

Conservatism is also introduced in the predicted pH conditions of WRSAs with PAG material at closure. The co-mingled placement methods (Source Term 1 and 2) will include a mix of PAG and NPAG material. At closure, the PAG material is expected to become acidic with equilibration modelling using PHREEQC for these scenarios modelled using an acidic pH of 3.5. This pH was selected based on observed pH in the HCT results for AG sample material. It is therefore representative of leachate characteristics in high sulfide material. However, the NPAG material in the co-mingled placement method has the potential to provide some alkalinity to maintain higher pH values than that used in the model. The effect of alkalinity provided by NPAG material to maintain higher pH will also be dependent on the effectiveness of mixing the PAG and NPAG material during placement. As there is no experimental or field data to confirm what this pH would be or direct data from a co-mingled HCT, a conservative approach is used that assumes the pH conditions of the WRSA as whole are representative of high sulfide material.

Radionuclide Data

As described in the previous section, radionuclide data were largely non-detect, but were pooled and maximum values were used to represent the radionuclide source term.

3.3 Underground Wall Rock Methods

Source terms were developed to estimate loadings from exposed wall rock during the development of the underground workings. The source terms were developed to represent geochemical loadings produced from oxidation of the wall rock from the start of exposure to final backfilling or inundation of the workings with groundwater.

The approach and inputs used to develop the underground wall rock source terms are detailed in the following subsections.

3.3.1 Method Overview

The source term loadings for the underground wall rock were derived using laboratory-based kinetic geochemical testing with HCTs and the underground mine plan and schedule. Like the waste rock source term development, the underground wall rock source terms were generated as a mass balance model where loadings from HCTs were scaled to field conditions. The underground mine plan was used to estimate exposed wall rock area by lithological group in each of the mine and UGTMF throughout the period of development. The exposed wall rock by lithological grouping was combined with the representative HCT loading rates and an assumption on reactive thickness of wall rock to

generate the source term predictions. The source terms were derived as a mass load for each parameter.

At the time of source term development, the underground water balance model did not include details of the locations of underground wall rock which will be in contact with waters during operations. Therefore, the underground wall rock is assumed to be unsaturated during operations, with all stored load released when the workings are inundated with groundwater post closure. However, this assumption is conservative because a component of the stored load is expected to be released during operations from wet areas in the underground with leachate treated at the effluent treatment plant.

3.3.2 Model Input and Assumptions

Mine Plan

The mine plan formed the bases of estimating the amount of reactive surface area in the underground walls throughout the life of mine. To account for exposure of special waste and ore, a lithological grouping was calculated to represent these materials exposed in the underground wall rock. RPA (2020) provided the distribution of wall rock surface areas for each development year and by mine development level for the following:

- Lithology type (SPGN or INT);
- Material type: waste rock (<0.03% U_3O_8), special waste (U_3O_8 between 0.03-0.3%) and ore (U_3O_8 >0.3%); and
- ARD classification (using sulfur modelling and criteria detailed in Section 3.2.2).

The exposed wall rock surface area figures provided by RPA (2020) were used to calculate surface area by lithological grouping. Surface area for the lithology groupings were calculated by mine level and production year during operations (Year 1 to 28). A summary of the total exposed wall rock area by lithological grouping and by development year is provided for the UGTMF (Table 3-11) and mine development area (Table 3-12). The total exposed wall rock summarized in these tables incorporates information from the mine groundwater inundation rate, where inundation of workings with groundwater will eliminate exposure. Details of the rate of groundwater inundation to the mine in used in the source term model is summarized in Section 3.3.2.

Table 3-11: Cumulative Surface Area Exposure by Lithological Grouping for the UGTMF

Status	Development Year	UGTMF Development - Summary of Cumulative Exposed Surface Area by Lithological Grouping (m^2)				
		INT-PAG	INT-NPAG	SPGN-PAG	SPGN-NPAG	Total
Operations	Year 1	0	0	0	0	0
	Year 2	0	0	0	0	0
	Year 3	2,849	11,780	258	1,065	15,952
	Year 4	24,209	17,453	2,293	1,784	45,740
	Year 5	48,679	23,539	30,436	9,489	112,143
	Year 6	59,509	23,539	51,152	9,489	143,689
	Year 7	77,261	28,331	57,924	11,316	174,832
	Year 8	81,747	28,895	63,751	12,049	186,442
	Year 9	93,670	28,895	73,301	12,049	207,915
	Year 10	93,670	28,895	73,301	12,049	207,915
	Year 11	93,670	28,895	73,301	12,049	207,915
	Year 12	93,670	28,895	73,301	12,049	207,915
	Year 13	93,670	28,895	73,301	12,049	207,915
	Year 14	94,155	53,681	73,525	72,303	293,664
	Year 15	104,101	60,844	80,504	77,715	323,164
	Year 16	107,004	80,964	88,050	102,096	378,114
	Year 17	107,004	80,964	88,050	103,146	379,164
	Year 18	107,004	80,964	88,050	103,146	379,164
	Year 19	107,004	80,964	88,050	103,146	379,164
	Year 20	107,004	80,964	88,050	103,146	379,164
	Year 21	107,004	80,964	88,050	103,146	379,164
	Year 22	107,004	80,964	88,050	103,146	379,164
	Year 23	107,004	80,964	88,050	103,146	379,164
	Year 24	107,004	80,964	88,050	103,146	379,164
	Year 25	122,947	91,331	99,409	118,548	432,236
	Year 26	138,889	101,699	110,769	133,951	485,308
	Year 27	154,831	112,067	122,128	149,353	538,380
	Year 28	166,475	119,352	130,128	160,608	576,562
Post Closure	Year 29	144,836	37,473	107,317	15,889	305,515
	Year 30	104,779	17,298	72,699	7,886	202,662
	Year 31	104,779	17,298	72,699	7,886	202,662
	Year 32	54,352	8,194	34,774	4,336	101,656
	Year 33	0	0	0	0	0
	Year 34	0	0	0	0	0

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Underground Source Terms\[UG_Source_Terms_1CN034.002_JAC_REV07.xlsx]Sheet

Table 3-12: Cumulative Surface Area Exposure Summary by Lithological Grouping for the Mine Development

Status	Development Year	Mine Development - Summary of Cumulative Exposed Surface Area by Lithological Grouping (m^2)					
		INT-PAG	INT-NPAG	SPGN-PAG	SPGN-NPAG	Special Waste + Ore	Total
Operations	Year 1	2,081	5,047	3,343	8,106	-	18,577
	Year 2	9,770	15,811	5,953	10,356	-	41,889
	Year 3	10,032	27,753	6,325	39,365	1,215	84,691
	Year 4	11,015	40,014	11,962	132,866	11,823	207,680
	Year 5	12,446	44,018	26,193	197,610	45,432	325,699
	Year 6	23,652	65,107	38,106	270,312	93,053	490,229
	Year 7	30,060	79,623	49,319	342,783	118,358	620,144
	Year 8	40,415	98,201	70,920	389,680	161,092	760,309
	Year 9	42,106	99,312	75,173	390,643	196,405	803,639
	Year 10	42,201	99,382	76,822	394,601	207,274	820,280
	Year 11	42,201	99,382	76,822	394,601	207,274	820,280
	Year 12	42,201	99,382	76,822	394,601	207,274	820,280
	Year 13	43,521	99,799	78,245	395,030	208,507	825,103
	Year 14	43,521	100,959	86,725	459,136	219,656	909,996
	Year 15	43,889	102,203	104,961	504,938	268,697	1,024,688
	Year 16	43,975	102,278	110,497	520,056	324,673	1,101,480
	Year 17	44,127	102,442	119,346	545,159	378,326	1,189,400
	Year 18	44,127	102,442	121,476	550,992	424,408	1,243,445
	Year 19	44,127	102,442	123,215	553,135	456,158	1,279,078
	Year 20	44,127	102,442	123,215	553,135	456,158	1,279,078
	Year 21	44,127	102,442	123,215	553,135	456,158	1,279,078
	Year 22	44,127	102,442	123,215	553,135	456,158	1,279,078
	Year 23	44,127	102,442	123,215	553,135	456,158	1,279,078
	Year 24	46,944	111,763	141,545	609,432	477,190	1,386,875
	Year 25	49,762	121,084	159,875	665,729	498,222	1,494,672
	Year 26	52,579	130,405	178,205	722,025	519,254	1,602,469
	Year 27	55,396	139,727	196,535	778,322	540,286	1,710,266
	Year 28	58,213	149,048	214,865	834,619	561,318	1,818,063
Post Closure	Year 29	37,895	104,717	57,954	320,276	184,070	704,911
	Year 30	31,905	58,860	45,475	213,420	144,789	494,449
	Year 31	26,446	47,796	38,297	177,721	106,588	396,848
	Year 32	21,514	35,555	31,829	140,416	74,772	304,087
	Year 33	1,306	1,536	4,103	39,374	20,259	66,578
	Year 34	0	0	0	0	0	0

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Underground Source Terms\[UG_Source_Terms_1CN034.002_JAC_REV07.xlsx]Sheet

Reactive Wall Thickness

The reactive surface area by lithological grouping from the mine plan was used to calculate a reactive mass in the underground wall rock. The calculation of reactive mass from the exposed wall rock surface area requires an estimate of the density and thickness of fracturing in the wall rock that will be exposed to oxygenated conditions during development. A value of 2,400 kg/m^3 was used for the density in the reactive mass calculations. Fractures in the wall rock will be created by blast-induced fracturing during development of the workings.

Published literature on blast-induced fracturing shows that there is a significant range in both the density of fracturing and the depth of fracture penetration. In general, the depth of fracture propagation is typically in the range of 0.6 to 1.8 meters, with a typical fracture density of 10%; however, this will depend on factors such as lithological composition and blast methods used. In the absence of any site-specific information relating to the depth of future wall fracturing, an estimated extent of damage zone of 1 m and fracture density of 10% is used for the underground wall rock source term model. This is consistent with published information (e.g., Siskind and Fumanti, 1974; Kelsall et al., 1984).

The reactive mass was calculated as per Equation 2.

Equation 2 -

$$\text{Reactive Mass (kg)} = A \times DRZ \times Fd \times \rho$$

A = Wall rock surface area (m^2)

DRZ = Damaged Rock Zone (1 m)

Fd = Fracture density (10%)

ρ = Average rock density (2,400 kg/m^3)

Wall Rock Loading Rates

Geochemical loading rates from HCTs were used as input in the source term modelling to represent the wall rock lithology groupings. These HCTs represent waste rock material from the different locations, lithology types and classification of ARD potential. Representative HCTs or mixtures of representatives HCTs were selected to provide geochemical loading rate inputs for each of the lithological groupings (e.g., PAG SPGN from the UGTMF).

The selection of representative HCTs and HCT mixtures used as geochemical loading rates input in the underground source term model followed the same procedure as detailed in the waste rock source term model (Section 3.2.2). Average loading rates in mg/kg/week were calculated from the last eight weekly cycles (weeks 48 to 56) in HCTs at the time of underground source term model development. The prorated loading rates were then scaled from laboratory to field conditions to account for differences in temperature.

A lithological grouping representing special waste (0.03 to 0.3% U_3O_8) was also used in the underground source term model to represent special waste and ore exposed in the wall rock. Following

guidance from RPA, the exposed surface area of ore material in wall rock derived from the mine plan is likely overestimated as it is assumed that the ore material will be removed from the wall rock. The majority of ore development representing undercuts in the stopes will be shotcreted and backfilled and therefore will not be exposed. To account for the potential of some ore remaining exposed in the final wall rock, the geochemical loading rates representing special waste were also used to represent all surface area of ore in the mine as detailed in the RPA mine plan.

A summary of the HCT mixtures representing the lithological groupings used to generate the geochemical loading inputs is summarized in Table 3-13.

Table 3-13: Summary of HCT Mixtures Representing Lithological Groupings for Geochemical Loading Rates used in the Underground Wall Rock Source Term Model

Lithology Group	HCT Sample	Solid Phase Sulfide (%)	UGTMF				Mine				
			NPAG		PAG		NPAG		PAG		Special Waste + Ore
			INT - UGTMF	SPGN - UGTMF	INT - UGTMF	SPGN - UGTMF	INT - Mine	SPGN - Mine	INT - Mine	SPGN - Mine	
INT - UGTMF	39032	0.17	100%	-	96.9%	-	-	-	-	-	-
INT - Mine	39186	0.18	-	-	-	-	100%	-	96.2%	-	-
SPGN - UGTMF	39023	0.18	-	100%	-	-	-	-	-	-	-
SPGN - UGTMF	39015	0.29	-	-	-	86%	-	-	-	-	-
SPGN - UGTMF	39010	2.65	-	-	3.1%	14%	-	-	-	-	-
SPGN - Mine	39140	1.06	-	-	-	-	-	-	3.8%	3.4%	-
SPGN - Mine	39181	0.02	-	-	-	-	-	50%	-	46.6%	-
SPGN - Mine	39076	0.19	-	-	-	-	-	50%	-	46.6%	-
SPGN - Mine	39137	3.32	-	-	-	-	-	-	-	3.4%	-
SW - Mine	39130	0.02	-	-	-	-	-	-	-	-	75%
SW - Mine	39172	0.08	-	-	-	-	-	-	-	-	25%

Notes: SW = Special Waste

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Underground Source Terms\[UG_Source_Terms_1CN034.002_JAC_REV08.xlsx]Sheet

Scaling Factors

The geochemical loading rates from the HCTs were scaled to account for the difference in field to laboratory temperature. The approach to scaling for temperature was the same as used in the waste rock source term model (Section 3.2.2). The laboratory temperature conditions were assumed to be 25°C and field conditions representing underground wall rock were assumed to be 15°C. The ratio of laboratory to field rate constant from the Arrhenius equation provides a temperature scaling factor of 0.29.

As estimates of the reactive tonnage are based on the reactive wall thickness in the wall rock, the HCTs are not scaled for grain size or channelization.

Mine Decommissioning and Closure

The rate at which groundwater inundates the mine workings following closure was used in the source term model to determine which levels of the mine were inundated in the years following operations. In the source term models, mine workings which are inundated with groundwater will no longer accumulate load. The rate of groundwater inundation of the mine workings following completion of production were provided by Golder (Golder 2020, *pers. comm.*). The summary provided by Golder included time for groundwater to inundate specific mine levels following decommissioning and closure. The summary indicates complete inundation of the workings in 5.6 years following closure (years 29 to 34). This information was used to identify the mine levels that are inundated annually following the completion of production (Table 3-14).

Table 3-14: Summary of Groundwater Inundation Rate

Upper Mine Level (m elev)	Lower Mine Level (m elev)	Simulated Inflow Rate (m^3/d)	Time to Groundwater Inundation (yrs)	Cumulative Time (yrs)	Post Closure Year	Inundated Mine Levels
530	>210	150	0.66	5.6	5-6	170-320
210	160	1019	0.12	4.91	4-5	350
160	120	1154	1.32	4.79	4-5	380-410
120	80	1414	1.10	3.47	3-4	440
80	40	1638	1.06	2.38	2-3	470.00
40	0	1715	0.58	1.32	1-2	500-530
0	-40	1780	0.27	0.74	0-1	560-890
-40	-80	1875	0.25	0.47	0-1	590-890
-80	-120	1964	0.18	0.22	0-1	590-890
<-120	-	1964	0.04	0.04	0-1	590-890

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Underground Source Terms\[UG_Source_Terms_1CN034.002_JAC_REV07.xlsx]Sheet

3.3.3 Uranium and Radionuclide Source Term Calculations

As outlined in the conceptual geochemical model (Section 2.2) uranium is presumed to be hosted in the oxide form as uraninite, and therefore the release of uranium is controlled by dissolution as opposed to oxidation. Subsequently, radionuclides on the uranium decay chain are also released by dissolution of uraninite. As the mechanism for release is different than most other constituents, a different approach is used to develop uranium and radionuclide source term predictions.

The same approach used to develop uranium and radionuclide source terms outlined in the waste rock modelling was used for the underground wall rock source terms (Section 3.2.3) which assumes the peak concentration early in the HCT testing or SFE provides a representation of leachate characteristics from metal release by dissolution from oxides such as uraninite. As the underground wall rock will include exposed special waste material, HCTs representative of special waste were also included in the data set used to generate the uranium and radionuclide source terms.

The uranium source term is represented by the peak value from all testing. The peak value is from the SFE test result on special waste sample 39130 (4.67 mg/L).

Radionuclide analysis from the HCT and shake-flask extraction testing also included radium-228, thorium-228, thorium-230, thorium-232, lead-210 and polonium-210. Of these, lead-210, polonium-210 and thorium-230 occur on the uranium decay chain and are evaluated in the EIS, therefore source terms were developed for these parameters. The development of the source terms for the underground wall rock followed a similar procedure used for the waste rock source term described in Section 3.2.3 where all SFE and HCT data were pooled from all waste rock and special waste samples with the maximum value for each radionuclide selected as the source term.

3.3.4 Conservatism in Model

Conservative assumptions were used in the development of the underground source term model. These include the following assumptions:

- The model assumes the geochemical loading will be stored in the wall face throughout operations prior to being inundated by groundwater, with all stored load released when the underground workings are inundated. In reality, a portion of the load will be mobilized by groundwater flowing into the mine and pumped from the underground during dewatering throughout operations. The mass released to mine waters during operations will be collected, treated and discharged, reducing the mass that could be released at closure compared to the assumed mass that accumulates and is released in totality at closure.
- In the absence of a detailed water balance showing wet and dry areas in the underground mine, no equilibrum modelling has been completed to assess if secondary mineral phases are predicted to form. The formation of secondary mineral phases would constrain water quality concentrations of some constituents to solubility limits.

  The modelled surface area for the underground workings includes a component of ore present in undercuts of stopes which will likely be backfilled or shotcreted soon after exposure which would limit oxidation of the ore exposed in wall rock. Despite this a source term for exposed ore was developed using the HCTs representing special waste as the primary geochemical input.

4 Results

4.1 Waste Rock

The objective of the source term development was to compare the WRSA(s) drainage water quality for each of the proposed waste rock placement method(s)) carried forward in the EIS solute transport models. Predicted seepage concentrations and loadings for all WRSAs representing the different placement methods during operations are provided in Table 4-1 and Table 4-2. Predicted seepage concentrations and loadings for all WRSAs during closure are provided in Table 4-3 and Table 4-4. A discussion of the results from each of the waste rock source term models are discussed in Section 5.

Table 4-1: Predicted WRSA(s) Concentrations – Operations

Parameter	Units	Source Term 1 - Base Case (toe seepage)	Source Term 1 - Upper Case (toe seepage)	Source Term 1 - Base Case (basal seepage)	Source Term 1 - Upper Case (basal seepage)	Source Term 2 - Base Case (toe seepage)	Source Term 2 - Upper Case (toe seepage)	Source Term 2 - Base Case (basal seepage)	Source Term 2 - Upper Case (basal seepage)	Source Term 3 - Base Case (toe seepage)	Source Term 3 - Upper Case (toe seepage)	Source Term 3 - Base Case (basal seepage)	Source Term 3 - Upper Case (basal seepage)	Source Term 4 - Base Case (basal seepage)	Source Term 4 - Upper Case (basal seepage)	Source Term 5 - Base Case (toe seepage)	Source Term 5 - Upper Case (toe seepage)	Source Term 5 - Base Case (basal seepage)	Source Term 5 - Upper Case (basal seepage)
General Chemistry																			
pH	s.u.	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Alkalinity	mg $CaCO_3$/L	1.4	1.4	3.8	3.9	1.4	1.4	3.9	4	1.4	1.4	3.8	3.9	3.8	3.8	1.4	1.5	4	4.1
SO_4	mg/L	170	260	170	260	300	450	300	450	260	380	260	380	92	140	470	700	470	700
Cl	mg/L	110	170	110	170	190	290	200	310	64	96	73	110	140	210	120	170	140	210
pe	s.u.	5.4	5.4	1.8	1.8	5.4	5.4	1.8	1.8	5.4	5.4	1.8	1.8	1.8	1.8	5.4	5.4	1.8	1.8
Dissolved Metals																			
Ag	mg/L	0.0023	0.0035	0.0023	0.0035	0.004	0.006	0.004	0.006	0.0021	0.0031	0.0021	0.0031	0.0023	0.0035	0.0038	0.0057	0.0038	0.0057
Al	mg/L	0.0038	0.0038	0.0038	0.0038	0.0039	0.0039	0.0039	0.0039	0.0038	0.0039	0.0038	0.0039	0.0038	0.0038	0.0039	0.004	0.0039	0.004
As	mg/L	0.021	0.032	0.021	0.032	0.038	0.056	0.038	0.056	0.0095	0.014	0.0095	0.014	0.029	0.044	0.017	0.026	0.017	0.026
Ba	mg/L	0.0099	0.0078	0.01	0.0079	0.0071	0.0058	0.0073	0.0059	0.007	0.0055	0.0071	0.0056	0.017	0.013	0.0049	0.004	0.0051	0.0042
B	mg/L	0.16	0.24	0.16	0.24	0.28	0.41	0.28	0.41	0.15	0.23	0.15	0.23	0.15	0.23	0.28	0.42	0.28	0.42
Ca	mg/L	30	45	30	45	52	79	52	79	23	34	23	34	33	50	42	63	42	63
Cd	mg/L	0.00083	0.0012	0.00083	0.0012	0.0014	0.0022	0.0014	0.0022	0.0016	0.0024	0.0016	0.0024	0.00014	0.00021	0.0029	0.0044	0.0029	0.0044
Co	mg/L	0.41	0.61	0.41	0.61	0.71	1.1	0.71	1.1	0.87	1.3	0.87	1.3	0.0029	0.0044	1.6	2.4	1.6	2.4
Cr	mg/L	0.0057	0.0086	0.0057	0.0086	0.01	0.015	0.01	0.015	0.0068	0.01	0.0068	0.01	0.0044	0.0066	0.012	0.019	0.012	0.019
Cu	mg/L	0.57	0.63	0.84	1.3	0.66	0.75	1.5	2.2	0.61	0.68	1.8	2.7	0.011	0.016	0.72	0.83	3.3	4.9
Fe	mg/L	0.012	0.013	5.1	7.6	0.014	0.015	8.9	13	0.013	0.014	8.7	13	1.8	2.7	0.015	0.016	16	24
Hg	mg/L	0.00044	0.00066	0.00044	0.00066	0.00077	0.0012	0.00077	0.0012	0.0004	0.0006	0.0004	0.0006	0.00044	0.00066	0.00073	0.0011	0.00073	0.0011
K	mg/L	160	240	160	240	280	410	280	410	150	230	150	230	150	220	280	420	280	420
Li	mg/L	0.031	0.047	0.031	0.047	0.055	0.082	0.055	0.082	0.058	0.087	0.058	0.087	0.0071	0.011	0.11	0.16	0.11	0.16
Mg	mg/L	13	19	13	19	23	34	23	34	23	35	23	35	3.7	5.5	42	64	42	64
Mn	mg/L	0.22	0.34	0.22	0.34	0.39	0.59	0.39	0.59	0.42	0.64	0.42	0.64	0.046	0.069	0.78	1.2	0.78	1.2
Mo	mg/L	0.025	0.037	0.025	0.037	0.044	0.066	0.044	0.066	0.02	0.03	0.02	0.03	0.027	0.04	0.037	0.055	0.037	0.055
Na	mg/L	1.9	2.9	1.9	2.9	3.4	5	3.4	5	1.9	2.8	1.9	2.8	1.8	2.7	3.4	5.2	3.4	5.2
Ni	mg/L	0.18	0.27	0.18	0.27	0.31	0.47	0.31	0.47	0.38	0.56	0.38	0.56	0.0061	0.0091	0.69	1	0.69	1
Pb	mg/L	0.00013	0.00011	0.00013	0.00011	0.0001	0.000087	0.0001	0.000089	0.00018	0.00016	0.00019	0.00016	0.0001	0.000084	0.00014	0.00013	0.00015	0.00013
Sb	mg/L	0.041	0.062	0.041	0.062	0.073	0.11	0.073	0.11	0.037	0.056	0.037	0.056	0.041	0.062	0.068	0.1	0.068	0.1
Se	mg/L	0.012	0.019	0.012	0.019	0.022	0.033	0.022	0.033	0.023	0.035	0.023	0.035	0.0028	0.0043	0.042	0.063	0.042	0.063
Sr	mg/L	0.22	0.33	0.22	0.33	0.39	0.58	0.39	0.58	0.25	0.38	0.25	0.38	0.18	0.27	0.46	0.69	0.46	0.69
Sn	mg/L	0.0036	0.0054	0.0036	0.0054	0.0063	0.0094	0.0063	0.0094	0.0026	0.0038	0.0026	0.0038	0.0041	0.0062	0.0047	0.0071	0.0047	0.0071
U	mg/L	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
V	mg/L	0.0077	0.012	0.0077	0.012	0.013	0.02	0.013	0.02	0.0056	0.0083	0.0056	0.0083	0.0088	0.013	0.01	0.015	0.01	0.015
Zn	mg/L	0.18	0.27	0.18	0.27	0.31	0.47	0.31	0.47	0.26	0.4	0.26	0.4	0.093	0.14	0.48	0.73	0.48	0.73
Ra-226	Bq/L	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Po-210	Bq/L	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Pb-210	Bq/L	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Th-230	Bq/L	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Table 4-2: Predicted WRSA(s) Loadings – Operations

Parameter	Units	Source Term 1 - Base Case - (toe seepage)	Source Term 1 - Upper Case - (toe seepage)	Source Term 1 - Base Case - (basal seepage)	Source Term 1 - Upper Case - (basal seepage)	Source Term 2 - Base Case - (toe seepage)	Source Term 2 - Upper Case - (toe seepage)	Source Term 2 - Base Case - (basal seepage)	Source Term 2 - Upper Case - (basal seepage)	Source Term 3 - Base Case - (toe seepage)	Source Term 3 - Upper Case - (toe seepage)
General Chemistry											
pH	s.u.	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Alkalinity	kg CaCO3/yr	270	270	85	87	140	150	88	90	130	130
SO_4	kg/yr	33000	50000	3900	5800	31000	46000	6800	10000	23000	35000
Cl	kg/yr	21000	32000	2600	3900	20000	29000	4500	6800	5800	8600
pe	s.u.	5.4	5.4	1.8	1.8	5.4	5.4	1.8	1.8	5.4	5.4
Dissolved Metals											
Ag	kg/yr	0.45	0.67	0.052	0.077	0.41	0.61	0.09	0.14	0.19	0.28
Al	kg/yr	0.73	0.74	0.085	0.086	0.39	0.4	0.086	0.088	0.35	0.35
As	kg/yr	4.2	6.2	0.48	0.72	3.8	5.7	0.84	1.3	0.86	1.3
Ba	kg/yr	1.9	1.5	0.22	0.18	0.72	0.59	0.16	0.13	0.63	0.5
B	kg/yr	31	46	3.5	5.3	28	42	6.2	9.3	14	21
Ca	kg/yr	5800	8700	670	1000	5300	8000	1200	1800	2100	3100
Cd	kg/yr	0.16	0.24	0.019	0.028	0.15	0.22	0.032	0.049	0.15	0.22
Co	kg/yr	79	120	9.1	14	72	110	16	24	79	120
Cr	kg/yr	1.1	1.7	0.13	0.19	1	1.5	0.22	0.34	0.61	0.92
Cu	kg/yr	110	120	19	28	67	76	33	50	55	62
Fe	kg/yr	2.4	2.6	110	170	1.4	1.5	200	300	1.2	1.3
Hg	kg/yr	0.085	0.13	0.0099	0.015	0.078	0.12	0.017	0.026	0.036	0.054
K	kg/yr	31000	46000	3500	5300	28000	42000	6200	9300	14000	21000
Li	kg/yr	6	9.1	0.7	1	5.5	8.3	1.2	1.8	5.3	7.9
Mg	kg/yr	2500	3800	290	430	2300	3400	510	760	2100	3100
Mn	kg/yr	43	65	5	7.5	40	59	8.8	13	38	58
Mo	kg/yr	4.8	7.3	0.56	0.84	4.4	6.6	0.98	1.5	1.8	2.7
Na	kg/yr	370	560	43	64	340	510	75	110	170	260
Ni	kg/yr	35	52	4	6	32	47	7	10	34	51
Pb	kg/yr	0.025	0.021	0.003	0.0025	0.01	0.0088	0.0023	0.002	0.017	0.014
Sb	kg/yr	8	12	0.93	1.4	7.3	11	1.6	2.4	3.4	5.1
Se	kg/yr	2.4	3.6	0.28	0.42	2.2	3.3	0.49	0.73	2.1	3.1
Sr	kg/yr	43	64	4.9	7.4	39	59	8.6	13	23	34
Sn	kg/yr	0.7	1	0.081	0.12	0.64	0.96	0.14	0.21	0.23	0.35
U	kg/yr	110	110	13	13	58	58	13	13	52	52
V	kg/yr	1.5	2.2	0.17	0.26	1.4	2	0.3	0.45	0.5	0.76
Zn	kg/yr	34	52	4	6	31	47	6.9	10	24	36
Ra-226	Bq/yr	210000000	210000000	25000000	25000000	110000000	110000000	25000000	25000000	100000000	100000000
Po-210	Bq/yr	17000000	17000000	2000000	2000000	9100000	9100000	2000000	2000000	8200000	8200000
Pb-210	Bq/yr	39000000	39000000	4500000	4500000	20000000	20000000	4500000	4500000	18000000	18000000
Th-230	Bq/yr	58000000	58000000	6700000	6700000	30000000	30000000	6700000	6700000	27000000	27000000

Table 4 2: Predicted WRSA(s) Loadings – Operations (con't)

Parameter	Units	Source Term 3 - Base Case - (basal seepage)	Source Term 3 - Upper Case - (basal seepage)	Source Term 4 - Base Case - (basal seepage)	Source Term 4 - Upper Case - (basal seepage)	Source Term 5 - Base Case - (toe seepage)	Source Term 5 - Upper Case - (toe seepage)	Source Term 5 - Base Case - (basal seepage)	Source Term 5 - Upper Case - (basal seepage)	Combined Source Term 3 and 4 - Base Case	Combined Source Term 3 and 4 - Upper Case	Combined Source Term 4 and 5 - Base Case	Combined Source Term 4 and 5 - Upper Case
General Chemistry													
pH	s.u.	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5				
Alkalinity	kg CaCO3/yr	38	39	470	480	65	67	40	41	640	650	580	590
SO_4	kg/yr	2500	3800	12000	17000	21000	32000	4700	7000	37000	56000	37000	56000
Cl	kg/yr	730	1100	17000	26000	5200	7900	1400	2000	24000	36000	24000	36000
pe	s.u.	1.8	1.8	1.8	1.8	5.4	5.4	1.8	1.8				
Dissolved Metals													
Ag	kg/yr	0.021	0.031	0.29	0.43	0.17	0.26	0.038	0.057	0.5	0.75	0.5	0.75
Al	kg/yr	0.038	0.038	0.47	0.48	0.17	0.18	0.039	0.039	0.86	0.87	0.69	0.7
As	kg/yr	0.095	0.14	3.7	5.5	0.79	1.2	0.17	0.26	4.6	7	4.6	7
Ba	kg/yr	0.071	0.056	2.2	1.7	0.22	0.18	0.05	0.041	2.9	2.2	2.4	1.9
B	kg/yr	1.5	2.3	19	28	12	19	2.8	4.1	34	51	34	51
Ca	kg/yr	230	340	4200	6300	1900	2800	420	630	6500	9700	6500	9700
Cd	kg/yr	0.016	0.024	0.017	0.026	0.13	0.2	0.029	0.044	0.18	0.27	0.18	0.27
Co	kg/yr	8.7	13	0.37	0.55	72	110	16	24	88	130	88	130
Cr	kg/yr	0.067	0.1	0.55	0.83	0.56	0.84	0.12	0.18	1.2	1.8	1.2	1.8
Cu	kg/yr	18	27	1.3	2	33	37	33	49	74	91	67	88
Fe	kg/yr	86	130	230	340	0.66	0.73	160	240	320	470	390	580
Hg	kg/yr	0.004	0.006	0.055	0.082	0.033	0.049	0.0073	0.011	0.095	0.14	0.095	0.14
K	kg/yr	1500	2300	19000	28000	13000	19000	2800	4200	34000	51000	34000	51000
Li	kg/yr	0.58	0.87	0.89	1.3	4.8	7.2	1.1	1.6	6.7	10	6.7	10
Mg	kg/yr	230	340	470	700	1900	2900	420	630	2800	4200	2800	4200
Mn	kg/yr	4.2	6.3	5.8	8.7	35	52	7.7	12	48	73	48	73
Mo	kg/yr	0.2	0.3	3.4	5.1	1.6	2.5	0.36	0.54	5.4	8.1	5.4	8.1
Na	kg/yr	19	28	230	340	150	230	34	51	410	620	410	620
Ni	kg/yr	3.7	5.6	0.76	1.1	31	46	6.9	10	39	58	39	58
Pb	kg/yr	0.0019	0.0016	0.013	0.011	0.0065	0.0057	0.0015	0.0013	0.032	0.026	0.021	0.018
Sb	kg/yr	0.37	0.55	5.2	7.8	3.1	4.6	0.68	1	9	13	9	13
Se	kg/yr	0.23	0.34	0.36	0.54	1.9	2.9	0.42	0.63	2.7	4	2.7	4
Sr	kg/yr	2.5	3.8	22	33	21	31	4.6	6.9	48	72	48	72
Sn	kg/yr	0.026	0.038	0.52	0.78	0.21	0.32	0.047	0.07	0.78	1.2	0.78	1.2
U	kg/yr	5.7	5.7	72	72	26	26	5.7	5.7	130	130	100	100
V	kg/yr	0.055	0.083	1.1	1.7	0.46	0.69	0.1	0.15	1.7	2.5	1.7	2.5
Zn	kg/yr	2.6	3.9	12	18	22	33	4.8	7.2	38	57	38	57
Ra-226	Bq/yr	11000000	11000000	60000000	60000000	49000000	49000000	11000000	11000000	170000000	170000000	120000000	120000000
Po-210	Bq/yr	900000	900000	11000000	11000000	4000000	4000000	900000	900000	20000000	20000000	16000000	16000000
Pb-210	Bq/yr	2000000	2000000	25000000	25000000	9000000	9000000	2000000	2000000	45000000	45000000	36000000	36000000
Th-230	Bq/yr	3000000	3000000	38000000	38000000	13000000	13000000	3000000	3000000	68000000	68000000	54000000	54000000

Table 4-3: Predicted WRSA(s) Seepage Concentrations – Closure

Parameter	Units	Source Term 1 - Base Case	Source Term 1 - Upper Case	Source Term 2 - Base Case	Source Term 2 - Upper Case	Source Term 3 - Base Case	Source Term 3 - Upper Case	Source Term 4 - Base Case	Source Term 4 - Upper Case	Source Term 5 - Base Case	Source Term 5 - Upper Case
General Chemistry											
pH	s.u.	3.5	3.5	3.5	3.5	3.5	3.5	6.5	6.5	3.5	3.5
Alkalinity	mg $CaCO_3$/L	0	0	0	0	0	0	3.9	3.9	0	0
SO_4	mg/L	1400	2100	260	400	3000	4500	160	240	530	790
Cl	mg/L	380	570	82	120	330	480	240	370	68	95
pe	s.u.	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Dissolved Metals											
Ag	mg/L	0.0064	0.0096	0.0012	0.0018	0.0064	0.0095	0.004	0.006	0.0011	0.0017
Al	mg/L	58	87	11	16	130	200	0.0038	0.0039	24	36
As	mg/L	0.059	0.088	0.011	0.017	0.026	0.039	0.051	0.077	0.0046	0.007
Ba	mg/L	0.0034	0.0029	0.0078	0.0062	0.0023	0.002	0.012	0.01	0.005	0.0041
B	mg/L	0.65	0.98	0.12	0.18	0.97	1.4	0.26	0.39	0.17	0.26
Ca	mg/L	100	160	19	29	120	180	58	87	21	31
Cd	mg/L	0.0056	0.0085	0.0011	0.0016	0.013	0.019	0.00024	0.00036	0.0023	0.0034
Co	mg/L	2.2	3.4	0.42	0.63	5.4	8	0.0051	0.0076	0.95	1.4
Cr	mg/L	0.016	0.024	0.003	0.0045	0.022	0.032	0.0077	0.012	0.0038	0.0057
Cu	mg/L	3.6	5.5	0.68	1	8.7	13	0.019	0.028	1.5	2.3
Fe	mg/L	36	54	6.7	10	78	120	3.2	4.8	14	21
Hg	mg/L	0.0012	0.0018	0.00023	0.00034	0.0012	0.0018	0.00076	0.0011	0.00021	0.00032
K	mg/L	530	800	100	150	700	1100	260	390	120	180
Li	mg/L	0.38	0.57	0.071	0.11	0.88	1.3	0.012	0.019	0.16	0.23
Mg	mg/L	150	220	28	42	340	510	6.5	9.7	60	91
Mn	mg/L	3.2	4.8	0.6	0.9	7.5	11	0.08	0.12	1.3	2
Mo	mg/L	0.044	0.064	0.011	0.015	0.009	0.0097	0.047	0.071	0.0066	0.0071
Na	mg/L	4.5	6.7	0.84	1.3	3.7	5.5	3.1	4.7	0.65	0.98
Ni	mg/L	2	3	0.37	0.56	4.7	7	0.011	0.016	0.83	1.2
Pb	mg/L	0.0042	0.0036	0.0074	0.0066	0.031	0.038	0.000079	0.000066	0.016	0.018
Sb	mg/L	0.12	0.17	0.022	0.033	0.11	0.17	0.072	0.11	0.02	0.03
Se	mg/L	0.13	0.19	0.024	0.036	0.29	0.44	0.005	0.0074	0.051	0.077
Sr	mg/L	1.2	1.8	0.22	0.34	2.2	3.2	0.31	0.46	0.38	0.57
Sn	mg/L	0.01	0.015	0.0019	0.0028	0.0078	0.012	0.0072	0.011	0.0014	0.0021
U	mg/L	1.6	1.6	1.6	1.6	1.6	1.6	0.57	0.57	1.6	1.6
V	mg/L	0.016	0.023	0.0029	0.0044	0.0032	0.0047	0.015	0.023	0.00056	0.00084
Zn	mg/L	1.3	1.9	0.24	0.36	2.7	4	0.16	0.24	0.48	0.71
Ra-226	Bq/L	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Po-210	Bq/L	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Pb-210	Bq/L	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Th-230	Bq/L	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

Table 4-4: Predicted WRSA(s) Seepage Loadings – Closure

Parameter	Units	Source Term 1 - Base Case	Source Term 1 - Upper Case	Source Term 2 - Base Case	Source Term 2 - Upper Case	Source Term 3 - Base Case	Source Term 3 - Upper Case	Source Term 4 - Base Case	Source Term 4 - Upper Case	Source Term 5 - Base Case	Source Term 5 - Upper Case	Combined Source Term 3 and 4 - Base Case	Combined Source Term 3 and 4 - Upper Case	Combined Source Term 4 and 5 - Base Case	Combined Source Term 4 and 5 - Upper Case
General Chemistry															
Alkalinity	kg $CaCO_3$/yr	0	0	0	0	0	0	150	160	0	0	150	160	150	160
SO_4	kg/yr	110000	160000	20000	31000	96000	140000	6400	9700	18000	27000	100000	150000	25000	37000
Cl	kg/yr	30000	44000	6300	9000	11000	15000	9700	15000	2300	3300	20000	30000	12000	18000
Dissolved Metals															
Ag	kg/yr	0.5	0.74	0.093	0.14	0.2	0.31	0.16	0.24	0.039	0.058	0.37	0.55	0.2	0.3
Al	kg/yr	4500	6700	840	1300	4300	6400	0.15	0.16	810	1200	4300	6400	810	1200
As	kg/yr	4.5	6.8	0.85	1.3	0.84	1.3	2	3.1	0.16	0.24	2.9	4.3	2.2	3.3
Ba	kg/yr	0.26	0.23	0.6	0.48	0.075	0.065	0.49	0.4	0.17	0.14	0.57	0.46	0.67	0.54
B	kg/yr	50	75	9.4	14	31	46	11	16	5.9	8.8	42	62	16	25
Ca	kg/yr	8000	12000	1500	2300	3800	5700	2300	3500	720	1100	6100	9200	3000	4600
Cd	kg/yr	0.44	0.65	0.082	0.12	0.41	0.62	0.0097	0.014	0.078	0.12	0.42	0.63	0.088	0.13
Co	kg/yr	170	260	33	49	170	260	0.2	0.31	32	49	170	260	33	49
Cr	kg/yr	1.2	1.9	0.23	0.35	0.69	1	0.31	0.46	0.13	0.2	1	1.5	0.44	0.66
Cu	kg/yr	280	420	53	79	280	410	0.74	1.1	52	78	280	410	53	80
Fe	kg/yr	2800	4100	520	780	2500	3800	130	190	470	710	2600	3900	600	900
Hg	kg/yr	0.094	0.14	0.018	0.026	0.039	0.058	0.031	0.046	0.0073	0.011	0.069	0.1	0.038	0.057
K	kg/yr	41000	62000	7700	12000	23000	34000	10000	15000	4200	6300	33000	49000	15000	22000
Li	kg/yr	29	44	5.5	8.2	28	42	0.5	0.74	5.3	8	29	43	5.8	8.7
Mg	kg/yr	12000	17000	2200	3200	11000	16000	260	390	2100	3100	11000	17000	2300	3500
Mn	kg/yr	250	370	46	70	240	360	3.2	4.8	45	68	240	360	48	73
Mo	kg/yr	3.4	5	0.87	1.1	0.29	0.31	1.9	2.8	0.23	0.24	2.2	3.1	2.1	3.1
Na	kg/yr	350	520	65	97	120	180	130	190	22	34	240	370	150	220
Ni	kg/yr	150	230	29	43	150	220	0.42	0.64	28	43	150	230	29	43
Pb	kg/yr	0.32	0.28	0.57	0.51	0.99	1.2	0.0031	0.0027	0.56	0.63	0.99	1.2	0.56	0.63
Sb	kg/yr	8.9	13	1.7	2.5	3.7	5.5	2.9	4.3	0.69	1	6.6	9.8	3.6	5.4
Se	kg/yr	9.8	15	1.8	2.7	9.3	14	0.2	0.3	1.8	2.6	9.5	14	2	2.9
Sr	kg/yr	92	140	17	26	69	100	12	19	13	20	82	120	25	38
Sn	kg/yr	0.77	1.2	0.14	0.22	0.25	0.37	0.29	0.43	0.047	0.071	0.54	0.81	0.34	0.5
U	kg/yr	120	120	120	120	49	49	23	23	53	53	72	72	76	76
V	kg/yr	1.2	1.8	0.23	0.34	0.1	0.15	0.61	0.92	0.019	0.029	0.71	1.1	0.63	0.95
Zn	kg/yr	99	150	19	28	86	130	6.5	9.8	16	24	93	140	23	34
Ra-226	Bq/yr	85000000	85000000	85000000	85000000	35000000	35000000	44000000	44000000	60000000	60000000	79000000	79000000	82000000	82000000
Po-210	Bq/yr	6900000	6900000	6900000	6900000	2900000	2900000	3600000	3600000	3100000	3100000	6500000	6500000	6700000	6700000
Pb-210	Bq/yr	15000000	15000000	15000000	15000000	6400000	6400000	8000000	8000000	6900000	6900000	14000000	14000000	15000000	15000000
Th-230	Bq/yr	23000000	23000000	23000000	23000000	9600000	9600000	12000000	12000000	10000000	10000000	22000000	22000000	22000000	22000000

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms/ Compiled_WR_Source_Terms-Issue_to_NexGen_1NC034.002_JAC_REV13-DRAFT.xlsx

4.2 Underground Wall Rock

The underground wall rock source terms are presented in Table 4-5. The source terms are provided as a mass of stored load released for each of the years following the operations when the underground workings are inundated (years 29 to 34). The source terms for uranium and radionuclides are provided as concentrations (mg/L and Bq/L respectively) in Table 4-6.

Table 4-5: Summary of Stored Loading for each Post-closure by Development Year

Development Year		29	30	31	32	33	34
Parameter	**Units**						
General Chemistry							
Alkalinity	kg $CaCO_3$	71,000	76,000	6,000	25,000	29,000	2,600
SO4	kg	130,000	88,000	17,000	40,000	67,000	9,000
Cl	kg	76,000	28,000	10,000	17,000	32,000	5,400
Dissolved Metals							
Ag	kg	3	1.3	0.39	0.71	1.3	0.21
Al	kg	1,600	2,100	340	990	1700	99
As	kg	76	23	10	13	23	5
Ba	kg	23	9.9	3.3	5.6	11	1.5
B	kg	760	130	110	120	240	52
Ca	kg	32,000	17,000	4,100	8,500	16,000	2,000
Cd	kg	8.6	1.4	1.3	1.1	1.9	0.53
Co	kg	94	42	11	22	55	5.1
Cr	kg	6.8	2.3	1.3	1.9	4.7	0.49
Cu	kg	95	100	10	41	67	4.9
Fe	kg	5200	1,100	990	1400	3700	420
Hg	kg	0.56	0.26	0.07	0.13	0.24	0.039
K	kg	20,000	16,000	2,300	6,400	10,000	1,200
Li	kg	27	16	4.2	8.1	14	1.9
Mg	kg	8,800	6,400	1,400	3,200	5,500	660
Mn	kg	110	110	14	44	60	6.6
Mo	kg	23,000	3,300	3,300	2,700	4,600	1,400
Na	kg	4,000	1,300	780	1,000	2,300	270
Ni	kg	64	49	8.5	22	39	3.7
Pb	kg	3.7	2.3	0.72	1.4	2.8	0.26
Sb	kg	66	26	8.7	14	26	4.5
Se	kg	27	4.4	4.1	4.1	9.7	1.7
Sr	kg	420	110	67	89	200	32
Sn	kg	7.4	1.7	1.1	1.5	3.6	0.6
V	kg	53	10	7.8	7.8	15	3.4
Zn	kg	130	83	17	39	66	8.9

Source: \\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Underground Source Terms\[Compiled_UG_Source_Terms-Issue_to_NexGen_1NC034.002_JAC_REV01.xlsx]Sheet

Table 4-6: Source Term Concentrations for Uranium and Radionuclides

Parameter	Unit	Source Term
Uranium	mg/L	4.67
Radium-226	Bq/L	70
Polonium-210	Bq/L	0.43
Lead-210	Bq/L	0.4
Thorium-230	Bq/L	2.8

5 Discussion

The following subsections discuss the results for waste rock source terms by comparing predictions for each of the proposed placement methods. A comparison of loadings for parameters of interest for the operations scenarios is provided in Figure 5-1 to Figure 5-7 and for closure scenarios is provided in Figure 5-8 to Figure 5-14. As there is only one scenario for the underground wall rock source terms, no discussion on the results is included. The influence of the underground wall rock source term on mine pool water quality is evaluated in the solute transport model.

5.1 Operations

5.1.1 Base Case versus Upper Case

A comparison of the predicted concentrations between the base and upper cases for the co-placement of PAG and NPAG material (Source Term 1) show the upper-case predictions are higher for most parameters (Table 4-1). As described in Section 3.2.3, the uranium and radionuclide source terms were derived from the measured concentrations in HCTs or SFEs and were not scaled. The base and upper cases are representative of changes to the grain size scaling factor. Therefore, the same source term is used for both the base and upper cases for uranium and radionuclides.

5.1.2 Toe versus Basal Seepage

Source term predictions were developed for leachate released as toe seepage and leachate released to shallow groundwater as basal seepage from leakage through the liner. In general, the concentrations for toe and basal seepage most parameters were the same for placement options that use a liner. Iron and copper both had lower concentrations for toe seepage in comparison to basal seepage as liner leakage for the co-placed PAG and NPAG material (Source Term 1 and 2) as well as the segregated PAG placement options (Source Term 3, 5). This is expected as ferrihydrite ($Fe(OH)_3$) and malachite ($Cu_2(CO_3)(OH)_2$) are modelled to precipitate at the more oxic conditions at toe seepage creating a solubility control for these constituents.

The segregated NPAG placement option (Source Term 4) is planned without use of a liner, therefore all leachate is modelled to be released as basal seepage.

5.1.3 Engineered Layer Design

To assess the effectiveness of the engineered layer design, the predicted concentrations from the WRSA with co-placement of PAG and NPAG material using engineered layering (Source Term 2) was compared with the WRSA with co-placed PAG and NPAG material without engineered layers (Source Term 1). As the engineered layer design (Source Term 2) is not expected to limit oxidation ingress during operations during active waste rock placement, the characteristics of leachate from waste rock are expected to be similar to Source Term 1. In general, the predicted concentrations for the co-placed PAG and NAG using an engineered layer design (Source Term 2) are higher than the co-placed option without engineer design (Source Term 1). This is attributed to the lower predicted flow from the water

balance model of the engineer design which results in a lower water to rock ratio, resulting in higher concentrations (Table 4-1).

5.1.4 Segregated versus Co-Placed Placement Methods

The predicted concentrations for placement methods with and without segregation of PAG material were compared to assess the effect on concentrations from segregation of materials. For this, the predicted source term concentrations from the segregated placement methods (Source Terms 3, 4 and 5) were compared with the co-mingled placement methods (Source Terms 1 and 2). The predicted concentrations for the segregated PAG WRSA (Source Term 3) were generally higher than the source term representing the co-placed PAG and NPAG WRSA (Source Term 1) (Table 4-1). This occurs because PAG rock containing higher sulfide content is segregated in Source Term 3, resulting in a higher sulfate production and release of trace metals associated with sulfides.

The pattern of higher concentration was also observed in the segregated PAG placement method using engineered layering (Source Term 5) compared with the predictions for the WRSA with co-placed PAG and NPAG material using engineered layering (Source Term 2) (Table 4-1).

Exceptions are arsenic and molybdenum which have lower concentrations in the segregated PAG placement methods in comparison to the co-placed PAG and NPAG WRSA. The geochemical testing show molybdenum and arsenic to be elevated in low-sulfide and NPAG HCTs resulting in higher concentrations in the co-placed scenario which has a higher proportion of NPAG material than the segregated PAG scenario.

Some parameters including aluminum, silver, antimony barium, boron, chromium, tin and mercury are trace constituents that also had lower concentration or equivalent in the segregated PAG placement method in comparison to the co-placed WRSA. However, the values were only slightly lower for these parameters.

Predicted seepage concentrations in the segregated NPAG placement method (Source Term 4) are generally lower in comparison to the co-placed methods (Source Term 1 and 2) (Table 4-1).

This is expected as the NPAG WRSA will only contain low sulfur-bearing material, resulting in lower sulfate production rates and lower release of trace metals contained within sulfide minerals. The exceptions are arsenic, molybdenum and antimony which have higher predicted concentrations in the segregated NPAG placement method. Geochemical testing indicates that arsenic and molybdenum are more mobile from NPAG samples. Therefore, concentrating low sulfur waste rock in the NPAG WRSA may result in an increase of seepage arsenic and molybdenum concentrations.

The predicted iron concentrations are higher in the segregated NPAG placement methods (Source Term 4) in comparison to the predicted concentrations for all other placement methods. The segregated NPAG placement method is the only source term modelled without a liner where all seepage reports directly to shallow groundwater at more reducing conditions. The lower iron concentrations in the scenarios modelled with a liner are attributed to the precipitation of ferrihydrite. As the saturation index for ferrihydrite is a function of redox conditions, the more oxidized conditions at the toe seepage will result in precipitation of ferrihydrite creating a solubility limit.

5.1.5 WRSA(s) Loadings

The source term water quality model is designed to predict seepage concentrations. In the segregated PAG and NPAG placement methods, PAG rock is segregated into a separate WRSA and therefore, direct comparison of the concentrations between options may be misleading without considering flow and loading for each WRSA (i.e., concentrations would be expected to be higher in the PAG WRSA in comparison to the co-placed PAG and NPAG drainage concentrations). Comparison of the loadings from the co-placed methods with the combined loadings from the segregated PAG and NPAG placement method for both the scenarios with and without engineered layering provides a direct basis for comparing the source terms for all the waste rock placement options.

Figure 5-1 to Figure 5-7 provide a comparison of loadings from select parameters for the co-placed (Source Term 1), co-placed with engineered layering (Source Term 2), combined loadings from the PAG and NPAG WRSAs (sum of Source Term 3 and 4) and combined loadings from the NPAG WRSA and PAG WRSA with engineered layering (sum of Source Term 4 and 5). Select parameters are those that were elevated in SFE or HCT testing (e.g., sulfate, copper, molybdenum) and those that are often screened as potential constituents of concern at uranium projects (e.g. arsenic, cobalt, uranium and radium-226).

The following is a summary of the comparison of loadings from all options:

- Sulfate loadings are comparable for all placement methods (Figure 5-1)
- Most trace element parameters (arsenic, molybdenum, cobalt) are comparable for all placement methods (Figure 5-2 to Figure 5-4)
- Copper loadings are lower in the segregated PAG and NPAG placement methods (sum of Source Term 3 and 4, and sum of Source Term 4 and 5) in comparison to the co-mingled placement options (Source Term 1 and 2). The copper concentrations are sensitive to redox conditions, and the component of leachate released as toe seepage under oxic conditions is at solubility limit with malachite ($Cu_2(CO_3)(OH)_2$) which is limiting copper concentrations. The component of leachate released as basal seepage under the more reduced environment in shallow groundwater is undersaturated for malachite ($Cu_2(CO_3)(OH)_2$) resulting in higher concentrations for the component of seepage released as liner leakage (Figure 5-5) The differences between the PAG and NPAG co-mingled scenario (Source Term 1) and co-mingled placement scenario with engineer design (Source Term 2) are attributed to the same principles although as a result of differences in water balance, with a greater proportion of seepage reporting as toe seepage in Source Term 2.
- As the source term for uranium and radium-226 were derived on a concentration basis, their loadings are sensitive to the differences in the amount of infiltration for each of the placement options. The co-placed PAG and NPAG with engineer design (Source Term 2) has the lowest amount of annual infiltration in comparison to the other scenarios, and therefore has the lowest loadings (Figure 5-6 and Figure 5-7)

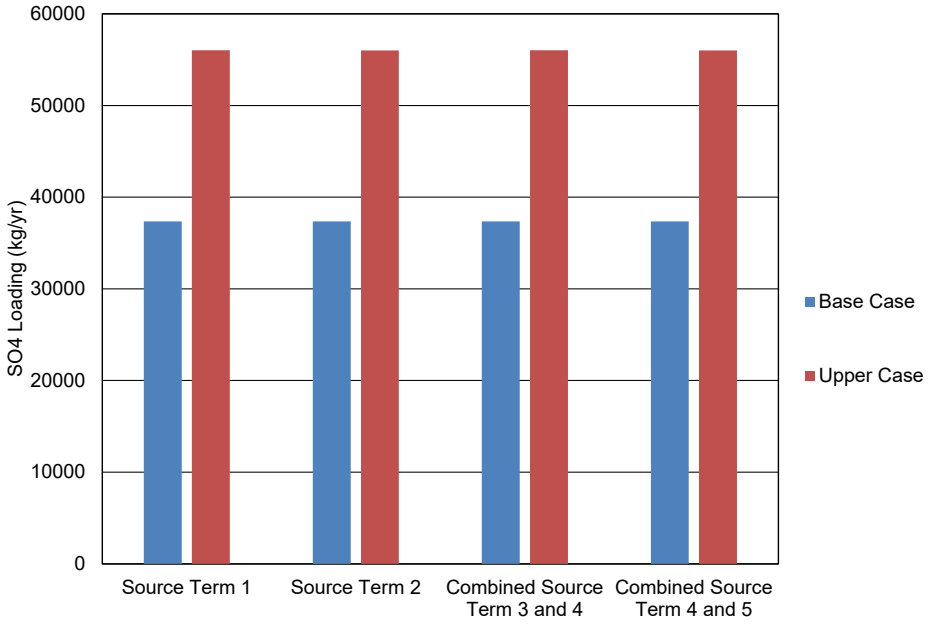

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Figure 5-1: Predicted WRSA(s) Sulfate Loadings – Operations

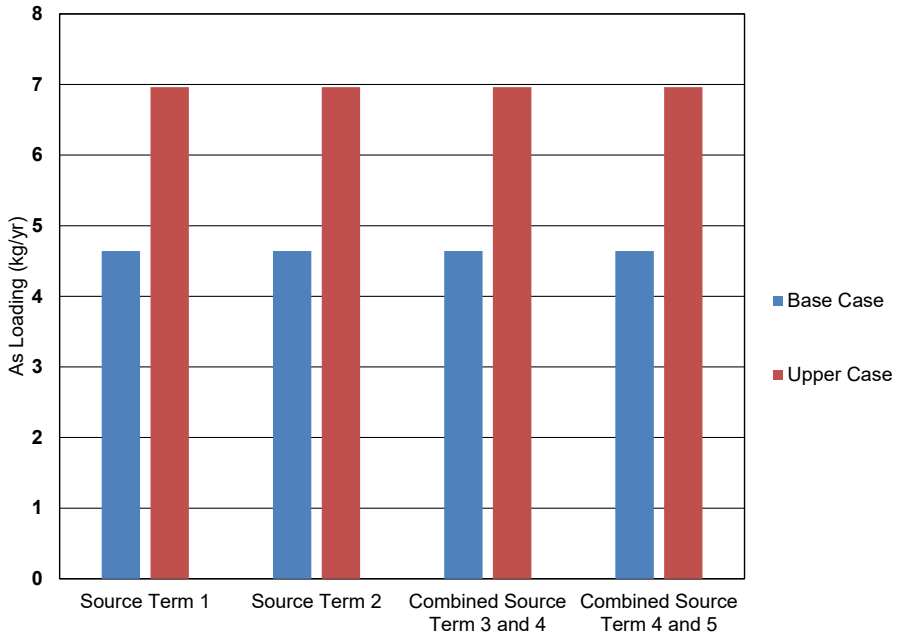

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Figure 5-2: Predicted WRSA(s) Arsenic Loadings – Operations

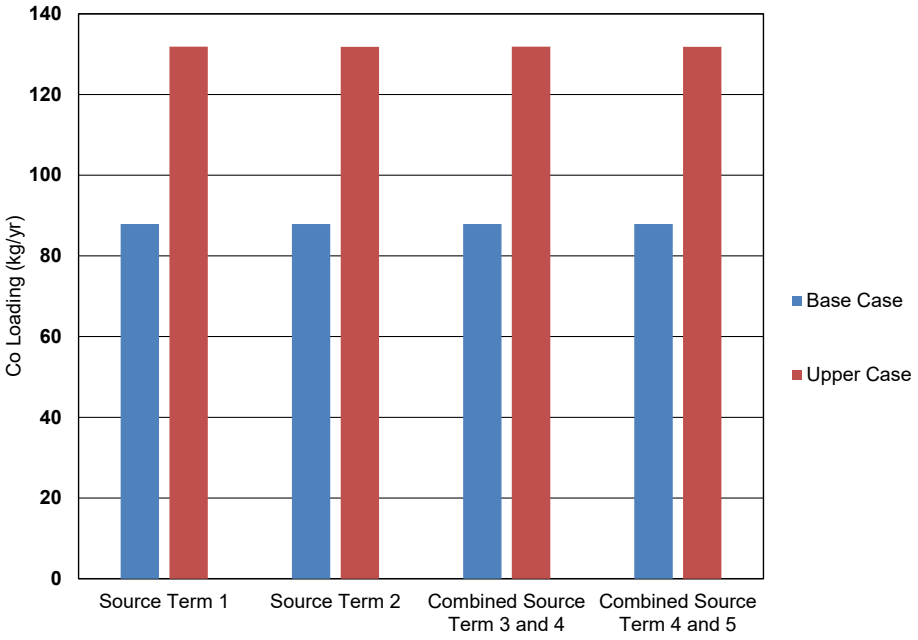

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Figure 5-3: Predicted WRSA(s) Cobalt Loadings – Operations

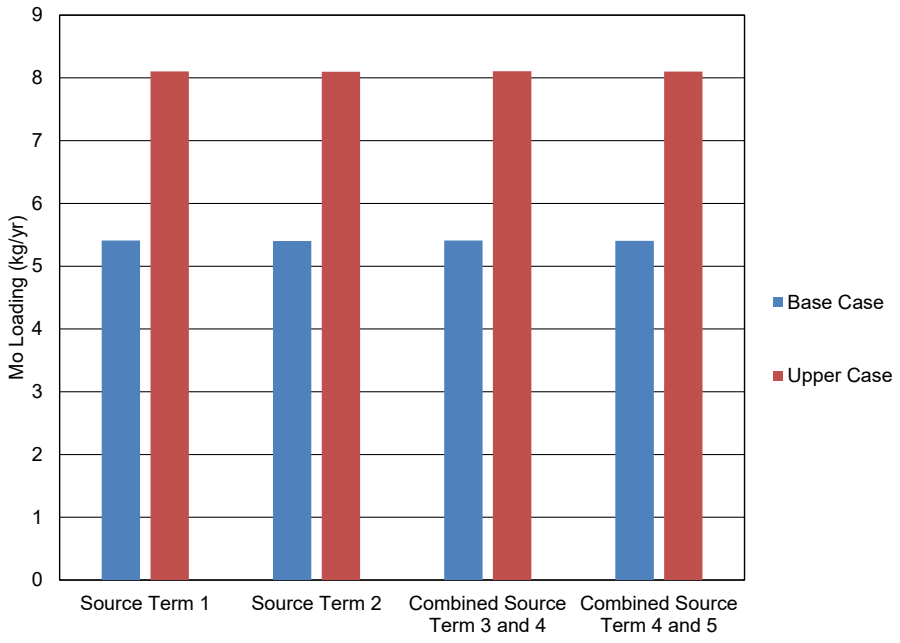

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Figure 5-4: Predicted WRSA(s) Molybdenum Loadings – Operations

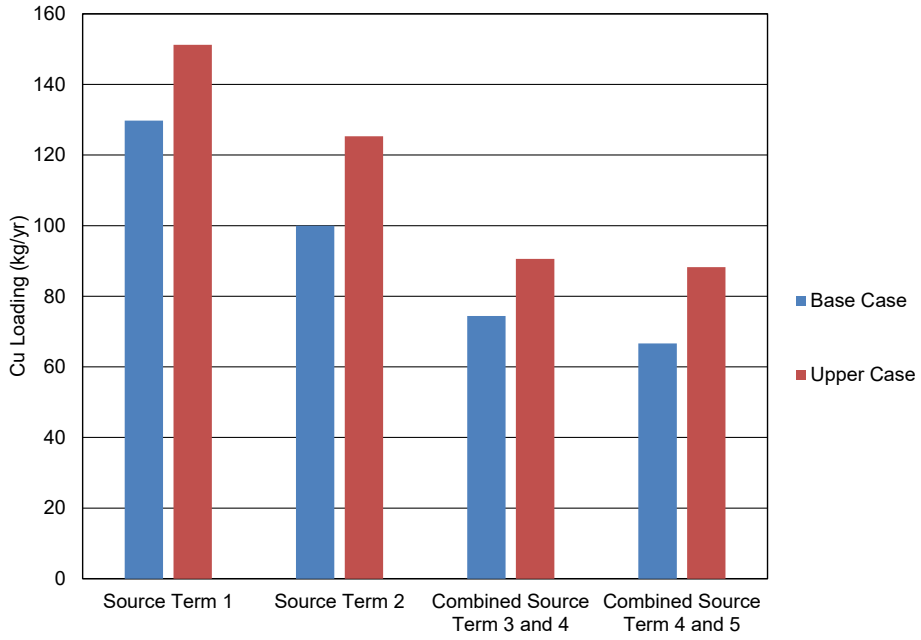

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Figure 5-5: Predicted WRSA(s) Copper Loadings – Operations

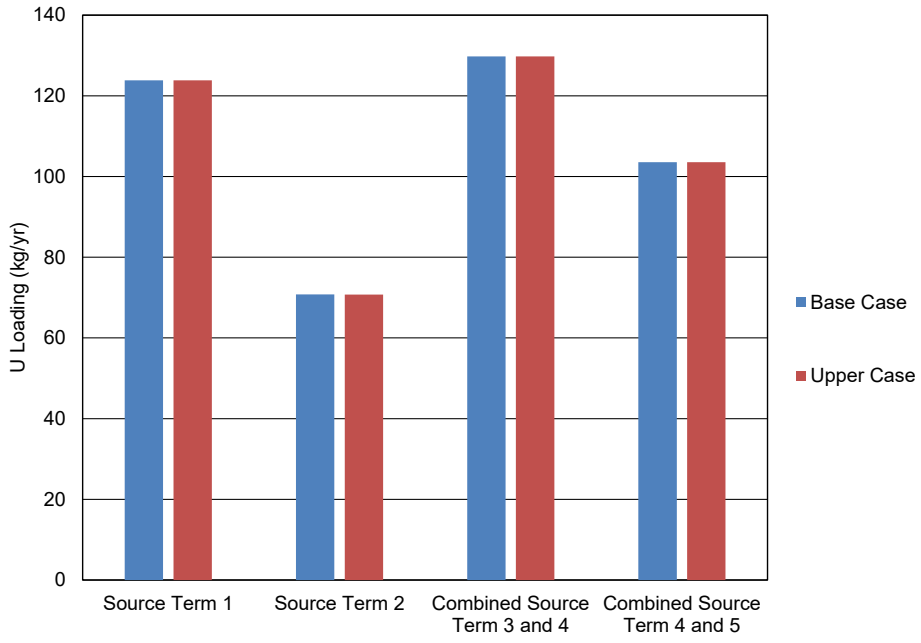

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Figure 5-6: Predicted WRSA(s) Uranium Loadings – Operations

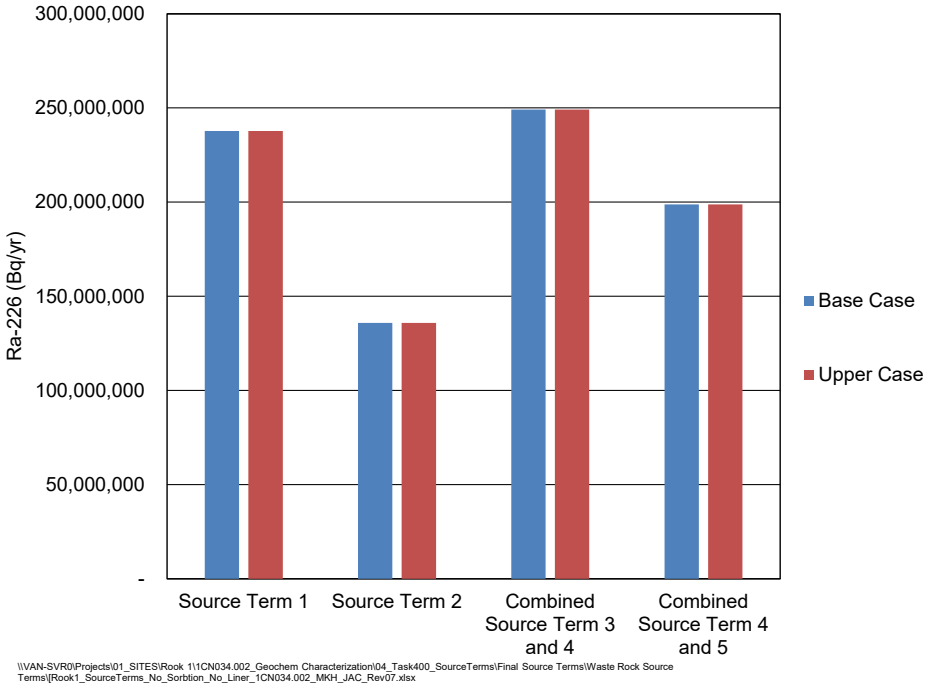

Figure 5-7: Predicted WRSA(s) radium-226 Loadings – Operations

5.2 Closure

5.2.1 Engineered Layer Design

At closure, the engineered layer design is predicted to restrict oxygen ingress to the upper portions of the waste rock piles, resulting in a reduction of reactive mass in the WRSA compared to options that do not include the engineered design. These conditions in the WRSA are modelled in Source Term 2 (co-placed PAG and NPAG material) and Source Term 5 (segregated PAG materials). The source terms for these WRSAs have lower concentrations for nearly all parameters in comparison to the placement methods representing the WRSAs without the engineered layering (Source Term 1 and 3). The lower concentrations in the placement methods that use an engineered layer design are attributed to the reduced reactive mass which results in a higher ratio of water to reactive mass. The exception is barium which has slightly higher concentrations in the placement methods with engineered layering.

5.2.2 Segregated versus Co-Placed Placement Methods

The predicted concentrations from segregating PAG and NPAG material at closure were compared to the predicted concentrations from the WRSAs with co-placement of PAG and NPAG material. The predicted concentrations for the placement method with segregated PAG material (Source Term 3) were generally higher than the co-placed PAG and NPAG material (Source Term 1) (Table 4-3). This occurs as segregated PAG rock containing higher sulfur has higher sulfate production rate and release of trace metals associated with sulfur as well as higher dissolution in acidic conditions for PAG

material. Exceptions are arsenic, molybdenum, tin, and vanadium, which have lower concentrations in Source Term 3 in comparison to Source Term 1. The geochemical testing with HCTs show these constituents to be elevated in low-sulfide and NPAG present in the co-placed PAG and NPAG placement option. Barium has only slightly lower values in Source Term 3 in comparison to Source Term 1.

Predicted concentrations in the placement method representing segregated NPAG material (Source Term 4) are lower in comparison to the co-placed PAG and NPAG material (Source Term 1) (Table 4-3. This is expected as the segregated NPAG WRSA will contain low sulfide material resulting in lower sulfate production rates and lower release of trace metals contained within sulfide minerals. The neutral pH conditions of the NPAG WRSA will also results in lower concentrations for constituents that typically have higher mobility at acidic conditions in comparison to the co-placed PAG and NPAG WRSA (Source Term 1) which is assumed to have acidic pH conditions at closure.

5.2.3 WRSA(s) Loadings

Like the operations scenario, a comparison of loadings provides a basis to compare the source terms for all the waste rock placement options at closure. Figure 5-8 to Figure 5-14 provide a comparison of the loadings for the waste rock placement methods from select parameters at closure.

The predicted loadings for the closure scenarios were most sensitive to the placement methods which use the engineered layer design. The following is a summary of the comparison of loadings for the placement options with and without engineered design:

- Parameters that are associated with sulfide oxidation (e.g., SO_4, Cu, Co) have lower loadings in the scenarios that use engineered layering to limit oxidation (e.g. Source Term 2 and Source Term 5) in comparison to the placement methods without engineered layering (Source Term 1, 3 and 4).
- Sulfate, copper and cobalt are comparable in the co-placed PAG and NPAG without engineered layering (Source Term 1) and the sum of the segregated PAG without engineered layering (Source Term 3) and segregated NPAG (Source Term 4); (
- Sulfate, copper and cobalt are comparable in the co-placed PAG and NPAG with engineered layering (Source Term 2) and the sum of the segregated PAG with engineered layering (Source Term 5) and segregated NPAG (Source Term 4); and
- Arsenic and molybdenum loadings are higher in the co-placed PAG and NPAG without engineered layering (Source Term 1) in comparison to the sum of segregated PAG without engineered layering (Source Term 3) and segregated NPAG (Source Term 4).

As the source terms for uranium and radium-226 were derived on a concentration basis, their loadings are sensitive to changes in water balance, resulting in the variations in calculated loadings observed in each of the different placement strategies. Additionally, as uranium mobility is pH dependent, a higher source term concentration was applied to all WRSAs which host PAG material. The calculated uranium loadings for the segregated PAG and NPAG WRSAs are lower in comparison to the WRSA options with conventional placement of combined PAG and NPAG material as the co-placed WRSA is conservatively assumed to be entirely PAG.

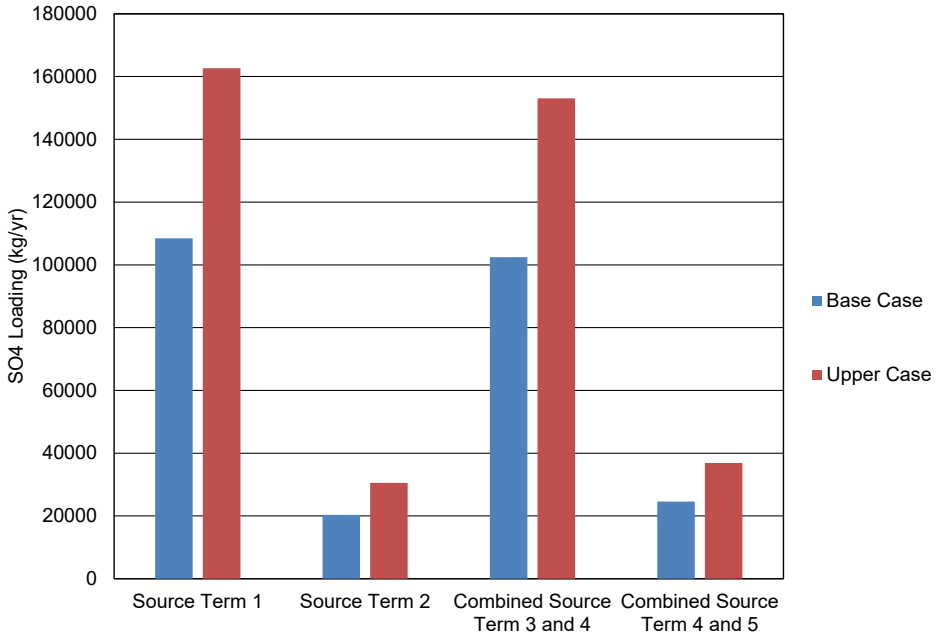

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Figure 5-8. Predicted WRSA(s) Sulfate Loadings – Closure

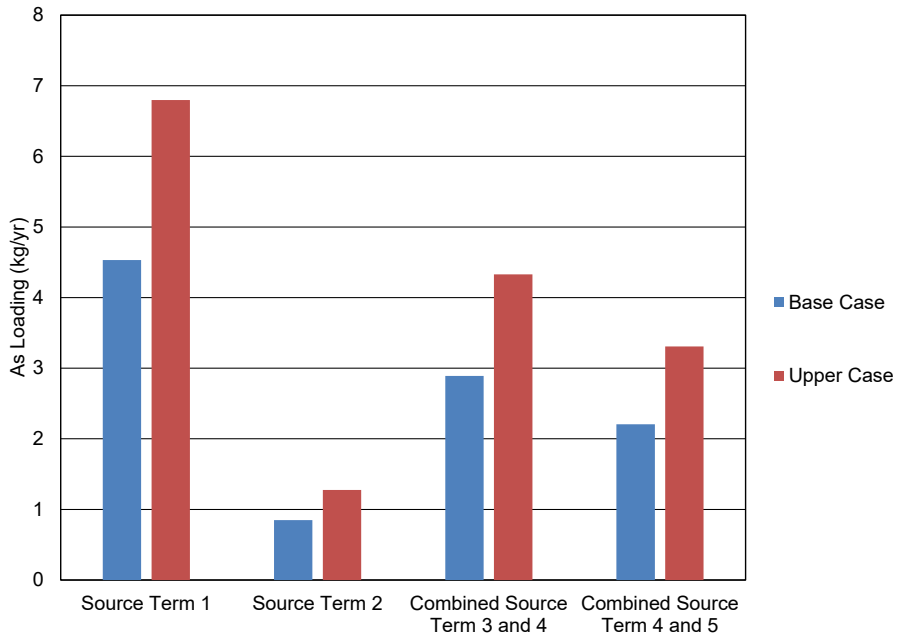

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Figure 5-9: Predicted WRSA(s) Arsenic Loadings – Closure

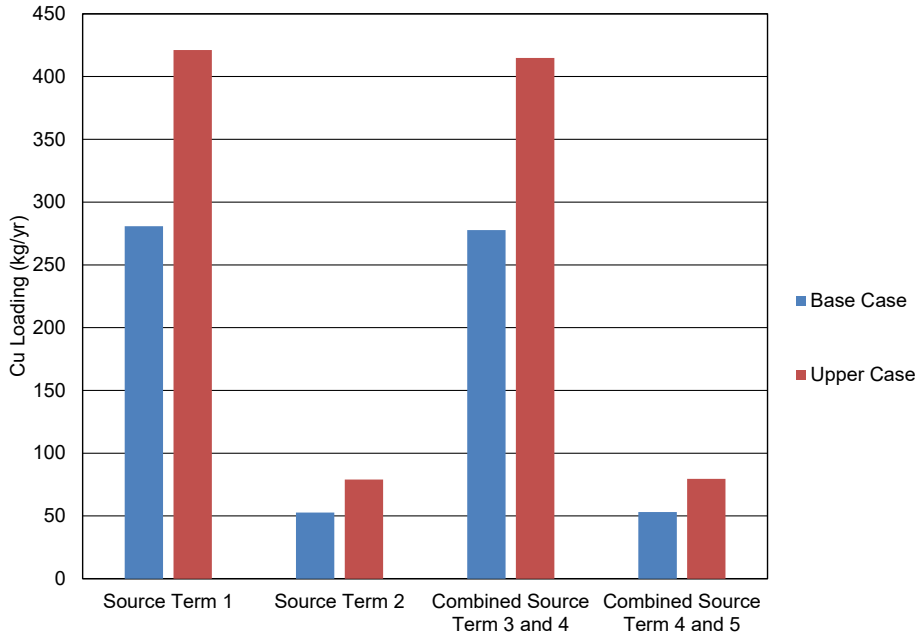

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Figure 5-10: Predicted WRSA(s) Copper Loadings – Closure

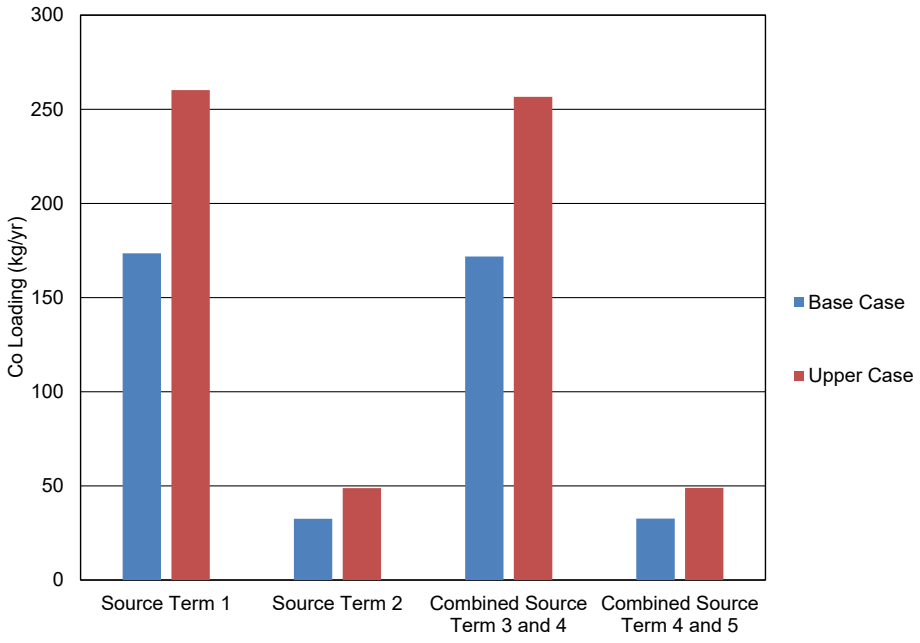

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Figure 5-11: Predicted WRSA(s) Cobalt Loadings – Closure

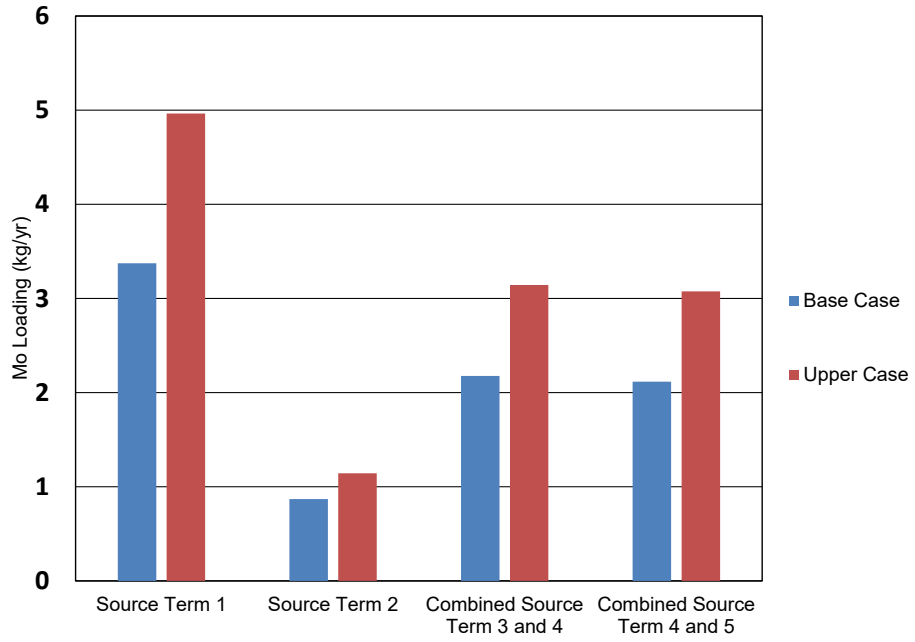

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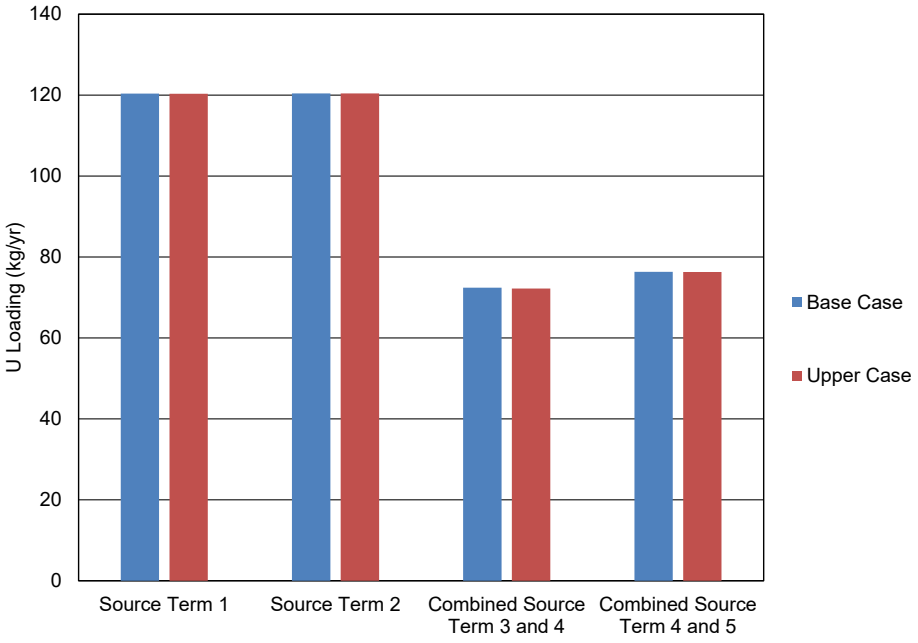
Figure 5-12. Predicted WRSA(s) Molybdenum Loadings – Closure



\\VAN-SVR0\Projects\01_SITES\Rook 1\1CN034.002_Geochem Characterization\04_Task400_SourceTerms\Final Source Terms\Waste Rock Source Terms\[Rook1_SourceTerms_No_Sorbtion_No_Liner_1CN034.002_MKH_JAC_Rev07.xlsx

Figure 5-13: Predicted WRSA(s) Uranium Loadings – Closure

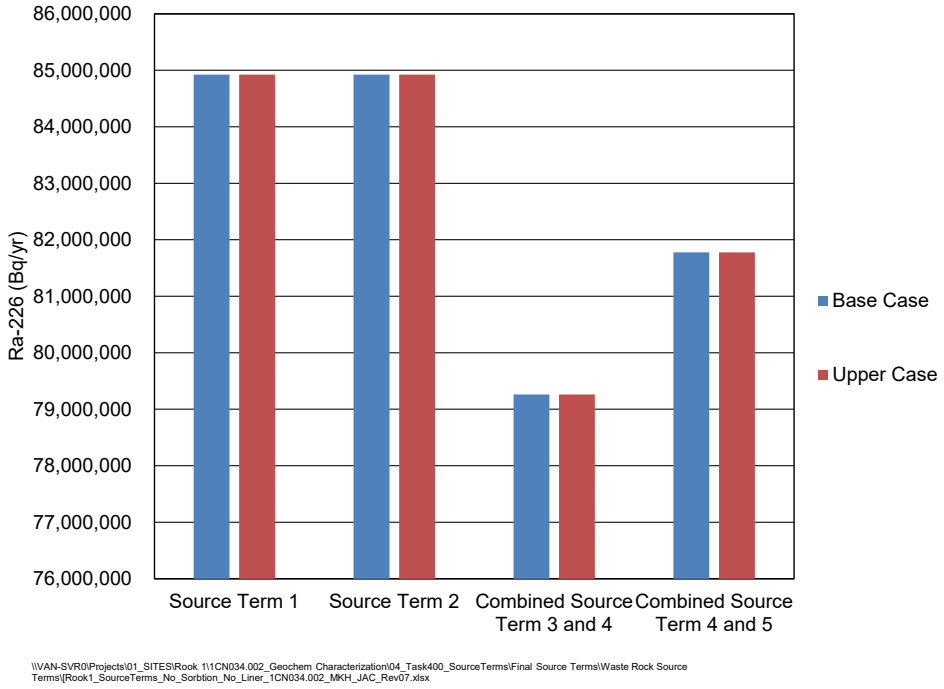


Figure 5-14: Predicted WRSA(s) radium-226 Loadings – Closure

6 Key Findings

6.1 Waste Rock

A comparison of the source terms developed for five different placement options and scenarios representing co-placed versus segregated materials and conventional versus engineered layers indicated the following:

- As a result of a higher proportion of material with elevated sulfide content, concentrations for sulfate and chalcophile elements were higher in the WRSA with segregated PAG material in comparison to the WRSA representing co-placed material at closure. Exceptions included some oxyanion species which are not necessarily hosted in sulfides and are mobile under near neutral pH conditions including arsenic and molybdenum.
- Leachate characteristics from the WRSA with segregated NPAG material had overall lower concentrations and loadings for most constituents in comparison to the leachate characteristics for the WRSA representing co-placed material and WRSA representing segregated PAG material for both operations and closure. The lower values resulted from a lower concentration of sulfide material and associated metal constituents.
- For WRSAs that include PAG material, concentrations for most constituents increase in the closure scenario in comparison to the operations scenario. These constituents increased in concentration due to modelled acidic conditions, as well as higher proportion of high sulfide samples used as input to represent the acidic waste rock material at closure.
- Loadings between the co-placed WRSA (Source Term 1) and combined loadings from the segregated PAG and NPAG WRSAs (sum loadings for Source Term 3 and 4) were similar for the operations scenario for most constituents. For the closure scenario, several parameters have comparable loadings for these two placement options, with lower loadings in the segregated PAG and NPAG WRSAs for some parameters including arsenic, molybdenum and uranium.
- For the closure scenarios, the loadings calculated from placement methods using engineered layering (Source Term 2 and 5) resulted in the lowest loadings in comparison to the same material placed without engineered layering. This is a result of the engineered design reducing oxygen ingress resulting in a reduction in reactive waste rock modelled for these placement options.

The source terms are considered preliminary with the expectation that further refinement and modifications to the inputs will be conducted as more HCT data becomes available or if there are modifications to the placement designs, mine plan or water balance. In the meantime, conservative assumptions have been used at several stages of source term development to minimize the likelihood of underestimating concentrations and loadings.

6.2 Underground Wall Rock

This report also presents the methods, assumptions and data input used to develop the source term loading predictions from exposed wall rock in the underground workings at the Project. The source terms were developed for use in the solute transport modelling.

Closure

This revised draft report, Waste Rock and Underground Wall Rock Source Term Predictions – Rook 1 Project, was prepared by

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Senior Consultant

Association of Professional Engineers & Geoscientists of Saskatchewan
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Member C1386
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Geology: ML/MKH	61946	

and reviewed by

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Michael Herrell, PGeo (BC)
Principal Consultant

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

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Rook I Project

Environmental Impact Statement

TSD XVIII: Site-Wide Water Balance and Water Quality Modelling Report

SITE-WIDE WATER BALANCE AND WATER QUALITY MODELLING REPORT FOR THE ROOK I PROJECT

Prepared for:

NexGen Energy Ltd.

Prepared by:

WSP Canada Inc.

April 2024

Executive Summary

A site-wide water balance and water quality model (SWWBM) was developed for the NexGen Energy Ltd. (NexGen) Rook I Project (Project) to support development of water management procedures under the Environmental Protection Program, evaluate engineering design decisions, and support assessment of the effects of Project activities on the receiving environment. The SWWBM was developed using GoldSim, which is a generalized systems dynamic modelling platform. The SWWBM integrates information of various forms and sources to estimate how water and mass loads move through the system over time and during various stages of the Project mine life. The structure of the SWWBM reflects Project site water management philosophy, water management planning, and the engineering decisions made during the design of the mine infrastructure.

This report has two purposes. Firstly, it is intended to describe the current SWWBM, including the main inputs and assumptions to the model, and to serve as a living document to track future changes in model inputs and assumptions as Project needs evolve. The model structure, high-level approach to modelling, and detailed methods are presented in this document to serve as a basis for training and to support future adaptations of the model. Secondly, the current revision of this report is intended to support quantitative effects assessment of the Project activities on the receiving environment and to communicate results relevant to effects assessment. The current revision is contemporary with the Rook I Project Environmental Assessment (EA) and feasibility level engineering. It is envisioned that the water balance work stream will continue through Project advancement as the SWWBM is refined and updated to reflect site conditions and supporting information changes. Importantly, the current model will serve as the operational SWWBM framework for the Project moving forward.

The SWWBM is set up to run various scenarios, including an Application Case, which consists of Project footprint and components in the context of reasonably foreseeable climate and receiving environment conditions, and multiple sensitivity scenarios that fulfill specific information objectives related to effects assessment, water management evaluation, design support verification, and design alternative evaluation. The Application Case results are carried forward for effects assessment in the receiving environment as part of the EA. The implications of model results on effects assessment are discussed in detail as part of the Environmental Impact Statement.

The SWWBM reflects water quantity and water quality dynamics of the Project based on information available at the time of writing. The model results provide sufficient and detailed information to support a robust EA for the Project and meet the anticipated expectations of rights holders, Indigenous and local communities, provincial regulators, and the federal Canadian Nuclear Safety Commission.

Abbreviations and Units of Measure

Acronym	Definition
EA	Environmental Assessment
EB	event-based
EIS	Environmental Impact Statement
ETP	effluent treatment plant
FS	feasibility study
Golder	Golder Associates Ltd.
ID	identification
N	nitrogen
NexGen	NexGen Energy Ltd.
NPAG	non-potentially acid generating
PAG	potentially acid generating
PMP	probable maximum precipitation
Project	Rook I Project
SWWBM	site-wide water balance and water quality model
TS	time series
UG	underground
UGTMF	underground tailings management facility
WRSAs	waste rock storage areas
WSP	WSP Canada Inc.

Units	Definition
%	percent
°	degree
°C	degrees Celsius
Bq/L	becquerels per litre
g/cm^3	grams per cubic centimetre
km	kilometre
m^2	square metres
m^3	cubic metres
m^3/d	cubic metres per day
m^3/hr	cubic metres per hour
m^3/yr	cubic metres per year
mg/L	milligrams per litre
mm	millimetre
mm/°C/day	millimetres per degree day
mm/yr	millimetres per year

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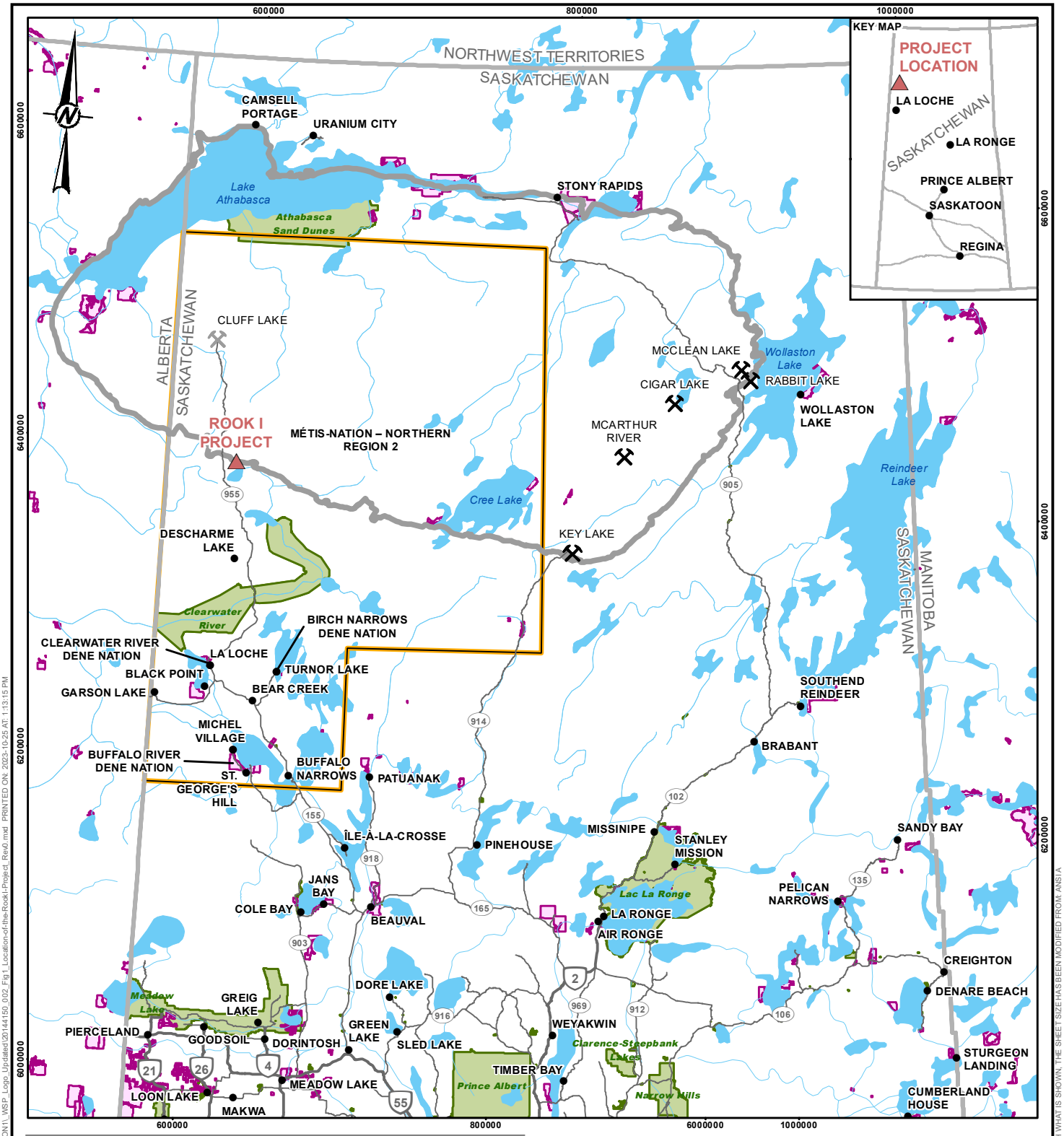
1.0 INTRODUCTION

The Rook I Project (Project) is a proposed new uranium mining and milling operation that is 100% owned by NexGen Energy Ltd. (NexGen; Figure 1). The Project would be approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon. The Project would reside within Treaty 8 territory and the Métis Homeland. At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, along the upper Clearwater River system. Access to the Project would be from an existing road off Highway 955 (Figure 2), with on-site worker accommodation serviced by fly-in/fly-out access.

The Project would include the following key facilities to support the extraction and processing of uranium from the Arrow deposit for transportation off site (Figure 3):

- underground mine development;
- process plant buildings, including uranium concentrate packaging facilities;
- paste tailings distribution system;
- underground tailings management facility (UGTMF);
- potentially acid generating (PAG) waste rock storage area (WRSA);
- non-potentially acid generating (NPAG) WRSA;
- special waste rock[1] and ore storage stockpiles;
- surface and underground water management infrastructure, including water management ponds, effluent treatment plant (ETP), and sewage treatment plant;
- conventional waste management facilities and fuel storage facilities;
- ancillary infrastructure, including maintenance shop, warehouse, administration building, and camp;
- airstrip and associated infrastructure; and
- access road to Project and site roads.

[1] Special waste rock is mine rock that is mineralized with insufficient grade to be considered ore (i.e., greater than 0.03% of triuranium octoxide [U_3O_8] and less than 0.26% U_3O_8). All special waste would be temporarily stored in the special waste rock stockpile.



LEGEND

- POPULATED PLACE
- URANIUM MINING FACILITY (ACTIVE)
- URANIUM MINING FACILITY (DECOMMISSIONED)
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN BOUNDARY
- INDIAN RESERVE
- PROVINCIAL PARKS
- WATERBODY
- PROJECT LOCATION
- MÉTIS NATION-SASKATCHEWAN NORTHERN REGION 2

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. PARKS OBTAINED FROM IHS MARKIT CANADA ULC.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT: NexGen Energy Ltd. — **ROOK I PROJECT**

TITLE: **LOCATION OF THE ROOK I PROJECT**

CON: wsp

PROJECT	20144150		PHASE	3314 - 6
DESIGN	JMC	2023-10-25	SCALE AS SHOWN	REV. 0
GIS	NO	2023-10-25		
CHECK	JMC	2023-10-25		
REVIEW	MM	2023-10-25		

FIGURE 1

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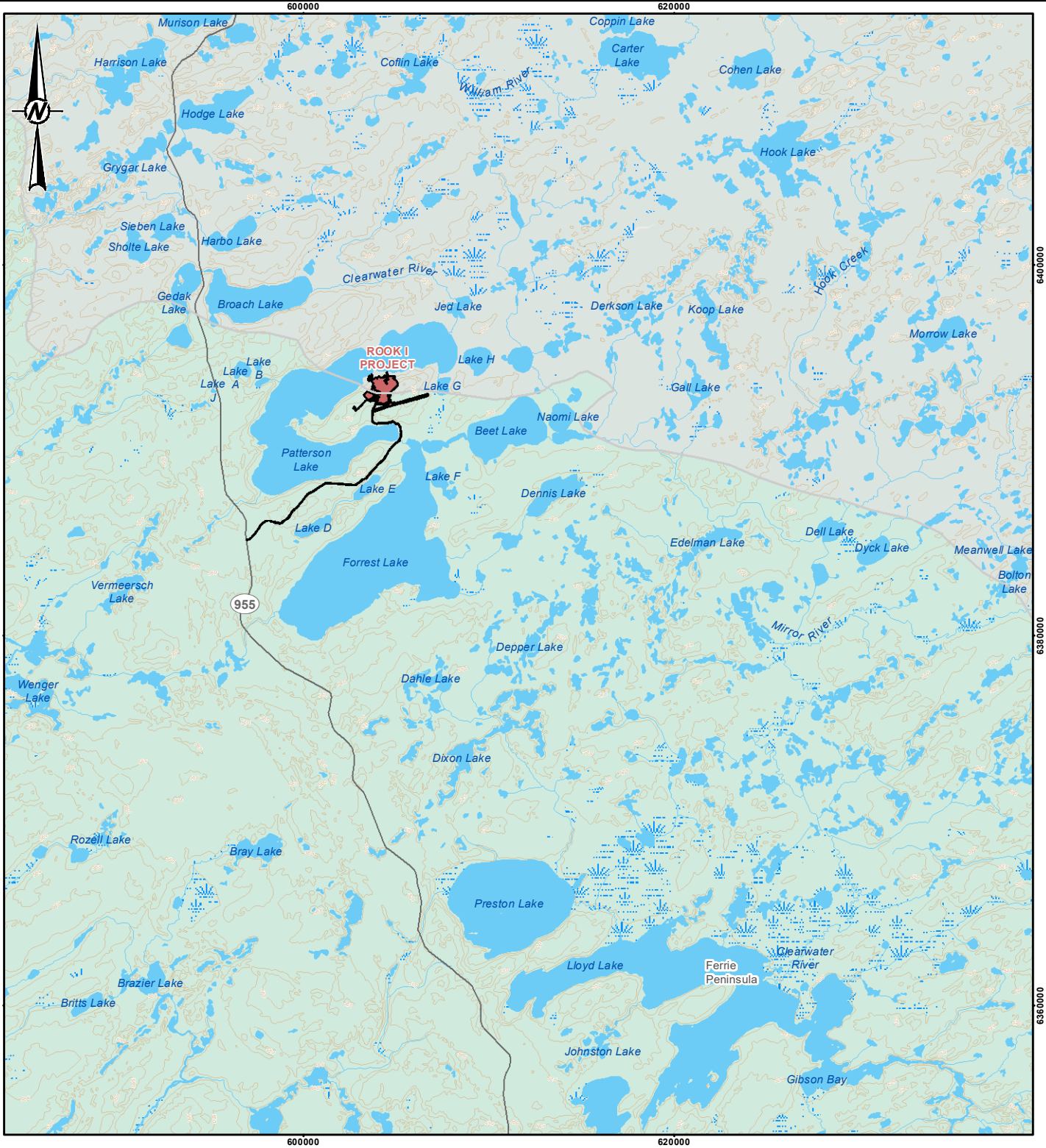

LEGEND

- ELEVATION CONTOUR (20 m INTERVAL)
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN
- WATERBODY
- WETLAND
- WOODED AREA
- PROPOSED PROJECT FOOTPRINT

0 5 10
1:300,000 KILOMETRES

REFERENCE(S)
1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021.
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT
NexGen Energy Ltd.

ROOK I PROJECT

TITLE

REGIONAL AREA OF THE ROOK I PROJECT

CON
wsp

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JMC	2023-10-25	SCALE AS SHOWN	REV. 0
GIS	NO	2023-10-25		
CHECK	JMC	2023-10-25	**FIGURE 2**	
REVIEW	MM	2023-10-25		

603000 604000 605000 606000 607000

6394000 6393000 6392000 6391000

Patterson Lake

Treated Effluent Pipe and Diffuser

Fresh Water Intake Pipe and Pumphouse

Underground Mine Access

Contact Water Pond #1

Treated Sewage Pipe and Outfall

Sewage Treatment Plant (STP)

Mine Terrace

PAG Runoff Collection Area

Process Plant

Ore Storage Stockpile

Effluent Treatment Plant (ETP)

Monitoring Ponds

Potentially Acid Generating (PAG) Waste Rock Storage Area

Mill Terrace

Fuel Storage Area

Special Waste Rock Stockpile

Camp

Contact Water Pond #2

Non-Potentially Acid Generating (NPAG) Waste Rock Storage Area

Communication Tower

West Bermed Runoff Collection Area

Domestic/Industrial Waste Management Area

Airstrip

Omni-Directional Approach Lighting (ODAL) Corridor

Explosives Magazine Storage

Batch Plant Sand and Aggregate Storage Area

Omni-Directional Approach Lighting (ODAL) Corridor

Gatehouse

Patterson Lake

LEGEND

- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WETLAND
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND

0 0.5 1

1:15,500 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

ROOK I PROPOSED PROJECT FOOTPRINT

CONS

wsp

PROJECT		20144150	PHASE		3314 - 6
DESIGN	JV	2020-03-13	SCALE AS SHOWN	REV.	0
GIS	NO	2023-10-25			
CHECK	RWP	2023-10-25	**FIGURE 3**		
REVIEW	DW	2023-10-25			

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This technical support document to the Environmental Impact Statement (EIS) describes the internal (i.e., within the spatial and temporal boundaries of the Project) coupled site-wide water balance and water quality model (SWWBM) developed for the Project. It is envisioned that the water balance work stream would continue through Project advancement as the SWWBM is refined and updated to reflect site conditions. Importantly, development of a model framework would serve as the operational SWWBM framework for the Project moving forward. While maintaining a “fit-for-purpose” approach, any steps taken during the Environmental Assessment (EA) and feasibility study in developing the SWWBM will align the Project with tools and expertise that would translate through the early stages of Project permitting and development, to early-stage monitoring, and, ultimately, the Operations, and Decommissioning and Reclamation (i.e., Closure) phases, and into far-future conditions. By early implementation of this approach, NexGen will increase its ability to calibrate and validate the SWWBM over the Project lifespan, improving its efficacy in these latter stages. In parallel, this approach will familiarize not only NexGen internal personnel with model usage, but will also establish continuity, confidence, and familiarity with external parties (e.g., regulators, local communities, First Nations and Métis Groups [collectively referred to as Indigenous Groups]) with respect to the format and outputs of the model. Thus, it is anticipated that the current SWWBM development is the first of a multi-stage process for model development and adaptation. A list of definitions that will be useful in the interpretation of this document is included in Appendix A, Glossary.

The location of the proposed Project would be in headwater catchments that drain naturally to adjacent Patterson Lake. Runoff reporting to the location of the Project site is localized, and there are no major tributaries conveying runoff from upstream other than in Patterson Lake itself. Figure 4 shows a general layout of the Project during Operations.

The key mining and water management facilities for the proposed Project are as follows:

- fresh water intake
- camp facilities
- construction laydown area
- undeveloped areas
- airport
- ore storage stockpile
- special waste rock stockpile
- NPAG WRSA
- PAG WRSA
- conventional waste management area
- mine terrace
- mill terrace
- haul road
- batch plant and aggregate stockpiles
- UGTMF
- underground (UG) workings
- site runoff pond #1 (i.e., contact water pond #1)
- site runoff pond #2 (i.e., contact water pond #2)
- PAG runoff collection area
- settling pond
- effluent treatment plant
- treated effluent monitoring ponds
- contingency pond
- west bermed runoff collection area
- fresh water plant
- sewage treatment facilities
- surface explosives magazine

2.0 BACKGROUND

The SWWBM is a decision-assist tool that supports development of the water management procedures under the Environmental Protection Program. The structure of the tool reflects the water management procedures under the Environmental Protection Program and the engineering decisions made during the design of the mine infrastructure. This subsection provides a summary of the information that serves as the foundation for development of the tool.

2.1 Site Water Management Philosophy

Effective site water management begins during Project design and continues through Project Closure. A risk-based approach to site water management considers both routine and non-routine Project conditions and would be periodically re-evaluated throughout the Project lifespan to adapt to best available technology and techniques, and to feedback from ongoing engagement with Indigenous Groups and the public.

The mine water management approach can be summarized by the following environmental protection design and development principles:

- Minimize fresh water intake through water reuse and recycling wherever possible.
- Maximize diversion of non-contact water surface runoff away from facilities and infrastructure.
- Collect and treat contact water, if required, prior re-use or release to the receiving environment.
- Confirm release water meets both regulated and established discharge criteria prior to discharge to the receiving environment.

NexGen is committed to designing and operating waste management facilities, including all site water management infrastructure, for responsible closure by recognizing and valuing the importance of protecting and preserving the environment through the Project lifespan. Mine waste management facilities, processes, and activities are designed in a manner that minimizes the reliance on active institutional controls following Closure.

2.2 Site Water Classification

Site water includes any water that would interact with the Project, including fresh water taken from Patterson Lake for use by the Project, water from precipitation events that would be intercepted by the Project, and waste water that would be generated from mine development and construction-related activity.

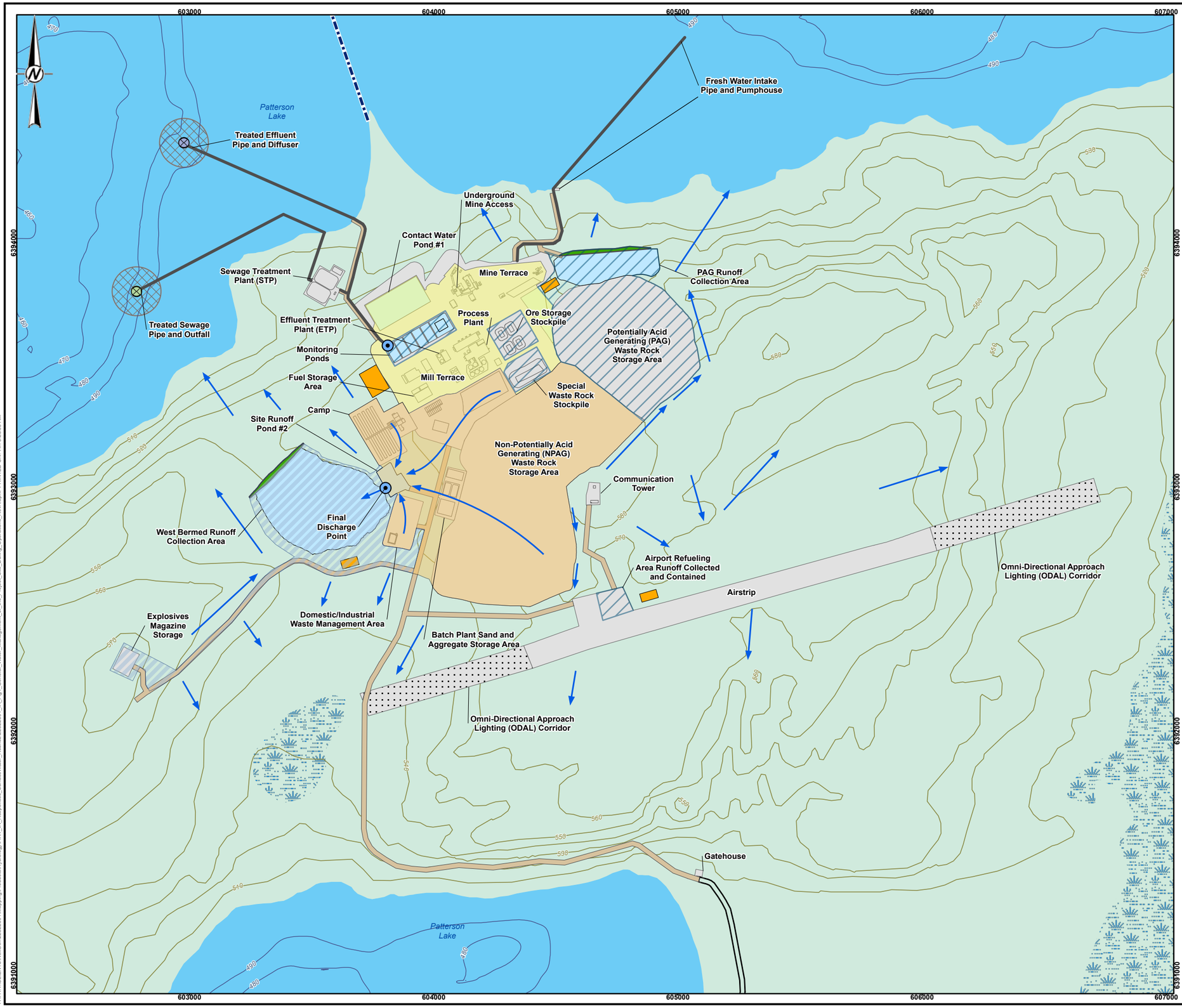
Site water is further classified by considering anticipated and tested parameters (e.g., chemical, radiological) to identify and define the required level of control that is commensurate with risks to people and the environment. Characteristics of site water inform the design of site water management facilities, processes, and activities that enable safe, secure, and environmentally responsible site water management through the Project lifespan. Present design focuses on modelled characteristics of site water that will be confirmed or adjusted through monitoring if the Project is approved and developed.

The site water types for the Project, including the general management approach for each type, are summarized in Table 1. Further definition of these water types is provided in Section 4.4.1, Water Balance Inputs. Figure 4 provides a visual summary of site water management infrastructure and flow paths for the Project.

Table 1: General Management Approach and Primary Infrastructure

Site Water Type	Description	General Management Approach
Fresh water	Surface water extracted for use at the Project site as potable water (i.e., treated fresh water) for domestic consumption or as raw fresh water (i.e., untreated fresh water) to support various demands on site.	Reduce fresh water consumption to minimize fresh surface water usage and withdrawals.
Non-contact water	Water that has not been physically, chemically, or radiologically altered by construction, mining, or milling activities.	Divert non-contact water to the extent practicable and allow for discharge directly to the receiving environment. Manage non-contact water not diverted away as contact water.
Contact water	Water that may have been physically, chemically, or radiologically altered by construction, mining, or milling activities.	Collect, capture and contain contact water. Reuse contact water where possible. Treat and manage water quality relative to environmental release targets as required before release to the environment.
Release water	Project-influenced water that is suitable for release to the environment. Release water includes contact water, treated or untreated, that has been confirmed to be acceptable for release relative to release criteria.	Discharge water meeting quality criteria relative to preliminary effluent release targets[a].

a) Preliminary targets have been derived for planning and assessment purposes as described in Appendix H, Environmental Release Target Development. Final targets will be determined through licensing.



LEGEND

- BATHYMETRY CONTOUR ELEVATION (5 m INTERVAL)
- ELEVATION CONTOUR (10 m INTERVAL)
- GENERAL FLOW DIRECTION
- LAKE BASIN DIVISION
- WATERBODY
- WETLAND
- WOODED AREA
- FINAL DISCHARGE POINT
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND
- EFFLUENT TREATED PIPE DIFFUSER
- SEWAGE TREATED PIPE OUTFALL
- PROPOSED REGULATED MIXING ZONE
- DRAINAGE TO SITE RUNOFF POND #1
- DRAINAGE TO SITE RUNOFF POND #2
- SELF CONTAINED
- TO WEST BERMED RUNOFF COLLECTION AREA

0 0.5 1

1:15,500 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
3. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd

ROOK I PROJECT

TITLE

GENERAL WATER MANAGEMENT OF PROJECT SITE DURING OPERATIONS

CONSULTANT

wsp

PROJECT		22522691	PHASE		3100.3150
DESIGN	RP	2024-04-09	SCALE AS SHOWN		REV. A
GIS	AA	2024-04-23	**FIGURE 4**		
CHECK					
REVIEW					

PATH: I:\CLIENTS\NexGen\22522691\Mapping\Product\Hydrology\FIR7_IR_Responses_SurfaceWater_Round2\22522691_IR_Fig4_General_Water_Management_of_the_Project_Site_During_Operations_RevA.aprx, PRINTED ON: AT: 8:28:53 AM

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0 25mm

2.3 Related Model Studies

The SWWBM draws on background studies and interacts with several models that have been developed for the Project. The models that provide background or data inputs for the SWWBM are summarized in Table 2. The results generated by the SWWBM are carried forward for effects assessment by the models listed in Table 3.

Table 2: Models that Provide Background or Data Input for the Site-Wide Water Balance and Water Quality Model

Model Name	Purpose	Software Platform	Data Linkages	Reference
Atmospheric loss calculations	To estimate evaporation, evapotranspiration, and sublimation	MATLAB	Atmospheric loss data input	Annex IV.1, Regional Meteorological and Hydrological Characterization Report
Process water balance block flow models	To support Rook I Project feasibility study	MS Excel Spreadsheet mass balance validated using SysCAD software	On-site runoff parameters	Wood 2020a
Groundwater solute transport model	To predict post-closure effects	FeFlow/GoldSim	Interaction between groundwater, UGTMF, and Patterson Lake	TSD XIV, Groundwater Flow and Solute Transport Modelling Report
Cover system design model(s)	To estimate surface water balance for a post-closure cover system design and long-term seepage (toe and basal) rates using a long-term climate database	Geostudio (SEEP/W and VADOSE/W)	Parameters for surface runoff from NPAG WRSA; toe seepage from lined WRSAs	Okane 2020a
Waste Rock Storage Area Infiltration Modeling	To assess basal drainage rate and time to reach steady-state drainage conditions for proposed WRSAs options during mining operations and post-closure periods	HydroGeoSphere	Input to SRK Source Term Geochemical Model	BGC 2020
Site runoff model	To support design of Project surface infrastructure as part of the feasibility design	MS Excel	Block flow diagrams with values for surface runoff parameters	Wood 2020b
Source term geochemical model	To estimate solute loadings for various WRSAs options To estimate UG loadings for Operations and post-closure from exposed UG wall rock	PHREEQC	Input to groundwater solute transport model. Provide input to geochemical and water quality source terms	SRK 2021

UG = underground; UGTMF = underground tailings management facility; NPAG = non-potentially acid generating; WRSAs = waste rock storage areas.

Table 3: Models that Directly Incorporate Site-Wide Water Balance and Water Quality Model Results for Environmental Assessment

Model Name	Purpose	Software Platform	Data Linkages	Reference
Regional hydrology model	To characterize conditions and predict Project effects in the receiving environment	GoldSim modelling platform	Receives data in time series format from the SWWBM; flows from the SWWBM will feed into this model	EIS Appendix 9A, Hydrological Modelling Summary Report
Regional surface water quality model	To characterize conditions and predict Project effects in the receiving environment	GoldSim modelling platform	Dependent on regional hydrology model and the SWWBM; flows and loads from the SWWBM will feed into this model	EIS Appendix 10A, Surface Water Quality Modelling Report
Near-field surface water quality model	To support the conceptual diffuser design	CORMIX model system	Dependent on SWWBM; flows and loads from the SWWBM will feed into this model	EIS Appendix 10A
Receiving environment environmental risk assessment model	To assess environmental risk	IMPACT	Flows and loads from the SWWBM feed into this model	TSD XXI Environmental Risk Assessment, Appendix A, IMPACT Model Report

SWWBM = site-wide water balance and water quality model.

3.0 SITE-WIDE WATER BALANCE AND WATER QUALITY MODEL

3.1 Model Objectives and Overview

The SWWBM is an integrated water balance and water quality model developed using the GoldSim modelling platform using a conservative mass balance approach. The general objective of the SWWBM is to serve as a decision-assist tool that can support development of a water management plan, evaluate engineering design decisions, identify the need for contingency plans in the event of upset conditions, and support assessments of the effects of Project activities on the receiving environment throughout the Project lifespan.

The SWWBM is set up to run various scenarios, including runs for model verification and future predictive modelling of the planned life of the mine (i.e., Construction, Operations, and Decommissioning and Reclamation [i.e., Closure]) and far-future scenarios under a variety of hydrometeorological conditions. A daily time step is used for each of the simulations based on the available site climate data supplemented by global re-analysis data to extend the period of record for which continuous and reliable observations are available. The ability to adjust the modelling time step based on the scenario objectives is also provided (e.g., longer time steps for longer-term model projections in the far-future scenarios to reduce computational demands).

The model scenarios include an Application Case, consisting of expected Project conditions for the EA, as well as several sensitivity analysis scenarios intended to evaluate the importance of uncertainty in variables (e.g., climate, geochemical source terms, treatment efficiency, and influent quality) that may affect the Application Case for each Project phase (i.e., Construction, Operations, and Closure). For each model scenario, the model may be run for the entire lifespan of the mine, for specific phase(s) of the Project, or for far-future scenarios beyond the handover of Institutional Control. The model scenarios are discussed in detail in Section 4.3, Model Scenario Development.

3.2 Spatial and Temporal Domain

3.2.1 Spatial Domain

The SWWBM encompasses the anticipated Project footprint and reporting catchments throughout all Project phases: Construction, Operations, and Closure, including both the Active Closure Stage and the Transitional Monitoring Stage. The downstream boundary for the model is defined by the points of discharge to Patterson Lake. The SWWBM was also used to simulate conditions in the far-future scenario, beyond the date of Institutional Control. The Transitional Monitoring Stage and the far-future scenario are also simulated by the model.

3.2.2 Temporal Domain

The model temporal domain includes the following temporal related aspects of the SWWBM: the temporal scope of the proposed Project, the time simulation modes used in the model, and the climate scenarios simulated.

3.2.2.1 Temporal Scope

The temporal scope of the SWWBM focused on the proposed 43-year period from the beginning of Construction to the end of Closure, which follows the minimum temporal boundary for the environmental assessment. Project phases are described in detail in Section 4.2, Project Phases.

3.2.2.2 Time Simulation Modes

The following time simulation modes were incorporated into the model:

- Time series (TS) simulations based on a historical time series scenario with historical climate inputs (see Section 3.2.2.3, Climate Scenarios). A daily time step is used for each of the simulations, derived based on the compiled climate database.
- Event-based (EB) simulations considering short-duration events such as extreme rainfall or snowmelt events.
- Fit-for-purpose simulations with the ability to adjust the modelling time step, and other simulation settings, based on the scenario objectives (e.g., longer time steps for longer-term model projections to reduce computational demands). A daily time step is adopted as the default unless otherwise specified.

3.2.2.3 Climate Scenarios

The climate time series scenarios used in the SWWBM are as follows:

- **Historical scenario,** which uses historical climate as the model input. The historical climate arbitrarily pairs the start date of the historical climate time series to the start date of the model simulations (i.e., historical time 1 January 1979 adopted for 1 January 2025). The historical climate time series is looped to provide a long-term time series for modelling the far future.
- **Deterministic forecasting scenarios**, including average climate conditions, relevant wet/dry climate conditions, and user-defined climate conditions, typically a mixture of wet/dry and average climate conditions. The start date of the model simulations is paired with a historical date using a high-level estimate of oscillating climate cycles based on the Pacific decadal oscillation, a longer-term climate oscillation that influences continental climates in the Canadian Prairie provinces. The historical time series value for 1 January 1988 was adopted for 1 January 2025, and the historical time series is looped from that point forward, similar to the historical scenario.

- **Stochastic forecasting,** which is used to provide an understanding of potential climate/hydrologic variability effects on the water balance and water quality including potential risks to current and planned water management scenarios. Stochastic parameters are used to randomly select a historical year to apply during a given model year during the simulation. The stochastic forecasting uses all the same years as the historical scenario but in a randomized order.
- **Climate change scenario**, which is based on historical climate adjusted to reflect 2050s climate change projections (50th percentile scenario) from the climate change assessment completed for the area of the Project (EIS Appendix 22A, Climate Change Dataset Summary Report).

3.3 Approach

Features of Project infrastructure (e.g., fresh water intake) and natural features that could affect or be affected by the Project (e.g., undeveloped area 1) are represented in the SWWBM by one or more facilities linked together by flow pathways. Features and facilities represented in the SWWBM are listed in Table 4. The features listed in Table 4 are represented in the model by elements or flows between elements. Basic calculations to estimate water quality and quantity are performed for all the elements (e.g., ponds, catchments) in the SWWBM. The SWWBM also incorporates varying degrees of flexibility with respect to inputs and calculation methods for features or facilities with greater potential to influence water quality and/or quantity, which allows for enhanced predictive capabilities for those features or facilities (Section 3.7, Flexibility).

Table 4: Site-Wide Water Balance and Water Quality Model Features and Facilities

Feature	Facilities
Intakes	Fresh water intake
Underground	Main UG water storage sump, backfill, shafts, UG workings, UGTMF
Undisturbed catchments	Undeveloped area 1, undeveloped area 2, undeveloped area 4, undeveloped area 5, undisturbed catchments reporting to fresh water diversions
Diversions	East perimeter diversion, south perimeter diversion, west perimeter diversion
Potentially mineralized built-up areas	Mill terrace, mine terrace, paste plant #1 and #2, process plant circuits, acid plant, boilers
Non-mineralized built-up areas	Conventional waste management area, surface explosives magazine, camp, construction laydown area
Ore and waste storage facilities	Special waste rock stockpile, NPAG WRSA, PAG WRSA, ore storage stockpile
Ponds	Site runoff pond #1 and #2, settling pond, contingency pond, PAG runoff collection area sump, self-contained area sumps, other sumps, sewage treatment lagoons, treated effluent monitoring ponds, west bermed runoff collection area, water/oil separator
Treatment facilities	Effluent treatment plant, sewage treatment plant, process plant
Discharges	Treated effluent diffuser, treated sewage outfall, west surface runoff outfall, east surface runoff outfall

UG = underground; UGTMF = underground tailings management facility; NPAG WRSA = non-potentially acid generating waste rock storage area; PAG WRSA = potentially acid generating waste rock storage area.

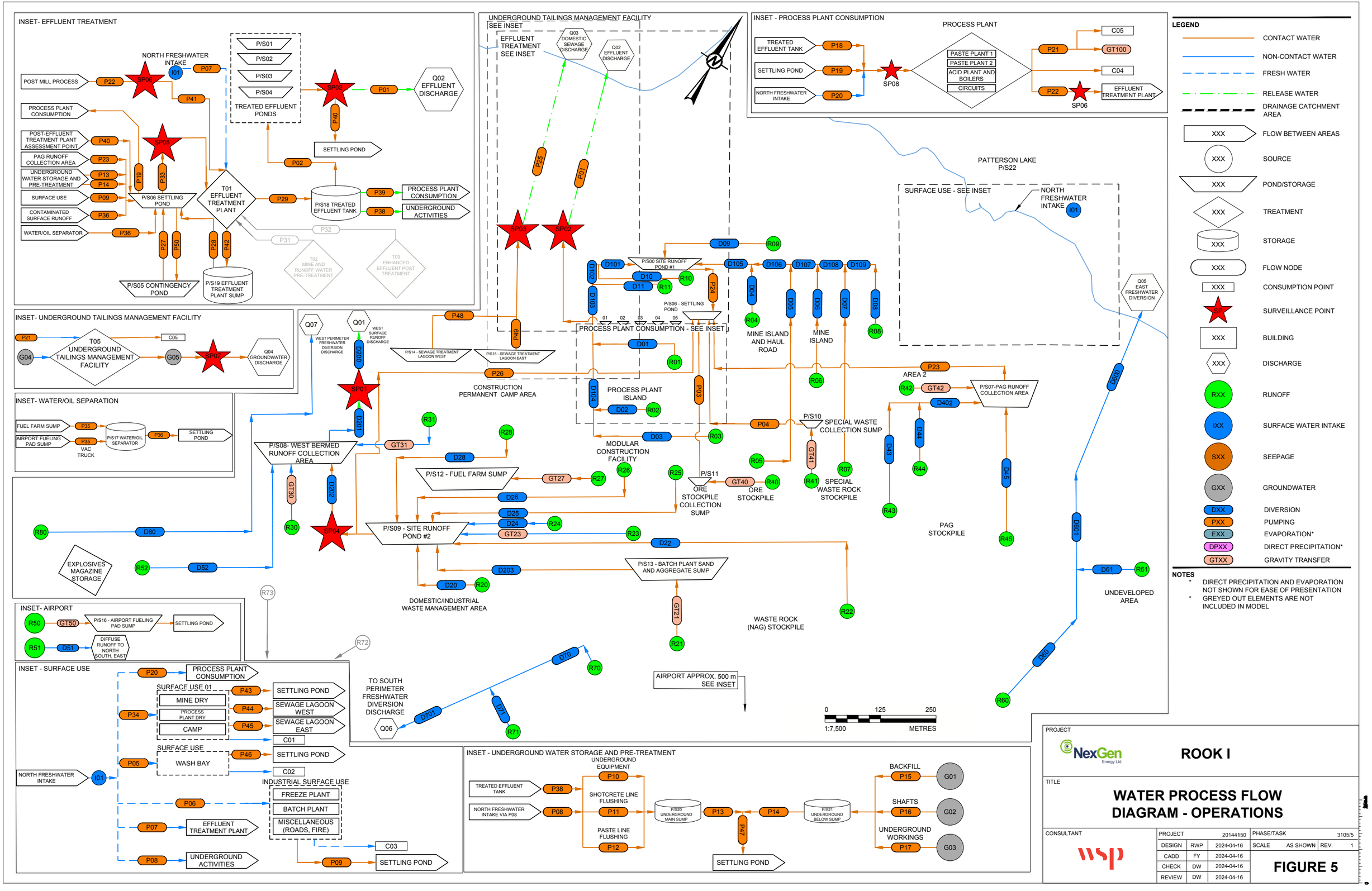
3.4 Water Process Flow Diagrams

Conceptual water process flow logic diagrams defining the scope and structure of the SWWBM are shown in Figure 5 and Figure 6. The diagrams can be viewed as a combination of "**elements**" and "**flows**"; there are eight types of elements included:

- **Source elements**:
  - catchments: runoff from natural catchment areas and streams (e.g., undisturbed catchment reporting to east perimeter fresh water diversion), and disturbed areas (e.g., NPAG WRSA, PAG WRSA, mill terrace);
  - groundwater inflows; and
  - water intakes.
- **Pond elements** (e.g., site runoff pond #1, site runoff pond #2, settling pond, west bermed runoff collection area).
- **Storage elements** (e.g., underground main sump, treated effluent tank).
- **Treatment elements** (e.g., ETP, process plant).
- **Consumption point elements** (e.g., domestic consumptions, dust suppression, tailings entrainment).
- **Surveillance point elements** (e.g., points of control, monitoring points, assessment nodes).
- **Discharge node elements** (e.g., treated effluent diffuser, treated sewage outfall, east surface runoff, west surface runoff).
- **Flow node elements** (e.g., diversion ditches, pumps and pipelines, gravity transfers), which represent flows (quantity and quality) between other elements in the SWWBM.

Water flowing through the system (i.e., flows) is classified into four types (i.e., fresh water, non-contact water, contact water, and release water; Section 2.2, Site Water Classification).

A description of the elements and flows shown on Figure 5 and Figure 6 is included in Appendix B, Flow ID Description. Note that greyed out elements on Figure 5 and Figure 6 are placeholders that represent elements that are not required for the environmental assessment and therefore are not included in the model at the current time. In some instances, the elements represent placeholders that could be added during future model revisions. In other instances, the elements represent adjacent non-contact runoff sources that drain away from the model spatial domain and are shown for completeness. The flow paths shown on Figure 5 and Figure 6 are colour coded to correspond to the classes of site water introduced in Section 2.2.



PROJECT

NexGen Energy Ltd.

ROOK I

TITLE

WATER PROCESS FLOW DIAGRAM - OPERATIONS

CONSULTANT

wsp

PROJECT		20144150	PHASE/TASK		3105/5
DESIGN	RWP	2024-04-16	SCALE	AS SHOWN	REV. 1
CADD	FY	2024-04-16			
CHECK	DW	2024-04-16			
REVIEW	DW	2024-04-16			

FIGURE 5

UNDERGROUND TAILINGS MANAGEMENT FACILITY
SEE INSET

PATTERSON LAKE

Q07 WEST PERIMETER FRESHWATER DIVERSION DISHCARGE

Q01 WEST SURFACE RUNOFF DISCHARGE

Q05 EAST PERIMETER FRESHWATER DIVERSION DISCHARGE

SP01

SP09

D200 D201 D202 D209 D28 D80 D204 D205 D206 D207 D208 D203 D20 D22 D112 D103 D100 D101 D102 D105 D106 D107 D108 D109 D10 D104 D04 D06 D07 D08 D01 D02 D110 D03 D05 D111 D40 D41 D42 D43 D44 D45 D400 D401 D800 D801 D61 D60 D701 D71 D10

GT31 GT30 GT27 GT23 GT121 GT41 GT40 GT42

R80 R31 R28 R30 R27 R26 R25 R24 R23 R22 R21 R20 R73 R72 R09 R10 R11 R04 R08 R01 R06 R02 R03 R07 R41 R05 R40 R42 R43 R44 R45 R60 R61 R70 R71

COVERED AND RECLAIMED AREA

COVERED AND RECLAIMED AREA

UNDEVELOPED AREA

TO SOUTH PERIMETER FRESHWATER DIVERSION DISCHARGE

Q06

INSET- UNDERGROUND TAILINGS MANAGEMENT FACILITY

G04 → T05 UNDERGROUND TAILINGS MANAGEMENT FACILITY → G05 → SP07 → Q04 GROUNDWATER DISCHARGE

0 125 250
1:7,500 METRES

LEGEND

- CONTACT WATER
- NON-CONTACT WATER
- DRAINAGE CATCHMENT AREA
- XXX FLOW BETWEEN AREAS
- XXX SOURCE
- XXX POND/STORAGE
- XXX TREATMENT
- XXX STORAGE
- XXX FLOW NODE
- XXX CONSUMPTION POINT
- SP SURVEILLANCE POINT
- XXX BUILDING
- XXX DISCHARGE
- RXX RUNOFF
- IXX SURFACE WATER INTAKE
- SXX SEEPAGE
- GXX GROUNDWATER
- DXX DIVERSION
- PXX PUMPING
- EXX EVAPORATION*
- DPXX DIRECT PRECIPITATION*
- GTXX GRAVITY TRANSFER

NOTES

* DIRECT PRECIPITATION AND EVAPORATION NOT SHOWN FOR EASE OF PRESENTATION
* GREYED OUT ELEMENTS ARE NOT INCLUDED IN MODEL
* DIAGRAM IS SPECIFIC TO MODEL AND MAY NOT INCLUDE ALL SURFACE AND GROUNDWATER FLOWS POST-CLOSURE

PROJECT

NexGen Energy Ltd.

ROOK I

TITLE

WATER PROCESS FLOW DIAGRAM - POST-CLOSURE

CONSULTANT

wsp

PROJECT		20144150	PHASE/TASK		3105/5
DESIGN	RWP	2021-08-23	SCALE	AS SHOWN	REV. 0
CADD	SDD	2021-08-23			
CHECK	DW	2021-08-23			
REVIEW	DW	2021-08-23			

FIGURE 6

3.5 Facility Grouping

Individual facilities that are grouped together in the SWWBM are listed in Table 5. The grouping is completed for simplicity wherever the grouping provides adequate resolution to meet model objectives.

Table 5: Facility Grouping

Name of Grouping	Facilities to be Included in Grouping
Underground activities	UG equipment, shotcrete line flushing, paste line flushing, backfill, shafts, UG workings
Post-effluent treatment infrastructure	Treated effluent tank, treated effluent ponds

UG = underground.

3.6 Surveillance Points

Surveillance points are used at strategic locations within the SWWBM to evaluate potential changes in water quantity or quality results, usually in areas where future flow monitoring or water quality stations may be located, downstream of proposed facilities, and at the final point of control before discharge. The surveillance points used in the SWWBM are summarized in Table 6. Several surveillance points are also located at points of control, which are locations where mitigations can be enacted to retain contact water for testing or route water for further treatment. Beyond the point of control, water is released to Patterson Lake.

Table 6: Surveillance Points in the Site-Wide Water Balance and Water Quality Model

Location	Rationale
After west bermed runoff collection area	Assess quality before release to the environment and quantify releases.
After treated effluent monitoring ponds (pond 1, 2, 3, 4, and contingency pond)	Point of control: Assess quality after ETP and before release to the environment to determine if acceptable or if further treatment is required. Model quantity of releases.
Before process plant	Assess quality and quantity of upstream inputs to the process plant.
After site runoff pond #2	Point of control: Assess quality of water and determine if routing to the ETP circuit is required based on environmental release targets. Assess quantity of water re-cycle.
Before effluent treatment plant feed	Assess quality and quantity of aggregate feed flow reporting to the ETP.
After process plant	Assess quality and quantity of flow outputs from the process plant.
After UGTMF groundwater discharge	Assess groundwater pathway loading to Patterson Lake. Not used in this iteration of the SWWBM. All groundwater interaction with UGTMF accounted for in the solute transport model (EIS Appendix 9A).

ETP = effluent treatment plant; SWWBM = site-wide water balance and water quality model; UGTMF = underground tailings management facility.

3.7 Flexibility

3.7.1 Base Flexibility

The SWWBM incorporates a base level of flexibility that is common to all features. Not all flexibilities listed are used for environmental assessment purposes but have been included to improve the functionality of the tool for a range of purposes. Base levels of flexibility include:

- **On/off toggle:** The on/off toggle allows features or specific elements to be activated or deactivated within the SWWBM in an efficient manner.
- **Timing – schedule:** The mine life schedule is the basis for the development of all features. The model provides the ability to modify the schedule.
- **Add mine facilities:** Defined potential mine facilities within the property boundaries can be added to the SWWBM.
- **Adjust mine facility parameters:** Characteristics of mine facilities, as described by different parameters, can be adjusted.
- **Seasonality:** Seasonality is incorporated within the SWWBM to evaluate the effect of annual hydrologic cycles.
- **Operational efficiency:** All elements within the SWWBM are adjustable to allow for defined simulation changes in operational function through the life of the mine that would apply when processes are active in specific elements within the SWWBM. This flexibility includes the ability to adjust treatment efficiency for the ETP.
- **Operational utility:** Different operational utility rates account for the proportion of time that processes are active in specific elements are included within the SWWBM.
- **Operational schedules:** Different operational schedules, including continuous treatment or batch releases associated with triggers based on quantity or quality, are incorporated within the SWWBM.
- **Element operational capacity:** Available operating capacity can be adjusted. For example, adjustments to the volumetric capacity available for sumps or ponds can be used for contingency planning or upset condition mitigation.

Keeping track of the quantities of water reporting to, from, or stored within, each feature and element over time (i.e., the water balance) forms the basis of the SWWBM. Base flexibility associated with factors related to water quantity includes:

- **Climate parameters:** A climate module that allows for the evaluation of a range of climate scenarios, including deterministic and probabilistic simulations, and climate change.
- **Catchment areas:** The catchment area of each element is adjustable.
- **Hydrology parameters:** All parameters related to hydrology (e.g., runoff coefficients, sublimation, snowmelt, surface water–groundwater interactions) are adjustable for each feature.

Water quality source terms are assigned to each feature. A source term is the predicted composition of water in contact with a Project-related material (e.g., stockpiled ore, explosives residues, treated sewage effluent). The water quality source term may comprise a geochemical loading rate or concentration directly applied to a catchment flow, or the source term may be simulated in an element--specific module, depending on the complexity of the geochemical behaviour being evaluated within an element. Base flexibility associated with factors related to water quality includes:

- **Source term variability:** The SWWBM includes source term end members that can be adjusted to reflect the inherent uncertainty with respect to conceptualization of geochemical reactions in site conditions. The source terms are developed to reflect the Application Case and Reasonable Upper Bound Scenario.

3.7.2 Added Flexibility

Based on a review of key areas of interest identified during the development of the Project to date, added levels of flexibility were implemented for selected elements within the SWWBM to facilitate the model's future use as the Project develops. These added levels of flexibility are not necessarily applied to all elements in the SWWBM. A greater level of computational flexibility is required for those elements that have a higher level of influence (i.e., risk or potential effects) on factors related to water quantity and/or quality within the SWWBM.

The added levels of flexibility considered for specific elements within the SWWBM include:

- **Design alternatives:** The SWWBM can simulate multiple design alternatives for selected elements that could affect water quality and quantity reporting from those elements through the lifespan of the mine (the Construction, Operations, and Closure phases) and the far-future scenario.
- **Alternative water management infrastructure:** At selected locations, the SWWBM can simulate the effect of alternative water management approaches and/or structures at those locations through the lifespan of the mine (i.e., the Construction, Operations, and Closure phases) and the far-future scenario.
- **Natural "what ifs":** The SWWBM can simulate unpredictable natural events (i.e., events outside the Project's control, such as extreme rainfall events including a probable maximum precipitation [PMP] event) that may affect water management within the Project site.
- **Operational "what ifs":** The SWWBM can simulate unusual operational conditions (i.e., conditions within the Project's control) that may affect water management (i.e., quality and/or quantity) within a mine facility or receiving environment. This includes a random flexibility to account for unforeseen operational shutdowns including, for example, a temporary pump failure.

4.0 MODEL METHODS, INPUTS, AND ASSUMPTIONS

4.1 Model Structure

The SWWBM was generated in GoldSim, a generalized systems dynamic modelling platform, following the structure of elements and flows presented in the water process flow diagrams (Figure 5 and Figure 6; Section 3.3, Approach). The following subsections discuss the model element types used in the SWWBM. Detailed methods and inputs associated with simulation of the element types are provided in Section 4.4, Water Balance Inputs and Assumptions.

4.1.1 Source Elements

Source elements in the model include catchments, which are assumed to be net generators of runoff and/or seepage, groundwater inflows, and water intakes.

4.1.1.1 Catchments

Catchments are assumed to be net sources of water to the system via runoff and seepage generated within the catchment boundaries. Catchment runoff is simulated using a simplified approach whereby direct precipitation is

multiplied by representative runoff coefficients (Appendix C and Appendix D). The runoff coefficient represents the fraction of precipitation input to the catchment (i.e., direct precipitation and snowmelt) that is translated into runoff. Runoff loss is the fraction of precipitation that is not translated into runoff. Runoff losses would consist of precipitation that is first stored at or near the ground surface and then either lost to the atmosphere through evaporation or infiltrates the ground surface.

The adopted runoff coefficients are conservative in magnitude (i.e., result in a greater amount of runoff from a given amount of rainfall or snowmelt) and applied consistently for all rainfall or melt events regardless of intensity, duration, or frequency. Runoff quality from each runoff catchment is simulated by applying a concentration to the runoff generated within the catchment.

4.1.1.2 Groundwater Inflows

Groundwater inflow sources are defined to account for groundwater entering the spatial model domain. Groundwater inflows may include pumped groundwater from dewatering wells (i.e., groundwater removed prior to reporting to the underground mine) or groundwater reporting to the underground mine. The key input for the quantity of water generated by a groundwater inflow element is groundwater flow rate. Groundwater quality is simulated by applying concentrations (e.g., major ions, metals, radionuclides) to the specific groundwater source. If the groundwater inflow element actively recovers groundwater (i.e., pumping wells), then additional inputs such as operation schedule, operational efficiency, and operational utility are also incorporated.

4.1.1.3 Water Intakes

Water intakes represent sources of water from Patterson Lake. The water intakes are simulated based on a defined daily pumping rate adjusted for upstream demand. Water quality of water entering the system from a water intake is assigned according to baseline ambient concentrations (i.e., major ions, metals, and radionuclides) observed for the source waterbody near the geographic location of the intake. Other key inputs for water intakes are the operational schedule, operational efficiency, and operational utility.

4.1.2 Pond and Storage Elements

Pond elements are the primary storage elements in the model. These elements store water that is input directly and/or transferred from other model elements. Water stored in ponds will also flow out via flow nodes (e.g., pumping, gravity transfers). Pond storage is calculated as the residual of inflows to the pond (i.e., flow nodes reporting from other model elements and direct precipitation), outflows from the pond (i.e., flow nodes out of the pond, atmospheric losses from the pond surface), and vertical seepage losses applied to the antecedent storage. Initial conditions for pond storage and water level are required at the initiation of the model. Seepage is simulated based on the presence or absence of a liner, and a seepage rate is calculated as a function of water depth, area, and pond bed material characteristics. Key inputs for pond elements are stage-storage-area curves, which describe the geometry of the pond; the seepage rate from the pond; and the presence or absence of a pond liner. Water quality values are aggregated based on the water quality of flows into the pond and the stored water for each time step. Pond elements are assumed to fully mix and have no layering or stratification.

Storage elements represent storage reservoirs not classified as “ponds” and typically include storage such as holding tanks and sumps. Like ponds, storage elements store water generated by other elements and interact with other model elements through inflows, outflows, and storage. The storage volume is calculated as the residual of inflows to the storage element reporting from flow nodes and outflows from the storage elements. Initial

conditions for storage volume are required at the initiation of the model. Other key inputs for storage elements include the minimum and maximum range of storage volume in the element and any losses within the storage element.

4.1.3 Treatment Elements

Treatment elements are used to represent processes that primarily change water quality of flow streams, such as the ETP or the process plant. Key input variables include the following:

- inflow water quality;
- operational efficiency (i.e., constituent of potential concern treatment or removal efficiency);
- operational utility (i.e., the proportion of time that the treatment processes are active when planned to be active);
- operation schedule (i.e., whether the operation is in a batch or continuous mode); and
- loading, material reactivity, and water quality scaling factors.

The level of complexity incorporated in treatment elements varies, with the objective of not over-simplifying the treatment process. Further details are provided in Section 4.5, Water Quality Inputs and Assumptions.

4.1.4 Consumption Point Elements

Consumption point elements are used to represent water losses from the system due to consumptive activities such as dust suppression, domestic consumption, and tailings entrainment. The key input to a consumption point element is the consumption rate. Other input parameters for consumption point elements include operational efficiency, operational utility, and operation schedule.

4.1.5 Surveillance Point Elements

Surveillance points are used to aggregate and summarize model results at locations of interest in the SWWBM, as described in Section 3.6, Surveillance Points. No input variables are required for surveillance point elements.

4.1.6 Discharge Node Elements

Discharge nodes are used to represent discharges of release water (i.e., final point of control) to Patterson Lake. No input variables are required for discharge node elements.

4.1.7 Flow Node Elements

Flow nodes convey water between other elements such as source, pond, storage, treatment, and discharge elements. Flow nodes are differentiated by flow mechanism. Inter-element (i.e., between elements) flow nodes include diversion channels, gravity transfers, and pumping via pipelines. Intra-element (i.e., within element) flow nodes include precipitation, evaporation, seepage, and groundwater.

The mechanisms associated with routing flow through the flow nodes are expected to operate at time intervals less than the daily time step of the SWWBM. For this reason, flow through the flow node is either constrained by a range of possible flow rates, a rating curve relating a controlling upstream elevation and flow through the flow node, a predefined flow rate (e.g., pump capacity), or a flow rate schedule (e.g., planned operational flow). Input parameters for simulating flow include predefined flow rates or flow rate schedules, flow losses to account for

diversions (e.g., from an open channel due to seepage), minimum and maximum flow rates, and rating curves as appropriate.

4.2 Project Phases

The SWWBM is adapted to reflect site conditions during all Project phases. The SWWBM is also adapted to reflect site conditions under a far-future scenario. Water process flow diagrams (Figure 5 and Figure 6) have been developed to illustrate relevant processes and flow paths included in the SWWBM and to summarize process flows for steady-state conditions over the following three Project phases:

- **Construction Phase (Construction):** includes site preparation; mine, process plant, and additional infrastructure development; transportation of people and materials to and from the Project; and all activities associated with commissioning the Project until Operations commences. The duration of Construction is expected to be four years.
- **Operations Phase (Operations):** includes all activities associated with mining and processing ore; tailings management; management of waste rock, domestic waste, and hazardous materials; release of treated effluent; site maintenance; progressive reclamation; and transportation of people and materials to and from the Project up until Decommissioning and Reclamation commences. The duration of Operations is expected to be 24 years.
- **Decommissioning and Reclamation Phase (i.e., Closure):** includes two stages expected to occur over 15 years.
    - **Active Closure Stage:** includes active decommissioning and reclamation activities that occur post-Operations, such as backfilling mine workings, removal of physical infrastructure, recontouring and revegetating disturbed areas, waste disposal or removal, and any other activities deemed necessary to achieve decommissioning objectives and return the site to a safe and stable condition prior to the Transitional Monitoring Stage. The duration of the Active Closure Stage is expected to be five years.
    - **Transitional Monitoring Stage:** includes monitoring and reporting activities that occur post Active Closure that would continue until monitoring and reporting verifies that the performance criteria have been met. Once performance criteria have been fully demonstrated, an application to be released from the Canadian Nuclear Safety Commission licence would be submitted to the Canadian Nuclear Safety Commission for approval. Once that is achieved, and upon Provincial approval, the land would be transferred back under Provincial management through the Institutional Control Program. The duration of the Transitional Monitoring Stage is nominally 10 years; however, NexGen acknowledges this duration would be dependent on the achievement of performance criteria.

The far-future scenario is not a Project phase; it represents a steady-state equilibrium potential where seepages and runoff from the Project report to Patterson Lake in perpetuity.

Start dates are incorporated in the SWWBM to activate individual elements once they are constructed and become operational. Each element will remain active within the SWWBM between the start date and end date established as per the mine plan. As noted in earlier subsections, characteristics of each element may vary over the active period. Further details on the active periods assumed for each element are provided in Appendix B.

Construction is a four-year period, inclusive of pre-development activities (RPA 2020). The composition of the Project site during Construction is dynamic; therefore, a discrete water process flow diagram is not presented for this phase. Individual site components are anticipated to be constructed sequentially. Not all facilities represented in Operations water process flow diagram (Figure 5) are constructed and become operational at the same time. The variation of site composition over time means that a water process flow diagram during Construction would only be capable of capturing a snapshot at some point between the initiation of the construction and the initiation of process activities (i.e., Operations) rather than a steady physical state. To provide further clarity, although a water process flow diagram has not been prepared for this phase, each of the relevant processes and periods for Construction are included in the SWWBM.

Operations is a 24-year period. The Operations flow logic diagram presented in Figure 5 shows the complete suite of elements that will be in place during Operations, as well as the relationships or connections between them. The characteristics of the elements in the Operations flow logic diagram may vary according to the mine plan during Operations; further details on the model inputs and assumptions for these stages are provided in Appendix C.

Closure includes two stages: the Active Closure Stage and Transitional Monitoring Stage.

- The Active Closure Stage is expected to be a five-year period. The composition of the site during Closure is dynamic; therefore, a discrete flow logic diagram is not presented for this phase. Individual site components are anticipated to be decommissioned sequentially. In a similar fashion to Construction, end dates are used in the SWWBM to deactivate elements during Closure. The elements are incrementally deactivated according to the mine plan. The last element to be deactivated will be the ETP and associated ponds, which are expected to remain active until the Active Closure Stage is complete, and there is reasonable confidence in the conditions during the Transitional Monitoring Stage.
- The Transitional Monitoring Stage is expected to be a 10-year period extending from the end of the Active Closure Stage and the handover of Institutional Control. The transition to Institutional Control involves monitoring of environmental media to verify that decommissioning performance criteria have been fully demonstrated prior to the transfer of the property to the Province of Saskatchewan.

The far-future scenario represents a steady-state equilibrium when seepages and runoff from the Project are predicted to report to Patterson Lake in perpetuity. A flow logic diagram for the Transitional Monitoring Stage and far-future scenario is shown in Figure 6; further details on the model inputs and assumptions for these stages are provided in Appendix D.

4.3 Model Scenario Development

This subsection summarizes and provides context for the model scenarios included in the SWWBM. A general list of information requirements that were used in deriving the scenarios is provided in Table 7.

Table 7: Information Requirement Drivers

Driver	Description
Effects assessment	Provide information to support an assessment of how mine operations will affect in-stream flow and water quality in the receiving environment. Information should be generated during each phase of the mine life, including throughout the range of in-stream flows because of withdrawals, diversion, induced losses to groundwater, and effluent discharge in consideration of climate, land use, and water allocation and withdrawal.
Water management evaluation	Test system performance over a range of climatic conditions.
Design support and verification	Evaluate FS engineering design system performance during extreme events.
Design alternative evaluation	Evaluate specific design alternatives for comparison to the FS engineering design in support of alternative evaluation and decision making.

FS = feasibility study.

Specific aspects of the flexibility listed in Section 3.7, Flexibility, are used to adapt the model to each scenario. Each specific model scenario is tailored to satisfy a specific information requirement based on existing documents (Government of British Columbia 2019; CNSC 2020; Environment Canada 2009, SERM 2000) and experience in permitting mines in Saskatchewan and across Canada. In general, the information requirements for the SWWBM are intended to provide a full characterization (quality and quantity) and predictions of all treated and untreated effluent sources. The scenarios include an Application Case as well as sensitivity analysis scenarios to provide context for uncertainty and potential implications for different assumptions. The sensitivity scenarios are intended to provide information on how the variation of climate, process efficiency, water quality assumptions, and operational uncertainties may affect the SWWBM results for the different phases of the Project. The scenarios summarized in Table 8 are intended to provide the information required to satisfy the expectations of rights holders, Indigenous and local communities, provincial regulators, and the Canadian Nuclear Safety Commission.

The scenarios in Table 8 are characterized according to Project phase, time, climate, information driver, and information objective. The Project phase indicates the Project phases and stages to which the scenario applies. The time information summarizes the temporal domain (Section 3.2, Spatial and Temporal Domain), time step, and the mode (deterministic or stochastic) for the climate-related calculations. The climate summary indicates climate data used in the simulations, which are discussed in further detail in Section 4.4.1.1, Climate. The driver summary indicates what the scenario can evaluate (Table 7). The information objective provides a summary of the objective of each scenario.

Table 8: Summary of Scenarios

ID	Description	Project Phase	Water Quality	Time	Climate	Driver	Information Objective
1	Application Case	All phases	Expected case	TS-D (D)	H	EA, WM, DV	Environmental Assessment verification forecasting
2	Application Case – deterministic climate	All phases	Expected case	TS-D (D)	H	EA, WM, DV	Sensitivity to climate timing and start time
3	Application Case – stochastic climate	All phases	Expected case	TS-D (S)	H	EA, WM, DV	Sensitivity to climate cycles
4	Far-Future scenario	FF	Expected case	TS-D (D)	H	EA, WM, DV	Forecasting
5	Climate change	All phases	Expected case	TS-D (D)	CC	EA, WM, DV	Effect of climate change
6	Extreme event – summer PMP	All phases	Expected case	TS, EB	H, July PMP	WM, DV	Forecasting extremes

Table 8: Summary of Scenarios

ID	Description	Project Phase	Water Quality	Time	Climate	Driver	Information Objective
7	Extreme event – spring PMP	All phases	Expected case	TS, EB	H, April PMP	WM, DV	Forecasting extremes
8	Extreme event - summer PMP climate change	All phases	Expected case	TS, EB	CC, July PMP	WM, DV	Effect of climate change forecasting extremes sensitivity to climate
9	Sensitivity – wet cycle	All phases	Expected case	TS-D (D)	H	WM, DV	Sensitivity to climate
10	Sensitivity – dry cycle	All phases	Expected case	TS-D (D)	H	WM, DV	Sensitivity to climate
11	Sensitivity operations conservative water quality	All phases	Upper bound case	TS-D (D)	H	WM, DV	Sensitivity to source terms
12	Sensitivity conservative water quality and low treatment efficiency	All phases	Upper bound case low treatment	TS-D (D)	H	WM, DV	Sensitivity to uncertainty in operational treatment efficiency
13	Sensitivity expected water quality and low treatment efficiency	All phases	Expected case low treatment	TS-D (D)	H	WM, DV	Sensitivity to uncertainty in operational treatment efficiency
14	Sensitivity WRSAs alternatives	All phases	Expected case Alternate WRSAs[a]	TS-D (D)	H	DA	Alternative for waste rock storage and source terms
15	Sensitivity to upset conditions	All phases	Expected case	TS-D (D)	H	WM, DV	Upset conditions; operational “what ifs”

a) See Table 10.

CC = climate change; H = historical climate time series; D = deterministic; EB = event based; TS = time series; TS-D = daily time series; TS-D (D) = daily time series run in deterministic mode; TS-D (S) = daily time series run in stochastic mode; S = stochastic; FF = far-future; EA = effects assessment; WM = water management evaluation; DV = design support and verification; DA = design alternative evaluation; WRSAs = waste rock storage areas.

4.4 Water Balance Inputs and Assumptions

This subsection summarizes the water balance inputs and assumptions required to operate the model structure (Section 5.2, Water Quality Model Results) to simulate the water balance for the Project activities.

4.4.1 Water Balance Inputs

The SWWBM is used to account for water sources to, movement within (i.e., routing, storage, division, aggregation), and losses (i.e., consumption and discharge) from the model domain over time. Detailed data parameters that are required to parameterize and run the SWWBM during the Project Period are summarized in the data tables included in Appendix C, Operations Phase Model Input Parameters. The detailed data parameters that are required to parameterize and run the SWWBM during post-closure are summarized in the data tables included in Appendix D, Transitional Monitoring Stage and Far-Future Scenario Model Input Parameters.

The parameters adopted for each element are those required to describe the water balance and water quality processes accounted for by the SWWBM.

4.4.1.1 Climate

General methods and assumptions common to several element types (Section 4.1, Model Structure) include climate and hydrometeorological interactions between an element and the atmosphere. The key interactions between the atmosphere and SWWBM elements are additions such as direct precipitation and atmospheric

losses such as evaporation, evapotranspiration, and sublimation. Climate scenarios (historic, deterministic, stochastic, and climate change) are described in Section 3.2.2.3.

Direct Precipitation

Precipitation data include both long-term time series and event-type datasets. Time series precipitation data are at a daily time step.

Snowmelt

Daily snowmelt from the snowpack is estimated using a temperature index per degree day model (Dingman 2002). In this method, a base or threshold temperature, which is assumed to be 0°C, is subtracted from the daily mean air temperature when spring temperatures exceed 0°C. This result is then multiplied by a melt coefficient to determine snowmelt water equivalent depth. The melt coefficient adopted for the Project site was estimated to be 4.9 millimetres per degree Celsius per day (mm/°C/day) based on the melt coefficient empirically derived by the regional hydrology model calibration of 3.0 mm/°C/day; EIS Section 9, Hydrology) increased to account for anticipated changes in surface albedo (i.e., how much solar radiation is reflected) associated with dust, snow clearing and storage, and built infrastructure in the Project footprint relative to the regional receiving environment.

Atmospheric Losses

The SWWBM accounts for losses of water to the atmosphere including:

- evaporation from open water surfaces using the Penman Combined model (Dingman 2002) modified for lake evaporation estimation by considering change in heat storage in the waterbody (McJannet et al. 2013); the heat storage term is estimated following the approach outlined in Jensen (2010); and
- sublimation from all land and frozen water surfaces using the Kuchment and Gelfan (1996) model.

Evapotranspiration losses are accounted for in the runoff coefficients used in the SWWBM (see Appendix C and Appendix D).

4.4.1.2 Fresh Water Intake and Use

Raw fresh water would be sourced from a single location in the Patterson Lake North Arm – East Basin. Raw fresh water would be conveyed from the intake to the fresh water storage tank for preliminary staging via the fresh water pumphouse. Some fresh water from the fresh water storage tank would be treated in the fresh water treatment plant before being distributed for domestic fresh water consumption. The balance of raw fresh water would be distributed to support various demands for surface industrial activities, underground activities, ETP demand, and process plant uses, as well as fire suppression. Fresh water would either be consumed (i.e., lost from system) or converted to contact water during use.

The simulated rate of fresh water intake is variable based on demands according to Project activities, camp population, and ore production over time.

4.4.1.3 Non-contact Water Runoff

Non-contact water would be generated as runoff from undisturbed catchments located adjacent to or within the Project footprint. Non-contact water generated from undisturbed catchments adjacent to the Project footprint would be diverted around the industrial area using diversion ditches (e.g., east perimeter diversion, west

perimeter diversion, and south perimeter diversion) and conveyed directly to Patterson Lake. Any non-contact water generated within the Project footprint that could not be diverted around the industrial area would report to the contact water management system (i.e., collection ponds, ETP) and be managed as contact water (Section 4.4.1.4, Non-mineralized Contact Water Runoff and Section 4.4.1.5, Mineralized Contact Water Runoff).

Non-contact water runoff is calculated in the model based on catchment area and runoff coefficients applied to daily rainfall and/or snowmelt.

4.4.1.4 Non-mineralized Contact Water Runoff

Non-mineralized contact water would be generated as runoff from surfaces that are not expected to be mineralized (e.g., NPAG waste rock, camp area). Non-mineralized contact water would be segregated from mineralized contact water by site drainage and grading. Non-mineralized contact water would be collected, captured, and conveyed to site runoff pond #2 (Figure 4; also referred to as contact water pond #2 in EIS Section 5.4.5 [Site Water Management], Figure 5.4-12) for containment. The capture zone (i.e., area that contributes water) for site runoff pond #2 would include the construction camp area, modular construction facility, WRSAs, construction laydown area, batch plant sand and aggregate storage, and conventional waste management area. Water collected within site runoff pond #2 that is suitable for release based on testing against effluent release targets would be directed to the west bermed runoff collection area.

The west bermed runoff collection area would receive runoff from the local non-contact water catchment area as well as non-mineralized contact water and water from site runoff pond #2 that is suitable for release to the environment (i.e., release water). As the outlet of site runoff pond #2 represents a final point of control, NexGen would apply to designate the outflow from site runoff pond #2 as a final discharge point. This designation would mean the site runoff pond #2 outflow location is where water would be monitored and analyzed to confirm all discharge release criteria, including Metal and Diamond Mining Effluent Regulations limits but excluding total suspended solids (TSS), are met. As water in the west bermed runoff collection area would be released via a ground-based discharge, it is expected that TSS would be naturally removed from the water before reaching potential fish habitat. If the non-TSS discharge release limits are not met within site runoff pond #2, this water would be deemed mineralized contact water and pumped to the settling pond where it would be reused in the process plant or treated in the effluent treatment plant.

Non-mineralized contact runoff is calculated in the model based on catchment area and runoff coefficients applied to daily rainfall and/or snowmelt.

4.4.1.5 Mineralized Contact Water Runoff

Mineralized contact water would be generated as runoff from surfaces that are expected to be mineralized (e.g., mine terrace, mill terrace, ore storage stockpile, PAG WRSA). Mineralized contact water runoff would be segregated from non-mineralized contact water runoff by site drainage and grading. Mineralized contact water would be collected and contained in site runoff pond #1 or in self-contained areas such as the ore storage stockpile sump, special waste stockpile sump, or PAG runoff collection area (Figure 4) before being conveyed to the settling pond for reuse or treatment. The capture zone for site runoff pond #1 would include the mine terrace, fresh air intake area, haul road, and mill terrace. The Application Case assumes that waste rock storage is segregated with NPAG being unlined and PAG being lined and including engineered source control layers. A cover system will be placed over the final WRSA landforms (EIS Section 5, Project Description).

Mineralized contact runoff is calculated in the model based on catchment area and runoff coefficients applied to daily rainfall and/or snowmelt. The rate of pumping from containment ponds is adapted to maintain flood storage and freeboard but is distributed so that the rate would not stress receiving elements.

4.4.1.6 Underground Contact Water

Underground contact water is water recovered from underground mining activities during construction and mine development and consists of groundwater inflows as well as water previously used in underground activities such as underground line flushing that is recovered after use. The underground mine workings would be dewatered during construction and mine development and would act as a sink for groundwater flows; groundwater would flow into the mine and be recovered rather than flowing out to the receiving environment. Underground contact water recovered in the underground mine workings would be collected for preliminary storage and pre-treatment to screen solids and settle TSS before being pumped to the settling pond (Figure 5).

Underground contact water is calculated in the SWWBM based on values developed for the feasibility study (FS) (Wood 2020a).

4.4.1.7 Process Plant Water

Process contact water would be generated as a result of the process plant. Feed water to the process plant would include raw fresh water and contact water from the settling pond. Process contact water effluent from the process plant would either be entrained in tailings paste, disposed of underground, or pumped to the ETP for treatment.

The demand rates to and outflows from the process plant were simulated based on a combination of values provided in the FS (Wood 2020a) prorated by the projected ore production rate.

4.4.1.8 Sewage Generation

Sewage is generated from the use of raw or treated fresh water by domestic sources and includes water reporting from washrooms, showers, laundry, and the kitchen. Sewage would be collected and stored before being transferred to the sewage treatment plant, where it is treated before being released to Patterson Lake via the treated sewage outfall.

The rate of sewage generation is accounted for in the SWWBM based on values provided for FS level engineering, adjusted over time for the projected camp population.

4.4.1.9 Release Water Discharge

Release water is generated from treated contact water (treated effluent), treated sewage, and non-mineralized contact water that is acceptable for release, as well as non-contact water. Water is classified as release water if it is confirmed to meet applicable environmental release targets, which are defined on a preliminary basis and will be refined through licensing. Release water would be discharged to Patterson Lake actively through the treated mine effluent diffuser and treated sewage outfall, or passively through diversions.

Discharge of release water from the treated effluent monitoring ponds via the treated mine effluent diffuser would be operated in a batch release mode. The rate of discharge is simulated on a demand basis in the SWWBM, discharging water accumulated in the treated effluent monitoring ponds daily if the proposed environmental release targets (Appendix H) are met.

Discharge of release water from the sewage treatment plant via the treated sewage outfall would be operated in a continuous release mode. The rate of discharge is simulated on a continuous basis in the SWWBM.

4.4.2 Water Balance Assumptions

The assumptions required for development and operation of the SWWBM are summarized in Table 9.

Table 9: Water Balance Assumptions

Data Type	Input Data Assumption	Rationale or Need for Assumption
Effluent treatment pond(s) batch release	Batch release is set such that a maximum of four individual ponds can be released in a single 24-hour period. The maximum rate of release from each effluent treatment pond is 1/4 the maximum batch release rate.	The batch operation release sequence was approximated because the batch release duration (6 hours) is less than the minimum time step of the model (24 hours or one day).
Underground contact water	Paste fill does not produce water from seepage[(a)].	Necessary assumption required to rationalize parameterization of a zero flow from a potential source.
Underground contact water	Seepage from backfilled primary stopes and secondary stopes will not be recovered during Operations (i.e., no drainage from backfills)[(a)].	Necessary assumption required to rationalize parameterization of a zero flow from a potential source.
Initial conditions for pond and storage elements	All ponds and storage elements have initial volumes of zero (i.e., zero mass) except Patterson Lake. Ponds are activated when they are constructed and assumed empty at Closure.	Necessary to clarify initial conditions for model simulations.
Pump operating rules	Pumps from storage elements are initiated automatically when 80% of maximum storage capacity is reached. Pumps from storage elements are stopped when storage reaches minimum allowable (10% of maximum storage capacity). The routine daily pumping rate is truncated on a daily time step if the minimum allowable storage is achieved. For pumps from pond/storage elements, the pumping rate is increased above routine to maximum capacity if storage in the upstream pond/storage element exceeds 90% of maximum storage capacity. The maximum pumping rate is assumed to be 1.5 times the routine pumping rate.	Minimum storage required to reduce noise in pumping. Minor variation of pumping rates required at the margins of operating range needed to maintain model stability and account for probable variation during operation.

a) Constituent masses are accounted for in geochemical source terms and solute transport modelling (Section 4.6, Model Verification and Performance).

4.5 Water Quality Inputs and Assumptions

This subsection summarizes the model inputs and assumptions required to simulate the quality of the water included in the water balance.

4.5.1 Source Term Inputs

A water quality (i.e., mass per unit volume) or mass load (i.e., mass per unit time) is assigned to each identified source of mass within the site. The reference for the quality or load assigned to each source throughout Construction, Operations, and Closure phases and for the far-future scenario is detailed in Appendix C and Appendix D, respectively, and summarized in Table 10. The source input values are presented in Appendix E,

Site Water Quality Model Geochemical and Water Quality Source Terms. References for data inputs are provided in Appendix C, Table C-2. These are referred to in subsequent, more detailed tables in Appendix C according to the Reference Number of “Ref #” in that table.

Data gaps were identified in seven source term input datasets where one or more parameters were not measured. In these cases, a conservative assumption was made using available data from the Project site or other active uranium mine sites in northern Saskatchewan (e.g., Cameco Key Lake Operation). The identified data gaps and subsequent assumptions made to develop a quality or load for the missing parameters for use as a model input are summarized in Table 11.

The water quality or mass load associated with the following constituents is simulated within the water quality portion of the SWWBM:

- **General chemistry and nutrients:** total ammonia (as nitrogen), chloride, nitrate (as nitrogen), total phosphorus, and sulphate.
- **Total metals:** aluminum, arsenic, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, selenium, sodium, strontium, uranium, vanadium, and zinc.
- **Radionuclides:** lead-210, polonium-210, radium-226, and thorium-230.

Table 10: Water Quality Data Input Summary

Source	Quality/Load Used as Model Input
Fresh water intake	Patterson Lake North Arm – East Basin baseline water quality
Undisturbed areas / natural runoff	Patterson Lake baseline water quality
Ore storage stockpile	Ore storage stockpile source term
Special waste rock stockpile	Special waste rock stockpile source term
Natural groundwater	Groundwater quality from bedrock wells
PAG WRSA	PAG WRSA[(a)] source term
NPAG WSRA	NPAG WRSA[(a)] source term
Sewage discharge	Sewage discharge objectives
Disturbed areas/runoff in contact with land affected by Project activities	SFE leachate quality of P11[(b)] borrow material (Okane 2020b)
Process Plant	Mixed effluent feed quality (Wood 2019)
Alternate WRSAs	Alternative WRSAs[(c)] source term
Treatment plant efficiency	Anticipated treatment plant removal efficiency

Table 10: Water Quality Data Input Summary

Source	Quality/Load Used as Model Input
Underground rock wall	Underground rock wall source term
WSRA closure cover	SFE leachate quality of P11 borrow material (Okane 2020b)
Reclaimed areas	SFE leachate quality of P11 borrow material (Okane 2020b)

a) Waste rock storage option involving the installation of a liner and incremental segregating, hauling, and placing of PAG waste rock in a segregated facility with alternating lifts of engineered source control material during Construction and Operations; incremental segregating, hauling, and placing of NPAG waste rock in a segregated facility during Construction and Operations; and decommissioning of both segregated PAG and NPAG facilities.

b) P11 borrow material was collected from a test pit within the planned Rook I Project footprint (Okane 2020b).

c) Alternate waste rock storage option involving incremental hauling and placing of waste rock in lifts at a single, unsegregated facility with alternating lifts of engineered source control material during Construction and Operations, and decommissioning of a single facility.

PAG WRSA = potentially acid generating waste rock storage area; NPAG WRSA = non-potentially acid generating waste rock storage area; SFE = shake flask extraction; WSRAs = waste rock storage areas.

Table 11: Water Quality Data Gap Assumptions

Source	Data Gap	Input Assumption	Rationale	Reference
Natural groundwater	Phosphorus concentration not measured	Median groundwater quality from overburden wells	Conservative assumption based on available data for the Project site	Golder 2020
	Mercury concentration not measured			
PAG WRSA	Phosphorus input not provided	2017 average and maximum concentration from Cameco Key Lake Gaertner Special Waste Pad for the Application Case and Reasonable Upper Bound Case, respectively	Conservative assumption based on measured phosphorus concentrations at an active uranium mine in northern Saskatchewan	Cameco 2018
NPAG WRSA	Phosphorus input not provided			
Ore storage stockpile	Phosphorus input not provided			
Special waste rock stockpile	Phosphorus input not provided			
Borrow material	Radionuclide content not measured	Median groundwater quality from overburden wells	Conservative assumption based on available data for the Project site	Okane 2020b
Underground rock wall	Phosphorus input not provided	Underground tailings management facility source term concentration	Consistent with Project groundwater solute transport model inputs	EIS Appendix 10A

PAG = potentially acid generating; NPAG = non-potentially acid generating; WSRA = waste rock storage area.

4.5.2 Source Term Assumptions

The following assumptions and limitations were used in the development of the site water quality model:

- Water quality is modelled instantaneously and assumes fully mixed conditions within any given reservoir or element.
- The site water quality model is mass-conservative (with the exception of the ETP, as described below). It does not account for:

  - changes in pH or redox conditions that may occur when calculating mixed water qualities, except for where it may have been included in the development of the source terms;
  - total suspended solids;
  - dissolved oxygen;
  - temperature;
  - nutrient cycling;
  - settling of particulate matter; and
  - solubility limits, except for where they may have been included in the development of the source terms.
- Radioactive decay is applied to radionuclides.
- Mass inputs from rainfall and snowmelt and mass loss from evaporation is assumed to be negligible.
- The preliminary environmental release targets (Appendix H) used as a basis for acceptable release to the environment are subject to change in future model iterations.
- With the exception of the underground rock wall source terms, all source terms were provided as constant sources (i.e., concentration/load per unit mass does not change over time).
- The ETP removal efficacy is incorporated by applying a fixed removal efficiency for each constituent. Removal efficiency inputs were based on values carried for prefeasibility and feasibility level engineering (Wood 2019) and are listed in Appendix E.
- The low ETP removal efficiency used in model scenarios 12 and 13 (Table 8) was assumed to be 99% of the routine treatment efficiency, which was intended to test a reasonably foreseeable reduction in treatment efficiency that would be persistent over time. For example, if the routine treatment efficiency is 99.9% removal and the low treatment efficiency is 98.9%, the concentration in the effluent would increase from 0.1% of the ETP feed water quality to 1% of the ETP feed water quality.
- The primary source of ammonia and nitrate in the treated effluent discharge is assumed to be from explosives, and concentrations were calculated based on the anticipated explosive type, powder factor, waste rate, and anticipated tonnage of development rock being produced (Ferguson and Leask 1988; Morin and Hutt 2008; Golder 2021).
- It is assumed that throughout Closure, ammonia and nitrate concentrations in the treated effluent ponds will linearly decrease over 10 years until reaching a steady-state reclamation / far-future concentration, reflecting a flushing of residual nitrogen from waste rock and other materials.
- It is assumed that the WRSAs source term developed from long-term average conditions can be applied under variable climate conditions.
- During the far-future scenario, infiltration into the WRSAs is directed to Patterson Lake via groundwater and will not report to the Rook I Project site surface.

- The process plant effluent source term was applied additively to the predicted concentrations of the process plant influent since the input quality was developed from pilot testing that used non-contact water.
- Predicted calcium and sodium concentrations from the ETP to the treated effluent ponds were calculated from a sulphate to calcium molar ratio and sulphate to sodium molar ratio of 6.9:2.6 and 6.9:8.8, respectively. These ratios were provided by NexGen (Lieu 2021) and based on preliminary modelling results.

4.6 Model Verification and Performance

Evaluation of model performance is an important aspect of any modelling exercise. At the current phase of model and Project development, monitoring data are not available for calibration or validation of the SWWBM because the site has not been developed. As a result, it is not possible to calibrate or validate predictive modes of the model at the current time; however, the Application Case scenarios may be used for qualitative verification of whether the SWWBM functions as intended.

A comparison of cumulative global inflows to outflows was completed to confirm that the model conserves mass, to understand any systemic bias in the model, and to verify if the model results are reasonable. The net balance of flows is presented in Table 12. A net loss of two percent of inflows was observed for the entire model domain over the course of simulations extending from Construction through to Closure. The net loss is attributed to model artefacts associated with residence time and time steps during model simulation. A positive volume bias was diagnosed for catchment source elements Q06, Q07 and R51 associated with snowpack accounting routines at the runoff source element scale. Overall, the biases presented in Table 12 are not expected to have a material influence on model results. In general, the patterns and magnitudes of inflows and outflows are reasonable relative to the model configuration, input data, and simulation constraints.

Table 12: Model Verification

Location	ID	Net Balance (% of inflows)
West Surface Runoff Discharge	Q01	-0.5
Treated Effluent Discharge	Q02	-2.3
Treated Domestic Sewage Discharge	Q03	0.0
East Surface Runoff Discharge	Q05	0.8
South Perimeter Diversion Discharge	Q06	0.3
West Perimeter Diversion Discharge	Q07	0.3
Non-contained Airport Runoff	R51	0.3
Model Domain	n/a	-2.0

n/a = not applicable.

5.0 MODEL RESULTS AND SENSITIVITY

This subsection discusses the model results as they relate to current application of the SWWBM with a focus on supporting assessment of the effects of Project activities on the receiving environment and answering specific questions about how the variation of climate, process efficiency, water quality assumptions, and operational uncertainties may affect the SWWBM for the different phases of the Project. Although modelling was completed using an integrated approach, the results are presented first for the water balance followed by water quality for

ease of interpretation and reference. In the discussion of results, names of specific elements are followed by the applicable identifier used on the water process flow diagrams in Figure 5 and Figure 6 for ease of reference (e.g., site runoff pond #1, which is a Pond/Storage (P/S) element, is identified as P/S00). For elements with a surveillance point (SP) located immediately downstream, both the element identifier and surveillance point identifiers are included (e.g., site runoff pond #2 (P/S09; SP04)).

The sensitivity analysis scenarios described in Section 5.1.1, Application Case for Effects Assessment, are a key component of managing uncertainty. The sensitivity analysis scenarios are used to evaluate model sensitivity to conservative water quantity (i.e., dry cycle and wet cycle) and water quality scenarios including the sensitivity to adopting the upper bound for geochemical source terms, and to a range of treatment efficiencies (i.e., low efficiency, high efficiency). Conclusions derived from the results of the sensitivity analysis scenarios are used to inform the water management plans for each phase of the mine lifespan.

Scenario 4 (Far-Future) is not discussed in detail in this technical support document given the results were not used in environmental assessment. In the approach used to support the effects assessment, the Application Case transitions to a long-term looping simulation representative of conditions following Institutional Control. The approach for simulating Far-Future surface water conditions is described in detail in EIS Appendix 9A and EIS Appendix 10A.

5.1 Water Balance Model Results

The water balance focuses on the flow rates at water intake and discharge locations, including variations between Project phases and seasonality.

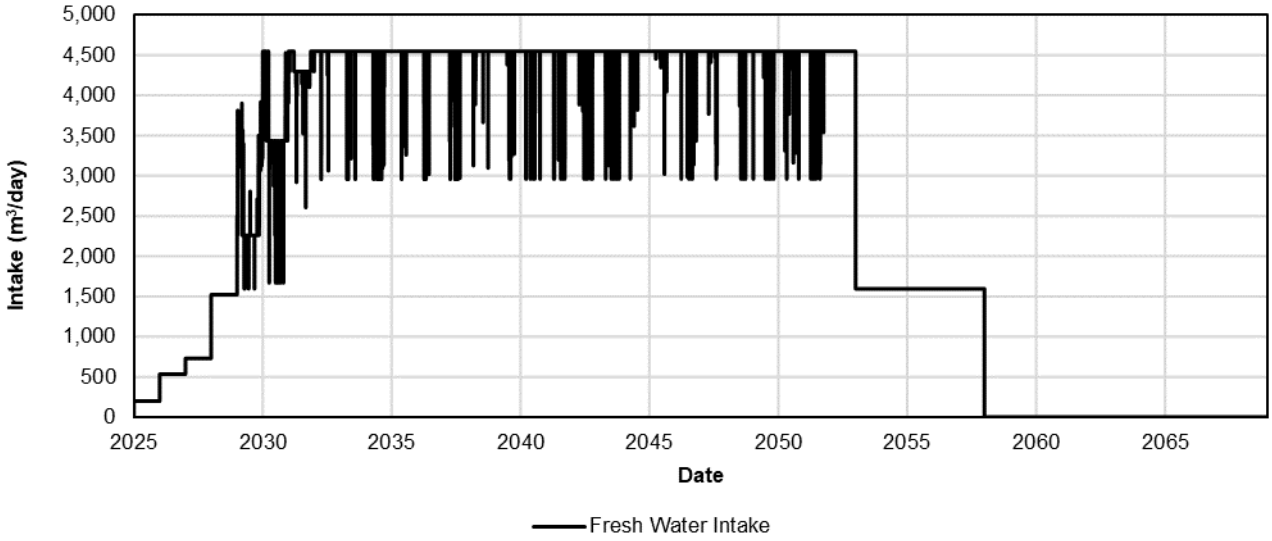
5.1.1 Application Case for Effects Assessment

The water balance of the capture zones shown on Figure 4, as well as non-contact water diversions adjacent to the mine, are accounted for and reflected by the SWWBM as described in Section 3.4, Water Process Flow Diagrams. The focus of the results is on Construction (4 years; 2025 to 2028), Operations (24 years; 2029 to 2052), and Closure, including the Active Closure Stage (5 years; 2053 to 2057) and Transitional Monitoring Stage (10 years). The Transitional Monitoring Stage water balance results are also indicative of the expected far-future scenario.

Intake

Fresh water would be sourced from a single location in the Patterson Lake North Arm – East Basin via the fresh water intake (I01). Fresh water demand for the Project would consist of fresh water for domestic consumption and fresh water for use in the fire water loop, a portion of process plant water, and surface industrial uses (Figure 5). The rate of fresh water intake would increase during Construction and into Operations as demands are added with more and more complex Project activities. During Operations, the fresh water intake would be, on average, approximately 4,300 m^3/d. The fresh water intake rate would decrease during the Active Closure Stage and then cease in the Transitional Monitoring Stage. The anticipated rate of fresh water intake from Patterson Lake is shown in Figure 7.

Figure 7: Anticipated Rate of Fresh Water Intake from Patterson Lake over Project Lifespan for the Application Case

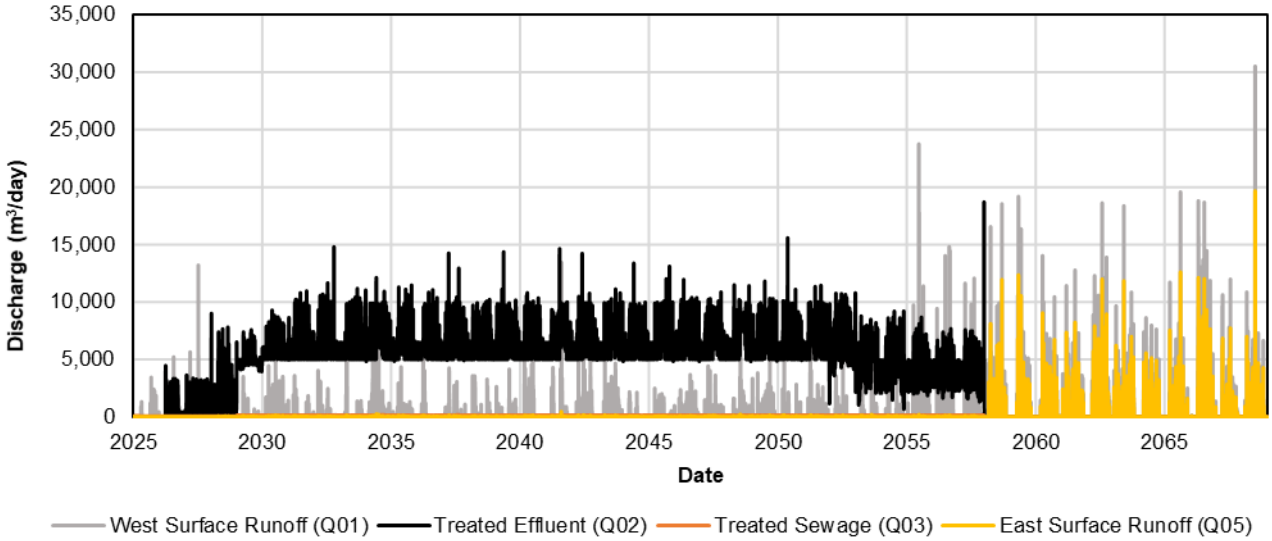


Discharge

Surface runoff from the west surface runoff discharge (Q01) would report to the Patterson Lake North Arm – West Basin. During Construction, Operations, and into the Active Closure Stage, the west surface runoff discharge (Q01) would include non-contact water from downstream of the site runoff pond #2 (P/S09; SP04) area as well as non-mineralized contact water that has been tested and confirmed to be acceptable for release. In the Transitional Monitoring Stage and into the far-future scenario, the west surface runoff discharge would also convey runoff from reclaimed, revegetated, and covered surfaces that would have formerly drained to the site runoff pond #2 (P/S09; SP04), and discharge rates will increase in magnitude. The rate of discharge via the west surface runoff (Q01) would be periodic and responsive to rainfall and snowmelt events. The estimated rate of daily discharge via the west surface runoff (Q01) to Patterson Lake is shown in Figure 8.

Treated effluent would be discharged via the mine effluent diffuser (Q02) to the Patterson Lake North Arm – West Basin. The feed (SP05) to the ETP (T01) would include components of recovered groundwater from the underground workings, process plant water, collected and captured runoff from mineralized or potentially mineralized surfaces on site, and runoff from non-mineralized surfaces that does not meet water quality-based environmental release targets. The treated effluent would be held in four treated effluent monitoring ponds (P/S01 to P/S04; SP02), tested relative to water quality environmental release targets, and released as a batch release if targets are met. The daily rate of treated effluent release (Q02) would vary throughout the mine life based on a variety of Project activities and seasonality. The estimated rate of daily treated effluent discharge to Patterson Lake is shown in Figure 8.

Figure 8: Estimated Rate of Daily Discharge to Patterson Lake via Various Pathways over Project Lifespan



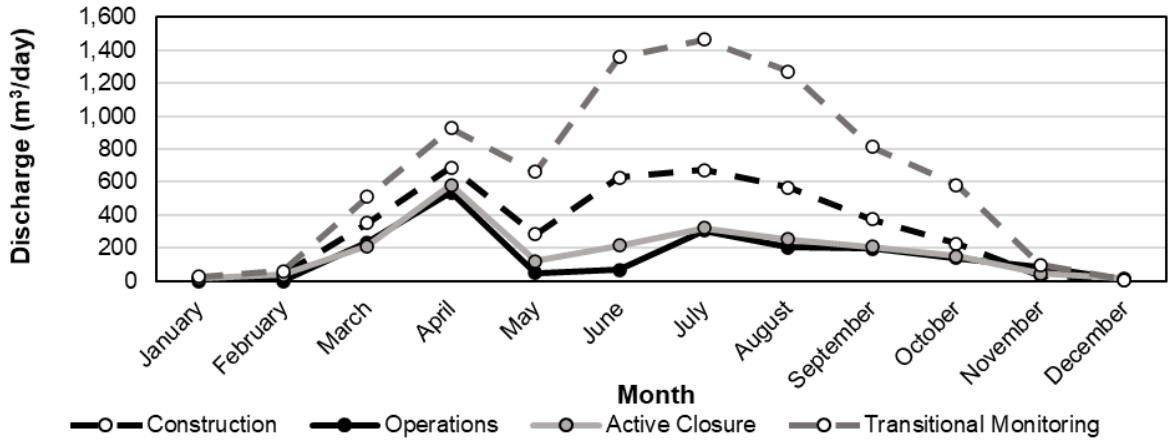
Treated sewage would discharge to the Patterson Lake North Arm – West Basin via the treated sewage outfall (Q03). Sewage generation would start during Construction and continue through Operations and the Active Closure Stage. The proposed peak workforce is assumed to include potential overlap during construction and operation of the facility, for a total design population of 350 people. As indicated in Figure 8, the magnitude of treated sewage discharge is small relative to other discharges. The daily treated sewage discharge during Operations is anticipated to average 150 m^3/d and ranges up to 165 m^3/d with some seasonal variation.

Surface runoff from the east surface runoff (Q05) would discharge to the Patterson Lake North Arm – East Basin. During Construction, Operations, and into the Active Closure Stage, the east surface runoff discharge will consist of non-contact water from outside of the mine-controlled area. During the Transitional Monitoring Stage and into the far future, runoff from some reclaimed, covered, and revegetated surfaces within the former mine-controlled area including the covered PAG WRSA would be routed to the east surface runoff and discharge to the Patterson Lake North Arm – East Basin. The estimated rate of daily discharge via the west surface runoff (Q01) to Patterson Lake is shown in Figure 8.

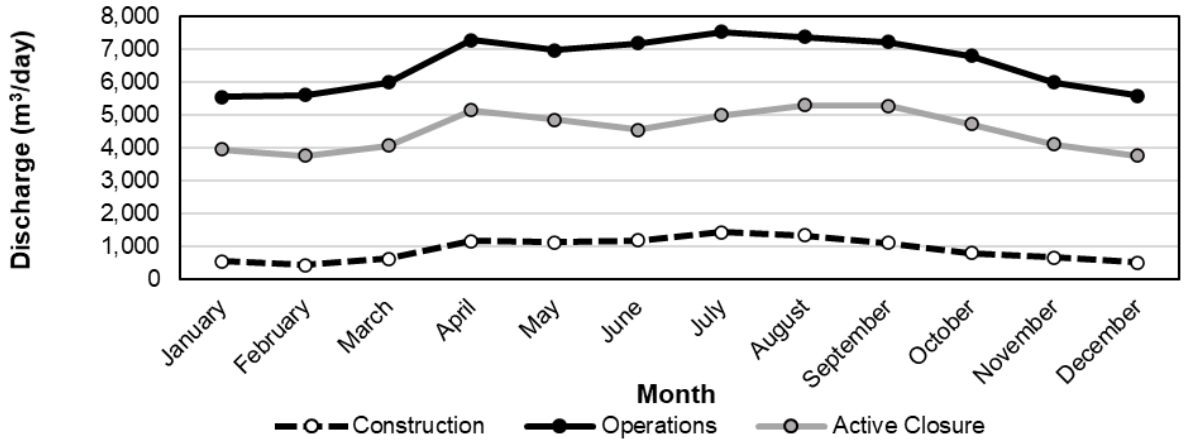
The estimated seasonal variation for discharge to Patterson Lake is shown in Figure 9. The discharge rates presented in Figure 9 are monthly averages while the discharge rates presented in Figure 8 are daily. The magnitude of discharge via pathways with rapid runoff response appear higher on a daily time step than the monthly average but are separated by days with much lower or zero flow conditions.

Figure 9: Seasonal Variation for a) West Surface Runoff, b) Treated Effluent, and c) East Surface Runoff for Application Case

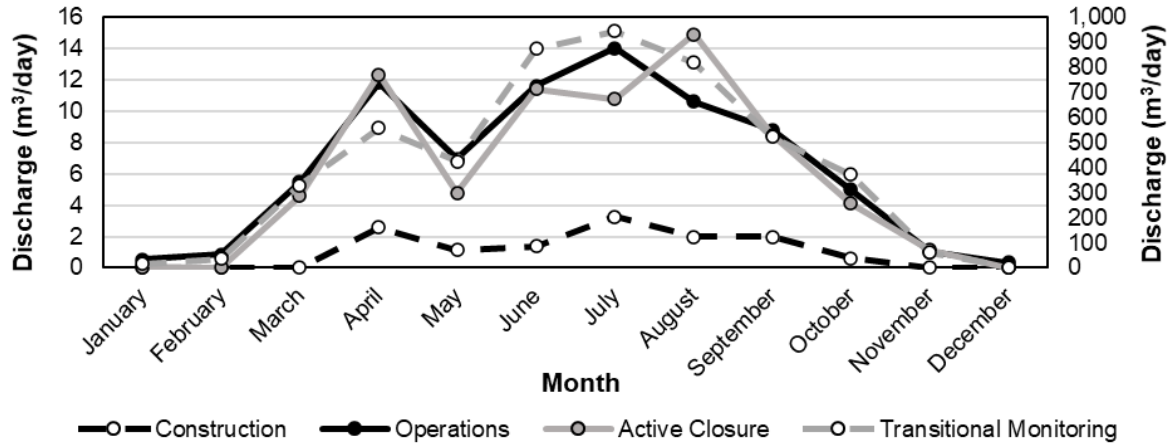
a)



b)



c)

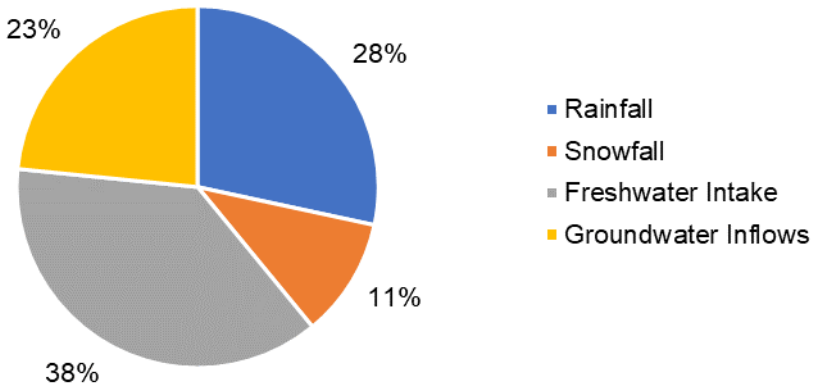


Note: Transitional Monitoring Stage shown on secondary y-axis.

Global Summary of Inflows and Outflows

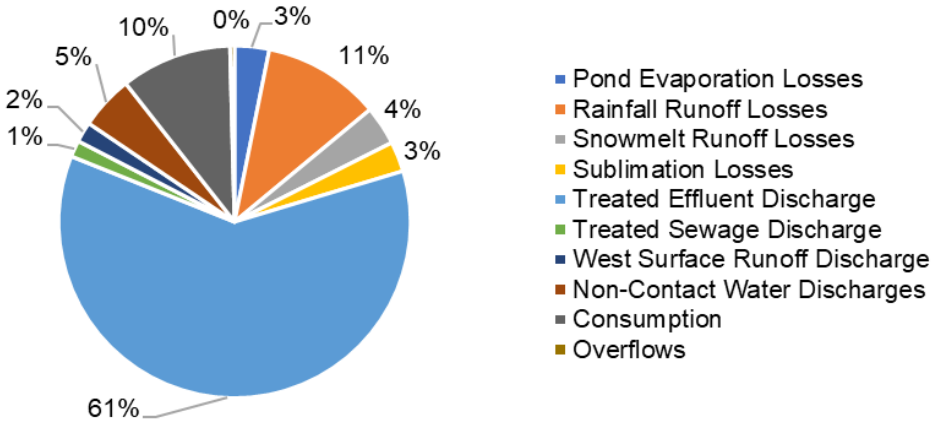
Water enters the SWWBM spatial domain by a combination of rainfall, snowfall, fresh water intake, and groundwater inflow. The simulated distribution of total SWWBM inflows over the Application Case is summarized in Figure 10. Note that the values presented in Figure 10 are prior to any losses being applied (e.g., sublimation, runoff losses). Approximately 61% of inflows are associated with groundwater inflows and fresh water intake, and 39% of inflows are associated with precipitation inputs.

Figure 10: Distribution of Inflows to Model Domain during the Application Case



Water leaves the SWWBM spatial domain by a combination of atmospheric losses, runoff losses (surface storage, soil storage, evapotranspiration), consumption, overflows, and as release water and non-contact water diversion discharges. The simulated distribution of total SWWBM discharges over the period from 2025 to 2068 in the Application Case is summarized in Figure 11. Approximately 64% of outflows are associated with treated effluent discharge release and non-contact water diversion discharges, 21% are associated with atmospheric losses from pond surfaces and runoff losses, and 10% are associated with consumption. The small percentage (less than 0.1%) of outflows as “overflow” is considered a percent error value rather than actual discharge.

Figure 11: Distribution of Outflows from the Model Domain during the Application Case



Note: The 0% shown at the top of Figure 11 corresponds to Overflows.

5.1.2 Sensitivity Scenarios

As described in Section 4.3, Model Scenario Development, the model includes an Application Case as well as sensitivity analysis scenarios to provide context for uncertainty and potential implications for different assumptions. The sensitivity scenarios are intended to provide information on how the variation of climate, process efficiency, water quality assumptions, and operational uncertainties may affect the SWWBM results for the different phases of the Project. The model scenarios are presented in Table 8.

5.1.2.1 Sensitivity to Climate Cycles and Climate Change

This subsection discusses the sensitivity of the site water management system to cycles observed in the historical climate as well as projected change to future climate over the Project lifespan. The sensitivity of the site water management system to climate cycles and climate change was evaluated using targeted scenarios as described below. Results for the sensitivity to climate cycles and climate change focus on variations of treated effluent discharge (Q02) as simulated by various sensitivity scenarios. A summary of simulation results under various climate scenarios is presented in Table 13.

Timing of Project in Climate Cycles

The Application Case (Scenario 1) adopts current climate and arbitrarily pairs the start date of the historical climate time series to the start date of the model simulations (i.e., historical time 1 January 1979 adopted for 1 January 2025). This assumes that the 2025 timing of the Project in periodic climate cycles will be the same as 1979. Climate is naturally variable, and it is uncertain if the Project time will synchronize with the climate cycles, as assumed in the modelling exercise. Scenario 2 was run to test if the model is sensitive to the potential timing of climate cycles. The start date of the model simulations was paired with a historical date based on a high-level estimate of oscillating climate cycles from the Pacific decadal oscillation, which is a longer-term climate oscillation that influences continental climates in the Prairie provinces. Under this sensitivity scenario, the historical time series value for 1 January 1988 was adopted for 1 January 2025 and the historical time series was otherwise looped similar to Scenario 1. The model results for Scenario 2 were only marginally different than Scenario 1, which verifies the model results are not sensitive to the timing of the Project phases relative to the timing of natural climate cycles.

Randomized Climate Variability

The Application Case (Scenario 1) adopts current climate based on the historical climate time series in a deterministic mode and assumes that future conditions and cycles will follow similar oscillations experienced in the past. Scenario 3 was run to test if the model is sensitive to randomization of historical climate. Stochastic parameters were used in GoldSim to randomly reselect which historical year to apply to a given model year during the simulation. The model results for Scenario 3 were only marginally different than Scenario 1, which verifies the model results are not sensitive to the timing of the Project phases relative to the timing of natural climate cycles.

Table 13: Summary of Simulation Results under Various Climate Scenarios

Climate Scenario	Parameter	Rainfall (mm/yr)	Snowfall (mm/yr)	Evaporation (mm/yr)	Fresh Water Intake (m^3/yr)	Treated Effluent Discharge (m^3/yr)	Treated Sewage Discharge (m^3/yr)
Application Case – historical (Scenario 1)	Mean	386	142	541	1,582,704	2,401,662	54,014
	St. Dev.	79	27	44	150,311	142,547	585
	Minimum	259	79	408	958,430	1,813,026	52,755
	Maximum	530	208	633	1,664,568	2,564,782	54,835
Application Case – deterministic (Scenario 2)	Mean	391	144	537	1,577,654	2,400,740	53,856
	St. Dev.	82	27	42	153,138	140,488	641
	Minimum	259	79	408	921,263	1,854,283	52,575
	Maximum	530	208	633	1,664,568	2,556,936	54,828
Application Case – stochastic (Scenario 3)	Mean	386	142	541	1,582,196	2,404,925	54,031
	St. Dev.	79	27	44	159,145	125,458	622
	Minimum	259	79	408	880,560	1,926,889	52,376
	Maximum	530	208	633	1,664,568	2,523,826	54,825
Wet cycle (Scenario 9)	Mean	458	133	527	1,533,558	2,429,265	52,854
	St. Dev.	76	32	63	155,431	121,166	1,079
	Minimum	329	87	478	904,637	1,930,431	51,575
	Maximum	523	170	633	1,664,641	2,510,500	54,771
Dry cycle (Scenario 10)	Mean	300	134	556	1,594,487	2,340,440	54,114
	St. Dev.	20	14	39	142,614	111,780	327
	Minimum	273	114	519	967,406	1,846,640	53,445
	Maximum	329	156	607	1,664,641	2,395,222	54,748
Climate change scenario (Scenario 5)	Mean	404	156	662	1,576,452	2,427,624	53,901
	St. Dev.	83	29	42	156,722	146,831	648
	Minimum	273	87	523	931,645	1,828,998	52,770
	Maximum	559	230	750	1,664,568	2,585,851	54,870

St. Dev. = standard deviation.

Prolonged Wet Cycle

Scenario 9 evaluated the sensitivity of the site water management system to a prolonged wet cycle. The meteorological time series for the four years between 1 January 1995 and 13 December 1998, observed to be the

wettest four consecutive years in the 41-year historical precipitation time series, was looped over the model simulation for anticipated Project activities from 2025 to 2068. A duration of four years is associated with prolonged periods of wetness in the historical record and retaining four consecutive years allows the simulation to retain the autocorrelation present in the natural oscillation of climate. A summary of simulation results under the prolonged wet cycle is presented in Table 13. The average precipitation over the four-year wet cycle evaluated was 591 mm per year, which is roughly 12% higher than the annual mean over the full historical record. Over this period, increased precipitation was largely due to increased rainfall. During the prolonged wet cycles, fresh water intake (I01) is not projected to increase based on the simulated results, and the nominal discharge rate (Q02) is projected to increase marginally by less than 1% based on simulated results. Annual fresh water decreased by approximately 3% from the Application Case based on the wet cycle simulations. The small magnitude of change means that the system is relatively insensitive to wet cycle precipitation and runoff relative to the normal climate because other sources (fresh water intake and underground water) constitute the majority of inputs to the site water management system.

Prolonged Dry Cycle

Scenario 10 evaluated the sensitivity of the site water management system to a prolonged dry cycle. The meteorological time series for the four years between 1 January 1979 and 13 December 1983, observed to be the driest four consecutive years in the 41-year historical precipitation time series, was looped over the model simulation for anticipated Project activities from 2025 to 2068. A duration of four years is associated with prolonged periods of dryness in the historical record, and retaining four consecutive years allows the simulation to retain the autocorrelation present in the natural oscillation of climate. A summary of simulation results under the prolonged dry cycle is presented in Table 13. The average precipitation over the four-year dry cycle evaluated was 434 mm per year, which is roughly 18% lower than the annual mean in Scenario 1. During prolonged dry cycles, fresh water intake (I01) is projected to increase by less than 1%, and the nominal discharge rate is projected to decrease marginally by less than 1% relative to the Application Case. During Operations, seasonal decreases in discharge are highest in summer due to high pond evaporation rates relative to rainfall. The small magnitude of change means that the system is relatively insensitive to a dry cycle precipitation and runoff relative to the normal climate because other sources (fresh water intake and underground water) constitute the majority of inputs to the site water management system.

Projected Climate Change

Scenario 5 evaluated the anticipated effect of climate change. The anticipated effect of climate change was assessed by adjusting the current climate to reflect mean projected climate change for the 2050s based on the climate change assessment completed by WSP as part of EIS Section 22, Assessment of Effects of the Environment on the Project. The nature of the change to historical climate varies geographically and will be dynamic over time. Site-specific future climate projections were developed for the Project through analysis of available projections from a multi-model ensemble. The multi-model ensemble consists of available regional scale projections from several climate models representing different future climate scenarios (e.g., level of greenhouse gas emissions). The 2050s (i.e., the period of 2041 to 2070) represent an upper bound in terms of climate change during the Project period. Climate change projections were incorporated by considering the projected monthly changes to temperature and precipitation. Temperature and precipitation are expected to increase under the mean climate change scenario, as well as potential atmospheric losses to lake evaporation and evapotranspiration. Sublimation is expected to decrease due to a shorter snow-covered period. A summary of

simulation results under the mean climate change scenario is presented in Table 13 and shows a small decrease in intakes and small increase in discharges relative to the Application Case.

5.1.2.2 Sensitivity to Extreme Events

Summer Probable Maximum Precipitation

Scenario 6 evaluated the sensitivity of the site water management infrastructure to extreme summer rainfall events. The maximum magnitude of PMP for northern Saskatchewan is expected to occur in mid-July when temperatures are highest. The performance of the water management system in response to a summer PMP was simulated by applying a summer 24-hour PMP rainfall event of 489.2 mm on 15 July annually in the historical compiled climate data. Inserting the PMP event each 15 July in the 43-year record allows for 43 model iterations under a variety of antecedent conditions, influenced by precipitation in early July. The model scenario results confirm that the site water management infrastructure design is appropriate but that operational refinement for flood storage dewatering is warranted during later stages of Project planning. The simulations showed that containment ponds contained the summer PMP runoff. In general, the contingency pond and settling pond become stressed approximately one week after the PMP event in response to simulated increases in pumping from other ponds. In practice, this can be managed by increasing the pumping rate following the PMP event to regain flood storage. Further refinement of the contingency pond and settling pond operation would be explored as part of future design and project planning.

Spring Probable Maximum Precipitation

Scenario 7 evaluated the sensitivity of the site water management infrastructure to extreme spring runoff events. The site water management system is designed to contain mineralized contact water during a PMP event. The magnitude of the PMP varies seasonally in response to seasonal variation of the persistent atmospheric dew point temperature, which governs the amount of precipitable water that can be held in the atmosphere. In spring, persistent dew point temperature and PMP rainfall volumes are lower than in mid-summer. However, the presence of accumulated snowpack and the runoff generating mechanics of a rain-on-snow event mean that in some cases, a spring PMP may govern the inflow design flood for containment ponds. The performance of the system in response to a spring PMP was simulated by applying a spring PMP rainfall event annually in the historical compiled climate data. The historical climate time series was modified by replacing 15 April total precipitation and rainfall with a spring 24-hour PMP of 154.6 mm (Hopkinson 1999). Inserting the spring PMP event each 15 April in the 43-year record allows for 43 model iterations under a variety of antecedent conditions (i.e., conditions prior to the PMP event occurring) influenced by precipitation and snowmelt in early April. The model scenario results confirm the site water management infrastructure design is appropriate, and the containment ponds were projected to contain the spring PMP runoff, including snowmelt.

Climate Change Probable Maximum Precipitation

Scenario 8 evaluated the sensitivity of the site water management infrastructure to changes in extreme storm events that may result from climate change over the Project lifespan. The model was run using the projected mean climate change time series with a climate change 24-hour PMP rainfall of 547.9 mm occurring each year on 15 July. The current flood storage design basis for containment in ponds receiving contact water from mineralized or potentially mineralized surfaces (i.e., site runoff pond #1 (P/S00), PAG runoff collection area (P/S07), process ponds (P/S05 and P/S06; SP05)) is for a summer PMP of 489.2 mm. Under the climate change 24-hour PMP, most containment ponds are projected to maintain sufficient storage containment but may result in loss of

freeboard under some antecedent conditions during the Operations phase. However, there was an increased probability of a PMP overflow from site runoff pond #1 (P/S00) during the Operations phase. Similar to Scenario 7 (i.e., summer PMP), the stress on the contingency pond (P/S05) would increase when regaining normal flood storage. Although it is probable that climate change will lead to warmer and wetter conditions, the rate, magnitude, and timing of projections are highly uncertain.

5.1.2.3 Sensitivity to Upset Conditions

As described in Section 3.1, Model Objectives and Overview, the SWWBM is a decision-assist tool that supports development of the water management procedures under the Environmental Protection Program and informs the need for, and development of, contingency plans in the event of upset conditions or operational “what ifs” (see Section 3.7.2, Added Flexibility). Such scenarios help to avoid potential adverse consequences from upset conditions during Operations.

Scenario 15 was used to evaluate sensitivity of the site water management infrastructure to reasonably foreseeable upset conditions. The reasonably foreseeable upset conditions simulated pump failures throughout the site water management system during operations that could be repaired, replaced, or recommissioned in a reasonable period of time. For each year in the simulation, one pump was triggered to fail for the first seven days of July before restarting. Over the full simulation, 24 individual pumps were tested for a specific pump failure under similar conditions. The simulation assumed that redundant pumps were not in place. For Scenario 15, the climate data for the historical year 1993, an average year based on rainfall and snowfall, was repeated in a loop to control for climate variability while evaluating the response to upset conditions. Early July was selected for the timing of the pump failure as this time of year is a period when site water management pumps are usually active.

Based on the simulations, surface ponds and collection sumps/areas are projected to have sufficient capacity to avoid overflows in the event of a pump failure. However, a seven-day pump failure is projected to result in an overflow of the settling pond (P/S06; SP05), overflows in effluent treatment (between the effluent treatment plant (T01) and the treated effluent tank (P/S18)), insufficient inflows to the process plant (T04) to meet ore production demand, and overflows in the underground sumps (P/S20 and P/S21) and groundwater pooling.

5.2 Water Quality Model Results

The site water quality model results for the Application Case and sensitivity scenarios are described in the following subsections. Monthly average results for the three modelled discharge points (i.e., Q01, Q02, and Q05) are tabulated for the Application Case and each sensitivity scenario in Appendix G, Water Quality Results.

5.2.1 Application Case for Effects Assessment

5.2.1.1 Expected Conditions

Water quality during all Project phases was summarized at six water quality surveillance points within the model as follows:

- water in site runoff pond #2 (P/S09; SP04; Figure 5);
- release water discharged to the environment (i.e., final point of control) via the west surface runoff discharge (Q01);
- water entering the process plant (SP08);

- post-process plant water (SP06);
- water in the settling pond (SP05); and
- release water discharged to the environment (i.e., final point of control) via the treated effluent ponds (Q02).

The quality of release water being discharged to the environment via the treated sewage outfall (Q03) was assumed to be constant over time and as such was not assessed in the SWWBM, though it was considered in the regional surface water quality model and effects assessment (EIS Section 10). The predicted treated sewage effluent quality is tabulated in Appendix E.

Water quality at the final points of control (i.e., SP04 and Q02) throughout the three Project phases was assessed and compared to the proposed environmental release targets (Appendix H) to determine whether water could be discharged to the environment or needed to be recirculated to the ETP.

Throughout Operations, modelled cadmium, iron, mercury, phosphorus, uranium, and zinc concentrations in site runoff pond #2 (P/S09; SP04) exceed the proposed environmental release targets and as such water is continuously routed to the settling pond within the model for eventual treatment rather than being routed to the west surface runoff discharge point (Q01) for direct release. Operational daily minimum, average, and maximum concentrations of these constituents are summarized in Table 14. The primary loading source of these constituents to site runoff pond #2 (P/S09; SP04) is the NPAG WRSA.

Table 14: Projected Concentrations of Selected Constituents in Site Runoff Pond #2 throughout Operations

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Cadmium	0.000051	0.000092	0.000093	0.000096
Iron	0.30	1.1	1.1	1.1
Mercury	0.00019	0.00025	0.00026	0.00027
Phosphorus	0.010	0.11	0.11	0.12
Uranium	0.030	0.33	0.33	0.34
Zinc	0.037	0.054	0.055	0.057

Water in site runoff pond #2 (P/S09; SP04) would be routed to the settling pond (P/S06; SP05) for reuse and/or treatment throughout the three Project phases. As a result, the water being discharged to the environment via the west surface runoff discharge, which is downstream of, and not collected by, site runoff pond #2 (P/S09; SP04), would be primarily sourced from undisturbed areas and disturbed areas covered with construction (i.e., borrow) material located downstream of site runoff pond #2 (P/S09; SP04). All modelled constituents in the west surface runoff discharge are below the proposed environmental release targets, except for cadmium. The average cadmium concentration discharged to the environment from the west surface runoff discharge throughout operations is predicted to be 0.000054 mg/L, which is slightly above the proposed environmental release target of 0.00051 mg/L. This predicted high cadmium concentration is a result of the source term input for borrow material used to construct the pads. However, the source term is based on one individual shake flask leachate test that

was reported to be below a method detection limit (0.0001 mg/L); an input value of half of the detection limit was assumed for modelling purposes.

Water entering the ETP would be sourced from the settling pond, post-process plant, and fresh water intake from Patterson Lake. In general, modelled major ion and radionuclide (excluding radium-226) concentrations in the ETP feed do not exceed their respective proposed environmental release targets. Metal concentrations in the ETP feed are typically one to three orders of magnitude higher than their respective targets throughout Operations because of effects from process activities. After treatment, modelled metal concentrations are predicted to be at least an order of magnitude lower than their respective release targets, except for arsenic and uranium. The modelled average treated arsenic concentration during Operations is 0.037 mg/L, which is below the proposed environmental release target of 0.043 mg/L, and the average uranium concentration is 0.010 mg/L, which is below the proposed environmental release target of 0.030 mg/L. Concentrations of selected constituents before and after treatment are plotted in Figure 12.

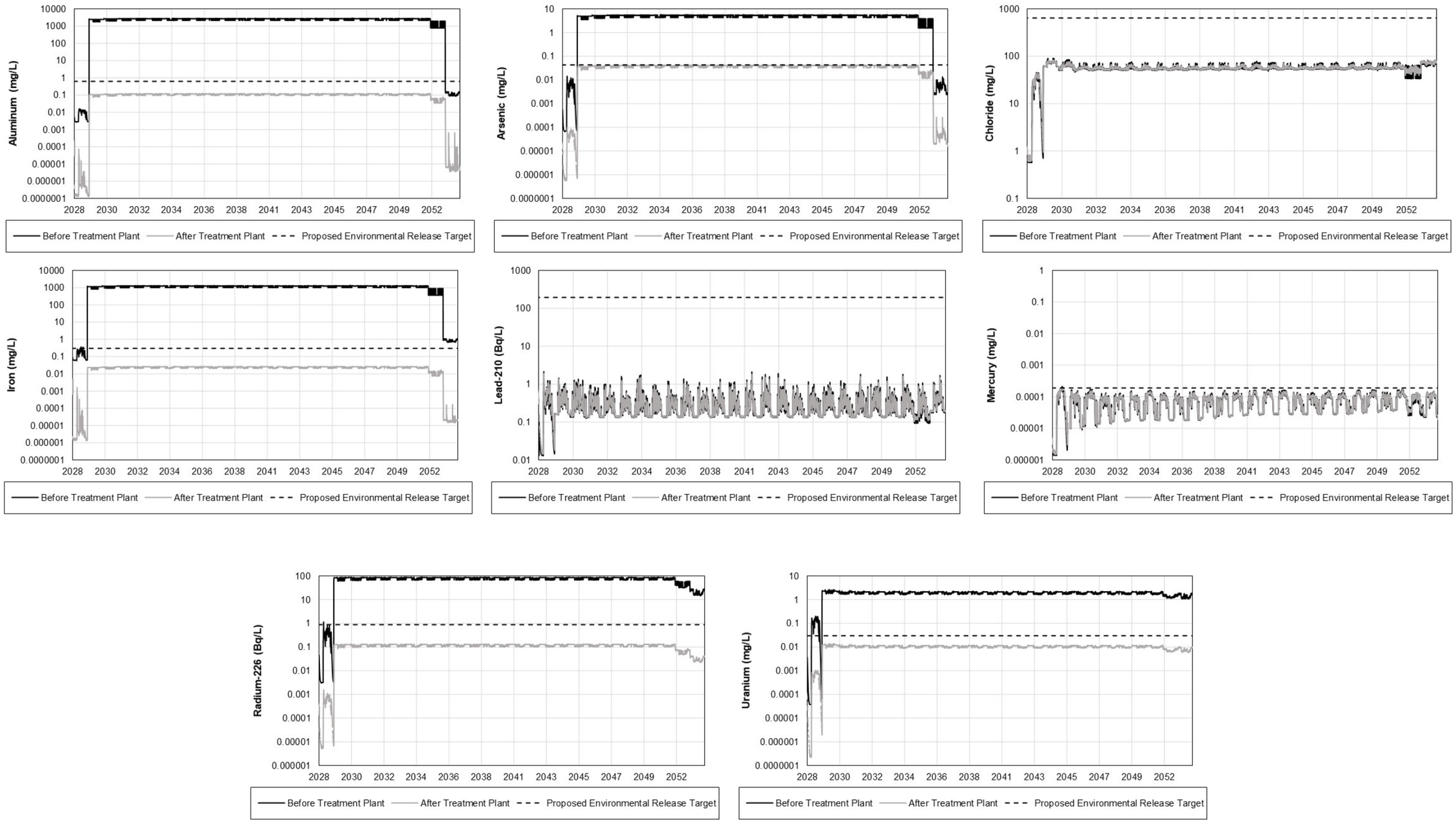
The primary contribution of predicted major ion, metal, and radionuclide loads to the ETP is variable. Metals would be primarily sourced from the process plant, followed by either the underground rock wall or the PAG WRSA. The main sources of each constituent are as follows:

- **groundwater from shafts:** calcium, chloride, magnesium, and sodium;
- **process activities:** metals (excluding mercury), radium-226, and sulphate;
- **ore stockpile:** lead-210 and polonium-210;
- **underground rock wall:** thorium-230; and
- **WRSAs (PAG and NPAG):** mercury.

In general, modelled water quality in the treated effluent ponds is below the proposed environmental release targets throughout the three Project phases and the water can be discharged to the environment. For short periods of time (i.e., weeks) during the Construction phase, total ammonia and mercury concentrations are predicted to exceed the proposed environment release targets (i.e., 15.5 mg/L as N and 0.00019 mg/L, respectively) in treated effluent pond #1. Ammonia exceedances are noted in January, March, and April 2028, and the maximum predicted concentration is 19.5 mg/L as nitrogen. Mercury exceedances are noted in May, August, and September 2028, and the maximum predicted concentration is 0.00030 mg/L.

It should be noted that the average sulphate concentration being discharged to the environment during Operations is 2,900 mg/L, which is above the proposed environmental release target of 1,116 mg/L and is based on preliminary ETP models (Lieu 2021). The proposed environmental release target is hardness dependent and was developed using the baseline hardness concentration in Patterson Lake; however, it is expected that hardness would increase in Patterson Lake during Operations due to the treated effluent discharge and that the sulphate threshold would increase in the receiving environment.

Figure 12: Concentrations of Selected Constituents before and after Treatment



Bq/L = becquerels per litre.

5.2.1.2 Expected Far-Future Scenario Conditions

Water quality was assessed at the following two discharge nodes in far-future scenario conditions:

- water discharged to the environment via the west surface runoff discharge (Q01); and
- water discharged to the environment via the east surface runoff discharge (Q05).

Water discharged via the west surface runoff (Q01) comprises runoff from the covered NPAG WRSA and other reclaimed and revegetated surfaces, and water discharged via the east fresh water diversion (Q05) is composed of runoff from the covered PAG WRSA and undisturbed areas.

The quality of water discharged to Patterson Lake in the far-future scenario is not predicted to exceed the proposed environmental release targets. The quality of runoff from the covered NPAG WRSA is assumed to be consistent with the construction (i.e., borrow) material quality and is tabulated in Appendix E. The main contribution of load to the east fresh water diversion is runoff from the covered PAG WRSA. This runoff quality is also assumed to be consistent with borrow material quality and tabulated in Appendix E.

5.2.2 Sensitivity Scenarios

5.2.2.1 Sensitivity to Climate Change

A sensitivity case was run for all the Project phases and the far-future scenario to assess how the Project site discharge concentrations are affected by climate change (Scenario 5). The water quality inputs for this sensitivity assessment are the same inputs as used in the Application Case for effects assessment; only the flow rates vary.

Overall, the effects from climate change on water quality are predicted to be minor and do not result in any additional exceedances of the proposed environmental release targets from the Application Case. The effects from climate change were most notable in the west surface runoff discharge (Q01), which receives a large proportion of natural flows. Maximum monthly average predicted concentrations throughout the three Project phases were approximately 1.5 times higher than the Application Case and monthly average predicted concentrations were approximately 1.2 times higher. Predicted treated effluent concentrations were similar to the Application Case predictions, likely because the primary source of mass to the ETP is from the process plant, which is largely unaffected by climate change.

5.2.2.2 Sensitivity to Source Term Variability

A sensitivity case was run for all Project phases and the far-future scenario to assess how the Project site discharge concentrations change when upper bound source terms are used as input data (Scenario 11 and Scenario 12).

Similar to the Application Case scenario, cadmium, iron, mercury, phosphorus, uranium, and zinc are predicted to exceed the proposed environmental release targets in site runoff pond #2 (P/S09; SP04); thus, water from this pond is routed to the settling pond for eventual treatment. Predicted average concentrations of cadmium, iron, mercury, phosphorus, uranium, and zinc in site runoff pond #2 (P/S09; SP04) during Operations are summarized in Table 15. No exceedances of any other constituents are noted in site runoff pond #2 (P/S09; SP04) as a result of the upper-bound source term inputs.

Table 15: Projected Upper Bound Sensitivity Scenario Concentrations of Selected Constituents in Site Runoff Pond #2 throughout Operations

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Cadmium	0.000051	0.00013	0.00013	0.00014
Iron	0.30	1.7	1.7	1.7
Mercury	0.00019	0.00038	0.00038	0.00040
Phosphorus	0.010	0.27	0.27	0.28
Uranium	0.030	0.33	0.33	0.34
Zinc	0.037	0.082	0.083	0.085

Since water in site runoff pond #2 (P/S09; SP04) would be routed to the settling pond (P/S06; SP05) throughout the three Project phases, the water being discharged to the environment via the west surface runoff would primarily be sourced from undisturbed areas and disturbed areas covered with construction (i.e., borrow) material. As noted in Table 10, the input for construction material was developed from shake flask leachate of one sample (i.e., P11 borrow material). The input data for this source are the same for the Application Case and upper bound sensitivity scenario due to the limited dataset; therefore, the quality of water being discharged via the west surface runoff is similar to the quality in the Application Case scenario.

Within the treated effluent ponds (P/S01 to P/S04; SP02), a number of constituents exhibit concentrations greater than the proposed environmental release targets due to upper-case source term inputs. As with the Application Case source term inputs, the average sulphate concentration in the treated effluent ponds is 2,900 mg/L. Additional constituents with exceedances include chloride, mercury, phosphorus, and uranium. Average concentrations of these constituents during Operations are summarized in Table 16.

The main contribution of upper-case chloride loads to the treated effluent ponds (P/S01 to P/S04; SP02) would be from natural groundwater that is collected and pumped to the settling pond (P/S06; SP05). The main contribution of mercury would be from the PAG WRSA and phosphorus is sourced from the WRSAs. The main contribution of uranium in the upper-case source terms would be from the ore storage stockpile.

These predictions were carried forward to the surface water quality assessment (EIS Section 10) and Environmental Risk Assessment (TSD XXI).

Table 16: Projected Upper Bound Sensitivity Scenario Concentrations of Selected Constituents in Treated Effluent Ponds throughout Operations

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Chloride	640	2.0	1,682	2,892
Mercury	0.00019	0.0000088	0.00012	0.00026
Phosphorus	0.010	0.058	0.11	0.20
Uranium	0.030	0.000028	0.0023	0.16

As described in Section 5.2.1.2, Expected Far-Future Scenario Conditions, all site discharges in the far-future scenario are a combination of undisturbed runoff and runoff from disturbed areas, including the covered NPAG and PAG WRSAs. The WRSAs closure cover systems (i.e., material used to permanently enclose waste rock piles during closure) and reclaimed areas are assumed to consist of the construction (i.e., borrow) source material, which does not have different inputs for the upper bound source terms. As such, the post-closure discharge quality in the upper-case source term scenario is equal to the quality described in Section 5.2.1.2, Expected Far-Future Scenario Conditions. The water quality does not exceed any of the proposed environmental release targets.

5.2.2.3 Sensitivity to Treatment Efficiency and Source Term Variability

Two sensitivity cases were run to assess how concentrations in the treated effluent ponds change when the ETP (T01) is not operating at its maximum efficiency (Scenario 12 and Scenario 13). As noted in Section 4.5.2, Source Term Assumptions, the lower ETP efficiency used in these scenarios was assumed to be 99% of the maximum treatment efficiency.

The Application Case source term inputs combined with low treatment plant removal efficiency results in a number of constituents with concentrations consistently greater than the proposed environmental release targets in the treated effluent ponds. These constituents include aluminum, arsenic, cadmium, chromium, cobalt, copper, iron, lead, radium-226, and vanadium. The daily minimum, average, and maximum concentrations of these constituents in the treated effluent ponds during Operations are presented in Table 17. The primary load contribution of these constituents is from process activities.

Table 17: Projected Concentrations of Selected Constituents in Treated Effluent Ponds with Low Treatment Plant Removal Efficiency

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Aluminum	0.62	3.8	23	27
Arsenic	0.043	0.013	0.078	0.095
Cadmium	0.000051	0.000016	0.000096	0.00011
Chromium	0.0045	0.0050	0.029	0.035
Cobalt	0.034	0.0055	0.033	0.039
Copper	0.016	0.061	0.36	0.44
Iron	0.30	1.8	10	13
Lead	0.008	0.0082	0.048	0.058
Radium-226[(a)]	0.88	0.11	0.81	0.95
Vanadium	0.052	0.035	0.20	0.25

a) Units in becquerels per litre.

Upper-case source term inputs combined with low treatment plant removal efficiency result in a larger number of constituents with concentrations greater than the proposed environmental release targets in the treated effluent ponds. Constituents in addition to the ones identified using Application Case source terms include chloride, mercury, molybdenum, and uranium. Daily minimum, average, and maximum concentrations of these constituents in the treated effluent ponds during Operations are presented in Table 18.

Table 18: Projected Upper-Case Concentrations of Selected Constituents in Treated Effluent Ponds with Low Treatment Plant Removal Efficiency

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Aluminum	0.62	4.2	23	27
Arsenic	0.043	0.015	0.078	0.095
Cadmium	0.000051	0.000017	0.00010	0.00016
Chloride	640	2.2	1,682	2,891
Chromium	0.0045	0.0054	0.029	0.035
Cobalt	0.034	0.0060	0.033	0.039
Copper	0.016	0.067	0.36	0.44
Iron	0.30	2.0	11	13
Lead	0.008	0.0089	0.048	0.058
Mercury	0.00019	0.0000097	0.00012	0.00027
Molybdenum	0.64	0.0064	0.16	1.4
Radium-226[(a)]	0.88	0.12	0.82	0.96
Uranium	0.030	0.0023	0.64	0.46
Vanadium	0.052	0.038	0.20	0.25

a) Units in becquerels per litre.

The predicted results in Table 17 and Table 18 suggest that the assumed removal efficiency of the ETP (T01) is slightly above the minimum requirements to meet the proposed environmental release targets and that there is limited contingency available. These results are provided to assist future evaluation and refinement of the ETP (T01) design as part of the Environmental Code of Practice.

5.2.2.4 Sensitivity to Design Alternatives

A sensitivity case was run for all Project phases to assess how concentrations in final points of control (i.e., site runoff pond #2 (P/S09; SP04) and treated effluent ponds (P/S01 to P/S04; SP02)) change when an alternate WRSAs option is carried forward for the Project (Scenario 14). For context, the Application Case considers a segregated unlined NPAG WRSA and a lined PAG WRSA with alternating lifts of engineered source control. Scenario 14 considers a WRSAs option involving incremental hauling and placing of waste rock in lifts in a single, unsegregated and unlined facility with alternating lifts of engineered source control material.

Similar to the Application Case (Section 5.2.1.1, Expected Conditions), cadmium, iron, mercury, phosphorus, uranium, and zinc concentrations in site runoff pond #2 (P/S09; SP04) exceed proposed environmental release targets under Scenario 14. Additional constituents that exceed the proposed targets include chromium, cobalt, copper, manganese, and selenium. The daily minimum, average, and maximum concentrations of these constituents in site runoff pond #2 (P/S09; SP04) during Operations are summarized in Table 19.

Concentrations of constituents in the treated effluent ponds are below proposed environmental release targets, which is consistent with results from the Application Case.

Table 19: Projected Concentrations of Selected Constituents in Site Runoff Pond #2 with Alternative Waste Rock Storage Area Source Term

Constituent	Proposed Environment Release Target (mg/L)	Projected Concentrations throughout Operations (mg/L)		
		Minimum	Average	Maximum
Cadmium	0.000051	0.00082	0.00082	0.00085
Chromium	0.0045	0.0058	0.0059	0.0061
Cobalt	0.034	0.41	0.41	0.43
Copper	0.016	0.86	0.87	0.90
Iron	0.30	5.1	5.2	5.4
Manganese	0.21	0.25	0.25	0.26
Mercury	0.00019	0.00044	0.00045	0.00046
Phosphorus	0.010	0.11	0.11	0.12
Selenium	0.0080	0.013	0.013	0.013
Uranium	0.030	0.33	0.33	0.34
Zinc	0.037	0.18	0.18	0.19

6.0 MODEL LIMITATIONS AND AREAS OF UNCERTAINTY

There is uncertainty in any modelling exercise. The sources of uncertainty for the SWWBM are listed in Table 20 alongside the mitigations adopted to manage uncertainty in the current exercise. In future modelling exercises using the SWWBM, these sources of uncertainty would be considered for further refinement as more information becomes available.

Table 20: Summary of Uncertainties and Mitigation Measures

Uncertainty	Description	How Uncertainty was Mitigated
Climate data	Site climate data have been monitored for a limited period, and a climate database compiled from publicly available sources is necessary to achieve the objectives of the study. The climate database selected as input data to the SWWBM is fit-for-purpose data; however, uncertainty may result from biases in monitoring methods and location of monitoring.	Fit-for-purpose data were used. Site data were used where possible. Publicly available sources were checked against other data collected in the region. Sensitivity to multiple climate and weather events was tested.
Model Linkages	Uncertainty can result from the exchange of data between models where output from one model is used as input to another.	A similar time step and temporal domain were used for SWWBM, regional hydrology modelling, and regional surface water quality modelling where possible. Model teams communicated regularly to discuss assumptions and data needs to facilitate consistency where possible. Detailed internal reviews were completed and model performance was verified.

Table 20: Summary of Uncertainties and Mitigation Measures

Uncertainty	Description	How Uncertainty was Mitigated
Future climate	The far-future scenario is conceptualized as a long-term equilibrium state with a time horizon exceeding current abilities to forecast climate and observed historical climate is assumed.	Climate change scenario was applied, and timing of application was conservative. Climate change scenarios were incorporated to manage uncertainty related to future changes in climate.
Calibration data	At the current phase of model and Project development, monitoring data are available for calibration or validation of the SWWBM. As a result, it is not possible to calibrate or validate predictive results of the model.	SWWBM performance was verified qualitatively. In future, model can be validated in early operations.
Model constraints	Some natural phenomena being simulated are the result of highly complex and interconnected processes that are currently not fully understood. Any model of these phenomena is a simplification of this complexity.	Sensitivity scenarios were used to contextualize uncertainty due to simplification of natural phenomena. Conservative runoff coefficients were used.
Project understanding	The current understanding of the Project (e.g., existing conditions, development plans) is expected to be of sufficient detail to support the environmental assessment for the Project; however, the level of Project understanding used in the progressive development of the SWWBM will need to be continually tested and validated as the Project advances.	Sensitivity scenarios were used to manage uncertainty related to process efficiency, water quality assumptions, and operational uncertainties that may affect the SWWBM for the different phases of the Project. The model is intended to be updated to reflect the Water Management Plan throughout Operations. There was close interaction with the NexGen and FS Engineering team to maintain project understanding.
Geochemical source terms	There is some inherent uncertainty with respect to conceptualization of geochemical reactions in site conditions.	Sensitivity scenarios with variable efficiency rates were used to contextualize uncertainty due to geochemical source terms. “Upper-case” source terms provide a boundary.
Treatment efficiencies	There is some inherent uncertainty with respect to removal efficiency of treatment processes.	Sensitivity scenarios with variable rates of efficiency were used to contextualize uncertainty due to treatment plant operations. Treatment efficiencies were compared to published data from other uranium mines to reduce uncertainty.
Groundwater inflow rates	Groundwater inflow rates developed for PFS engineering and carried to FS engineering were adopted. Inflows from groundwater make up 23% of inflows with limited losses moving through the system to the ETP. The water balance is expected to be sensitive to variations in the rate of groundwater inflow.	Groundwater inflow was assumed to be a constant rate representative of full development of the underground workings toward the end of the Project lifespan and not graduated based on underground mine development.

SWWBM = site-wide water balance and water quality model; PFS = prefeasibility study; FS = feasibility study; ETP = effluent treatment plant.

7.0 KEY FINDINGS

An integrated SWWBM was developed as a decision-assist tool to support development of the water management procedures under the Environmental Protection Program, evaluate engineering design decisions, and support assessment of the effects of Project activities on the receiving environment. Key findings related to the present model execution and EA are as follows:

- The Project would result in a net discharge of water to Patterson Lake during Operations. The net discharge would vary according to Project activities, seasonality, and in response to longer-term climate cycles.
- Treated effluent discharge to Patterson Lake is expected to be highest during Operations, when Project activities would peak. Treated effluent discharge during Operations is predicted to average 6,575 m^3/d and range from a minimum of 634 m^3/d to a maximum of 15,581 m^3/d.
- Treated sewage discharge to Patterson Lake is expected to be highest at the beginning of Operations when there is overlap between Construction and Operations activities and when camp populations will be highest. Treated sewage discharge during Operations would average 148 m^3/d and range from a minimum of 0 m^3/d to a maximum of 165 m^3/d.
- Fresh water intake from Patterson Lake is expected to be highest during Operations, when Project activities would peak, and is predicted to average 4,333 m^3/d and range from a minimum of 1,522 m^3/d to a maximum of 4,548 m^3/d.
- The Project water balance is relatively insensitive to changes in climate. The timing of the Project in climate cycles, randomized climate variability, prolonged wet cycles, prolonged dry cycles, and mean projections of climate change that will be contemporary with the Project only result in small changes to the water balance.
- The Project water management system is designed to contain a summer PMP for the Project site. Under a conservative climate change scenario derived for the Project lifespan, the magnitude of the PMP is projected to increase by 15%. Performance of containment ponds that capture runoff from pads (i.e., site runoff pond #1 (P/S00)) may be stressed during a climate change PMP, resulting in the loss of freeboard, but generally does not result in a loss of containment.
- Reasonably foreseeable upset conditions such as pump failure may stress the operation of the system leading to accumulation of water above maximum operating conditions, loss of flood storage and/or freeboard, or in some instances, loss of containment. Mitigation for pump failure is recommended based on the evaluation. Depending on the pump and pipeline configuration, mitigations for pump failure may include alarm systems, pump redundancy, and/or adoption of mobile contingency pumps.
- Non-mineralized contact water generated by runoff from non-mineralized surfaces would be collected, contained in site runoff pond #2 (P/S09; SP04), tested, and if environmental release targets are exceeded, conveyed to the settling pond for reuse or treatment. Throughout Operations, cadmium, iron, mercury, phosphorus, uranium, and zinc concentrations in site runoff pond #2 (P/S09; SP04) water are predicted to exceed the proposed environmental release targets; therefore, until the waters are generated and can be tested, the water is assumed to be routed to the settling pond for treatment or reuse rather than being routed to the west surface runoff discharge point (Q01) for release.

- In general, water quality in the treated effluent ponds is below the proposed environmental release targets throughout the Application Case. For short periods of time (i.e., weeks) during Construction, total ammonia and mercury concentrations are predicted to exceed the proposed environment release targets in treated effluent pond #1. Total ammonia loadings are a function of explosives use and are predicted to exceed the proposed environmental release targets during Construction as there is less water managed on site during that time, which drives concentrations higher. Mercury loads would primarily be sourced from the WRSAs.
- Site discharge in the far-future scenario, which consists of runoff over reclaimed stockpiles and undisturbed areas, is predicted not to exceed the proposed environmental release targets.
- By running sensitivity scenarios related to water quality, namely sensitivities surrounding source terms and ETP efficiency, additional constituents were identified that may exceed the proposed environmental release targets during the Project phases, particularly if the upper bound source term inputs are realized and treatment efficiency is low. These constituents are aluminum, arsenic, cadmium, chromium, cobalt, copper, chloride, iron, lead, mercury, molybdenum, phosphorus, uranium, vanadium, and radium-226.
- A 1% reduction in the assumed ETP removal efficiency is predicted to result in exceedances of the proposed environmental release targets, suggesting that the assumed removal efficiency of the ETP is just above the minimum requirements to meet the proposed environmental release targets and that there is limited contingency available. However, as the proposed environmental release targets are conservative, exceedances of the proposed environmental release targets may not result in exceedances of water quality thresholds in Patterson Lake.
- These findings represent reasonably conservative estimates and predictions of water quantity and quality at surveillance points throughout the site and at the final point of control. These predictions form the basis for effects assessment and inform the Water Management Plan, which would be iteratively updated with site data to reduce uncertainties as operations proceed.

8.0 CLOSING

WSP is pleased to submit this report to NexGen in support of the environmental assessment for the Rook I Project. For details on the limitations and use of information presented in this report, please refer to the Study Limitations section following this page. If you have any questions or require additional details related to this study, please contact the undersigned.

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9.0 STUDY LIMITATIONS

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The scope and the period of WSP's services are as described in WSP's proposal, and are subject to restrictions and limitations. WSP did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the report. If a service is not expressly indicated, do not assume it has been provided. If a matter is not addressed, do not assume that any determination has been made by WSP in regard to it. Any assessments, designs and advice made in this report are based on the conditions indicated from published sources and the investigation described. No warranty is included, either express or implied, that the actual conditions will conform exactly to the assessments contained in this report. Where data supplied by the Client or other external sources (including without limitation, other consultants, laboratories, public databases), including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted by WSP for incomplete or inaccurate data supplied by others.

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APPENDIX A

Glossary

Term	Definition
Added flexibility	Flexibility applied only to selected models, modules, and/or facilities.
Base flexibility	Flexibility applied to all models, modules, and/or facilities.
Bermed runoff collection area	Bermed areas designed for the collection of non-contaminated runoff and temporary storage so that suspended solids can settle out before the water is released to the receiving environment.
Driver	Rationale for application of flexibility within the site-wide water balance and water quality model (SWWBM).
Effluent treatment plant	Facility consisting of a series of processes for treating contaminated water from the north area. Additional treatment processes being considered as “options” are included in the model as discrete facilities rather than being included in this facility.
Environmental release targets	Preliminary targets for release water concentration that consider applicable water quality thresholds and conditions in the receiving environment including hydrology and water quality.
Facility	Specific Project feature or natural feature (e.g., potentially acid generating stockpile, site runoff pond, effluent treatment plant, Patterson Lake).
Feature	Generic Project infrastructure or natural feature potentially affected/affecting the Project (e.g., ponds, catchments).
Framework	Provides guiding objective and approach for development of the SWWBM.
Geographical extent	Geographical limit of the SWWBM.
Model	Computational platform within the SWWBM to provide specific results.
Post-closure	Includes the Transitional Monitoring Stage and the far-future scenario.
Schedule	Life of mine temporal extent, through Construction, Operations, Closure phases and post-closure.
Stakeholder	Person or entity, including rights holders, with a direct or indirect interest in the Project and Project influence.
Sub-element	Component of the feature or facility separated to facilitate development of modules/models.
SWWBM	Instrument including one or more models, to support meeting framework objective.

APPENDIX B

Flow ID Description

Table B-1: Table of Contents

Table Number	Table Title
Table B-1	Table of Contents
Table B-2	Element Active Periods
Table B-3	ElementID - Runoff Source
Table B-4	ElementID - Groundwater Source
Table B-5	ElementID - Intake Source
Table B-6	ElementID - Pond/Storage
Table B-7	ElementID - Treatment
Table B-8	ElementID - Consumption
Table B-9	ElementID - Assessment Nodes
Table B-10	ElementID - Discharge
Table B-11	ElementID - Pumping Flows
Table B-12	ElementID - Diversion Ditch Flows
Table B-13	ElementID - Gravity Transfer Flows

Table B-2: Element Active Periods

Element	ID	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056
		Construction				Operation																								Decommissioning			
		Yr-4	Yr-3	Yr-2	Yr-1	Yr1	Yr2	Yr3	Yr4	Yr5	Yr6	Yr7	Yr8	Yr9	Yr10	Yr11	Yr12	Yr13	Yr14	Yr15	Yr16	Yr17	Yr18	Yr19	Yr20	Yr21	Yr22	Yr23	Yr24	Yr25	yr26	yr27	yr28
Site Runoff Pond #1	P/S00																																
Treated Effluent Pond #1	P/S01																																
Treated Effluent Pond #2	P/S02																																
Treated Effluent Pond #3	P/S03																																
Treated Effluent Pond #4	P/S04																																
Contingency Pond	P/S05																																
Settling Pond	P/S06																																
PAG Runoff Collection Area	P/S07																																
West Bermed Runoff Collection Area	P/S08																																
Site Runoff Pond #2	P/S09																																
Special Waste Collection Sump	P/S10																																
Ore Stockpile Collection Sump	P/S11																																
Fuel Farm Sump / Pond	P/S12																																
Batch Plant Sand and Aggregate Sump / Pond	P/S13																																
Sewage Treatment Lagoon #1 (west)	P/S14																																
Sewage Treatment Lagoon #2 (east)	P/S15																																
Airport Fueling Pad Sump / Pond	P/S16																																
Water / Oil Separator	P/S17																																
Treated Effluent Tank	P/S18																																
Effluent Treatment Plant Sump	P/S19																																
Underground Main Sump	P/S20																																
Underground Below Sump	P/S21																																
Patterson Lake	P/S22																																
Construction / Permanent Camp	R28																																
West Bermed Runoff Collection Area local catchment	R30																																
Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R31																																
Explosives Magazine Storage	R52																																
Domestic and Industrial Waste Management Area	R20																																
Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	R24																																
Batch Plant Sand and Aggregate Storage Area	R21																																
Waste Rock (NAG) Stockpile	R22																																
Lined portion of Fuel Farm	R27																																
Modular construction facility located north of the Fuel Farm and south of Mill Island	R26																																
Construction Laydown Area	R25																																
Fresh Air Intake / Fan	R09																																
Mine Island - West (Crusher, Hoist, Compression, Office / Dry and Diesel Fuel)	R04																																
Mine Island - East (Laydown area, exhaust area, fire water tank / pumphouse)	R08																																
Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	R06																																
Mine Island - South (the catchment bounded by Special Waste, Ore Storage, and PAG)	R07																																
Haul Road Lined	R05																																
Local Area South of the Surface Runoff Pond #1	R10																																
Local Area South of the Surface Runoff Pond #1	R11																																
Mill Island - North	R01																																
Mill Island - South West	R02																																
Mill Island - South East	R03																																
Special Waste Stockpile	R41																																
Ore Stockpile	R40																																
Potentially Acid Generating (PAG) stockpile - West Slope	R43																																
Potentially Acid Generating (PAG) stockpile - North Slope	R44																																
Potentially Acid Generating (PAG) stockpile - North East Slope	R45																																
Area 2	R42																																
Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R60																																
Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R61																																
Contained Airport Runoff	R50																																
Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown)	R23																																
Undisturbed catchment south of the Domestic/Industrial Waste Management Area	R72																																
Undisturbed catchment south of the West Bermed Runoff Containment Area	R73																																
Undisturbed catchment south of the NAG Waste Rock Stockpile	R70																																
Undisturbed catchment south of the NAG Waste Rock Stockpile	R71																																
Non-contained Airport Runoff	R51																																
Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	R80																																
Effluent Treatment Plant	T01																																
Mine and Runoff Water Pre-Treatment	T02																																
Enhanced Effluent Post Treatment	T03																																
Process Plant	T04																																
Underground Tailings Management Facility	T05																																
Fresh Water Intake	I01																																
West Surface Runoff Discharge	Q01																																
Treated Effluent Discharge	Q02																																
Treated Sewage Discharge	Q03																																
Groundwater Discharge	Q04																																
East Surface Water Discharge	Q05																																
South Perimeter Diversion Discharge	Q06																																
West Perimeter Diversion Discharge	Q07																																

Table B-2: Element Active Periods

Element	ID	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067
			Closure									
		yr29	yr30	yr31	yr32	yr33	yr34	yr35	yr36	yr37	yr38	yr39
Site Runoff Pond #1	P/S00											
Treated Effluent Pond #1	P/S01											
Treated Effluent Pond #2	P/S02											
Treated Effluent Pond #3	P/S03											
Treated Effluent Pond #4	P/S04											
Contingency Pond	P/S05											
Settling Pond	P/S06											
PAG Runoff Collection Area	P/S07											
West Bermed Runoff Collection Area	P/S08											
Site Runoff Pond #2	P/S09											
Special Waste Collection Sump	P/S10											
Ore Stockpile Collection Sump	P/S11											
Fuel Farm Sump / Pond	P/S12											
Batch Plant Sand and Aggregate Sump / Pond	P/S13											
Sewage Treatment Lagoon #1 (west)	P/S14											
Sewage Treatment Lagoon #2 (east)	P/S15											
Airport Fueling Pad Sump / Pond	P/S16											
Water / Oil Separator	P/S17											
Treated Effluent Tank	P/S18											
Effluent Treatment Plant Sump	P/S19											
Underground Main Sump	P/S20											
Underground Below Sump	P/S21											
Patterson Lake	P/S22											
Construction / Permanent Camp	R28											
West Bermed Runoff Collection Area local catchment	R30											
Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R31											
Explosives Magazine Storage	R52											
Domestic and Industrial Waste Management Area	R20											
Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	R24											
Batch Plant Sand and Aggregate Storage Area	R21											
Waste Rock (NAG) Stockpile	R22											
Lined portion of Fuel Farm	R27											
Modular construction facility located north of the Fuel Farm and south of Mill Island	R26											
Construction Laydown Area	R25											
Fresh Air Intake / Fan	R09											
Mine Island - West (Crusher, Hoist, Compression, Office / Dry and Diesel Fuel)	R04											
Mine Island - East (Laydown area, exhaust area, fire water tank / pumphouse)	R08											
Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	R06											
Mine Island - South (the catchment bounded by Special Waste, Ore Storage, and PAG)	R07											
Haul Road Lined	R05											
Local Area South of the Surface Runoff Pond #1	R10											
Local Area South of the Surface Runoff Pond #1	R11											
Mill Island - North	R01											
Mill Island - South West	R02											
Mill Island - South East	R03											
Special Waste Stockpile	R41											
Ore Stockpile	R40											
Potentially Acid Generating (PAG) stockpile - West Slope	R43											
Potentially Acid Generating (PAG) stockpile - North Slope	R44											
Potentially Acid Generating (PAG) stockpile - North East Slope	R45											
Area 2	R42											
Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R60											
Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R61											
Contained Airport Runoff	R50											
Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown)	R23											
Undisturbed catchment south of the Domestic/Industrial Waste Management Area	R72											
Undisturbed catchment south of the West Bermed Runoff Containment Area	R73											
Undisturbed catchment south of the NAG Waste Rock Stockpile	R70											
Undisturbed catchment south of the NAG Waste Rock Stockpile	R71											
Non-contained Airport Runoff	R51											
Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	R80											
Effluent Treatment Plant	T01											
Mine and Runoff Water Pre-Treatment	T02											
Enhanced Effluent Post Treatment	T03											
Process Plant	T04											
Underground Tailings Management Facility	T05											
Fresh Water Intake	I01											
West Surface Runoff Discharge	Q01											
Treated Effluent Discharge	Q02											
Treated Sewage Discharge	Q03											
Groundwater Discharge	Q04											
East Surface Water Discharge	Q05											
South Perimeter Diversion Discharge	Q06											
West Perimeter Diversion Discharge	Q07											

Table B-3: ElementID - Runoff Source

ID	Description	Routed To		Routed Via		Water Classification
		Description	Element ID	Description	Element ID	
Operations						
R01	Mill Island - North	Site Runoff Pond #1	P/S00	Diversion Ditch	D01, D103, D102, D101	Contact Water
R02	Mill Island - South West	Site Runoff Pond #1	P/S00	Diversion Ditch	D02, D104, D103, D102, D101	Contact Water
R03	Mill Island - South East	Site Runoff Pond #1	P/S00	Diversion Ditch	D03, D104, D103, D102, D101	Contact Water
R04	Mine Island - West (Crusher, Hoist, Compression, Office / Dry and Diesel Fuel)	Site Runoff Pond #1	P/S00	Diversion Ditch	D04, D105	Contact Water
R05	Haul Road Lined	Site Runoff Pond #1	P/S00	Diversion Ditch	D05, D106, D105	Contact Water
R06	Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	Site Runoff Pond #1	P/S00	Diversion Ditch	D06, D107, D106, D105	Contact Water
R07	Mine Island - South (the catchment bounded by Special Waste, Ore Storage, and PAG)	Site Runoff Pond #1		Diversion Ditch	D07, D108, D107, D106, D105	Contact Water
R08	Mine Island - East (Laydown area, exhaust area, fire water tank / pumphouse)	Site Runoff Pond #1	P/S00	Diversion Ditch	D08, D109, D108, D107, D106, D105	Contact Water
R09	Fresh Air Intake / Fan	Site Runoff Pond #1	P/S00	Diversion Ditch	D09	Contact Water
R10	Local Area South of the Surface Runoff Pond #1	Site Runoff Pond #1	P/S00	Diversion Ditch	D10, D101	Contact Water
R11	Local Area South of the Surface Runoff Pond #1	Site Runoff Pond #1	P/S00	Diversion Ditch	D11, D102, D101	Contact Water
R20	Domestic and Industrial Waste Management Area	Site Runoff Pond #1	P/S09	Diversion Ditch	D20	Contact Water
R21	Batch Plant Sand and Aggregate Storage Area	Batch Plant Sand and Aggregate Sump	P/S13	Gravity Transfer	GT21	Contact Water
R22	Waste Rock (NAG) Stockpile	Site Runoff Pond #1	P/S09	Diversion Ditch	D22	Contact Water
R23	Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown	Site Runoff Pond #1	P/S09	Gravity Transfer	GT23	Contact Water
R24	Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	Site Runoff Pond #1	P/S09	Diversion Ditch	D24	Contact Water
R25	Construction Laydown Area	Site Runoff Pond #1	P/S09	Diversion Ditch	D25	Contact Water
R26	Modular construction facility located north of the Fuel Farm and south of Mill Island	Site Runoff Pond #1	P/S09	Diversion Ditch	D26	Contact Water
R27	Lined portion of Fuel Farm	Fuel Farm Sump	P/S12	Gravity Transfer	GT27	Contact Water
R28	Construction / Permanent Camp	Surface Runoff Pond #2	P/S09	Diversion Ditch	D28	Contact Water
R30	West Bermed Runoff Collection Area local catchment	West Bermed Runoff Collection Area	P/S08	Gravity Transfer	GT30	Contact Water
R31	Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	West Bermed Runoff Collection Area	P/S08	Gravity Transfer	GT31	Contact Water
R40	Ore Stockpile	Ore Stockpile Collection Sump	P/S11	Gravity Transfer	GT40	Contact Water
R41	Special Waste Stockpile	Special Waste Collection Sump	P/S10	Gravity Transfer	GT41	Contact Water
R42	Area 2	PAG Runoff Collection Area	P/S07	Gravity Transfer	GT42	Contact Water
R43	Potentially Acid Generating (PAG) stockpile - West Slope	PAG Runoff Collection Area	P/S07	Diversion Ditch	D43, D402	Contact Water
R44	Potentially Acid Generating (PAG) stockpile - North Slope	PAG Runoff Collection Area	P/S07	Diversion Ditch	D44, D402	Contact Water
R45	Potentially Acid Generating (PAG) stockpile - North East Slope	PAG Runoff Collection Area	P/S07	Diversion Ditch	D45	Contact Water
R50	Contained Airport Runoff	Airport Fueling Pad Sump / Pond	P/S16	Gravity Transfer	GT50	Contact Water
R51	Non-contained Airport Runoff	Uncontrolled to Environment	N/A	Diversion Ditch	D51	Non-contact Water
R52	Explosives Magazine Storage	West Bermed Runoff Collection Area	P/S08	Diversion Ditch	D52	Contact Water
R60	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	East Surface Runoff Discharge	Q05	Diversion Ditch	D60, D601, D600	Non-contact Water
R61	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	East Surface Runoff Discharge	Q05	Diversion Ditch	D61, D601, D600	Non-contact Water
R70	Undisturbed catchment south of the NPAG Waste Rock Stockpile	South Perimeter Diversion Discharge	Q06	Diversion Ditch	D70, D701	Non-contact Water
R71	Undisturbed catchment south of the NPAG Waste Rock Stockpile	South Perimeter Diversion Discharge	Q06	Diversion Ditch	D71, D701	Non-contact Water
R72	Undisturbed catchment south of the Domestic/Industrial Waste Management Area	Uncontrolled to Environment	N/A	N/A	N/A	Non-contact Water
R73	Undisturbed catchment south of the West Bermed Runoff Containment Area	Uncontrolled to Environment	N/A	N/A	N/A	Non-contact Water
R80	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	West Surface Runoff Discharge	Q07	Diversion Ditch	D80	Non-contact Water
Post-Closure						
R20	Domestic and Industrial Waste Management Area	West Surface Runoff Discharge	Q01	Diversion Ditch	D20, D203, D206, D205, D204, D202, D201, D200	Contact Water
R21	Batch Plant Sand and Aggregate Storage Area	West Surface Runoff Discharge	Q01	Gravity Transfer	GT21, D203, D206, D205, D204, D202, D201, D200	Contact Water
R22	Waste Rock (NAG) Stockpile	West Surface Runoff Discharge	Q01	Diversion Ditch	D22, D207, D206, D205, D204, D202, D201, D200	Contact Water
R23	Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown	West Surface Runoff Discharge	Q01	Gravity Transfer, Diversion Ditch	GT23, D208, D207, D206, D205, D204, D202, D201, D200	Contact Water
R24	Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	West Surface Runoff Discharge	Q01	Diversion Ditch	D24, D208, D207, D206, D205, D204, D202, D201, D200	Contact Water
R25	Construction Laydown Area	West Surface Runoff Discharge	Q01	Diversion Ditch	D25, D205, D204, D202, D201, D200	Contact Water
R26	Modular construction facility located north of the Fuel Farm and south of Mill Island	West Surface Runoff Discharge	Q01	Diversion Ditch	D26, D204, D202, D201, D200	Contact Water
R27	Lined portion of Fuel Farm	West Surface Runoff Discharge	Q01	Gravity Transfer, Diversion Ditch	GT27, D209, D202, D201, D200	Contact Water
R28	Construction / Permanent Camp	West Surface Runoff Discharge	Q01	Diversion Ditch	D28, D209, D202, D201, D200	Contact Water
R30	West Bermed Runoff Collection Area local catchment	West Surface Runoff Discharge	Q01	Gravity Transfer, Diversion Ditch	GT30, D201, D200	Contact Water
R31	Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	West Surface Runoff Discharge	Q01	Gravity Transfer, Diversion Ditch	GT31, D201, D200	Contact Water
R42	Area 2	East Surface Runoff Discharge	Q05	Gravity Transfer, Diversion Ditch	GT42, D401, D400, D600	Contact Water
R43	Potentially Acid Generating (PAG) stockpile - West Slope	East Surface Runoff Discharge	Q05	Diversion Ditch	D43, D402, D401, D400, D600	Contact Water
R44	Potentially Acid Generating (PAG) stockpile - North Slope	East Surface Runoff Discharge	Q05	Diversion Ditch	D44, D402, D401, D400, D600	Contact Water
R45	Potentially Acid Generating (PAG) stockpile - North East Slope	East Surface Runoff Discharge	Q05	Diversion Ditch	D45, D400, D600	Contact Water
R52	Explosives Magazine Storage	West Surface Runoff Discharge	Q01	Diversion Ditch	D52, D201, D200	Contact Water
R60	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	East Surface Runoff Discharge	Q05	Diversion Ditch	D60, D601, D600	Non-contact Water
R61	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	East Surface Runoff Discharge	Q05	Diversion Ditch	D61, D601, D600	Non-contact Water
R70	Undisturbed catchment south of the NPAG Waste Rock Stockpile	South Perimeter Freshwater Diversion Discharge	Q06	Diversion Ditch	D70, D701	Non-contact Water
R71	Undisturbed catchment south of the NPAG Waste Rock Stockpile	South Perimeter Freshwater Diversion Discharge	Q06	Diversion Ditch	D71, D701	Non-contact Water
R80	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	West Perimeter Diversion Discharge	Q07	Diversion Ditch	D80	Non-contact Water

N/A = not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.
Notes: Only active model elements have been included in the Post-closure list.

Table B-4: ElementID - Groundwater Source

ID	Description	Routed To		Routed Via		Water Classification
		Description	Element ID	Description	Element ID	
Operations						
G01	Groundwater Inflow to Backfill	Underground Below Sump	P/S21	N/A	P15	Contact
G02	Groundwater Inflow to Shafts	Underground Below Sump	P/S21	N/A	P16	Contact
G03	Groundwater Inflow to UG Workings	Underground Below Sump	P/S21	N/A	P17	Contact
G04	Groundwater contribution upstream of UGTMF	Underground Tailings Management Facility	Not Used	Not Used	Not Used	Contact
G05	Groundwater contribution downstream of UGTMF	Post UGTMF Groundwater Discharge	Not Used	Not Used	Not Used	Contact
Post-Closure						
G04	Groundwater contribution upstream of UGTMF	Underground Tailings Management Facility		Not Used	Not Used	Contact
G05	Groundwater contribution downstream of UGTMF	Post UGTMF Groundwater Discharge	Not Used	Not Used	Not Used	Contact

N/A = not applicable; UGTMF = underground tailings management facility.

Notes: Only active model elements have been included in the Post-closure list.

Table B-5: ElementID - Intake Source

Description	ID	Routed to		Routed via	
		Description	ID	Description	ID
Operations					
Freshwater Intake	I01	Various	N/A	Various	N/A
Post-Closure					
N/A	N/A	N/A	N/A	N/A	N/A

N/A = not applicable.

Table B-6: ElementID - Pond/Storage

Description	ID	Routed to		Routed via	
		Description	ID	Description	ID
Operations					
Site Runoff Pond #1	P/S00	Settling Pond	P/S06	Pumping	P24
Treated Effluent Pond #1	P/S01	Contingency Pond	P/S05	N/A	N/A
Treated Effluent Pond #2	P/S02	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	AP02	N/A	N/A
Treated Effluent Pond #3	P/S03	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	AP02	N/A	N/A
Treated Effluent Pond #4	P/S04	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	AP02	N/A	N/A
Contingency Pond	P/S05	Treated Effluent Pond #1	P/S01	Pumping	P27
Settling Pond	P/S06	Pre-effluent Treatment Plant Feed		Pumping	P33
		Pre-process plant	AP08	Pumping	P19
PAG Runoff Collection Area	P/S07	Settling Pond	P/S06	Pumping	P23
West Bermed Runoff Collection Area	P/S08	Post West Bermed Runoff Collection Area	AP01	Diversion Ditch	D201
Site Runoff Pond #2	P/S09	Post Surface Runoff Pond #2	AP04	Diversion Ditch	D202
Special Waste Collection Sump	P/S10	Settling Pond	P/S06	Pumping	P04
Ore Stockpile Collection Sump	P/S11	Settling Pond	P/S06	Pumping	P03
Fuel Farm Sump / Pond	P/S12	Water / Oil Separator	P/S17	Pumping (Vac Truck)	P35
Batch Plant Sand and Aggregate Sump / Pond	P/S13	Surface Runoff Pond #2	P/S09	Diversion Ditch	D203
Sewage Treatment Lagoon #1 (west)	P/S14	Post Sewage Treatment Lagoons	AP03	N/A	N/A
Sewage Treatment Lagoon #2 (east)	P/S15	Post Sewage Treatment Lagoons	AP03	N/A	N/A
Airport Fueling Pad Sump / Pond	P/S16	Water / Oil Separator	P/S17	Pumping (Vac Truck)	P35
Water / Oil Separator	P/S17	Settling Pond	P/S06	Pumping	P36
Treated Effluent Tank	P/S18	Treated Effluent Pond #1	P/S01	Pumping	P02
		Pre-process plant	AP08	Pumping	P18
		Underground activities	various	Pumping	P38
Effluent Treatment Plant Sump	P/S19	Settling Pond	P/S06	Pumping	P28
Underground Main Sump	P/S20	Settling Pond	P/S06	Pumping	P13
Underground Below Sump	P/S21	Settling Pond	P/S06	Pumping	P14
Patterson Lake	P/S22	Forrest Lake	-	Clearwater River below Patterson Lake	-
Post-Closure					
N/A	N/A	N/A	N/A	N/A	N/A

N/A = not applicable.

Table B-7: ElementID - Treatment

Description	ID	Routed to		Routed via	
		Description	ID	Description	ID
Operations					
Effluent Treatment Plant	T01	Treated Effluent Tank	P/S018	Pumping	P29
Mine Runoff Water Pre-treatment	T02	Effluent Treatment Plant	T01	Pumping	P31
Enhanced Effluent Post Treatment	T03	Effluent Treatment Plant	T01	Pumping	P32
Process Plant	T04	Post Process Plant	AP06	Pumping	P22
Underground Tailings Management Facility	Not Used	Not Used	Not Used	Not Used	Not Used
Post-Closure					
Underground Tailings Management Facility	Not Used	Not Used		Not Used	Not Used

Notes:
Only active model elements have been included in the Post-closure list.
Underground Tailings Management Facility accounted for in Solute Transport Modelling.

Table B-8: ElementID - Consumption

ID	Description
Operations	
C01	Surface Use (Potable Water - Mine Dry, Potable Water - Process Plant Dry, Camp)
C02	Surface Use (Wash Bay)
C03	Surface Industrial Use (Freeze Plant , Batch Plant , Misc. (roads, fire)
C04	Process Plant Consumption (Paste Plant 1, Paste Plant 2, Circuits, Acid Plants and Boilers)
C05	Underground Waste Disposal
Post-Closure	
N/A	N/A

N/A = not applicable.

Table B-9: ElementID - Assessment Nodes

ID	Description	Rationale
Operations		
SP01	Post West Bermed Runoff Collection Area	Assess quality before release to the environment via diversion ditch D201 to Q01 West Surface Runoff Discharge in Patterson Lake
SP02	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Assess quality after the Treated Effluent Ponds before being pumped via P01 to the environment at Q02 Effluent Discharge in Patterson Lake to determine if acceptable or if further treatment is required
SP03	Post Sewage Treatment Lagoons	Assess water quality prior before being pumped via P25 to the environment at Q03 Domestic Sewage Discharge in Patterson Lake
SP04	Post Surface Runoff Pond #2	Assess quality of water at limit of control and determine if pumping to the T01 Effluent Treatment Plant circuit via P26 and the P/S06 Settling Pond is required
SP05	Pre-effluent Treatment Plant Feed	Assess quality of aggregate feed flow reporting from the P/S06 Settling Pond to the T01 Effluent Treatment Plant
SP06	Post Process Plant	Assess quality of downstream outputs from the Process Plant prior to being pumped to the T01 Effluent Treatment Plant via P22
SP07	Post UGTMF Groundwater Discharge	Assess groundwater pathway loading to Patterson Lake via Q04 Groundwater Discharge
SP08	Pre-process plant	Assess quality of upstream inputs to the Process Plant
Post-Closure		
SP01	Post West Bermed Runoff Collection Area	Assess quality before release to the environment via diversion ditch D201 to Q01 West Surface Runoff Discharge in Patterson Lake
SP07	Post UGTMF Groundwater Discharge	Assess groundwater pathway loading to Patterson Lake via Q04 Groundwater Discharge
SP09	Pre-East Perimeter Freshwater Diversion	Assess surface water pathway to Patterson Lake via Q05 East Perimeter Freshwater Diversion Discharge

Notes: Only active model elements have been included in the Post-closure list.
UGTMF = underground tailings management facility.

Table B-10: ElementID - Discharge

Discharge	ID	Routed to	
		Description	ID
Operations			
West Surface Runoff Discharge	Q01	Patterson Lake	P/S 22
Treated Effluent Discharge	Q02	Patterson Lake	P/S 22
Domestic Sewage Discharge	Q03	Patterson Lake	P/S 22
Not used	Q04	Patterson Lake	P/S 22
East Surface Runoff Discharge	Q05	Patterson Lake	P/S 22
South Perimeter Diversion Discharge	Q06	Patterson Lake	P/S 22
West Perimeter Diversion Discharge	Q07	Patterson Lake	
Post Closure			
West Surface Runoff Discharge	Q01	Patterson Lake	P/S 22
Groundwater Discharge	Q04	Not Used	Not Used
East Surface Runoff Discharge	Q05	Patterson Lake	P/S 22
South Perimeter Diversion Discharge	Q06	Patterson Lake	P/S 22
West Perimeter Diversion Discharge	Q07	Patterson Lake	P/S 22

Notes: Only active model elements have been included in the Post-closure list.

Table B-11: ElementID - Pumping Flows

ID	Routed to		Routed from	
	Description	ID	Description	ID
Operations				
P01	Effluent Discharge	Q02	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	AP02
P02	Treated Effluent Pond #1	P/S01	Treated Effluent Tank	P/S18
P03	Settling Pond	P/S06	Ore Stockpile Collection Sump	P/S11
P04	Settling Pond	P/S06	Special Waste Collection Sump	P/S10
P05	Surface Use (Wash Bay)	C02	Fresh Water Intake	I01
P06	Surface Industrial Use (Freeze Plant , Batch Plant , Misc. (roads, fire)	C03	Fresh Water Intake	I01
P07	Effluent Treatment Plant	T01		I01
P08	Underground Activities	P10, P11, P12	Fresh Water Intake	I01
P09	Settling Pond	P/S06	Industrial Surface Use	-
P10	Underground Main Sump	P/S03	Underground Equipment	P38/P08
P11	Underground Main Sump	P/S03	Shotcrete Line Flushing	P38/P08
P12	Underground Main Sump	P/S03	Paste Line Flushing	P38/P08
P13	Settling Pond	P/S06	Underground Main Sump	P/S03
P14	Settling Pond	P/S06	Underground Below Sump	P/S04
P15	Underground Below Sump	P/S04	Groundwater Inflow to Backfill	G01
P16	Underground Below Sump	P/S04	Groundwater Inflow to Shafts	G02
P17	Underground Below Sump	P/S04	Groundwater Inflow to Underground Workings	G03
P18	Pre-process plant	AP08	Treated Effluent Tank	P/S18
P19	Pre-process plant	AP08	Settling Pond	P/S06
P20	Pre-process plant	AP08	North Freshwater Intake	I01
P21	Underground Waste Disposal	C05	Process Plant	T04
P22	Post Process Plant	AP06	Process Plant	T04
P23	Settling Pond	P/S06	PAG Runoff Collection Area	P/S07
P24	Settling Pond	P/S06	Site Runoff Pond #1	P/S00
P25	Domestic Sewage Discharge	Q03	Post Sewage Treatment Lagoons	AP03
P26	Settling Pond	P/S06	Surface Runoff Pond #2	P/S09
P27	Settling Pond	P/S06	Contingency Pond	P/S05
P28	Settling Pond	P/S06	Effluent Treatment Plant Sump	P/S19
P29	Treated Effluent Tank	P/S18	Effluent Treatment Plant	T01
P30	Not used	Not used	Not used	Not used
P31	Effluent Treatment Plant	T01	Mine and Runoff Water Pre-Treatment	T02
P32	Effluent Treatment Plant	T01	Enhanced Effluent Post Treatment	T03
P33	Pre-effluent Treatment Plant Feed	AP05	Setting Pond	P/S06
P34	Surface Use (Potable Water - Mine Dry, Potable Water - Process Plant Dry, Camp)	C01	Fresh Water Intake	I01
P35	Water / Oil Separator	P/S17	Fuel Farm Sump / Pond	P/S12
			Airport Fueling Pad Sump / Pond	P/S16
P36	Settling Pond	P/S06	Water / Oil Separator	P/S17
P37	Settling Pond	P/S06	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	AP02
P38	Underground Activities	P10, P11, P12	Treated Effluent Tank	P/S18
P39	Pre-process plant	AP08	Treated Effluent Tank	P/S18
P40	Not used	Not used	Not used	Not used
P41	Effluent Treatment Plant	T01	Post Process Plant	AP06
P42	Effluent Treatment Plant Sump	P/S19	Effluent Treatment Plant	T01
P43	Settling Pond	P/S06	Surface Use 1	-
P44	Sewage Treatment Lagoon West	P/S14	Surface Use 1	-
P45	Sewage Treatment Lagoon East	P/S15	Surface Use 1	-
P46	Settling Pond	P/S06	Surface Use Wash Bay	-
P47	Settling Pond	P/S06	Underground Main Sump and Underground Below Sump	PS/20 and P/S21
P48	Assessment Point 3	AP03	Sewage Treatment Lagoon West	P/S14
P49	Assessment Point 3	AP03	Sewage Treatment Lagoon East	P/S15
P50	Contingency Pond	P/S05	Settling Pond	P/S06
Post-Closure				
N/A	N/A	N/A	N/A	N/A

N/A = not applicable.

Appendix B: Flow ID Description

Table B-12: ElementID - Diversion Ditch Flows

ID	Routed to		Routed from	
	Description	ID	Description	ID
Operations				
D01	Diversion Ditch	D103	Mill Island - North	R01
D02	Diversion Ditch	D104	Mill Island - South West	R02
D03	Diversion Ditch	D104	Mill Island - South East	R03
D04	Diversion Ditch	D105	Mine Island - West (Crusher, Hoist, Compression, Office / Dry and Diesel Fuel)	R04
D05	Diversion Ditch	D106	Haul Road Lined	R05
D06	Diversion Ditch	D107	Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	R06
D07	Diversion Ditch	D108		R07
D08	Diversion Ditch	D109	Mine Island - East (Laydown area, exhaust area, fire water tank / pumphouse)	R08
D09	Site Runoff Pond #1	P/S00	Fresh Air Intake / Fan	R09
D10	Diversion Ditch	D101	Local Area South of the Surface Runoff Pond #1	R10
D11	Diversion Ditch	D102	Local Area South of the Surface Runoff Pond #1	R11
D12	Not Used	N/A	Not Used	N/A
D13	Not Used	N/A	Not Used	N/A
D14	Not Used	N/A	Not Used	N/A
D15	Not Used	N/A	Not Used	N/A
D16	Not Used	N/A	Not Used	N/A
D17	Not Used	N/A	Not Used	N/A
D18	Not Used	N/A	Not Used	N/A
D19	Not Used	N/A	Not Used	N/A
D20	Site Runoff Pond #2	P/S09	Domestic and Industrial Waste Management Area	R20
D21	Not Used	N/A	Not Used	N/A
D22	Site Runoff Pond #2	P/S09	Waste Rock (NAG) Stockpile	R22
D23	Not Used	N/A	Not Used	N/A
D24	Site Runoff Pond #2	P/S09	Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	R24
D25	Site Runoff Pond #2	P/S09	Construction Laydown Area	R25
D26	Site Runoff Pond #2	P/S09	Modular construction facility located north of the Fuel Farm and south of Mill Island	R26
D27	Not Used	N/A	Lined portion of Fuel Farm	R27
D28	Site Runoff Pond #2		Construction / Permanent Camp	R28
D29	Not Used	N/A	Not Used	N/A
D30	Not Used	N/A	Not Used	N/A
D31	Not Used	N/A	Not Used	N/A
D32	Not Used	N/A	Not Used	N/A
D33	Not Used	N/A	Not Used	N/A
D34	Not Used	N/A	Not Used	N/A
D35	Not Used	N/A	Not Used	N/A
D36	Not Used	N/A	Not Used	N/A
D37	Not Used	N/A	Not Used	N/A
D38	Not Used	N/A	Not Used	N/A
D39	Not Used	N/A	Not Used	N/A
D40	Not Used	N/A	Not Used	N/A
D41	Not Used	N/A	Not Used	N/A
D42	Not Used	N/A	Not Used	N/A
D43	Diversion Ditch	D402	Potentially Acid Generating (PAG) stockpile - West Slope	R43
D44	Diversion Ditch	D402	Potentially Acid Generating (PAG) stockpile - North Slope	R44
D45	PAG Runoff Collection Area	P/S07	Potentially Acid Generating (PAG) stockpile - North East Slope	R45
D46	Not Used	N/A	Not Used	N/A
D47	Not Used	N/A	Not Used	N/A
D48	Not Used	N/A	Not Used	N/A
D49	Not Used	N/A	Not Used	N/A
D50	Not Used	N/A	Not Used	N/A
D51	Uncontrolled to Environment	N/A	Non-contained Airport Runoff	R51
D52	West Bermed Runoff Collection Area	P/S08	Explosives Magazine Storage	R52
D53	Not Used	N/A	Not Used	N/A
D54	Not Used	N/A	Not Used	N/A
D55	Not Used	N/A	Not Used	N/A
D56	Not Used	N/A	Not Used	N/A
D57	Not Used	N/A	Not Used	N/A
D58	Not Used	N/A	Not Used	N/A
D59	Not Used	N/A	Not Used	N/A
D60	Diversion Ditch	D601	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R60
D61	Diversion Ditch	D601	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R61
D62	Not Used	N/A	Not Used	N/A
D63	Not Used	N/A	Not Used	N/A
D64	Not Used	N/A	Not Used	N/A
D65	Not Used	N/A	Not Used	N/A
D66	Not Used	N/A	Not Used	N/A
D67	Not Used	N/A	Not Used	N/A
D68	Not Used	N/A	Not Used	N/A
D69	Not Used	N/A	Not Used	N/A
D70	Diversion Ditch	D701	Undisturbed catchment south of the NPAG Waste Rock Stockpile	R70
D71	Diversion Ditch	D701	Undisturbed catchment south of the NPAG Waste Rock Stockpile	R71
D72	Not Used	N/A	Not Used	N/A
D73	Not Used	N/A	Not Used	N/A
D74	Not Used	N/A	Not Used	N/A
D75	Not Used	N/A	Not Used	N/A
D76	Not Used	N/A	Not Used	N/A
D77	Not Used	N/A	Not Used	N/A
D78	Not Used	N/A	Not Used	N/A
D79	Not Used	N/A	Not Used	N/A
D80	West Perimeter Freshwater Diversion Discharge	Q07	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	R80
	TO		FROM	
D101	Site Runoff Pond #2	P/S00	Diversion Ditch	D102, D10
D102	Diversion Ditch	D101	Diversion Ditch	D103, D11
D103	Diversion Ditch	D102	Diversion Ditch	D104, D01
D104	Diversion Ditch	D103	Diversion Ditch	D02, D03
D105	Site Runoff Pond #2	P/S00	Diversion Ditch	D04, D106
D106	Diversion Ditch	D105	Diversion Ditch	D05,D107
D107	Diversion Ditch	D106	Diversion Ditch	D06,D108
D108	Diversion Ditch	D107	Diversion Ditch	D07, D109
D109	Diversion Ditch	D108	Diversion Ditch	D08
D200	West Surface Runoff Discharge	Q01	Post West Bermed Runoff Collection Area	AP01
D201	Post West Bermed Runoff Collection Area	AP01	West Bermed Runoff Collection Area	P/S08
D202	West Bermed Runoff Collection Area	P/S08	Post Surface Runoff Pond #2	AP04
D203	Surface Runoff Pond #2	P/S09	Batch Plant Sand and Aggregate Sump	P/S13
D402	PAG Runoff Collection Area	P/S07	Diversion Ditch	D43, D44
D600	East Perimeter Freshwater Diversion Discharge	Q05	Diversion Ditch	D601
D601	Diversion Ditch	D600	Diversion Ditch	D60, D61
D701	South Perimeter Diversion Discharge	Q06	Diversion Ditch	D70, D71
Post-Closure				
D20	Diversion Ditch	D203	Domestic and Industrial Waste Management Area	R20
D21	Not Used	N/A	Not Used	N/A
D22	Diversion Ditch	D207	Waste Rock (NAG) Stockpile	R22
D23	Not Used	N/A	Not Used	N/A
D24	Diversion Ditch	D208	Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	R24
D25	Diversion Ditch	D205	Construction Laydown Area	R25
D26	Diversion Ditch	D204	Modular construction facility located north of the Fuel Farm and south of Mill Island	R26
D27	Not Used	N/A	Lined portion of Fuel Farm	R27
D28	Diversion Ditch	D209	Construction / Permanent Camp	R28
D52	Diversion Ditch	D201	Explosives Magazine Storage	R52
D200	West Surface Runoff Discharge	Q01	Post West Bermed Runoff Collection Area	AP01
D201	Post West Bermed Runoff Collection Area	AP01	Diversion Ditch, Gravity Transfer	D202, GT31, GT30
D202	Diversion Ditch	D201	Diversion Ditch	D204, D209
D203	Diversion Ditch	D206	Diversion Ditch, Gravity Transfer	D20, GT21
D204	Diversion Ditch	D202	Diversion Ditch	D205, D26
D205	Diversion Ditch	D204	Diversion Ditch	D206, D25
D206	Diversion Ditch	D205	Diversion Ditch	D207, D203
D207	Diversion Ditch	D206	Diversion Ditch	D22, D208
D208	Diversion Ditch	D207	Diversion Ditch, Gravity Transfer	GT23, D24
D209	Diversion Ditch	D202	Diversion Ditch, Gravity Transfer	D28, GT27
D70	Diversion Ditch	D701	Undisturbed catchment south of the NPAG Waste Rock Stockpile	R70
D71	Diversion Ditch	D701	Undisturbed catchment south of the NPAG Waste Rock Stockpile	R71
D61	Diversion Ditch	D601	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R61
D60	Diversion Ditch	D601	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	R60
D43	Diversion Ditch	D402	Potentially Acid Generating (PAG) stockpile - West Slope	R43
D44	Diversion Ditch	D402	Potentially Acid Generating (PAG) stockpile - North Slope	R44
D45	Diversion Ditch	D400	Potentially Acid Generating (PAG) stockpile - North East Slope	R45
D400	Diversion Ditch	D600	Diversion Ditch	D45, D401
D401	Diversion Ditch	D400	Diversion Ditch, Gravity Transfer	GT42, D402
D402	Diversion Ditch	D401	Diversion Ditch	D43, D44
D600	Pre-East Freshwater Diversion	AP09	Diversion Ditch	D400, D601
D601	Diversion Ditch	D600	Diversion Ditch	D60, D61
D701	South Perimeter Diversion Discharge	Q06	Diversion Ditch	D70, D71
D80	West Perimeter Diversion Discharge	Q07	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	R80

Notes: Only active model elements have been included in the Post-closure list.

Table B-13: ElementID - Gravity Transfer Flows

ID	Routed to		Routed from	
	Description	ID	Description	ID
Operations				
GT21	Batch Plant Sand and Aggregate Sump	P/S13	Batch Plant Sand and Aggregate Storage Area	R21
GT23	Site Runoff Pond #2	P/S09	Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown	R23
GT27	Fuel Farm Sump	P/S12	Lined portion of Fuel Farm	R27
GT30	West Bermed Runoff Collection Area	P/S08	West Bermed Runoff Collection Area local catchment	R30
GT31	West Bermed Runoff Collection Area	P/S08	Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R31
GT40	Ore Stockpile Collection Sump	P/S11	Ore Stockpile	R40
GT41	Special Waste Collection Sump	P/S10		R41
GT42	PAG Runoff Collection Area	P/S07	Area 2	R42
GT50	Airport Fueling Pad Sump / Pond	P/S16	Contained Airport Runoff	R50
GT100	Groundwater Discharge	Q04	Pumping	P21
Post-Closure				
GT42	Diversion Ditch	D401	Area 2	R42
GT21	Diversion Ditch	D203	Batch Plant Sand and Aggregate Storage Area	R21
GT23	Diversion Ditch	D208	Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Construction Laydown	R23
GT27	Diversion Ditch	D209	Lined portion of Fuel Farm	R27
GT30	Diversion Ditch	D201	West Bermed Runoff Collection Area local catchment	R30
GT31	Diversion Ditch	D201	Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R31

Note: Omitted gravity transfer ID's in sequence are listed in the list of Diversion Ditches.
Note: Only active model elements have been included in the Post-closure list.

APPENDIX C

Operations Phase Model Input Parameters

Table C-1: Table of Contents

Table Number	Table Title
Table C-1	Table of Contents
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Table C-4	Source - Groundwater Inflow
Table C-5	Source - Surface Water Intake
Table C-6	Pond/Storage
Table C-7	Treatment
Table C-8	Consumption
Table C-9	Assessment Points
Table C-10	Discharge
Table C-11	Pumping Flows
Table C-12	Diversion Ditch
Table C-13	Gravity Transfer

Table C-2: References

Reference Number	Organization	Document Number	Revision	Description	Source
0	Golder	18114335-2750-2753	D	Climate Database Summary Memo	Golder (R. Phillips) 27 July 2020
1	Wood	203700-DD10-CAL-00001	B	Runoff Calculations for storm (2 hr, 1:100 24 hr, and PMP Events)	Wood (B. Pozniak) 08 December 2020
2	Not Used	Not Used	Not Used	Not Used	Not Used
3	Wood	2500-DD10-GAD-00001	D	General Site Drainage Plan	Wood (B. Pozniak) 27 November 2020
4	Not Used	Not Used	Not Used	Not Used	Not Used
5	Not Used	Not Used	Not Used	Not Used	Not Used
6	Wood	2100-DD10-SKT-00101	Revision in Progress	Site Runoff Calculations Working Sketch - Capture Areas	Wood (B. Pozniak) 26 January 2021
7	Wood	2100-DD10-SKT-00102	Revision in Progress	Ground Disturbance Working Sketch - Disturbance Extents	Wood (B. Pozniak) 26 January 2021
8	Golder	N/A	A	Golder Associates. 2019c. Regional Hydrological Characterization Report. NexGen Rook I Environmental Baseline Studies. (Date Accessed on 24 September 2019)	Golder (R.Phillips) 20 July 2020
9	Wood	0000-DD10-DSC-0001	2	Civil Design Criteria - Section 5.1	Wood (B.Pozniak) 03 November 2020
10	Golder	N/A	N/A	Hydrogeology EA Section - Existing Conditions	Golder (M. Tremblay) 2020
11	Golder	N/A	N/A	Hydrology EA Section - Existing Conditions	Golder (R. Phillips) 2020
12	Golder	N/A	N/A	Surface Water Quality EA Section - Existing Conditions	Golder (G. Van Arkle) 2020
13	CanNorth	CanNorth Rep no. 3008	0	CanNorth (Canada North Environmental Services Limited Partnership). 2019. Rook I Project Aquatic and Terrestrial Environmental Baseline Report - Draft Report. Perrpared for NexGen Energy Ltd. Report Number 3008. Pp. 815	CanNorth (K.Wells) 2019
14	Wood	N/A	N/A	Boehm, A. 2019a. Personal Communication by Email on 12 July 2019.	Wood (A. Boehm) 12 July 2019
15	Wood	N/A	N/A	Boehm, A. 2019b. Personal Communication by Email on 25 July 2019.	Wood (A. Boehm) 25 July 2019
16	BGC	1762004	Final	BGC (BGC Engineering Inc.). 2020. Water Rock Storage Area Infiltration Modelling - Final. Document Number 1762004. Pp. 18	NexGen (K. Bonstrom) July 2020
17	Wood	0000-DC10-BFD-00020	D	0000-DC10-BFD-00020_RevD .pdf. Process Water Balance Block Flow Diagram North Area. Prepared by NexGen (or their engineering consultants) and provided to Golder on 08 December 2020.	Wood (P.O'Hara) 12 January 2021
18	Wood	0000-DC10-BFD-00040	A	0000-DC10-BFD-00040_RevA.pdf. Process Water Balance Block Flow Diagram West Area. Prepared by NexGen (or their engineering consultants) and provided to Golder on 27 November 2020.	Wood (P.O'Hara) 12 January 2021
19	Golder	GAL-209-18114335	A	Golder. 2020. Rook I Project: Groundwater Chemistry Baseline - Draft. November 2020. Pp. 563.	Golder (Colin Higgins January 2021)
20	Wood	100303-0000-BA10-RPT-0003	C	Rook I Prefeasibility Report - Table 7-4: Effluent Treatment Results	A. Lieu (12 January 2021)
21	Not Used	Not used	Not Used	Not Used	Not Used
22	Okane	1219-01-007	3	Okane (Okane Consultants). 2020. Rook I WRSA – 1-Dimensional Numerical Modelling of WRSA End-Members. Document Number: 1219-01-007 Rev 3. Pp. 12	NexGen (K. Bonstrom) July 2020
23	Okane	N/A	N/A	WR Loading and WBs (Oct 27 2020) Excel File (accompanying report reference 22)	NexGen (K. Bonstrom January 2021)
24	Golder	*****	0	Golder. 2021. NexGen Rook I Project - Source Terms for Ore and Special Waste Facilities.	Golder (Nico Bezuidenhout January 2021)
25	Golder	******	N/A	Solute Transport Modeling Results	Golder (Mike Tremblay) 15 March 2021
26	Golder	GAL-100-18114335	1	Conceptual Diffuser Design Report for the Rook I Project	Golder (December 2019)
27	Okane	1219-002-011	N/A	Rook I Borrow Material Geochemical Analysis	Okane (J. Robertson) 6 December 2020
28	NexGen	N/A	N/A	UG Process Water Consumption 011521.xlsx	NexGen (K. Bonstrom) 12 January 2021
29	RPA	3166	2	RPA Arrow Deposit Updated EA Plan	RPA (D. Robson) 30 June 2020
30	Stantec	N/A	N/A	Re: Golder RFI - Sewage Outfall	Stantec (Mark Hatton) 07 May 2021
31	SRK	Compiled_WR_Srouce_Terms-Issue_to_NexGen_1NC034.002_JAC_Rev10-DRAFT 29Mar21	Rev10	Compiled Waste Rock Source Terms	SRK (Jeff Clarke) 29 March 2021
32	SRK	Compiled_UG_Source_Terms-Issue_to_NexGen_1NC034.002_JAC_Rev01 (002)	Rev1	Compiled Underground Source Terms	SRK (Jeff Clarke) 27 November 2020
33	Golder	GAL-039-2044150-REP NexGen UGTMF and Stope Source-Term Specialist Report_Draft.pdf	N/A	Rook I Project - Source-Term Derivation for Tailings Disposal	Golder (Nico Bezuidenhout) January 2021

Note: References are cited in subsequent tables using the reference number listed above.

Table C-3a: Source - Runoff - Disturbed Area Catchments

Input Variable \ Disturbed Area Catchment	Mill Island - North[b]	Mill Island - South West	Mill Island - South East	Mine Island - West (Crusher,Hoist, Compression, Office / Dry and Diesel Fuel)	Haul Road Lined	Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	Mine Island - South (the catchment bounded by Special Waste, Ore Storage, and PAG)	Mine Island - East (Laydown area, exhaust area, fire watertank / pumphouse)	Fresh Air Intake Fan Area	Local Area South of the Surface Runoff Pond #1	Local Area South of the Surface Runoff Pond #1	Domestic and Industrial Waste Management Area	Batch Plant Sand and Aggregate Storage Area	Waste Rock (NPAG) Stockpile[f]	Construction Laydown Area	Modular construction facility located north of the fuel farm and south of Mill Island	Lined portion of Fuel Farm[l]	Construction / Permanent Camp	West Bermed Runoff Containment Area local catchment	Ore Stockpile	Special Waste Stockpile	Area 2	Potentially Acid Generating (PAG) stockpile - West Slope[g]	Potentially Acid Generating (PAG) stockpile - North Slope[h]	Potentially Acid Generating (PAG) stockpile - North East Slope[j]	Contained Airport Runoff	Non-contained Airport Runoff	Explosives Magazine Storage
ElementID	R01	R02	R03	R04	R05	R06	R07	R08	R09	R10	R11	R20	R21	R22	R25	R26	R27	R28	R30	R40	R41	R42	R43	R44	R45	R50	R51	R52
Climate data	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0
Catchment area	65,813; Ref6	34,130; Ref6[i]	34,130; Ref6[i]	21,480; Ref6[g]	21,480; Ref6[g]	18,960.67; Ref6[h]	18,960.67; Ref6[h]	18,960.67; Ref6[h]	6,260; Ref6	3,435; Ref6	1,050; Ref6	20,000; Ref6	15,000; Ref6	505,300[k]; Ref6	20,290; Ref6	24,150; Ref6	1,000; PH	40,760; Ref6	153,440; Ref6	21,744; Ref6	16,730; Ref6	10,040; Ref6	87,433; Ref6[j]	87,433; Ref6[j]	87,433; Ref6[j]	1,000[a] Ref6[j]	22,900[a] Ref6[j]	44,960; Ref6
Runoff coefficient	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.6; Ref1	0.4; Ref1	0.6; Ref1	0.6; Ref1	0.95; Ref1	0.6; Ref1	0.6; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.95; Ref1	0.6; Ref1	0.6; Ref1
Liner Presence / Absence (P = Present; A = Absent)	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	P; Ref 3	A; Ref 3	A; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	P; Ref 3	A; Ref 3	A; Ref 3
Runoff pH	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref23[d]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref24	Ref24	Ref27[c]	Ref23[e]	Ref23[e]	Ref23[e]	Ref27[c]	Ref27[c]	Ref27[c]
Runoff major ions input	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref23[d]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref24	Ref24	Ref27[c]	Ref23[e]	Ref23[e]	Ref23[e]	Ref27[c]	Ref27[c]	Ref27[c]
Runoff metals input	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref23[d]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref24	Ref24	Ref27[c]	Ref23[e]	Ref23[e]	Ref23[e]	Ref27[c]	Ref27[c]	Ref27[c]
Runoff radionuclides input	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref23[d]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref27[c]	Ref24	Ref24	Ref27[c]	Ref23[e]	Ref23[e]	Ref23[e]	Ref27[c]	Ref27[c]	Ref27[c]
Seepage rates	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Notes:

N/A = Not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.

a) Parameter is a placeholder not discretely implemented in current version. Future application is possible.

b) Mill Island North includes area labelled as "Road and Unlined Ditching (to Site Runoff Pond #1).

c) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

d) Base case for Non-acid generating waste rock storage area (NAG WRSA) water quality source terms is Option 2B - non-PAG WRSA Base - No Liner.

e) Base case for potentially acid generating waste rock storage area (PAG WRSA) water quality source terms is Option 2B - PAG Ops - Eng Layer - Base - Liner.

f) EA Case footprint for PAG WRSA and NAG WRSA adopted.

g) Total area for Mine Island and Haul Road (Lined), 42,960 m^2, divided evenly in two parts for drainage routing.

h) Total area for Mine Island (Unlined), 56,882 m^2, divided evenly into three parts for drainage routing.

i) Total area for Mill Island, 68,260 m^2, divided evenly into two parts for drainage routing.

j) Total area for PAG Stockpile Area (EA), 262,320 m^2 divided evenly into three sub-catchments.

k) Total area for NPAG Stockpile Area (EA).

l) The lined portion of the fuel farm estimated to be 1,000 m^2 and subtracted from the total area of the Construction Laydown Area.

Table C-3b: Source - Runoff - Undisturbed Area Catchments

Input Variable \ Natural Area Catchment	Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Contruction Laydown)	Undeveloped Area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment south of the Domestic/Industrial Waste Management Area	Undisturbed catchment south of the West Bermed Runoff Containment Area	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area
Element ID	**R23**	**R24**	**R31**	**R60**	**R61**	**R70**	**R71**	**R72**	**R73**	**R80**
Climate data	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Not Used[a]	Not Used[a]	Ref0
Catchment area	368,240; Ref6	100,980; Ref6	72,370; Ref6	15,000; PH	15,000; PH	25,000; PH	25,000; PH	Not Used[a]	Not Used[a]	25,000; PH
Runoff coefficient	0.15; Ref1	0.15; Ref1	0.15; Ref1	0.15; Ref1	0.15; Ref1	0.15; Ref1	0.15; Ref1	Not Used[a]	Not Used[a]	0.15; Ref1
Liner Presence / Absence (P = Present; A = Absent)	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	Not Used[a]	Not Used[a]	A; Ref 3
Runoff pH input	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Not Used[a]	Not Used[a]	Ref12[b]
Runoff major ions input	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Not Used[a]	Not Used[a]	Ref12[b]
Runoff metals input	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Not Used[a]	Not Used[a]	Ref12[b]
Runoff radionuclides input	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Ref12[b]	Not Used[a]	Not Used[a]	Ref12[b]

Notes:

PH = Placeholder

a) Undisturbed catchment R72 and R73 are not included in the model domain.

b) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

Table C-4: Source - Groundwater Inflow

Input Variable \ Groundwater Outflow	Groundwater Inflow to Backfill	Groundwater Inflow to Shafts	Groundwater Inflow to UG Workings	Groundwater contribution upstream of UGTMF	Groundwater contribution downstream of UGTMF
ElementID	G01	G02	G03	G04	G05
Groundwater Flow Rates (m^3/hr)	4; Ref17	30; Ref17	70; Ref17	Not Used[c]	Not Used[c]
Groundwater Quality pH	Ref19[a,b,d]	Ref19[a,b,d]	Ref 32[d]	Not Used[c]	Not Used[c]
Groundwater Water Major Ions Input	Ref19[a,b,d]	Ref19[a,b,d]	Ref 32[d]	Not Used[c]	Not Used[c]
Groundwater Water Metals Input	Ref19[a,b,d]	Ref19[a,b,d]	Ref 32[d]	Not Used[c]	Not Used[c]
Groundwater Water Radionuclides Input	Ref19[a,b,d]	Ref19[a,b,d]	Ref 32[d]	Not Used[c]	Not Used[c]

Notes:

a) Westbay wells will be most representative of the groundwater entering the Shafts. Water quality varies with depth and WQ measured at depth of UG workings will be carried forward. Most conservative West Bay Well, as determined by metals and radionuclides, will be carried forward.

b) Most conservative West Bay Well, as determined by metals and radionuclides, will be carried forward.

c) Groundwater interaction with the UGTMF is accounted for in Rook I Solute Transport Modelling.

d) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

UG = underground, UGTMF = underground tailings management facility.

Table C-5: Source - Surface Water Intake

Input Variable \ Fresh water Intake	North Freshwater Intake
ElementID	101
Pumping Rate (m^3/hr)	185[(a)]; Ref17
Ambient Water Quality pH	Ref12[(b,f)]
Ambient Water Major Ions Input	Ref12[(b,f)]
Ambient Water Metals Input	Ref12[(b,f)]
Ambient Water Radionuclides Input	Ref12[(b,f)]
Operational Schedule	Continuous[(c)]
Operational Efficiency	100%[(d)]
Operational Utility	100%[(e)]

Notes:

a) Base case assumes constant withdrawal rate.

b) Water quality derived from baseline water quality for the Patterson Lake North Arm - East Basin.

c) Operational schedule for the Application case is assumed to be continuous.

d) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

e) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

f) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

Table C-6: Pond/Storage

Input Variable \ Ponds	Site Runoff Pond #1	Monitoring Pond #1	Monitoring Pond #2	Monitoring Pond #3	Monitoring Pond #4	Contingency Pond	Settling Pond	PAG Runoff Collection Area	West Bermed Runoff Collection Area	Site Runoff Pond #2	Special Waste Collection Sump	Ore Stockpile Collection Sump	Fuel Farm Sump / Pond	Batch Plant Sand and Aggregate Storage Area Sump / Pond	Sewage Treatment Lagoon #1 (west)	Sewage Treatment Lagoon #2 (east)	Airport Fuelling Pad Sump / Pond	Water / Oil Separator	Treated Effluent Tank	Effluent Treatment Plant Sump	Underground Main Sump	Underground Below Sump	Patterson Lake
Element ID	P/S00	P/S01	P/S02	P/S03	P/S04	P/S05	P/S06	P/S07	P/S08	P/S09	P/S10	P/S11	P/S12	P/S13	P/S14	P/S15	P/S16	P/S17	P/S18	P/S19	P/S20	P/S21	P/S22
Climate data	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	Ref0	N/A	N/A	N/A	Ref0	Ref0	Ref0	N/A	N/A	N/A	N/A	N/A	N/A	Not Simulated[b]
Pond area (m^2)	28,800; Ref6	3,106; Ref6	3,106; Ref6	3,106; Ref6	3,106; Ref6	3,106; Ref6	5,940; Ref6	48,464; Ref6	153,440; Ref6	6,160; Ref6	2,174[f]	1,673[f]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Simulated[b]
Evaporation	Ref8	Ref8	Ref8	Ref8	Ref8	Ref8	Ref8	Ref8	Ref8	Ref8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Not Simulated[b]
Design Storm	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	PMP	100 yr 24hr	PMP	PMP	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	Not Simulated[b]
Minimum Storage (m^3)[i]	13,000	500[c]	500[c]	500[c]	500[c]	500[c]	1,600[c]	16,000	29,000	3,000	1,000	1,000	1[c]	1[c]	100[c]	100[c]	1[c]	1[c]	90	1[c]	50[c]	100[c]	Not Simulated[b]
Operating Storage (m^3)[j]	13,000	N/A	N/A	N/A	N/A	N/A	N/A	16,000	0	3,000	1,000	1,000	1	1	100[c]	100[c]	1[c]	1[c]	90	1[c]	50[c]	100[c]	Not Simulated[b]
Flood Storage (m^3)	131,690; Ref1	1,860 Ref1	1,860 Ref1	1,860 Ref1	1,860 Ref1	1,860 Ref1	3,855 Ref1	156,545; Ref1	286,854; Ref1	29,057; Ref1	8,184; Ref1	10,635; Ref1	N/A	N/A	900	900	N/A	N/A	N/A	N/A	N/A	N/A	Not Simulated[b]
Maximum Storage (Minimum Storage + Operating Storage + Flood Storage)	164,690	5,000; Ref9	5,000; Ref9	5,000; Ref9	5,000; Ref9	5,000; Ref9	16,000; Ref9	188,545	315,854	35,057	11,184	12,635	10[d]	10[d]	1,000[e]	1,000[e]	10[d]	10[d]	300; Ref13	10[d]	500; Ref17	1000; Ref17	Not Simulated[b]
Initial Conditions (Water Level)	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	FSL	Not Simulated[b]
Liner Presence/Absence (P = Present; A = Absent)	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	A; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	P; Ref3	Not Simulated[b]
Seepage rates	0	0	0	0	0	0	0	0	0[a]	0	0	0	0	0	0	0	0	0	0	0	0	0	Not Simulated[b]
Stage-Storage-Area Relationship	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[g]	Estimated[h]	Estimated[h]	Estimated[h]	Estimated[h]	Estimated[h]	Estimated[h]	Not Simulated[b]

Notes:

FSL = Full supply level; PMP = probable maxium preciption.

a) Seepage from the West Bermed Runoff Collection Area will report to Patterson Lake along the same flow path. Seepage from West Bermed Runoff Collection Area is a component of West Surface Runoff Discharge (Q01).

b) Patterson Lake simulated in the Regional Hydrology Model.

c) minimum pond storage maintained at approximately 10% of required flood storage to support water quality calculations.

d) sump size assumed to be 10 m3 in the absence of sizing data.

e) sewage lagoon assumed to be 1,000 in leiu of documented value.

f) Area of collection sumps estimated as 10%.

g) Stage-storage-area relationships estimated as an inverted tapezoidal prism fit to storage and area at full supply level.

h) Stage-storage- area relationship estimated as cylindrical tank.

i) Minimum storage estimated as approximately 10% of flood storage. Minimum storage maintained at all times to accommodate WQ calculation.

j) Operating storage estimated as approximately 10% of flood storage.

Table C-7: Treatment

Input Variable \ Treatment	Effluent Treatment Plant	Mine and Runoff Water Pre-Treatment	Enhanced Effluent Post Treatment	Process Plant	Underground Tailings Management Facility
Element ID	**T01**	**T02**	**T03**	**T04**	**T05**
Treatment Efficiency - Metals	Ref20[e]	Not Used[a]	Not Used[a]	Ref20[e]	Not Used[f]
Treatment Efficiency - Radionuclides	Ref20[e]	Not Used[a]	Not Used[a]	Ref20[e]	Not Used[f]
Treatment Efficiency - Major Ions	Ref20[e]	Not Used[a]	Not Used[a]	Ref20[e]	Not Used[f]
Water quality scaling factors	Ref20[e]	Not Used[a]	Not Used[a]	Ref20[e]	Not Used[f]
Material reactivity	Ref20[e]	Not Used[a]	Not Used[a]	Ref20[e]	Not Used[f]
Operations schedule	Continuous[b]	Not Used[a]	Not Used[a]	Continuous[b]	Not Used[f]
Operational efficiency	100%[c]	Not Used[a]	Not Used[a]	100%[c]	Not Used[f]
Operational utility	100%[d]	Not Used[a]	Not Used[a]	100%[d]	Not Used[f]

Notes:

a) A pre- and post-treatment enhancement study is currently being contemplated by NexGen to evaluate optimization potential for effluent treatment plant water quality. Findings of this study may influence effluent water quality and design configurations.

b) Operational schedule for the Application case is assumed to be continuous.

c) In the Application case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

d) In the Application case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

e) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

f) Groundwater interaction with the UGTMF is accounted for in Rook I Solute Transport Modelling.

Table C-8: Consumption

Input Variable \ Consumption	Surface Use (Potable Water - Mine Dry, Potable Water - Process Plant Dry, Camp)	Surface Use (Wash Bay)	Surface Industrial Use (Freeze Plant , Batch Plant , Misc. (roads, fire)	Process Plant Consumption (Paste Plant 1, Paste Plant 2, Circuits, Acid Plants and Boilers)[a]	Underground Waste Disposal
Element ID	**C01**	**C02**	**C03**	**C04**	**C05**
Water consumption rates (m^3/hr)	4; Ref 17	1; Ref 17	7; Ref 17	0; Ref17	49; Ref 17

Table C-9: Assessment Points

Input Variable / Assessment Point	SP01 Post West Bermed Runoff Collection Area	SP02 Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	SP03 Post Sewage Treatment Lagoons	SP04 Post Surface Runoff Pond #2	SP05 Pre-effluent Treatment Plant Feed	SP06 Post Process Plant	SP07 Post UGTMF Groundwater Discharge	SP08 Pre- Process plant	SP09 Pre-East Freshwater Diversion
Element ID									
Operating Rule	Overflow	1[(a)]	Overflow	1[(b)]	None	None	None	Not Used	Not Used
Flow Rate Threshold (m^3/hr)	None	None	None	None	None	None	None	Not Used	Not Used
Threshold for Water Major Ions Input	None	Ref26	None	Ref26	None	None	None	Not Used	Not Used
Thresholds for Water Metals Input	None	Ref26	None	Ref26	None	None	None	Not Used	Not Used
Thresholds for Water Radionuclides Input	None	Ref26	None	Ref26	None	None	None	Not Used	Not Used

Notes:

a) SP02 Rule 1 - If water quality (COPC's) exceeds thresholds for discharge to the environment, then activate pumping to P/S06 Settling Pond via P40.

b) SP04 Rule 1 - If water quality (COPC's) exceeds thresholds for discharge to the environment, then activate pumping to P/S06 Settling Pond via P26.

UGTMF = underground tailiings management facillity.

Table C-10: Discharge

Input Variable \ Discharge	Q01 West Surface Runoff Discharge	Q02 Effluent Discharge	Q03 Domestic Sewage Discharge	Q04 Groundwater Discharge	Q05 East Perimeter Freshwater Diversion Discharge	Q06 South Perimeter Freshwater Diverison Discharge	Q07 West Perimeter Freshwater Diversion Discharge
Batch release pumping rate (m^3/hr)	N/A	833; Ref14	N/A	N/A	N/A	N/A	N/A
Batch release duration (hrs)	N/A	6[a]; Ref14	N/A	N/A	N/A	N/A	N/A
Nominal discharge rate (m^3/hr)	N/A	380; Ref17	6.2; Ref17	N/A	N/A	N/A	N/A
Operation schedule	Continuous	Batch Sequence[b]	Conitnuous[e]	Continuous	Continuous	Continuous	Continuous
Operation efficiency	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operation utility	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]

Notes:

a) Batch release emptying time is based on a six hour target to empty one of the four treated effluent ponds.

b) The operational schedule is expected to be ordered in a looped sequence between the four treated effluent ponds and contingency pond. When one pond is filled to FSL, additional water will be directed to the next pond in the sequence. Water from the ponds will be released in a batch mode and when empty will return to the looped sequence for filling. Ponds will not fill while being emptied.

c) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

d) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

e) Sewage lagoons expected to have continuous operation at nominal discharge rate.

Table C-11: Pumping Flows

Input Variable \ Pumping from : to	Post Treated Effluent Monitoring Ponds to Effluent Discharge	Treated Effluent Tank to Treated Effluent Pond #1	Ore Stockpile Collection Sump to Settling Pond	Special Waste Collection Sump to Settling Pond	North Freshwater Intake to Surface Use Wash Bay	North Freshwater Intake to Surface Industrial Use	North Freshwater Intake to Effluent Treatment Plant	North Freshwater Intake to Underground Activities	Industrial Surface Use to Settling Pond	Underground Equipment to Underground Main Sump	Shotcrete Line Flushing to Underground Main Sump	Paste Line Flushing to Underground Main Sump	Underground Main Sump to Settling Pond	Underground Below Sump to Settling Pond
ElementID	P01	P02	P03	P04	P05	P06	P07	P08	P09	P10	P11	P12	P13	P14
Pumping Rate (m^3/hr)	833; Ref14	275; Ref17	Demand as function of storage	Demand as function of storage	1; Ref 17	7; Ref17	14; Ref17	33; Ref17	4.57; Ref17	45; Ref17	5; Ref17	4; Ref17	158; Ref17	
Pumping Rate (m^3/day)	19,992	6,600	600	600	24	168	336	792	110	1,080	120	96	3,792	3,792
Pumping Capacity (m^3/hr)	Pumping Rate	8,856	1.5 x Pumping Rate[g]	1.5 x Pumping Rate[g]	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate
Operating Rule	Acceptable Quality[a]	Continuous	Operating Range	Operating Range	Demand as function of activities	Demand as function of activities	N/A	N/A	N/A	N/A	N/A	N/A	Continuous	Continuous
Operation Schedule	Batch Sequence[b]	Continuous	Batch	Batch	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous
Operation Efficiency	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operation Utility	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]
Operational Triggers	SP02 PERT	If Contingency Pond (P/S05) is full, Pump at Capacity.	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:

FSL = full supply level; MOWL = Maximum Operating Water Level; PERT = Proposed environmental release targets;

a) If water quality exceeds thresholds for discharge to the environment, then activate pumping to Settling Pond.

b) The operational schedule is expected to be ordered in a looped sequence between the four treated effluent ponds and contingency pond. When one pond is filled to FSL, additional water will be directed to the next pond in the sequence. Water from the ponds will be released in a batch mode and when empty will return to the looped sequence for filling. Ponds will not fill while being emptied.

c) In the Application case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

d) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

e) Pumps turn on at routine pumping rate when storage exceeds Minimum Storage.

f) Pumps switch from the routine pumping rate to pump at the Pumping Capacity Rate operational trigger met.

g) Pumps turn off when at Minimum Storage. Pumping in one time step capped so that available water only is pumped.

Table C-11: Pumping Flov

Input Variable \ Pumping from : to	Groundwater Inflow to Backfill to Underground Below Sump	Groundwater Inflow to Shafts to Underground Below Sump	Groundwater Inflow to Underground Workings to Underground Below Sump	Treated Effluent Tank to Process Plant	Settling Pond to Process Plant	North Freshwater Intake to Process Plant	Process Plant to Underground Waste Disposal	Process Plant to Effluent Treatment Plant	PAG Runoff Collection Area to Settling Pond	Site Runoff Pond #1 to Settling Pond	Post Sewage Treatment Lagoons to Domestic Sewage Discharge	Surface Runoff Pond #2 to Settling Pond	Contingency Pond to Settling Pond
ElementID	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	P25	P26	P27
Pumping Rate (m^3/hr)	4; Ref17	30; Ref17	70; Ref17	See P39	147; Ref17	123; Ref17	49; Ref17	231; Ref17	25; Ref 17	25; Ref17	6.88;	Demand	Demand
Pumping Rate (m^3/day)	96	720	1,680	See P39	3,528	2,952	Function of Ore Production. Garduated up to Pumping Rate.	Function of Ore Production. Graduated up to Maximum Pumping Rate.	600	600	165; Ref 30	600	4992
Pumping Capacity (m^3/hr)	Pumping Rate	Pumping Rate	Pumping Rate	See P39	1.5 x Pumping Rate[g]	Pumping Rate	Pumping Rate	Pumping Rate	1.5 x Pumping Rate[g]	1.5 x Pumping Rate[g]	1.5 x Pumping Rate[g]	1.5 x Pumping Rate[g]	Pumping Rate
Operating Rule	Continuous	Continuous	Continuous	See P39	Continuous	Continuous	Continuous	Continuous	Operating Range	Operating Range	Operating Range	Quality[a]	Storage based
Operation Schedule	Continuous	Continuous	Continuous	See P39	Continuous	Continuous	Continuous	Continuous	Batch	Batch	Batch	Batch	Batch
Operation Efficiency	100%[c]	100%[c]	100%[c]	See P39	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operation Utility	100%[d]	100%[d]	100%[d]	See P39	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]
Operational Triggers	N/A	N/A	N/A	See P39	Storage Range 10% to 90% Storage[e]	Governed to make up P21 demand based on P18 and P19.	N/A	N/A	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	Storage Range 10% to 80% Storage[e]	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	Active if storage > 0

Notes:
FSL = full supply level; MOWL = Maximum Operating Water Level; PERT = Proposed environmental release targets;
a) If water quality exceeds thresholds for discharge to the environment, then activate pumping to Settling Pond.
b) The operational schedule is expected to be ordered in a looped sequence between the four treated effluent ponds and contingency pond. When one pond is filled to FSL, additional water will be directed to the next pond in the sequence. Water from the ponds will be released in a batch mode and when empty will return to the looped sequence for filling. Ponds will not fill while being emptied.
c) In the Application case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
d) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
e) Pumps turn on at routine pumping rate when storage exceeds Minimum Storage.
f) Pumps switch from the routine pumping rate to pump at the Pumping Capacity Rate operational trigger met.
g) Pumps turn off when at Minimum Storage. Pumping in one time step capped so that available water only is pumped.

Table C-11: Pumping Flov

Input Variable \ Pumping from : to	Effluent Treatment Plant Sump to Settling Pond	Effluent Treatment Plant to Treated Effluent Tank	Treated Effluent Tank to Underground Activities	Mine Runoff Water Pre-Treatment to Effluent Treatment Plant	Enhanced Effluent Post-Treatment to Effluent Treatment Plant	Settling Pond to Pre-Effluent Treatment Plant Feed	North Freshwater Intake Surface Use (Potable Water - Mine Dry, Potable Water - Process Plant Dry, Camp)	Fuel Farm Sump / Pond and Airport Fueling Pad Sump / Pond to Water / Oil Separator via Vac Truck	Water / Oil Separator to Settling Pond	Post Treated Effluent Monitoring Ponds to Settling Pond	Treated Effluent Tank to Underground Activities	Treated Effluent Tank to Pre-Process Plant
ElementID	P28	P29	P30	P31	P32	P33	P34	P35	P36	P37	P38	P39
Pumping Rate (m^3/hr)	Demand	306; Ref17	Not Used	Not Used	Not Used	61; Ref 17	11.5	N/A	Demand	Not Used	21; Ref 17	10; Ref 17
Pumping Rate (m^3/day)	Up to 90% ofP/S19 Storage	Demand (P07 + P41 + P33)	Not Used	Not Used	Not Used	1464	276.2	Limit = 90% P/S12 Storage	Limit = 90% P/S17 Storage	Not Used	504	240
Pumping Capacity (m^3/hr)	Pumping Rate	9600	Not Used	Not Used	Not Used	3552	Pumping Rate	Pumping Rate	1.5 x Pumping Rate[g]	Not Used	Pumping Rate	Pumping Rate
Operating Rule	Operating Range	Continuous	Not Used	Not Used	Not Used	Continuous	Continuous	Operating Range	Operating Range	Not Used	Continuous	Continuous
Operation Schedule	Batch	Continuous	Not Used	Not Used	Not Used	Continuous	Continuous	Batch	Batch	Not Used	Continuous	Continuous
Operation Efficiency	100%[c]	100%[c]	Not Used	Not Used	Not Used	100%[c]	100%[c]	100%[c]	100%[c]	Not Used	100%[c]	100%[c]
Operation Utility	100%[d]	100%[d]	Not Used	Not Used	Not Used	100%[d]	100%[d]	100%[d]	100%[d]	Not Used	100%[d]	100%[d]
Operational Triggers	Storage Range 10% to 80% Storage[e]	1. Maximum Pumping Rate < P07 + P41 + AP05, P07[g]	Not Used	Not Used	Not Used	1. Storage > Minimum Storage[e] 2. Storage > Operating Storage[f] 3. Storage < Minimum Storage[g]	N/A	Storage Range 10% to 80% Storage[e]	Storage Range 10% to 80% Storage[e]	Not Used	Minimum Storage in Treated Effluent Tank = 30% of Max Storage	Storage Range 10% to 80% Storage[e]

Notes:
FSL = full supply level; MOWL = Maximum Operating Water Level; PERT = Proposed environmental release targets;
a) If water quality exceeds thresholds for discharge to the environment, then activate pumping to Settling Pond.
b) The operational schedule is expected to be ordered in a looped sequence between the four treated effluent ponds and contingency pond. When one pond is filled to FSL, additional water will be directed to the next pond in the sequence. Water from the ponds will be released in a batch mode and when empty will return to the looped sequence for filling. Ponds will not fill while being emptied.
c) In the Application case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
d) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
e) Pumps turn on at routine pumping rate when storage exceeds Minimum Storage.
f) Pumps switch from the routine pumping rate to pump at the Pumping Capacity Rate operational trigger met.
g) Pumps turn off when at Minimum Storage. Pumping in one time step capped so that available water only is pumped.

Table C-11: Pumping Flow

Input Variable \ Pumping from : to	Post-Effluent Treatment Plant to Settling Pond	Post Process Plant to Effluent Treatment Plant	Effluent Treatment Plant to Effluent Treatment Plant Sump	Surface Use 1 to Settling Pond	Surface Use 1 to Sewage Treatment Lagoon West	Surface Use 1 to Sewage Treatment Lagoon East	Surface Use Wash Bay to Settling Pond	Underground Water Storage and Pre-Treatment to Settling Pond	Sewage Treatment Lagoon West to Assessment Point 3	Sewage Treatment Lagoon East to Assessment Point 3	Settling Pond to Contingency Pond
ElementID	P40	P41	P42	P43	P44	P45	P46	P47	P48	P49	P50
Pumping Rate (m^3/hr)	20	See P22	0; Ref 17	5.1	3.1	3.1	1.0; Ref17	P13+P17	3.44	3.44	Overflow Weir
Pumping Rate (m^3/day)	480	See P22	0	123	74	74	24	P13+P17	83	83	Overflow
Pumping Capacity (m^3/hr)	Pumping Rate	See P22	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	Pumping Rate	1.5 x Pumping Rate[g]	1.5 x Pumping Rate[g]	N/A
Operating Rule	SP02 Off Spec WQ	See P22	N/A	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	Continuous	MOWL
Operation Schedule	Batch	See P22	Batch	Continuous	Continuous	Continuous	Continuous	Continuous	Batch	Batch	Continuous
Operation Efficiency	100%[c]	See P22	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operation Utility	100%[d]	See P22	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]	100%[d]
Operational Triggers	Storage Range 10% to 80% Storage[e]	See P22	N/A	N/A	N/A	N/A	-	-	Storage Range 10% to 90% Storage[e]	Storage Range 10% to 90% Storage[e]	Flow above freeboard

Notes:
FSL = full supply level; MOWL = Maximum Operating Water Level; PERT = Proposed environmental release targets;
a) If water quality exceeds thresholds for discharge to the environment, then activate pumping to Settling Pond.
b) The operational schedule is expected to be ordered in a looped sequence between the four treated effluent ponds and contingency pond. When one pond is filled to FSL, additional water will be directed to the next pond in the sequence. Water from the ponds will be released in a batch mode and when empty will return to the looped sequence for filling. Ponds will not fill while being emptied.
c) In the Application case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
d) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
e) Pumps turn on at routine pumping rate when storage exceeds Minimum Storage.
f) Pumps switch from the routine pumping rate to pump at the Pumping Capacity Rate operational trigger met.
g) Pumps turn off when at Minimum Storage. Pumping in one time step capped so that available water only is pumped.

Table C-12: Diversion Ditch

Upstream Element	Mill Island - North	Mill Island - South West	Mill Island - South East	Mine Island - West (Crusher Hoist, Compression, Office / Dry and Diesel Fuel)	Haul Road Lined	Mine Island - South (the catchment bounded by Ore Storage and Mine Island)	Mine Island - South (the catchment bounded by Special Waste, Ore Storage, and PAG)	Mine Island - East (Laydown area, exhaust area, fire watertank / pumphouse)	Fresh Air Intake / Fan	Local Area South of the Surface Runoff Pond #1	Local Area South of the Surface Runoff Pond #1	Domestic and Industrial Waste Management Area
Element ID	D01	D02	D03	D04	D05	D06	D07	D08	D09	D10	D11	D20
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:

N/A = Not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.

a) Seepage rate accounted for in the runoff coefficient for the source catchment.

b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

d) Operational triggers associated with active years. Sub-annual operational triggers can be added if warranted.

e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.

Table C-12: Diversion Ditch

Upstream Element	Waste Rock (NAG) Stockpile	Undeveloped area #4: The catchment bounded by Surface Runoff Pond #2, Domestic/Industrial Waste Management Area, Construction / Permanent Camp	Construction Laydown Area	Modular construction facility located north of the fuel farm and south of Mill Island	Construction / Permanent Camp	Potentially Acid Generating (PAG) stockpile - West Slope	Potentially Acid Generating (PAG) stockpile - North Slope	Potentially Acid Generating (PAG) stockpile - North East Slope	Non-Contained Airport Runoff	Explosives Magazine Storage	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area
Element ID	D22	D24	D25	D26	D28	D43	D44	D45	D51	D52	D60	D61
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:
N/A = Not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.
a) Seepage rate accounted for in the runoff coefficient for the source catchment.
b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
d) Operational triggers associated with active years. Sub-annual operational triggers can be added if warranted.
e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.

Table C-12: Diversion Ditch

Upstream Element	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	D101 Diversion Ditch	D102 Diversion Ditch	D103 Diversion Ditch	D104 Diversion Ditch	D105 Diversion Ditch	D106 Diversion Ditch	D107 Diversion Ditch	D108 Diversion Ditch	D109 Diversion Ditch
Element ID	D70	D71	D80									
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:
N/A = Not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.
a) Seepage rate accounted for in the runoff coefficient for the source catchment.
b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
d) Operational triggers associated with active years. Sub-annual operational triggers can be added if warranted.
e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.

Table C-12: Diversion Ditch

Upstream Element	Post West Bermed Runoff Collection Area to West Surface Runoff Discharge	West Bermed Runoff Collection Area to Post West Bermed Runoff Collection Area	Post Surface Runoff pond #2 to West Bermed Runoff Collection Area	D203 Batch Plant Sand and Aggregate Sump	D402 Diversion Ditch	D600 Diversion Ditch	D601 Diversion Ditch	Diversion Ditch to South Perimeter Diversion Discharge
Element ID	D200	D201	D202	D203	D402	D600	D601	D701
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule		Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency		100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility		100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers		As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:
N/A = Not applicable; PAG = potentially acid generating; NPAG = non-potentially acid generating.
a) Seepage rate accounted for in the runoff coefficient for the source catchment.
b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
d) Operational triggers associated with active years. Sub-annual operatinal triggers can be added if warranted.
e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.

Table C-13: Gravity Transfer

Input Variable \ Gravity Transfer Outfall	R21 - Batch Plant Sand and Aggregate Storage Area	R23 - Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Contruction Laydown)	R27 - Lined portion of Fuel Farm	R30 - West Bermed Runoff Collection Area local catchment	R31 - Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R40 - Ore Stockpile	R41 - Special Waste Stockpile	R42 -Area 2	R50 - Contained Airport Runoff	Groundwater Discharge from UGTMF Bleed Water
Element ID	GT21	GT23	GT27	GT30	GT31	GT40	GT41	GT42	GT50	GT100
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]
Rating curves	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]

Notes:

a) Seepage rate accounted for in the runoff coefficient for the source catchment.

b) Operational schedule and operatinal triggers as per the element active dates.

c) Base case assumes operation efficiency and operational utility at 100%.

d) All routing rates expected to be sub-daily due to spatial extent of modelling domain.

UGTMF = underground tailiIngs management facility.

APPENDIX D

Transitional Monitoring Stage and Far-Future Scenario Model Input Parameters

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Table D-2: References

Reference Number	Organization	Document Number	Revision	Description	Source
0	Golder	18114335-2750-2753	D	Climate Database Summary Memo	Golder (R. Phillips) 27 July 2020
1	Wood	203700-DD10-CAL-00001	B	Runoff Calculations for storm (2 hr, 1:100 24 hr, and PMP Events)	Wood (B. Pozniak) 08 December 2020
2	Not Used	Not Used	Not Used	Not Used	Not Used
3	Wood	2500-DD10-GAD-00001	D	General Site Drainage Plan	Wood (B. Pozniak) 27 November 2020
4	Not Used	Not Used	Not Used	Not Used	Not Used
5	Not Used	Not Used	Not Used	Not Used	Not Used
6	Wood	2100-DD10-SKT-00101	Revision in Progress	Site Runoff Calculations Working Sketch - Capture Areas	Wood (B. Pozniak) 26 January 2021
7	Wood	2100-DD10-SKT-00102	Revision in Progress	Ground Disturbance Working Sketch - Disturbance Extents	Wood (B. Pozniak) 26 January 2021
8	Golder	N/A	A	Golder Associates. 2019c. Regional Hydrological Characterization Report. NexGen Rook I Environmental Baseline Studies. (Date Accessed on 24 September 2019)	Golder (R.Phillips) 20 July 2020
9	Wood	0000-DD10-DSC-0001	2	Civil Design Criteria - Section 5.1	Wood (B.Pozniak) 03 November 2020
10	Golder	N/A	N/A	Hydrogeology EA Section - Existing Conditions	Golder (M. Tremblay) 2020
11	Golder	N/A	N/A	Hydrology EA Section - Existing Conditions	Golder (R. Phillips) 2020
12	Golder	N/A	N/A	Surface Water Quality EA Section - Existing Conditions	Golder (G. Van Arkle) 2020
13	CanNorth	CanNorth Rep no. 3008	0	CanNorth (Canada North Environmental Services Limited Partnership). 2019. Rook I Project Aquatic and Terrestrial Environmental Baseline Report - Draft Report. Perrpared for NexGen Energy Ltd. Report Number 3008. Pp. 815	CanNorth (K.Wells) 2019
14	Wood	N/A	N/A	Boehm, A. 2019a. Personal Communication by Email on 12 July 2019.	Wood (A. Boehm) 12 July 2019
15	Wood	N/A	N/A	Boehm, A. 2019b. Personal Communication by Email on 25 July 2019.	Wood (A. Boehm) 25 July 2019
16	BGC	1762004	Final	BGC (BGC Engineering Inc.). 2020. Water Rock Storage Area Infiltration Modelling - Final. Document Number 1762004. Pp. 18	NexGen (K. Bonstrom) July 2020
17	Wood	0000-DC10-BFD-00020	D	0000-DC10-BFD-00020_RevD .pdf. Process Water Balance Block Flow Diagram North Area. Prepared by NexGen (or their engineering consultants) and provided to Golder on 08 December 2020.	Wood (P.O'Hara) 12 January 2021
18	Wood	0000-DC10-BFD-00040	A	0000-DC10-BFD-00040_RevA.pdf. Process Water Balance Block Flow Diagram West Area. Prepared by NexGen (or their engineering consultants) and provided to Golder on 27 November 2020.	Wood (P.O'Hara) 12 January 2021
19	Golder	GAL-209-18114335	A	Golder. 2020. Rook I Project: Groundwater Chemistry Baseline - Draft. November 2020. Pp. 563.	Golder (Colin Higgins January 2021)
20	Wood	100303-0000-BA10-RPT-0003	C	Rook I Prefeasibility Report - Table 7-4: Effluent Treatment Results	A. Lieu (12 January 2021)
21	Not Used	Not used	Not Used	Not Used	Not Used
22	Okane	1219-01-007	3	Okane (Okane Consultants). 2020. Rook I WRSA – 1-Dimensional Numerical Modelling of WRSA End-Members. Document Number: 1219-01-007 Rev 3. Pp. 12	NexGen (K. Bonstrom) July 2020
23	Okane	N/A	N/A	WR Loading and WBs (Oct 27 2020) Excel File (accompanying report reference 22)	NexGen (K. Bonstrom January 2021)
24	Golder	*****	0	Golder. 2021. NexGen Rook I Project - Source Terms for Ore and Special Waste Facilities.	Golder (Nico Bezuidenhout January 2021)
25	Golder	******	N/A	Solute Transport Modeling Results	Golder (Mike Tremblay) 15 March 2021
26	Golder	GAL-100-18114335	1	Conceptual Diffuser Design Report for the Rook I Project	Golder (December 2019)
27	Okane	1219-002-011	N/A	Rook I Borrow Material Geochemical Analysis	Okane (J. Robertson) 6 December 2020
28	NexGen	N/A	N/A	UG Process Water Consumption 011521.xlsx	NexGen (K. Bonstrom) 12 January 2021
29	RPA	3166	2	RPA Arrow Deposit Updated EA Plan	RPA (D. Robson) 30 June 2020
30	Stantec	N/A	N/A	Re: Golder RFI - Sewage Outfall	Stantec (Mark Hatton) 07 May 2021
31	SRK	Compiled_WR_Srouce_Terms-Issue_to_NexGen_1NC034.002_JAC_Rev10-DRAFT 29Mar21	Rev10	Compiled Waste Rock Source Terms	SRK (Jeff Clarke) 29 March 2021
32	SRK	Compiled_UG_Source_Terms-Issue_to_NexGen_1NC034.002_JAC_Rev01 (002)	Rev1	Compiled Underground Source Terms	SRK (Jeff Clarke) 27 November 2020
33	Golder	GAL-039-2044150-REP NexGen UGTMF and Stope Source-Term Specialist Report_Draft.pdf	N/A	Rook I Project - Source-Term Derivation for Tailings Disposal	Golder (Nico Bezuidenhout) January 2021

Table D-3a: Source - Runoff - Disturbed Area Catchments

Input Variable \ Disturbed Area Catchment	Waste Rock (NAG) Stockpile	Area 2	Potentially Acid Generating (PAG) stockpile - West Slope	Potentially Acid Generating (PAG) stockpile - North Slope	Potentially Acid Generating (PAG) stockpile - North East Slope
ElementID	R22	R42	R43	R44	R45
Climate data	Ref0	Ref0	Ref0	Ref0	Ref0
Catchment area	505,300; Ref6[(b)]	58,686; Ref17[(d)]	87,433; Ref6[(a)]	87,433; Ref6[(a)]	87,433; Ref6[(a)]
Land use distribution	Enigneered Cover	Enigneered Cover	Enigneered Cover	Enigneered Cover	Enigneered Cover
Runoff coefficient	0.95 Ref22	0.95 Ref22	0.95 Ref22	0.95 Ref22	0.95 Ref22
Liner Presence / Absence (P = Present; A = Absent)	A[(b)]; Ref 22	A[(b)]; Ref 22	A[(b)]; Ref 22	A[(b)]; Ref 22	A[(b)]; Ref 22
Runoff pH	Ref23[(c)]	Ref12[(c)]	Ref23[(c)]	Ref23[(c)]	Ref23[(c)]
Runoff major ions inputs	Ref23[(c)]	Ref12[(c)]	Ref23[(c)]	Ref23[(c)]	Ref23[(c)]
Runoff metals inputs	Ref23[(c)]	Ref12[(c)]	Ref23[(c)]	Ref23[(c)]	Ref23[(c)]
Runoff radionuclides inputs	Ref23[(c)]	Ref12[(c)]	Ref23[(c)]	Ref23[(c)]	Ref23[(c)]
Seepage rates	0[(e)]	0[(e)]	0[(e)]	0[(e)]	0[(e)]

Notes:

a) Total area for PAG Stockpile Area (EA), 262,320 m^2 divided evenly into three sub-catchments.

b) Total area for NPAG Stockpile Area (EA).

c) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

d) The footprint area of PAG Runoff Collection Area (P/S07) is assumed to be added to R42 (Area 2) at closure.

e) Water that infiltrates into the pile is assumed to percolate through the liner and report to Patterson Lake via groundwater pathways accounted for by the Solute Transport Model.

Table D-3b: Source - Runoff - Undisturbed Area Catchments

Input Variable \ Natural Area Catchment	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area
Element ID	**R60**	**R61**	**R70**	**R71**	**R80**
Climate data	Ref0	Ref0	Ref0	Ref0	Ref0
Catchment area	15,000; PH	15,000; PH	25,000; PH	25,000; PH	25,000; PH
Runoff coefficient	0.15 Ref1	0.15 Ref1	0.15 Ref1	0.15 Ref1	0.15 Ref1
Liner Presence / Absence	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3	A; Ref 3
Runoff pH	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]
Runoff major ions input	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]
Runoff metals input	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]
Runoff radionuclides input	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]	Ref12[(a)]

Notes:

PH = Placeholder.

a) Detailed source input values for water quality (i.e. mass per unit volume) or mass load (i.e. mass per unit time) assigned to each source are presetned in Appendix E: Site Water Quality Model Geochemical and Water Quality Source Terms.

Table D-4: Source - Groundwater Inflow

Input Variable \ Groundwater Outflow	Groundwater contribution upstream of UGTMF	Groundwater contribution downstream of UGTMF
ElementID	G04	G05
Groundwater Flow Rates (m^3/hr)	Not Used	Not Used
Groundwater Quality pH	Not Used	Not Used
Groundwater Water Major Ions Input	Not Used	Not Used
Groundwater Water Metals Input	Not Used	Not Used
Groundwater Water Radionuclides Input	Not Used	Not Used

Table D-5: Source - Surface Water Intake

Input Variable \ Fresh water Intake	Not Used
ElementID	N/A
Pumping Rate (m^3/hr)	N/A
Ambient Water Quality pH	N/A
Ambient Water Major Ions Concentration	N/A
Ambient Water Metals Concentration	N/A
Ambient Water Radionuclides Concentration	N/A
Operational Schedule	N/A
Operational Efficiency	N/A
Operational Utility	N/A

N/A = not applicable.

Table D-6: Pond/Storage

Input Variable \ Ponds	Not Used
Element ID	**N/A**
Climate data	N/A
Pond area	N/A
Evaporation	N/A
Minimum Storage or Water Level	N/A
Maximum Storage or Water Level	N/A
Initial Conditions (Water Level)	N/A
Liner Presence/Absence (P = Present; A = Absent)	N/A
Seepage rates	N/A
Stage-Storage-Area Relationship	N/A

N/A = not applicable.

Table D-7: Treatment

Input Variable \ Treatment	Underground Tailings Management Facility
Element ID	**T05**
Treatment Efficiency - Metals	Ref25[(a)]
Treatment Efficiency - Radionuclides	Ref25[(a)]
Treatment Efficiency - Major Ions	Ref25[(a)]
Water quality scaling factors	Ref25[(a)]
Material reactivity	Ref25[(a)]
Operations schedule	Ref25[(a)]
Operational efficiency	Ref25[(a)]
Operational utility	Ref25[(a)]

Notes:

a) To be populated with information from Solute Transport modeling.

Table D-8: Consumption

Input Variable \ Consumption	Not Used
Element ID	**N/A**
Water consumption rates (m^3/hr)	N/A
Maximum retention capacity	N/A

N/A = not applicable.

Table D-9: Assessment Points

Input Variable / Assessment Point	Waste Rock Cover Runoff	Post UGTMF Groundwater Discharge	Pre-east Freshwater Diversion
Element ID	**AP01**	**AP07**	**AP09**
Operating Rule	N/A	N/A	N/A
Flow Rate Threshold (m^3/hr)	N/A	N/A	N/A
Threshold for Water Major Ions Concentration	N/A	N/A	N/A
Thresholds for Water Metals Concentration	N/A	N/A	N/A
Thresholds for Water Radionuclides Concentration	N/A	N/A	N/A

N/A = not applicable.

Table D-10: Discharge

Input Variable \ Discharge	West Surface Runoff Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Element ID	Q01	Q04	Q05	Q06	Q07
Batch release pumping rate (m^3/hr)	N/A	N/A	N/A	N/A	N/A
Batch release duration (hrs)	NA	N/A	N/A	N/A	N/A
Nominal discharge rate (m^3/hr)	N/A	N/A	N/A	N/A	N/A
Operation schedule	Continuous	Continuous	Continuous	Continuous	Continuous
Operation efficiency	100%[(a)]	100%[(a)]	100%[(a)]	100%[(a)]	100%[(a)]
Operation utility	100%[(b)]	100%[(b)]	100%[(b)]	100%[(b)]	100%[(b)]

Notes:

a) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

b) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

Table D-11: Pumping Flows

Input Variable \ Pumping from : to ElementID	Not Used
Pumping Rate (m^3/hr)	N/A
Pumping Capacity (m^3/hr)	N/A
Operating Rule	N/A
Operation schedule	N/A
Operation efficiency	N/A
Operation utility	N/A
Operational triggers	N/A

FSL = full supply level; NOWL = normal operating level; N/A = not applicable.

Table D-12: Diversion Ditch

Upstream Element	Waste Rock (NAG) Stockpile	Post West Bermed Runoff Collection Area	Diversion Ditch	Potentially Acid Generating (PAG) stockpile - West Slope	Potentially Acid Generating (PAG) stockpile - North Slope	Potentially Acid Generating (PAG) stockpile - North East Slope	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undeveloped Area - Contributing to Freshwater Diversion around PAG Area	Undisturbed catchment south of the NPAG Waste Rock Stockpile	Undisturbed catchment south of the NPAG Waste Rock Stockpile
Element ID	**D22**	**D201**	**D202**	**D43**	**D44**	**D45**	**D60**	**D61**	**D70**	**D71**
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:

a) Seepage rate accounted for in the runoff coefficient for the source catchment.

b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".

c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".

d) Operational triggers associated with active years. Sub-annual operatinal triggers can be added if warranted.

e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.

N/A = Not applicable, NAG =non acid generating ; PAG = potentially acid generating, NPAG = non-potentially acid generating.

Table D-12: Diversion Ditch

Upstream Element	Undisturbed catchment north of explosive area access road diverted around West Bermed Runoff Collection Area	Diversion Ditch	Diversion Ditch	Diversion Ditch	Diversion Ditch	Diversion Ditch	Diversion Ditch
Element ID	D80	D400	D401	D402	D600	D601	D701
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]	As per Active Years[d]
Rating curves	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]	Standard Rating Curve[e]

Notes:
a) Seepage rate accounted for in the runoff coefficient for the source catchment.
b) In the base case, operational efficiency is assumed to be 100%. Operational efficiency may be varied to test "operational what-if's".
c) In the base case, operational utility is assumed to be 100%. Operational utility may be varied to test "operational what-if's".
d) Operational triggers associated with active years. Sub-annual operatinal triggers can be added if warranted.
e) Standard rating curve developed based on the Civil Design Criteria for Ditches and Swales - 0000-DD10-DSC-0001 Rev2.
N/A = Not applicable, NAG =non acid generating ; PAG = potentially acid generating, NPAG = non-potentially acid generating.

Table D-13: Gravity Transfer

Input Variable \ Gravity Transfer Outfall	R21 - Batch Plant Sand and Aggregate Storage Area	R23 - Undisturbed catchment bounded by Access Road, Batch Plant and Aggregate Storage Area, Waste Rock NAG, and Contruction Laydown)	R27 - Lined portion of Fuel Farm	R30 - West Bermed Runoff Collection Area local catchment	R31 - Undisturbed catchment bounded by construction / permanent camp and the west runoff containment berm	R42 -Area 2
Element ID	GT21	GT23	GT27	GT30	GT31	GT42
Seepage rates	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]	N/A[a]
Operation schedule	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous	Uncontrolled Continuous
Operation efficiency	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]	100%[b]
Operation utility	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]	100%[c]
Operational triggers	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]	N/A[b]
Rating curves	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]	In = Out[d]

Notes:

a) Seepage rate accounted for in the runoff coefficient for the source catchment.

b) Operational schedule and operatinal triggers as per the element active dates.

c) Base case assumes operation efficiency and operational utility at 100%.

d) All routing rates expected to be sub-daily due to spatial extent of modelling domain.

APPENDIX E

Site Water Quality Model Geochemical and Water Quality Source Terms

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Table Number	Table Title
Table E-1:	Base Case Project Period Inputs
Table E-2:	Upper Case Project Period Inputs
Table E-3:	Underground Rock Wall Project Period Inputs
Table E-4:	Base Case and Upper Case Post-Closure Inputs

Table E-1: Base Case Project Period Inputs

Parameter	Unit	Fresh Water Intake	Undisturbed Areas	Ore Stockpile	Special Waste Stockpile	Groundwater	PAG WRSA	Non-PAG WRSA	Sewage Discharge	Disturbed Areas	Post-Process Plant Addition	Treatment Efficiency	Low Treatment Efficiency	Alternative WRSA
Aluminum	mg/L	0.0038	0.0038	0.0077	0.00022	0.012	0.0039	0.0038	0.0038	0.053	3670	99.996%	98.996%	0.0039
Arsenic	mg/L	0.000095	0.000095	0.16	0.060	0.0023	0.017	0.029	0.000095	0.00060	7.3	99.247%	98.254%	0.038
Calcium	mg/L	3.6	3.6	0.41	0.77	2102	42	33	3.6	0.85	456	0.000%	0.000%	52
Cadmium	mg/L	0.0000049	0.0000049	0.012	0.013	0.000070	0.0029	0.00014	0.0000049	0.000050	0.014	99.929%	98.929%	0.0014
Chloride	mg/L	0.57	0.57	11	12	343	120	140	0.57	1.5	0	0.000%	0.000%	200
Cobalt	mg/L	0.000050	0.000050	0.0023	0.0019	0.0023	1.6	0.0029	0.000050	0.0010	4.7	99.885%	98.886%	0.71
Chromium	mg/L	0.00020	0.00020	0.0028	0.0031	0.00025	0.012	0.0044	0.00020	0.00025	4.7	99.989%	98.989%	0.010
Copper	mg/L	0.00012	0.00012	0.25	0.093	0.0011	0.72	0.011	0.00012	0.00020	58	99.991%	98.991%	1.5
Iron	mg/L	0.086	0.086	0.000079	0.00024	3.9	0.015	1.8	0.086	0.030	1710	99.998%	98.998%	8.9
Mercury	mg/L	0.0000014	0.0000014	0.00011	0.00012	0.0000030	0.00073	0.00044	0.0000014	0.0000045	0	0.000%	0.000%	0.00077
Magnesium	mg/L	1.2	1.2	2.7	3.7	421	42	3.7	1.2	0.25	0	0.000%	0.000%	23
Manganese	mg/L	0.021	0.021	0.065	0.073	0.11	0.78	0.046	0.021	0.090	15	99.873%	98.875%	0.39
Molybdenum	mg/L	0.000053	0.000053	429	159	0.033	0.037	0.027	0.000053	0.00010	5.0	99.884%	98.885%	0.044
Sodium	mg/L	1.4	1.4	260	137	879	3.4	1.8	1.4	0.45	885	0.000%	0.000%	3.4
Ammonia_as_N	mg/L	0.022	0.022	0.82	0.85	0	0	0	362	0.20	0	0.000%	0.000%	0
Nickel	mg/L	0.000073	0.000073	0.00034	0.00066	0.0076	0.69	0.0061	0.000073	0.0013	19	99.925%	98.926%	0.31
Nitrate_as_N	mg/L	0.090	0.090	0.036	0.017	0.040	0	0	700	0.045	0	0.000%	0.000%	0
Phosphorus	mg/L	0.0075	0.0075	0.19	0.19	0.025	0.19	0.19	1.2	0.0016	0	0.000%	0.000%	0.19
Lead	mg/L	0.000047	0.000047	3.3E-08	6.5E-08	0.0041	0.00014	0.00010	0.000047	0.000050	7.8	99.999%	98.999%	0.00010
Lead_210	mg/L	4.6E-12	4.6E-12	1.3E-08	1.5E-09	1.4E-11	7.1E-11	7.1E-11	4.6E-12	3.6E-12	0	0.000%	0.000%	7.1E-11
Polonium_210	mg/L	2.1E-14	2.1E-14	2.3E-10	2.7E-11	5.9E-14	5.3E-13	5.3E-13	2.1E-14	1.5E-14	0	0.000%	0.000%	5.3E-13
Radium_226	mg/L	1.2E-10	1.2E-10	0.00000045	8.3E-08	2.7E-10	3.0E-08	3.0E-08	1.2E-10	6.8E-11	0.0000025	99.849%	98.851%	3.0E-08
Selenium	mg/L	0.000047	0.000047	0.0073	0.0031	0.000050	0.042	0.0028	0.000047	0.000050	0.11	99.273%	98.280%	0.022
Sulphate	mg/L	1.5	1.5	150	120	0.80	470	92	1.5	2.0	2900	0.000%	0.000%	300
Strontium	mg/L	0.030	0.030	0.17	0.18	2.2	0.46	0.18	0.030	0.010	0	0.000%	0.000%	0.39
Thorium_230	mg/L	6.3E-09	6.3E-09	0.00000021	2.3E-08	2.6E-08	0.00000039	0.00000039	6.3E-09	6.6E-09	0	0.000%	0.000%	0.00000039
Uranium	mg/L	0.000051	0.000051	1.3	0.44	0.000050	0.57	0.57	0.000051	0.000050	1.3	99.462%	98.467%	0.57
Vanadium	mg/L	0.00015	0.00015	0.0040	0.0063	0.00010	0.010	0.0088	0.00015	0.00020	33	99.992%	98.992%	0.013
Zinc	mg/L	0.00080	0.00080	0.011	0.036	0.14	0.48	0.093	0.00080	0.0035	1.9	99.874%	98.875%	0.31

PAG = potentially acid generating.
WRSA = waste rock storage area.

Table E-2: Upper Case Project Period Inputs

Parameter	Unit	Freshwater Intake	Undisturbed Areas	Ore Stockpile	Special Waste Stockpile	Groundwater	PAG WRSA	Non-PAG WRSA	Sewage Discharge	Disturbed Areas	Post Process Plant Addition	Treatment Efficiency	Low Treatment Efficiency	Alternative WRSA
Aluminum	mg/L	0.010	0.010	1.8	2.1	0.19	0.0040	0.0038	0.0038	0.053	3670	99.996%	98.996%	0.0039
Arsenic	mg/L	0.00013	0.00013	1.2	0.45	0.018	0.026	0.044	0.000095	0.00060	7.3	99.247%	98.254%	0.038
Calcium	mg/L	4.0	4.0	83	69	3688	63	50	3.6	0.85	456	0.000%	0.000%	52
Cadmium	mg/L	0.000010	0.000010	0.091	0.100	0.00067	0.0044	0.00021	0.0000049	0.000050	0.014	99.929%	98.929%	0.0014
Chloride	mg/L	1.0	1.0	81	89	12370	170	210	0.57	1.5	0	0.000%	0.000%	200
Cobalt	mg/L	0.00010	0.00010	0.017	0.014	0.0070	2.4	0.0044	0.000050	0.0010	4.7	99.885%	98.886%	0.71
Chromium	mg/L	0.00050	0.00050	0.047	0.052	0.0025	0.019	0.0066	0.00020	0.00025	4.7	99.989%	98.989%	0.010
Copper	mg/L	0.00050	0.00050	1.5	0.56	0.0032	0.83	0.016	0.00012	0.00020	58	99.991%	98.991%	1.5
Iron	mg/L	0.46	0.46	4.6	5.2	16	0.016	2.7	0.086	0.030	1710	99.998%	98.998%	8.9
Mercury	mg/L	0.0000040	0.0000040	0.00080	0.00088	0.0000079	0.0011	0.00066	0.0000014	0.0000045	0	0.000%	0.000%	0.00077
Magnesium	mg/L	1.4	1.4	20	28	428	64	5.5	1.2	0.25	0	0.000%	0.000%	23
Manganese	mg/L	0.057	0.057	0.48	0.55	1.9	1.2	0.069	0.021	0.090	15	99.873%	98.875%	0.39
Molybdenum	mg/L	0.00010	0.00010	2663	1064	0.16	0.055	0.040	0.000053	0.00010	5.0	99.884%	98.885%	0.044
Sodium	mg/L	1.5	1.5	17	22	1595	5.2	2.7	1.4	0.45	885	0.000%	0.000%	3.4
Ammonia_as_N	mg/L	0.053	0.053	6.7	7.4	0	0	0	362	0.20	0	0.000%	0.000%	0
Nickel	mg/L	0.00050	0.00050	0.39	0.24	0.031	1.0	0.0091	0.000073	0.0013	19	99.925%	98.926%	0.31
Nitrate_as_N	mg/L	0.50	0.50	1.1	1.2	0.32	0	0	700	0.045	0	0.000%	0.000%	0
Phosphorus	mg/L	0.050	0.050	0.45	0.45	0.21	0.45	0.45	1.2	0.0016	0	0.000%	0.000%	0.19
Lead	mg/L	0.00010	0.00010	0.53	0.028	0.031	0.00013	0.000084	0.000047	0.000050	7.8	99.999%	98.999%	0.00010
Lead_210	mg/L	1.3E-11	1.3E-11	9.6E-08	1.1E-08	3.6E-11	7.1E-11	7.1E-11	4.6E-12	3.6E-12	0	0.000%	0.000%	7.1E-11
Polonium_210	mg/L	1.1E-13	1.1E-13	1.7E-09	2.0E-10	5.9E-14	5.3E-13	5.3E-13	2.1E-14	1.5E-14	0	0.000%	0.000%	5.3E-13
Radium_226	mg/L	2.7E-10	2.7E-10	0.0000033	0.00000062	0.00000024	3.0E-08	3.0E-08	1.2E-10	6.8E-11	0.0000025	99.849%	98.851%	3.0E-08
Selenium	mg/L	0.00010	0.00010	0.054	0.023	0.00050	0.063	0.0043	0.000047	0.000050	0.11	99.273%	98.280%	0.022
Sulphate	mg/L	1.7	1.7	894	713	3.3	700	140	1.5	2.0	2900	0.000%	0.000%	300
Strontium	mg/L	0.032	0.032	1.3	1.4	95	0.69	0.27	0.030	0.010	0	0.000%	0.000%	0.39
Thorium_230	mg/L	1.3E-08	1.3E-08	0.0000016	0.00000017	2.6E-08	0.00000039	0.00000039	6.3E-09	6.6E-09	0	0.000%	0.000%	0.00000039
Uranium	mg/L	0.00010	0.00010	795	44	0.00050	0.57	0.57	0.000051	0.000050	1.3	99.462%	98.467%	0.57
Vanadium	mg/L	0.00050	0.00050	0.70	0.68	0.0012	0.015	0.013	0.00015	0.00020	33	99.992%	98.992%	0.013
Zinc	mg/L	0.0030	0.0030	0.084	0.27	0.97	0.73	0.14	0.00080	0.0035	1.9	99.874%	98.875%	0.31

PAG = potentially acid generating.
WRSA = waste rock storage area.

Table E-3: Underground Rock Wall Project Period Inputs

Operating Year	Aluminum	Arsenic	Calcium	Cadmium	Chloride	Cobalt	Chromium	Copper	Iron	Mercury	Magnesium	Manganese	Molybdenum	Sodium	mmonia_as_	Nickel	Nitrate_as_N	Phosphorus
	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	kg/year	mg/L
-4	6.1	0.036	46	0.00057	89	0.22	0.020	0.19	17	0.00063	16	0.094	0.15	8.6	0	0.11	0	0.027
-3	20	0.067	120	0.0015	210	0.55	0.062	0.46	49	0.0014	45	0.24	0.44	28	0	0.31	0	0.027
-2	32	0.21	260	0.0042	470	0.61	0.10	0.59	79	0.0034	82	0.45	6.2	47	0	0.39	0	0.027
-1	53	0.67	590	0.024	1100	1.1	0.17	1.2	140	0.0085	170	1.2	54	79	0	0.74	0	0.027
1	86	1.3	940	0.083	1900	2.3	0.24	3.0	200	0.015	310	3.1	210	120	0	1.7	0	0.027
2	130	2.1	1300	0.17	2900	3.5	0.37	4.6	290	0.021	460	4.8	420	180	0	2.7	0	0.027
3	160	2.7	1700	0.21	3600	4.4	0.46	5.7	370	0.027	570	5.9	530	230	0	3.4	0	0.027
4	190	3.3	2000	0.28	4300	5.8	0.56	7.1	450	0.032	680	7.1	730	280	0	4.3	0	0.027
5	200	3.7	2100	0.34	4600	6.2	0.59	7.8	460	0.034	730	7.9	880	310	0	4.7	0	0.027
6	200	3.8	2100	0.36	4700	6.3	0.60	7.8	470	0.035	740	8.1	930	310	0	4.8	0	0.027
7	200	3.8	2100	0.36	4700	6.3	0.60	7.8	470	0.035	740	8.1	930	310	0	4.8	0	0.027
8	200	3.8	2100	0.36	4700	6.3	0.60	7.8	470	0.035	740	8.1	930	310	0	4.8	0	0.027
9	210	3.8	2200	0.36	4700	6.4	0.60	7.9	470	0.035	740	8.1	940	310	0	4.8	0	0.027
10	220	4.3	2500	0.39	5400	6.9	0.66	8.4	510	0.041	810	8.9	990	340	0	5.1	0	0.027
11	230	5.0	2800	0.47	6100	7.9	0.71	9.6	550	0.046	890	10	1200	370	0	5.8	0	0.027
12	240	5.7	3100	0.56	6700	8.3	0.75	10	560	0.050	950	11	1500	400	0	6.3	0	0.027
13	250	6.4	3200	0.65	7100	8.7	0.78	11	580	0.053	990	12	1700	430	0	6.6	0	0.027
14	250	6.8	3300	0.73	7400	8.9	0.80	11	590	0.055	1000	12	1900	450	0	6.9	0	0.027
15	250	7.1	3400	0.78	7600	9.0	0.81	11	590	0.056	1000	13	2000	460	0	7.0	0	0.027
16	250	7.1	3400	0.78	7600	9.0	0.81	11	590	0.056	1000	13	2000	460	0	7.0	0	0.027
17	250	7.1	3400	0.78	7600	9.0	0.81	11	590	0.056	1000	13	2000	460	0	7.0	0	0.027
18	250	7.1	3400	0.78	7600	9.0	0.81	11	590	0.056	1000	13	2000	460	0	7.0	0	0.027
19	250	7.1	3400	0.78	7600	9.0	0.81	11	590	0.056	1000	13	2000	460	0	7.0	0	0.027
20	270	7.6	3600	0.82	8100	9.9	0.87	12	650	0.060	1100	13	2100	490	0	7.5	0	0.027
21	290	8.1	3900	0.86	8800	11	0.94	13	710	0.065	1200	15	2200	520	0	8.3	0	0.027
22	320	8.6	4300	0.89	9500	12	1.0	15	770	0.071	1300	16	2300	560	0	9.0	0	0.027
23	350	9.1	4600	0.93	10000	13	1.1	16	830	0.076	1400	17	2400	600	0	9.8	0	0.027
24	370	9.6	4900	0.97	11000	15	1.2	17	900	0.081	1500	18	2500	630	0	10	0	0.027
25	230	3.6	2200	0.32	4500	5.9	0.59	8.4	440	0.034	760	8.9	830	310	0	4.9	0	0.027
26	150	2.6	1500	0.25	3100	4.4	0.39	6.1	300	0.024	520	6.3	650	210	0	3.6	0	0.027
27	140	2.1	1300	0.19	2700	3.9	0.33	5.6	250	0.020	460	5.7	480	170	0	3.2	0	0.027
28	87	1.5	860	0.13	1800	2.8	0.24	3.5	190	0.014	300	3.4	340	120	0	2.1	0	0.027
29	5.1	0.31	120	0.034	320	0.26	0.027	0.25	22	0.0023	37	0.39	91	16	0	0.20	0	0.027

Table E-3: Underground Rock Wall Project Period Inputs

Operating Year	Lead	Lead_210	Polonium_210	Radium_226	Selenium	Sulphate	Strontium	Thorium_230	Uranium	Vanadium	Zinc
	kg/year	mg/L	mg/L	mg/L	kg/year	kg/year	kg/year	mg/L	mg/L	kg/year	kg/year
-4	0.010	1.4E-10	2.5E-12	0.0000019	0.028	170	0.69	0.0000037	4.7	0.022	0.17
-3	0.032	1.4E-10	2.5E-12	0.0000019	0.082	410	1.9	0.0000037	4.7	0.058	0.42
-2	0.051	1.4E-10	2.5E-12	0.0000019	0.12	880	3.5	0.0000037	4.7	0.13	0.90
-1	0.089	1.4E-10	2.5E-12	0.0000019	0.23	2100	7.2	0.0000037	4.7	0.34	2.1
1	0.14	1.4E-10	2.5E-12	0.0000019	0.44	3900	11	0.0000037	4.7	0.74	3.9
2	0.21	1.4E-10	2.5E-12	0.0000019	0.75	5800	17	0.0000037	4.7	1.3	5.7
3	0.27	1.4E-10	2.5E-12	0.0000019	0.95	7200	21	0.0000037	4.7	1.6	7.0
4	0.33	1.4E-10	2.5E-12	0.0000019	1.2	8500	26	0.0000037	4.7	2.1	8.4
5	0.35	1.4E-10	2.5E-12	0.0000019	1.4	9200	28	0.0000037	4.7	2.4	9.0
6	0.35	1.4E-10	2.5E-12	0.0000019	1.4	9300	28	0.0000037	4.7	2.5	9.1
7	0.35	1.4E-10	2.5E-12	0.0000019	1.4	9300	28	0.0000037	4.7	2.5	9.1
8	0.35	1.4E-10	2.5E-12	0.0000019	1.4	9300	28	0.0000037	4.7	2.5	9.1
9	0.35	1.4E-10	2.5E-12	0.0000019	1.5	9300	29	0.0000037	4.7	2.5	9.2
10	0.37	1.4E-10	2.5E-12	0.0000019	1.6	11000	32	0.0000037	4.7	2.8	10
11	0.40	1.4E-10	2.5E-12	0.0000019	1.8	12000	35	0.0000037	4.7	3.2	12
12	0.43	1.4E-10	2.5E-12	0.0000019	2.0	13000	38	0.0000037	4.7	3.8	13
13	0.45	1.4E-10	2.5E-12	0.0000019	2.2	14000	40	0.0000037	4.7	4.3	13
14	0.46	1.4E-10	2.5E-12	0.0000019	2.4	14000	42	0.0000037	4.7	4.7	14
15	0.47	1.4E-10	2.5E-12	0.0000019	2.5	14000	43	0.0000037	4.7	5.0	14
16	0.47	1.4E-10	2.5E-12	0.0000019	2.5	14000	43	0.0000037	4.7	5.0	14
17	0.47	1.4E-10	2.5E-12	0.0000019	2.5	14000	43	0.0000037	4.7	5.0	14
18	0.47	1.4E-10	2.5E-12	0.0000019	2.5	14000	43	0.0000037	4.7	5.0	14
19	0.47	1.4E-10	2.5E-12	0.0000019	2.5	14000	43	0.0000037	4.7	5.0	14
20	0.50	1.4E-10	2.5E-12	0.0000019	2.7	15000	46	0.0000037	4.7	5.2	15
21	0.54	1.4E-10	2.5E-12	0.0000019	2.9	17000	50	0.0000037	4.7	5.5	16
22	0.59	1.4E-10	2.5E-12	0.0000019	3.1	18000	54	0.0000037	4.7	5.8	18
23	0.63	1.4E-10	2.5E-12	0.0000019	3.2	20000	58	0.0000037	4.7	6.1	19
24	0.67	1.4E-10	2.5E-12	0.0000019	3.4	21000	61	0.0000037	4.7	6.4	20
25	0.36	1.4E-10	2.5E-12	0.0000019	1.3	9500	27	0.0000037	4.7	2.3	9.3
26	0.24	1.4E-10	2.5E-12	0.0000019	0.97	6600	18	0.0000037	4.7	1.7	6.4
27	0.21	1.4E-10	2.5E-12	0.0000019	0.77	5800	15	0.0000037	4.7	1.3	5.6
28	0.14	1.4E-10	2.5E-12	0.0000019	0.56	3800	11	0.0000037	4.7	0.94	3.7
29	0.014	1.4E-10	2.5E-12	0.0000019	0.10	520	1.8	0.0000037	4.7	0.22	0.51

Table E-4: Base Case and Upper Case Post-Closure Inputs

Parameter	Unit	Stockpile Closure Covers	Reclaimed Areas	Undisturbed Areas
Aluminum	mg/L	0.053	0.053	0.0038
Arsenic	mg/L	0.00060	0.00060	0.000095
Calcium	mg/L	0.85	0.85	3.6
Cadmium	mg/L	0.000050	0.000050	0.0000049
Chloride	mg/L	1.5	1.5	0.57
Cobalt	mg/L	0.0010	0.0010	0.000050
Chromium	mg/L	0.00025	0.00025	0.00020
Copper	mg/L	0.00020	0.00020	0.00012
Iron	mg/L	0.030	0.030	0.086
Mercury	mg/L	0.0000045	0.0000045	0.0000014
Magnesium	mg/L	0.25	0.25	1.2
Manganese	mg/L	0.090	0.090	0.021
Molybdenum	mg/L	0.00010	0.00010	0.000053
Sodium	mg/L	0.45	0.45	1.4
Ammonia_as_N	mg/L	0.20	0.20	0.022
Nickel	mg/L	0.0013	0.0013	0.000073
Nitrate_as_N	mg/L	0.045	0.045	0.090
Phosphorus	mg/L	0.0016	0.0016	0.0075
Lead	mg/L	0.000050	0.000050	0.000047
Lead_210	mg/L	3.6E-12	3.6E-12	4.6E-12
Polonium_210	mg/L	1.5E-14	1.5E-14	2.1E-14
Radium_226	mg/L	6.8E-11	6.8E-11	1.2E-10
Selenium	mg/L	0.000050	0.000050	0.000047
Sulphate	mg/L	2.0	2.0	1.5
Strontium	mg/L	0.010	0.010	0.030
Thorium_230	mg/L	6.6E-09	6.6E-09	6.3E-09
Uranium	mg/L	0.000050	0.000050	0.000051
Vanadium	mg/L	0.00020	0.00020	0.00015
Zinc	mg/L	0.0035	0.0035	0.00080

APPENDIX F

Water Balance Results

Table F-0: Scenario 15: Sensitivity to Upset Conditions

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Table F-2	Scenario 2: Application Case Deterministic
Table F-3	Scenario 3: Application Case Stochastic
Table F-4	Scenario 5: Climate Change
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Table F-7	Scenario 8: Extreme Event – Climate Change PMP
Table F-8	Scenario 9: Sensitivity – Wet Cycle
Table F-9	Scenario 10: Sensitivity Dry Cycle
Table F-10	Scenario 18: Sensitivity to Upset Conditions

PMP = probable maximum precipitation.

Table F-1: Scenario 1: Application Case

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	335	4185	224	105	7	287	1999	2777	0	3409	335	4185	105	0	108	10	5
Annual Nominal Rate	Construction Phase	m^3/day	746	151	899	12	75	82	88	1020	0	0	0	151	899	75	0	1	2	4
Annual Nominal Rate	Operations Phase	m^3/day	0	181	6575	375	148	0	472	0	5092	0	6250	181	6575	148	0	6	11	5
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	526	4528	162	150	0	191	5587	0	0	0	526	4528	150	0	6	10	5
Annual Nominal Rate	Tansitional Monitoring Stage	m^3/day	0	651	9	0	0	0	0	4	0	0	0	651	9	0	0	416	10	5
Monthly Average Discharge Rate	**Entire CODR Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2681	16	3538	168	104	0	10	1556	2549	0	3176	16	3538	104	0	5	1	0
February	Entire Simulation	m^3/day	2690	36	3508	162	105	0	25	1526	2554	0	3184	36	3508	105	0	10	1	1
		m^3/day	2665	349	3824	199	106	9	182	1729	2714	0	3349	349	3824	106	0	91	9	5
April	Treated Effluent Tank to Process Plant	m^3/day	2564	688	4683	268	105	10	530	2375	2878	0	3516	688	4683	105	0	153	16	9
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2622	284	4406	248	105	4	335	2136	2880	0	3518	284	4406	105	0	114	11	6
June	Settling Pond to Process Plant	m^3/day	2580	627	4576	246	104	12	489	2320	2883	0	3518	627	4576	104	0	235	19	10
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2492	672	4805	263	102	28	606	2551	2894	0	3520	672	4805	102	0	246	21	11
August	Freshwater Intake to Process Plant	m^3/day	2518	568	4722	267	104	13	520	2406	2891	0	3522	568	4722	104	0	202	17	9
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2566	375	4578	257	104	6	402	2308	2886	0	3514	375	4578	104	0	121	11	6
October	Entire Simulation	m^3/day	2630	226	4171	227	105	6	191	1871	2860	0	3490	226	4171	105	0	70	6	3
November	Entire Simulation	m^3/day	2688	32	3646	192	105	1	25	1537	2687	0	3318	32	3646	105	0	7	1	0
December	Entire Simulation	m^3/day	2700	13	3551	171	105	0	13	1511	2578	0	3213	13	3551	105	0	1	0	0
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	0	533	19	68	0	0	563	0	0	0	0	533	68	0	0	0	0
February	Construction	m^3/day	753	0	418	0	76	0	0	426	0	0	0	0	418	76	0	0	0	0
March	Construction	m^3/day	746	232	614	0	77	96	0	625	0	0	0	232	614	77	0	0	0	3
April	Construction	m^3/day	746	537	1157	28	76	101	168	1253	0	0	0	537	1157	76	0	3	4	9
May	Construction	m^3/day	746	46	1116	9	74	63	154	1497	0	0	0	46	1116	74	0	1	2	3
June	Construction	m^3/day	746	66	1160	8	75	119	119	1362	0	0	0	66	1160	75	0	1	2	6
July	Construction	m^3/day	746	304	1426	11	75	274	247	1665	0	0	0	304	1426	75	0	3	5	11
August	Construction	m^3/day	746	204	1324	42	75	156	156	1584	0	0	0	204	1324	75	0	2	3	7
September	Construction	m^3/day	746	194	1083	24	75	70	163	1440	0	0	0	194	1083	75	0	2	3	5
October	Construction	m^3/day	746	140	782	4	75	79	47	842	0	0	0	140	782	75	0	1	1	4
November	Construction	m^3/day	746	84	657	0	75	18	0	583	0	0	0	84	657	75	0	0	0	1
December	Construction	m^3/day	746	5	493	0	74	0	0	366	0	0	0	5	493	74	0	0	0	0

Table F-1: Scenario 1: Application Case

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4460	14	5525	300	148	0	19	1616	4672	0	5822	14	5525	148	0	1	1	0
February	Operations	m^3/day	4476	36	5582	296	149	0	43	1655	4682	0	5840	36	5582	149	0	1	1	1
March	Operations	m^3/day	4433	212	5970	339	150	0	271	1841	4950	0	6109	212	5970	150	0	5	9	5
April	Operations	m^3/day	4249	583	7258	425	149	0	879	2893	5263	0	6451	583	7258	149	0	12	19	10
May	Operations	m^3/day	4351	121	6951	411	148	0	544	2527	5278	0	6436	121	6951	148	0	7	11	6
June	Operations	m^3/day	4284	214	7166	410	148	0	803	2816	5284	0	6451	214	7166	148	0	12	19	10
July	Operations	m^3/day	4136	321	7508	427	142	0	1001	3142	5304	0	6459	321	7508	142	0	14	23	12
August	Operations	m^3/day	4136	253	7360	421	146	0	850	2972	5305	0	6454	253	7360	146	0	11	17	9
September	Operations	m^3/day	4229	206	7215	414	147	0	720	2815	5292	0	6445	206	7215	147	0	9	14	7
October	Operations	m^3/day	4333	150	6784	383	148	0	419	2331	5268	0	6426	150	6784	148	0	5	8	4
November	Operations	m^3/day	4449	43	5967	352	149	0	76	1699	5054	0	6209	43	5967	149	0	1	2	1
December	Operations	m^3/day	4471	15	5572	313	149	0	20	1602	4728	0	5885	15	5572	149	0	0	1	0
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	12	3945	24	151	0	0	5370	1	0	2	12	3945	151	0	0	0	0
February	Active Closure	m^3/day	1596	1	3744	10	149	0	0	5069	0	0	0	1	3744	149	0	0	0	0
March	Active Closure	m^3/day	1596	382	4045	68	150	0	91	5444	0	0	0	382	4045	150	0	5	8	4
April	Active Closure	m^3/day	1596	1185	5129	276	151	0	424	5919	0	0	0	1185	5129	151	0	12	20	10
May	Active Closure	m^3/day	1596	394	4845	215	150	0	205	5628	0	0	0	394	4845	150	0	5	8	4
June	Active Closure	m^3/day	1596	1140	4530	170	151	0	178	5348	0	0	0	1140	4530	151	0	11	19	9
July	Active Closure	m^3/day	1596	936	4967	248	150	0	274	5886	0	0	0	936	4967	150	0	11	18	9
August	Active Closure	m^3/day	1596	1130	5275	296	152	0	460	5960	0	0	0	1130	5275	152	0	15	25	12
September	Active Closure	m^3/day	1596	713	5256	301	151	0	414	6186	0	0	0	713	5256	151	0	9	14	7
October	Active Closure	m^3/day	1596	302	4707	226	150	0	170	5555	0	0	0	302	4707	150	0	4	7	3
November	Active Closure	m^3/day	1596	100	4097	100	149	0	71	5424	0	0	0	100	4097	149	0	1	2	1
December	Active Closure	m^3/day	1596	0	3753	0	149	0	0	5223	0	0	0	0	3753	149	0	0	0	0
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transtitional Monitoring	m^3/day	0	27	110	0	0	0	0	50	0	0	0	27	110	0	0	17	0	0
February	Transtitional Monitoring	m^3/day	0	57	0	0	0	0	0	0	0	0	0	57	0	0	0	37	1	0
March	Transtitional Monitoring	m^3/day	0	511	0	0	0	0	0	0	0	0	0	511	0	0	0	329	8	4
April	Transtitional Monitoring	m^3/day	0	927	0	0	0	0	0	0	0	0	0	927	0	0	0	560	14	7
May	Transtitional Monitoring	m^3/day	0	662	0	0	0	0	0	0	0	0	0	662	0	0	0	427	10	5
June	Transtitional Monitoring	m^3/day	0	1358	0	0	0	0	0	0	0	0	0	1358	0	0	0	875	21	11
July	Transtitional Monitoring	m^3/day	0	1466	0	0	0	0	0	0	0	0	0	1466	0	0	0	945	23	11
August	Transtitional Monitoring	m^3/day	0	1272	0	0	0	0	0	0	0	0	0	1272	0	0	0	820	20	10
September	Transtitional Monitoring	m^3/day	0	813	0	0	0	0	0	0	0	0	0	813	0	0	0	524	13	6
October	Transtitional Monitoring	m^3/day	0	581	0	0	0	0	0	0	0	0	0	581	0	0	0	374	9	5
November	Transtitional Monitoring	m^3/day	0	96	0	0	0	0	0	0	0	0	0	96	0	0	0	62	1	1
December	Transtitional Monitoring	m^3/day	0	5	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	0

Table F-2: Scenario 2: Application Case Deterministic

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	337	4192	234	104	8	294	2019	2768	0	3402	337	4192	104	0	100	10	5
Annual Nominal Rate	Construction Phase	m^3/day	746	240	914	93	75	86	112	1128	0	0	0	240	914	75	0	1	2	5
Annual Nominal Rate	Operations Phase	m^3/day	0	183	6573	379	147	0	477	0	5074	0	6237	183	6573	147	0	7	11	5
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	585	4596	169	150	0	209	5612	0	0	0	585	4596	150	0	7	11	5
Annual Nominal Rate	Tansitional Monitoring Stage	m^3/day	0	594	8	0	0	0	0	3	0	0	0	594	8	0	0	381	9	5
Monthly Average Discharge Rate	**Entire CODC Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2683	21	3533	167	104	1	11	1515	2540	0	3168	21	3533	104	0	6	1	0
February	Entire Simulation	m^3/day	2675	46	3498	160	105	5	25	1571	2514	0	3144	46	3498	105	0	15	1	1
		m^3/day	2643	307	3792	197	106	6	178	1729	2651	0	3283	307	3792	106	0	82	8	4
April	Treated Effluent Tank to Process Plant	m^3/day	2554	718	4536	244	104	9	476	2269	2864	0	3506	718	4536	104	0	174	16	9
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2599	350	4376	243	104	15	338	2131	2878	0	3513	350	4376	104	0	123	11	6
June	Settling Pond to Process Plant	m^3/day	2584	608	4639	270	105	16	511	2305	2882	0	3523	608	4639	105	0	182	19	10
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2505	630	4830	305	103	15	653	2613	2893	0	3534	630	4830	103	0	215	21	11
August	Freshwater Intake to Process Plant	m^3/day	2485	584	4754	284	101	8	554	2452	2897	0	3530	584	4754	101	0	163	17	9
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2556	338	4641	283	104	10	435	2412	2889	0	3530	338	4641	104	0	94	11	6
October	Entire Simulation	m^3/day	2627	244	4235	255	105	7	197	1965	2860	0	3484	244	4235	105	0	74	6	3
November	Entire Simulation	m^3/day	2688	39	3656	196	105	1	17	1557	2693	0	3321	39	3656	105	0	10	1	1
December	Entire Simulation	m^3/day	2706	16	3557	179	105	0	10	1514	2573	0	3208	16	3557	105	0	4	0	0
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	30	499	19	68	11	0	575	0	0	0	30	499	68	0	0	0	0
February	Construction	m^3/day	753	51	570	0	76	57	35	781	0	0	0	51	570	76	0	1	2	2
March	Construction	m^3/day	746	136	677	0	77	12	61	864	0	0	0	136	677	77	0	1	2	3
April	Construction	m^3/day	746	797	1355	26	76	146	168	1361	0	0	0	797	1355	76	0	1	2	10
May	Construction	m^3/day	746	221	1042	0	75	143	66	1122	0	0	0	221	1042	75	0	1	2	5
June	Construction	m^3/day	746	622	1537	65	76	174	353	1517	0	0	0	622	1537	76	0	5	8	14
July	Construction	m^3/day	746	492	1115	315	76	172	324	1918	0	0	0	492	1115	76	0	4	7	11
August	Construction	m^3/day	746	105	1160	255	75	83	130	1534	0	0	0	105	1160	75	0	2	3	6
September	Construction	m^3/day	746	208	1184	78	75	117	168	1741	0	0	0	208	1184	75	0	2	4	7
October	Construction	m^3/day	746	158	648	339	75	113	26	1095	0	0	0	158	648	75	0	0	0	3
November	Construction	m^3/day	746	22	675	1	75	0	13	606	0	0	0	22	675	75	0	0	0	1
December	Construction	m^3/day	746	49	507	3	75	8	0	412	0	0	0	49	507	75	0	0	0	1

Table F-2: Scenario 2: Application Case Deterministic

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4464	14	5516	296	148	0	18	1611	4656	0	5807	14	5516	148	0	0	1	0
February	Operations	m^3/day	4449	21	5508	288	149	0	20	1611	4609	0	5765	21	5508	149	0	0	0	0
March	Operations	m^3/day	4396	175	5881	334	150	0	249	1842	4830	0	5990	175	5881	150	0	5	8	4
April	Operations	m^3/day	4235	564	7123	409	147	0	819	2754	5230	0	6398	564	7123	147	0	12	19	10
May	Operations	m^3/day	4303	156	6964	411	147	0	596	2637	5278	0	6451	156	6964	147	0	7	12	6
June	Operations	m^3/day	4295	206	7017	407	148	0	709	2580	5280	0	6452	206	7017	148	0	11	18	9
July	Operations	m^3/day	4172	277	7564	434	145	0	1033	3191	5300	0	6477	277	7564	145	0	14	23	12
August	Operations	m^3/day	4062	319	7488	444	142	0	954	3081	5315	0	6488	319	7488	142	0	12	20	10
September	Operations	m^3/day	4212	254	7297	427	146	0	780	2930	5300	0	6472	254	7297	146	0	9	15	8
October	Operations	m^3/day	4330	157	6883	398	149	0	430	2490	5269	0	6417	157	6883	149	0	5	9	4
November	Operations	m^3/day	4443	48	6036	352	149	0	78	1761	5071	0	6222	48	6036	149	0	1	2	1
December	Operations	m^3/day	4481	7	5541	338	149	0	10	1595	4725	0	5881	7	5541	149	0	0	0	0
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	11	4004	38	151	0	13	5075	1	0	2	11	4004	151	0	0	1	0
February	Active Closure	m^3/day	1596	73	3934	34	149	0	92	5475	0	0	0	73	3934	149	0	1	2	1
March	Active Closure	m^3/day	1596	362	4123	93	150	0	93	5407	0	0	0	362	4123	150	0	5	7	4
April	Active Closure	m^3/day	1596	933	4575	161	150	0	225	5462	0	0	0	933	4575	150	0	8	13	7
May	Active Closure	m^3/day	1596	492	4468	181	149	0	105	5444	0	0	0	492	4468	149	0	5	8	4
June	Active Closure	m^3/day	1596	1280	5235	305	152	0	501	5919	0	0	0	1280	5235	152	0	16	26	13
July	Active Closure	m^3/day	1596	1069	5283	283	151	0	384	5997	0	0	0	1069	5283	151	0	13	21	11
August	Active Closure	m^3/day	1596	1574	5252	282	152	0	435	6070	0	0	0	1574	5252	152	0	15	25	13
September	Active Closure	m^3/day	1596	622	5282	301	151	0	359	6072	0	0	0	622	5282	151	0	9	14	7
October	Active Closure	m^3/day	1596	470	4932	230	150	0	275	5849	0	0	0	470	4932	150	0	5	9	5
November	Active Closure	m^3/day	1596	97	4276	114	149	0	24	5348	0	0	0	97	4276	149	0	1	1	1
December	Active Closure	m^3/day	1596	11	3754	0	149	0	0	5223	0	0	0	11	3754	149	0	0	0	0
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transitional Monitoring	m^3/day	0	38	0	0	0	0	0	30	0	0	0	38	0	0	0	25	1	0
February	Transitional Monitoring	m^3/day	0	60	0	0	0	0	0	0	0	0	0	60	0	0	0	39	1	0
March	Transitional Monitoring	m^3/day	0	480	0	0	0	0	0	0	0	0	0	480	0	0	0	309	7	4
April	Transitional Monitoring	m^3/day	0	1214	0	0	0	0	0	0	0	0	0	1214	0	0	0	761	19	9
May	Transitional Monitoring	m^3/day	0	600	0	0	0	0	0	0	0	0	0	600	0	0	0	387	9	5
June	Transitional Monitoring	m^3/day	0	1138	0	0	0	0	0	0	0	0	0	1138	0	0	0	733	18	9
July	Transitional Monitoring	m^3/day	0	1309	0	0	0	0	0	0	0	0	0	1309	0	0	0	843	20	10
August	Transitional Monitoring	m^3/day	0	929	0	0	0	0	0	0	0	0	0	929	0	0	0	598	14	7
September	Transitional Monitoring	m^3/day	0	694	0	0	0	0	0	0	0	0	0	694	0	0	0	447	11	5
October	Transitional Monitoring	m^3/day	0	518	0	0	0	0	0	0	0	0	0	518	0	0	0	334	8	4
November	Transitional Monitoring	m^3/day	0	81	0	0	0	0	0	0	0	0	0	81	0	0	0	52	1	1
December	Transitional Monitoring	m^3/day	0	49	0	0	0	0	0	0	0	0	0	49	0	0	0	31	1	0

Table F-3: Scenario 3: Application Case Stochastic

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4 and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4 and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	343	4207	231	105	8	294	2017	2794	0	3425	343	4207	105	0	102	10	5
Annual Nominal Rate	Construction Phase	m^3/day	746	249	964	12	75	90	101	1163	0	0	0	249	964	75	0	1	2	5
Annual Nominal Rate	Operations Phase	m^3/day	0	180	6584	385	148	0	477	0	5123	0	6279	180	6584	148	0	7	11	5
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	616	4626	177	150	0	218	5728	0	0	0	616	4626	150	0	7	11	6
Annual Nominal Rate	Tansitional Monitoring Stage	m^3/day	0	608	8	0	0	0	0	3	0	0	0	608	8	0	0	390	9	5
Monthly Average Discharge Rate	**Entire CODC Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2683	67	3582	176	104	0	24	1542	2595	0	3218	67	3582	104	0	15	1	1
February	Entire Simulation	m^3/day	2692	181	3619	184	106	0	62	1650	2600	0	3231	181	3619	106	0	33	4	2
		m^3/day	2637	508	4094	223	106	11	310	1976	2764	0	3400	508	4094	106	0	113	11	6
April	Treated Effluent Tank to Process Plant	m^3/day	2616	337	4350	232	105	12	320	2090	2869	0	3499	337	4350	105	0	83	9	5
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2638	295	4235	234	105	8	313	1966	2878	0	3512	295	4235	105	0	113	10	6
June	Settling Pond to Process Plant	m^3/day	2578	529	4569	267	105	13	503	2310	2879	0	3525	529	4569	105	0	184	18	10
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2497	683	4855	282	103	18	639	2549	2893	0	3525	683	4855	103	0	225	21	11
August	Freshwater Intake to Process Plant	m^3/day	2493	591	4708	270	103	14	533	2448	2896	0	3526	591	4708	103	0	202	17	9
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2545	350	4615	254	102	5	426	2330	2888	0	3513	350	4615	102	0	95	12	6
October	Entire Simulation	m^3/day	2633	278	4269	242	106	6	216	1998	2869	0	3497	278	4269	106	0	75	7	4
November	Entire Simulation	m^3/day	2677	106	3734	203	105	4	46	1627	2735	0	3363	106	3734	105	0	26	2	1
December	Entire Simulation	m^3/day	2697	70	3596	185	105	1	22	1529	2601	0	3231	70	3596	105	0	25	1	1
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	70	453	27	69	0	0	540	0	0	0	70	453	69	0	0	0	1
February	Construction	m^3/day	753	112	677	0	77	0	31	781	0	0	0	112	677	77	0	1	2	2
March	Construction	m^3/day	746	474	770	2	77	120	82	1157	0	0	0	474	770	77	0	2	3	7
April	Construction	m^3/day	746	376	1266	16	76	126	163	1547	0	0	0	376	1266	76	0	1	2	4
May	Construction	m^3/day	746	200	1019	0	75	79	97	1052	0	0	0	200	1019	75	0	2	2	6
June	Construction	m^3/day	746	205	1204	8	75	148	158	1420	0	0	0	205	1204	75	0	2	3	8
July	Construction	m^3/day	746	413	1171	5	75	229	128	1388	0	0	0	413	1171	75	0	2	3	9
August	Construction	m^3/day	746	265	1311	44	75	137	182	1710	0	0	0	265	1311	75	0	2	4	9
September	Construction	m^3/day	746	235	1102	15	75	97	124	1336	0	0	0	235	1102	75	0	2	3	5
October	Construction	m^3/day	746	335	1193	19	75	86	166	1709	0	0	0	335	1193	75	0	2	3	5
November	Construction	m^3/day	746	238	783	11	75	40	58	832	0	0	0	238	783	75	0	1	1	3
December	Construction	m^3/day	746	49	614	0	74	8	24	470	0	0	0	49	614	74	0	0	1	1

Table F-3: Scenario 3: Application Case Stochastic

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4 and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4 and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4464	29	5613	310	148	0	40	1617	4758	0	5900	29	5613	148	0	1	1	1
February	Operations	m^3/day	4477	83	5661	317	150	0	92	1686	4761	0	5920	83	5661	150	0	2	3	1
March	Operations	m^3/day	4383	390	6380	365	150	0	475	2153	5041	0	6204	390	6380	150	0	8	12	6
April	Operations	m^3/day	4346	287	6803	390	150	0	520	2402	5258	0	6422	287	6803	150	0	7	11	5
May	Operations	m^3/day	4381	93	6664	400	148	0	503	2269	5277	0	6432	93	6664	148	0	7	11	5
June	Operations	m^3/day	4291	225	7003	421	149	0	754	2605	5274	0	6446	225	7003	149	0	12	19	10
July	Operations	m^3/day	4137	261	7557	450	146	0	1032	3181	5301	0	6456	261	7557	146	0	14	23	12
August	Operations	m^3/day	4104	292	7430	439	144	0	931	3025	5311	0	6475	292	7430	144	0	12	19	10
September	Operations	m^3/day	4183	237	7282	415	143	0	769	2909	5298	0	6446	237	7282	143	0	9	15	8
October	Operations	m^3/day	4335	150	6839	398	149	0	422	2429	5271	0	6422	150	6839	149	0	5	8	4
November	Operations	m^3/day	4431	72	6099	369	150	0	119	1769	5155	0	6303	72	6099	150	0	2	3	1
December	Operations	m^3/day	4460	34	5625	336	149	0	40	1620	4756	0	5908	34	5625	149	0	1	1	1
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	195	3999	42	151	0	14	5297	1	0	2	195	3999	151	0	2	3	1
February	Active Closure	m^3/day	1596	656	4045	74	150	0	19	5758	0	0	0	656	4045	150	0	6	10	5
March	Active Closure	m^3/day	1596	540	4587	177	150	0	217	5886	0	0	0	540	4587	150	0	6	10	5
April	Active Closure	m^3/day	1596	520	4726	175	150	0	336	5919	0	0	0	520	4726	150	0	5	8	4
May	Active Closure	m^3/day	1596	343	4487	124	149	0	183	5555	0	0	0	343	4487	149	0	5	8	4
June	Active Closure	m^3/day	1596	1031	4916	263	151	0	335	5729	0	0	0	1031	4916	151	0	13	22	11
July	Active Closure	m^3/day	1596	1168	5309	312	151	0	467	5997	0	0	0	1168	5309	151	0	14	23	12
August	Active Closure	m^3/day	1596	1053	5227	297	150	0	364	6034	0	0	0	1053	5227	150	0	12	20	10
September	Active Closure	m^3/day	1596	929	5075	244	151	0	291	5843	0	0	0	929	5075	151	0	10	16	8
October	Active Closure	m^3/day	1596	681	5042	248	150	0	310	6070	0	0	0	681	5042	150	0	7	12	6
November	Active Closure	m^3/day	1596	202	4170	126	149	0	22	5500	0	0	0	202	4170	149	0	1	2	1
December	Active Closure	m^3/day	1596	89	3886	33	149	0	39	5149	0	0	0	89	3886	149	0	1	2	1
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transitional Monitoring	m^3/day	0	90	0	0	0	0	0	35	0	0	0	90	99	0	0	58	1	1
February	Transitional Monitoring	m^3/day	0	175	0	0	0	0	0	0	0	0	0	175	0	0	0	113	3	1
March	Transitional Monitoring	m^3/day	0	731	0	0	0	0	0	0	0	0	0	731	0	0	0	451	11	6
April	Transitional Monitoring	m^3/day	0	411	0	0	0	0	0	0	0	0	0	411	0	0	0	265	6	3
May	Transitional Monitoring	m^3/day	0	604	0	0	0	0	0	0	0	0	0	604	0	0	0	389	9	5
June	Transitional Monitoring	m^3/day	0	1091	0	0	0	0	0	0	0	0	0	1091	0	0	0	703	17	9
July	Transitional Monitoring	m^3/day	0	1353	0	0	0	0	0	0	0	0	0	1353	0	0	0	871	21	11
August	Transitional Monitoring	m^3/day	0	1247	0	0	0	0	0	0	0	0	0	1247	0	0	0	804	19	10
September	Transitional Monitoring	m^3/day	0	698	0	0	0	0	0	0	0	0	0	698	0	0	0	449	11	5
October	Transitional Monitoring	m^3/day	0	572	0	0	0	0	0	0	0	0	0	572	0	0	0	369	9	4
November	Transitional Monitoring	m^3/day	0	169	0	0	0	0	0	0	0	0	0	169	0	0	0	109	3	1
December	Transitional Monitoring	m^3/day	0	115	0	0	0	0	0	0	0	0	0	115	0	0	0	74	2	1

Table F-4: Scenario 5: Climate Change

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	179	4309	236	104	9	308	2060	2823	0	3454	179	4309	104	0	106	10	6
Annual Nominal Rate	Construction Phase	m^3/day	746	143	922	15	75	96	91	1058	0	0	0	143	922	75	0	1	2	4
Annual Nominal Rate	Operations Phase	m^3/day	0	163	6727	393	148	0	507	0	5175	0	6332	163	6727	148	0	7	12	6
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	258	4670	178	150	0	199	5665	0	0	0	258	4670	150	0	7	11	5
Annual Nominal Rate	Tansitional Monitoring Stage	m^3/day	0	189	101	0	0	0	0	97	0	0	0	189	101	0	0	405	11	5
Monthly Average Discharge Rate	**Entire CODC Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2678	46	3706	197	104	3	34	1559	2650	0	3277	46	3706	104	0	30	2	1
February	Entire Simulation	m^3/day	2674	76	3671	191	105	2	64	1596	2659	0	3287	76	3671	105	0	11	3	2
		m^3/day	2604	332	4193	219	105	12	309	2002	2800	0	3436	332	4193	105	0	95	11	6
April	Treated Effluent Tank to Process Plant	m^3/day	2603	271	4532	257	105	8	364	2166	2879	0	3511	271	4532	105	0	129	11	6
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2598	140	4384	238	104	6	356	2124	2881	0	3517	140	4384	104	0	101	12	6
June	Settling Pond to Process Plant	m^3/day	2572	275	4680	257	105	15	505	2413	2887	0	3521	275	4680	105	0	221	19	10
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2482	296	4877	268	101	26	615	2588	2897	0	3530	296	4877	101	0	230	21	11
August	Freshwater Intake to Process Plant	m^3/day	2488	260	4800	277	103	14	542	2486	2896	0	3523	260	4800	103	0	194	18	9
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2548	173	4664	264	103	8	421	2342	2889	0	3521	173	4664	103	0	119	12	6
October	Entire Simulation	m^3/day	2612	120	4290	239	106	5	228	1966	2872	0	3498	120	4290	106	0	82	7	4
November	Entire Simulation	m^3/day	2667	56	3924	209	106	3	84	1662	2809	0	3437	56	3924	106	0	20	3	1
December	Entire Simulation	m^3/day	2694	30	3779	205	105	0	50	1632	2712	0	3344	30	3779	105	0	7	2	1
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	89	401	19	69	31	0	492	0	0	0	89	401	69	0	0	0	1
February	Construction	m^3/day	753	65	573	0	77	19	0	530	0	0	0	65	573	77	0	0	0	1
March	Construction	m^3/day	746	249	608	0	77	120	3	658	0	0	0	249	608	77	0	1	1	4
April	Construction	m^3/day	746	425	1240	24	76	89	213	1336	0	0	0	425	1240	76	0	3	4	7
May	Construction	m^3/day	746	44	1089	8	74	81	136	1486	0	0	0	44	1089	74	0	1	2	4
June	Construction	m^3/day	746	73	1130	0	75	148	97	1243	0	0	0	73	1130	75	0	1	2	6
July	Construction	m^3/day	746	294	1466	22	75	253	264	1815	0	0	0	294	1466	75	0	3	6	11
August	Construction	m^3/day	746	159	1285	55	75	184	146	1711	0	0	0	159	1285	75	0	2	3	8
September	Construction	m^3/day	746	92	1135	38	75	93	160	1452	0	0	0	92	1135	75	0	2	3	5
October	Construction	m^3/day	746	114	803	7	75	78	54	750	0	0	0	114	803	75	0	1	1	4
November	Construction	m^3/day	746	68	667	0	75	48	19	691	0	0	0	68	667	75	0	0	0	1
December	Construction	m^3/day	746	38	650	0	74	0	0	507	0	0	0	38	650	74	0	0	0	0

Table F-4: Scenario 5: Climate Change

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4455	37	5765	345	148	0	56	1652	4858	0	6007	37	5765	148	0	1	2	1
February	Operations	m^3/day	4447	99	5779	343	149	0	113	1682	4872	0	6027	99	5779	149	0	2	4	2
March	Operations	m^3/day	4320	363	6541	373	149	0	510	2289	5114	0	6277	363	6541	149	0	8	13	6
April	Operations	m^3/day	4315	303	7012	411	149	0	572	2528	5280	0	6440	303	7012	149	0	7	12	6
May	Operations	m^3/day	4316	127	6847	390	148	0	575	2400	5278	0	6447	127	6847	148	0	8	13	6
June	Operations	m^3/day	4263	191	7284	431	148	0	831	2861	5291	0	6453	191	7284	148	0	12	20	10
July	Operations	m^3/day	4132	252	7588	429	144	0	1010	3173	5307	0	6468	252	7588	144	0	14	24	12
August	Operations	m^3/day	4082	207	7420	429	144	0	887	2977	5313	0	6474	207	7420	144	0	11	18	9
September	Operations	m^3/day	4189	155	7348	418	145	0	764	2852	5298	0	6451	155	7348	145	0	9	16	8
October	Operations	m^3/day	4302	107	6904	399	148	0	471	2458	5278	0	6423	107	6904	148	0	6	9	5
November	Operations	m^3/day	4411	66	6261	386	150	0	174	1877	5213	0	6361	66	6261	150	0	3	4	2
December	Operations	m^3/day	4450	49	5919	360	149	0	99	1709	4986	0	6138	49	5919	149	0	2	3	2
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	38	4174	61	151	0	28	5075	2	0	2	38	4174	151	0	1	2	1
February	Active Closure	m^3/day	1596	28	3923	32	149	0	1	5313	0	0	0	28	3923	149	0	1	2	1
March	Active Closure	m^3/day	1596	400	4369	130	150	0	173	5591	0	0	0	400	4369	150	0	7	11	5
April	Active Closure	m^3/day	1596	585	5124	268	151	0	330	5729	0	0	0	585	5124	151	0	10	17	8
May	Active Closure	m^3/day	1596	145	4818	200	150	0	196	5776	0	0	0	145	4818	150	0	5	8	4
June	Active Closure	m^3/day	1596	469	4602	174	151	0	187	5615	0	0	0	469	4602	151	0	12	20	10
July	Active Closure	m^3/day	1596	313	5106	254	150	0	277	6034	0	0	0	313	5106	150	0	11	18	9
August	Active Closure	m^3/day	1596	540	5376	326	152	0	483	5997	0	0	0	540	5376	152	0	16	26	13
September	Active Closure	m^3/day	1596	291	5344	321	151	0	397	6110	0	0	0	291	5344	151	0	9	15	7
October	Active Closure	m^3/day	1596	116	4845	229	150	0	166	5739	0	0	0	116	4845	150	0	5	7	4
November	Active Closure	m^3/day	1596	141	4424	131	150	0	135	5577	0	0	0	141	4424	150	0	3	5	3
December	Active Closure	m^3/day	1596	18	3898	7	149	0	1	5407	0	0	0	18	3898	149	0	1	1	0
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transtitional Monitoring	m^3/day	0	56	0	0	0	0	0	145	0	0	0	56	0	0	0	115	3	2
February	Transtitional Monitoring	m^3/day	0	17	0	0	0	0	0	96	0	0	0	17	0	0	0	36	1	0
March	Transtitional Monitoring	m^3/day	0	175	0	0	0	0	0	96	0	0	0	175	0	0	0	352	10	5
April	Transtitional Monitoring	m^3/day	0	216	0	0	0	0	0	94	0	0	0	216	0	0	0	460	12	6
May	Transtitional Monitoring	m^3/day	0	158	0	0	0	0	0	91	0	0	0	158	0	0	0	341	9	5
June	Transtitional Monitoring	m^3/day	0	382	0	0	0	0	0	90	0	0	0	382	0	0	0	822	22	11
July	Transtitional Monitoring	m^3/day	0	407	0	0	0	0	0	88	0	0	0	407	0	0	0	876	23	12
August	Transtitional Monitoring	m^3/day	0	361	0	0	0	0	0	89	0	0	0	361	0	0	0	778	21	10
September	Transtitional Monitoring	m^3/day	0	237	0	0	0	0	0	91	0	0	0	237	0	0	0	511	14	7
October	Transtitional Monitoring	m^3/day	0	178	0	0	0	0	0	94	0	0	0	178	0	0	0	384	10	5
November	Transtitional Monitoring	m^3/day	0	54	0	0	0	0	0	96	0	0	0	54	0	0	0	117	3	2
December	Transtitional Monitoring	m^3/day	0	21	0	0	0	0	0	96	0	0	0	21	0	0	0	45	1	1

Table F-5: Scenario 6: Extreme Event – Summer PMP

Value	Summary Period	Units	P/S00	P/S01	P/S02	P/S03	P/S04	P/S05	P/S06	P/S07	P/S08	P/S09	P/S10	P/S11
			Surface Runoff Pond #1	Treated Effluent Pond #1	Treated Effluent Pond #2	Treated Effluent Pond #3	Treated Effluent Pond #4	Contingency Pond	Settling Pond	PAG Runoff Collection Area	West Bermed Runoff Collection Area	Surface Runoff Pond #2	Special Waste Collection Sump	Ore Stockpile Collection Sump
Number of Overflow Events	Entire CODR Simulation	#	0	0	0	0	0	26	0	0	0	22 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Construction Phase	#	0	0	0	0	0	0	0	0	0	0	0	0
Number of Overflow Events	Operations Phase	#	0	0	0	0	0	23 (<5,000 m^3)	0	0	0	22 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Active Closure Stage	#	0	0	0	0	0	3 (~50,000 m^3)	0	0	0	0	0	0
Number of Overflow Events	Tansitional Monitoring Stage	#	0	0	0	0	0	0	0	0	0	0	0	0

Table F-6: Scenario 7: Extreme Event – Spring PMP

Value	Summary Period	Units	P/S00	P/S01	P/S02	P/S03	P/S04	P/S05	P/S06	P/S07	P/S08	P/S09	P/S10	P/S11
			Surface Runoff Pond #1	Treated Effluent Pond #1	Treated Effluent Pond #2	Treated Effluent Pond #3	Treated Effluent Pond #4	Contingency Pond	Settling Pond	PAG Runoff Collection Area	West Bermed Runoff Collection Area	Surface Runoff Pond #2	Special Waste Collection Sump	Ore Stockpile Collection Sump
Number of Overflow Events	Entire CODR Simulation	#	0	0	0	0	0	3 (~20,000 m^3)	0	0	0	13 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Construction Phase	#	0	0	0	0	0	0	0	0	0	1 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Operations Phase	#	0	0	0	0	0	0	0	0	0	11 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Active Closure Stage	#	0	0	0	0	0	3 (~20,000 m^3)	0	0	0	1 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Tansitional Monitoring Stage	#	0	0	0	0	0	0	0	0	0	0	0	0

Table F-7: Scenario 8: Extreme Event – Climate Change PMP

Value	Summary Period		P/S00	P/S01	P/S02	P/S03	P/S04	P/S05	P/S06	P/S07	P/S08	P/S09	P/S10	P/S11
		Units	Surface Runoff Pond #1	Treated Effluent Pond #1	Treated Effluent Pond #2	Treated Effluent Pond #3	Treated Effluent Pond #4	Contingency Pond	Settling Pond	PAG Runoff Collection Area	West Bermed Runoff Collection Area	Surface Runoff Pond #2	Special Waste Collection Sump	Ore Stockpile Collection Sump
Number of Overflow Events	Entire CODR Simulation	#	0	0	0	0	0	26 (Variable by Phase)	0	0	6	22 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Construction Phase	#	0	0	0	0	0	0	0	0	0	0	0	0
Number of Overflow Events	Operations Phase	#	0	0	0	0	0	23 (<5,000 m^3)	0	0	5 (<30,000 m^3)	20 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Active Closure Stage	#	0	0	0	0	0	3 (~50,000 m^3)	0	0	1 (<1,000 m^3)	2 (To West Bermed Runoff Collection Area)	0	0
Number of Overflow Events	Tansitional Monitoring Stage	#	0	0	0	0	0	0	0	0	0	0	0	0

Table F-8: Scenario 9: Sensitivity – Wet Cycle

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	239	4278	236	103	11	312	2066	2781	0	3410	239	4278	103	0	109	11	6
Annual Nominal Rate	Construction Phase	m^3/day	746	338	997	11	75	121	90	1056	0	0	0	338	997	75	0	1	2	6
Annual Nominal Rate	Operations Phase	m^3/day	0	221	6651	393	145	0	510	0	5098	0	6252	221	6651	145	0	7	11	6
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	338	4702	182	150	0	221	5712	0	0	0	338	4702	150	0	7	11	6
Annual Nominal Rate	Transitional Monitoring Stage	m^3/day	0	196	101	0	0	0	0	97	0	0	0	196	101	0	0	419	11	6
Monthly Average Discharge Rate	**Entire CODC Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2684	0	3588	184	104	0	0	1523	2581	0	3199	0	3588	104	0	0	0	0
February	Entire Simulation	m^3/day	2691	0	3557	174	105	0	0	1549	2568	0	3191	0	3557	105	0	0	0	0
		m^3/day	2687	3	3571	176	105	0	14	1531	2581	0	3209	3	3571	105	0	4	0	0
April	Treated Effluent Tank to Process Pla	m^3/day	2667	76	3866	211	105	5	164	1669	2782	0	3411	76	3866	105	0	74	7	4
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2558	662	4465	246	106	19	467	2148	2873	0	3522	662	4465	106	0	296	29	16
June	Settling Pond to Process Plant	m^3/day	2279	426	5143	297	96	27	812	2851	2919	0	3553	426	5143	96	0	204	19	10
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2301	501	5117	294	98	25	782	2846	2915	0	3532	501	5117	98	0	252	24	13
August	Freshwater Intake to Process Plant	m^3/day	2314	557	5009	293	101	21	666	2690	2912	0	3543	557	5009	101	0	222	22	12
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2389	401	4907	280	99	21	559	2559	2903	0	3535	401	4907	99	0	175	16	9
October	Entire Simulation	m^3/day	2612	112	4455	252	104	6	143	2112	2875	0	3501	112	4455	104	0	49	5	2
November	Entire Simulation	m^3/day	2659	0	3787	211	105	0	0	1549	2785	0	3412	0	3787	105	0	0	0	0
December	Entire Simulation	m^3/day	2704	0	3635	194	105	0	0	1565	2608	0	3238	0	3635	105	0	0	0	0
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	0	417	19	68	0	0	435	0	0	0	0	417	68	0	0	0	0
February	Construction	m^3/day	753	0	489	0	76	0	0	491	0	0	0	0	489	76	0	0	0	0
March	Construction	m^3/day	746	0	471	0	76	0	0	459	0	0	0	0	471	76	0	0	0	0
April	Construction	m^3/day	746	61	886	7	75	40	123	952	0	0	0	61	886	75	0	2	3	3
May	Construction	m^3/day	746	620	1284	39	76	149	229	1304	0	0	0	620	1284	76	0	2	4	13
June	Construction	m^3/day	746	997	1637	11	77	362	167	1739	0	0	0	997	1637	77	0	3	4	13
July	Construction	m^3/day	746	641	1662	26	76	244	282	2107	0	0	0	641	1662	76	0	3	5	12
August	Construction	m^3/day	746	875	1455	18	76	289	99	1751	0	0	0	875	1455	76	0	1	2	13
September	Construction	m^3/day	746	579	1252	1	76	255	125	1281	0	0	0	579	1252	76	0	2	3	9
October	Construction	m^3/day	746	242	1040	8	75	93	42	940	0	0	0	242	1040	75	0	0	1	3
November	Construction	m^3/day	746	18	815	0	74	17	12	765	0	0	0	18	815	74	0	0	0	0
December	Construction	m^3/day	746	0	533	0	74	0	0	412	0	0	0	0	533	74	0	0	0	0
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4466	0	5571	329	148	0	0	1579	4731	0	5865	0	5571	148	0	0	0	0
February	Operations	m^3/day	4477	0	5598	318	149	0	0	1599	4709	0	5852	0	5598	149	0	0	0	0
March	Operations	m^3/day	4469	0	5608	317	149	0	17	1618	4731	0	5883	0	5608	149	0	0	0	0
April	Operations	m^3/day	4434	44	5999	359	149	0	226	1713	5051	0	6204	44	5999	149	0	3	6	3
May	Operations	m^3/day	4333	434	6626	398	150	0	642	2272	5255	0	6446	434	6626	150	0	16	26	13
June	Operations	m^3/day	3682	677	8005	468	137	0	1326	3544	5357	0	6530	677	8005	137	0	17	28	14
July	Operations	m^3/day	3795	376	7925	457	133	0	1303	3527	5340	0	6474	376	7925	133	0	14	24	12
August	Operations	m^3/day	3722	582	7801	462	141	0	1183	3373	5346	0	6500	582	7801	141	0	16	27	13
September	Operations	m^3/day	3961	359	7566	452	139	0	918	3173	5319	0	6485	359	7566	139	0	11	19	9
October	Operations	m^3/day	4194	159	7158	427	144	0	451	2687	5289	0	6444	159	7158	144	0	4	7	3
November	Operations	m^3/day	4398	9	6183	361	149	0	24	1799	5184	0	6331	9	6183	149	0	0	0	0
December	Operations	m^3/day	4466	0	5715	362	149	0	0	1610	4843	0	5994	0	5715	149	0	0	0	0
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	0	4062	29	151	0	0	5186	2	0	2	0	4062	151	0	0	0	0
February	Active Closure	m^3/day	1596	0	3832	15	149	0	0	5353	0	0	0	0	3832	149	0	0	0	0
March	Active Closure	m^3/day	1596	5	3901	5	149	0	14	5223	0	0	0	5	3901	149	0	0	1	0
April	Active Closure	m^3/day	1596	97	4146	82	149	0	80	5158	0	0	0	97	4146	149	0	3	5	3
May	Active Closure	m^3/day	1596	556	4503	161	151	0	172	5555	0	0	0	556	4503	151	0	15	24	12
June	Active Closure	m^3/day	1596	979	5674	357	153	0	613	6452	0	0	0	979	5674	153	0	17	27	14
July	Active Closure	m^3/day	1596	646	5619	361	152	0	566	6476	0	0	0	646	5619	152	0	15	24	12
August	Active Closure	m^3/day	1596	1085	5623	366	152	0	577	6181	0	0	0	1085	5623	152	0	19	31	15
September	Active Closure	m^3/day	1596	451	5518	338	151	0	416	6300	0	0	0	451	5518	151	0	10	17	8
October	Active Closure	m^3/day	1596	199	5212	278	150	0	200	5812	0	0	0	199	5212	150	0	4	7	3
November	Active Closure	m^3/day	1596	14	4410	167	149	0	1	5653	0	0	0	14	4410	149	0	0	0	0
December	Active Closure	m^3/day	1596	0	3877	21	149	0	0	5186	0	0	0	0	3877	149	0	0	0	0
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transitional Monitoring	m^3/day	0	0	0	0	0	0	0	132	0	0	0	0	0	0	0	0	0	0
February	Transitional Monitoring	m^3/day	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	0	0	0
March	Transitional Monitoring	m^3/day	0	5	0	0	0	0	0	96	0	0	0	5	0	0	0	11	0	0
April	Transitional Monitoring	m^3/day	0	97	0	0	0	0	0	94	0	0	0	97	0	0	0	209	6	3
May	Transitional Monitoring	m^3/day	0	447	0	0	0	0	0	91	0	0	0	447	0	0	0	917	26	13
June	Transitional Monitoring	m^3/day	0	491	0	0	0	0	0	90	0	0	0	491	0	0	0	1059	28	14
July	Transitional Monitoring	m^3/day	0	409	0	0	0	0	0	89	0	0	0	409	0	0	0	881	24	12
August	Transitional Monitoring	m^3/day	0	427	0	0	0	0	0	90	0	0	0	427	0	0	0	921	25	12
September	Transitional Monitoring	m^3/day	0	340	0	0	0	0	0	92	0	0	0	340	0	0	0	732	20	10
October	Transitional Monitoring	m^3/day	0	117	0	0	0	0	0	95	0	0	0	117	0	0	0	252	7	3
November	Transitional Monitoring	m^3/day	0	9	0	0	0	0	0	96	0	0	0	9	0	0	0	19	1	0
December	Transitional Monitoring	m^3/day	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	0	0	0

Table F-9: Scenario 10: Sensitivity Dry Cycle

Value	Summary Period	Units	I01	AP01	AP02 Discharge	AP02 Recycled	AP03	AP04 Discharge	AP04 Recycled	AP05	AP06	AP07	AP08	Q01	Q02	Q03	Q04	Q05	Q06	Q07
			Fresh Water Intake	Post West Bermed Runoff Collection Area	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Treated Effluent Monitoring Ponds (Pond 1, 2, 3, 4, and Contingency Pond)	Post Sewage Treatment Lagoons	Post Surface Runoff Pond #2	Post Surface Runoff Pond #2	Pre-Effluent Treatment Plant Feed	Post Process Plant	Post UGTMF Groundwater Discharge	Pre Process Plant	West Surface Runoff Discharge	Effluent Discharge	Domestic Sewage Discharge	Groundwater Discharge	East Perimeter Freshwater Diversion Discharge	South Perimeter Freshwater Diversion Discharge	West Perimeter Freshwater Diversion Discharge
Annual Nominal Rate	Entire CODR Simulation	m^3/day	0	118	4109	222	105	8	227	1938	2743	0	3375	118	4109	105	0	78	8	4
Annual Nominal Rate	Construction Phase	m^3/day	746	157	901	10	75	86	89	1017	0	0	0	157	901	75	0	1	2	4
Annual Nominal Rate	Operations Phase	m^3/day	0	90	6408	378	148	0	369	0	5029	0	6188	90	6408	148	0	5	8	4
Annual Nominal Rate	Active Closure Stage	m^3/day	1596	174	4455	131	150	0	150	5559	0	0	0	174	4455	150	0	5	8	4
Annual Nominal Rate	Tansitional Monitoring Stage	m^3/day	0	140	101	0	0	0	0	96	0	0	0	140	101	0	0	298	8	4
Monthly Average Discharge Rate	**Entire CODC Simulation**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Entire Simulation	m^3/day	2685	0	3570	173	104	0	0	1511	2563	0	3190	0	3570	104	0	0	0	0
February	Entire Simulation	m^3/day	2692	0	3556	163	105	0	1	1557	2552	0	3180	0	3556	105	0	0	0	0
		m^3/day	2691	2	3551	166	105	0	6	1558	2565	0	3194	2	3551	105	0	3	0	0
April	Treated Effluent Tank to Process Plant	m^3/day	2680	44	3728	207	105	8	118	1588	2722	0	3350	44	3728	105	0	46	4	2
May	Entire Simulation	Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22	2524	456	4454	253	104	19	498	2161	2864	0	3499	456	4454	104	0	241	23	12
June	Settling Pond to Process Plant	m^3/day	2496	263	4954	290	102	12	619	2665	2896	0	3552	263	4954	102	0	158	16	8
July	Entire Simulation	Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22	2541	260	4941	281	104	29	592	2626	2890	0	3526	260	4941	104	0	203	19	10
August	Freshwater Intake to Process Plant	m^3/day	2618	128	4723	262	106	13	375	2444	2880	0	3515	128	4723	106	0	129	12	7
September	Entire Simulation	Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22	2630	149	4382	253	105	6	260	2124	2875	0	3509	149	4382	105	0	80	8	4
October	Entire Simulation	m^3/day	2649	77	4054	216	105	6	140	1749	2838	0	3464	77	4054	105	0	44	4	2
November	Entire Simulation	m^3/day	2688	1	3597	202	105	1	3	1533	2626	0	3255	1	3597	105	0	0	0	0
December	Entire Simulation	m^3/day	2706	0	3617	185	105	0	0	1558	2592	0	3224	0	3617	105	0	0	0	0
Monthly Average Discharge Rate	**Construction**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Construction	m^3/day	734	0	320	15	68	0	0	352	0	0	0	0	320	68	0	0	0	0
February	Construction	m^3/day	753	0	562	0	76	0	0	543	0	0	0	0	562	76	0	0	0	0
March	Construction	m^3/day	746	0	409	0	76	0	0	412	0	0	0	0	409	76	0	0	0	0
April	Construction	m^3/day	746	52	748	0	75	52	43	726	0	0	0	52	748	75	0	1	1	2
May	Construction	m^3/day	746	702	1269	27	76	243	217	1352	0	0	0	702	1269	76	0	3	5	13
June	Construction	m^3/day	746	140	1301	16	75	129	189	1777	0	0	0	140	1301	75	0	1	2	6
July	Construction	m^3/day	746	399	1585	15	75	277	238	1760	0	0	0	399	1585	75	0	3	5	11
August	Construction	m^3/day	746	223	1369	19	75	158	163	1861	0	0	0	223	1369	75	0	2	3	7
September	Construction	m^3/day	746	198	1272	21	75	78	178	1622	0	0	0	198	1272	75	0	2	3	5
October	Construction	m^3/day	746	139	834	8	75	75	34	797	0	0	0	139	834	75	0	1	1	4
November	Construction	m^3/day	746	12	486	0	74	15	0	414	0	0	0	12	486	74	0	0	0	0
December	Construction	m^3/day	746	0	632	0	74	0	0	564	0	0	0	0	632	74	0	0	0	0
Monthly Average Discharge Rate	**Operations**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Operations	m^3/day	4469	0	5562	310	148	0	0	1571	4699	0	5848	0	5562	148	0	0	0	0
February	Operations	m^3/day	4477	0	5578	297	149	0	1	1616	4677	0	5829	0	5578	149	0	0	0	0
March	Operations	m^3/day	4476	0	5588	304	149	0	8	1602	4697	0	5849	0	5588	149	0	0	0	0
April	Operations	m^3/day	4458	4	5811	356	149	0	166	1621	4958	0	6112	4	5811	149	0	2	4	2
May	Operations	m^3/day	4218	395	6660	408	149	0	655	2295	5223	0	6391	395	6660	149	0	13	22	11
June	Operations	m^3/day	4098	250	7742	464	141	0	1096	3316	5313	0	6505	250	7742	141	0	11	19	9
July	Operations	m^3/day	4201	141	7610	446	145	0	956	3215	5297	0	6457	141	7610	145	0	12	20	10
August	Operations	m^3/day	4320	79	7421	432	150	0	684	3020	5283	0	6447	79	7421	150	0	8	14	7
September	Operations	m^3/day	4354	130	7005	423	150	0	510	2630	5278	0	6444	130	7005	150	0	7	11	6
October	Operations	m^3/day	4396	70	6518	382	150	0	303	2042	5255	0	6403	70	6518	150	0	4	7	3
November	Operations	m^3/day	4449	9	5764	376	149	0	30	1610	4932	0	6082	9	5764	149	0	0	1	0
December	Operations	m^3/day	4476	0	5583	338	149	0	0	1610	4714	0	5865	0	5583	149	0	0	0	0
Monthly Average Discharge Rate	**Active Closure**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Active Closure	m^3/day	1596	0	4026	24	151	0	0	5186	1	0	2	0	4026	151	0	0	0	0
February	Active Closure	m^3/day	1596	0	3855	0	149	0	0	5313	0	0	0	0	3855	149	0	0	0	0
March	Active Closure	m^3/day	1596	4	3843	0	149	0	0	5555	0	0	0	4	3843	149	0	0	0	0
April	Active Closure	m^3/day	1596	60	4035	66	149	0	49	5082	0	0	0	60	4035	149	0	2	4	2
May	Active Closure	m^3/day	1596	620	4708	180	151	0	254	5702	0	0	0	620	4708	151	0	13	22	11
June	Active Closure	m^3/day	1596	395	5417	321	151	0	510	6034	0	0	0	395	5417	151	0	12	19	10
July	Active Closure	m^3/day	1596	350	5359	314	151	0	392	6107	0	0	0	350	5359	151	0	12	20	10
August	Active Closure	m^3/day	1596	243	5056	271	150	0	245	5665	0	0	0	243	5056	150	0	8	14	7
September	Active Closure	m^3/day	1596	218	4985	228	150	0	235	6034	0	0	0	218	4985	150	0	7	11	6
October	Active Closure	m^3/day	1596	163	4400	140	150	0	95	5223	0	0	0	163	4400	150	0	4	6	3
November	Active Closure	m^3/day	1596	13	3895	22	149	0	17	5310	0	0	0	13	3895	149	0	0	1	0
December	Active Closure	m^3/day	1596	0	3848	0	149	0	0	5481	0	0	0	0	3848	149	0	0	0	0
Monthly Average Discharge Rate	**Transitional Monitoring**	**Units**	**I01**	**AP01**	**AP02 Discharge**	**AP02 Recycled**	**AP03**	**AP04 Discharge**	**AP04 Recycled**	**AP05**	**AP06**	**AP07**	**AP08**	**Q01**	**Q02**	**Q03**	**Q04**	**Q05**	**Q06**	**Q07**
January	Transtitional Monitoring	m^3/day	0	0	0	0	0	0	0	129	0	0	0	0	0	0	0	0	0	0
February	Transtitional Monitoring	m^3/day	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	1	0	0
March	Transtitional Monitoring	m^3/day	0	3	0	0	0	0	0	96	0	0	0	3	0	0	0	7	0	0
April	Transtitional Monitoring	m^3/day	0	71	0	0	0	0	0	94	0	0	0	71	0	0	0	153	4	2
May	Transtitional Monitoring	m^3/day	0	403	0	0	0	0	0	91	0	0	0	403	0	0	0	824	23	12
June	Transtitional Monitoring	m^3/day	0	297	0	0	0	0	0	90	0	0	0	297	0	0	0	640	17	9
July	Transtitional Monitoring	m^3/day	0	353	0	0	0	0	0	89	0	0	0	353	0	0	0	760	20	10
August	Transtitional Monitoring	m^3/day	0	240	0	0	0	0	0	90	0	0	0	240	0	0	0	517	14	7
September	Transtitional Monitoring	m^3/day	0	188	0	0	0	0	0	92	0	0	0	188	0	0	0	405	11	5
October	Transtitional Monitoring	m^3/day	0	106	0	0	0	0	0	94	0	0	0	106	0	0	0	228	6	3
November	Transtitional Monitoring	m^3/day	0	9	0	0	0	0	0	96	0	0	0	9	0	0	0	20	1	0
December	Transtitional Monitoring	m^3/day	0	0	0	0	0	0	0	96	0	0	0	0	0	0	0	0	0	0

Table F-10: Scenario 18: Sensitivity to Upset Conditions

ID	Description	Summary of Upset Condition Implications
P01	Post Treated Effluent Monitoring Ponds to Effluent Discharge	Treated Effluent Ponds overflows (28,000 m^3)
		Flow (7,500 m^3) recycled to Settling Pond which does not overflow
P02	Treated Effluent Tank to Treated Effluent Pond #1	Treated Effluent Tank overflows (48,000 m^3)
P03	Ore Stockpile Collection Sump to Settling Pond	No overflow, the Ore Stockpile Collection Sump has enough capacity to accumulate seven days of water before discharging
P04	Special Waste Collection Sump to Settling Pond	No overflow, the Special Waste Collection Sump has enough capacity to accumulate seven days of water before discharging
P13	Underground Main Sump to Settling Pond	Underground Main Sump overflows (8,600 m^3)
P14	Underground Below Sump to Settling Pond	Underground Below Sump overflows (18,000 m^3)
P15	Groundwater Inflow to Backfill to Underground Below Sump	Groundwater pooling (670 m^3)
P16	Groundwater Inflow to Shafts to Underground Below Sump	Groundwater pooling (5,000 m^3)
		Groundwater pooling (12,000 m^3)
P18	Treated Effluent Tank to Process Plant	No overflow, other outflows from Treated Effluent Tank are able to compensate
		Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22
P19	Settling Pond to Process Plant	No overflow, other outflows from Settling Pond maintain the storage below capacity
		Process plant nflow does not meet demand (by 3,500 m^3/day), reflected in outflow P22
P20	Freshwater Intake to Process Plant	No overflow, but unused intake (21,000 m^3)
		Process Plant inflow does not meet demand (by 3,000 m^3/day), reflected in outflow P22
P21	Process Plant to Underground Waste Disposal	Effluent Treatment Plant overflows (45 m^3) because P22 compensates for absence of P21
P22	Process Plant to Effluent Treatment Plant	No overflow, process plant has enough capacity to accumulate seven days of water before discharging
P23	PAG Runoff Collection Area to Settling Pond	No overflow, PAG Runoff Collection Area has enough capacity to accumulate seven days of water before discharging
P24	Surface Runoff Pond #1 to Settling Pond	No overflow, Surface Runoff Pond #1 has enough capacity to accumulate seven days of water before discharging
P26	Surface Runoff Pond #2 to Settling Pond	No overflow, Surface Runoff Pond #2 has enough capacity to accumulate seven days of water before discharging
P27	Contingency Pond to Settling Pond	No overflow, Contingency Pond has enough capacity to accumulate seven days of water before discharging
P28	Effluent Treatment Plant Sump to Settling Pond	No overflow, Effluent Treatment Plant Sump has enough capacity to accumulate seven days of water before discharging (no flow ever goes to the Effluent Treatment Plant Sump)
P29	Effluent Treatment Plant to Treated Effluent Tank	Effluent Treatment Plant overflows (55,000 m^3)
		Process plant inflow does not meet demand (by 240 m^3/day), reflected in outflow P22
P33	Settling Pond to Pre-Effluent Treatment Plant Feed	Contingency Pond overflows (3,700 m^3)
P38	Treated Effluent Tank to Underground Activities	No overflow, other outflows from Treated Effluent Tank are able to compensate
P40	Post-Effluent Treatment Plant to Settling Pond	No overflow, Treated Effluent Ponds are able to discharge enough in the seven days to not recirculate the water to the Settling Pond
P50	Settling Pond to Contingency Pond	No overflow, other outflows from Settling Pond are able to compensate

APPENDIX G

Water Quality Results

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Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0041	0.023	0.000097	0.0000051	3.5	0.57	0.00020	0.000055	0.00012	0.085	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0083	0.037	0.00014	0.0000088	3.0	0.61	0.00018	0.00014	0.00012	0.072	0.000043	0.011	1.0	0.026	0.0000016
	May		0.014	0.058	0.00019	0.000014	2.6	0.71	0.00019	0.00025	0.00013	0.064	0.000042	0.011	0.88	0.033	0.0000019
	June		0.021	0.086	0.00028	0.000021	2.9	0.95	0.00023	0.00039	0.00016	0.074	0.000053	0.013	1.0	0.047	0.0000026
	July		0.032	0.13	0.00040	0.000031	3.1	1.3	0.00029	0.00059	0.00020	0.080	0.000063	0.015	1.0	0.066	0.0000035
	August		0.042	0.16	0.00051	0.000040	3.3	1.5	0.00033	0.00077	0.00024	0.086	0.000072	0.017	1.1	0.081	0.0000043
	September		0.043	0.17	0.00052	0.000041	2.9	1.5	0.00032	0.00080	0.00023	0.076	0.000068	0.016	0.96	0.082	0.0000043
	October		0.042	0.16	0.00051	0.000041	2.5	1.4	0.00029	0.00079	0.00022	0.068	0.000063	0.014	0.84	0.079	0.0000042
	November		0.040	0.15	0.00048	0.000038	2.2	1.3	0.00027	0.00074	0.00020	0.060	0.000057	0.013	0.74	0.074	0.0000039
	December		0.039	0.15	0.00047	0.000038	2.2	1.3	0.00027	0.00073	0.00020	0.059	0.000056	0.013	0.72	0.073	0.0000038
	January	2026	0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	February		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	March		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.058	0.000056	0.012	0.71	0.073	0.0000038
	April		0.037	0.14	0.00044	0.000035	1.8	1.2	0.00024	0.00069	0.00018	0.051	0.000051	0.011	0.61	0.068	0.0000035
	May		0.051	0.20	0.00060	0.000049	2.5	1.7	0.00033	0.00095	0.00025	0.069	0.000069	0.015	0.83	0.094	0.0000049
	June		0.055	0.21	0.00064	**0.000052**	2.6	1.8	0.00035	0.0010	0.00026	0.072	0.000073	0.016	0.86	0.10	0.0000052
	July		0.062	0.24	0.00073	**0.000059**	2.9	2.0	0.00039	0.0012	0.00029	0.080	0.000082	0.018	0.95	0.11	0.0000058
	August		0.054	0.21	0.00064	**0.000052**	2.5	1.7	0.00034	0.0010	0.00026	0.069	0.000071	0.016	0.81	0.099	0.0000051
	September		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.065	0.000067	0.015	0.76	0.093	0.0000048
	October		0.050	0.19	0.00059	0.000048	2.3	1.6	0.00031	0.00094	0.00023	0.063	0.000065	0.014	0.74	0.091	0.0000047
	November		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	December		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	January	2027	0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	February		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	March		0.047	0.18	0.00055	0.000044	2.1	1.5	0.00029	0.00087	0.00022	0.058	0.000060	0.013	0.68	0.085	0.0000044
	April		0.038	0.15	0.00045	0.000037	1.7	1.2	0.00024	0.00072	0.00018	0.048	0.000050	0.011	0.56	0.070	0.0000036
	May		0.041	0.16	0.00048	0.000039	1.8	1.3	0.00025	0.00077	0.00019	0.051	0.000053	0.012	0.59	0.075	0.0000038
	June		0.049	0.19	0.00057	0.000046	2.1	1.6	0.00030	0.00091	0.00023	0.060	0.000063	0.014	0.70	0.088	0.0000045
	July		0.049	0.19	0.00057	0.000047	2.1	1.6	0.00030	0.00092	0.00023	0.060	0.000063	0.014	0.70	0.089	0.0000046
	August		0.056	0.21	0.00066	**0.000053**	2.4	1.8	0.00034	0.0010	0.00026	0.069	0.000072	0.016	0.80	0.10	0.0000052
	September		0.068	0.26	0.00080	**0.000065**	2.9	2.2	0.00042	0.0013	0.00031	0.083	0.000087	0.019	0.96	0.12	0.0000063
	October		0.071	0.27	0.00083	**0.000067**	3.1	2.3	0.00043	0.0013	0.00033	0.086	0.000091	0.020	1.0	0.13	0.0000066
	November		0.062	0.24	0.00072	**0.000059**	2.7	2.0	0.00038	0.0011	0.00028	0.075	0.000079	0.017	0.88	0.11	0.0000057
	December		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	January	2028	0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	February		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	March		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	April		0.054	0.21	0.00076	**0.000052**	2.4	2.3	0.00035	0.0010	0.00030	0.073	0.000069	0.016	0.76	0.098	0.0000070
	May		0.047	0.18	0.00073	0.000046	2.0	2.3	0.00030	0.00090	0.00028	0.062	0.000058	0.014	0.60	0.085	0.0000070
	June		0.057	0.22	0.00085	**0.000055**	2.3	2.7	0.00036	0.0011	0.00032	0.071	0.000069	0.016	0.69	0.10	0.0000081
	July		0.065	0.25	0.00094	**0.000063**	2.4	2.9	0.00039	0.0012	0.00035	0.076	0.000076	0.017	0.73	0.12	0.0000087
	August		0.067	0.25	0.00093	**0.000064**	2.3	2.8	0.00039	0.0013	0.00034	0.073	0.000077	0.017	0.70	0.12	0.0000084
	September		0.069	0.26	0.00094	**0.000066**	2.3	2.8	0.00040	0.0013	0.00035	0.072	0.000078	0.017	0.69	0.12	0.0000084
	October		0.076	0.29	0.0010	**0.000073**	2.5	3.0	0.00044	0.0014	0.00038	0.078	0.000085	0.019	0.75	0.13	0.0000090
	November		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	December		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
		MINIMUM	0.0038	0.022	0.000095	0.0000049	1.7	0.57	0.00018	0.000050	0.00012	0.048	0.000042	0.011	0.56	0.021	0.0000014
		MAXIMUM	0.076	0.29	0.0010	**0.000073**	3.6	3.0	0.00044	0.0014	0.00038	0.086	0.000091	0.020	1.2	0.13	0.0000090
		AVERAGE	0.048	0.18	0.00059	0.000046	2.5	1.7	0.00032	0.00089	0.00024	0.070	0.000066	0.015	0.82	0.088	0.0000050
Operations	January	2029	0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	February		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	March		0.074	0.28	0.00099	**0.000071**	2.4	2.9	0.00042	0.0014	0.00036	0.075	0.000083	0.018	0.72	0.13	0.0000087
	April		0.058	0.22	0.00076	**0.000055**	1.8	2.2	0.00032	0.0011	0.00028	0.056	0.000064	0.014	0.54	0.10	0.0000065
	May		0.057	0.22	0.00074	**0.000055**	1.7	2.1	0.00032	0.0011	0.00027	0.054	0.000063	0.014	0.52	0.10	0.0000063
	June		0.061	0.23	0.00078	**0.000058**	1.8	2.2	0.00034	0.0012	0.00028	0.056	0.000067	0.014	0.54	0.11	0.0000066
	July		0.076	0.29	0.00095	**0.000072**	2.1	2.7	0.00041	0.0014	0.00034	0.067	0.000082	0.017	0.65	0.13	0.0000080
	August		0.086	0.33	0.0011	**0.000082**	2.3	3.0	0.00046	0.0016	0.00038	0.075	0.000092	0.020	0.72	0.15	0.0000089
	September		0.081	0.31	0.00100	**0.000077**	2.1	2.7	0.00043	0.0015	0.00036	0.068	0.000086	0.018	0.66	0.14	0.0000081
	October		0.082	0.31	0.0010	**0.000078**	2.2	2.8	0.00044	0.0016	0.00036	0.069	0.000088	0.018	0.66	0.14	0.0000082
	November		0.080	0.30	0.00098	**0.000076**	2.1	2.7	0.00043	0.0015	0.00035	0.067	0.000085	0.018	0.64	0.14	0.0000080
	December		0.080	0.30	0.00098	**0.000076**	2.1	2.7	0.00043	0.0015	0.00035	0.067	0.000085	0.018	0.64	0.14	0.0000080

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2030	0.080	0.30	0.00098	**0.000076**	2.1	2.7	0.00043	0.0015	0.00035	0.067	0.000085	0.018	0.64	0.14	0.0000080
	February		0.079	0.30	0.00096	**0.000075**	2.1	2.6	0.00042	0.0015	0.00034	0.066	0.000083	0.017	0.63	0.14	0.0000078
	March		0.074	0.28	0.00090	**0.000070**	1.9	2.5	0.00039	0.0014	0.00032	0.062	0.000079	0.016	0.59	0.13	0.0000073
	April		0.062	0.24	0.00075	**0.000059**	1.6	2.0	0.00033	0.0012	0.00027	0.051	0.000066	0.014	0.49	0.11	0.0000061
	May		0.067	0.25	0.00081	**0.000064**	1.7	2.2	0.00035	0.0013	0.00029	0.054	0.000070	0.015	0.52	0.12	0.0000065
	June		0.062	0.23	0.00073	**0.000058**	1.5	1.9	0.00032	0.0012	0.00026	0.048	0.000064	0.013	0.46	0.11	0.0000058
	July		0.058	0.22	0.00069	**0.000055**	1.4	1.8	0.00030	0.0011	0.00024	0.045	0.000061	0.012	0.43	0.10	0.0000054
	August		0.066	0.25	0.00077	**0.000062**	1.5	2.0	0.00034	0.0012	0.00027	0.050	0.000068	0.014	0.48	0.11	0.0000060
	September		0.061	0.23	0.00071	**0.000058**	1.4	1.9	0.00031	0.0011	0.00025	0.046	0.000063	0.013	0.44	0.11	0.0000055
	October		0.060	0.23	0.00070	**0.000057**	1.4	1.8	0.00031	0.0011	0.00025	0.045	0.000062	0.013	0.43	0.10	0.0000055
	November		0.056	0.21	0.00065	**0.000053**	1.3	1.7	0.00028	0.0010	0.00023	0.041	0.000057	0.012	0.40	0.096	0.0000050
	December		0.054	0.21	0.00063	**0.000052**	1.3	1.6	0.00028	0.0010	0.00022	0.040	0.000056	0.011	0.39	0.094	0.0000049
	January	2031	0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.00099	0.00021	0.039	0.000054	0.011	0.37	0.091	0.0000047
	February		0.052	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.00099	0.00021	0.039	0.000054	0.011	0.37	0.090	0.0000047
	March		0.051	0.19	0.00060	0.000049	1.2	1.5	0.00026	0.00097	0.00021	0.038	0.000053	0.011	0.36	0.089	0.0000046
	April		0.043	0.16	0.00050	0.000041	0.98	1.3	0.00022	0.00081	0.00017	0.032	0.000044	0.0090	0.30	0.074	0.0000038
	May		0.044	0.17	0.00051	0.000042	1.0	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0093	0.31	0.076	0.0000039
	June		0.055	0.21	0.00064	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.040	0.000057	0.012	0.38	0.095	0.0000049
	July		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000069	0.014	0.47	0.12	0.0000060
	August		0.077	0.29	0.00088	**0.000073**	1.7	2.3	0.00039	0.0014	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000068
	September		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.055	0.000078	0.016	0.53	0.13	0.0000067
	October		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000072	0.015	0.49	0.12	0.0000062
	November		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000058
	December		0.065	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	January	2032	0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	February		0.064	0.24	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	March		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0010	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000049
	April		0.046	0.17	0.00053	0.000044	1.0	1.4	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.32	0.079	0.0000040
	May		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	June		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000060	0.012	0.41	0.10	0.0000052
	July		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.10	0.0000051
Operations	August		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000062	0.013	0.42	0.11	0.0000053
	September		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	October		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	November		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000059
	December		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000059
	January	2033	0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000059
	February		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000059
	March		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	April		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	May		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	June		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000062	0.013	0.42	0.11	0.0000053
	July		0.074	0.28	0.00085	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.053	0.000076	0.015	0.51	0.13	0.0000065
	August		0.080	0.30	0.00091	**0.000075**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	September		0.080	0.30	0.00092	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	October		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	November		0.070	0.27	0.00080	**0.000067**	1.6	2.1	0.00035	0.0013	0.00028	0.050	0.000072	0.014	0.48	0.12	0.0000061
	December		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	January	2034	0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	February		0.069	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	March		0.065	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	April		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.092	0.0000047
	May		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	June		0.046	0.17	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.080	0.0000040
	July		0.044	0.17	0.00050	0.000041	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.075	0.0000038
	August		0.049	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.034	0.000049	0.010	0.33	0.084	0.0000042
	September		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	October		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	November		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	December		0.050	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	January	2035	0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.036	0.000051	0.010	0.34	0.086	0.0000044
	February		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	March		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	April	2035	0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	May		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	June		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.082	0.0000042
	July		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	August		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000058
	October		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	November		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	December		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	January	2036	0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	February		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	March		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000054
	April		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	May		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	June		0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	July		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	August		0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.58	0.15	0.0000075
	September		0.093	0.35	0.0011	**0.000088**	2.1	2.7	0.00047	0.0018	0.00037	0.066	0.000095	0.019	0.63	0.16	0.0000081
	October		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000089	0.018	0.59	0.15	0.0000075
	November		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	December		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	January	2037	0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	February		0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0014	0.00030	0.055	0.000078	0.016	0.52	0.13	0.0000067
	March		0.074	0.28	0.00085	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.053	0.000076	0.015	0.50	0.13	0.0000064
	April		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000049
	May		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	July		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000048
	August		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	September		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000067	0.014	0.45	0.11	0.0000057
	October		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	November		0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000058
	December		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	January	2038	0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	February		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	March		0.056	0.21	0.00063	**0.000053**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000057	0.011	0.38	0.096	0.0000048
	April		0.045	0.17	0.00051	0.000042	0.99	1.3	0.00022	0.00084	0.00018	0.032	0.000046	0.0092	0.30	0.077	0.0000039
	May		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.33	0.085	0.0000043
	June		0.058	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	July		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00034	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	August		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	September		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000068
	October		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00034	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	November		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	December		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	January	2039	0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	February		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000049
	March		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	April		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	May		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	June		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000068
	July		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000069
	August		0.061	0.23	0.00069	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	September		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	October		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	November		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	December		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	January	2040	0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	February		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	March		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	April		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.27	0.069	0.0000035
	May		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	June		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0095	0.31	0.079	0.0000040
	August		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	October		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	November		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	December		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	January	2041	0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	February		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	March		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.42	0.11	0.0000053
	April		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	May		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	June		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	July		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	August		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	September		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	October		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	November		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.32	0.082	0.0000041
	December		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0098	0.32	0.082	0.0000041
	January	2042	0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0098	0.32	0.082	0.0000041
	February		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0098	0.32	0.082	0.0000041
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.32	0.080	0.0000040
	April		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.27	0.069	0.0000035
	May		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.042	0.16	0.00048	0.000040	0.92	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.29	0.072	0.0000036
	July		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	August		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	September		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0095	0.31	0.079	0.0000040
	October		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.070	0.0000035
	November		0.040	0.15	0.00045	0.000037	0.87	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	December		0.040	0.15	0.00045	0.000037	0.87	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	January	2043	0.040	0.15	0.00045	0.000037	0.87	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
Operations	February		0.040	0.15	0.00045	0.000037	0.87	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	March		0.040	0.15	0.00045	0.000037	0.87	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	April		0.036	0.14	0.00042	0.000034	0.80	1.1	0.00018	0.00069	0.00014	0.026	0.000037	0.0075	0.25	0.063	0.0000032
	May		0.038	0.15	0.00044	0.000036	0.85	1.1	0.00019	0.00072	0.00015	0.027	0.000039	0.0079	0.26	0.066	0.0000033
	June		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.070	0.0000035
	July		0.045	0.17	0.00051	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	August		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	September		0.041	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	October		0.037	0.14	0.00042	0.000035	0.81	1.1	0.00018	0.00069	0.00015	0.026	0.000037	0.0076	0.25	0.063	0.0000032
	November		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00014	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	December		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	January	2044	0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0070	0.23	0.059	0.0000030
	February		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0070	0.23	0.059	0.0000030
	March		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	April		0.033	0.13	0.00038	0.000031	0.73	0.97	0.00017	0.00062	0.00013	0.024	0.000034	0.0069	0.23	0.057	0.0000029
	May		0.041	0.15	0.00046	0.000039	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	June		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.036	0.000051	0.010	0.34	0.086	0.0000043
	July		0.052	0.20	0.00060	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	August		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000070	0.014	0.46	0.12	0.0000059
	September		0.083	0.31	0.00095	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	October		0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000073
	November		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000087	0.018	0.58	0.15	0.0000074
	December		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.57	0.15	0.0000073
	January	2045	0.084	0.32	0.00096	**0.000080**	1.9	2.5	0.00042	0.0016	0.00033	0.060	0.000086	0.017	0.57	0.15	0.0000073
	February		0.084	0.32	0.00096	**0.000080**	1.9	2.5	0.00042	0.0016	0.00033	0.060	0.000086	0.017	0.57	0.15	0.0000073
	March		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000068
	April		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	May		0.064	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	July		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.48	0.12	0.0000062
	August		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000081	0.016	0.54	0.14	0.0000069
	September		0.086	0.33	0.00098	**0.000082**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.59	0.15	0.0000075

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000087	0.018	0.58	0.15	0.0000074
	November		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	December		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	January	2046	0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000080	0.016	0.53	0.13	0.0000068
	February		0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000080	0.016	0.53	0.13	0.0000068
	March		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.48	0.12	0.0000062
	April		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	May		0.062	0.23	0.00071	**0.000058**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	June		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	July		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000060	0.012	0.40	0.10	0.0000051
	August		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.098	0.0000050
	September		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	October		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	November		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.080	0.0000040
	December		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	January	2047	0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	February		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	March		0.045	0.17	0.00051	0.000042	0.99	1.3	0.00023	0.00084	0.00018	0.032	0.000046	0.0092	0.30	0.077	0.0000039
	April		0.041	0.16	0.00047	0.000039	0.90	1.2	0.00021	0.00077	0.00016	0.029	0.000042	0.0084	0.28	0.071	0.0000036
	May		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	July		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	August		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	September		0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	October		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	November		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	December		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000060	0.012	0.40	0.10	0.0000051
	January	2048	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	February		0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	March		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	April		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
Operations	May		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.092	0.0000047
	June		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	July		0.059	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	August		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.32	0.082	0.0000041
	September		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.033	0.000047	0.0095	0.31	0.079	0.0000040
	October		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	November		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	December		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.074	0.0000037
	January	2049	0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.27	0.070	0.0000035
	February		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.069	0.0000035
	March		0.038	0.15	0.00044	0.000036	0.85	1.1	0.00019	0.00072	0.00015	0.027	0.000039	0.0079	0.26	0.066	0.0000033
	April		0.037	0.14	0.00042	0.000035	0.81	1.1	0.00019	0.00069	0.00015	0.026	0.000037	0.0076	0.25	0.063	0.0000032
	May		0.041	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	June		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00018	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	July		0.043	0.16	0.00049	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.29	0.075	0.0000038
	August		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0096	0.31	0.080	0.0000040
	September		0.043	0.16	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.29	0.075	0.0000038
	October		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00073	0.00015	0.028	0.000040	0.0081	0.27	0.067	0.0000034
	November		0.035	0.13	0.00040	0.000034	0.78	1.0	0.00018	0.00067	0.00014	0.025	0.000036	0.0074	0.24	0.061	0.0000031
	December		0.035	0.13	0.00040	0.000033	0.78	1.0	0.00018	0.00067	0.00014	0.025	0.000036	0.0073	0.24	0.061	0.0000031
	January	2050	0.035	0.13	0.00040	0.000033	0.78	1.0	0.00018	0.00067	0.00014	0.025	0.000036	0.0073	0.24	0.061	0.0000031
	February		0.035	0.13	0.00040	0.000033	0.78	1.0	0.00018	0.00067	0.00014	0.025	0.000036	0.0073	0.24	0.061	0.0000031
	March		0.035	0.13	0.00040	0.000033	0.77	1.0	0.00018	0.00066	0.00014	0.025	0.000036	0.0072	0.24	0.060	0.0000030
	April		0.032	0.12	0.00037	0.000031	0.71	0.94	0.00016	0.00061	0.00013	0.023	0.000033	0.0067	0.22	0.056	0.0000028
	May		0.034	0.13	0.00039	0.000032	0.74	0.98	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	June		0.037	0.14	0.00042	0.000035	0.81	1.1	0.00019	0.00069	0.00015	0.026	0.000038	0.0076	0.25	0.064	0.0000032
	July		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	August		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	September		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	October		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	December		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	February		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	March		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	April		0.039	0.15	0.00045	0.000037	0.87	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	May		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	June		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0098	0.32	0.081	0.0000041
	July		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	August		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	September		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0095	0.31	0.079	0.0000040
	October		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	November		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0093	0.30	0.077	0.0000039
	December		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.031	0.000044	0.0089	0.29	0.074	0.0000037
	January	2052	0.043	0.16	0.00049	0.000041	0.95	1.2	0.00022	0.00081	0.00017	0.030	0.000044	0.0089	0.29	0.074	0.0000037
	February		0.043	0.16	0.00049	0.000041	0.95	1.2	0.00022	0.00081	0.00017	0.030	0.000044	0.0089	0.29	0.074	0.0000037
	March		0.043	0.16	0.00049	0.000041	0.94	1.2	0.00022	0.00081	0.00017	0.030	0.000044	0.0088	0.29	0.074	0.0000037
	April		0.039	0.15	0.00044	0.000037	0.86	1.1	0.00020	0.00073	0.00015	0.028	0.000040	0.0080	0.26	0.067	0.0000034
	May		0.041	0.16	0.00047	0.000039	0.90	1.2	0.00021	0.00077	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	July		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	August		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.037	0.000053	0.011	0.35	0.089	0.0000045
	September		0.060	0.23	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.40	0.10	0.0000052
	October		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	November		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	December		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
		MINIMUM	0.032	0.12	0.00037	0.000031	0.71	0.94	0.00016	0.00061	0.00013	0.023	0.000033	0.0067	0.22	0.056	0.0000028
		MAXIMUM	0.093	0.35	0.0011	**0.000088**	2.4	3.0	0.00047	0.0018	0.00038	0.077	0.000095	0.020	0.74	0.16	0.0000090
		AVERAGE	0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.099	0.0000051
Decommissioning	January	2053	0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	February		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	March		0.060	0.23	0.00069	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	April		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	May		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.086	0.0000044
	June		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	July		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	August		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000088	0.018	0.59	0.15	0.0000075
	September		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	October		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	November		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	December		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	January	2054	0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	February		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	March		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	April		0.047	0.18	0.00054	0.000044	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	May		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	June		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	July		0.074	0.28	0.00085	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.053	0.000075	0.015	0.50	0.13	0.0000064
	August		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	September		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	October		0.066	0.25	0.00075	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	November		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000054
	December		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	January	2055	0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	February		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	March		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	April		0.050	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	May		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.080	0.0000040
	June		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	July		0.042	0.16	0.00048	0.000040	0.92	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.28	0.072	0.0000036
	August		0.049	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.034	0.000049	0.010	0.33	0.084	0.0000042
	September		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	October		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	November		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.086	0.0000044
	December		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	February		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	March		0.045	0.17	0.00051	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	April		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0094	0.31	0.079	0.0000040
	May		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	June		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.11	0.0000053
	July		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	August		0.064	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	October		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	November		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000049
	December		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000050
	January	2057	0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000050
	February		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000050
	March		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000049
	April		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0097	0.32	0.081	0.0000041
	May		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	June		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000070	0.014	0.46	0.12	0.0000059
	July		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	August		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.43	0.11	0.0000054
	September		0.073	0.28	0.00084	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	October		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	November		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	December		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.56	0.14	0.0000071
		MINIMUM	0.042	0.16	0.00048	0.000040	0.92	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.28	0.072	0.0000036
		MAXIMUM	0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000088	0.018	0.59	0.15	0.0000075
		AVERAGE	0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
Reclamation	January	2058	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2059	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2060	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2062	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2063	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2064	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2065	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2066	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August	**2066**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	**July**	**2067**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045
	January		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Post-Closure	**July**	**≥2070**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	1.0E-02	0.25	0.090	0.0000045

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	**January**	**2025**	0.000053	0.000073	0.090	0.0075	0.0043	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000079	0.089	0.0075	0.0066	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00081
	April		0.000053	0.00019	0.077	0.0062	0.0063	0.0038	0.000043	1.2	0.025	1.4	0.0044	0.000046	0.00014	0.00099
	May		0.000057	0.00033	0.070	0.0054	0.0063	0.0034	0.000042	1.0	0.022	1.4	0.0043	0.000045	0.00014	0.0013
	June		0.000075	0.00051	0.082	0.0061	0.0080	0.0041	0.000053	1.2	0.026	1.8	0.0053	0.000055	0.00018	0.0018
	July		0.000095	0.00078	0.091	0.0064	0.0093	0.0046	0.000063	1.3	0.028	2.2	0.0063	0.000065	0.00022	0.0025
	August		0.00011	0.0010	0.100	0.0068	0.011	0.0051	0.000072	1.4	0.030	2.5	0.0072	0.000074	0.00026	0.0032
	September		0.00011	0.0010	0.090	0.0059	0.010	0.0046	0.000068	1.2	0.026	2.4	0.0068	0.000070	0.00025	0.0032
	October		0.00010	0.0010	0.081	0.0052	0.0094	0.0042	0.000063	1.1	0.023	2.2	0.0063	0.000065	0.00023	0.0031
	November		0.000096	0.00097	0.073	0.0046	0.0089	0.0038	0.000057	0.95	0.021	2.1	0.0058	0.000059	0.00021	0.0029
	December		0.000095	0.00096	0.072	0.0045	0.0093	0.0037	0.000056	0.93	0.020	2.0	0.0057	0.000058	0.00021	0.0028
	January	**2026**	0.000094	0.00096	0.071	0.0044	0.0097	0.0037	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	February		0.000094	0.00096	0.071	0.0044	0.010	0.0037	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	March		0.000094	0.00095	0.071	0.0044	0.011	0.0036	0.000056	0.91	0.020	2.0	0.0056	0.000057	0.00021	0.0028
	April		0.000086	0.00090	0.062	0.0038	0.0085	0.0032	0.000051	0.80	0.017	1.8	0.0051	0.000052	0.00019	0.0026
	May		0.00012	0.0012	0.085	0.0051	0.012	0.0044	0.000069	1.1	0.024	2.5	0.0070	0.000071	0.00026	0.0036
	June		0.00013	0.0013	0.089	0.0053	0.011	0.0046	0.000073	1.1	0.025	2.7	0.0074	0.000075	0.00027	0.0039
	July		0.00014	0.0015	0.099	0.0059	0.012	0.0052	0.000082	1.3	0.027	3.0	0.0082	0.000084	0.00031	0.0044
	August		0.00012	0.0013	0.086	0.0051	0.0096	0.0045	0.000071	1.1	0.024	2.6	0.0072	0.000073	0.00027	0.0038
	September		0.00012	0.0012	0.080	0.0047	0.0088	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	October		0.00011	0.0012	0.079	0.0046	0.0089	0.0041	0.000065	0.98	0.022	2.4	0.0066	0.000067	0.00025	0.0035
	November		0.00012	0.0012	0.080	0.0047	0.0097	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	December		0.00012	0.0012	0.080	0.0047	0.010	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	January	**2027**	0.00012	0.0012	0.080	0.0047	0.011	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	February		0.00012	0.0012	0.080	0.0047	0.012	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	March		0.00011	0.0011	0.073	0.0042	0.010	0.0038	0.000060	0.91	0.020	2.2	0.0061	0.000062	0.00023	0.0033
	April		0.000087	0.00093	0.059	0.0035	0.0076	0.0031	0.000050	0.74	0.016	1.8	0.0050	0.000051	0.00019	0.0027
	May		0.000093	0.0010	0.064	0.0037	0.0077	0.0033	0.000053	0.79	0.017	1.9	0.0053	0.000054	0.00020	0.0029
	June		0.00011	0.0012	0.075	0.0043	0.0087	0.0039	0.000063	0.93	0.020	2.3	0.0063	0.000064	0.00024	0.0034
	July		0.00011	0.0012	0.075	0.0044	0.0078	0.0039	0.000063	0.94	0.021	2.3	0.0063	0.000064	0.00024	0.0034
	August		0.00013	0.0014	0.086	0.0050	0.0088	0.0045	0.000072	1.1	0.023	2.6	0.0072	0.000074	0.00027	0.0039
	September		0.00015	0.0017	0.10	0.0060	0.011	0.0054	0.000087	1.3	0.028	3.2	0.0088	0.000089	0.00033	0.0048
	October		0.00016	0.0017	0.11	0.0063	0.013	0.0056	0.000091	1.3	0.030	3.3	0.0091	0.000093	0.00034	0.0050
	November		0.00014	0.0015	0.094	0.0055	0.011	0.0049	0.000079	1.2	0.026	2.9	0.0079	0.000081	0.00030	0.0043
	December		0.00014	0.0015	0.093	0.0054	0.012	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	January	**2028**	0.00014	0.0015	0.093	0.0054	0.013	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	February		0.00014	0.0015	0.093	0.0054	0.014	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	March		0.00014	0.0015	0.093	0.0054	0.014	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	April		0.00024	0.0013	0.081	0.0055	0.013	0.0092	0.000081	1.0	0.023	2.9	0.0083	0.0026	0.00030	0.0042
	May		0.00027	0.0012	0.065	0.0048	0.0099	0.010	0.000074	0.80	0.019	2.7	0.0076	0.0035	0.00027	0.0039
	June		0.00030	0.0014	0.077	0.0054	0.012	0.011	0.000086	0.93	0.021	3.1	0.0088	0.0038	0.00032	0.0046
	July		0.00031	0.0016	0.084	0.0056	0.012	0.011	0.000093	1.0	0.023	3.4	0.0095	0.0037	0.00035	0.0051
	August		0.00029	0.0017	0.083	0.0053	0.012	0.010	0.000091	0.98	0.022	3.3	0.0092	0.0032	0.00034	0.0051
	September		0.00028	0.0017	0.084	0.0052	0.012	0.0099	0.000092	0.98	0.022	3.4	0.0093	0.0029	0.00034	0.0052
	October		0.00030	0.0019	0.091	0.0056	0.014	0.010	0.000099	1.1	0.024	3.7	0.010	0.0030	0.00037	0.0057
	November		0.00029	0.0019	0.091	0.0055	0.014	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	December		0.00029	0.0019	0.091	0.0055	0.015	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
		MINIMUM	0.000053	0.000073	0.059	0.0035	0.0043	0.0031	0.000042	0.74	0.016	1.4	0.0043	0.000045	0.00014	0.00080
		MAXIMUM	0.00031	0.0019	0.11	0.0075	0.015	0.011	0.000099	1.4	0.030	3.7	0.010	0.0038	0.00037	0.0057
		AVERAGE	0.00014	0.0012	0.083	0.0053	0.010	0.0054	0.000069	1.1	0.023	2.5	0.0070	0.00065	0.00025	0.0035
Operations	**January**	**2029**	0.00029	0.0019	0.091	0.0055	0.016	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	February		0.00029	0.0019	0.091	0.0055	0.016	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	March		0.00028	0.0018	0.088	0.0054	0.016	0.010	0.000096	1.0	0.023	3.5	0.0097	0.0028	0.00036	0.0055
	April		0.00021	0.0014	0.067	0.0039	0.012	0.0071	0.000073	0.78	0.018	2.7	0.0073	0.0019	0.00027	0.0042
	May		0.00019	0.0014	0.066	0.0037	0.011	0.0066	0.000070	0.75	0.017	2.6	0.0071	0.0017	0.00027	0.0041
	June		0.00020	0.0015	0.069	0.0038	0.011	0.0066	0.000074	0.79	0.018	2.8	0.0074	0.0016	0.00028	0.0044
	July		0.00023	0.0019	0.084	0.0046	0.013	0.0078	0.000090	0.96	0.022	3.4	0.0090	0.0018	0.00034	0.0054
	August		0.00025	0.0021	0.095	0.0050	0.015	0.0083	0.00010	1.1	0.024	3.8	0.010	0.0018	0.00038	0.0061
	September		0.00023	0.0020	0.088	0.0046	0.013	0.0073	0.000093	0.99	0.022	3.5	0.0093	0.0014	0.00036	0.0057
	October		0.00023	0.0020	0.089	0.0046	0.014	0.0073	0.000094	1.00	0.022	3.5	0.0094	0.0014	0.00036	0.0058
	November		0.00022	0.0020	0.087	0.0045	0.014	0.0071	0.000091	0.97	0.022	3.4	0.0092	0.0013	0.00035	0.0056
	December		0.00022	0.0020	0.087	0.0044	0.015	0.0070	0.000091	0.97	0.022	3.4	0.0091	0.0013	0.00035	0.0056

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.00022	0.0020	0.087	0.0044	0.015	0.0070	0.000091	0.97	0.022	3.4	0.0091	0.0013	0.00035	0.0056
	February		0.00021	0.0019	0.085	0.0044	0.015	0.0069	0.000089	0.95	0.021	3.4	0.0090	0.0013	0.00034	0.0055
	March		0.00020	0.0018	0.080	0.0041	0.014	0.0064	0.000084	0.89	0.020	3.2	0.0084	0.0012	0.00032	0.0052
	April		0.00016	0.0015	0.066	0.0033	0.011	0.0051	0.000069	0.74	0.017	2.6	0.0070	0.00086	0.00027	0.0043
	May		0.00017	0.0017	0.071	0.0035	0.012	0.0053	0.000074	0.79	0.018	2.8	0.0075	0.00084	0.00029	0.0046
	June		0.00015	0.0015	0.064	0.0031	0.0098	0.0046	0.000067	0.71	0.016	2.5	0.0067	0.00063	0.00026	0.0042
	July		0.00014	0.0014	0.060	0.0029	0.0085	0.0041	0.000063	0.66	0.015	2.4	0.0063	0.00048	0.00024	0.0040
	August		0.00015	0.0016	0.068	0.0031	0.0091	0.0044	0.000070	0.74	0.016	2.7	0.0070	0.00046	0.00027	0.0045
	September		0.00013	0.0015	0.062	0.0029	0.0083	0.0040	0.000064	0.68	0.015	2.5	0.0064	0.00036	0.00025	0.0041
	October		0.00013	0.0015	0.062	0.0028	0.0084	0.0039	0.000063	0.67	0.015	2.4	0.0064	0.00033	0.00025	0.0041
	November		0.00012	0.0014	0.057	0.0026	0.0081	0.0035	0.000058	0.62	0.014	2.2	0.0059	0.00028	0.00023	0.0038
	December		0.00012	0.0013	0.056	0.0025	0.0084	0.0034	0.000057	0.61	0.013	2.2	0.0057	0.00027	0.00022	0.0037
	January	2031	0.00011	0.0013	0.054	0.0024	0.0084	0.0033	0.000055	0.58	0.013	2.1	0.0055	0.00026	0.00022	0.0036
	February		0.00011	0.0013	0.053	0.0024	0.0088	0.0033	0.000055	0.58	0.013	2.1	0.0055	0.00026	0.00021	0.0035
	March		0.00011	0.0013	0.052	0.0024	0.0089	0.0032	0.000054	0.57	0.013	2.1	0.0054	0.00025	0.00021	0.0035
	April		0.000091	0.0011	0.044	0.0020	0.0068	0.0026	0.000045	0.47	0.011	1.7	0.0045	0.00018	0.00018	0.0029
	May		0.000093	0.0011	0.045	0.0020	0.0064	0.0026	0.000046	0.49	0.011	1.8	0.0046	0.00015	0.00018	0.0030
	June		0.00011	0.0014	0.056	0.0025	0.0079	0.0033	0.000057	0.61	0.013	2.2	0.0057	0.00018	0.00022	0.0037
	July		0.00014	0.0017	0.068	0.0030	0.0094	0.0039	0.000070	0.74	0.016	2.7	0.0070	0.00019	0.00027	0.0046
	August		0.00016	0.0019	0.077	0.0034	0.011	0.0044	0.000079	0.84	0.019	3.0	0.0079	0.00020	0.00031	0.0052
	September		0.00015	0.0019	0.077	0.0034	0.011	0.0044	0.000078	0.83	0.018	3.0	0.0078	0.00018	0.00031	0.0051
	October		0.00014	0.0017	0.071	0.0031	0.010	0.0040	0.000073	0.77	0.017	2.8	0.0073	0.00016	0.00029	0.0048
	November		0.00013	0.0016	0.066	0.0029	0.0098	0.0037	0.000067	0.72	0.016	2.6	0.0068	0.00014	0.00026	0.0044
	December		0.00013	0.0016	0.066	0.0029	0.010	0.0037	0.000067	0.71	0.016	2.6	0.0067	0.00014	0.00026	0.0044
	January	2032	0.00013	0.0016	0.065	0.0029	0.011	0.0037	0.000066	0.70	0.016	2.5	0.0066	0.00014	0.00026	0.0043
	February		0.00013	0.0016	0.065	0.0029	0.011	0.0037	0.000066	0.70	0.016	2.5	0.0066	0.00014	0.00026	0.0043
	March		0.00011	0.0014	0.056	0.0025	0.0093	0.0031	0.000057	0.61	0.013	2.2	0.0057	0.00012	0.00022	0.0037
	April		0.000093	0.0011	0.046	0.0020	0.0070	0.0026	0.000047	0.50	0.011	1.8	0.0047	0.000087	0.00019	0.0031
	May		0.000098	0.0012	0.049	0.0022	0.0073	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000087	0.00020	0.0033
	June		0.00012	0.0015	0.059	0.0026	0.0087	0.0033	0.000061	0.64	0.014	2.3	0.0061	0.000099	0.00024	0.0040
	July		0.00012	0.0014	0.058	0.0025	0.0081	0.0032	0.000059	0.63	0.014	2.3	0.0060	0.000091	0.00023	0.0039
	August		0.00012	0.0015	0.061	0.0027	0.0082	0.0034	0.000062	0.66	0.015	2.4	0.0063	0.000089	0.00025	0.0041
	September		0.00014	0.0017	0.069	0.0030	0.0095	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000097	0.00028	0.0046
	October		0.00014	0.0017	0.070	0.0030	0.010	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000097	0.00028	0.0047
	November		0.00014	0.0017	0.068	0.0030	0.010	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000094	0.00027	0.0046
	December		0.00014	0.0017	0.068	0.0030	0.011	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000094	0.00027	0.0046
	January	2033	0.00014	0.0017	0.068	0.0030	0.011	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000094	0.00027	0.0046
	February		0.00014	0.0017	0.068	0.0030	0.012	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000094	0.00027	0.0046
	March		0.00013	0.0017	0.068	0.0030	0.012	0.0037	0.000069	0.73	0.016	2.7	0.0069	0.000094	0.00027	0.0045
	April		0.00010	0.0013	0.052	0.0023	0.0084	0.0029	0.000053	0.56	0.012	2.0	0.0053	0.000069	0.00021	0.0035
	May		0.00011	0.0013	0.054	0.0024	0.0081	0.0030	0.000055	0.58	0.013	2.1	0.0055	0.000068	0.00022	0.0036
	June		0.00012	0.0015	0.061	0.0027	0.0090	0.0034	0.000062	0.66	0.015	2.4	0.0063	0.000075	0.00025	0.0041
	July		0.00015	0.0018	0.074	0.0032	0.011	0.0041	0.000076	0.80	0.018	2.9	0.0076	0.000090	0.00030	0.0050
	August		0.00016	0.0020	0.080	0.0035	0.011	0.0044	0.000081	0.86	0.019	3.1	0.0081	0.000094	0.00032	0.0053
	September		0.00016	0.0020	0.080	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000094	0.00032	0.0054
	October		0.00016	0.0020	0.080	0.0035	0.012	0.0044	0.000082	0.86	0.019	3.1	0.0082	0.000093	0.00032	0.0054
	November		0.00014	0.0017	0.070	0.0031	0.011	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000081	0.00028	0.0047
	December		0.00014	0.0017	0.070	0.0030	0.011	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000080	0.00028	0.0047
	January	2034	0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000080	0.00028	0.0047
	February		0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000080	0.00028	0.0047
	March		0.00013	0.0016	0.065	0.0028	0.011	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000075	0.00026	0.0044
	April		0.00011	0.0013	0.054	0.0023	0.0088	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000061	0.00022	0.0036
	May		0.00011	0.0013	0.054	0.0024	0.0086	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000061	0.00022	0.0036
	June		0.000091	0.0011	0.046	0.0020	0.0061	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000050	0.00019	0.0031
	July		0.000086	0.0011	0.044	0.0019	0.0051	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000047	0.00018	0.0029
	August		0.000096	0.0012	0.049	0.0021	0.0056	0.0026	0.000050	0.52	0.012	1.9	0.0050	0.000051	0.00019	0.0033
	September		0.000098	0.0012	0.050	0.0022	0.0057	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000052	0.00020	0.0033
	October		0.00011	0.0013	0.054	0.0024	0.0067	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000057	0.00022	0.0036
	November		0.00010	0.0013	0.053	0.0023	0.0071	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	December		0.000099	0.0012	0.050	0.0022	0.0072	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000053	0.00020	0.0034
	January	2035	0.000099	0.0012	0.050	0.0022	0.0076	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	February		0.000097	0.0012	0.050	0.0022	0.0079	0.0027	0.000050	0.53	0.012	1.9	0.0051	0.000052	0.00020	0.0033
	March		0.000097	0.0012	0.050	0.0022	0.0083	0.0027	0.000050	0.53	0.012	1.9	0.0051	0.000052	0.00020	0.0033

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	April	2035	0.000090	0.0011	0.046	0.0020	0.0074	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000048	0.00018	0.0031
	May		0.000086	0.0011	0.044	0.0019	0.0064	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	June		0.000094	0.0012	0.048	0.0021	0.0066	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000050	0.00019	0.0032
	July		0.00010	0.0013	0.053	0.0023	0.0070	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	August		0.00013	0.0016	0.064	0.0028	0.0084	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	September		0.00013	0.0017	0.067	0.0029	0.0090	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	October		0.00013	0.0016	0.066	0.0029	0.0091	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000068	0.00026	0.0044
	November		0.00013	0.0016	0.065	0.0028	0.0095	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	December		0.00013	0.0016	0.065	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	January	2036	0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	February		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	March		0.00012	0.0015	0.062	0.0027	0.011	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0041
	April		0.000093	0.0012	0.047	0.0020	0.0073	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	May		0.000092	0.0011	0.047	0.0020	0.0068	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	June		0.00011	0.0014	0.057	0.0025	0.0082	0.0031	0.000058	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0038
	July		0.00013	0.0016	0.064	0.0028	0.0089	0.0035	0.000065	0.69	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	August		0.00017	0.0021	0.086	0.0037	0.012	0.0047	0.000088	0.93	0.021	3.4	0.0088	0.000088	0.00034	0.0058
	September		0.00018	0.0023	0.093	0.0041	0.014	0.0051	0.000095	1.0	0.022	3.6	0.0095	0.000096	0.00037	0.0063
	October		0.00017	0.0021	0.087	0.0038	0.013	0.0047	0.000089	0.94	0.021	3.4	0.0089	0.000089	0.00035	0.0058
	November		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	December		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	January	2037	0.00016	0.0020	0.082	0.0036	0.014	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	February		0.00015	0.0019	0.077	0.0033	0.013	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0052
	March		0.00015	0.0018	0.074	0.0032	0.013	0.0040	0.000076	0.80	0.018	2.9	0.0076	0.000076	0.00030	0.0050
	April		0.00011	0.0014	0.057	0.0025	0.0090	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	May		0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00012	0.0015	0.060	0.0026	0.0088	0.0032	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	July		0.00011	0.0013	0.055	0.0024	0.0073	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	August		0.00014	0.0017	0.070	0.0030	0.0092	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	September		0.00013	0.0016	0.066	0.0028	0.0086	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	October		0.00013	0.0017	0.068	0.0030	0.0094	0.0037	0.000069	0.74	0.016	2.7	0.0069	0.000070	0.00027	0.0046
	November		0.00013	0.0017	0.067	0.0029	0.0100	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	December		0.00013	0.0016	0.067	0.0029	0.010	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	January	2038	0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	February		0.00013	0.0016	0.066	0.0029	0.011	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000068	0.00027	0.0044
	March		0.00011	0.0014	0.056	0.0024	0.0091	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	April		0.000088	0.0011	0.045	0.0019	0.0066	0.0024	0.000046	0.48	0.011	1.7	0.0046	0.000046	0.00018	0.0030
	May		0.000097	0.0012	0.049	0.0021	0.0073	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	June		0.00011	0.0014	0.058	0.0025	0.0084	0.0031	0.000059	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0039
	July		0.00013	0.0016	0.067	0.0029	0.0095	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	August		0.00016	0.0020	0.080	0.0035	0.011	0.0043	0.000081	0.86	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	September		0.00015	0.0019	0.079	0.0034	0.011	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00032	0.0053
	October		0.00013	0.0016	0.067	0.0029	0.0094	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	November		0.00013	0.0016	0.064	0.0028	0.0094	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00025	0.0043
	December		0.00012	0.0016	0.063	0.0028	0.0100	0.0034	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00025	0.0043
	January	2039	0.00012	0.0016	0.063	0.0028	0.010	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	February		0.00011	0.0014	0.057	0.0025	0.0093	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	March		0.00011	0.0013	0.054	0.0024	0.0090	0.0030	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	April		0.00011	0.0013	0.055	0.0024	0.0091	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	May		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	June		0.00016	0.0019	0.079	0.0034	0.013	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00032	0.0053
	July		0.00016	0.0019	0.079	0.0034	0.012	0.0043	0.000080	0.85	0.019	3.1	0.0081	0.000081	0.00032	0.0053
	August		0.00012	0.0015	0.061	0.0026	0.0084	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000062	0.00024	0.0041
	September		0.00012	0.0015	0.062	0.0027	0.0087	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	October		0.00012	0.0014	0.059	0.0026	0.0083	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000061	0.00024	0.0040
	November		0.00011	0.0013	0.054	0.0024	0.0079	0.0030	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	December		0.00011	0.0013	0.054	0.0024	0.0084	0.0029	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	January	2040	0.00011	0.0013	0.054	0.0024	0.0089	0.0029	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	February		0.00011	0.0013	0.054	0.0024	0.0092	0.0029	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	March		0.000089	0.0011	0.045	0.0020	0.0072	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	April		0.000079	0.00099	0.040	0.0017	0.0059	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000083	0.0010	0.042	0.0018	0.0059	0.0023	0.000043	0.46	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	June		0.000089	0.0011	0.045	0.0020	0.0059	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000047	0.00018	0.0030

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.000090	0.0011	0.046	0.0020	0.0054	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	August		0.00013	0.0016	0.064	0.0028	0.0080	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	September		0.00013	0.0017	0.068	0.0029	0.0088	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	October		0.00012	0.0016	0.063	0.0028	0.0084	0.0034	0.000064	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	November		0.00013	0.0016	0.064	0.0028	0.0091	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	December		0.00013	0.0016	0.064	0.0028	0.0097	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	January	2041	0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	February		0.00013	0.0016	0.064	0.0028	0.011	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	March		0.00012	0.0015	0.061	0.0027	0.011	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00025	0.0041
	April		0.000098	0.0012	0.050	0.0022	0.0079	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	May		0.00010	0.0013	0.053	0.0023	0.0081	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	June		0.00013	0.0017	0.068	0.0029	0.010	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	July		0.00014	0.0018	0.072	0.0031	0.010	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	August		0.000096	0.0012	0.049	0.0021	0.0060	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	September		0.000091	0.0011	0.046	0.0020	0.0055	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	October		0.000096	0.0012	0.049	0.0021	0.0061	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000094	0.0012	0.048	0.0021	0.0064	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	December		0.000094	0.0012	0.048	0.0021	0.0070	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	January	2042	0.000094	0.0012	0.048	0.0021	0.0074	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	February		0.000094	0.0012	0.048	0.0021	0.0078	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	March		0.000091	0.0011	0.046	0.0020	0.0078	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	April		0.000079	0.00098	0.040	0.0017	0.0062	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000081	0.0010	0.041	0.0018	0.0061	0.0022	0.000042	0.45	0.0099	1.6	0.0042	0.000042	0.00017	0.0028
	June		0.000083	0.0010	0.042	0.0018	0.0056	0.0023	0.000043	0.45	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	July		0.000083	0.0010	0.042	0.0018	0.0048	0.0023	0.000043	0.46	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	August		0.000086	0.0011	0.044	0.0019	0.0049	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	September		0.000090	0.0011	0.046	0.0020	0.0051	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000047	0.00018	0.0031
	October		0.000079	0.00099	0.040	0.0018	0.0045	0.0022	0.000041	0.44	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	November		0.000078	0.00097	0.040	0.0017	0.0049	0.0022	0.000040	0.43	0.0095	1.5	0.0040	0.000041	0.00016	0.0027
	December		0.000078	0.00097	0.040	0.0017	0.0054	0.0022	0.000040	0.43	0.0095	1.5	0.0040	0.000041	0.00016	0.0027
Operations	January	2043	0.000078	0.00097	0.040	0.0017	0.0059	0.0022	0.000040	0.43	0.0095	1.5	0.0040	0.000041	0.00016	0.0027
	February		0.000078	0.00097	0.040	0.0017	0.0062	0.0022	0.000040	0.43	0.0095	1.5	0.0040	0.000041	0.00016	0.0027
	March		0.000078	0.00097	0.040	0.0017	0.0065	0.0022	0.000040	0.43	0.0095	1.5	0.0040	0.000041	0.00016	0.0027
	April		0.000072	0.00089	0.036	0.0016	0.0056	0.0020	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	May		0.000075	0.00094	0.038	0.0017	0.0053	0.0021	0.000039	0.41	0.0092	1.5	0.0039	0.000039	0.00015	0.0026
	June		0.000079	0.00099	0.040	0.0018	0.0051	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000041	0.00016	0.0027
	July		0.000089	0.0011	0.045	0.0020	0.0054	0.0024	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	August		0.000087	0.0011	0.044	0.0019	0.0049	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0029
	September		0.000080	0.00099	0.041	0.0018	0.0043	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	October		0.000072	0.00090	0.037	0.0016	0.0039	0.0020	0.000037	0.40	0.0088	1.4	0.0037	0.000038	0.00015	0.0025
	November		0.000067	0.00084	0.034	0.0015	0.0039	0.0019	0.000035	0.37	0.0082	1.3	0.0035	0.000035	0.00014	0.0023
	December		0.000067	0.00083	0.034	0.0015	0.0043	0.0018	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	January	2044	0.000067	0.00083	0.034	0.0015	0.0047	0.0018	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	February		0.000067	0.00083	0.034	0.0015	0.0051	0.0018	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	March		0.000067	0.00083	0.034	0.0015	0.0053	0.0018	0.000034	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	April		0.000065	0.00081	0.033	0.0014	0.0046	0.0018	0.000034	0.36	0.0079	1.3	0.0034	0.000034	0.00013	0.0022
	May		0.000080	0.00100	0.041	0.0018	0.0056	0.0022	0.000041	0.44	0.0097	1.6	0.0042	0.000042	0.00016	0.0027
	June		0.000099	0.0012	0.050	0.0022	0.0068	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0034
	July		0.00010	0.0013	0.052	0.0023	0.0066	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	August		0.00013	0.0017	0.068	0.0030	0.0088	0.0037	0.000070	0.74	0.016	2.7	0.0070	0.000070	0.00027	0.0046
	September		0.00016	0.0020	0.083	0.0036	0.011	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
	October		0.00016	0.0021	0.084	0.0036	0.012	0.0045	0.000085	0.90	0.020	3.3	0.0085	0.000086	0.00034	0.0056
	November		0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000087	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	December		0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000086	0.91	0.020	3.3	0.0086	0.000087	0.00034	0.0057
	January	2045	0.00017	0.0021	0.084	0.0037	0.014	0.0046	0.000086	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0057
	February		0.00017	0.0021	0.084	0.0037	0.014	0.0046	0.000086	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0057
	March		0.00016	0.0019	0.079	0.0034	0.014	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00032	0.0053
	April		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	May		0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00013	0.0017	0.068	0.0029	0.010	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	July		0.00014	0.0017	0.071	0.0031	0.010	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	August		0.00016	0.0019	0.079	0.0034	0.011	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000081	0.00032	0.0053
	September		0.00017	0.0021	0.086	0.0037	0.013	0.0047	0.000088	0.93	0.021	3.4	0.0088	0.000088	0.00035	0.0058

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	October	2045	0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000087	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	November		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	December		0.00016	0.0020	0.081	0.0035	0.013	0.0044	0.000082	0.87	0.019	3.2	0.0082	0.000083	0.00032	0.0054
	January	2046	0.00015	0.0019	0.078	0.0034	0.013	0.0042	0.000080	0.84	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	February		0.00015	0.0019	0.078	0.0034	0.014	0.0042	0.000080	0.84	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	March		0.00014	0.0017	0.071	0.0031	0.012	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	April		0.00012	0.0015	0.062	0.0027	0.011	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	May		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	June		0.00012	0.0015	0.062	0.0027	0.0096	0.0033	0.000063	0.66	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	July		0.00012	0.0015	0.059	0.0026	0.0085	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000061	0.00024	0.0040
	August		0.00011	0.0014	0.057	0.0025	0.0076	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	September		0.00011	0.0013	0.053	0.0023	0.0069	0.0029	0.000054	0.58	0.013	2.1	0.0055	0.000055	0.00021	0.0036
	October		0.000096	0.0012	0.049	0.0021	0.0063	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000091	0.0011	0.046	0.0020	0.0062	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	December		0.000090	0.0011	0.046	0.0020	0.0066	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	January	2047	0.000090	0.0011	0.046	0.0020	0.0071	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	February		0.000090	0.0011	0.046	0.0020	0.0074	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	March		0.000088	0.0011	0.045	0.0019	0.0075	0.0024	0.000046	0.48	0.011	1.7	0.0046	0.000046	0.00018	0.0030
	April		0.000080	0.0010	0.041	0.0018	0.0065	0.0022	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00016	0.0027
	May		0.000081	0.0010	0.041	0.0018	0.0059	0.0022	0.000042	0.45	0.0099	1.6	0.0042	0.000042	0.00017	0.0028
	June		0.00010	0.0013	0.051	0.0022	0.0071	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	July		0.00011	0.0013	0.055	0.0024	0.0071	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	August		0.00011	0.0013	0.054	0.0023	0.0066	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	September		0.00011	0.0014	0.057	0.0025	0.0072	0.0031	0.000059	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0039
	October		0.00012	0.0015	0.061	0.0026	0.0080	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000062	0.00024	0.0041
	November		0.00012	0.0015	0.059	0.0026	0.0083	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000061	0.00024	0.0040
	December		0.00011	0.0014	0.058	0.0025	0.0087	0.0032	0.000060	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
	January	2048	0.00011	0.0014	0.058	0.0025	0.0091	0.0031	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	February		0.00011	0.0014	0.057	0.0025	0.0095	0.0031	0.000058	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0038
	March		0.00011	0.0014	0.057	0.0025	0.0098	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	April		0.00011	0.0013	0.054	0.0023	0.0093	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	May		0.00011	0.0013	0.054	0.0023	0.0089	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	June		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	July		0.00012	0.0014	0.059	0.0025	0.0084	0.0032	0.000060	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
	August		0.000094	0.0012	0.048	0.0021	0.0059	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	September		0.000090	0.0011	0.046	0.0020	0.0055	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	October		0.000086	0.0011	0.044	0.0019	0.0055	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	November		0.000086	0.0011	0.044	0.0019	0.0059	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	December		0.000084	0.0010	0.043	0.0019	0.0062	0.0023	0.000043	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	January	2049	0.000079	0.00099	0.040	0.0018	0.0060	0.0022	0.000041	0.44	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	February		0.000078	0.00097	0.040	0.0017	0.0062	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	March		0.000076	0.00094	0.038	0.0017	0.0061	0.0021	0.000039	0.42	0.0092	1.5	0.0039	0.000039	0.00015	0.0026
	April		0.000072	0.00090	0.037	0.0016	0.0056	0.0020	0.000037	0.40	0.0088	1.4	0.0038	0.000038	0.00015	0.0025
	May		0.000080	0.00099	0.041	0.0018	0.0059	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	June		0.000087	0.0011	0.044	0.0019	0.0059	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	July		0.000085	0.0011	0.043	0.0019	0.0052	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	August		0.000091	0.0011	0.046	0.0020	0.0053	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	September		0.000085	0.0011	0.043	0.0019	0.0048	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	October		0.000077	0.00096	0.039	0.0017	0.0043	0.0021	0.000040	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	November		0.000070	0.00087	0.035	0.0015	0.0041	0.0019	0.000036	0.38	0.0085	1.4	0.0036	0.000036	0.00014	0.0024
	December		0.000070	0.00087	0.035	0.0015	0.0046	0.0019	0.000036	0.38	0.0085	1.4	0.0036	0.000036	0.00014	0.0024
	January	2050	0.000070	0.00087	0.035	0.0015	0.0050	0.0019	0.000036	0.38	0.0085	1.4	0.0036	0.000036	0.00014	0.0024
	February		0.000070	0.00087	0.035	0.0015	0.0054	0.0019	0.000036	0.38	0.0085	1.4	0.0036	0.000036	0.00014	0.0024
	March		0.000069	0.00086	0.035	0.0015	0.0055	0.0019	0.000036	0.38	0.0084	1.4	0.0036	0.000036	0.00014	0.0023
	April		0.000063	0.00079	0.032	0.0014	0.0045	0.0018	0.000033	0.35	0.0077	1.3	0.0033	0.000033	0.00013	0.0022
	May		0.000066	0.00083	0.034	0.0015	0.0046	0.0018	0.000034	0.37	0.0081	1.3	0.0034	0.000035	0.00014	0.0023
	June		0.000072	0.00090	0.037	0.0016	0.0047	0.0020	0.000038	0.40	0.0088	1.4	0.0038	0.000038	0.00015	0.0025
	July		0.00010	0.0013	0.053	0.0023	0.0070	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	August		0.00013	0.0016	0.065	0.0028	0.0085	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	September		0.00012	0.0015	0.062	0.0027	0.0081	0.0033	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	October		0.00012	0.0015	0.061	0.0027	0.0083	0.0033	0.000063	0.66	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	November		0.00011	0.0014	0.058	0.0025	0.0083	0.0032	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	December		0.00011	0.0014	0.057	0.0025	0.0087	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.00011	0.0014	0.057	0.0025	0.0092	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	February		0.00011	0.0014	0.057	0.0025	0.0096	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	March		0.00011	0.0013	0.054	0.0024	0.0092	0.0030	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	April		0.000078	0.00097	0.039	0.0017	0.0054	0.0021	0.000040	0.43	0.0094	1.5	0.0040	0.000040	0.00016	0.0026
	May		0.000079	0.00098	0.040	0.0017	0.0052	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	June		0.000093	0.0012	0.047	0.0020	0.0060	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	July		0.000097	0.0012	0.049	0.0021	0.0060	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	August		0.000089	0.0011	0.045	0.0020	0.0051	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	September		0.000090	0.0011	0.046	0.0020	0.0052	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	October		0.000088	0.0011	0.045	0.0019	0.0053	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	November		0.000088	0.0011	0.045	0.0019	0.0057	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	December		0.000085	0.0011	0.043	0.0019	0.0059	0.0023	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	January	2052	0.000084	0.0011	0.043	0.0019	0.0063	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	February		0.000084	0.0011	0.043	0.0019	0.0067	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	March		0.000084	0.0011	0.043	0.0019	0.0071	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	April		0.000076	0.00095	0.039	0.0017	0.0057	0.0021	0.000040	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	May		0.000081	0.0010	0.041	0.0018	0.0056	0.0022	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00016	0.0027
	June		0.000096	0.0012	0.049	0.0021	0.0065	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	July		0.000099	0.0012	0.051	0.0022	0.0062	0.0027	0.000051	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	August		0.00010	0.0013	0.052	0.0022	0.0062	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	September		0.00012	0.0015	0.060	0.0026	0.0074	0.0032	0.000061	0.64	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	October		0.00012	0.0015	0.062	0.0027	0.0082	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	November		0.00012	0.0015	0.062	0.0027	0.0089	0.0034	0.000063	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	December		0.00012	0.0015	0.062	0.0027	0.0095	0.0034	0.000063	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
		MINIMUM	0.000063	0.00079	0.032	0.0014	0.0039	0.0018	0.000033	0.35	0.0077	1.3	0.0033	0.000033	0.00013	0.0022
		MAXIMUM	0.00029	0.0023	0.095	0.0055	0.016	0.010	0.00010	1.1	0.024	3.8	0.010	0.0029	0.00038	0.0063
		AVERAGE	0.00012	0.0014	0.058	0.0026	0.0086	0.0034	0.000059	0.63	0.014	2.3	0.0059	0.00017	0.00023	0.0039
Decommissioning	January	2053	0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	February		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	March		0.00012	0.0015	0.060	0.0026	0.010	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000062	0.00024	0.0040
	April		0.000094	0.0012	0.048	0.0021	0.0074	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	May		0.000099	0.0012	0.050	0.0022	0.0074	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0034
	June		0.00013	0.0016	0.066	0.0029	0.0098	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	July		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	August		0.00017	0.0021	0.087	0.0038	0.012	0.0047	0.000088	0.94	0.021	3.4	0.0088	0.000089	0.00035	0.0058
	September		0.00012	0.0016	0.063	0.0028	0.0085	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	October		0.00011	0.0014	0.056	0.0024	0.0076	0.0031	0.000057	0.61	0.013	2.2	0.0057	0.000058	0.00023	0.0038
	November		0.00011	0.0013	0.054	0.0024	0.0077	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	December		0.00011	0.0013	0.054	0.0024	0.0082	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0036
	January	2054	0.00011	0.0013	0.054	0.0024	0.0087	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0036
	February		0.00011	0.0013	0.054	0.0024	0.0091	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0036
	March		0.00011	0.0013	0.053	0.0023	0.0092	0.0029	0.000054	0.58	0.013	2.1	0.0055	0.000055	0.00021	0.0036
	April		0.000092	0.0012	0.047	0.0020	0.0076	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	May		0.000089	0.0011	0.046	0.0020	0.0067	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000047	0.00018	0.0030
	June		0.00012	0.0015	0.061	0.0026	0.0089	0.0033	0.000062	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	July		0.00015	0.0018	0.074	0.0032	0.011	0.0040	0.000075	0.80	0.018	2.9	0.0076	0.000076	0.00030	0.0050
	August		0.00013	0.0016	0.066	0.0029	0.0087	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	September		0.00013	0.0016	0.066	0.0029	0.0089	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0044
	October		0.00013	0.0016	0.066	0.0029	0.0091	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000068	0.00026	0.0044
	November		0.00012	0.0015	0.063	0.0027	0.0090	0.0034	0.000064	0.68	0.015	2.5	0.0064	0.000064	0.00025	0.0042
	December		0.00012	0.0015	0.062	0.0027	0.0095	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	January	2055	0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	February		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0042
	March		0.00012	0.0015	0.062	0.0027	0.011	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0042
	April		0.000099	0.0012	0.050	0.0022	0.0081	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	May		0.000091	0.0011	0.046	0.0020	0.0068	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	June		0.000095	0.0012	0.048	0.0021	0.0067	0.0026	0.000049	0.52	0.012	1.9	0.0049	0.000049	0.00019	0.0032
	July		0.000082	0.0010	0.042	0.0018	0.0048	0.0023	0.000043	0.45	0.0100	1.6	0.0043	0.000043	0.00017	0.0028
	August		0.000096	0.0012	0.049	0.0021	0.0057	0.0026	0.000049	0.52	0.012	1.9	0.0050	0.000050	0.00019	0.0033
	September		0.00010	0.0013	0.053	0.0023	0.0063	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	October		0.00010	0.0013	0.053	0.0023	0.0067	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	November		0.000099	0.0012	0.050	0.0022	0.0067	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0034
	December		0.000098	0.0012	0.050	0.0022	0.0072	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.000098	0.0012	0.050	0.0022	0.0077	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	February		0.000098	0.0012	0.050	0.0022	0.0081	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	March		0.000088	0.0011	0.045	0.0020	0.0071	0.0024	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	April		0.000090	0.0011	0.046	0.0020	0.0070	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000047	0.00018	0.0031
	May		0.00010	0.0013	0.052	0.0023	0.0080	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	June		0.00012	0.0015	0.061	0.0027	0.0091	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00024	0.0041
	July		0.00013	0.0016	0.064	0.0028	0.0090	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	August		0.00012	0.0016	0.063	0.0028	0.0085	0.0034	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00025	0.0043
	September		0.00010	0.0013	0.052	0.0022	0.0065	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	October		0.00011	0.0013	0.055	0.0024	0.0072	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	November		0.00011	0.0014	0.057	0.0025	0.0081	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	December		0.00011	0.0014	0.057	0.0025	0.0087	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	January	2057	0.00011	0.0014	0.057	0.0025	0.0092	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	February		0.00011	0.0014	0.057	0.0025	0.0096	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	March		0.00011	0.0014	0.057	0.0025	0.0099	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	April		0.000093	0.0012	0.047	0.0021	0.0075	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	May		0.00011	0.0013	0.055	0.0024	0.0087	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	June		0.00013	0.0017	0.068	0.0030	0.011	0.0037	0.000070	0.74	0.016	2.7	0.0070	0.000070	0.00027	0.0046
	July		0.00013	0.0016	0.064	0.0028	0.0092	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	August		0.00012	0.0015	0.063	0.0027	0.0085	0.0034	0.000064	0.68	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	September		0.00014	0.0018	0.073	0.0032	0.010	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	October		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0054
	November		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	December		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000083	0.88	0.020	3.2	0.0084	0.000084	0.00033	0.0055
		MINIMUM	0.000082	0.0010	0.042	0.0018	0.0048	0.0023	0.000043	0.45	0.0100	1.6	0.0043	0.000043	0.00017	0.0028
		MAXIMUM	0.00017	0.0021	0.087	0.0038	0.013	0.0047	0.000088	0.94	0.021	3.4	0.0088	0.000089	0.00035	0.0058
		AVERAGE	0.00012	0.0014	0.059	0.0025	0.0087	0.0032	0.000060	0.63	0.014	2.3	0.0060	0.000060	0.00024	0.0039
Reclamation	January	2058	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2059	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2060	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

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			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	January	2062	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	January	2063	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2064	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
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	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2066	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-1: Scenario 1: Application Case - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Reclamation	**April**	**2066**	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	**2067**	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035
Post-Closure	**January**	**≥2070**	0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.003	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	2.5E-03	2.5E-03	0.000050	0.45	0.0100	1.9	5.0E-03	0.000050	0.00020	0.0035

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	June		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	July		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	October		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000031	1.7	0.000012	0.00000016	1.6	0.49	0.0000016	0.00000054	0.0000012	0.00069	0.00000038	0.29	0.58	0.00019	0.0000023
	May		0.0000049	4.2	0.000014	0.00000014	3.1	0.81	0.00000026	0.00000027	0.0000004	0.00010	5.6E-08	0.35	1.1	0.000061	0.0000033
	June		0.0000013	3.1	0.000028	0.00000028	2.3	0.94	6.8E-08	0.00000032	0.00000053	0.000019	1.0E-08	0.69	0.86	0.000043	0.0000050
	July		0.00000098	3.6	0.000054	0.00000056	2.7	1.5	4.6E-08	0.00000057	0.0000010	0.0000034	1.7E-09	1.4	1.1	0.000061	0.0000091
	August		0.00000085	2.2	0.000058	0.00000061	1.6	1.5	3.7E-08	0.00000057	0.0000011	0.00000088	4.5E-10	1.5	0.74	0.000054	0.0000093
	September		0.00000075	2.2	0.000038	0.00000039	1.5	1.1	2.8E-08	0.00000046	0.00000069	0.0000008	4.0E-10	0.93	0.63	0.000047	0.0000065
	October		0.00000086	3.9	0.000033	0.00000034	2.5	1.2	3.3E-08	0.0000005	0.0000006	0.0000013	5.9E-10	0.80	0.96	0.000057	0.0000063
	November		0.0000004	5.4	0.000011	0.00000012	3.2	0.80	2.5E-08	0.00000021	0.00000021	0.0000016	6.0E-10	0.28	1.1	0.000037	0.0000031
	December		0.00000025	5.9	0.0000045	4.3E-08	3.5	0.65	2.3E-08	0.00000011	8.1E-08	0.0000017	6.1E-10	0.11	1.2	0.000030	0.0000020
	January	2027	0.00000031	6.6	0.0000097	9.8E-08	3.2	0.72	2.3E-08	0.00000015	0.00000018	0.0000016	5.7E-10	0.24	1.1	0.000032	0.0000027
	February		0.00000039	5.6	0.000017	0.00000018	2.4	0.76	2.3E-08	0.00000022	0.00000032	0.0000012	4.6E-10	0.43	0.87	0.000032	0.0000036
	March		0.00000054	6.6	0.000029	0.0000003	3.2	1.1	3.3E-08	0.00000032	0.00000054	0.0000016	6.3E-10	0.73	1.2	0.000045	0.0000056
	April		0.00000058	3.6	0.000033	0.00000034	1.9	1.0	2.7E-08	0.00000036	0.00000061	0.00000096	4.2E-10	0.81	0.75	0.000040	0.0000057
	May		0.00000087	3.8	0.000039	0.0000004	2.2	1.3	3.3E-08	0.00000052	0.00000071	0.0000011	5.3E-10	0.95	0.86	0.000056	0.0000070
	June		0.00000075	4.8	0.000040	0.00000041	2.5	1.3	3.5E-08	0.00000046	0.00000073	0.0000013	5.6E-10	0.98	0.99	0.000052	0.0000071
	July		0.0000009	4.0	0.000068	0.00000071	2.2	1.7	4.5E-08	0.00000062	0.0000013	0.0000011	5.4E-10	1.7	0.98	0.000060	0.000011
	August		0.00000094	3.2	0.000041	0.00000043	1.9	1.3	3.3E-08	0.00000056	0.00000076	0.00000099	5.0E-10	1.0	0.77	0.000058	0.0000074
	September		0.00000065	5.5	0.000021	0.00000021	2.4	0.95	2.6E-08	0.00000036	0.00000038	0.0000012	5.2E-10	0.51	0.88	0.000045	0.0000044
	October		0.00000051	3.8	0.000026	0.00000027	2.2	0.91	2.6E-08	0.00000031	0.00000048	0.0000011	4.5E-10	0.65	0.82	0.000037	0.0000048
	November		0.00000054	4.3	0.000025	0.00000026	2.2	0.93	2.6E-08	0.00000032	0.00000047	0.0000011	4.7E-10	0.63	0.85	0.000039	0.0000048
	December		0.00000047	6.9	0.000018	0.00000019	2.9	0.89	2.7E-08	0.00000026	0.00000033	0.0000015	5.7E-10	0.44	1.1	0.000039	0.0000040
	January	2028	0.000011	6.8	0.0000018	2.8E-08	2.2	0.38	0.00000057	0.00000018	0.00000038	0.00024	0.00000013	0.047	0.75	0.000073	0.0000011
	February		0.00000012	10	0.00000063	3.7E-09	3.5	0.57	1.5E-08	4.3E-08	1.0E-08	0.0000013	4.4E-10	0.021	1.2	0.000019	0.0000014
	March		0.00000012	9.7	0.00000052	2.5E-09	3.5	0.57	1.5E-08	4.1E-08	8.0E-09	0.0000013	4.3E-10	0.014	1.2	0.000019	0.0000014
	April		0.0000048	8.5	0.000027	0.00000022	4.9	7.2	0.00000029	0.000025	0.0000014	0.00010	5.7E-08	0.48	1.9	0.000067	0.000029
	May		0.0000011	4.8	0.000043	0.00000031	9.6	27	0.0000002	0.00015	0.0000057	0.000016	7.1E-09	0.42	5.1	0.00013	0.00012
	June		0.00000092	5.5	0.000040	0.0000003	8.9	24	0.00000017	0.00014	0.0000054	0.000013	5.8E-09	0.41	5.0	0.00012	0.00011
	July		0.00000063	5.5	0.000061	0.00000046	12	36	0.00000023	0.00021	0.0000077	0.0000081	2.3E-09	0.65	6.7	0.00015	0.00016
	August		0.00000073	4.8	0.000051	0.00000041	11	34	0.00000023	0.00022	0.0000081	0.000010	3.9E-09	0.48	6.9	0.00015	0.00016
	September		0.0000005	5.0	0.000051	0.00000042	11	34	0.00000022	0.00022	0.0000080	0.0000056	1.4E-09	0.50	7.1	0.00015	0.00016
	October		0.00000026	6.6	0.000023	0.00000019	7.5	18	0.00000011	0.00011	0.0000041	0.0000024	5.0E-10	0.22	4.5	0.000084	0.000086
	November		0.00000026	9.2	0.000019	0.00000016	7.6	15	9.6E-08	0.000091	0.0000033	0.0000025	5.8E-10	0.20	4.2	0.000076	0.000072
	December		0.00000012	9.3	0.0000011	7.8E-09	3.8	1.9	1.8E-08	0.0000034	0.00000013	0.0000013	4.2E-10	0.028	1.4	0.000020	0.0000078
		MINIMUM	0.00000012	1.7	0.00000052	2.5E-09	1.5	0.38	1.5E-08	4.1E-08	8.0E-09	0.0000008	4.0E-10	0.014	0.58	0.000019	0.0000011
		MAXIMUM	0.000031	10	0.000068	0.00000071	12	36	0.0000016	0.00022	0.0000081	0.00069	0.00000038	1.7	7.1	0.00019	0.00016
		AVERAGE	0.0000021	5.3	0.000028	0.00000027	4.2	6.7	0.00000014	0.000036	0.0000017	0.000038	2.0E-08	0.57	2.0	0.000066	0.000031
Operations	January	2029	0.097	6.1	0.034	0.0000061	425	51	0.00030	0.0033	0.0032	0.021	0.000061	0.14	62	0.012	0.000011
	February		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000010
	March		0.11	5.2	0.037	0.0000068	456	65	0.00034	0.0036	0.0035	0.023	0.000067	0.22	75	0.013	0.000029
	April		0.087	4.5	0.030	0.0000058	448	71	0.00027	0.0031	0.0028	0.019	0.000054	0.61	62	0.010	0.00011
	May		0.096	4.8	0.033	0.0000063	456	73	0.00030	0.0034	0.0031	0.021	0.000060	0.33	70	0.012	0.00010
	June		0.097	4.8	0.033	0.0000063	456	74	0.00030	0.0034	0.0032	0.021	0.000060	0.42	70	0.012	0.00010
	July		0.10	4.9	0.035	0.0000066	456	74	0.00032	0.0035	0.0033	0.022	0.000063	0.43	72	0.012	0.000088
	August		0.092	4.6	0.032	0.0000061	458	76	0.00029	0.0033	0.0030	0.020	0.000058	0.45	69	0.011	0.00011
	September		0.093	4.6	0.032	0.0000061	457	75	0.00029	0.0033	0.0030	0.020	0.000058	0.48	69	0.011	0.00011
	October		0.11	5.2	0.037	0.0000069	456	75	0.00034	0.0037	0.0035	0.023	0.000067	0.33	79	0.013	0.000073
	November		0.11	5.2	0.037	0.0000068	456	66	0.00034	0.0036	0.0035	0.023	0.000067	0.22	76	0.013	0.000027
	December		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000010

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2030	0.11	4.8	0.039	0.0000072	455	55	0.00036	0.0038	0.0037	0.025	0.000071	0.16	66	0.014	0.000016
	February		0.11	4.7	0.039	0.0000072	453	54	0.00035	0.0038	0.0037	0.025	0.000071	0.20	63	0.014	0.000024
	March		0.11	4.7	0.039	0.0000073	454	58	0.00036	0.0039	0.0037	0.025	0.000071	0.21	65	0.014	0.000038
	April		0.097	4.0	0.033	0.0000063	455	63	0.00030	0.0034	0.0031	0.021	0.000060	0.45	55	0.012	0.000098
	May		0.10	4.2	0.035	0.0000066	457	63	0.00032	0.0035	0.0033	0.022	0.000063	0.39	59	0.012	0.000092
	June		0.094	3.9	0.032	0.0000062	459	66	0.00029	0.0033	0.0030	0.020	0.000058	0.50	57	0.011	0.00011
	July		0.093	3.9	0.032	0.0000062	457	69	0.00029	0.0033	0.0030	0.020	0.000058	0.56	56	0.011	0.00013
	August		0.097	4.1	0.034	0.0000064	457	68	0.00030	0.0035	0.0032	0.021	0.000061	0.45	58	0.012	0.00012
	September		0.096	4.0	0.033	0.0000063	458	67	0.00030	0.0034	0.0031	0.021	0.000060	0.42	58	0.012	0.00012
	October		0.10	4.2	0.035	0.0000066	459	64	0.00031	0.0035	0.0033	0.022	0.000063	0.38	59	0.012	0.00010
	November		0.11	4.7	0.039	0.0000072	456	61	0.00035	0.0039	0.0037	0.025	0.000070	0.18	67	0.013	0.000053
	December		0.11	4.8	0.039	0.0000073	454	56	0.00036	0.0039	0.0037	0.025	0.000072	0.19	64	0.014	0.000029
	January	2031	0.12	4.3	0.041	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000074	0.18	61	0.014	0.000029
	February		0.12	4.4	0.040	0.0000074	456	52	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000015
	March		0.12	4.3	0.040	0.0000074	456	52	0.00036	0.0040	0.0038	0.026	0.000073	0.19	59	0.014	0.000031
	April		0.10	3.5	0.035	0.0000065	456	57	0.00031	0.0035	0.0033	0.022	0.000063	0.45	50	0.012	0.000084
	May		0.11	3.7	0.036	0.0000068	457	56	0.00033	0.0037	0.0034	0.023	0.000066	0.29	52	0.013	0.000086
	June		0.11	3.7	0.037	0.0000070	456	57	0.00033	0.0037	0.0035	0.023	0.000067	0.33	54	0.013	0.000084
	July		0.11	3.7	0.037	0.0000069	457	57	0.00034	0.0037	0.0035	0.023	0.000067	0.34	53	0.013	0.000082
	August		0.11	3.7	0.036	0.0000069	457	60	0.00033	0.0037	0.0034	0.023	0.000066	0.37	53	0.013	0.000096
	September		0.10	3.6	0.036	0.0000068	457	58	0.00033	0.0036	0.0034	0.023	0.000065	0.36	53	0.013	0.000091
	October		0.11	3.9	0.039	0.0000073	459	58	0.00035	0.0039	0.0037	0.025	0.000071	0.30	56	0.013	0.000072
	November		0.12	4.3	0.041	0.0000075	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.16	63	0.014	0.000030
	December		0.12	4.4	0.041	0.0000075	457	52	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000019
	January	2032	0.12	4.8	0.040	0.0000074	455	52	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000018
	February		0.12	5.0	0.040	0.0000074	456	52	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000017
	March		0.11	4.2	0.038	0.0000072	456	55	0.00035	0.0038	0.0036	0.024	0.000070	0.30	53	0.013	0.000069
	April		0.10	3.8	0.036	0.0000068	461	57	0.00033	0.0036	0.0034	0.023	0.000065	0.43	49	0.012	0.000094
	May		0.11	4.0	0.037	0.0000070	457	55	0.00034	0.0038	0.0035	0.024	0.000068	0.28	53	0.013	0.000084
	June		0.11	4.1	0.038	0.0000071	458	56	0.00035	0.0038	0.0036	0.024	0.000069	0.32	54	0.013	0.000071
	July		0.10	3.7	0.035	0.0000066	455	58	0.00031	0.0035	0.0033	0.022	0.000063	0.49	49	0.012	0.00010
Operations	August		0.10	3.8	0.036	0.0000067	459	58	0.00032	0.0036	0.0034	0.023	0.000065	0.33	51	0.012	0.000096
	September		0.11	4.2	0.039	0.0000074	457	56	0.00036	0.0040	0.0037	0.025	0.000072	0.25	55	0.014	0.000075
	October		0.12	4.3	0.040	0.0000074	453	55	0.00036	0.0040	0.0038	0.025	0.000072	0.26	57	0.014	0.000057
	November		0.12	4.7	0.041	0.0000075	455	53	0.00037	0.0040	0.0039	0.026	0.000074	0.17	60	0.014	0.000031
	December		0.12	5.0	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000017
	January	2033	0.12	4.6	0.041	0.0000075	458	53	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000018
	February		0.12	4.5	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000018
	March		0.12	4.4	0.041	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000022
	April		0.11	3.5	0.036	0.0000070	457	59	0.00033	0.0037	0.0034	0.023	0.000066	0.57	50	0.013	0.00010
	May		0.10	3.4	0.035	0.0000067	458	57	0.00032	0.0036	0.0034	0.023	0.000064	0.25	50	0.012	0.00010
	June		0.11	3.6	0.038	0.0000071	460	56	0.00034	0.0038	0.0036	0.024	0.000068	0.32	52	0.013	0.000092
	July		0.11	3.7	0.039	0.0000073	458	56	0.00035	0.0039	0.0037	0.025	0.000071	0.30	54	0.014	0.000078
	August		0.11	3.5	0.037	0.0000070	460	58	0.00033	0.0037	0.0035	0.023	0.000067	0.36	52	0.013	0.000094
	September		0.11	3.6	0.038	0.0000071	458	57	0.00034	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.000081
	October		0.11	3.8	0.040	0.0000074	455	55	0.00036	0.0040	0.0037	0.025	0.000072	0.28	54	0.014	0.000068
	November		0.11	3.9	0.040	0.0000074	458	56	0.00036	0.0039	0.0037	0.025	0.000072	0.24	57	0.014	0.000058
	December		0.12	4.4	0.040	0.0000074	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	January	2034	0.12	4.5	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000018
	February		0.12	4.5	0.040	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000022
	March		0.12	4.1	0.041	0.0000077	456	54	0.00038	0.0041	0.0039	0.026	0.000075	0.21	58	0.014	0.000043
	April		0.10	3.6	0.036	0.0000068	459	57	0.00032	0.0036	0.0034	0.023	0.000065	0.44	51	0.012	0.000085
	May		0.11	3.8	0.039	0.0000073	458	56	0.00035	0.0039	0.0037	0.025	0.000070	0.20	56	0.013	0.000073
	June		0.099	3.3	0.034	0.0000066	455	60	0.00031	0.0035	0.0032	0.022	0.000062	0.68	48	0.012	0.00012
	July		0.095	3.1	0.033	0.0000064	455	62	0.00030	0.0034	0.0031	0.021	0.000060	0.57	47	0.011	0.00013
	August		0.097	3.2	0.033	0.0000064	456	63	0.00030	0.0034	0.0032	0.021	0.000061	0.39	48	0.012	0.00013
	September		0.10	3.4	0.035	0.0000067	457	59	0.00032	0.0036	0.0033	0.022	0.000064	0.37	49	0.012	0.00012
	October		0.11	3.9	0.039	0.0000073	459	57	0.00035	0.0039	0.0037	0.025	0.000070	0.21	55	0.014	0.000088
	November		0.12	4.1	0.041	0.0000076	456	55	0.00037	0.0041	0.0039	0.026	0.000074	0.20	60	0.014	0.000049
	December		0.12	4.2	0.041	0.0000076	456	53	0.00037	0.0040	0.0038	0.026	0.000074	0.20	59	0.014	0.000038
	January	2035	0.12	4.4	0.040	0.0000074	455	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000020
	February		0.12	4.4	0.041	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000074	0.16	61	0.014	0.000026
	March		0.12	4.5	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April	2035	0.11	3.8	0.038	0.0000072	457	55	0.00035	0.0038	0.0036	0.024	0.000069	0.35	54	0.013	0.000067
	May		0.10	3.4	0.035	0.0000068	460	57	0.00032	0.0036	0.0033	0.023	0.000064	0.43	50	0.012	0.000095
	June		0.10	3.4	0.036	0.0000068	459	58	0.00033	0.0036	0.0034	0.023	0.000065	0.34	52	0.012	0.000096
	July		0.10	3.4	0.036	0.0000069	457	57	0.00033	0.0037	0.0034	0.023	0.000065	0.36	50	0.013	0.000098
	August		0.11	3.5	0.037	0.0000070	457	58	0.00034	0.0038	0.0035	0.024	0.000067	0.34	52	0.013	0.000097
	September		0.11	3.6	0.037	0.0000070	457	56	0.00034	0.0038	0.0035	0.024	0.000068	0.32	52	0.013	0.000086
	October		0.12	3.8	0.040	0.0000075	458	55	0.00036	0.0040	0.0038	0.025	0.000073	0.26	56	0.014	0.000063
	November		0.12	4.3	0.041	0.0000076	456	54	0.00037	0.0040	0.0039	0.026	0.000074	0.16	62	0.014	0.000026
	December		0.12	4.4	0.040	0.0000074	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	January	2036	0.12	4.5	0.040	0.0000074	457	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	February		0.12	4.5	0.040	0.0000074	457	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	March		0.12	4.2	0.041	0.0000076	456	53	0.00037	0.0041	0.0039	0.026	0.000075	0.20	59	0.014	0.000040
	April		0.10	3.3	0.035	0.0000067	458	59	0.00031	0.0035	0.0033	0.022	0.000063	0.56	48	0.012	0.00011
	May		0.11	3.5	0.036	0.0000069	458	57	0.00033	0.0037	0.0034	0.023	0.000066	0.26	51	0.013	0.000094
	June		0.11	3.6	0.037	0.0000070	458	58	0.00034	0.0038	0.0035	0.024	0.000067	0.34	52	0.013	0.000092
	July		0.11	3.7	0.038	0.0000072	460	57	0.00035	0.0039	0.0036	0.024	0.000069	0.34	51	0.013	0.000094
	August		0.12	4.0	0.040	0.0000075	458	55	0.00037	0.0040	0.0038	0.026	0.000073	0.27	57	0.014	0.000056
	September		0.11	3.8	0.039	0.0000074	458	56	0.00036	0.0039	0.0037	0.025	0.000071	0.30	54	0.014	0.000075
	October		0.11	3.9	0.039	0.0000074	458	56	0.00036	0.0039	0.0037	0.025	0.000072	0.28	56	0.014	0.000066
	November		0.12	4.3	0.041	0.0000075	456	54	0.00037	0.0040	0.0039	0.026	0.000074	0.16	62	0.014	0.000030
	December		0.12	4.5	0.040	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	January	2037	0.12	4.3	0.040	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	February		0.12	4.0	0.041	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.22	58	0.014	0.000046
	March		0.12	4.0	0.040	0.0000074	457	53	0.00036	0.0039	0.0038	0.025	0.000072	0.20	59	0.014	0.000039
	April		0.10	3.2	0.035	0.0000066	457	58	0.00031	0.0035	0.0033	0.022	0.000063	0.45	49	0.012	0.00010
	May		0.12	3.7	0.040	0.0000075	457	55	0.00036	0.0040	0.0038	0.025	0.000072	0.23	54	0.014	0.000074
	June		0.098	3.1	0.034	0.0000065	456	59	0.00031	0.0034	0.0032	0.021	0.000061	0.52	49	0.012	0.00010
	July		0.099	3.1	0.034	0.0000066	455	61	0.00031	0.0035	0.0032	0.022	0.000062	0.50	48	0.012	0.00012
	August		0.11	3.3	0.036	0.0000069	458	56	0.00033	0.0037	0.0034	0.023	0.000066	0.28	51	0.013	0.000098
	September		0.10	3.3	0.035	0.0000067	455	56	0.00032	0.0036	0.0033	0.022	0.000064	0.36	49	0.012	0.000096
	October		0.11	3.7	0.039	0.0000074	457	57	0.00036	0.0039	0.0037	0.025	0.000071	0.21	59	0.014	0.000068
Operations	November		0.12	4.1	0.041	0.0000076	457	54	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000029
	December		0.12	4.3	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	January	2038	0.12	4.2	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000021
	February		0.12	4.3	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000022
	March		0.11	3.5	0.037	0.0000071	459	56	0.00034	0.0038	0.0035	0.024	0.000068	0.34	52	0.013	0.000084
	April		0.10	3.2	0.035	0.0000066	456	57	0.00032	0.0035	0.0033	0.022	0.000063	0.42	48	0.012	0.00010
	May		0.11	3.5	0.038	0.0000071	457	56	0.00034	0.0038	0.0036	0.024	0.000068	0.27	53	0.013	0.000086
	June		0.11	3.6	0.038	0.0000072	458	56	0.00035	0.0038	0.0036	0.024	0.000070	0.32	55	0.013	0.000069
	July		0.11	3.4	0.036	0.0000069	459	58	0.00033	0.0037	0.0034	0.023	0.000066	0.34	52	0.013	0.000096
	August		0.11	3.6	0.039	0.0000074	456	56	0.00036	0.0039	0.0037	0.025	0.000071	0.30	53	0.014	0.000077
	September		0.10	3.3	0.036	0.0000069	454	58	0.00033	0.0036	0.0034	0.023	0.000066	0.42	52	0.013	0.000092
	October		0.11	3.5	0.037	0.0000071	456	57	0.00034	0.0038	0.0035	0.024	0.000068	0.30	52	0.013	0.000093
	November		0.12	3.9	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.19	61	0.014	0.000046
	December		0.12	4.3	0.040	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000022
	January	2039	0.12	4.3	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000023
	February		0.11	3.7	0.040	0.0000074	458	55	0.00036	0.0039	0.0037	0.025	0.000072	0.26	55	0.014	0.000067
	March		0.12	3.9	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.22	58	0.014	0.000051
	April		0.12	3.8	0.040	0.0000074	458	55	0.00036	0.0039	0.0037	0.025	0.000072	0.25	56	0.014	0.000059
	May		0.12	3.8	0.041	0.0000076	458	55	0.00037	0.0041	0.0039	0.026	0.000074	0.25	57	0.014	0.000058
	June		0.12	3.8	0.040	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000073	0.29	57	0.014	0.000055
	July		0.10	3.2	0.035	0.0000067	460	58	0.00032	0.0035	0.0033	0.022	0.000063	0.38	50	0.012	0.00010
	August		0.096	3.0	0.033	0.0000064	455	62	0.00030	0.0034	0.0031	0.021	0.000060	0.55	47	0.012	0.00013
	September		0.11	3.3	0.036	0.0000069	458	57	0.00033	0.0037	0.0034	0.023	0.000066	0.29	52	0.013	0.000096
	October		0.11	3.5	0.038	0.0000071	455	58	0.00034	0.0038	0.0035	0.024	0.000068	0.30	53	0.013	0.000096
	November		0.11	3.8	0.039	0.0000073	457	56	0.00036	0.0039	0.0037	0.025	0.000071	0.22	59	0.014	0.000056
	December		0.12	4.3	0.040	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000025
	January	2040	0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000025
	February		0.12	4.5	0.040	0.0000075	457	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	March		0.11	3.6	0.036	0.0000069	456	56	0.00033	0.0036	0.0034	0.023	0.000066	0.41	50	0.013	0.000088
	April		0.10	3.5	0.036	0.0000068	459	56	0.00033	0.0036	0.0034	0.023	0.000065	0.34	51	0.012	0.000094
	May		0.11	3.6	0.037	0.0000070	459	59	0.00033	0.0037	0.0034	0.023	0.000066	0.36	52	0.013	0.000099
	June		0.10	3.4	0.035	0.0000067	456	58	0.00032	0.0035	0.0033	0.022	0.000063	0.44	50	0.012	0.00010

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	July	2040	0.098	3.2	0.034	0.0000065	456	61	0.00031	0.0035	0.0032	0.022	0.000061	0.45	48	0.012	0.00012
	August		0.12	3.9	0.040	0.0000075	459	57	0.00036	0.0040	0.0038	0.025	0.000072	0.21	55	0.014	0.000090
	September		0.12	3.9	0.040	0.0000075	457	56	0.00036	0.0040	0.0038	0.025	0.000073	0.27	56	0.014	0.000071
	October		0.11	3.8	0.039	0.0000073	460	58	0.00035	0.0039	0.0037	0.025	0.000070	0.30	55	0.013	0.000084
	November		0.12	4.4	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.16	63	0.014	0.000032
	December		0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	January	2041	0.12	4.6	0.040	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000027
	February		0.12	4.6	0.040	0.0000075	458	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000027
	March		0.12	4.3	0.040	0.0000075	457	54	0.00036	0.0040	0.0038	0.025	0.000073	0.24	58	0.014	0.000047
	April		0.11	3.5	0.036	0.0000070	456	59	0.00033	0.0037	0.0034	0.023	0.000066	0.46	51	0.013	0.00010
	May		0.11	3.7	0.038	0.0000072	458	57	0.00035	0.0039	0.0036	0.024	0.000069	0.20	52	0.013	0.000092
	June		0.11	3.7	0.038	0.0000073	456	57	0.00035	0.0038	0.0036	0.024	0.000070	0.32	54	0.013	0.000076
	July		0.10	3.5	0.036	0.0000068	457	59	0.00032	0.0036	0.0034	0.023	0.000064	0.44	51	0.012	0.00010
	August		0.096	3.1	0.033	0.0000065	454	63	0.00030	0.0034	0.0031	0.021	0.000060	0.79	47	0.011	0.00014
	September		0.098	3.3	0.034	0.0000065	457	63	0.00031	0.0035	0.0032	0.022	0.000061	0.28	48	0.012	0.00014
	October		0.11	3.6	0.037	0.0000071	458	57	0.00033	0.0038	0.0035	0.023	0.000067	0.25	52	0.013	0.00011
	November		0.12	4.0	0.041	0.0000077	458	58	0.00037	0.0041	0.0038	0.026	0.000074	0.16	60	0.014	0.000076
	December		0.12	4.5	0.041	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000029
	January	2042	0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000028
	February		0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000028
	March		0.12	4.3	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.20	59	0.014	0.000047
	April		0.10	3.6	0.036	0.0000069	456	58	0.00033	0.0036	0.0034	0.023	0.000065	0.44	52	0.012	0.000085
	May		0.11	3.8	0.039	0.0000074	461	57	0.00035	0.0039	0.0037	0.025	0.000070	0.22	54	0.013	0.000090
	June		0.10	3.4	0.035	0.0000068	457	62	0.00032	0.0036	0.0033	0.022	0.000063	0.62	51	0.012	0.00012
	July		0.097	3.2	0.034	0.0000065	457	65	0.00030	0.0034	0.0032	0.021	0.000061	0.46	48	0.012	0.00014
	August		0.098	3.3	0.034	0.0000066	459	63	0.00031	0.0035	0.0032	0.022	0.000062	0.47	48	0.012	0.00014
	September		0.10	3.4	0.035	0.0000068	459	61	0.00031	0.0036	0.0033	0.022	0.000063	0.45	51	0.012	0.00012
	October		0.10	3.4	0.035	0.0000068	457	61	0.00032	0.0036	0.0033	0.022	0.000064	0.34	49	0.012	0.00012
	November		0.12	4.0	0.041	0.0000077	457	57	0.00037	0.0041	0.0038	0.026	0.000074	0.15	59	0.014	0.000074
	December		0.12	4.5	0.040	0.0000075	455	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	January	2043	0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.5	0.040	0.0000075	457	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	April		0.11	3.8	0.038	0.0000073	456	56	0.00034	0.0038	0.0036	0.024	0.000069	0.48	53	0.013	0.000083
	May		0.10	3.5	0.035	0.0000068	460	58	0.00032	0.0036	0.0033	0.022	0.000064	0.26	50	0.012	0.00010
	June		0.099	3.3	0.034	0.0000066	455	60	0.00031	0.0035	0.0032	0.022	0.000062	0.46	48	0.012	0.00011
	July		0.099	3.3	0.034	0.0000067	456	60	0.00031	0.0035	0.0032	0.022	0.000062	0.46	50	0.012	0.00012
	August		0.098	3.2	0.034	0.0000066	456	62	0.00031	0.0035	0.0032	0.021	0.000061	0.48	47	0.012	0.00014
	September		0.098	3.3	0.034	0.0000066	456	62	0.00031	0.0035	0.0032	0.021	0.000061	0.51	49	0.012	0.00013
	October		0.10	3.4	0.035	0.0000068	459	60	0.00032	0.0036	0.0033	0.022	0.000064	0.34	49	0.012	0.00012
	November		0.11	3.8	0.038	0.0000073	458	56	0.00035	0.0039	0.0036	0.024	0.000070	0.23	53	0.013	0.000091
	December		0.12	4.2	0.041	0.0000078	456	56	0.00037	0.0041	0.0039	0.026	0.000075	0.17	61	0.014	0.000054
	January	2044	0.12	4.5	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000030
	February		0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.4	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.17	61	0.014	0.000034
	April		0.11	3.6	0.037	0.0000072	462	59	0.00034	0.0038	0.0035	0.024	0.000068	0.39	51	0.013	0.00010
	May		0.11	3.8	0.039	0.0000074	457	57	0.00035	0.0039	0.0037	0.025	0.000071	0.29	55	0.014	0.000082
	June		0.11	3.7	0.038	0.0000073	457	57	0.00035	0.0038	0.0036	0.024	0.000070	0.30	54	0.013	0.000079
	July		0.098	3.2	0.034	0.0000066	457	60	0.00031	0.0034	0.0032	0.021	0.000061	0.49	48	0.012	0.00011
	August		0.11	3.6	0.038	0.0000072	458	58	0.00034	0.0038	0.0036	0.024	0.000068	0.27	53	0.013	0.000098
	September		0.12	3.8	0.040	0.0000076	457	58	0.00036	0.0040	0.0038	0.025	0.000072	0.29	55	0.014	0.000081
	October		0.12	4.0	0.041	0.0000077	457	56	0.00037	0.0040	0.0038	0.026	0.000074	0.25	57	0.014	0.000066
	November		0.12	4.2	0.041	0.0000077	456	55	0.00037	0.0040	0.0039	0.026	0.000075	0.17	62	0.014	0.000039
	December		0.12	4.4	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000032
	January	2045	0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.11	4.2	0.039	0.0000074	455	55	0.00035	0.0038	0.0037	0.025	0.000071	0.30	59	0.013	0.000047
	April		0.10	3.4	0.036	0.0000068	456	57	0.00032	0.0036	0.0034	0.023	0.000064	0.27	50	0.012	0.000099
	May		0.10	3.5	0.036	0.0000070	460	58	0.00033	0.0037	0.0034	0.023	0.000066	0.35	52	0.013	0.00010
	June		0.10	3.4	0.036	0.0000069	456	58	0.00032	0.0036	0.0034	0.023	0.000065	0.38	51	0.012	0.000099
	July		0.10	3.5	0.036	0.0000069	458	59	0.00033	0.0036	0.0034	0.023	0.000065	0.38	50	0.013	0.00011
	August		0.11	3.6	0.037	0.0000071	459	59	0.00034	0.0038	0.0035	0.024	0.000068	0.33	53	0.013	0.000097
	September		0.11	3.7	0.038	0.0000073	457	58	0.00035	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.000089

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.12	3.8	0.040	0.0000075	457	56	0.00036	0.0040	0.0037	0.025	0.000072	0.27	56	0.014	0.000073
	November		0.12	4.1	0.041	0.0000078	456	55	0.00037	0.0041	0.0039	0.026	0.000075	0.19	60	0.014	0.000047
	December		0.12	4.4	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000033
	January	2046	0.12	4.3	0.041	0.0000077	457	55	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000039
	February		0.12	4.5	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.0	0.040	0.0000075	457	56	0.00036	0.0040	0.0037	0.025	0.000072	0.28	56	0.014	0.000066
	April		0.11	3.8	0.039	0.0000074	458	57	0.00035	0.0039	0.0037	0.025	0.000071	0.26	55	0.014	0.000081
	May		0.11	3.6	0.037	0.0000070	458	58	0.00033	0.0037	0.0035	0.023	0.000067	0.34	53	0.013	0.000091
	June		0.11	3.5	0.036	0.0000070	456	58	0.00033	0.0036	0.0034	0.023	0.000066	0.40	51	0.013	0.000096
	July		0.098	3.2	0.034	0.0000065	456	59	0.00031	0.0034	0.0032	0.021	0.000061	0.43	48	0.012	0.00011
	August		0.099	3.2	0.034	0.0000066	456	61	0.00031	0.0035	0.0032	0.022	0.000062	0.47	49	0.012	0.00012
	September		0.10	3.4	0.036	0.0000069	459	60	0.00032	0.0036	0.0034	0.023	0.000065	0.39	51	0.012	0.00012
	October		0.10	3.4	0.036	0.0000069	459	58	0.00033	0.0036	0.0034	0.023	0.000065	0.34	51	0.012	0.00010
	November		0.12	3.9	0.040	0.0000076	458	58	0.00036	0.0040	0.0038	0.025	0.000072	0.20	57	0.014	0.000087
	December		0.12	4.3	0.041	0.0000077	455	55	0.00037	0.0040	0.0039	0.026	0.000074	0.16	62	0.014	0.000037
	January	2047	0.12	4.4	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000075	457	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.3	0.041	0.0000077	457	55	0.00037	0.0040	0.0039	0.026	0.000075	0.18	61	0.014	0.000042
	April		0.11	3.6	0.037	0.0000072	457	57	0.00034	0.0038	0.0035	0.024	0.000068	0.40	52	0.013	0.000087
	May		0.10	3.4	0.036	0.0000069	458	58	0.00032	0.0036	0.0034	0.023	0.000065	0.35	50	0.012	0.00010
	June		0.11	3.7	0.039	0.0000074	457	57	0.00035	0.0039	0.0036	0.025	0.000070	0.28	54	0.013	0.000087
	July		0.10	3.3	0.035	0.0000068	458	59	0.00032	0.0036	0.0033	0.022	0.000064	0.47	49	0.012	0.00011
	August		0.099	3.2	0.034	0.0000067	455	61	0.00031	0.0035	0.0032	0.022	0.000062	0.46	48	0.012	0.00013
	September		0.10	3.5	0.036	0.0000070	459	58	0.00033	0.0037	0.0034	0.023	0.000066	0.35	51	0.013	0.00010
	October		0.11	3.7	0.038	0.0000074	459	58	0.00035	0.0039	0.0036	0.024	0.000070	0.25	55	0.013	0.000095
	November		0.12	4.2	0.041	0.0000078	456	55	0.00037	0.0041	0.0039	0.026	0.000075	0.19	60	0.014	0.000047
	December		0.12	4.4	0.040	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000031
	January	2048	0.12	4.4	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000036
	February		0.12	4.5	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000032
	March		0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000031
	April		0.11	4.0	0.038	0.0000073	455	55	0.00035	0.0038	0.0036	0.024	0.000070	0.28	55	0.013	0.000065
Operations	May		0.12	4.0	0.041	0.0000077	457	56	0.00037	0.0041	0.0039	0.026	0.000074	0.23	57	0.014	0.000067
	June		0.12	3.9	0.040	0.0000077	458	57	0.00037	0.0040	0.0038	0.026	0.000073	0.28	55	0.014	0.000076
	July		0.098	3.2	0.034	0.0000067	455	61	0.00031	0.0034	0.0032	0.021	0.000061	0.75	48	0.012	0.00012
	August		0.095	3.1	0.033	0.0000064	455	62	0.00030	0.0034	0.0031	0.021	0.000059	0.43	46	0.011	0.00014
	September		0.097	3.1	0.033	0.0000065	458	63	0.00030	0.0034	0.0032	0.021	0.000061	0.41	48	0.012	0.00014
	October		0.11	3.5	0.036	0.0000070	458	58	0.00033	0.0037	0.0034	0.023	0.000066	0.24	53	0.013	0.00011
	November		0.12	4.1	0.041	0.0000078	456	58	0.00038	0.0041	0.0039	0.026	0.000075	0.15	61	0.014	0.000068
	December		0.12	4.3	0.041	0.0000077	455	55	0.00037	0.0040	0.0039	0.026	0.000074	0.17	60	0.014	0.000043
	January	2049	0.12	4.0	0.040	0.0000076	458	56	0.00036	0.0040	0.0038	0.025	0.000072	0.24	57	0.014	0.000066
	February		0.12	4.4	0.040	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000035
	March		0.11	4.1	0.039	0.0000074	456	55	0.00035	0.0038	0.0037	0.025	0.000070	0.29	58	0.013	0.000052
	April		0.11	3.8	0.040	0.0000075	459	57	0.00036	0.0040	0.0037	0.025	0.000072	0.22	54	0.014	0.000085
	May		0.11	3.6	0.037	0.0000071	458	57	0.00034	0.0037	0.0035	0.023	0.000067	0.34	52	0.013	0.000089
	June		0.10	3.4	0.035	0.0000069	455	58	0.00032	0.0036	0.0034	0.023	0.000064	0.38	50	0.012	0.00011
	July		0.095	3.1	0.033	0.0000064	455	62	0.00030	0.0033	0.0031	0.021	0.000059	0.54	47	0.011	0.00013
	August		0.098	3.2	0.034	0.0000066	456	62	0.00031	0.0035	0.0032	0.021	0.000061	0.46	49	0.012	0.00013
	September		0.100	3.3	0.034	0.0000067	456	62	0.00031	0.0035	0.0032	0.022	0.000062	0.52	50	0.012	0.00013
	October		0.10	3.3	0.035	0.0000067	456	61	0.00031	0.0035	0.0033	0.022	0.000063	0.36	49	0.012	0.00013
	November		0.11	3.8	0.039	0.0000074	457	57	0.00035	0.0039	0.0036	0.025	0.000070	0.21	54	0.013	0.000100
	December		0.12	4.2	0.041	0.0000077	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.14	63	0.014	0.000048
	January	2050	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000036
	February		0.12	4.3	0.040	0.0000076	456	55	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000036
	March		0.12	4.1	0.041	0.0000077	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.17	61	0.014	0.000046
	April		0.10	3.2	0.035	0.0000068	456	58	0.00032	0.0035	0.0033	0.022	0.000064	0.42	49	0.012	0.00010
	May		0.11	3.5	0.038	0.0000073	456	57	0.00035	0.0039	0.0036	0.024	0.000070	0.25	54	0.013	0.000092
	June		0.11	3.4	0.037	0.0000071	456	58	0.00034	0.0037	0.0035	0.024	0.000067	0.38	50	0.013	0.00010
	July		0.12	3.7	0.040	0.0000076	456	58	0.00036	0.0040	0.0037	0.025	0.000072	0.27	57	0.014	0.000079
	August		0.11	3.7	0.039	0.0000075	457	58	0.00036	0.0039	0.0037	0.025	0.000071	0.28	55	0.014	0.000082
	September		0.10	3.2	0.035	0.0000068	456	58	0.00032	0.0036	0.0033	0.022	0.000064	0.39	50	0.012	0.00010
	October		0.12	3.7	0.040	0.0000076	457	58	0.00036	0.0040	0.0038	0.025	0.000072	0.24	57	0.014	0.000082
	November		0.12	4.0	0.041	0.0000078	456	56	0.00037	0.0041	0.0039	0.026	0.000075	0.21	59	0.014	0.000059
	December		0.12	4.2	0.041	0.0000077	457	56	0.00037	0.0040	0.0039	0.026	0.000074	0.14	63	0.014	0.000039

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000038
	February		0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000039
	March		0.12	3.9	0.041	0.0000077	456	56	0.00037	0.0040	0.0038	0.026	0.000074	0.21	59	0.014	0.000061
	April		0.100	3.1	0.034	0.0000068	455	61	0.00031	0.0035	0.0033	0.022	0.000062	0.75	48	0.012	0.00012
	May		0.098	3.1	0.034	0.0000066	456	63	0.00031	0.0035	0.0032	0.022	0.000062	0.28	49	0.012	0.00014
	June		0.10	3.3	0.036	0.0000069	459	59	0.00032	0.0036	0.0034	0.023	0.000065	0.33	52	0.012	0.00011
	July		0.099	3.1	0.034	0.0000067	458	62	0.00031	0.0035	0.0032	0.022	0.000062	0.50	49	0.012	0.00013
	August		0.097	3.0	0.033	0.0000066	458	65	0.00030	0.0034	0.0032	0.021	0.000061	0.50	48	0.012	0.00015
	September		0.10	3.2	0.035	0.0000069	456	59	0.00032	0.0036	0.0033	0.022	0.000064	0.33	50	0.012	0.00012
	October		0.11	3.4	0.037	0.0000071	457	57	0.00033	0.0037	0.0035	0.023	0.000067	0.29	51	0.013	0.00010
	November		0.12	3.7	0.040	0.0000077	457	59	0.00036	0.0040	0.0038	0.025	0.000073	0.23	57	0.014	0.000091
	December		0.12	4.0	0.041	0.0000077	457	57	0.00037	0.0040	0.0039	0.026	0.000074	0.17	62	0.014	0.000049
	January	2052	0.069	5.2	0.024	0.0000045	457	49	0.00021	0.0023	0.0022	0.015	0.000043	0.13	56	0.0082	0.000036
	February		0.061	5.4	0.021	0.0000041	454	47	0.00019	0.0021	0.0020	0.013	0.000038	0.12	53	0.0073	0.000035
	March		0.061	5.4	0.021	0.0000041	453	47	0.00019	0.0021	0.0020	0.013	0.000038	0.12	53	0.0073	0.000036
	April		0.039	3.4	0.013	0.0000029	456	56	0.00012	0.0014	0.0013	0.0085	0.000024	0.42	47	0.0047	0.00010
	May		0.042	3.6	0.015	0.0000031	455	54	0.00013	0.0015	0.0014	0.0093	0.000027	0.36	46	0.0051	0.00010
	June		0.045	3.9	0.016	0.0000032	456	55	0.00014	0.0016	0.0015	0.0099	0.000028	0.28	49	0.0054	0.00010
	July		0.038	3.2	0.013	0.0000028	455	57	0.00012	0.0014	0.0012	0.0082	0.000023	0.51	45	0.0046	0.00012
	August		0.037	3.1	0.013	0.0000027	456	59	0.00011	0.0014	0.0012	0.0080	0.000023	0.37	47	0.0045	0.00012
	September		0.048	4.1	0.016	0.0000034	456	53	0.00015	0.0017	0.0016	0.010	0.000030	0.24	48	0.0058	0.00010
	October		0.056	4.8	0.019	0.0000038	455	50	0.00017	0.0019	0.0018	0.012	0.000035	0.22	49	0.0067	0.000071
	November		0.064	5.6	0.022	0.0000042	458	47	0.00020	0.0022	0.0021	0.014	0.000040	0.14	52	0.0076	0.000039
	December		0.062	5.5	0.021	0.0000041	454	46	0.00019	0.0021	0.0020	0.014	0.000039	0.12	53	0.0074	0.000035
		MINIMUM	0.037	3.0	0.013	0.0000027	425	46	0.00011	0.0014	0.0012	0.0080	0.000023	0.12	45	0.0045	0.000010
		MAXIMUM	0.12	6.1	0.041	0.0000078	462	76	0.00038	0.0041	0.0039	0.026	0.000075	0.79	79	0.014	0.00015
		AVERAGE	0.11	3.9	0.037	0.0000070	457	57	0.00034	0.0037	0.0035	0.024	0.000067	0.29	56	0.013	0.000073
Decommissioning	January	2053	0.0043	5.2	0.0015	0.00000046	440	72	0.000013	0.00015	0.00014	0.00096	0.0000027	0.19	85	0.00055	0.000031
	February		0.0000063	4.8	0.000020	0.00000015	441	75	5.1E-08	0.0000047	0.00000048	0.000021	1.3E-08	0.19	89	0.000042	0.000025
	March		0.000061	4.8	0.000047	0.00000021	425	75	0.00000024	0.000021	0.0000029	0.000033	4.7E-08	0.30	86	0.000057	0.000036
	April		0.000014	4.7	0.000058	0.00000039	281	72	0.00000021	0.00014	0.0000059	0.000019	1.5E-08	0.53	59	0.00012	0.00013
	May		0.0000049	4.6	0.000041	0.00000035	304	70	0.00000017	0.00016	0.0000058	0.000016	9.1E-09	0.36	64	0.00013	0.00011
	June		0.0000054	4.5	0.000037	0.00000032	355	74	0.00000015	0.00013	0.0000049	0.000018	1.0E-08	0.32	74	0.00011	0.000094
	July		0.0000053	4.5	0.000045	0.00000035	324	73	0.00000016	0.00013	0.0000051	0.000017	9.7E-09	0.43	68	0.00011	0.00011
	August		0.000035	4.4	0.000061	0.0000004	324	73	0.00000025	0.00012	0.0000057	0.000024	2.9E-08	0.57	67	0.00011	0.00010
	September		0.000014	4.3	0.000062	0.00000042	262	72	0.00000023	0.00016	0.0000066	0.000018	1.4E-08	0.55	56	0.00013	0.00014
	October		0.000014	4.2	0.000045	0.00000037	306	71	0.00000021	0.00017	0.0000067	0.000018	1.5E-08	0.36	65	0.00013	0.00012
	November		0.0000067	4.2	0.000031	0.00000029	367	74	0.00000014	0.00012	0.0000047	0.000018	1.1E-08	0.26	77	0.00010	0.000087
	December		0.0000063	4.0	0.000020	0.00000015	442	75	5.1E-08	0.0000053	0.00000051	0.000021	1.3E-08	0.19	89	0.000042	0.000026
	January	2054	0.0000047	3.9	0.000017	0.00000013	439	74	4.1E-08	0.0000038	0.00000039	0.000019	1.2E-08	0.19	88	0.000040	0.000020
	February		0.0000042	3.9	0.000015	0.00000012	440	74	3.8E-08	0.0000045	0.00000039	0.000019	1.2E-08	0.19	88	0.000040	0.000019
	March		0.000011	3.8	0.000023	0.00000017	414	73	8.5E-08	0.000032	0.0000016	0.000020	1.6E-08	0.24	84	0.000056	0.000036
	April		0.000041	3.7	0.000054	0.00000031	348	72	0.00000023	0.000082	0.0000045	0.000026	3.3E-08	0.50	71	0.000089	0.000077
	May		0.000011	3.7	0.000047	0.00000035	293	71	0.00000019	0.00015	0.0000060	0.000017	1.3E-08	0.42	62	0.00012	0.00012
	June		0.0000037	3.6	0.000035	0.00000031	345	74	0.00000015	0.00014	0.0000053	0.000016	9.2E-09	0.34	72	0.00012	0.000098
	July		0.0000062	3.5	0.000042	0.00000033	325	72	0.00000016	0.00013	0.0000049	0.000017	1.1E-08	0.42	68	0.00011	0.000100
	August		0.000035	3.4	0.000070	0.00000044	271	72	0.00000029	0.00016	0.0000071	0.000023	2.8E-08	0.66	57	0.00013	0.00013
	September		0.000012	3.3	0.000045	0.00000035	305	72	0.0000002	0.00016	0.0000064	0.000017	1.4E-08	0.39	65	0.00013	0.00012
	October		0.0000088	3.2	0.000039	0.00000034	329	73	0.00000018	0.00016	0.0000062	0.000017	1.2E-08	0.35	69	0.00013	0.00011
	November		0.000017	3.1	0.000030	0.00000021	381	72	0.00000013	0.000066	0.0000030	0.000020	1.8E-08	0.28	78	0.000075	0.000058
	December		0.0000042	3.0	0.000015	0.00000012	439	74	3.8E-08	0.0000037	0.00000036	0.000019	1.2E-08	0.19	88	0.000040	0.000018
	January	2055	0.0000039	2.9	0.000014	0.0000001	437	73	3.7E-08	0.0000074	0.00000048	0.000018	1.1E-08	0.19	88	0.000041	0.000017
	February		0.0000039	2.9	0.000013	9.5E-08	440	74	3.5E-08	0.0000046	0.00000038	0.000018	1.2E-08	0.19	89	0.000040	0.000016
	March		0.0000039	2.8	0.000013	9.4E-08	440	74	3.4E-08	0.0000032	0.00000033	0.000018	1.1E-08	0.19	88	0.000039	0.000015
	April		0.000059	2.7	0.000042	0.00000025	358	70	0.00000031	0.00015	0.0000072	0.000028	4.5E-08	0.22	75	0.00012	0.000078
	May		0.000013	2.7	0.000026	0.00000027	350	71	0.00000018	0.00018	0.0000067	0.000017	1.5E-08	0.19	74	0.00013	0.000093
	June		0.000057	2.5	0.000043	0.00000029	356	73	0.00000033	0.00019	0.0000085	0.000028	4.4E-08	0.20	75	0.00014	0.000096
	July		0.000012	2.5	0.000029	0.00000033	314	69	0.00000021	0.00023	0.0000084	0.000015	1.4E-08	0.19	68	0.00016	0.00011
	August		0.000024	2.4	0.000035	0.00000035	329	73	0.00000026	0.00025	0.0000096	0.000018	2.2E-08	0.18	71	0.00017	0.00012
	September		0.0000036	2.3	0.000026	0.00000032	357	75	0.00000018	0.00022	0.0000079	0.000015	9.5E-09	0.19	76	0.00015	0.00011
	October		0.000015	2.3	0.000028	0.00000029	369	75	0.0000002	0.00019	0.0000073	0.000018	1.7E-08	0.19	78	0.00014	0.00010
	November		0.000011	2.2	0.000020	0.00000018	404	74	0.00000011	0.000083	0.0000033	0.000018	1.5E-08	0.19	83	0.000081	0.000053
	December		0.0000039	2.0	0.000013	9.4E-08	437	73	3.4E-08	0.0000039	0.00000035	0.000018	1.1E-08	0.19	88	0.000039	0.000016

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	**January**	**2056**	0.0000028	2.0	0.000011	7.4E-08	440	73	2.9E-08	0.0000027	0.00000024	0.000018	1.1E-08	0.19	88	0.000038	0.000012
	February		0.0000025	1.9	0.000010	6.8E-08	442	73	2.8E-08	0.0000025	0.00000022	0.000018	1.1E-08	0.19	89	0.000037	0.000011
	March		0.000025	1.8	0.000026	0.00000021	380	72	0.00000019	0.00014	0.0000056	0.000020	2.4E-08	0.19	79	0.00011	0.000068
	April		0.0000090	1.7	0.000019	0.00000018	395	73	0.00000012	0.00011	0.0000041	0.000017	1.4E-08	0.19	82	0.000094	0.000060
	May		0.0000077	1.6	0.000018	0.00000016	403	73	0.0000001	0.000092	0.0000035	0.000017	1.3E-08	0.19	83	0.000086	0.000050
	June		0.000026	1.6	0.000025	0.00000019	401	74	0.00000018	0.00011	0.0000048	0.000021	2.5E-08	0.19	83	0.000098	0.000061
	July		0.0000043	1.5	0.000022	0.00000026	363	73	0.00000016	0.00018	0.0000066	0.000015	1.0E-08	0.19	77	0.00013	0.000091
	August		0.000056	1.4	0.000041	0.00000028	351	72	0.00000033	0.00020	0.0000087	0.000026	4.3E-08	0.19	75	0.00015	0.000098
	September		0.0000058	1.3	0.000026	0.00000032	333	72	0.0000002	0.00024	0.0000087	0.000014	1.1E-08	0.18	72	0.00016	0.00012
	October		0.0000051	1.2	0.000024	0.00000029	375	77	0.00000017	0.00021	0.0000074	0.000015	1.1E-08	0.19	80	0.00014	0.00010
	November		0.0000024	1.1	0.000013	0.00000012	424	74	5.9E-08	0.000048	0.0000018	0.000017	1.1E-08	0.19	86	0.000061	0.000034
	December		0.0000025	1.0	0.000010	6.7E-08	440	73	2.8E-08	0.0000025	0.00000021	0.000017	1.1E-08	0.19	88	0.000037	0.000011
	January	**2057**	0.00000078	0.96	0.0000061	3.5E-08	441	72	1.7E-08	0.0000011	7.6E-08	0.000016	1.0E-08	0.19	88	0.000036	0.0000048
	February		0.00000029	0.88	0.0000048	2.5E-08	437	72	1.4E-08	0.00000067	3.6E-08	0.000015	9.9E-09	0.19	88	0.000035	0.0000027
	March		0.0000021	0.80	0.0000055	2.5E-08	441	72	2.0E-08	0.00000074	9.4E-08	0.000016	1.1E-08	0.19	89	0.000035	0.0000027
	April		0.000030	0.74	0.000026	0.00000021	384	74	0.00000021	0.00016	0.0000066	0.000020	2.7E-08	0.19	80	0.00012	0.000073
	May		0.00000036	0.65	0.000013	0.00000015	402	74	9.4E-08	0.00012	0.0000041	0.000014	9.1E-09	0.19	83	0.000095	0.000058
	June		0.00000043	0.55	0.0000097	0.0000001	426	74	6.2E-08	0.000071	0.0000025	0.000015	9.7E-09	0.20	87	0.000072	0.000033
	July		0.000024	0.48	0.000027	0.00000026	375	76	0.00000023	0.00021	0.0000080	0.000019	2.4E-08	0.19	79	0.00014	0.000095
	August		0.000018	0.40	0.000026	0.00000028	374	77	0.00000022	0.00023	0.0000086	0.000017	1.9E-08	0.19	80	0.00015	0.00011
	September		0.00000044	0.31	0.000019	0.00000026	383	78	0.00000016	0.00021	0.0000073	0.000013	8.7E-09	0.19	81	0.00014	0.000098
	October		0.00000029	0.22	0.0000096	0.00000011	414	73	6.4E-08	0.000073	0.0000026	0.000014	9.4E-09	0.19	85	0.000072	0.000037
	November		0.00000031	0.14	0.0000067	5.6E-08	430	72	3.3E-08	0.000028	0.0000010	0.000015	9.8E-09	0.19	87	0.000049	0.000016
	December		0.00000029	0.059	0.0000050	2.8E-08	440	72	1.5E-08	0.0000028	0.00000011	0.000015	1.0E-08	0.19	88	0.000036	0.0000037
		MINIMUM	0.00000029	0.059	0.0000048	2.5E-08	262	69	1.4E-08	0.00000067	3.6E-08	0.000013	8.7E-09	0.18	56	0.000035	0.0000027
		MAXIMUM	0.0043	5.2	0.0015	0.00000046	442	78	0.000013	0.00025	0.00014	0.00096	0.0000027	0.66	89	0.00055	0.00014
		AVERAGE	0.000085	2.5	0.000052	0.00000022	381	73	0.00000036	0.00011	0.0000065	0.000034	6.1E-08	0.26	79	0.00010	0.000066

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates non-applicable periods of time when there is no discharge.

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	**January**	**2025**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	June		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	July		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	October		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2026**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0046	0.00000068	2.0	0.0056	0.32	0.00025	0.0000011	3.2	0.016	2.5	0.0037	0.000063	0.0000012	0.0000075
	May		0.0053	0.00000024	4.9	0.0093	0.37	0.00025	0.00000097	4.2	0.029	3.4	0.0061	0.000073	0.00000019	0.0000027
	June		0.011	0.00000023	3.6	**0.010**	0.75	0.00050	0.0000015	7.1	0.025	5.3	0.0067	0.00015	5.4E-08	0.0000023
	July		0.022	0.00000038	4.2	**0.017**	1.5	0.00099	0.0000027	13	0.033	9.8	0.011	0.00030	4.1E-08	0.0000038
	August		0.024	0.00000037	2.5	**0.016**	1.6	0.0011	0.0000028	14	0.026	10	0.0098	0.00032	3.7E-08	0.0000036
	September		0.015	0.00000032	2.5	**0.011**	1.0	0.00068	0.0000019	9.2	0.021	6.8	0.0072	0.00021	2.6E-08	0.0000028
	October		0.013	0.00000036	4.5	**0.012**	0.87	0.00058	0.0000017	8.4	0.028	6.4	0.0081	0.00018	2.7E-08	0.0000030
	November		0.0043	0.00000016	6.3	0.0090	0.29	0.00020	0.00000081	3.7	0.029	3.1	0.0059	0.000059	1.7E-08	0.0000017
	December		0.0015	9.1E-08	6.9	0.0081	0.11	0.000075	0.00000051	2.2	0.030	2.1	0.0052	0.000021	1.4E-08	0.0000013
	January	**2027**	0.0037	0.00000012	7.8	0.0086	0.25	0.00017	0.00000073	3.3	0.029	2.8	0.0055	0.000050	1.6E-08	0.0000015
	February		0.0069	0.00000016	6.5	0.0086	0.45	0.00031	0.0000010	4.9	0.024	3.8	0.0055	0.000094	1.7E-08	0.0000017
	March		0.012	0.00000022	7.8	**0.013**	0.77	0.00053	0.0000016	7.9	0.033	6.0	0.0081	0.00016	2.7E-08	0.0000025
	April		0.013	0.00000025	4.2	**0.011**	0.88	0.00059	0.0000017	8.3	0.023	6.1	0.0069	0.00018	2.4E-08	0.0000024
	May		0.015	0.00000037	4.4	**0.013**	1.0	0.00069	0.0000020	9.6	0.026	7.2	0.0083	0.00021	2.9E-08	0.0000032
	June		0.016	0.00000032	5.6	**0.014**	1.1	0.00071	0.0000021	10	0.030	7.5	0.0087	0.00022	3.0E-08	0.0000031
	July		0.028	0.00000039	4.5	**0.019**	1.9	0.0012	0.0000033	17	0.033	12	0.012	0.00038	4.3E-08	0.0000042
	August		0.016	0.0000004	3.6	**0.012**	1.1	0.00074	0.0000021	10	0.025	7.6	0.0084	0.00022	3.0E-08	0.0000033
	September		0.0081	0.00000027	6.4	0.0092	0.55	0.00037	0.0000012	5.6	0.024	4.4	0.0063	0.00011	2.0E-08	0.0000023
	October		0.010	0.00000021	4.4	0.0100	0.70	0.00047	0.0000014	6.8	0.024	5.1	0.0064	0.00014	2.2E-08	0.0000021
	November		0.010	0.00000022	5.0	0.0100	0.68	0.00046	0.0000014	6.7	0.024	5.0	0.0064	0.00014	2.2E-08	0.0000022
	December		0.0071	0.00000019	8.1	0.0099	0.47	0.00032	0.0000011	5.2	0.028	4.1	0.0064	0.000096	2.0E-08	0.0000020
	January	**2028**	0.00049	0.00000024	8.0	0.0049	0.045	0.000037	0.00000035	1.2	0.019	1.1	0.0031	0.0000069	0.00000043	0.0000028
	February		0.000044	4.0E-08	12	0.0075	0.013	0.0000067	0.00000025	1.4	0.030	1.5	0.0048	0.0000008	8.9E-09	0.00000073
	March		0.0000016	3.9E-08	11	0.0074	0.0049	0.0000048	0.00000025	1.4	0.030	1.4	0.0047	0.00000022	8.8E-09	0.00000072
	April		0.0071	0.0000072	10	**0.020**	0.51	0.00040	0.0000058	5.7	0.044	14	0.021	0.00023	0.00000023	0.000014
	May		0.0047	0.000044	5.6	**0.046**	0.43	0.00051	0.000028	4.8	0.084	58	0.066	0.00060	0.00000017	0.000063
	June		0.0051	0.000041	6.4	**0.042**	0.42	0.00048	0.000026	4.7	0.080	55	0.059	0.00054	0.00000015	0.000058
	July		0.0084	0.000058	6.4	**0.060**	0.67	0.00076	0.000038	7.0	0.11	78	0.086	0.00082	0.0000002	0.000083
	August		0.0056	0.000062	5.6	**0.055**	0.49	0.00061	0.000039	5.3	0.10	79	0.081	0.00074	0.00000019	0.000085
	September		0.0061	0.000062	5.8	**0.056**	0.51	0.00063	0.000039	5.5	0.11	82	0.081	0.00073	0.00000018	0.000084
	October		0.0023	0.000032	7.7	**0.032**	0.22	0.00028	0.000020	3.0	0.069	46	0.045	0.00034	8.8E-08	0.000043
	November		0.0020	0.000026	11	**0.030**	0.20	0.00023	0.000016	3.1	0.068	39	0.039	0.00028	7.5E-08	0.000035
	December		0.000057	0.0000010	11	0.0091	0.020	0.0000012	0.00000083	1.5	0.032	4.9	0.0077	0.0000098	1.1E-08	0.0000019
		MINIMUM	0.0000016	3.9E-08	2.0	0.0049	0.0049	0.0000048	0.00000025	1.2	0.016	1.1	0.0031	0.00000022	8.8E-09	0.00000072
		MAXIMUM	0.028	0.000062	12	**0.060**	1.9	0.0012	0.000039	17	0.11	82	0.086	0.00082	0.0000012	0.000085
		AVERAGE	0.0087	0.000010	6.2	**0.018**	0.61	0.00046	0.0000075	6.2	0.040	18	0.020	0.00023	0.00000011	0.000016
Operations	**January**	**2029**	0.0037	0.0085	7.2	**0.017**	0.14	0.11	0.00049	825	0.30	**2704**	0.83	0.011	0.0016	0.0015
	February		0.0040	0.0094	6.1	**0.018**	0.16	0.13	0.00054	885	0.35	**2901**	1.0	0.012	0.0018	0.0016
	March		0.0048	0.0094	6.1	**0.024**	0.22	0.13	0.00054	885	0.36	**2900**	1.0	0.013	0.0018	0.0016
	April		0.0094	0.0077	5.3	**0.052**	0.63	0.10	0.00046	868	0.33	**2847**	0.84	0.010	0.0015	0.0014
	May		0.0057	0.0084	5.6	**0.045**	0.33	0.11	0.00051	886	0.37	**2902**	0.94	0.011	0.0016	0.0015
	June		0.0070	0.0085	5.6	**0.046**	0.42	0.11	0.00051	885	0.37	**2901**	0.95	0.012	0.0016	0.0015
	July		0.0074	0.0089	5.8	**0.043**	0.44	0.12	0.00053	885	0.37	**2900**	0.98	0.012	0.0017	0.0016
	August		0.0072	0.0081	5.4	**0.049**	0.46	0.11	0.00049	889	0.37	**2914**	0.94	0.011	0.0016	0.0015
	September		0.0075	0.0082	5.4	**0.050**	0.49	0.11	0.00049	887	0.36	**2908**	0.93	0.011	0.0016	0.0015
	October		0.0060	0.0094	6.1	**0.037**	0.33	0.13	0.00056	885	0.40	**2900**	1.1	0.013	0.0018	0.0017
	November		0.0046	0.0094	6.1	**0.024**	0.21	0.13	0.00054	885	0.37	**2900**	1.0	0.013	0.0018	0.0016
	December		0.0040	0.0094	6.1	**0.018**	0.16	0.13	0.00054	885	0.35	**2900**	1.0	0.012	0.0018	0.0016

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.0045	0.0100	5.6	**0.019**	0.16	0.13	0.00057	883	0.32	**2892**	0.89	0.012	0.0019	0.0017
	February		0.0052	0.0099	5.5	**0.021**	0.19	0.13	0.00057	879	0.31	**2880**	0.85	0.011	0.0019	0.0017
	March		0.0051	0.0100	5.6	**0.025**	0.20	0.13	0.00058	881	0.33	**2885**	0.88	0.012	0.0019	0.0018
	April		0.0079	0.0085	4.7	**0.044**	0.46	0.11	0.00051	883	0.30	**2895**	0.75	0.0100	0.0016	0.0015
	May		0.0072	0.0089	5.0	**0.041**	0.39	0.11	0.00053	887	0.32	**2907**	0.80	0.011	0.0017	0.0016
	June		0.0084	0.0082	4.6	**0.048**	0.51	0.11	0.00049	891	0.31	**2920**	0.77	0.010	0.0016	0.0015
	July		0.0090	0.0082	4.5	**0.055**	0.57	0.10	0.00050	887	0.32	**2906**	0.76	0.0099	0.0016	0.0015
	August		0.0077	0.0086	4.8	**0.050**	0.45	0.11	0.00052	888	0.32	**2909**	0.78	0.010	0.0016	0.0015
	September		0.0073	0.0084	4.7	**0.049**	0.43	0.11	0.00051	888	0.32	**2910**	0.78	0.010	0.0016	0.0015
	October		0.0069	0.0088	4.9	**0.043**	0.38	0.11	0.00053	891	0.32	**2919**	0.80	0.010	0.0017	0.0016
	November		0.0044	0.0099	5.6	**0.028**	0.17	0.13	0.00058	886	0.34	**2903**	0.90	0.012	0.0019	0.0017
	December		0.0050	0.010	5.6	**0.022**	0.19	0.13	0.00058	882	0.32	**2890**	0.87	0.012	0.0019	0.0018
	January	2031	0.0051	0.010	5.1	**0.021**	0.18	0.13	0.00060	885	0.31	**2900**	0.82	0.011	0.0020	0.0018
	February		0.0045	0.010	5.2	**0.017**	0.13	0.13	0.00059	885	0.31	**2901**	0.84	0.011	0.0020	0.0018
	March		0.0053	0.010	5.1	**0.022**	0.19	0.13	0.00059	885	0.30	**2899**	0.80	0.011	0.0020	0.0018
	April		0.0084	0.0088	4.1	**0.040**	0.46	0.11	0.00052	886	0.28	**2903**	0.69	0.0098	0.0017	0.0016
	May		0.0060	0.0093	4.3	**0.037**	0.29	0.11	0.00055	888	0.29	**2908**	0.70	0.0100	0.0018	0.0016
	June		0.0069	0.0094	4.4	**0.037**	0.33	0.12	0.00056	884	0.29	**2898**	0.73	0.010	0.0018	0.0017
	July		0.0070	0.0094	4.3	**0.038**	0.35	0.12	0.00056	886	0.29	**2905**	0.72	0.010	0.0018	0.0017
	August		0.0072	0.0092	4.3	**0.042**	0.37	0.11	0.00055	887	0.29	**2907**	0.72	0.010	0.0018	0.0016
	September		0.0071	0.0092	4.3	**0.040**	0.37	0.11	0.00055	887	0.29	**2907**	0.71	0.010	0.0018	0.0016
	October		0.0066	0.0099	4.6	**0.034**	0.30	0.12	0.00058	890	0.30	**2917**	0.76	0.011	0.0019	0.0017
	November		0.0047	0.010	5.1	**0.021**	0.15	0.13	0.00060	886	0.32	**2905**	0.85	0.012	0.0020	0.0018
	December		0.0047	0.010	5.2	**0.018**	0.15	0.13	0.00060	886	0.31	**2904**	0.83	0.011	0.0020	0.0018
	January	2032	0.0046	0.010	5.7	**0.018**	0.14	0.13	0.00059	884	0.31	**2896**	0.84	0.011	0.0020	0.0018
	February		0.0046	0.010	5.8	**0.017**	0.13	0.13	0.00059	885	0.31	**2901**	0.85	0.011	0.0020	0.0018
	March		0.0067	0.0098	4.9	**0.033**	0.30	0.12	0.00057	886	0.29	**2902**	0.72	0.010	0.0019	0.0017
	April		0.0082	0.0091	4.4	**0.042**	0.43	0.11	0.00054	894	0.27	**2929**	0.66	0.0097	0.0018	0.0016
	May		0.0062	0.0095	4.7	**0.036**	0.27	0.12	0.00057	887	0.29	**2907**	0.70	0.010	0.0018	0.0017
	June		0.0069	0.0097	4.8	**0.034**	0.32	0.12	0.00057	888	0.29	**2911**	0.73	0.010	0.0019	0.0017
	July		0.0089	0.0088	4.3	**0.045**	0.50	0.11	0.00053	883	0.28	**2894**	0.66	0.0095	0.0017	0.0016
	August		0.0066	0.0091	4.5	**0.040**	0.33	0.11	0.00054	892	0.29	**2922**	0.69	0.0098	0.0017	0.0016
	September		0.0060	0.010	5.0	**0.033**	0.25	0.12	0.00059	888	0.30	**2909**	0.74	0.011	0.0019	0.0018
	October		0.0061	0.010	5.0	**0.029**	0.25	0.12	0.00059	879	0.30	**2880**	0.76	0.011	0.0019	0.0018
	November		0.0051	0.010	5.5	**0.021**	0.17	0.13	0.00060	884	0.31	**2895**	0.82	0.011	0.0020	0.0018
	December		0.0046	0.010	5.9	**0.017**	0.13	0.13	0.00059	887	0.31	**2907**	0.85	0.011	0.0020	0.0018
	January	2033	0.0047	0.010	5.4	**0.017**	0.13	0.13	0.00059	888	0.31	**2910**	0.85	0.011	0.0020	0.0018
	February		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	887	0.31	**2906**	0.85	0.011	0.0020	0.0018
	March		0.0049	0.010	5.2	**0.018**	0.15	0.13	0.00060	886	0.31	**2904**	0.84	0.011	0.0020	0.0018
	April		0.010	0.0092	4.1	**0.044**	0.59	0.11	0.00055	888	0.28	**2909**	0.68	0.0099	0.0018	0.0016
	May		0.0057	0.0090	4.0	**0.041**	0.25	0.11	0.00054	888	0.28	**2911**	0.67	0.0097	0.0017	0.0016
	June		0.0069	0.0096	4.3	**0.038**	0.32	0.12	0.00057	893	0.29	**2925**	0.69	0.010	0.0018	0.0017
	July		0.0067	0.0099	4.4	**0.035**	0.30	0.12	0.00059	889	0.29	**2912**	0.72	0.011	0.0019	0.0018
	August		0.0074	0.0094	4.2	**0.040**	0.37	0.11	0.00056	894	0.29	**2928**	0.70	0.010	0.0018	0.0017
	September		0.0069	0.0096	4.3	**0.036**	0.32	0.12	0.00057	890	0.29	**2915**	0.72	0.010	0.0019	0.0017
	October		0.0066	0.010	4.5	**0.032**	0.28	0.12	0.00059	884	0.29	**2896**	0.73	0.011	0.0019	0.0018
	November		0.0059	0.010	4.6	**0.029**	0.24	0.12	0.00059	889	0.30	**2914**	0.77	0.011	0.0019	0.0018
	December		0.0047	0.010	5.2	**0.017**	0.14	0.13	0.00059	884	0.31	**2897**	0.84	0.011	0.0020	0.0018
	January	2034	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2902**	0.85	0.011	0.0020	0.0018
	February		0.0049	0.010	5.3	**0.018**	0.15	0.13	0.00059	885	0.31	**2901**	0.84	0.011	0.0020	0.0018
	March		0.0058	0.011	4.9	**0.024**	0.21	0.13	0.00061	885	0.30	**2902**	0.79	0.011	0.0020	0.0018
	April		0.0086	0.0091	4.2	**0.039**	0.45	0.11	0.00054	891	0.28	**2919**	0.69	0.0099	0.0017	0.0016
	May		0.0053	0.0099	4.5	**0.032**	0.20	0.12	0.00058	890	0.30	**2915**	0.75	0.011	0.0019	0.0017
	June		0.012	0.0087	3.8	**0.049**	0.71	0.11	0.00052	882	0.28	**2891**	0.65	0.0095	0.0017	0.0016
	July		0.0099	0.0084	3.6	**0.053**	0.59	0.10	0.00051	883	0.28	**2895**	0.63	0.0092	0.0016	0.0015
	August		0.0075	0.0085	3.7	**0.052**	0.40	0.10	0.00052	884	0.28	**2898**	0.65	0.0094	0.0016	0.0015
	September		0.0072	0.0089	4.0	**0.046**	0.37	0.11	0.00054	886	0.29	**2904**	0.65	0.0096	0.0017	0.0016
	October		0.0053	0.0099	4.5	**0.035**	0.20	0.12	0.00059	891	0.30	**2918**	0.73	0.010	0.0019	0.0018
	November		0.0054	0.010	4.9	**0.025**	0.19	0.13	0.00061	884	0.31	**2898**	0.80	0.011	0.0020	0.0018
	December		0.0055	0.010	5.0	**0.023**	0.19	0.13	0.00060	885	0.30	**2899**	0.80	0.011	0.0020	0.0018
	January	2035	0.0048	0.010	5.2	**0.017**	0.14	0.13	0.00059	884	0.31	**2895**	0.84	0.011	0.0020	0.0018
	February		0.0050	0.010	5.1	**0.019**	0.15	0.13	0.00060	885	0.31	**2901**	0.83	0.011	0.0020	0.0018
	March		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2901**	0.85	0.011	0.0020	0.0018

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April	2035	0.0075	0.0097	4.5	**0.033**	0.35	0.12	0.00057	887	0.29	**2906**	0.73	0.010	0.0019	0.0017
	May		0.0083	0.0090	4.0	**0.041**	0.44	0.11	0.00054	894	0.28	**2928**	0.68	0.0098	0.0017	0.0016
	June		0.0069	0.0091	4.0	**0.040**	0.34	0.11	0.00055	890	0.29	**2917**	0.69	0.0099	0.0018	0.0016
	July		0.0073	0.0092	4.0	**0.041**	0.36	0.11	0.00055	886	0.28	**2904**	0.67	0.0099	0.0018	0.0016
	August		0.0071	0.0095	4.2	**0.041**	0.35	0.12	0.00056	888	0.29	**2908**	0.69	0.010	0.0018	0.0017
	September		0.0068	0.0095	4.2	**0.037**	0.32	0.12	0.00056	887	0.29	**2907**	0.70	0.010	0.0018	0.0017
	October		0.0063	0.010	4.5	**0.030**	0.26	0.13	0.00060	889	0.30	**2912**	0.75	0.011	0.0020	0.0018
	November		0.0050	0.010	5.1	**0.019**	0.16	0.13	0.00060	886	0.31	**2902**	0.84	0.011	0.0020	0.0018
	December		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2899**	0.84	0.011	0.0020	0.0018
	January	2036	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.011	0.0020	0.0018
	February		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.012	0.0020	0.0018
	March		0.0056	0.010	5.0	**0.023**	0.20	0.13	0.00061	885	0.30	**2900**	0.79	0.011	0.0020	0.0018
	April		0.010	0.0088	3.9	**0.046**	0.58	0.11	0.00053	889	0.28	**2913**	0.66	0.0096	0.0017	0.0016
	May		0.0058	0.0093	4.1	**0.039**	0.25	0.11	0.00055	890	0.29	**2916**	0.68	0.0099	0.0018	0.0017
	June		0.0072	0.0095	4.3	**0.039**	0.35	0.12	0.00056	890	0.29	**2915**	0.70	0.010	0.0018	0.0017
	July		0.0072	0.0097	4.4	**0.040**	0.34	0.12	0.00058	893	0.29	**2925**	0.69	0.010	0.0019	0.0017
	August		0.0064	0.010	4.7	**0.029**	0.27	0.13	0.00060	890	0.30	**2916**	0.77	0.011	0.0020	0.0018
	September		0.0067	0.0100	4.5	**0.034**	0.30	0.12	0.00059	889	0.29	**2913**	0.73	0.011	0.0019	0.0018
	October		0.0065	0.010	4.6	**0.032**	0.28	0.12	0.00059	889	0.30	**2914**	0.75	0.011	0.0019	0.0018
	November		0.0050	0.010	5.1	**0.020**	0.16	0.13	0.00060	886	0.31	**2902**	0.83	0.011	0.0020	0.0018
	December		0.0047	0.010	5.4	**0.017**	0.13	0.13	0.00059	887	0.31	**2907**	0.85	0.011	0.0020	0.0018
	January	2037	0.0047	0.010	5.1	**0.017**	0.13	0.13	0.00059	888	0.31	**2909**	0.85	0.011	0.0020	0.0018
	February		0.0058	0.010	4.7	**0.025**	0.22	0.13	0.00060	886	0.30	**2903**	0.78	0.011	0.0020	0.0018
	March		0.0056	0.010	4.7	**0.023**	0.20	0.13	0.00059	887	0.30	**2908**	0.79	0.011	0.0019	0.0018
	April		0.0084	0.0088	3.7	**0.043**	0.46	0.11	0.00053	888	0.28	**2908**	0.66	0.0096	0.0017	0.0016
	May		0.0059	0.010	4.3	**0.032**	0.23	0.12	0.00060	888	0.29	**2909**	0.73	0.011	0.0020	0.0018
	June		0.0094	0.0086	3.6	**0.046**	0.54	0.11	0.00051	884	0.28	**2898**	0.67	0.0095	0.0017	0.0015
	July		0.0091	0.0087	3.6	**0.050**	0.52	0.11	0.00053	884	0.28	**2896**	0.65	0.0095	0.0017	0.0016
	August		0.0063	0.0093	3.9	**0.039**	0.28	0.11	0.00056	889	0.29	**2914**	0.68	0.0099	0.0018	0.0017
	September		0.0072	0.0090	3.8	**0.040**	0.36	0.11	0.00054	884	0.28	**2896**	0.66	0.0096	0.0017	0.0016
	October		0.0054	0.010	4.4	**0.030**	0.20	0.12	0.00059	888	0.31	**2908**	0.79	0.011	0.0019	0.0018
Operations	November		0.0052	0.010	4.9	**0.020**	0.16	0.13	0.00060	887	0.31	**2907**	0.83	0.011	0.0020	0.0018
	December		0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.011	0.0020	0.0018
	January	2038	0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.31	**2898**	0.85	0.011	0.0020	0.0018
	February		0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.31	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0073	0.0095	4.1	**0.036**	0.34	0.12	0.00056	890	0.29	**2917**	0.69	0.010	0.0018	0.0017
	April		0.0080	0.0089	3.7	**0.042**	0.42	0.11	0.00053	886	0.27	**2902**	0.65	0.0095	0.0017	0.0016
	May		0.0063	0.0096	4.1	**0.035**	0.27	0.12	0.00057	888	0.29	**2908**	0.71	0.010	0.0018	0.0017
	June		0.0071	0.0098	4.2	**0.032**	0.33	0.12	0.00058	888	0.29	**2910**	0.74	0.011	0.0019	0.0017
	July		0.0070	0.0093	4.0	**0.040**	0.34	0.11	0.00055	891	0.29	**2919**	0.69	0.0100	0.0018	0.0017
	August		0.0067	0.0100	4.2	**0.034**	0.30	0.12	0.00059	886	0.29	**2903**	0.72	0.011	0.0019	0.0018
	September		0.0082	0.0092	3.9	**0.040**	0.43	0.11	0.00055	881	0.29	**2888**	0.70	0.010	0.0018	0.0016
	October		0.0064	0.0095	4.1	**0.038**	0.29	0.12	0.00057	885	0.29	**2899**	0.69	0.010	0.0018	0.0017
	November		0.0053	0.010	4.6	**0.024**	0.19	0.13	0.00060	886	0.31	**2902**	0.81	0.011	0.0020	0.0018
	December		0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.011	0.0020	0.0018
	January	2039	0.0048	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0065	0.010	4.4	**0.030**	0.26	0.12	0.00059	888	0.30	**2910**	0.74	0.011	0.0019	0.0018
	March		0.0060	0.010	4.6	**0.025**	0.22	0.13	0.00061	886	0.30	**2905**	0.78	0.011	0.0020	0.0018
	April		0.0063	0.010	4.5	**0.028**	0.25	0.12	0.00059	889	0.30	**2912**	0.75	0.011	0.0019	0.0018
	May		0.0063	0.010	4.5	**0.028**	0.25	0.13	0.00061	889	0.30	**2912**	0.77	0.011	0.0020	0.0018
	June		0.0070	0.010	4.5	**0.027**	0.29	0.13	0.00060	886	0.30	**2904**	0.77	0.011	0.0020	0.0018
	July		0.0076	0.0089	3.7	**0.042**	0.39	0.11	0.00053	892	0.28	**2923**	0.67	0.0097	0.0017	0.0016
	August		0.0098	0.0085	3.5	**0.052**	0.57	0.10	0.00051	884	0.28	**2896**	0.64	0.0093	0.0016	0.0015
	September		0.0064	0.0093	3.9	**0.038**	0.28	0.11	0.00055	890	0.29	**2915**	0.69	0.0099	0.0018	0.0016
	October		0.0067	0.0096	4.1	**0.038**	0.30	0.12	0.00057	884	0.30	**2896**	0.71	0.010	0.0018	0.0017
	November		0.0056	0.0100	4.5	**0.026**	0.21	0.12	0.00058	887	0.31	**2907**	0.79	0.011	0.0019	0.0018
	December		0.0048	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.011	0.0020	0.0018
	January	2040	0.0049	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2899**	0.85	0.011	0.0020	0.0018
	February		0.0050	0.010	5.4	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.012	0.0020	0.0018
	March		0.0083	0.0093	4.3	**0.038**	0.42	0.11	0.00055	884	0.28	**2898**	0.68	0.0099	0.0018	0.0016
	April		0.0072	0.0091	4.1	**0.038**	0.34	0.11	0.00054	890	0.28	**2916**	0.68	0.0098	0.0018	0.0016
	May		0.0075	0.0093	4.2	**0.040**	0.36	0.11	0.00056	890	0.30	**2917**	0.70	0.010	0.0018	0.0017
	June		0.0086	0.0089	4.0	**0.042**	0.45	0.11	0.00053	884	0.28	**2897**	0.67	0.0097	0.0017	0.0016

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.0084	0.0086	3.8	**0.049**	0.45	0.11	0.00052	886	0.28	**2903**	0.64	0.0094	0.0017	0.0016
	August		0.0058	0.010	4.6	**0.034**	0.20	0.12	0.00060	891	0.31	**2920**	0.73	0.011	0.0019	0.0018
	September		0.0066	0.010	4.6	**0.031**	0.27	0.12	0.00060	888	0.30	**2908**	0.75	0.011	0.0020	0.0018
	October		0.0070	0.0099	4.4	**0.035**	0.30	0.12	0.00058	892	0.30	**2924**	0.74	0.011	0.0019	0.0017
	November		0.0052	0.010	5.2	**0.019**	0.15	0.13	0.00060	886	0.32	**2903**	0.84	0.012	0.0020	0.0018
	December		0.0050	0.010	5.4	**0.017**	0.13	0.13	0.00059	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	January	2041	0.0051	0.010	5.4	**0.017**	0.13	0.13	0.00060	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	February		0.0051	0.010	5.4	**0.017**	0.13	0.13	0.00059	889	0.32	**2912**	0.85	0.011	0.0020	0.0018
	March		0.0065	0.010	5.1	**0.024**	0.24	0.13	0.00059	886	0.30	**2904**	0.78	0.011	0.0020	0.0018
	April		0.0091	0.0093	4.2	**0.041**	0.48	0.11	0.00055	885	0.29	**2899**	0.69	0.010	0.0018	0.0017
	May		0.0055	0.0097	4.4	**0.036**	0.19	0.12	0.00058	888	0.29	**2911**	0.70	0.010	0.0019	0.0017
	June		0.0074	0.0098	4.4	**0.033**	0.33	0.12	0.00058	886	0.30	**2903**	0.73	0.011	0.0019	0.0017
	July		0.0088	0.0091	4.1	**0.042**	0.45	0.11	0.00054	887	0.29	**2906**	0.69	0.0099	0.0017	0.0016
	August		0.013	0.0084	3.6	**0.055**	0.83	0.10	0.00051	882	0.28	**2889**	0.64	0.0093	0.0016	0.0015
	September		0.0061	0.0087	3.8	**0.050**	0.27	0.11	0.00053	886	0.28	**2905**	0.64	0.0094	0.0017	0.0016
	October		0.0062	0.0094	4.2	**0.039**	0.25	0.11	0.00057	890	0.30	**2916**	0.69	0.0100	0.0018	0.0017
	November		0.0052	0.010	4.8	**0.029**	0.15	0.13	0.00061	889	0.32	**2912**	0.80	0.011	0.0020	0.0018
	December		0.0051	0.010	5.3	**0.017**	0.13	0.13	0.00060	886	0.32	**2905**	0.85	0.011	0.0020	0.0018
	January	2042	0.0051	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2899**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.011	0.0020	0.0018
	March		0.0060	0.010	5.1	**0.023**	0.19	0.13	0.00060	886	0.31	**2904**	0.80	0.011	0.0020	0.0018
	April		0.0089	0.0092	4.3	**0.037**	0.45	0.11	0.00054	884	0.29	**2898**	0.71	0.010	0.0018	0.0016
	May		0.0060	0.0099	4.5	**0.034**	0.22	0.12	0.00059	895	0.30	**2932**	0.72	0.010	0.0019	0.0018
	June		0.011	0.0089	4.0	**0.047**	0.65	0.11	0.00054	888	0.29	**2909**	0.68	0.0098	0.0017	0.0016
	July		0.0086	0.0086	3.7	**0.054**	0.47	0.10	0.00052	886	0.29	**2904**	0.65	0.0094	0.0016	0.0015
	August		0.0089	0.0087	3.8	**0.051**	0.48	0.11	0.00053	891	0.29	**2919**	0.65	0.0094	0.0017	0.0016
	September		0.0090	0.0088	3.9	**0.045**	0.46	0.11	0.00054	890	0.30	**2918**	0.68	0.0098	0.0017	0.0016
	October		0.0070	0.0090	4.0	**0.046**	0.34	0.11	0.00055	888	0.29	**2909**	0.66	0.0096	0.0017	0.0016
	November		0.0052	0.010	4.7	**0.028**	0.14	0.13	0.00061	886	0.32	**2904**	0.78	0.011	0.0020	0.0018
	December		0.0051	0.010	5.3	**0.017**	0.13	0.13	0.00059	884	0.32	**2895**	0.84	0.011	0.0020	0.0018
Operations	January	2043	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2902**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.012	0.0020	0.0018
	March		0.0052	0.010	5.4	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.012	0.0020	0.0018
	April		0.0098	0.0096	4.4	**0.035**	0.49	0.12	0.00057	885	0.29	**2898**	0.71	0.010	0.0019	0.0017
	May		0.0061	0.0090	4.1	**0.040**	0.25	0.11	0.00054	892	0.28	**2922**	0.67	0.0097	0.0017	0.0016
	June		0.0090	0.0087	3.9	**0.045**	0.47	0.11	0.00052	884	0.28	**2895**	0.66	0.0095	0.0017	0.0016
	July		0.0091	0.0087	3.9	**0.045**	0.48	0.11	0.00053	885	0.29	**2900**	0.67	0.0096	0.0017	0.0016
	August		0.0091	0.0086	3.8	**0.051**	0.49	0.11	0.00053	885	0.28	**2901**	0.64	0.0093	0.0017	0.0016
	September		0.0095	0.0086	3.8	**0.050**	0.52	0.11	0.00052	884	0.29	**2898**	0.65	0.0095	0.0017	0.0016
	October		0.0073	0.0090	4.0	**0.046**	0.34	0.11	0.00054	892	0.29	**2922**	0.66	0.0096	0.0017	0.0016
	November		0.0061	0.0098	4.4	**0.034**	0.22	0.12	0.00059	889	0.30	**2913**	0.70	0.010	0.0019	0.0017
	December		0.0056	0.011	4.9	**0.024**	0.16	0.13	0.00061	884	0.32	**2898**	0.81	0.011	0.0020	0.0018
	January	2044	0.0052	0.010	5.3	**0.017**	0.14	0.13	0.00060	886	0.32	**2905**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	884	0.32	**2898**	0.84	0.011	0.0020	0.0018
	March		0.0057	0.010	5.2	**0.019**	0.17	0.13	0.00059	886	0.32	**2904**	0.83	0.011	0.0020	0.0018
	April		0.0082	0.0095	4.2	**0.041**	0.39	0.12	0.00057	897	0.29	**2938**	0.69	0.010	0.0018	0.0017
	May		0.0071	0.0099	4.4	**0.033**	0.29	0.12	0.00059	887	0.30	**2907**	0.73	0.011	0.0019	0.0018
	June		0.0071	0.0098	4.4	**0.033**	0.30	0.12	0.00058	887	0.30	**2907**	0.73	0.010	0.0019	0.0017
	July		0.0093	0.0086	3.8	**0.046**	0.50	0.11	0.00052	888	0.28	**2909**	0.65	0.0094	0.0017	0.0015
	August		0.0065	0.0096	4.3	**0.037**	0.26	0.12	0.00058	889	0.30	**2912**	0.71	0.010	0.0018	0.0017
	September		0.0071	0.010	4.5	**0.033**	0.29	0.12	0.00060	887	0.30	**2906**	0.74	0.011	0.0019	0.0018
	October		0.0066	0.010	4.7	**0.029**	0.25	0.13	0.00061	886	0.31	**2904**	0.77	0.011	0.0020	0.0018
	November		0.0056	0.010	5.0	**0.020**	0.16	0.13	0.00061	885	0.32	**2901**	0.83	0.011	0.0020	0.0018
	December		0.0053	0.010	5.2	**0.018**	0.14	0.13	0.00060	886	0.32	**2905**	0.84	0.011	0.0020	0.0018
	January	2045	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2901**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2903**	0.85	0.011	0.0020	0.0018
	March		0.0076	0.0099	4.9	**0.024**	0.31	0.12	0.00058	884	0.31	**2897**	0.79	0.011	0.0019	0.0017
	April		0.0061	0.0091	4.0	**0.038**	0.26	0.11	0.00054	885	0.29	**2899**	0.67	0.0097	0.0017	0.0016
	May		0.0076	0.0092	4.1	**0.039**	0.36	0.11	0.00055	892	0.29	**2924**	0.69	0.0099	0.0018	0.0016
	June		0.0079	0.0091	4.0	**0.039**	0.38	0.11	0.00054	885	0.29	**2902**	0.68	0.0098	0.0017	0.0016
	July		0.0079	0.0092	4.1	**0.042**	0.38	0.11	0.00055	889	0.29	**2912**	0.67	0.0098	0.0018	0.0016
	August		0.0073	0.0095	4.2	**0.038**	0.33	0.12	0.00057	891	0.30	**2919**	0.71	0.010	0.0018	0.0017
	September		0.0073	0.0097	4.4	**0.036**	0.32	0.12	0.00058	888	0.30	**2909**	0.71	0.010	0.0019	0.0017

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	October	2045	0.0069	0.010	4.5	**0.031**	0.27	0.12	0.00060	887	0.30	**2908**	0.75	0.011	0.0019	0.0018
	November		0.0059	0.010	4.9	**0.023**	0.19	0.13	0.00061	885	0.31	**2898**	0.81	0.011	0.0020	0.0018
	December		0.0054	0.010	5.2	**0.018**	0.15	0.13	0.00060	885	0.32	**2902**	0.84	0.011	0.0020	0.0018
	January	2046	0.0056	0.010	5.1	**0.020**	0.16	0.13	0.00060	886	0.32	**2904**	0.82	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00060	888	0.32	**2909**	0.85	0.011	0.0020	0.0018
	March		0.0072	0.010	4.7	**0.029**	0.28	0.12	0.00059	888	0.30	**2908**	0.75	0.011	0.0019	0.0018
	April		0.0065	0.0099	4.4	**0.033**	0.25	0.12	0.00059	890	0.30	**2915**	0.74	0.011	0.0019	0.0018
	May		0.0076	0.0094	4.2	**0.037**	0.35	0.11	0.00056	889	0.30	**2913**	0.71	0.010	0.0018	0.0017
	June		0.0083	0.0092	4.1	**0.039**	0.40	0.11	0.00055	886	0.29	**2903**	0.69	0.0099	0.0018	0.0016
	July		0.0084	0.0086	3.8	**0.045**	0.44	0.11	0.00052	886	0.28	**2903**	0.65	0.0094	0.0017	0.0015
	August		0.0090	0.0087	3.8	**0.048**	0.48	0.11	0.00052	885	0.29	**2901**	0.66	0.0095	0.0017	0.0016
	September		0.0081	0.0091	4.0	**0.044**	0.40	0.11	0.00055	891	0.29	**2918**	0.68	0.0098	0.0018	0.0016
	October		0.0074	0.0091	4.0	**0.039**	0.34	0.11	0.00055	891	0.29	**2918**	0.69	0.0099	0.0018	0.0016
	November		0.0058	0.010	4.6	**0.033**	0.20	0.12	0.00061	889	0.31	**2913**	0.75	0.011	0.0020	0.0018
	December		0.0055	0.010	5.0	**0.019**	0.15	0.13	0.00060	884	0.32	**2896**	0.84	0.011	0.0020	0.0018
	January	2047	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2899**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2905**	0.85	0.012	0.0020	0.0018
	March		0.0058	0.010	5.1	**0.021**	0.18	0.13	0.00061	887	0.32	**2907**	0.82	0.011	0.0020	0.0018
	April		0.0086	0.0095	4.2	**0.036**	0.41	0.12	0.00057	886	0.29	**2904**	0.70	0.010	0.0018	0.0017
	May		0.0075	0.0091	4.0	**0.040**	0.35	0.11	0.00054	889	0.28	**2912**	0.67	0.0097	0.0017	0.0016
	June		0.0069	0.0098	4.4	**0.034**	0.28	0.12	0.00058	888	0.30	**2908**	0.72	0.010	0.0019	0.0017
	July		0.0092	0.0089	3.9	**0.045**	0.49	0.11	0.00054	889	0.28	**2912**	0.66	0.0096	0.0017	0.0016
	August		0.0088	0.0087	3.8	**0.048**	0.47	0.11	0.00053	884	0.29	**2896**	0.65	0.0095	0.0017	0.0016
	September		0.0076	0.0092	4.1	**0.040**	0.35	0.11	0.00055	890	0.29	**2916**	0.69	0.0099	0.0018	0.0016
	October		0.0064	0.0098	4.3	**0.036**	0.24	0.12	0.00059	890	0.31	**2916**	0.73	0.011	0.0019	0.0017
	November		0.0060	0.010	4.9	**0.023**	0.19	0.13	0.00061	886	0.32	**2902**	0.81	0.011	0.0020	0.0018
	December		0.0052	0.010	5.2	**0.018**	0.14	0.13	0.00060	887	0.32	**2907**	0.85	0.012	0.0020	0.0018
	January	2048	0.0055	0.010	5.2	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.83	0.011	0.0020	0.0018
	February		0.0053	0.010	5.3	**0.018**	0.14	0.13	0.00060	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	March		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2902**	0.85	0.011	0.0020	0.0018
	April		0.0071	0.0098	4.7	**0.029**	0.28	0.12	0.00057	883	0.30	**2895**	0.74	0.010	0.0019	0.0017
	May		0.0063	0.010	4.7	**0.028**	0.22	0.13	0.00061	887	0.31	**2906**	0.76	0.011	0.0020	0.0018
	June		0.0071	0.010	4.6	**0.031**	0.28	0.13	0.00061	888	0.30	**2910**	0.75	0.011	0.0020	0.0018
	July		0.013	0.0086	3.8	**0.049**	0.78	0.11	0.00052	882	0.28	**2891**	0.65	0.0095	0.0017	0.0015
	August		0.0083	0.0084	3.6	**0.051**	0.44	0.10	0.00051	884	0.28	**2895**	0.62	0.0091	0.0016	0.0015
	September		0.0081	0.0085	3.7	**0.051**	0.41	0.10	0.00052	888	0.29	**2910**	0.64	0.0093	0.0016	0.0015
	October		0.0060	0.0093	4.2	**0.039**	0.23	0.11	0.00056	888	0.30	**2911**	0.69	0.0099	0.0018	0.0017
	November		0.0054	0.011	4.8	**0.026**	0.14	0.13	0.00062	886	0.33	**2902**	0.81	0.011	0.0020	0.0019
	December		0.0058	0.010	5.0	**0.021**	0.17	0.13	0.00060	884	0.31	**2897**	0.81	0.011	0.0020	0.0018
	January	2049	0.0066	0.010	4.7	**0.028**	0.24	0.13	0.00060	888	0.31	**2911**	0.76	0.011	0.0020	0.0018
	February		0.0053	0.010	5.2	**0.018**	0.14	0.13	0.00060	886	0.33	**2903**	0.85	0.011	0.0020	0.0018
	March		0.0074	0.0099	4.9	**0.024**	0.29	0.12	0.00058	884	0.31	**2897**	0.78	0.011	0.0019	0.0017
	April		0.0061	0.010	4.5	**0.032**	0.21	0.12	0.00060	890	0.30	**2918**	0.72	0.011	0.0019	0.0018
	May		0.0077	0.0094	4.2	**0.036**	0.35	0.12	0.00056	889	0.29	**2912**	0.70	0.010	0.0018	0.0017
	June		0.0080	0.0090	4.0	**0.041**	0.39	0.11	0.00054	884	0.29	**2897**	0.66	0.0096	0.0017	0.0016
	July		0.010	0.0083	3.6	**0.050**	0.56	0.10	0.00051	884	0.28	**2895**	0.64	0.0092	0.0016	0.0015
	August		0.0089	0.0086	3.8	**0.049**	0.47	0.11	0.00053	884	0.29	**2897**	0.66	0.0094	0.0017	0.0016
	September		0.0098	0.0088	3.8	**0.048**	0.54	0.11	0.00053	885	0.29	**2899**	0.67	0.0096	0.0017	0.0016
	October		0.0076	0.0088	3.8	**0.047**	0.36	0.11	0.00054	884	0.29	**2897**	0.65	0.0095	0.0017	0.0016
	November		0.0058	0.0098	4.4	**0.035**	0.20	0.12	0.00059	887	0.30	**2906**	0.70	0.010	0.0019	0.0018
	December		0.0054	0.010	5.0	**0.021**	0.13	0.13	0.00061	885	0.33	**2900**	0.84	0.012	0.0020	0.0018
	January	2050	0.0053	0.010	5.1	**0.017**	0.13	0.13	0.00060	886	0.33	**2903**	0.85	0.011	0.0020	0.0018
	February		0.0053	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.33	**2903**	0.85	0.011	0.0020	0.0018
	March		0.0058	0.010	4.9	**0.020**	0.17	0.13	0.00060	886	0.32	**2905**	0.82	0.011	0.0020	0.0018
	April		0.0086	0.0089	3.8	**0.040**	0.43	0.11	0.00053	886	0.28	**2903**	0.66	0.0096	0.0017	0.0016
	May		0.0065	0.0098	4.2	**0.034**	0.25	0.12	0.00058	885	0.30	**2899**	0.72	0.010	0.0019	0.0017
	June		0.0082	0.0094	4.0	**0.040**	0.38	0.11	0.00056	885	0.29	**2900**	0.67	0.0099	0.0018	0.0017
	July		0.0069	0.010	4.4	**0.031**	0.26	0.12	0.00060	886	0.31	**2903**	0.76	0.011	0.0019	0.0018
	August		0.0070	0.010	4.3	**0.032**	0.28	0.12	0.00059	887	0.31	**2907**	0.74	0.011	0.0019	0.0018
	September		0.0083	0.0090	3.8	**0.040**	0.40	0.11	0.00054	886	0.29	**2903**	0.68	0.0097	0.0017	0.0016
	October		0.0064	0.010	4.4	**0.031**	0.23	0.13	0.00060	887	0.32	**2907**	0.77	0.011	0.0020	0.0018
	November		0.0063	0.010	4.7	**0.024**	0.21	0.13	0.00061	885	0.31	**2901**	0.79	0.011	0.0020	0.0018
	December		0.0054	0.010	4.9	**0.018**	0.14	0.13	0.00060	887	0.33	**2905**	0.85	0.011	0.0020	0.0018

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.0054	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.33	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0054	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.33	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0063	0.010	4.6	**0.024**	0.21	0.13	0.00060	885	0.31	**2899**	0.79	0.011	0.0020	0.0018
	April		0.013	0.0088	3.7	**0.048**	0.79	0.11	0.00053	882	0.29	**2892**	0.66	0.0096	0.0017	0.0016
	May		0.0065	0.0087	3.6	**0.048**	0.27	0.11	0.00053	884	0.29	**2898**	0.65	0.0094	0.0017	0.0016
	June		0.0073	0.0091	3.9	**0.040**	0.33	0.11	0.00055	891	0.30	**2920**	0.69	0.0098	0.0018	0.0016
	July		0.0096	0.0087	3.6	**0.047**	0.51	0.11	0.00052	889	0.29	**2911**	0.66	0.0095	0.0017	0.0016
	August		0.0095	0.0085	3.5	**0.053**	0.51	0.10	0.00052	888	0.29	**2910**	0.65	0.0094	0.0016	0.0015
	September		0.0072	0.0090	3.8	**0.042**	0.32	0.11	0.00055	884	0.30	**2898**	0.66	0.0097	0.0017	0.0016
	October		0.0070	0.0094	4.0	**0.037**	0.29	0.11	0.00056	886	0.29	**2904**	0.68	0.0099	0.0018	0.0017
	November		0.0064	0.010	4.4	**0.032**	0.23	0.12	0.00061	888	0.32	**2909**	0.76	0.011	0.0020	0.0018
	December		0.0058	0.010	4.8	**0.020**	0.16	0.13	0.00061	887	0.33	**2907**	0.84	0.011	0.0020	0.0018
	January	2052	0.0035	0.0060	6.2	**0.017**	0.12	0.084	0.00035	887	0.30	**2905**	0.75	0.0086	0.0012	0.0011
	February		0.0032	0.0054	6.4	**0.016**	0.11	0.076	0.00032	881	0.28	**2886**	0.71	0.0080	0.0010	0.00095
	March		0.0033	0.0053	6.4	**0.016**	0.12	0.075	0.00031	879	0.28	**2881**	0.71	0.0080	0.0010	0.00094
	April		0.0064	0.0034	4.0	**0.039**	0.42	0.054	0.00022	886	0.28	**2903**	0.64	0.0067	0.00066	0.00065
	May		0.0057	0.0037	4.3	**0.038**	0.36	0.056	0.00024	884	0.27	**2896**	0.62	0.0067	0.00072	0.00070
	June		0.0047	0.0040	4.5	**0.036**	0.28	0.059	0.00025	884	0.29	**2897**	0.65	0.0070	0.00076	0.00074
	July		0.0076	0.0033	3.8	**0.045**	0.53	0.051	0.00022	883	0.27	**2894**	0.60	0.0064	0.00063	0.00064
	August		0.0055	0.0032	3.7	**0.044**	0.37	0.051	0.00021	884	0.28	**2898**	0.64	0.0066	0.00062	0.00062
	September		0.0041	0.0042	4.8	**0.035**	0.23	0.061	0.00027	885	0.28	**2901**	0.64	0.0070	0.00080	0.00078
	October		0.0042	0.0049	5.7	**0.027**	0.21	0.069	0.00030	883	0.28	**2895**	0.65	0.0074	0.00094	0.00088
	November		0.0035	0.0056	6.7	**0.018**	0.13	0.078	0.00033	889	0.28	**2914**	0.69	0.0080	0.0011	0.00099
	December		0.0033	0.0054	6.5	**0.016**	0.11	0.076	0.00032	880	0.28	**2885**	0.70	0.0080	0.0010	0.00095
		MINIMUM	0.0032	0.0032	3.5	**0.016**	0.11	0.051	0.00021	825	0.27	**2704**	0.60	0.0064	0.00062	0.00062
		MAXIMUM	0.013	0.011	7.2	**0.055**	0.83	0.13	0.00062	897	0.40	**2938**	1.1	0.013	0.0020	0.0019
		AVERAGE	0.0066	0.0094	4.6	**0.032**	0.29	0.12	0.00056	886	0.30	**2904**	0.76	0.010	0.0018	0.0017
Decommissioning	January	2053	0.00093	0.00038	6.2	**0.019**	0.18	0.041	0.000029	255	0.41	305	1.1	0.0091	0.000073	0.00010
	February		0.00060	0.0000033	5.7	**0.019**	0.19	0.040	0.0000060	184	0.43	7.7	1.2	0.0095	0.00000012	0.000040
	March		0.0024	0.000012	5.6	**0.023**	0.30	0.038	0.0000090	180	0.42	22	1.2	0.0092	0.0000011	0.000046
	April		0.0055	0.000043	5.5	**0.051**	0.54	0.025	0.000029	119	0.33	60	0.81	0.0064	0.00000038	0.000082
	May		0.0032	0.000045	5.4	**0.043**	0.37	0.027	0.000031	127	0.34	56	0.86	0.0068	0.00000019	0.000083
	June		0.0026	0.000038	5.3	**0.038**	0.32	0.032	0.000026	148	0.38	47	1.00	0.0079	0.00000018	0.000077
	July		0.0041	0.000039	5.2	**0.044**	0.43	0.029	0.000027	136	0.36	51	0.92	0.0073	0.0000002	0.000079
	August		0.0063	0.000038	5.1	**0.044**	0.59	0.029	0.000026	138	0.36	51	0.92	0.0072	0.00000071	0.000075
	September		0.0058	0.000048	5.0	**0.056**	0.56	0.023	0.000033	110	0.32	65	0.76	0.0061	0.0000004	0.000089
	October		0.0030	0.000050	5.0	**0.045**	0.36	0.027	0.000033	128	0.35	62	0.87	0.0068	0.00000035	0.000088
	November		0.0015	0.000036	5.0	**0.035**	0.25	0.033	0.000025	153	0.39	45	1.0	0.0080	0.00000019	0.000074
	December		0.00060	0.0000035	4.8	**0.019**	0.19	0.040	0.0000061	184	0.43	8.0	1.2	0.0095	0.00000012	0.000040
	January	2054	0.00050	0.0000029	4.7	**0.019**	0.19	0.040	0.0000049	183	0.42	5.9	1.2	0.0095	9.8E-08	0.000038
	February		0.00047	0.0000030	4.6	**0.019**	0.19	0.039	0.0000047	183	0.42	5.8	1.2	0.0094	9.1E-08	0.000038
	March		0.0012	0.000011	4.5	**0.024**	0.23	0.037	0.0000093	173	0.40	16	1.1	0.0090	0.00000023	0.000046
	April		0.0051	0.000027	4.3	**0.038**	0.51	0.031	0.000018	148	0.36	36	0.98	0.0077	0.00000078	0.000063
	May		0.0040	0.000045	4.3	**0.048**	0.43	0.026	0.000030	123	0.33	58	0.84	0.0066	0.00000031	0.000082
	June		0.0026	0.000042	4.2	**0.041**	0.34	0.031	0.000028	144	0.37	51	0.97	0.0076	0.00000016	0.000080
	July		0.0039	0.000038	4.1	**0.043**	0.43	0.029	0.000026	136	0.36	48	0.92	0.0073	0.00000022	0.000076
	August		0.0074	0.000048	3.9	**0.055**	0.68	0.024	0.000031	116	0.32	64	0.79	0.0063	0.00000075	0.000086
	September		0.0035	0.000048	3.9	**0.047**	0.39	0.027	0.000031	127	0.35	60	0.87	0.0068	0.00000033	0.000085
	October		0.0028	0.000047	3.8	**0.044**	0.35	0.029	0.000031	137	0.36	57	0.93	0.0073	0.00000027	0.000085
	November		0.0018	0.000021	3.7	**0.030**	0.28	0.034	0.000015	159	0.39	28	1.1	0.0083	0.00000034	0.000056
	December		0.00047	0.0000028	3.6	**0.019**	0.19	0.040	0.0000045	183	0.42	5.5	1.2	0.0095	9.1E-08	0.000038
	January	2055	0.00038	0.0000037	3.5	**0.019**	0.19	0.039	0.0000045	182	0.42	6.0	1.2	0.0094	7.7E-08	0.000038
	February		0.00035	0.0000029	3.4	**0.019**	0.19	0.040	0.0000039	184	0.42	5.3	1.2	0.0095	7.2E-08	0.000038
	March		0.00035	0.0000025	3.3	**0.019**	0.19	0.040	0.0000036	184	0.42	4.8	1.2	0.0095	7.1E-08	0.000037
	April		0.00079	0.000048	3.2	**0.033**	0.21	0.032	0.000027	150	0.38	49	1.00	0.0078	0.0000011	0.000079
	May		0.00041	0.000052	3.2	**0.036**	0.17	0.031	0.000032	145	0.38	57	0.98	0.0076	0.00000029	0.000086
	June		0.00062	0.000059	3.0	**0.037**	0.19	0.032	0.000034	148	0.39	62	1.00	0.0078	0.0000011	0.000091
	July		0.00050	0.000066	2.9	**0.040**	0.17	0.028	0.000040	130	0.36	71	0.89	0.0069	0.0000003	0.00010
	August		0.00039	0.000073	2.8	**0.044**	0.17	0.029	0.000044	136	0.38	78	0.93	0.0073	0.00000052	0.00011
	September		0.00036	0.000063	2.7	**0.041**	0.17	0.032	0.000039	147	0.40	68	1.0	0.0079	0.00000015	0.00010
	October		0.00036	0.000056	2.7	**0.039**	0.18	0.032	0.000035	152	0.40	61	1.0	0.0080	0.00000034	0.000093
	November		0.00035	0.000025	2.6	**0.028**	0.18	0.036	0.000017	168	0.41	30	1.1	0.0087	0.00000021	0.000060
	December		0.00035	0.0000027	2.4	**0.019**	0.19	0.039	0.0000037	182	0.41	5.2	1.2	0.0094	7.1E-08	0.000037

Table G-2: Scenario 1: Application Case - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	**January**	**2056**	0.00027	0.0000022	2.3	**0.019**	0.19	0.040	0.0000029	184	0.42	3.8	1.2	0.0095	5.8E-08	0.000036
	February		0.00025	0.0000020	2.2	**0.019**	0.19	0.040	0.0000027	184	0.42	3.4	1.2	0.0095	5.3E-08	0.000036
	March		0.00031	0.000041	2.2	**0.032**	0.18	0.034	0.000025	158	0.39	43	1.1	0.0083	0.00000048	0.000075
	April		0.00028	0.000032	2.1	**0.030**	0.18	0.036	0.000020	164	0.40	36	1.1	0.0086	0.00000021	0.000067
	May		0.00028	0.000027	2.0	**0.028**	0.18	0.036	0.000017	168	0.40	29	1.1	0.0087	0.00000018	0.000062
	June		0.00028	0.000035	1.9	**0.031**	0.18	0.036	0.000021	167	0.41	37	1.1	0.0087	0.00000049	0.000068
	July		0.00029	0.000053	1.8	**0.037**	0.17	0.032	0.000032	150	0.39	56	1.0	0.0079	0.00000016	0.000089
	August		0.00032	0.000061	1.7	**0.038**	0.17	0.031	0.000035	146	0.38	63	0.99	0.0077	0.0000010	0.000092
	September		0.00026	0.000070	1.6	**0.043**	0.16	0.029	0.000042	137	0.38	74	0.94	0.0073	0.00000021	0.00011
	October		0.00023	0.000059	1.5	**0.041**	0.18	0.033	0.000036	155	0.41	64	1.1	0.0083	0.00000018	0.000097
	November		0.00024	0.000015	1.4	**0.025**	0.19	0.038	0.000010	177	0.41	19	1.2	0.0092	7.2E-08	0.000049
	December		0.00025	0.0000020	1.3	**0.019**	0.19	0.040	0.0000027	184	0.41	3.4	1.2	0.0095	5.3E-08	0.000036
	January	**2057**	0.00011	0.0000014	1.2	**0.019**	0.19	0.040	0.0000011	184	0.41	1.7	1.2	0.0095	2.5E-08	0.000034
	February		0.000071	0.0000011	1.1	**0.019**	0.19	0.040	0.00000063	183	0.41	1.1	1.2	0.0094	1.7E-08	0.000033
	March		0.000072	0.0000013	0.98	**0.019**	0.19	0.040	0.00000064	184	0.41	1.2	1.2	0.0095	4.7E-08	0.000033
	April		0.00015	0.000048	0.90	**0.035**	0.18	0.034	0.000027	160	0.40	49	1.1	0.0084	0.00000058	0.000082
	May		0.000076	0.000034	0.80	**0.032**	0.18	0.036	0.000020	167	0.41	37	1.1	0.0087	6.6E-08	0.000068
	June		0.000092	0.000021	0.68	**0.026**	0.19	0.039	0.000012	178	0.41	20	1.2	0.0093	4.8E-08	0.000055
	July		0.00015	0.000061	0.59	**0.040**	0.18	0.033	0.000035	155	0.40	62	1.1	0.0083	0.0000005	0.000096
	August		0.00010	0.000067	0.49	**0.043**	0.18	0.033	0.000039	155	0.41	69	1.1	0.0083	0.0000004	0.00010
	September		0.000085	0.000059	0.40	**0.041**	0.18	0.034	0.000035	158	0.41	63	1.1	0.0084	0.00000011	0.000096
	October		0.000076	0.000021	0.30	**0.027**	0.18	0.037	0.000013	172	0.41	24	1.1	0.0090	4.8E-08	0.000055
	November		0.000075	0.0000089	0.20	**0.022**	0.19	0.039	0.0000052	179	0.41	9.6	1.2	0.0093	2.9E-08	0.000042
	December		0.000072	0.0000018	0.10	**0.019**	0.19	0.040	0.00000099	184	0.41	1.7	1.2	0.0095	1.8E-08	0.000034
		MINIMUM	0.000071	0.0000011	0.10	**0.019**	0.16	0.023	0.00000063	110	0.32	1.1	0.76	0.0061	1.7E-08	0.000033
		MAXIMUM	0.0074	0.00038	6.2	**0.056**	0.68	0.041	0.000044	255	0.43	305	1.2	0.0095	0.000073	0.00011
		AVERAGE	0.0013	0.000037	3.0	**0.032**	0.25	0.034	0.000021	160	0.39	41	1.1	0.0083	0.0000015	0.000068

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates non-applicable periods of time when there is no discharge.

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June			0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2026	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2027	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2028	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	January	2029	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	January	2030	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2031	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2032	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2033	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2034	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations																	

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2036	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2037	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2038	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2039	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2041	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2042	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2043	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2044	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2046	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2047	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2048	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2049	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2050	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2051	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2052	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Decommissioning	January	2053	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2054	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2055	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	January	2056	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2057	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0067	0.025	0.000076	0.0000064	0.12	0.19	0.000032	0.00013	0.000026	0.0040	0.0000064	0.0013	0.034	0.011	0.00000057
	April		0.022	0.085	0.00026	0.000021	0.51	0.66	0.00011	0.00042	0.000089	0.016	0.000023	0.0048	0.16	0.039	0.0000020
	May		0.035	0.13	0.00040	0.000033	0.60	1.00	0.00017	0.00066	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	June		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.049	0.0000083	0.000033	0.0000066	0.0010	0.0000017	0.00033	0.0089	0.0030	0.00000015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000033	0.00013	0.000027	0.0041	0.0000067	0.0013	0.035	0.012	0.00000059
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00074	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000033
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	April		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000013	0.0021	0.0000033	0.00067	0.018	0.0059	0.0000003
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.023	0.087	0.00026	0.000022	0.39	0.65	0.00011	0.00043	0.000088	0.014	0.000022	0.0044	0.12	0.039	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.0087	0.033	0.000099	0.0000082	0.15	0.25	0.000042	0.00016	0.000033	0.0052	0.0000083	0.0017	0.044	0.015	0.00000074
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	November		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	February		0.0037	0.014	0.000042	0.0000035	0.064	0.11	0.000018	0.000070	0.000014	0.0022	0.0000036	0.00072	0.019	0.0063	0.00000032
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.016	0.060	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.0094	0.000015	0.0031	0.081	0.027	0.0000014
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000080	0.00032	0.000064	0.0100	0.000016	0.0032	0.086	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.74	0.00012	0.00049	0.000099	0.015	0.000025	0.0050	0.13	0.044	0.0000022
	July		0.021	0.080	0.00024	0.000020	0.36	0.60	0.00010	0.00040	0.000081	0.013	0.000020	0.0041	0.11	0.036	0.0000018
	August		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.015	0.057	0.00017	0.000014	0.26	0.43	0.000072	0.00029	0.000058	0.0090	0.000015	0.0029	0.077	0.026	0.0000013
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000094	0.17	0.28	0.000048	0.00019	0.000038	0.0059	0.0000096	0.0019	0.051	0.017	0.00000085
	April		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	May		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00024	0.00095	0.00019	0.030	0.000048	0.0097	0.26	0.086	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	November		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	February		0.015	0.056	0.00017	0.000014	0.26	0.42	0.000071	0.00028	0.000057	0.0088	0.000014	0.0029	0.076	0.025	0.0000013
	March		0.022	0.083	0.00025	0.000021	0.37	0.62	0.00010	0.00041	0.000083	0.013	0.000021	0.0042	0.11	0.037	0.0000019

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

Time Period	Month	Year	Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
			mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.86	0.00014	0.00057	0.00012	0.018	0.000029	0.0058	0.15	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	August	**2066**	0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.69	0.00012	0.00046	0.000093	0.014	0.000023	0.0047	0.12	0.041	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
Reclamation	**January**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.028	0.11	0.00032	0.000026	0.48	0.79	0.00013	0.00053	0.00011	0.016	0.000027	0.0054	0.14	0.047	0.0000024
	May		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	June		0.033	0.12	0.00037	0.000031	0.57	0.94	0.00016	0.00062	0.00013	0.020	0.000032	0.0064	0.17	0.056	0.0000028
	July	**2067**	0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.028	0.000045	0.0091	0.24	0.080	0.0000040
	September		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	November		0.0048	0.018	0.000054	0.0000045	0.082	0.14	0.000023	0.000090	0.000018	0.0028	0.0000046	0.00092	0.024	0.0081	0.00000041
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
		MAXIMUM	0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
		AVERAGE	0.027	0.10	0.00031	0.000026	0.47	0.78	0.00013	0.00052	0.00010	0.016	0.000026	0.0053	0.14	0.047	0.0000023
Post-Closure	**January**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.024	0.092	0.00028	0.000023	0.42	0.69	0.00012	0.00046	0.000093	0.014	0.000023	0.0047	0.12	0.041	0.0000021
	May		0.035	0.13	0.00040	0.000033	0.60	1.00	0.00017	0.00066	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July	**≥2070**	0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	October		0.032	0.12	0.00036	0.000030	0.55	0.91	0.00015	0.00060	0.00012	0.019	0.000031	0.0062	0.16	0.054	0.0000027
	November		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000033	0.00013	0.000027	0.0041	0.0000067	0.0013	0.035	0.012	0.00000059
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
		MAXIMUM	0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
		AVERAGE	0.029	0.11	0.00033	0.000028	0.50	0.84	0.00014	0.00055	0.00011	0.017	0.000028	0.0057	0.15	0.050	0.0000025

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2026	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2027	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2028	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	January	2029	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2031	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2032	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2033	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2034	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2036	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2037	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2038	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2039	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2041	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2042	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2043	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2044	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2046	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2047	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2048	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2049	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2050	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2052	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Decommissioning	January	2053	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2054	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2055	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2057	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000013	0.00017	0.0059	0.00022	0.00032	0.00033	0.0000064	0.060	0.0013	0.25	0.00033	0.0000065	0.000026	0.00045
	April		0.000044	0.00055	0.023	0.0010	0.0012	0.0012	0.000023	0.25	0.0055	0.88	0.0012	0.000023	0.000091	0.0015
	May		0.000067	0.00086	0.031	0.0012	0.0017	0.0017	0.000034	0.31	0.0069	1.3	0.0017	0.000034	0.00013	0.0023
	June		0.000089	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.7	0.0023	0.000045	0.00018	0.0031
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0021	0.000042	0.00017	0.0029
	September		0.000056	0.00073	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0059	1.1	0.0014	0.000028	0.00011	0.0020
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0014	0.000027	0.00011	0.0019
	November		0.0000033	0.000043	0.0015	0.000058	0.000084	0.000084	0.0000017	0.016	0.00034	0.065	0.000084	0.0000017	0.0000066	0.00012
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000013	0.00017	0.0061	0.00023	0.00034	0.00034	0.0000067	0.062	0.0014	0.26	0.00034	0.0000067	0.000027	0.00046
	May		0.000075	0.00096	0.034	0.0013	0.0019	0.0019	0.000038	0.35	0.0078	1.5	0.0019	0.000038	0.00015	0.0026
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0021	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0019	0.000037	0.00015	0.0026
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0016	0.000032	0.00013	0.0022
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0018	0.000035	0.00014	0.0024
	October		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.000082	0.0000016	0.0000064	0.00011
	April		0.000040	0.00051	0.018	0.00069	0.0010	0.0010	0.000020	0.19	0.0041	0.78	0.0010	0.000020	0.000080	0.0014
	May		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0016	0.000032	0.00013	0.0022
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0021	0.000042	0.00017	0.0029
	July		0.000075	0.00097	0.035	0.0013	0.0019	0.0019	0.000038	0.35	0.0078	1.5	0.0019	0.000038	0.00015	0.0026
	August		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	September		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0019	0.000038	0.00015	0.0026
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0014	0.000027	0.00011	0.0019
	November		0.0000066	0.000085	0.0031	0.00012	0.00017	0.00017	0.0000033	0.031	0.00069	0.13	0.00017	0.0000033	0.000013	0.00023
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.000082	0.0000016	0.0000064	0.00011

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.000082	0.0000016	0.0000064	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.00057	0.000011	0.000045	0.00078
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0015	0.000030	0.00012	0.0021
	May		0.000044	0.00056	0.020	0.00076	0.0011	0.0011	0.000022	0.20	0.0045	0.86	0.0011	0.000022	0.000088	0.0015
	June		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	July		0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0025	0.000050	0.00020	0.0035
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0021	0.000042	0.00017	0.0029
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	October		0.000067	0.00087	0.031	0.0012	0.0017	0.0017	0.000034	0.32	0.0070	1.3	0.0017	0.000034	0.00013	0.0023
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.00025	0.0000050	0.047	0.0010	0.19	0.00025	0.0000050	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.00041	0.0000081	0.075	0.0017	0.31	0.00041	0.0000081	0.000032	0.00056
	April		0.000017	0.00021	0.0076	0.00029	0.00042	0.00042	0.0000083	0.078	0.0017	0.32	0.00042	0.0000083	0.000033	0.00058
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0019	0.000037	0.00015	0.0026
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0022	0.000043	0.00017	0.0030
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0016	0.000032	0.00013	0.0022
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	October		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0011	0.000023	0.000090	0.0016
	November		0.000030	0.00038	0.014	0.00052	0.00076	0.00076	0.000015	0.14	0.0031	0.58	0.00076	0.000015	0.000060	0.0010
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00016	0.0000032	0.000013	0.00022
	February		0.0000071	0.000091	0.0033	0.00012	0.00018	0.00018	0.0000036	0.033	0.00074	0.14	0.00018	0.0000036	0.000014	0.00025
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.00041	0.0000081	0.075	0.0017	0.31	0.00041	0.0000081	0.000032	0.00056
	April		0.000030	0.00039	0.014	0.00053	0.00077	0.00077	0.000015	0.14	0.0031	0.59	0.00077	0.000015	0.000061	0.0011
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0019	0.000037	0.00015	0.0026
	June		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0019	0.000038	0.00015	0.0026
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0022	0.000044	0.00017	0.0030
	August		0.000074	0.00096	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0019	0.000037	0.00015	0.0026
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0018	0.000035	0.00014	0.0024
	October		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0013	0.000026	0.00010	0.0018
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00016	0.0000032	0.000013	0.00022
	April		0.000030	0.00038	0.014	0.00052	0.00076	0.00076	0.000015	0.14	0.0031	0.58	0.00076	0.000015	0.000060	0.0010
	May		0.000032	0.00041	0.015	0.00056	0.00081	0.00082	0.000016	0.15	0.0033	0.63	0.00082	0.000016	0.000064	0.0011
	June		0.000050	0.00064	0.023	0.00086	0.0013	0.0013	0.000025	0.23	0.0052	0.97	0.0013	0.000025	0.000100	0.0017
	July		0.000040	0.00052	0.019	0.00070	0.0010	0.0010	0.000020	0.19	0.0042	0.79	0.0010	0.000020	0.000081	0.0014
	August		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0020	0.000039	0.00015	0.0027
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.0019	0.000037	0.34	0.0076	1.4	0.0019	0.000037	0.00015	0.0025
	October		0.000029	0.00037	0.013	0.00050	0.00073	0.00073	0.000015	0.14	0.0030	0.56	0.00073	0.000015	0.000058	0.0010
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.0088	0.00033	0.00048	0.00048	0.0000096	0.089	0.0020	0.37	0.00048	0.0000096	0.000038	0.00066
	April		0.000056	0.00073	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0059	1.1	0.0014	0.000028	0.00011	0.0020
	May		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0013	0.000026	0.00010	0.0018
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0022	0.000043	0.00017	0.0030
	July		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0021	0.000042	0.00017	0.0029
	August		0.000096	0.0012	0.044	0.0017	0.0024	0.0024	0.000048	0.45	0.0100	1.9	0.0024	0.000048	0.00019	0.0033
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.0019	0.000037	0.34	0.0076	1.4	0.0019	0.000037	0.00015	0.0025
	October		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0016	0.000032	0.00013	0.0022
	November		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0015	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0011	0.000023	0.000090	0.0016
	January	2066	0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0011	0.000023	0.000090	0.0016
	February		0.000028	0.00037	0.013	0.00049	0.00072	0.00072	0.000014	0.13	0.0029	0.55	0.00072	0.000014	0.000057	0.00099
	March		0.000042	0.00054	0.019	0.00072	0.0011	0.0011	0.000021	0.20	0.0043	0.81	0.0011	0.000021	0.000084	0.0014

Table G-3: Scenario 1: Application Case - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0015	0.000030	0.00012	0.0021
	May		0.000058	0.00074	0.027	0.0010	0.0015	0.0015	0.000029	0.27	0.0060	1.1	0.0015	0.000029	0.00012	0.0020
	June		0.000040	0.00051	0.018	0.00069	0.0010	0.0010	0.000020	0.19	0.0041	0.78	0.0010	0.000020	0.000080	0.0014
	July		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0011	0.000023	0.000090	0.0016
	August	**2066**	0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0013	0.000026	0.00010	0.0018
	September		0.000046	0.00060	0.021	0.00081	0.0012	0.0012	0.000023	0.22	0.0048	0.91	0.0012	0.000023	0.000093	0.0016
	October		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.00057	0.000011	0.000045	0.00078
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.00025	0.0000050	0.047	0.0010	0.19	0.00025	0.0000050	0.000020	0.00035
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.000082	0.0000016	0.0000064	0.00011
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reclamation	**February**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00016	0.0000032	0.000013	0.00022
	April		0.000053	0.00068	0.024	0.00092	0.0013	0.0013	0.000027	0.25	0.0055	1.0	0.0013	0.000027	0.00011	0.0018
	May		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0014	0.000027	0.00011	0.0019
	June		0.000063	0.00081	0.029	0.0011	0.0016	0.0016	0.000032	0.29	0.0065	1.2	0.0016	0.000032	0.00013	0.0022
	July	**2067**	0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0022	0.000044	0.00017	0.0030
	August		0.000090	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.8	0.0023	0.000045	0.00018	0.0031
	September		0.000089	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.7	0.0023	0.000045	0.00018	0.0031
	October		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0019	0.000038	0.00015	0.0027
	November		0.0000091	0.00012	0.0042	0.00016	0.00023	0.00023	0.0000046	0.043	0.00095	0.18	0.00023	0.0000046	0.000018	0.00032
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.000082	0.0000016	0.0000064	0.00011
		MAXIMUM	0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0025	0.000050	0.00020	0.0035
		AVERAGE	0.000052	0.00067	0.024	0.00091	0.0013	0.0013	0.000026	0.25	0.0054	1.0	0.0013	0.000026	0.00010	0.0018
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00016	0.0000032	0.000013	0.00022
	April		0.000046	0.00060	0.021	0.00081	0.0012	0.0012	0.000023	0.22	0.0048	0.91	0.0012	0.000023	0.000093	0.0016
	May		0.000067	0.00086	0.031	0.0012	0.0017	0.0017	0.000034	0.31	0.0070	1.3	0.0017	0.000034	0.00013	0.0023
Post-Closure	**June**	**≥2070**	0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0019	0.000038	0.00015	0.0026
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
	August		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0020	0.000039	0.00015	0.0027
	September		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0019	0.000038	0.00015	0.0026
	October		0.000061	0.00078	0.028	0.0011	0.0015	0.0016	0.000031	0.29	0.0063	1.2	0.0016	0.000031	0.00012	0.0021
	November		0.000013	0.00017	0.0061	0.00023	0.00034	0.00034	0.0000067	0.062	0.0014	0.26	0.00034	0.0000067	0.000027	0.00046
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00016	0.0000032	0.000013	0.00022
		MAXIMUM	0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0020	0.000040	0.00016	0.0028
		AVERAGE	0.000056	0.00072	0.026	0.00097	0.0014	0.0014	0.000028	0.26	0.0058	1.1	0.0014	0.000028	0.00011	0.0019

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0057	0.028	0.00011	0.0000066	3.3	0.58	0.00019	0.000088	0.00012	0.080	0.000045	0.012	1.1	0.023	0.0000015
	April		0.011	0.048	0.00016	0.000012	2.5	0.63	0.00017	0.00020	0.00012	0.063	0.000040	0.010	0.87	0.029	0.0000017
	May		0.016	0.065	0.00022	0.000016	2.5	0.76	0.00019	0.00029	0.00013	0.064	0.000043	0.011	0.86	0.037	0.0000021
	June		0.025	0.098	0.00032	0.000024	3.0	1.0	0.00025	0.00045	0.00017	0.075	0.000055	0.013	1.0	0.052	0.0000029
	July		0.037	0.15	0.00046	0.000036	3.2	1.4	0.00031	0.00069	0.00022	0.084	0.000068	0.016	1.1	0.074	0.0000040
	August		0.050	0.19	0.00061	0.000048	3.6	1.8	0.00038	0.00092	0.00028	0.095	0.000082	0.019	1.2	0.096	0.0000051
	September		0.053	0.21	0.00064	**0.000051**	3.3	1.8	0.00038	0.00099	0.00028	0.088	0.000081	0.018	1.1	0.10	0.0000053
	October		0.053	0.21	0.00064	**0.000051**	3.0	1.8	0.00036	0.00099	0.00027	0.081	0.000077	0.017	0.99	0.099	0.0000052
	November		0.051	0.20	0.00061	0.000049	2.7	1.7	0.00034	0.00096	0.00025	0.075	0.000072	0.016	0.90	0.095	0.0000049
	December		0.051	0.20	0.00061	0.000049	2.7	1.7	0.00034	0.00095	0.00025	0.073	0.000071	0.016	0.88	0.094	0.0000049
	January	2026	0.050	0.19	0.00059	0.000048	2.5	1.6	0.00032	0.00093	0.00024	0.070	0.000069	0.015	0.84	0.092	0.0000048
	February		0.050	0.19	0.00059	0.000048	2.5	1.6	0.00032	0.00093	0.00024	0.070	0.000069	0.015	0.84	0.092	0.0000048
	March		0.049	0.19	0.00058	0.000047	2.5	1.6	0.00032	0.00092	0.00024	0.069	0.000068	0.015	0.83	0.091	0.0000047
	April		0.044	0.17	0.00052	0.000042	2.1	1.4	0.00028	0.00082	0.00021	0.059	0.000059	0.013	0.70	0.081	0.0000042
	May		0.060	0.23	0.00071	**0.000057**	2.9	2.0	0.00038	0.0011	0.00029	0.080	0.000080	0.018	0.95	0.11	0.0000057
	June		0.063	0.24	0.00075	**0.000061**	3.0	2.1	0.00040	0.0012	0.00030	0.083	0.000084	0.019	0.98	0.12	0.0000060
	July		0.071	0.27	0.00084	**0.000068**	3.3	2.3	0.00045	0.0013	0.00034	0.092	0.000094	0.021	1.1	0.13	0.0000067
	August		0.061	0.24	0.00072	**0.000059**	2.8	2.0	0.00038	0.0011	0.00029	0.078	0.000080	0.018	0.91	0.11	0.0000058
	September		0.059	0.23	0.00069	**0.000056**	2.7	1.9	0.00037	0.0011	0.00028	0.074	0.000077	0.017	0.87	0.11	0.0000055
	October		0.060	0.23	0.00070	**0.000057**	2.7	1.9	0.00037	0.0011	0.00028	0.075	0.000078	0.017	0.87	0.11	0.0000056
	November		0.063	0.24	0.00074	**0.000060**	2.8	2.0	0.00039	0.0012	0.00029	0.078	0.000081	0.018	0.92	0.11	0.0000059
	December		0.059	0.23	0.00069	**0.000056**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000077	0.017	0.86	0.11	0.0000055
	January	2027	0.057	0.22	0.00067	**0.000055**	2.6	1.8	0.00035	0.0011	0.00027	0.072	0.000074	0.016	0.84	0.10	0.0000054
	February		0.050	0.19	0.00059	0.000048	2.2	1.6	0.00031	0.00093	0.00023	0.062	0.000065	0.014	0.73	0.091	0.0000047
	March		0.045	0.17	0.00053	0.000043	2.0	1.4	0.00028	0.00084	0.00021	0.056	0.000058	0.013	0.66	0.082	0.0000042
	April		0.042	0.16	0.00050	0.000040	1.9	1.4	0.00026	0.00079	0.00020	0.052	0.000055	0.012	0.61	0.077	0.0000039
	May		0.046	0.18	0.00054	0.000044	2.0	1.5	0.00028	0.00086	0.00021	0.057	0.000059	0.013	0.66	0.083	0.0000043
	June		0.053	0.20	0.00062	0.000051	2.3	1.7	0.00033	0.00100	0.00025	0.065	0.000069	0.015	0.76	0.096	0.0000050
	July		0.053	0.20	0.00062	0.000051	2.3	1.7	0.00033	0.00099	0.00025	0.065	0.000068	0.015	0.76	0.096	0.0000050
	August		0.061	0.23	0.00072	**0.000058**	2.7	2.0	0.00037	0.0011	0.00028	0.075	0.000078	0.017	0.87	0.11	0.0000057
	September		0.077	0.29	0.00090	**0.000073**	3.3	2.4	0.00047	0.0014	0.00035	0.094	0.000098	0.022	1.1	0.14	0.0000071
	October		0.082	0.31	0.00096	**0.000078**	3.5	2.6	0.00050	0.0015	0.00038	0.100	0.00010	0.023	1.2	0.15	0.0000076
	November		0.072	0.27	0.00084	**0.000068**	3.1	2.3	0.00044	0.0013	0.00033	0.087	0.000092	0.020	1.0	0.13	0.0000067
	December		0.072	0.27	0.00084	**0.000068**	3.1	2.3	0.00044	0.0013	0.00033	0.087	0.000092	0.020	1.0	0.13	0.0000067
	January	2028	0.072	0.27	0.00084	**0.000068**	3.1	2.3	0.00044	0.0013	0.00033	0.087	0.000092	0.020	1.0	0.13	0.0000067
	February		0.072	0.27	0.00084	**0.000068**	3.1	2.3	0.00044	0.0013	0.00033	0.087	0.000092	0.020	1.0	0.13	0.0000067
	March		0.070	0.27	0.00096	**0.000067**	3.2	2.9	0.00045	0.0013	0.00038	0.094	0.000090	0.020	1.0	0.13	0.0000087
	April		0.058	0.22	0.0011	**0.000057**	2.9	3.7	0.00041	0.0011	0.00041	0.093	0.000074	0.019	0.84	0.10	0.000011
	May		0.052	0.20	0.00089	**0.000051**	2.3	3.0	0.00035	0.0010	0.00034	0.074	0.000064	0.015	0.67	0.094	0.0000090
	June		0.065	0.25	0.0011	**0.000064**	2.7	3.5	0.00042	0.0013	0.00041	0.088	0.000079	0.019	0.80	0.12	0.000011
	July		0.077	0.29	0.0012	**0.000075**	3.0	3.9	0.00048	0.0015	0.00045	0.096	0.000091	0.021	0.88	0.14	0.000012
	August		0.083	0.32	0.0012	**0.000080**	3.0	3.9	0.00050	0.0016	0.00046	0.096	0.000096	0.022	0.89	0.15	0.000012
	September		0.089	0.34	0.0013	**0.000086**	3.1	4.1	0.00053	0.0017	0.00049	0.10	0.00010	0.023	0.92	0.16	0.000012
	October		0.10	0.38	0.0015	**0.000097**	3.4	4.5	0.00060	0.0019	0.00054	0.11	0.00011	0.026	1.0	0.18	0.000014
	November		0.10	0.39	0.0015	**0.000098**	3.4	4.5	0.00060	0.0019	0.00054	0.11	0.00012	0.026	1.0	0.18	0.000014
	December		0.10	0.39	0.0015	**0.000098**	3.4	4.5	0.00060	0.0019	0.00054	0.11	0.00011	0.026	1.0	0.18	0.000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	1.9	0.57	0.00017	0.000050	0.00012	0.052	0.000040	0.010	0.61	0.021	0.0000014
		MAXIMUM	0.10	0.39	0.0015	**0.000098**	3.6	4.5	0.00060	0.0019	0.00054	0.11	0.00012	0.026	1.2	0.18	0.000014
		AVERAGE	0.056	0.22	0.00073	**0.000054**	2.9	2.1	0.00037	0.0011	0.00029	0.081	0.000077	0.017	0.93	0.10	0.0000063
Operations	January	2029	0.10	0.39	0.0015	**0.000098**	3.4	4.5	0.00060	0.0019	0.00054	0.11	0.00011	0.026	1.0	0.18	0.000014
	February		0.10	0.39	0.0015	**0.000098**	3.4	4.5	0.00060	0.0019	0.00054	0.11	0.00011	0.026	1.0	0.18	0.000013
	March		0.091	0.34	0.0013	**0.000087**	3.0	3.9	0.00053	0.0017	0.00048	0.097	0.00010	0.023	0.90	0.16	0.000012
	April		0.072	0.27	0.0010	**0.000069**	2.3	3.0	0.00041	0.0014	0.00037	0.074	0.000080	0.018	0.69	0.13	0.0000091
	May		0.073	0.28	0.0010	**0.000070**	2.3	3.0	0.00042	0.0014	0.00037	0.073	0.000081	0.018	0.68	0.13	0.0000090
	June		0.078	0.29	0.0010	**0.000074**	2.3	3.1	0.00044	0.0015	0.00038	0.076	0.000085	0.019	0.70	0.14	0.0000092
	July		0.097	0.37	0.0013	**0.000093**	2.9	3.8	0.00054	0.0018	0.00047	0.092	0.00011	0.023	0.86	0.17	0.000011
	August		0.11	0.43	0.0015	**0.00011**	3.2	4.2	0.00062	0.0021	0.00053	0.10	0.00012	0.026	0.97	0.20	0.000013
	September		0.11	0.40	0.0014	**0.00010**	2.9	3.9	0.00058	0.0020	0.00049	0.095	0.00011	0.024	0.89	0.18	0.000012
	October		0.11	0.43	0.0015	**0.00011**	3.1	4.1	0.00062	0.0021	0.00052	0.10	0.00012	0.026	0.95	0.20	0.000012
	November		0.11	0.43	0.0015	**0.00011**	3.1	4.1	0.00062	0.0022	0.00052	0.10	0.00012	0.026	0.94	0.20	0.000012
	December		0.11	0.43	0.0014	**0.00011**	3.1	4.1	0.00061	0.0021	0.00052	0.100	0.00012	0.026	0.94	0.20	0.000012

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.11	0.43	0.0014	**0.00011**	3.1	4.1	0.00061	0.0021	0.00052	0.100	0.00012	0.026	0.94	0.20	0.000012
	February		0.11	0.41	0.0014	**0.00010**	2.9	3.9	0.00058	0.0020	0.00049	0.095	0.00011	0.024	0.89	0.19	0.000012
	March		0.089	0.34	0.0011	**0.000085**	2.4	3.2	0.00048	0.0017	0.00040	0.078	0.000095	0.020	0.73	0.15	0.0000095
	April		0.085	0.32	0.0011	**0.000081**	2.3	3.0	0.00046	0.0016	0.00038	0.073	0.000090	0.019	0.69	0.15	0.0000089
	May		0.088	0.33	0.0011	**0.000084**	2.3	3.0	0.00047	0.0017	0.00039	0.075	0.000093	0.020	0.70	0.15	0.0000091
	June		0.077	0.29	0.00095	**0.000073**	2.0	2.6	0.00041	0.0015	0.00034	0.063	0.000081	0.017	0.60	0.13	0.0000078
	July		0.075	0.28	0.00091	**0.000071**	1.9	2.4	0.00039	0.0014	0.00032	0.060	0.000078	0.016	0.57	0.13	0.0000073
	August		0.082	0.31	0.00099	**0.000078**	2.0	2.6	0.00043	0.0016	0.00035	0.065	0.000086	0.018	0.61	0.14	0.0000079
	September		0.076	0.29	0.00090	**0.000072**	1.8	2.4	0.00039	0.0014	0.00032	0.059	0.000078	0.016	0.56	0.13	0.0000072
	October		0.076	0.29	0.00091	**0.000072**	1.8	2.4	0.00039	0.0014	0.00032	0.059	0.000079	0.016	0.56	0.13	0.0000072
	November		0.070	0.26	0.00083	**0.000066**	1.7	2.2	0.00036	0.0013	0.00029	0.053	0.000072	0.015	0.51	0.12	0.0000065
	December		0.065	0.24	0.00076	**0.000061**	1.5	2.0	0.00033	0.0012	0.00027	0.049	0.000067	0.014	0.47	0.11	0.0000060
	January	2031	0.061	0.23	0.00072	**0.000058**	1.4	1.9	0.00031	0.0011	0.00025	0.046	0.000063	0.013	0.44	0.11	0.0000057
	February		0.061	0.23	0.00072	**0.000057**	1.4	1.9	0.00031	0.0011	0.00025	0.046	0.000063	0.013	0.44	0.10	0.0000056
	March		0.056	0.21	0.00066	**0.000053**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000058	0.012	0.40	0.097	0.0000052
	April		0.049	0.19	0.00058	0.000047	1.1	1.5	0.00025	0.00093	0.00020	0.037	0.000051	0.010	0.35	0.085	0.0000045
	May		0.051	0.19	0.00060	0.000049	1.2	1.6	0.00026	0.00097	0.00021	0.038	0.000053	0.011	0.36	0.089	0.0000047
	June		0.064	0.24	0.00074	**0.000060**	1.5	1.9	0.00032	0.0012	0.00026	0.047	0.000065	0.013	0.45	0.11	0.0000058
	July		0.079	0.30	0.00092	**0.000075**	1.8	2.4	0.00040	0.0015	0.00032	0.058	0.000081	0.017	0.55	0.14	0.0000071
	August		0.094	0.36	0.0011	**0.000089**	2.1	2.8	0.00048	0.0018	0.00038	0.069	0.000096	0.020	0.66	0.16	0.0000084
	September		0.095	0.36	0.0011	**0.000090**	2.1	2.8	0.00048	0.0018	0.00038	0.069	0.000097	0.020	0.66	0.16	0.0000085
	October		0.092	0.35	0.0011	**0.000087**	2.1	2.7	0.00047	0.0017	0.00037	0.067	0.000094	0.019	0.64	0.16	0.0000082
	November		0.085	0.32	0.00098	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000086	0.018	0.59	0.15	0.0000075
	December		0.082	0.31	0.00095	**0.000078**	1.9	2.5	0.00042	0.0016	0.00033	0.060	0.000084	0.017	0.57	0.14	0.0000073
	January	2032	0.077	0.29	0.00089	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000079	0.016	0.54	0.13	0.0000069
	February		0.077	0.29	0.00088	**0.000072**	1.7	2.3	0.00039	0.0014	0.00031	0.056	0.000078	0.016	0.53	0.13	0.0000068
	March		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.100	0.0000051
	April		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.39	0.097	0.0000049
	May		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.10	0.0000051
	June		0.071	0.27	0.00082	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000063
	July		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000072	0.015	0.49	0.12	0.0000062
	August		0.078	0.30	0.00090	**0.000074**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000069
	September		0.092	0.35	0.0011	**0.000087**	2.0	2.7	0.00046	0.0017	0.00037	0.066	0.000094	0.019	0.63	0.16	0.0000081
	October		0.099	0.38	0.0011	**0.000094**	2.2	2.9	0.00050	0.0019	0.00040	0.071	0.00010	0.020	0.68	0.17	0.0000087
	November		0.098	0.37	0.0011	**0.000092**	2.2	2.9	0.00049	0.0018	0.00039	0.070	0.000100	0.020	0.67	0.17	0.0000086
	December		0.096	0.37	0.0011	**0.000091**	2.1	2.8	0.00049	0.0018	0.00038	0.069	0.000098	0.020	0.66	0.17	0.0000084
	January	2033	0.083	0.31	0.00095	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	February		0.078	0.30	0.00090	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.13	0.0000068
	March		0.075	0.28	0.00085	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.053	0.000076	0.015	0.51	0.13	0.0000065
	April		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	May		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	June		0.078	0.29	0.00089	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000068
	July		0.097	0.37	0.0011	**0.000092**	2.1	2.8	0.00049	0.0018	0.00039	0.069	0.000099	0.020	0.66	0.17	0.0000085
	August		0.11	0.40	0.0012	**0.00010**	2.4	3.1	0.00054	0.0020	0.00042	0.076	0.00011	0.022	0.73	0.18	0.0000093
	September		0.11	0.42	0.0013	**0.00011**	2.5	3.3	0.00056	0.0021	0.00044	0.080	0.00011	0.023	0.76	0.19	0.0000097
	October		0.11	0.43	0.0013	**0.00011**	2.5	3.3	0.00057	0.0021	0.00045	0.080	0.00011	0.023	0.77	0.19	0.0000098
	November		0.099	0.38	0.0011	**0.000094**	2.2	2.9	0.00050	0.0019	0.00039	0.071	0.00010	0.020	0.68	0.17	0.0000086
	December		0.096	0.36	0.0011	**0.000091**	2.1	2.8	0.00048	0.0018	0.00038	0.068	0.000098	0.020	0.65	0.17	0.0000083
	January	2034	0.095	0.36	0.0011	**0.000090**	2.1	2.8	0.00048	0.0018	0.00038	0.068	0.000097	0.020	0.65	0.16	0.0000083
	February		0.094	0.36	0.0011	**0.000089**	2.1	2.8	0.00048	0.0018	0.00037	0.067	0.000096	0.019	0.64	0.16	0.0000082
	March		0.078	0.29	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000068
	April		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	May		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.49	0.13	0.0000063
	June		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000050
	July		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	August		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	September		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	October		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	November		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	December		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	January	2035	0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	February		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	March		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April	2035	0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0097	0.32	0.082	0.0000041
	May		0.052	0.20	0.00060	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	June		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.38	0.095	0.0000048
	July		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000054
	August		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000081	0.016	0.54	0.14	0.0000069
	September		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000089	0.018	0.59	0.15	0.0000075
	October		0.089	0.34	0.0010	**0.000084**	2.0	2.6	0.00045	0.0017	0.00035	0.063	0.000090	0.018	0.60	0.15	0.0000077
	November		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.59	0.15	0.0000075
	December		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.58	0.15	0.0000074
	January	2036	0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.58	0.15	0.0000074
	February		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.58	0.15	0.0000074
	March		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	April		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.093	0.0000047
	May		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	June		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	July		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	August		0.11	0.40	0.0012	**0.00010**	2.3	3.1	0.00053	0.0020	0.00042	0.075	0.00011	0.022	0.72	0.18	0.0000092
	September		0.11	0.43	0.0013	**0.00011**	2.5	3.3	0.00057	0.0021	0.00045	0.081	0.00012	0.023	0.77	0.20	0.0000099
	October		0.10	0.40	0.0012	**0.000099**	2.3	3.1	0.00053	0.0020	0.00042	0.074	0.00011	0.022	0.71	0.18	0.0000091
	November		0.096	0.36	0.0011	**0.000091**	2.1	2.8	0.00048	0.0018	0.00038	0.068	0.000098	0.020	0.65	0.17	0.0000083
	December		0.091	0.34	0.0010	**0.000086**	2.0	2.7	0.00046	0.0017	0.00036	0.065	0.000093	0.019	0.62	0.16	0.0000079
	January	2037	0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00036	0.064	0.000092	0.018	0.61	0.16	0.0000078
	February		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.47	0.12	0.0000061
	March		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	April		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	May		0.077	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000066
	June		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	July		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	August		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000089	0.018	0.59	0.15	0.0000076
	September		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	October		0.089	0.34	0.0010	**0.000084**	2.0	2.6	0.00045	0.0017	0.00035	0.063	0.000091	0.018	0.60	0.15	0.0000077
Operations	November		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.58	0.15	0.0000074
	December		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	January	2038	0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	February		0.077	0.29	0.00087	**0.000072**	1.7	2.2	0.00039	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000066
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	April		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.38	0.095	0.0000048
	May		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	June		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	July		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	August		0.099	0.37	0.0011	**0.000093**	2.2	2.9	0.00050	0.0019	0.00039	0.070	0.00010	0.020	0.67	0.17	0.0000086
	September		0.099	0.38	0.0011	**0.000094**	2.2	2.9	0.00050	0.0019	0.00039	0.070	0.00010	0.020	0.67	0.17	0.0000086
	October		0.083	0.32	0.00095	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000072
	November		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.56	0.14	0.0000071
	December		0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.13	0.0000068
	January	2039	0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.13	0.0000068
	February		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	March		0.069	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	April		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	May		0.080	0.30	0.00091	**0.000075**	1.8	2.3	0.00040	0.0015	0.00031	0.056	0.000081	0.016	0.54	0.14	0.0000069
	June		0.10	0.38	0.0012	**0.000096**	2.2	2.9	0.00051	0.0019	0.00040	0.072	0.00010	0.021	0.69	0.17	0.0000088
	July		0.11	0.40	0.0012	**0.00010**	2.3	3.1	0.00053	0.0020	0.00042	0.075	0.00011	0.022	0.72	0.18	0.0000092
	August		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.56	0.14	0.0000071
	September		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000088	0.018	0.59	0.15	0.0000075
	October		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	November		0.075	0.28	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.053	0.000077	0.015	0.51	0.13	0.0000065
	December		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00029	0.051	0.000074	0.015	0.49	0.12	0.0000063
	January	2040	0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	February		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	March		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	April		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	May		0.052	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000046
	June		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	August		0.077	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000066
	September		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	October		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	November		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	December		0.080	0.30	0.00092	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	January	2041	0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000067
	February		0.076	0.29	0.00086	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000077	0.016	0.51	0.13	0.0000066
	March		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	April		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000048
	May		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.080	0.30	0.00092	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	July		0.085	0.32	0.00097	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000087	0.018	0.58	0.15	0.0000074
	August		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	September		0.057	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.38	0.097	0.0000049
	October		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	November		0.059	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000060	0.012	0.40	0.10	0.0000051
	December		0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	January	2042	0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	February		0.057	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	March		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	April		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	May		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	June		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0100	0.33	0.083	0.0000042
	July		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.036	0.000051	0.010	0.34	0.086	0.0000043
	August		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	September		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.38	0.095	0.0000048
	October		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00093	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	November		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	December		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	January	2043	0.049	0.18	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	February		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	March		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	April		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.27	0.069	0.0000035
	May		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	June		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	July		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.092	0.0000046
	August		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	September		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	October		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0091	0.30	0.075	0.0000038
	November		0.042	0.16	0.00047	0.000039	0.92	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0086	0.28	0.072	0.0000036
	December		0.041	0.15	0.00046	0.000039	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	January	2044	0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.070	0.0000035
	February		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00076	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	March		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0081	0.27	0.067	0.0000034
	April		0.040	0.15	0.00045	0.000037	0.87	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	May		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	June		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	July		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000066	0.013	0.44	0.11	0.0000056
	August		0.088	0.34	0.0010	**0.000084**	1.9	2.6	0.00044	0.0017	0.00035	0.063	0.000090	0.018	0.60	0.15	0.0000077
	September		0.10	0.39	0.0012	**0.000097**	2.3	3.0	0.00051	0.0019	0.00041	0.073	0.00010	0.021	0.70	0.18	0.0000089
	October		0.11	0.41	0.0012	**0.00010**	2.4	3.2	0.00055	0.0020	0.00043	0.077	0.00011	0.022	0.74	0.19	0.0000094
	November		0.11	0.42	0.0013	**0.00010**	2.4	3.2	0.00055	0.0021	0.00043	0.078	0.00011	0.023	0.75	0.19	0.0000095
	December		0.10	0.38	0.0012	**0.000096**	2.2	2.9	0.00051	0.0019	0.00040	0.072	0.00010	0.021	0.69	0.17	0.0000088
	January	2045	0.097	0.37	0.0011	**0.000092**	2.1	2.8	0.00049	0.0018	0.00039	0.069	0.000099	0.020	0.66	0.17	0.0000084
	February		0.095	0.36	0.0011	**0.000090**	2.1	2.8	0.00048	0.0018	0.00038	0.067	0.000097	0.019	0.64	0.16	0.0000082
	March		0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00035	0.064	0.000091	0.018	0.61	0.15	0.0000078
	April		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	May		0.078	0.29	0.00088	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	June		0.078	0.29	0.00088	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	July		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	August		0.094	0.36	0.0011	**0.000089**	2.1	2.7	0.00047	0.0018	0.00037	0.067	0.000096	0.019	0.64	0.16	0.0000082
	September		0.11	0.41	0.0012	**0.00010**	2.4	3.2	0.00055	0.0020	0.00043	0.077	0.00011	0.022	0.74	0.19	0.0000094

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.12	0.44	0.0013	**0.00011**	2.5	3.3	0.00058	0.0022	0.00046	0.082	0.00012	0.024	0.78	0.20	0.0000100
	November		0.11	0.43	0.0013	**0.00011**	2.5	3.3	0.00058	0.0022	0.00045	0.081	0.00012	0.024	0.78	0.20	0.0000100
	December		0.11	0.42	0.0013	**0.00010**	2.4	3.2	0.00055	0.0021	0.00044	0.078	0.00011	0.023	0.75	0.19	0.0000095
	January	2046	0.094	0.36	0.0011	**0.000089**	2.1	2.7	0.00047	0.0018	0.00037	0.067	0.000096	0.019	0.64	0.16	0.0000081
	February		0.089	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00035	0.063	0.000091	0.018	0.61	0.15	0.0000078
	March		0.083	0.32	0.00095	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000072
	April		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000082	0.016	0.55	0.14	0.0000070
	May		0.078	0.29	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000068
	June		0.077	0.29	0.00088	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	July		0.075	0.28	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.053	0.000077	0.015	0.51	0.13	0.0000065
	August		0.074	0.28	0.00084	**0.000070**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	September		0.070	0.27	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000072	0.014	0.48	0.12	0.0000061
	October		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	November		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00032	0.0012	0.00025	0.044	0.000064	0.013	0.43	0.11	0.0000054
	December		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	January	2047	0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.41	0.11	0.0000053
	February		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	March		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	April		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.33	0.085	0.0000043
	May		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.037	0.000053	0.011	0.35	0.089	0.0000045
	June		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	July		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	August		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	September		0.074	0.28	0.00084	**0.000070**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	October		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.54	0.14	0.0000070
	November		0.079	0.30	0.00090	**0.000074**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.14	0.0000068
	December		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000066
	January	2048	0.074	0.28	0.00084	**0.000070**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	February		0.071	0.27	0.00081	**0.000068**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.48	0.12	0.0000062
	March		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	April		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	May		0.065	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000067	0.013	0.44	0.11	0.0000057
	June		0.078	0.29	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	July		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	August		0.057	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.38	0.097	0.0000049
	September		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	October		0.054	0.20	0.00062	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	November		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.089	0.0000045
	December		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	January	2049	0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	February		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000048	0.0096	0.32	0.080	0.0000040
	March		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	April		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	May		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0098	0.32	0.082	0.0000041
	June		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	July		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	August		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	September		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000052	0.011	0.34	0.087	0.0000044
	October		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0097	0.32	0.080	0.0000040
	November		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.030	0.000044	0.0089	0.29	0.074	0.0000037
	December		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.031	0.000044	0.0090	0.29	0.074	0.0000037
	January	2050	0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.031	0.000044	0.0089	0.29	0.074	0.0000037
	February		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.031	0.000044	0.0089	0.29	0.074	0.0000037
	March		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00076	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	April		0.037	0.14	0.00042	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.026	0.000038	0.0077	0.25	0.064	0.0000032
	May		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00074	0.00015	0.028	0.000040	0.0081	0.27	0.067	0.0000034
	June		0.043	0.16	0.00049	0.000041	0.95	1.2	0.00022	0.00081	0.00017	0.030	0.000044	0.0089	0.29	0.074	0.0000037
	July		0.061	0.23	0.00069	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	August		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	September		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	October		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	November		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000061
	December		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	February		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	March		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	April		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	May		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	June		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	July		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	August		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000048
	September		0.057	0.21	0.00065	**0.000054**	1.2	1.7	0.00029	0.0011	0.00022	0.040	0.000058	0.012	0.39	0.098	0.0000049
	October		0.057	0.21	0.00065	**0.000054**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.39	0.098	0.0000049
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	December		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.096	0.0000049
	January	**2052**	0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	February		0.052	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000045
	March		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	April		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	May		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	June		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000060	0.012	0.40	0.10	0.0000052
	July		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	August		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	September		0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.14	0.0000068
	October		0.086	0.32	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000087	0.018	0.58	0.15	0.0000074
	November		0.088	0.33	0.00100	**0.000083**	1.9	2.5	0.00044	0.0016	0.00035	0.062	0.000089	0.018	0.59	0.15	0.0000076
	December		0.084	0.32	0.00096	**0.000080**	1.9	2.4	0.00042	0.0016	0.00033	0.060	0.000086	0.017	0.57	0.14	0.0000073
		MINIMUM	0.037	0.14	0.00042	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.026	0.000038	0.0077	0.25	0.064	0.0000032
		MAXIMUM	0.12	0.44	0.0015	**0.00011**	3.4	4.5	0.00062	0.0022	0.00054	0.11	0.00012	0.026	1.0	0.20	0.000014
		AVERAGE	0.071	0.27	0.00082	**0.000067**	1.6	2.1	0.00036	0.0013	0.00029	0.052	0.000073	0.015	0.49	0.12	0.0000063
Decommissioning	**January**	**2053**	0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	February		0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0014	0.00030	0.055	0.000078	0.016	0.52	0.13	0.0000067
	March		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00029	0.051	0.000073	0.015	0.49	0.12	0.0000063
	April		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	May		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	June		0.086	0.32	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000087	0.018	0.58	0.15	0.0000074
	July		0.11	0.40	0.0012	**0.000099**	2.3	3.1	0.00053	0.0020	0.00042	0.075	0.00011	0.022	0.71	0.18	0.0000091
	August		0.11	0.40	0.0012	**0.00010**	2.3	3.1	0.00054	0.0020	0.00042	0.076	0.00011	0.022	0.72	0.18	0.0000092
	September		0.079	0.30	0.00090	**0.000075**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.54	0.14	0.0000068
	October		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	November		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	December		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	January	**2054**	0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	February		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	March		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.012	0.41	0.11	0.0000053
	April		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	May		0.052	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000045
	June		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	July		0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000073
	August		0.074	0.28	0.00084	**0.000070**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	September		0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000080	0.016	0.53	0.13	0.0000068
	October		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	November		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000077	0.016	0.52	0.13	0.0000066
	December		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	January	**2055**	0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	February		0.067	0.25	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	March		0.067	0.25	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	April		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	May		0.052	0.20	0.00060	0.000049	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000045
	June		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	July		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	August		0.057	0.21	0.00065	**0.000054**	1.2	1.7	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.39	0.098	0.0000049
	September		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	October		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	November		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	December		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	February		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	March		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	April		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	May		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	June		0.075	0.28	0.00085	**0.000071**	1.6	2.2	0.00037	0.0014	0.00030	0.053	0.000076	0.015	0.51	0.13	0.0000065
	July		0.078	0.30	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.14	0.0000068
	August		0.079	0.30	0.00090	**0.000074**	1.7	2.3	0.00040	0.0015	0.00031	0.056	0.000080	0.016	0.53	0.14	0.0000068
	September		0.065	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000067	0.014	0.44	0.11	0.0000057
	October		0.070	0.27	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	November		0.075	0.28	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.053	0.000076	0.015	0.51	0.13	0.0000065
	December		0.076	0.29	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000077	0.016	0.51	0.13	0.0000066
	January	**2057**	0.076	0.29	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000077	0.016	0.51	0.13	0.0000066
	February		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00029	0.051	0.000074	0.015	0.49	0.12	0.0000063
	March		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	April		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	May		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	June		0.086	0.32	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000087	0.018	0.58	0.15	0.0000074
	July		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	August		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000070
	September		0.096	0.36	0.0011	**0.000090**	2.1	2.8	0.00048	0.0018	0.00038	0.068	0.000097	0.020	0.65	0.16	0.0000083
	October		0.11	0.42	0.0013	**0.00010**	2.4	3.2	0.00056	0.0021	0.00044	0.078	0.00011	0.023	0.75	0.19	0.0000096
	November		0.12	0.44	0.0013	**0.00011**	2.5	3.4	0.00058	0.0022	0.00046	0.082	0.00012	0.024	0.78	0.20	0.000010
	December		0.11	0.43	0.0013	**0.00011**	2.5	3.3	0.00057	0.0021	0.00045	0.081	0.00012	0.023	0.78	0.20	0.0000099
		MINIMUM	0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
		MAXIMUM	0.12	0.44	0.0013	**0.00011**	2.5	3.4	0.00058	0.0022	0.00046	0.082	0.00012	0.024	0.78	0.20	0.000010
		AVERAGE	0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00029	0.051	0.000073	0.015	0.49	0.12	0.0000063
Reclamation	**January**	**2058**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2059**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2060**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	January	2061	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2062	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2063	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2064	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2065	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2066	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	**April**	**2066**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2067**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Post-Closure	**January**	**≥2070**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.000053	0.000073	0.090	0.0075	0.0043	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.00012	0.084	0.0069	0.0061	0.0041	0.000045	1.3	0.028	1.4	0.0046	0.000048	0.00015	0.00088
	April		0.000052	0.00026	0.068	0.0053	0.0056	0.0033	0.000040	1.00	0.022	1.3	0.0040	0.000042	0.00013	0.0011
	May		0.000060	0.00038	0.070	0.0053	0.0064	0.0035	0.000043	1.0	0.022	1.4	0.0044	0.000046	0.00015	0.0014
	June		0.000080	0.00059	0.084	0.0062	0.0082	0.0042	0.000055	1.2	0.026	1.9	0.0056	0.000058	0.00019	0.0020
	July		0.00010	0.00090	0.096	0.0067	0.0098	0.0049	0.000068	1.3	0.029	2.4	0.0068	0.000070	0.00024	0.0029
	August		0.00013	0.0012	0.11	0.0074	0.012	0.0057	0.000082	1.5	0.033	2.9	0.0082	0.000085	0.00030	0.0037
	September		0.00013	0.0013	0.11	0.0068	0.012	0.0054	0.000081	1.4	0.030	2.9	0.0081	0.000083	0.00030	0.0039
	October		0.00013	0.0013	0.098	0.0062	0.012	0.0051	0.000077	1.3	0.028	2.8	0.0078	0.000079	0.00028	0.0039
	November		0.00012	0.0013	0.091	0.0056	0.011	0.0047	0.000072	1.2	0.026	2.6	0.0073	0.000074	0.00027	0.0037
	December		0.00012	0.0012	0.089	0.0055	0.012	0.0046	0.000071	1.1	0.025	2.6	0.0072	0.000073	0.00026	0.0037
	January	2026	0.00012	0.0012	0.085	0.0052	0.012	0.0044	0.000069	1.1	0.024	2.5	0.0069	0.000070	0.00026	0.0036
	February		0.00012	0.0012	0.085	0.0052	0.012	0.0044	0.000069	1.1	0.024	2.5	0.0069	0.000070	0.00026	0.0036
	March		0.00012	0.0012	0.085	0.0052	0.013	0.0044	0.000068	1.1	0.024	2.5	0.0068	0.000070	0.00025	0.0035
	April		0.00010	0.0011	0.073	0.0044	0.0099	0.0038	0.000059	0.92	0.020	2.2	0.0060	0.000061	0.00022	0.0031
	May		0.00014	0.0015	0.098	0.0059	0.014	0.0051	0.000080	1.2	0.027	2.9	0.0081	0.000082	0.00030	0.0043
	June		0.00015	0.0015	0.10	0.0061	0.013	0.0053	0.000084	1.3	0.028	3.1	0.0085	0.000086	0.00032	0.0045
	July		0.00016	0.0017	0.11	0.0067	0.014	0.0059	0.000094	1.4	0.031	3.4	0.0094	0.000096	0.00035	0.0050
	August		0.00014	0.0015	0.097	0.0057	0.011	0.0050	0.000080	1.2	0.027	2.9	0.0081	0.000082	0.00030	0.0043
	September		0.00013	0.0014	0.093	0.0054	0.010	0.0048	0.000077	1.2	0.025	2.8	0.0077	0.000079	0.00029	0.0042
	October		0.00014	0.0015	0.093	0.0054	0.011	0.0048	0.000078	1.2	0.026	2.8	0.0078	0.000079	0.00029	0.0042
	November		0.00014	0.0015	0.098	0.0057	0.012	0.0051	0.000081	1.2	0.027	3.0	0.0082	0.000083	0.00031	0.0044
	December		0.00013	0.0014	0.092	0.0054	0.012	0.0048	0.000077	1.2	0.025	2.8	0.0077	0.000078	0.00029	0.0042
	January	2027	0.00013	0.0014	0.089	0.0052	0.012	0.0046	0.000074	1.1	0.024	2.7	0.0075	0.000076	0.00028	0.0040
	February		0.00011	0.0012	0.078	0.0045	0.010	0.0040	0.000065	0.97	0.021	2.4	0.0065	0.000066	0.00024	0.0035
	March		0.00010	0.0011	0.070	0.0041	0.0092	0.0036	0.000058	0.87	0.019	2.1	0.0059	0.000060	0.00022	0.0032
	April		0.000095	0.0010	0.065	0.0038	0.0085	0.0034	0.000055	0.82	0.018	2.0	0.0055	0.000056	0.00021	0.0030
	May		0.00010	0.0011	0.071	0.0041	0.0089	0.0037	0.000059	0.88	0.019	2.2	0.0059	0.000061	0.00022	0.0032
	June		0.00012	0.0013	0.082	0.0048	0.0098	0.0043	0.000069	1.0	0.022	2.5	0.0069	0.000070	0.00026	0.0037
	July		0.00012	0.0013	0.082	0.0047	0.0088	0.0043	0.000068	1.0	0.022	2.5	0.0069	0.000070	0.00026	0.0037
	August		0.00014	0.0015	0.093	0.0054	0.0097	0.0049	0.000078	1.2	0.026	2.9	0.0079	0.000080	0.00030	0.0043
	September		0.00017	0.0019	0.12	0.0068	0.013	0.0061	0.000098	1.5	0.032	3.6	0.0099	0.00010	0.00037	0.0054
	October		0.00018	0.0020	0.12	0.0072	0.015	0.0065	0.00010	1.6	0.034	3.8	0.011	0.00011	0.00039	0.0057
	November		0.00016	0.0017	0.11	0.0063	0.013	0.0057	0.000092	1.4	0.030	3.4	0.0092	0.000094	0.00035	0.0050
	December		0.00016	0.0017	0.11	0.0063	0.014	0.0057	0.000092	1.4	0.030	3.4	0.0092	0.000094	0.00035	0.0050
	January	2028	0.00016	0.0017	0.11	0.0063	0.015	0.0057	0.000092	1.4	0.030	3.4	0.0092	0.000094	0.00035	0.0050
	February		0.00016	0.0017	0.11	0.0063	0.016	0.0057	0.000092	1.4	0.030	3.4	0.0092	0.000094	0.00035	0.0050
	March		0.00029	0.0017	0.11	0.0071	0.017	0.011	0.00010	1.3	0.030	3.7	0.010	0.0029	0.00038	0.0054
	April		0.00049	0.0015	0.086	0.0075	0.014	0.019	0.00011	1.1	0.026	3.9	0.011	0.0078	0.00039	0.0053
	May		0.00037	0.0013	0.072	0.0058	0.011	0.014	0.000090	0.89	0.021	3.2	0.0092	0.0055	0.00032	0.0045
	June		0.00043	0.0017	0.088	0.0068	0.014	0.017	0.00011	1.1	0.025	3.9	0.011	0.0062	0.00039	0.0055
	July		0.00046	0.0020	0.100	0.0074	0.016	0.017	0.00012	1.2	0.028	4.4	0.012	0.0063	0.00044	0.0063
	August		0.00044	0.0021	0.10	0.0072	0.016	0.016	0.00012	1.2	0.028	4.5	0.012	0.0057	0.00045	0.0066
	September		0.00045	0.0022	0.11	0.0074	0.017	0.016	0.00013	1.3	0.030	4.7	0.013	0.0056	0.00047	0.0070
	October		0.00049	0.0025	0.12	0.0082	0.020	0.018	0.00014	1.4	0.033	5.2	0.014	0.0060	0.00053	0.0079
	November		0.00049	0.0026	0.12	0.0081	0.020	0.018	0.00014	1.4	0.033	5.2	0.015	0.0059	0.00053	0.0079
	December		0.00048	0.0025	0.12	0.0081	0.021	0.018	0.00014	1.4	0.033	5.2	0.014	0.0059	0.00053	0.0079
		MINIMUM	0.000052	0.000073	0.065	0.0038	0.0043	0.0033	0.000040	0.82	0.018	1.3	0.0040	0.000042	0.00013	0.00080
		MAXIMUM	0.00049	0.0026	0.12	0.0082	0.021	0.019	0.00014	1.6	0.034	5.2	0.015	0.0078	0.00053	0.0079
		AVERAGE	0.00019	0.0014	0.094	0.0061	0.012	0.0072	0.000082	1.2	0.027	3.0	0.0083	0.0013	0.00030	0.0042
Operations	January	2029	0.00048	0.0025	0.12	0.0081	0.022	0.018	0.00014	1.4	0.033	5.2	0.014	0.0059	0.00053	0.0079
	February		0.00048	0.0025	0.12	0.0081	0.023	0.018	0.00014	1.4	0.033	5.2	0.014	0.0059	0.00053	0.0079
	March		0.00042	0.0023	0.11	0.0071	0.020	0.015	0.00013	1.3	0.029	4.6	0.013	0.0050	0.00047	0.0070
	April		0.00031	0.0018	0.084	0.0053	0.015	0.011	0.000096	0.98	0.022	3.6	0.0098	0.0035	0.00036	0.0055
	May		0.00030	0.0018	0.085	0.0052	0.015	0.011	0.000096	0.98	0.022	3.5	0.0097	0.0033	0.00036	0.0055
	June		0.00030	0.0019	0.089	0.0054	0.015	0.011	0.000100	1.0	0.023	3.7	0.010	0.0032	0.00038	0.0058
	July		0.00036	0.0024	0.11	0.0065	0.019	0.013	0.00012	1.3	0.029	4.6	0.012	0.0036	0.00046	0.0072
	August		0.00040	0.0028	0.13	0.0072	0.021	0.014	0.00014	1.4	0.032	5.2	0.014	0.0037	0.00053	0.0082
	September		0.00036	0.0026	0.12	0.0065	0.019	0.012	0.00013	1.3	0.030	4.8	0.013	0.0031	0.00049	0.0077
	October		0.00037	0.0028	0.12	0.0069	0.020	0.013	0.00014	1.4	0.032	5.1	0.014	0.0032	0.00052	0.0082
	November		0.00037	0.0028	0.12	0.0069	0.021	0.012	0.00014	1.4	0.032	5.1	0.014	0.0031	0.00052	0.0082
	December		0.00037	0.0028	0.12	0.0068	0.022	0.012	0.00013	1.4	0.032	5.1	0.014	0.0031	0.00052	0.0081

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.00037	0.0028	0.12	0.0068	0.022	0.012	0.00013	1.4	0.032	5.1	0.014	0.0031	0.00052	0.0081
	February		0.00035	0.0027	0.12	0.0064	0.022	0.012	0.00013	1.3	0.030	4.8	0.013	0.0029	0.00049	0.0077
	March		0.00028	0.0022	0.097	0.0053	0.018	0.0094	0.00011	1.1	0.025	3.9	0.011	0.0022	0.00040	0.0064
	April		0.00026	0.0021	0.092	0.0049	0.016	0.0086	0.000099	1.0	0.023	3.7	0.010	0.0020	0.00038	0.0061
	May		0.00026	0.0022	0.095	0.0050	0.017	0.0086	0.00010	1.1	0.024	3.8	0.010	0.0019	0.00039	0.0062
	June		0.00022	0.0019	0.082	0.0042	0.013	0.0070	0.000087	0.91	0.020	3.3	0.0088	0.0014	0.00034	0.0054
	July		0.00020	0.0018	0.078	0.0039	0.012	0.0063	0.000083	0.87	0.019	3.1	0.0083	0.0011	0.00032	0.0052
	August		0.00021	0.0020	0.086	0.0042	0.013	0.0065	0.000090	0.94	0.021	3.4	0.0091	0.0011	0.00035	0.0057
	September		0.00019	0.0019	0.078	0.0038	0.011	0.0057	0.000082	0.86	0.019	3.1	0.0082	0.00082	0.00032	0.0052
	October		0.00018	0.0019	0.079	0.0038	0.011	0.0056	0.000082	0.87	0.019	3.1	0.0083	0.00077	0.00032	0.0052
	November		0.00017	0.0017	0.072	0.0034	0.011	0.0050	0.000075	0.79	0.018	2.9	0.0075	0.00066	0.00029	0.0048
	December		0.00015	0.0016	0.066	0.0031	0.010	0.0046	0.000069	0.73	0.016	2.6	0.0069	0.00059	0.00027	0.0044
	January	2031	0.00014	0.0015	0.063	0.0029	0.0100	0.0043	0.000065	0.69	0.015	2.5	0.0065	0.00054	0.00025	0.0042
	February		0.00014	0.0015	0.062	0.0029	0.010	0.0043	0.000065	0.68	0.015	2.5	0.0065	0.00053	0.00025	0.0041
	March		0.00013	0.0014	0.057	0.0027	0.0096	0.0039	0.000060	0.63	0.014	2.3	0.0060	0.00047	0.00023	0.0038
	April		0.00011	0.0012	0.050	0.0023	0.0080	0.0033	0.000052	0.55	0.012	2.0	0.0052	0.00036	0.00020	0.0034
	May		0.00011	0.0013	0.052	0.0024	0.0079	0.0034	0.000054	0.57	0.013	2.1	0.0054	0.00032	0.00021	0.0035
	June		0.00014	0.0016	0.065	0.0030	0.0096	0.0041	0.000067	0.70	0.016	2.5	0.0067	0.00036	0.00026	0.0043
	July		0.00017	0.0019	0.080	0.0036	0.012	0.0049	0.000083	0.87	0.019	3.2	0.0083	0.00040	0.00032	0.0053
	August		0.00020	0.0023	0.095	0.0043	0.014	0.0058	0.000098	1.0	0.023	3.7	0.0098	0.00042	0.00038	0.0063
	September		0.00020	0.0023	0.096	0.0043	0.014	0.0058	0.000099	1.0	0.023	3.8	0.0099	0.00038	0.00039	0.0064
	October		0.00019	0.0023	0.093	0.0042	0.014	0.0055	0.000095	1.0	0.022	3.6	0.0096	0.00035	0.00037	0.0062
	November		0.00018	0.0021	0.085	0.0038	0.013	0.0051	0.000088	0.93	0.021	3.3	0.0088	0.00031	0.00034	0.0057
	December		0.00017	0.0020	0.083	0.0037	0.013	0.0049	0.000085	0.90	0.020	3.3	0.0085	0.00030	0.00033	0.0056
	January	2032	0.00016	0.0019	0.078	0.0035	0.013	0.0046	0.000080	0.85	0.019	3.1	0.0080	0.00028	0.00031	0.0052
	February		0.00016	0.0019	0.077	0.0034	0.013	0.0046	0.000079	0.84	0.019	3.0	0.0079	0.00027	0.00031	0.0052
	March		0.00012	0.0014	0.058	0.0026	0.0093	0.0034	0.000060	0.63	0.014	2.3	0.0060	0.00019	0.00023	0.0039
	April		0.00012	0.0014	0.056	0.0025	0.0090	0.0033	0.000058	0.61	0.014	2.2	0.0058	0.00017	0.00023	0.0038
	May		0.00012	0.0014	0.059	0.0026	0.0091	0.0034	0.000060	0.63	0.014	2.3	0.0060	0.00016	0.00024	0.0039
	June		0.00015	0.0017	0.071	0.0032	0.011	0.0041	0.000073	0.77	0.017	2.8	0.0073	0.00018	0.00029	0.0048
	July		0.00014	0.0017	0.071	0.0031	0.010	0.0040	0.000073	0.77	0.017	2.8	0.0073	0.00017	0.00029	0.0048
	August		0.00016	0.0019	0.079	0.0035	0.011	0.0044	0.000080	0.85	0.019	3.1	0.0081	0.00017	0.00032	0.0053
	September		0.00019	0.0023	0.092	0.0041	0.013	0.0052	0.000094	1.00	0.022	3.6	0.0094	0.00019	0.00037	0.0062
	October		0.00020	0.0024	0.100	0.0044	0.015	0.0056	0.00010	1.1	0.024	3.9	0.010	0.00020	0.00040	0.0067
	November		0.00020	0.0024	0.098	0.0043	0.015	0.0055	0.00010	1.1	0.023	3.8	0.010	0.00019	0.00039	0.0066
	December		0.00019	0.0024	0.097	0.0042	0.016	0.0054	0.000099	1.0	0.023	3.8	0.0099	0.00019	0.00039	0.0065
	January	2033	0.00017	0.0020	0.083	0.0036	0.014	0.0046	0.000085	0.90	0.020	3.2	0.0085	0.00016	0.00033	0.0055
	February		0.00016	0.0019	0.079	0.0034	0.013	0.0044	0.000080	0.85	0.019	3.1	0.0080	0.00015	0.00031	0.0053
	March		0.00015	0.0018	0.075	0.0033	0.013	0.0042	0.000076	0.81	0.018	2.9	0.0076	0.00014	0.00030	0.0050
	April		0.00012	0.0015	0.060	0.0026	0.0097	0.0034	0.000061	0.65	0.014	2.4	0.0062	0.00010	0.00024	0.0040
	May		0.00014	0.0017	0.069	0.0030	0.011	0.0038	0.000070	0.75	0.017	2.7	0.0071	0.00012	0.00028	0.0046
	June		0.00015	0.0019	0.078	0.0034	0.012	0.0043	0.000079	0.84	0.019	3.0	0.0079	0.00012	0.00031	0.0052
	July		0.00019	0.0024	0.097	0.0042	0.015	0.0054	0.000099	1.1	0.023	3.8	0.0099	0.00015	0.00039	0.0065
	August		0.00021	0.0026	0.11	0.0047	0.016	0.0059	0.00011	1.2	0.026	4.2	0.011	0.00016	0.00043	0.0072
	September		0.00022	0.0027	0.11	0.0049	0.017	0.0062	0.00011	1.2	0.027	4.4	0.011	0.00016	0.00045	0.0075
	October		0.00022	0.0028	0.11	0.0049	0.017	0.0062	0.00011	1.2	0.027	4.4	0.012	0.00016	0.00045	0.0075
	November		0.00020	0.0024	0.099	0.0043	0.016	0.0055	0.00010	1.1	0.024	3.9	0.010	0.00014	0.00040	0.0067
	December		0.00019	0.0023	0.096	0.0042	0.016	0.0053	0.000098	1.0	0.023	3.7	0.0098	0.00013	0.00038	0.0064
	January	2034	0.00019	0.0023	0.096	0.0042	0.016	0.0053	0.000097	1.0	0.023	3.7	0.0097	0.00013	0.00038	0.0064
	February		0.00019	0.0023	0.095	0.0041	0.017	0.0052	0.000096	1.0	0.023	3.7	0.0096	0.00013	0.00038	0.0063
	March		0.00015	0.0019	0.078	0.0034	0.013	0.0043	0.000079	0.84	0.019	3.0	0.0079	0.00011	0.00031	0.0052
	April		0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000084	0.00026	0.0043
	May		0.00014	0.0018	0.073	0.0032	0.012	0.0040	0.000074	0.79	0.017	2.8	0.0074	0.000095	0.00029	0.0049
	June		0.00011	0.0014	0.057	0.0025	0.0080	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000070	0.00023	0.0038
	July		0.00011	0.0013	0.054	0.0024	0.0068	0.0030	0.000055	0.58	0.013	2.1	0.0055	0.000063	0.00022	0.0036
	August		0.00012	0.0015	0.062	0.0027	0.0077	0.0034	0.000063	0.67	0.015	2.4	0.0064	0.000071	0.00025	0.0042
	September		0.00012	0.0015	0.063	0.0027	0.0076	0.0034	0.000064	0.68	0.015	2.4	0.0064	0.000070	0.00025	0.0042
	October		0.00014	0.0017	0.071	0.0031	0.0093	0.0039	0.000072	0.76	0.017	2.8	0.0072	0.000078	0.00028	0.0047
	November		0.00012	0.0015	0.062	0.0027	0.0084	0.0034	0.000063	0.67	0.015	2.4	0.0064	0.000069	0.00025	0.0042
	December		0.00011	0.0014	0.055	0.0024	0.0077	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000060	0.00022	0.0037
	January	2035	0.00011	0.0013	0.054	0.0023	0.0080	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000059	0.00022	0.0036
	February		0.000099	0.0012	0.051	0.0022	0.0077	0.0028	0.000051	0.55	0.012	2.0	0.0052	0.000055	0.00020	0.0034
	March		0.000099	0.0012	0.051	0.0022	0.0081	0.0028	0.000051	0.55	0.012	2.0	0.0052	0.000055	0.00020	0.0034

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.000093	0.0012	0.047	0.0021	0.0075	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000051	0.00019	0.0032
	May		0.00010	0.0013	0.052	0.0023	0.0082	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000056	0.00021	0.0035
	June		0.00011	0.0014	0.055	0.0024	0.0081	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000059	0.00022	0.0037
	July		0.00012	0.0015	0.063	0.0027	0.0087	0.0034	0.000064	0.68	0.015	2.5	0.0064	0.000067	0.00025	0.0042
	August		0.00016	0.0019	0.079	0.0034	0.011	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000084	0.00032	0.0053
	September		0.00017	0.0021	0.087	0.0038	0.012	0.0047	0.000089	0.94	0.021	3.4	0.0089	0.000091	0.00035	0.0058
	October		0.00017	0.0022	0.089	0.0039	0.013	0.0048	0.000090	0.96	0.021	3.5	0.0090	0.000093	0.00036	0.0059
	November		0.00017	0.0021	0.087	0.0038	0.013	0.0047	0.000088	0.93	0.021	3.4	0.0088	0.000091	0.00035	0.0058
	December		0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000086	0.92	0.020	3.3	0.0087	0.000089	0.00034	0.0057
	January	2036	0.00017	0.0021	0.085	0.0037	0.014	0.0046	0.000086	0.92	0.020	3.3	0.0086	0.000089	0.00034	0.0057
	February		0.00017	0.0021	0.085	0.0037	0.015	0.0046	0.000086	0.91	0.020	3.3	0.0086	0.000089	0.00034	0.0057
	March		0.00013	0.0016	0.066	0.0029	0.011	0.0036	0.000067	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0044
	April		0.00011	0.0013	0.054	0.0023	0.0083	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	May		0.00011	0.0014	0.057	0.0025	0.0087	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000060	0.00023	0.0038
	June		0.00014	0.0017	0.071	0.0031	0.011	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000073	0.00028	0.0047
	July		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000084	0.00032	0.0054
	August		0.00021	0.0026	0.11	0.0046	0.016	0.0058	0.00011	1.1	0.025	4.1	0.011	0.00011	0.00042	0.0071
	September		0.00022	0.0028	0.11	0.0049	0.017	0.0062	0.00012	1.2	0.027	4.4	0.012	0.00012	0.00046	0.0076
	October		0.00021	0.0026	0.10	0.0046	0.016	0.0057	0.00011	1.1	0.025	4.1	0.011	0.00011	0.00042	0.0070
	November		0.00019	0.0023	0.096	0.0042	0.015	0.0052	0.000098	1.0	0.023	3.7	0.0098	0.000099	0.00038	0.0064
	December		0.00018	0.0022	0.091	0.0040	0.015	0.0049	0.000093	0.98	0.022	3.6	0.0093	0.000094	0.00036	0.0061
	January	2037	0.00018	0.0022	0.090	0.0039	0.015	0.0049	0.000092	0.97	0.022	3.5	0.0092	0.000093	0.00036	0.0060
	February		0.00014	0.0017	0.070	0.0030	0.011	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	March		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000067	0.00026	0.0043
	April		0.00013	0.0016	0.064	0.0028	0.011	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	May		0.00015	0.0019	0.077	0.0033	0.013	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0051
	June		0.00014	0.0018	0.072	0.0031	0.011	0.0039	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	July		0.00013	0.0017	0.068	0.0029	0.0096	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000070	0.00027	0.0045
	August		0.00017	0.0021	0.087	0.0038	0.012	0.0047	0.000089	0.94	0.021	3.4	0.0089	0.000090	0.00035	0.0058
	September		0.00016	0.0020	0.083	0.0036	0.011	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
	October		0.00017	0.0022	0.089	0.0039	0.013	0.0048	0.000091	0.96	0.021	3.5	0.0091	0.000091	0.00036	0.0060
	November		0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000086	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	December		0.00016	0.0020	0.081	0.0035	0.013	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	January	2038	0.00016	0.0020	0.081	0.0035	0.013	0.0044	0.000082	0.87	0.019	3.2	0.0082	0.000083	0.00032	0.0054
	February		0.00015	0.0019	0.077	0.0033	0.013	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0051
	March		0.00011	0.0014	0.058	0.0025	0.0091	0.0031	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	April		0.00011	0.0014	0.055	0.0024	0.0087	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000057	0.00022	0.0037
	May		0.00012	0.0015	0.060	0.0026	0.0094	0.0033	0.000061	0.65	0.014	2.4	0.0061	0.000062	0.00024	0.0040
	June		0.00014	0.0017	0.069	0.0030	0.011	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	July		0.00016	0.0020	0.080	0.0035	0.012	0.0043	0.000081	0.86	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	August		0.00019	0.0024	0.099	0.0043	0.015	0.0054	0.00010	1.1	0.024	3.9	0.010	0.00010	0.00040	0.0066
	September		0.00020	0.0024	0.099	0.0043	0.015	0.0054	0.00010	1.1	0.024	3.9	0.010	0.00010	0.00040	0.0067
	October		0.00016	0.0020	0.083	0.0036	0.012	0.0045	0.000085	0.90	0.020	3.3	0.0085	0.000085	0.00033	0.0056
	November		0.00016	0.0020	0.082	0.0036	0.012	0.0044	0.000083	0.88	0.020	3.2	0.0083	0.000084	0.00033	0.0055
	December		0.00015	0.0019	0.078	0.0034	0.012	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	January	2039	0.00015	0.0019	0.078	0.0034	0.013	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	February		0.00014	0.0018	0.073	0.0032	0.012	0.0040	0.000074	0.79	0.017	2.8	0.0074	0.000075	0.00029	0.0049
	March		0.00014	0.0017	0.069	0.0030	0.012	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046
	April		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	May		0.00016	0.0019	0.079	0.0035	0.013	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000081	0.00032	0.0053
	June		0.00020	0.0025	0.10	0.0044	0.017	0.0055	0.00010	1.1	0.024	3.9	0.010	0.00010	0.00041	0.0068
	July		0.00021	0.0026	0.11	0.0046	0.017	0.0058	0.00011	1.1	0.025	4.2	0.011	0.00011	0.00043	0.0071
	August		0.00016	0.0020	0.082	0.0035	0.012	0.0044	0.000083	0.88	0.020	3.2	0.0083	0.000084	0.00033	0.0055
	September		0.00017	0.0021	0.087	0.0038	0.013	0.0047	0.000088	0.94	0.021	3.4	0.0088	0.000089	0.00035	0.0058
	October		0.00016	0.0020	0.082	0.0036	0.012	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	November		0.00015	0.0018	0.075	0.0033	0.012	0.0041	0.000077	0.81	0.018	2.9	0.0077	0.000077	0.00030	0.0050
	December		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000074	0.78	0.017	2.8	0.0074	0.000074	0.00029	0.0048
	January	2040	0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	February		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	March		0.00010	0.0013	0.053	0.0023	0.0083	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	April		0.000098	0.0012	0.050	0.0022	0.0077	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	May		0.00010	0.0013	0.052	0.0023	0.0077	0.0028	0.000053	0.57	0.013	2.0	0.0053	0.000054	0.00021	0.0035
	June		0.00011	0.0014	0.055	0.0024	0.0076	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000057	0.00022	0.0037

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.00011	0.0014	0.055	0.0024	0.0069	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000057	0.00022	0.0037
	August		0.00015	0.0019	0.077	0.0033	0.010	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000078	0.00031	0.0051
	September		0.00016	0.0020	0.081	0.0035	0.011	0.0044	0.000082	0.87	0.019	3.2	0.0082	0.000083	0.00032	0.0054
	October		0.00016	0.0020	0.081	0.0035	0.011	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0055
	November		0.00016	0.0020	0.083	0.0036	0.012	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
	December		0.00016	0.0020	0.080	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	January	2041	0.00015	0.0019	0.077	0.0033	0.012	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0051
	February		0.00015	0.0019	0.076	0.0033	0.013	0.0041	0.000077	0.82	0.018	3.0	0.0077	0.000078	0.00030	0.0051
	March		0.00014	0.0017	0.069	0.0030	0.012	0.0038	0.000070	0.75	0.017	2.7	0.0070	0.000071	0.00028	0.0046
	April		0.00011	0.0014	0.056	0.0024	0.0088	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	May		0.00013	0.0016	0.065	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00016	0.0020	0.080	0.0035	0.013	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	July		0.00017	0.0021	0.085	0.0037	0.013	0.0046	0.000087	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	August		0.00011	0.0014	0.058	0.0025	0.0075	0.0032	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	September		0.00011	0.0014	0.056	0.0025	0.0070	0.0031	0.000058	0.61	0.013	2.2	0.0058	0.000058	0.00023	0.0038
	October		0.00012	0.0015	0.061	0.0026	0.0079	0.0033	0.000062	0.66	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	November		0.00012	0.0014	0.058	0.0025	0.0080	0.0032	0.000060	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
	December		0.00011	0.0014	0.057	0.0025	0.0084	0.0031	0.000058	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0038
	January	2042	0.00011	0.0014	0.057	0.0025	0.0090	0.0031	0.000058	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0038
	February		0.00011	0.0014	0.057	0.0025	0.0094	0.0031	0.000059	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0039
	March		0.00010	0.0013	0.053	0.0023	0.0088	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	April		0.000088	0.0011	0.045	0.0019	0.0068	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	May		0.000093	0.0012	0.048	0.0021	0.0071	0.0026	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	June		0.000095	0.0012	0.048	0.0021	0.0066	0.0026	0.000049	0.52	0.012	1.9	0.0049	0.000049	0.00019	0.0032
	July		0.000098	0.0012	0.050	0.0022	0.0061	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0034
	August		0.00010	0.0013	0.053	0.0023	0.0061	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	September		0.00011	0.0014	0.055	0.0024	0.0065	0.0030	0.000056	0.60	0.013	2.2	0.0056	0.000057	0.00022	0.0037
	October		0.000097	0.0012	0.049	0.0021	0.0057	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000096	0.0012	0.049	0.0021	0.0062	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	December		0.000096	0.0012	0.049	0.0021	0.0068	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	January	2043	0.000096	0.0012	0.049	0.0021	0.0073	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	February		0.000096	0.0012	0.049	0.0021	0.0077	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	March		0.000095	0.0012	0.048	0.0021	0.0079	0.0026	0.000049	0.52	0.012	1.9	0.0049	0.000049	0.00019	0.0032
	April		0.000079	0.00099	0.040	0.0017	0.0059	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000089	0.0011	0.045	0.0020	0.0065	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	June		0.000093	0.0012	0.047	0.0020	0.0062	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	July		0.00011	0.0013	0.054	0.0023	0.0067	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00021	0.0036
	August		0.00010	0.0013	0.053	0.0023	0.0062	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	September		0.000096	0.0012	0.049	0.0021	0.0055	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	October		0.000086	0.0011	0.044	0.0019	0.0049	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	November		0.000082	0.0010	0.042	0.0018	0.0050	0.0023	0.000042	0.45	0.0099	1.6	0.0042	0.000043	0.00017	0.0028
	December		0.000080	0.00100	0.041	0.0018	0.0053	0.0022	0.000041	0.44	0.0097	1.6	0.0042	0.000042	0.00016	0.0027
	January	2044	0.000079	0.00099	0.040	0.0018	0.0057	0.0022	0.000041	0.44	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	February		0.000079	0.00098	0.040	0.0017	0.0060	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	March		0.000077	0.00096	0.039	0.0017	0.0061	0.0021	0.000040	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	April		0.000078	0.00097	0.039	0.0017	0.0058	0.0021	0.000040	0.43	0.0094	1.5	0.0040	0.000040	0.00016	0.0026
	May		0.000093	0.0012	0.047	0.0021	0.0068	0.0026	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	June		0.00012	0.0014	0.059	0.0026	0.0084	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000061	0.00024	0.0040
	July		0.00013	0.0016	0.064	0.0028	0.0086	0.0035	0.000066	0.69	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	August		0.00017	0.0022	0.088	0.0038	0.012	0.0048	0.000090	0.96	0.021	3.5	0.0090	0.000091	0.00035	0.0059
	September		0.00020	0.0025	0.10	0.0044	0.014	0.0056	0.00010	1.1	0.024	4.0	0.010	0.00010	0.00041	0.0069
	October		0.00021	0.0027	0.11	0.0047	0.016	0.0059	0.00011	1.2	0.026	4.2	0.011	0.00011	0.00044	0.0073
	November		0.00022	0.0027	0.11	0.0048	0.017	0.0060	0.00011	1.2	0.026	4.3	0.011	0.00011	0.00044	0.0074
	December		0.00020	0.0025	0.10	0.0044	0.016	0.0055	0.00010	1.1	0.024	4.0	0.010	0.00010	0.00041	0.0068
	January	2045	0.00019	0.0024	0.097	0.0042	0.016	0.0053	0.000099	1.0	0.023	3.8	0.0099	0.000100	0.00039	0.0065
	February		0.00019	0.0023	0.095	0.0041	0.016	0.0052	0.000097	1.0	0.023	3.7	0.0097	0.000097	0.00038	0.0064
	March		0.00018	0.0022	0.090	0.0039	0.015	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	April		0.00016	0.0020	0.081	0.0035	0.014	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	May		0.00015	0.0019	0.077	0.0034	0.013	0.0042	0.000079	0.84	0.019	3.0	0.0079	0.000079	0.00031	0.0052
	June		0.00015	0.0019	0.077	0.0034	0.012	0.0042	0.000079	0.84	0.018	3.0	0.0079	0.000079	0.00031	0.0052
	July		0.00016	0.0020	0.082	0.0036	0.012	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	August		0.00019	0.0023	0.094	0.0041	0.014	0.0051	0.000096	1.0	0.022	3.7	0.0096	0.000096	0.00038	0.0063
	September		0.00021	0.0027	0.11	0.0047	0.016	0.0059	0.00011	1.2	0.026	4.2	0.011	0.00011	0.00043	0.0073

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.00023	0.0028	0.12	0.0050	0.018	0.0063	0.00012	1.2	0.027	4.5	0.012	0.00012	0.00046	0.0077
	November		0.00023	0.0028	0.11	0.0050	0.018	0.0062	0.00012	1.2	0.027	4.5	0.012	0.00012	0.00046	0.0077
	December		0.00022	0.0027	0.11	0.0048	0.018	0.0060	0.00011	1.2	0.026	4.3	0.011	0.00011	0.00044	0.0074
	January	2046	0.00018	0.0023	0.094	0.0041	0.016	0.0051	0.000096	1.0	0.022	3.7	0.0096	0.000096	0.00038	0.0063
	February		0.00018	0.0022	0.089	0.0039	0.015	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	March		0.00016	0.0020	0.083	0.0036	0.014	0.0045	0.000085	0.90	0.020	3.2	0.0085	0.000085	0.00033	0.0056
	April		0.00016	0.0020	0.081	0.0035	0.014	0.0044	0.000082	0.87	0.019	3.2	0.0082	0.000083	0.00032	0.0054
	May		0.00015	0.0019	0.078	0.0034	0.013	0.0042	0.000079	0.84	0.019	3.0	0.0079	0.000080	0.00031	0.0052
	June		0.00015	0.0019	0.077	0.0034	0.012	0.0042	0.000079	0.84	0.018	3.0	0.0079	0.000079	0.00031	0.0052
	July		0.00015	0.0018	0.075	0.0033	0.011	0.0041	0.000077	0.81	0.018	2.9	0.0077	0.000077	0.00030	0.0050
	August		0.00014	0.0018	0.073	0.0032	0.010	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	September		0.00014	0.0017	0.070	0.0031	0.0097	0.0038	0.000072	0.76	0.017	2.7	0.0072	0.000072	0.00028	0.0047
	October		0.00013	0.0016	0.065	0.0028	0.0090	0.0035	0.000066	0.70	0.016	2.5	0.0067	0.000067	0.00026	0.0044
	November		0.00012	0.0015	0.063	0.0027	0.0089	0.0034	0.000064	0.68	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	December		0.00012	0.0015	0.062	0.0027	0.0093	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	January	2047	0.00012	0.0015	0.061	0.0027	0.0097	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00024	0.0041
	February		0.00012	0.0015	0.061	0.0026	0.010	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000062	0.00024	0.0041
	March		0.00010	0.0013	0.052	0.0023	0.0083	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	April		0.000097	0.0012	0.049	0.0021	0.0077	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	May		0.00010	0.0013	0.052	0.0022	0.0078	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	June		0.00012	0.0015	0.062	0.0027	0.0089	0.0033	0.000063	0.66	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	July		0.00013	0.0016	0.066	0.0029	0.0091	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	August		0.00013	0.0016	0.066	0.0029	0.0086	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0044
	September		0.00014	0.0018	0.074	0.0032	0.0097	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	October		0.00016	0.0020	0.080	0.0035	0.011	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	November		0.00015	0.0019	0.079	0.0034	0.011	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00031	0.0053
	December		0.00015	0.0019	0.076	0.0033	0.012	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000078	0.00031	0.0051
	January	2048	0.00014	0.0018	0.074	0.0032	0.012	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	February		0.00014	0.0017	0.071	0.0031	0.012	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	March		0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	April		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	May		0.00013	0.0016	0.065	0.0028	0.011	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	June		0.00015	0.0019	0.078	0.0034	0.013	0.0042	0.000079	0.84	0.019	3.0	0.0079	0.000080	0.00031	0.0052
	July		0.00013	0.0016	0.067	0.0029	0.0098	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	August		0.00011	0.0014	0.056	0.0025	0.0073	0.0031	0.000058	0.61	0.013	2.2	0.0058	0.000058	0.00023	0.0038
	September		0.00011	0.0013	0.054	0.0023	0.0067	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	October		0.00011	0.0013	0.054	0.0023	0.0069	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	November		0.00010	0.0013	0.051	0.0022	0.0069	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	December		0.000094	0.0012	0.048	0.0021	0.0067	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	January	2049	0.000092	0.0011	0.047	0.0020	0.0069	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	February		0.000092	0.0011	0.047	0.0020	0.0073	0.0025	0.000048	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	March		0.000089	0.0011	0.045	0.0020	0.0072	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	April		0.000087	0.0011	0.044	0.0019	0.0069	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	May		0.000094	0.0012	0.048	0.0021	0.0071	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	June		0.000099	0.0012	0.050	0.0022	0.0069	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	July		0.000097	0.0012	0.049	0.0021	0.0061	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	August		0.00010	0.0013	0.053	0.0023	0.0062	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	September		0.000100	0.0012	0.051	0.0022	0.0058	0.0027	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	October		0.000092	0.0011	0.047	0.0020	0.0053	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	November		0.000084	0.0011	0.043	0.0019	0.0051	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	December		0.000085	0.0011	0.043	0.0019	0.0057	0.0023	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	January	2050	0.000085	0.0011	0.043	0.0019	0.0062	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	February		0.000085	0.0011	0.043	0.0019	0.0066	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	March		0.000079	0.00098	0.040	0.0017	0.0061	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	April		0.000073	0.00091	0.037	0.0016	0.0052	0.0020	0.000038	0.40	0.0088	1.4	0.0038	0.000038	0.00015	0.0025
	May		0.000077	0.00096	0.039	0.0017	0.0054	0.0021	0.000040	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	June		0.000084	0.0011	0.043	0.0019	0.0055	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	July		0.00012	0.0015	0.061	0.0026	0.0081	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000062	0.00024	0.0041
	August		0.00014	0.0018	0.073	0.0032	0.0097	0.0040	0.000074	0.79	0.017	2.8	0.0074	0.000075	0.00029	0.0049
	September		0.00014	0.0017	0.070	0.0030	0.0092	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	October		0.00014	0.0017	0.071	0.0031	0.0096	0.0038	0.000072	0.77	0.017	2.8	0.0072	0.000073	0.00028	0.0047
	November		0.00014	0.0017	0.070	0.0030	0.0100	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	December		0.00014	0.0017	0.069	0.0030	0.011	0.0038	0.000070	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.00014	0.0017	0.069	0.0030	0.011	0.0038	0.000070	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046
	February		0.00013	0.0017	0.068	0.0029	0.011	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	March		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	April		0.000083	0.0010	0.042	0.0018	0.0057	0.0023	0.000043	0.46	0.010	1.7	0.0043	0.000043	0.00017	0.0028
	May		0.000086	0.0011	0.044	0.0019	0.0057	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	June		0.00010	0.0013	0.053	0.0023	0.0068	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	July		0.00011	0.0014	0.058	0.0025	0.0072	0.0031	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	August		0.00011	0.0013	0.055	0.0024	0.0065	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	September		0.00011	0.0014	0.057	0.0025	0.0068	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	October		0.00011	0.0014	0.057	0.0025	0.0070	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	November		0.00011	0.0014	0.058	0.0025	0.0077	0.0032	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	December		0.00011	0.0014	0.056	0.0024	0.0078	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	January	2052	0.00010	0.0013	0.053	0.0023	0.0078	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	February		0.00010	0.0013	0.052	0.0023	0.0081	0.0028	0.000053	0.57	0.013	2.0	0.0053	0.000054	0.00021	0.0035
	March		0.00010	0.0013	0.051	0.0022	0.0082	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	April		0.000094	0.0012	0.048	0.0021	0.0072	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	May		0.000098	0.0012	0.050	0.0022	0.0071	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0033
	June		0.00012	0.0015	0.059	0.0026	0.0083	0.0032	0.000060	0.64	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	July		0.00012	0.0015	0.062	0.0027	0.0082	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	August		0.00013	0.0016	0.065	0.0028	0.0084	0.0035	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	September		0.00015	0.0019	0.078	0.0034	0.010	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	October		0.00017	0.0021	0.086	0.0037	0.012	0.0047	0.000087	0.93	0.020	3.3	0.0087	0.000088	0.00034	0.0057
	November		0.00017	0.0021	0.088	0.0038	0.013	0.0048	0.000089	0.95	0.021	3.4	0.0089	0.000090	0.00035	0.0059
	December		0.00017	0.0021	0.084	0.0037	0.013	0.0046	0.000086	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0056
		MINIMUM	0.000073	0.00091	0.037	0.0016	0.0049	0.0020	0.000038	0.40	0.0088	1.4	0.0038	0.000038	0.00015	0.0025
		MAXIMUM	0.00048	0.0028	0.13	0.0081	0.023	0.018	0.00014	1.4	0.033	5.2	0.014	0.0059	0.00053	0.0082
		AVERAGE	0.00015	0.0017	0.072	0.0032	0.011	0.0043	0.000074	0.78	0.017	2.8	0.0074	0.00031	0.00029	0.0048
Decommissioning	January	2053	0.00015	0.0019	0.077	0.0034	0.012	0.0042	0.000079	0.83	0.018	3.0	0.0079	0.000079	0.00031	0.0052
	February		0.00015	0.0019	0.077	0.0033	0.013	0.0042	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0052
	March		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	April		0.00012	0.0014	0.059	0.0026	0.0094	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000060	0.00024	0.0039
	May		0.00013	0.0016	0.066	0.0029	0.010	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000068	0.00026	0.0044
	June		0.00017	0.0021	0.086	0.0037	0.014	0.0047	0.000087	0.93	0.020	3.3	0.0087	0.000088	0.00034	0.0057
	July		0.00021	0.0026	0.11	0.0046	0.016	0.0057	0.00011	1.1	0.025	4.1	0.011	0.00011	0.00042	0.0070
	August		0.00021	0.0026	0.11	0.0046	0.016	0.0058	0.00011	1.2	0.025	4.2	0.011	0.00011	0.00043	0.0071
	September		0.00016	0.0019	0.079	0.0034	0.011	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00032	0.0053
	October		0.00014	0.0018	0.072	0.0031	0.010	0.0039	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	November		0.00013	0.0017	0.068	0.0030	0.0100	0.0037	0.000069	0.74	0.016	2.7	0.0070	0.000070	0.00027	0.0046
	December		0.00013	0.0016	0.067	0.0029	0.010	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	January	2054	0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	February		0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	March		0.00012	0.0015	0.061	0.0027	0.010	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00024	0.0041
	April		0.00010	0.0013	0.053	0.0023	0.0086	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	May		0.00010	0.0013	0.052	0.0023	0.0080	0.0028	0.000053	0.57	0.013	2.0	0.0053	0.000054	0.00021	0.0035
	June		0.00014	0.0017	0.070	0.0030	0.011	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	July		0.00016	0.0021	0.084	0.0036	0.012	0.0046	0.000085	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0056
	August		0.00015	0.0018	0.074	0.0032	0.010	0.0040	0.000075	0.80	0.018	2.9	0.0075	0.000076	0.00030	0.0049
	September		0.00015	0.0019	0.078	0.0034	0.011	0.0042	0.000080	0.84	0.019	3.1	0.0080	0.000080	0.00031	0.0052
	October		0.00016	0.0020	0.082	0.0035	0.012	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000084	0.00033	0.0055
	November		0.00015	0.0019	0.076	0.0033	0.011	0.0041	0.000077	0.82	0.018	3.0	0.0078	0.000078	0.00030	0.0051
	December		0.00014	0.0018	0.073	0.0032	0.011	0.0040	0.000074	0.79	0.017	2.8	0.0074	0.000075	0.00029	0.0049
	January	2055	0.00014	0.0017	0.071	0.0031	0.011	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000072	0.00028	0.0047
	February		0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.73	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	March		0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.73	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	April		0.00011	0.0013	0.054	0.0023	0.0084	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	May		0.00010	0.0013	0.052	0.0023	0.0078	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000054	0.00021	0.0035
	June		0.00011	0.0013	0.055	0.0024	0.0078	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	July		0.000093	0.0012	0.047	0.0021	0.0057	0.0026	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	August		0.00011	0.0014	0.057	0.0025	0.0068	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	September		0.00012	0.0015	0.062	0.0027	0.0076	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	October		0.00012	0.0016	0.063	0.0028	0.0081	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	November		0.00012	0.0015	0.062	0.0027	0.0083	0.0033	0.000063	0.66	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	December		0.00012	0.0015	0.060	0.0026	0.0087	0.0033	0.000061	0.65	0.014	2.4	0.0061	0.000062	0.00024	0.0040

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.00012	0.0015	0.060	0.0026	0.0093	0.0033	0.000061	0.65	0.014	2.4	0.0061	0.000062	0.00024	0.0040
	February		0.00012	0.0015	0.060	0.0026	0.0098	0.0033	0.000061	0.65	0.014	2.4	0.0061	0.000062	0.00024	0.0040
	March		0.00011	0.0013	0.054	0.0023	0.0085	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	April		0.00011	0.0013	0.055	0.0024	0.0086	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	May		0.00012	0.0015	0.063	0.0027	0.0098	0.0034	0.000064	0.68	0.015	2.5	0.0064	0.000064	0.00025	0.0042
	June		0.00015	0.0018	0.075	0.0032	0.011	0.0041	0.000076	0.81	0.018	2.9	0.0076	0.000076	0.00030	0.0050
	July		0.00015	0.0019	0.078	0.0034	0.011	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000080	0.00031	0.0053
	August		0.00015	0.0019	0.079	0.0034	0.011	0.0043	0.000080	0.85	0.019	3.1	0.0080	0.000081	0.00031	0.0053
	September		0.00013	0.0016	0.065	0.0028	0.0087	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	October		0.00014	0.0017	0.070	0.0030	0.0096	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	November		0.00015	0.0018	0.075	0.0033	0.011	0.0041	0.000076	0.81	0.018	2.9	0.0077	0.000077	0.00030	0.0050
	December		0.00015	0.0018	0.076	0.0033	0.012	0.0041	0.000077	0.82	0.018	2.9	0.0077	0.000077	0.00030	0.0051
	January	2057	0.00015	0.0018	0.076	0.0033	0.012	0.0041	0.000077	0.82	0.018	2.9	0.0077	0.000077	0.00030	0.0051
	February		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000074	0.78	0.017	2.8	0.0074	0.000074	0.00029	0.0048
	March		0.00014	0.0018	0.072	0.0031	0.012	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	April		0.00011	0.0014	0.057	0.0025	0.0092	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	May		0.00014	0.0017	0.070	0.0030	0.011	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	June		0.00017	0.0021	0.086	0.0037	0.014	0.0047	0.000087	0.93	0.020	3.3	0.0087	0.000088	0.00034	0.0057
	July		0.00016	0.0020	0.083	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
	August		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0054
	September		0.00019	0.0023	0.096	0.0041	0.014	0.0052	0.000097	1.0	0.023	3.7	0.0097	0.000098	0.00038	0.0064
	October		0.00022	0.0027	0.11	0.0048	0.017	0.0060	0.00011	1.2	0.026	4.3	0.011	0.00011	0.00044	0.0074
	November		0.00023	0.0028	0.12	0.0050	0.018	0.0063	0.00012	1.2	0.028	4.5	0.012	0.00012	0.00046	0.0077
	December		0.00022	0.0028	0.11	0.0050	0.019	0.0062	0.00012	1.2	0.027	4.5	0.012	0.00012	0.00046	0.0076
		MINIMUM	0.000093	0.0012	0.047	0.0021	0.0057	0.0026	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
		MAXIMUM	0.00023	0.0028	0.12	0.0050	0.019	0.0063	0.00012	1.2	0.028	4.5	0.012	0.00012	0.00046	0.0077
		AVERAGE	0.00014	0.0018	0.072	0.0031	0.011	0.0039	0.000073	0.78	0.017	2.8	0.0074	0.000074	0.00029	0.0048
Reclamation	January	2058	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2059	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2060	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	January	2061	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2062	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2063	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	January	2064	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2065	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2066	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-4: Scenario 5: Climate Change - West Surface Runoff Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August	**2066**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	**January**		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July	**2067**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Post-Closure	**July**	**≥2070**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0036	0.021	0.000089	0.0000046	3.4	0.54	0.00019	0.000047	0.00012	0.081	0.000045	0.012	1.2	0.020	0.0000013
	April		0.0030	0.017	0.000073	0.0000038	2.8	0.44	0.00015	0.000039	0.000096	0.066	0.000037	0.0100	0.95	0.016	0.0000011
	May		0.0028	0.016	0.000068	0.0000035	2.6	0.41	0.00014	0.000036	0.000090	0.062	0.000034	0.0093	0.89	0.015	0.0000010
	June		0.0027	0.016	0.000067	0.0000035	2.5	0.41	0.00014	0.000035	0.000088	0.061	0.000033	0.0091	0.87	0.015	0.00000099
	July		0.0025	0.014	0.000061	0.0000032	2.3	0.37	0.00013	0.000032	0.000080	0.056	0.000031	0.0083	0.80	0.014	0.0000009
	August		0.0024	0.013	0.000058	0.0000030	2.2	0.35	0.00012	0.000031	0.000076	0.053	0.000029	0.0079	0.76	0.013	0.00000086
	September		0.0021	0.012	0.000052	0.0000027	2.0	0.31	0.00011	0.000028	0.000068	0.047	0.000026	0.0070	0.68	0.011	0.00000077
	October		0.0019	0.011	0.000048	0.0000025	1.8	0.29	0.00010	0.000025	0.000063	0.044	0.000024	0.0065	0.63	0.011	0.00000071
	November		0.0018	0.010	0.000045	0.0000023	1.7	0.27	0.000095	0.000024	0.000059	0.041	0.000023	0.0061	0.59	0.0100	0.00000066
	December		0.0018	0.010	0.000045	0.0000023	1.7	0.27	0.000093	0.000024	0.000058	0.040	0.000022	0.0060	0.58	0.0098	0.00000066
	January	2026	0.0018	0.010	0.000044	0.0000022	1.6	0.26	0.000091	0.000023	0.000057	0.040	0.000022	0.0058	0.57	0.0096	0.00000064
	February		0.0018	0.010	0.000044	0.0000022	1.6	0.26	0.000091	0.000023	0.000057	0.040	0.000022	0.0058	0.57	0.0096	0.00000064
	March		0.0012	2.0	0.000029	0.0000015	2.3	0.36	0.000061	0.000015	0.000038	0.026	0.000014	0.0082	0.79	0.0064	0.00000089
	April		0.000093	3.9	0.000025	0.00000035	3.1	0.96	0.0000048	0.0000015	0.0000034	0.0021	0.0000011	0.58	1.1	0.00054	0.0000045
	May		0.0000056	4.4	0.000020	0.00000021	3.3	0.95	0.0000003	0.00000033	0.00000054	0.00012	6.4E-08	0.51	1.2	0.000069	0.0000042
	June		0.0000016	3.3	0.000042	0.00000043	2.6	1.3	7.5E-08	0.00000051	0.0000008	0.000018	9.9E-09	1.1	1.0	0.000060	0.0000074
	July		0.00000093	3.4	0.000053	0.00000055	2.5	1.5	4.3E-08	0.00000056	0.00000099	0.0000023	1.1E-09	1.3	1.0	0.000060	0.0000090
	August		0.0000012	2.7	0.000088	0.00000092	2.0	2.1	5.3E-08	0.00000081	0.0000016	0.0000011	5.8E-10	2.2	0.97	0.000074	0.000014
	September		0.0000012	2.9	0.000062	0.00000064	2.1	1.8	4.4E-08	0.00000076	0.0000011	0.0000011	5.9E-10	1.5	0.90	0.000074	0.000011
	October		0.00000097	3.8	0.000033	0.00000034	2.5	1.3	3.4E-08	0.00000055	0.0000006	0.0000013	6.1E-10	0.81	0.96	0.000062	0.0000066
	November		0.00000043	5.3	0.000011	0.00000011	3.2	0.81	2.5E-08	0.00000022	0.0000002	0.0000016	6.0E-10	0.27	1.1	0.000038	0.0000031
	December		0.0000012	3.7	0.000061	0.00000064	2.5	1.8	4.6E-08	0.00000072	0.0000011	0.0000013	6.5E-10	1.5	1.1	0.000073	0.000010
	January	2027	0.00000059	7.4	0.000026	0.00000027	3.3	1.1	3.3E-08	0.00000034	0.00000049	0.0000017	6.5E-10	0.65	1.2	0.000047	0.0000053
	February		0.00000077	5.4	0.000038	0.00000039	3.1	1.3	3.7E-08	0.00000046	0.00000069	0.0000016	6.5E-10	0.93	1.2	0.000056	0.0000070
	March		0.00000077	5.3	0.000047	0.00000049	3.0	1.4	4.0E-08	0.00000049	0.00000086	0.0000015	6.5E-10	1.2	1.2	0.000056	0.0000082
	April		0.00000072	5.8	0.000034	0.00000036	3.1	1.3	3.5E-08	0.00000043	0.00000063	0.0000015	6.4E-10	0.85	1.2	0.000053	0.0000065
	May		0.00000076	5.7	0.000038	0.00000039	3.0	1.3	3.6E-08	0.00000046	0.00000069	0.0000015	6.4E-10	0.93	1.1	0.000055	0.0000069
	June		0.00000082	5.0	0.000049	0.00000051	2.7	1.5	4.0E-08	0.00000052	0.00000091	0.0000014	6.0E-10	1.2	1.1	0.000057	0.0000085
	July		0.0000010	4.1	0.000077	0.0000008	2.4	1.9	5.0E-08	0.00000071	0.0000014	0.0000012	6.0E-10	1.9	1.1	0.000068	0.000012
	August		0.0000011	3.7	0.000051	0.00000053	2.2	1.6	4.0E-08	0.00000069	0.00000094	0.0000012	6.0E-10	1.3	0.91	0.000070	0.0000091
	September		0.00000092	5.6	0.000030	0.00000031	2.6	1.3	3.3E-08	0.00000052	0.00000055	0.0000014	6.2E-10	0.74	0.99	0.000060	0.0000062
	October		0.00000078	5.3	0.000040	0.00000041	3.0	1.4	3.8E-08	0.00000047	0.00000074	0.0000015	6.5E-10	0.99	1.2	0.000056	0.0000073
	November		0.00000083	5.3	0.000041	0.00000043	3.0	1.4	3.8E-08	0.0000005	0.00000075	0.0000015	6.5E-10	1.0	1.1	0.000058	0.0000075
	December		0.00000058	8.1	0.000024	0.00000025	3.5	1.1	3.3E-08	0.00000033	0.00000045	0.0000017	6.8E-10	0.60	1.3	0.000048	0.0000051
	January	2028	0.00000024	14	0.0000053	5.1E-08	4.1	0.77	2.2E-08	0.00000011	9.5E-08	0.0000017	5.9E-10	0.15	1.4	0.000029	0.0000024
	February		0.00000015	13	0.00000081	4.9E-09	4.4	0.71	1.9E-08	5.3E-08	1.3E-08	0.0000016	5.4E-10	0.028	1.5	0.000024	0.0000018
	March		0.00000018	11	0.0000033	3.0E-08	4.3	1.1	2.2E-08	0.0000033	0.00000017	0.0000016	5.3E-10	0.071	1.5	0.000026	0.0000039
	April		0.0000004	7.7	0.000039	0.00000031	6.2	13	8.2E-08	0.000047	0.0000021	0.0000032	5.8E-10	0.68	2.5	0.000061	0.000051
	May		0.0000006	5.2	0.000044	0.00000033	10	29	0.00000018	0.00018	0.0000065	0.0000043	7.0E-10	0.41	5.7	0.00014	0.00013
	June		0.00000054	7.2	0.000041	0.00000032	9.6	25	0.00000016	0.00015	0.0000057	0.0000039	6.9E-10	0.41	5.4	0.00012	0.00012
	July		0.00000051	5.6	0.000062	0.00000047	12	36	0.00000022	0.00021	0.0000078	0.0000053	7.4E-10	0.66	6.8	0.00015	0.00016
	August		0.00000056	5.4	0.000058	0.00000048	14	41	0.00000026	0.00027	0.0000100	0.0000049	7.9E-10	0.53	8.6	0.00019	**0.00019**
	September		0.0000005	5.4	0.000058	0.00000047	13	39	0.00000024	0.00025	0.0000092	0.0000048	7.4E-10	0.58	8.4	0.00017	0.00018
	October		0.00000039	8.3	0.000035	0.00000032	11	29	0.00000018	0.00020	0.0000072	0.0000033	7.0E-10	0.34	7.3	0.00014	0.00014
	November		0.00000029	9.7	0.000024	0.00000019	8.5	19	0.00000011	0.00011	0.0000039	0.0000029	6.2E-10	0.26	4.7	0.000086	0.000087
	December		0.00000016	11	0.0000036	2.8E-08	5.2	4.7	3.1E-08	0.000014	0.00000051	0.0000017	5.4E-10	0.068	2.2	0.000031	0.000020
		MINIMUM	0.00000015	0.010	0.00000081	4.9E-09	1.6	0.26	1.9E-08	5.3E-08	1.3E-08	0.0000011	5.3E-10	0.0058	0.57	0.000024	0.00000064
		MAXIMUM	0.0038	14	0.000095	0.0000049	14	41	0.00020	0.00027	0.00012	0.086	0.000047	2.2	8.6	0.021	**0.00019**
		AVERAGE	0.00077	4.3	0.000045	0.0000012	4.1	5.7	0.000040	0.000040	0.000026	0.017	0.0000095	0.55	1.9	0.0043	0.000026
Operations	January	2029	0.097	6.2	0.034	0.0000061	426	51	0.00030	0.0033	0.0032	0.021	0.000061	0.14	61	0.012	0.0000099
	February		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000011
	March		0.10	4.9	0.035	0.0000065	456	69	0.00032	0.0035	0.0033	0.022	0.000063	0.37	70	0.012	0.000073
	April		0.089	4.4	0.031	0.0000059	456	72	0.00028	0.0031	0.0029	0.020	0.000056	0.50	65	0.011	0.00011
	May		0.10	5.0	0.035	0.0000065	457	74	0.00031	0.0035	0.0033	0.022	0.000063	0.36	72	0.012	0.000098
	June		0.095	4.7	0.033	0.0000062	457	74	0.00030	0.0033	0.0031	0.021	0.000060	0.44	70	0.011	0.000099
	July		0.10	4.9	0.035	0.0000065	457	76	0.00031	0.0035	0.0033	0.022	0.000063	0.46	73	0.012	0.000094
	August		0.092	4.6	0.032	0.0000060	457	75	0.00029	0.0032	0.0030	0.020	0.000057	0.46	68	0.011	0.00011
	September		0.090	4.5	0.031	0.0000059	456	74	0.00028	0.0032	0.0029	0.020	0.000056	0.49	66	0.011	0.00011
	October		0.11	5.2	0.037	0.0000069	456	76	0.00033	0.0037	0.0035	0.023	0.000067	0.34	78	0.013	0.000080
	November		0.11	5.2	0.037	0.0000068	456	70	0.00034	0.0037	0.0035	0.023	0.000067	0.27	78	0.013	0.000043
	December		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000010

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.11	4.8	0.039	0.0000072	456	55	0.00036	0.0039	0.0037	0.025	0.000072	0.15	66	0.014	0.000013
	February		0.11	4.7	0.039	0.0000072	456	55	0.00035	0.0038	0.0036	0.025	0.000070	0.29	62	0.013	0.000029
	March		0.10	4.2	0.035	0.0000066	456	63	0.00032	0.0035	0.0033	0.022	0.000064	0.32	60	0.012	0.000084
	April		0.11	4.4	0.036	0.0000068	457	63	0.00033	0.0037	0.0034	0.023	0.000066	0.28	61	0.013	0.000081
	May		0.10	4.3	0.035	0.0000067	457	63	0.00032	0.0035	0.0033	0.022	0.000064	0.43	60	0.012	0.000078
	June		0.093	3.9	0.032	0.0000061	457	65	0.00029	0.0033	0.0030	0.020	0.000058	0.50	55	0.011	0.00011
	July		0.093	3.8	0.032	0.0000062	457	68	0.00029	0.0033	0.0030	0.020	0.000058	0.54	55	0.011	0.00013
	August		0.094	3.9	0.032	0.0000062	457	67	0.00029	0.0033	0.0031	0.021	0.000059	0.48	56	0.011	0.00013
	September		0.096	4.0	0.033	0.0000063	457	67	0.00030	0.0034	0.0031	0.021	0.000060	0.43	57	0.012	0.00012
	October		0.096	4.1	0.033	0.0000063	456	64	0.00030	0.0034	0.0031	0.021	0.000060	0.40	58	0.012	0.00010
	November		0.11	4.7	0.039	0.0000073	456	63	0.00035	0.0039	0.0037	0.025	0.000071	0.22	66	0.014	0.000067
	December		0.11	4.7	0.039	0.0000072	456	61	0.00035	0.0039	0.0037	0.025	0.000071	0.25	66	0.013	0.000051
	January	2031	0.12	4.3	0.041	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.20	60	0.014	0.000036
	February		0.12	4.4	0.040	0.0000074	456	52	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000015
	March		0.11	3.9	0.039	0.0000073	456	55	0.00035	0.0039	0.0037	0.025	0.000071	0.29	55	0.014	0.000061
	April		0.11	3.8	0.037	0.0000070	456	58	0.00034	0.0037	0.0035	0.024	0.000067	0.35	55	0.013	0.000079
	May		0.11	3.8	0.038	0.0000071	456	57	0.00034	0.0038	0.0036	0.024	0.000069	0.30	54	0.013	0.000077
	June		0.11	3.8	0.037	0.0000069	457	57	0.00033	0.0037	0.0035	0.023	0.000067	0.35	55	0.013	0.000073
	July		0.11	3.7	0.037	0.0000070	456	57	0.00034	0.0037	0.0035	0.023	0.000067	0.35	53	0.013	0.000086
	August		0.10	3.6	0.036	0.0000068	457	58	0.00033	0.0036	0.0034	0.023	0.000065	0.36	53	0.013	0.000091
	September		0.10	3.5	0.035	0.0000066	457	58	0.00032	0.0036	0.0033	0.022	0.000064	0.38	52	0.012	0.000096
	October		0.11	3.8	0.038	0.0000070	456	57	0.00034	0.0038	0.0036	0.024	0.000068	0.31	55	0.013	0.000074
	November		0.12	4.2	0.041	0.0000076	456	56	0.00037	0.0041	0.0039	0.026	0.000074	0.20	62	0.014	0.000041
	December		0.12	4.3	0.040	0.0000074	456	52	0.00036	0.0040	0.0038	0.026	0.000073	0.18	60	0.014	0.000027
	January	2032	0.12	4.6	0.041	0.0000076	456	54	0.00037	0.0041	0.0039	0.026	0.000075	0.19	61	0.014	0.000035
	February		0.12	4.9	0.040	0.0000074	456	52	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000018
	March		0.10	3.9	0.036	0.0000069	456	58	0.00033	0.0037	0.0034	0.023	0.000066	0.46	50	0.013	0.000096
	April		0.11	4.1	0.038	0.0000072	456	55	0.00035	0.0039	0.0036	0.024	0.000069	0.26	53	0.013	0.000082
	May		0.11	4.1	0.038	0.0000072	456	56	0.00035	0.0038	0.0036	0.024	0.000070	0.31	54	0.013	0.000075
	June		0.11	4.2	0.039	0.0000073	456	55	0.00035	0.0039	0.0037	0.025	0.000071	0.32	54	0.014	0.000067
	July		0.098	3.6	0.034	0.0000065	457	59	0.00031	0.0034	0.0032	0.021	0.000061	0.49	49	0.012	0.00011
	August		0.10	3.8	0.036	0.0000068	456	57	0.00033	0.0036	0.0034	0.023	0.000065	0.32	51	0.012	0.000095
	September		0.12	4.3	0.040	0.0000074	456	56	0.00036	0.0040	0.0038	0.025	0.000072	0.26	55	0.014	0.000073
	October		0.12	4.4	0.040	0.0000075	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.25	57	0.014	0.000054
	November		0.12	4.6	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.19	60	0.014	0.000037
	December		0.12	4.9	0.040	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.17	61	0.014	0.000023
	January	2033	0.11	3.8	0.039	0.0000074	455	55	0.00036	0.0039	0.0037	0.025	0.000071	0.29	53	0.014	0.000075
	February		0.12	4.3	0.041	0.0000075	456	54	0.00037	0.0040	0.0039	0.026	0.000074	0.15	63	0.014	0.000026
	March		0.11	4.2	0.039	0.0000073	456	53	0.00036	0.0039	0.0037	0.025	0.000071	0.24	57	0.014	0.000041
	April		0.10	3.4	0.035	0.0000066	456	56	0.00032	0.0035	0.0033	0.022	0.000063	0.36	50	0.012	0.000092
	May		0.11	3.8	0.039	0.0000074	456	56	0.00036	0.0039	0.0037	0.025	0.000071	0.27	55	0.014	0.000076
	June		0.11	3.5	0.037	0.0000069	456	56	0.00033	0.0037	0.0035	0.023	0.000067	0.34	53	0.013	0.000080
	July		0.12	3.8	0.040	0.0000074	457	55	0.00036	0.0040	0.0037	0.025	0.000072	0.30	54	0.014	0.000070
	August		0.11	3.5	0.037	0.0000070	456	58	0.00033	0.0037	0.0035	0.023	0.000067	0.38	52	0.013	0.000097
	September		0.11	3.6	0.038	0.0000071	456	56	0.00034	0.0038	0.0035	0.024	0.000068	0.33	52	0.013	0.000083
	October		0.11	3.7	0.038	0.0000072	455	55	0.00035	0.0039	0.0036	0.024	0.000070	0.31	53	0.013	0.000076
	November		0.12	3.8	0.040	0.0000074	456	55	0.00036	0.0040	0.0037	0.025	0.000072	0.26	56	0.014	0.000063
	December		0.12	4.2	0.041	0.0000076	456	53	0.00037	0.0040	0.0039	0.026	0.000075	0.18	60	0.014	0.000033
	January	2034	0.12	4.5	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	February		0.12	4.4	0.040	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.15	61	0.014	0.000023
	March		0.11	3.6	0.037	0.0000070	456	55	0.00034	0.0037	0.0035	0.024	0.000067	0.33	51	0.013	0.000083
	April		0.11	3.6	0.036	0.0000069	456	56	0.00033	0.0037	0.0034	0.023	0.000066	0.36	52	0.013	0.000082
	May		0.12	4.1	0.041	0.0000076	456	55	0.00037	0.0041	0.0039	0.026	0.000074	0.21	58	0.014	0.000051
	June		0.099	3.3	0.034	0.0000067	456	61	0.00031	0.0035	0.0032	0.022	0.000062	0.74	48	0.012	0.00012
	July		0.096	3.2	0.033	0.0000064	457	63	0.00030	0.0034	0.0031	0.021	0.000060	0.55	48	0.012	0.00013
	August		0.096	3.2	0.033	0.0000064	457	62	0.00030	0.0034	0.0031	0.021	0.000060	0.38	47	0.012	0.00013
	September		0.100	3.3	0.034	0.0000066	456	60	0.00031	0.0035	0.0032	0.022	0.000062	0.40	49	0.012	0.00012
	October		0.11	3.8	0.038	0.0000072	456	57	0.00035	0.0039	0.0036	0.024	0.000069	0.21	55	0.013	0.000093
	November		0.11	3.6	0.037	0.0000070	456	56	0.00033	0.0037	0.0035	0.023	0.000067	0.31	53	0.013	0.000085
	December		0.11	3.8	0.039	0.0000072	456	56	0.00035	0.0039	0.0037	0.025	0.000070	0.24	57	0.013	0.000061
	January	2035	0.12	4.4	0.041	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000025
	February		0.12	4.0	0.040	0.0000075	456	55	0.00036	0.0040	0.0038	0.026	0.000073	0.23	58	0.014	0.000051
	March		0.12	4.4	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000019

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April	2035	0.11	3.8	0.039	0.0000073	456	54	0.00035	0.0039	0.0037	0.025	0.000070	0.28	54	0.013	0.000064
	May		0.11	3.9	0.039	0.0000074	456	55	0.00036	0.0039	0.0037	0.025	0.000071	0.37	56	0.014	0.000056
	June		0.10	3.4	0.035	0.0000067	456	57	0.00032	0.0036	0.0033	0.022	0.000064	0.34	50	0.012	0.000095
	July		0.10	3.4	0.035	0.0000067	457	58	0.00032	0.0036	0.0033	0.022	0.000064	0.35	50	0.012	0.000100
	August		0.11	3.6	0.037	0.0000071	456	59	0.00034	0.0038	0.0035	0.024	0.000068	0.35	53	0.013	0.000098
	September		0.11	3.5	0.037	0.0000070	456	57	0.00033	0.0037	0.0035	0.023	0.000067	0.34	52	0.013	0.000090
	October		0.12	3.8	0.040	0.0000074	456	55	0.00036	0.0040	0.0037	0.025	0.000072	0.27	55	0.014	0.000068
	November		0.12	4.1	0.041	0.0000077	456	54	0.00038	0.0041	0.0039	0.026	0.000075	0.19	61	0.014	0.000036
	December		0.12	4.4	0.041	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000025
	January	2036	0.12	4.5	0.040	0.0000074	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	February		0.12	4.5	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	March		0.10	3.6	0.036	0.0000069	456	58	0.00033	0.0036	0.0034	0.023	0.000065	0.47	51	0.013	0.000092
	April		0.10	3.5	0.036	0.0000068	456	57	0.00032	0.0036	0.0034	0.023	0.000065	0.34	51	0.012	0.000097
	May		0.11	3.8	0.039	0.0000073	457	56	0.00035	0.0039	0.0036	0.025	0.000070	0.26	53	0.013	0.000084
	June		0.11	3.7	0.037	0.0000070	456	56	0.00034	0.0037	0.0035	0.023	0.000067	0.36	52	0.013	0.000081
	July		0.10	3.5	0.036	0.0000068	456	57	0.00033	0.0036	0.0034	0.023	0.000065	0.35	51	0.013	0.000096
	August		0.12	4.0	0.040	0.0000075	457	56	0.00036	0.0040	0.0038	0.026	0.000073	0.28	57	0.014	0.000058
	September		0.11	3.8	0.039	0.0000073	456	56	0.00035	0.0039	0.0036	0.024	0.000070	0.31	54	0.013	0.000078
	October		0.11	3.6	0.037	0.0000070	456	56	0.00034	0.0037	0.0035	0.024	0.000068	0.33	53	0.013	0.000082
	November		0.12	4.1	0.041	0.0000077	456	54	0.00038	0.0041	0.0039	0.026	0.000075	0.20	60	0.014	0.000042
	December		0.12	4.3	0.041	0.0000076	456	54	0.00037	0.0041	0.0039	0.026	0.000075	0.19	60	0.014	0.000035
	January	2037	0.12	4.3	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000019
	February		0.11	3.4	0.037	0.0000069	456	57	0.00033	0.0037	0.0035	0.023	0.000066	0.44	50	0.013	0.000089
	March		0.12	3.7	0.040	0.0000074	456	55	0.00036	0.0040	0.0037	0.025	0.000072	0.23	56	0.014	0.000072
	April		0.12	3.8	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.24	57	0.014	0.000054
	May		0.12	3.8	0.041	0.0000076	456	54	0.00037	0.0041	0.0039	0.026	0.000074	0.24	57	0.014	0.000051
	June		0.097	3.1	0.033	0.0000064	457	59	0.00030	0.0034	0.0032	0.021	0.000061	0.52	49	0.012	0.00010
	July		0.097	3.0	0.034	0.0000065	457	61	0.00030	0.0034	0.0032	0.021	0.000061	0.49	49	0.012	0.00012
	August		0.11	3.3	0.036	0.0000069	456	57	0.00033	0.0037	0.0034	0.023	0.000066	0.30	51	0.013	0.000099
	September		0.10	3.3	0.036	0.0000068	456	57	0.00032	0.0036	0.0034	0.023	0.000065	0.37	50	0.012	0.000099
	October		0.11	3.7	0.039	0.0000074	456	57	0.00036	0.0039	0.0037	0.025	0.000071	0.20	59	0.014	0.000066
Operations	November		0.12	3.9	0.040	0.0000075	456	54	0.00036	0.0040	0.0038	0.025	0.000073	0.24	57	0.014	0.000053
	December		0.12	4.1	0.041	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000022
	January	2038	0.12	4.2	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000021
	February		0.12	4.0	0.041	0.0000076	456	54	0.00037	0.0041	0.0039	0.026	0.000074	0.19	60	0.014	0.000037
	March		0.10	3.2	0.035	0.0000067	456	58	0.00032	0.0036	0.0033	0.022	0.000064	0.45	48	0.012	0.00010
	April		0.11	3.5	0.038	0.0000071	456	56	0.00034	0.0038	0.0036	0.024	0.000069	0.27	53	0.013	0.000087
	May		0.11	3.6	0.039	0.0000074	456	56	0.00036	0.0039	0.0037	0.025	0.000072	0.29	55	0.014	0.000072
	June		0.11	3.5	0.038	0.0000072	456	57	0.00035	0.0038	0.0036	0.024	0.000070	0.34	55	0.013	0.000071
	July		0.10	3.3	0.035	0.0000067	456	58	0.00032	0.0036	0.0033	0.022	0.000064	0.36	51	0.012	0.00010
	August		0.11	3.5	0.039	0.0000073	456	56	0.00035	0.0039	0.0037	0.025	0.000070	0.31	53	0.013	0.000080
	September		0.10	3.3	0.036	0.0000069	456	58	0.00033	0.0036	0.0034	0.023	0.000065	0.45	52	0.013	0.000094
	October		0.11	3.3	0.036	0.0000069	456	58	0.00033	0.0037	0.0034	0.023	0.000066	0.30	51	0.013	0.000097
	November		0.12	3.8	0.041	0.0000076	456	56	0.00037	0.0041	0.0039	0.026	0.000074	0.20	59	0.014	0.000060
	December		0.12	4.0	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.19	60	0.014	0.000040
	January	2039	0.12	4.3	0.040	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000024
	February		0.12	3.9	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.22	58	0.014	0.000052
	March		0.12	3.8	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.24	57	0.014	0.000057
	April		0.11	3.8	0.040	0.0000074	456	55	0.00036	0.0039	0.0037	0.025	0.000072	0.26	55	0.014	0.000063
	May		0.12	3.7	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.26	56	0.014	0.000062
	June		0.12	3.7	0.040	0.0000075	456	56	0.00036	0.0040	0.0038	0.025	0.000073	0.29	57	0.014	0.000058
	July		0.10	3.2	0.035	0.0000066	456	59	0.00031	0.0035	0.0033	0.022	0.000063	0.38	51	0.012	0.00011
	August		0.098	3.0	0.034	0.0000065	457	62	0.00031	0.0035	0.0032	0.021	0.000061	0.55	47	0.012	0.00013
	September		0.11	3.4	0.037	0.0000070	456	56	0.00033	0.0037	0.0035	0.023	0.000066	0.29	51	0.013	0.000095
	October		0.11	3.4	0.037	0.0000071	456	58	0.00034	0.0038	0.0035	0.024	0.000067	0.33	52	0.013	0.000099
	November		0.12	3.7	0.040	0.0000075	456	56	0.00036	0.0040	0.0038	0.025	0.000072	0.24	57	0.014	0.000067
	December		0.12	4.1	0.041	0.0000076	456	54	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000036
	January	2040	0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	February		0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	March		0.10	3.4	0.035	0.0000067	456	60	0.00032	0.0035	0.0033	0.022	0.000063	0.53	49	0.012	0.00011
	April		0.11	3.6	0.037	0.0000069	456	57	0.00033	0.0037	0.0035	0.023	0.000066	0.25	52	0.013	0.000092
	May		0.11	3.6	0.037	0.0000070	456	59	0.00033	0.0037	0.0035	0.023	0.000067	0.39	52	0.013	0.000096
	June		0.100	3.4	0.034	0.0000066	456	59	0.00031	0.0035	0.0032	0.022	0.000062	0.44	50	0.012	0.00011

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.099	3.3	0.034	0.0000066	457	63	0.00031	0.0035	0.0032	0.022	0.000062	0.48	49	0.012	0.00013
	August		0.11	3.8	0.038	0.0000073	457	58	0.00035	0.0039	0.0036	0.024	0.000070	0.22	55	0.013	0.000094
	September		0.12	3.9	0.040	0.0000075	456	56	0.00036	0.0040	0.0037	0.025	0.000072	0.29	55	0.014	0.000075
	October		0.11	3.8	0.039	0.0000073	456	57	0.00035	0.0039	0.0036	0.025	0.000070	0.29	55	0.013	0.000078
	November		0.12	4.2	0.041	0.0000077	456	55	0.00037	0.0041	0.0039	0.026	0.000075	0.19	60	0.014	0.000044
	December		0.12	4.4	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.19	59	0.014	0.000041
	January	2041	0.12	4.4	0.041	0.0000076	456	55	0.00037	0.0040	0.0039	0.026	0.000074	0.15	63	0.014	0.000034
	February		0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000033
	March		0.11	4.0	0.039	0.0000073	456	55	0.00035	0.0038	0.0036	0.025	0.000070	0.38	56	0.013	0.000063
	April		0.10	3.4	0.035	0.0000067	456	57	0.00032	0.0035	0.0033	0.022	0.000063	0.30	49	0.012	0.00010
	May		0.12	4.0	0.040	0.0000076	456	56	0.00037	0.0040	0.0038	0.026	0.000073	0.21	57	0.014	0.000073
	June		0.11	3.7	0.038	0.0000072	456	57	0.00034	0.0038	0.0036	0.024	0.000069	0.33	54	0.013	0.000077
	July		0.10	3.5	0.036	0.0000069	456	59	0.00033	0.0036	0.0034	0.023	0.000065	0.45	51	0.012	0.00010
	August		0.097	3.2	0.033	0.0000066	457	63	0.00030	0.0034	0.0031	0.021	0.000060	0.79	47	0.012	0.00014
	September		0.096	3.2	0.033	0.0000064	457	64	0.00030	0.0034	0.0031	0.021	0.000060	0.30	48	0.012	0.00014
	October		0.10	3.5	0.036	0.0000069	456	58	0.00033	0.0037	0.0034	0.023	0.000066	0.28	51	0.013	0.00011
	November		0.12	3.9	0.040	0.0000076	456	57	0.00036	0.0040	0.0038	0.025	0.000072	0.20	56	0.014	0.000088
	December		0.12	4.4	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.15	63	0.014	0.000031
	January	2042	0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000028
	February		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.11	4.0	0.038	0.0000073	456	54	0.00035	0.0038	0.0036	0.024	0.000070	0.28	55	0.013	0.000063
	April		0.10	3.5	0.036	0.0000069	457	58	0.00032	0.0036	0.0034	0.023	0.000065	0.42	51	0.012	0.000097
	May		0.11	3.8	0.039	0.0000074	456	56	0.00036	0.0039	0.0037	0.025	0.000071	0.20	55	0.014	0.000080
	June		0.097	3.3	0.034	0.0000066	456	60	0.00030	0.0034	0.0032	0.021	0.000061	0.60	49	0.012	0.00012
	July		0.096	3.2	0.033	0.0000065	457	63	0.00030	0.0034	0.0031	0.021	0.000060	0.44	48	0.012	0.00013
	August		0.098	3.2	0.034	0.0000066	457	63	0.00031	0.0035	0.0032	0.021	0.000061	0.48	48	0.012	0.00014
	September		0.10	3.4	0.036	0.0000069	456	59	0.00032	0.0036	0.0034	0.023	0.000064	0.47	50	0.012	0.00012
	October		0.10	3.5	0.036	0.0000070	456	62	0.00033	0.0037	0.0034	0.023	0.000065	0.35	50	0.013	0.00013
	November		0.11	3.9	0.039	0.0000075	456	57	0.00036	0.0040	0.0037	0.025	0.000071	0.18	57	0.014	0.000084
	December		0.12	4.5	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000030
	January	2043	0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.3	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.025	0.000073	0.21	59	0.014	0.000045
	April		0.10	3.4	0.035	0.0000067	456	57	0.00031	0.0035	0.0033	0.022	0.000063	0.42	48	0.012	0.00010
	May		0.11	3.8	0.038	0.0000073	456	56	0.00035	0.0039	0.0036	0.024	0.000070	0.27	53	0.013	0.000091
	June		0.10	3.4	0.035	0.0000067	456	58	0.00032	0.0035	0.0033	0.022	0.000063	0.46	48	0.012	0.00011
	July		0.10	3.4	0.035	0.0000068	456	60	0.00032	0.0035	0.0033	0.022	0.000063	0.47	50	0.012	0.00011
	August		0.096	3.2	0.033	0.0000065	457	63	0.00030	0.0034	0.0031	0.021	0.000060	0.49	48	0.012	0.00014
	September		0.098	3.2	0.034	0.0000066	456	62	0.00031	0.0035	0.0032	0.021	0.000061	0.53	49	0.012	0.00013
	October		0.10	3.3	0.035	0.0000067	456	61	0.00032	0.0036	0.0033	0.022	0.000063	0.37	48	0.012	0.00013
	November		0.11	3.7	0.038	0.0000073	456	56	0.00035	0.0039	0.0036	0.024	0.000069	0.21	54	0.013	0.000095
	December		0.12	4.0	0.041	0.0000078	456	56	0.00037	0.0041	0.0039	0.026	0.000075	0.20	59	0.014	0.000064
	January	2044	0.12	4.4	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000030
	February		0.12	4.4	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.17	61	0.014	0.000037
	March		0.12	4.2	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.025	0.000072	0.23	59	0.014	0.000045
	April		0.11	3.6	0.037	0.0000071	456	56	0.00034	0.0038	0.0035	0.024	0.000068	0.28	52	0.013	0.000088
	May		0.11	3.7	0.038	0.0000073	456	56	0.00035	0.0038	0.0036	0.024	0.000070	0.31	54	0.013	0.000077
	June		0.11	3.7	0.039	0.0000074	457	57	0.00035	0.0039	0.0037	0.025	0.000070	0.30	55	0.013	0.000078
	July		0.10	3.3	0.035	0.0000067	457	59	0.00031	0.0035	0.0033	0.022	0.000063	0.45	48	0.012	0.00011
	August		0.11	3.7	0.038	0.0000073	456	57	0.00035	0.0039	0.0036	0.024	0.000069	0.28	54	0.013	0.000091
	September		0.11	3.8	0.039	0.0000075	456	58	0.00036	0.0039	0.0037	0.025	0.000071	0.30	55	0.014	0.000085
	October		0.12	3.9	0.040	0.0000076	456	56	0.00037	0.0040	0.0038	0.026	0.000073	0.24	57	0.014	0.000066
	November		0.12	4.1	0.040	0.0000076	456	56	0.00037	0.0040	0.0038	0.026	0.000073	0.22	60	0.014	0.000051
	December		0.12	4.1	0.042	0.0000078	456	55	0.00038	0.0041	0.0039	0.026	0.000075	0.20	59	0.014	0.000053
	January	2045	0.12	4.3	0.041	0.0000077	456	55	0.00037	0.0040	0.0039	0.026	0.000074	0.18	60	0.014	0.000042
	February		0.12	4.4	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000030
	March		0.11	4.1	0.039	0.0000074	456	55	0.00035	0.0039	0.0037	0.025	0.000071	0.27	57	0.014	0.000060
	April		0.11	3.7	0.038	0.0000073	456	57	0.00035	0.0038	0.0036	0.024	0.000070	0.27	54	0.013	0.000084
	May		0.10	3.4	0.035	0.0000068	456	57	0.00032	0.0036	0.0033	0.022	0.000064	0.39	50	0.012	0.00010
	June		0.10	3.3	0.035	0.0000067	456	58	0.00032	0.0035	0.0033	0.022	0.000063	0.40	50	0.012	0.00011
	July		0.099	3.3	0.034	0.0000066	456	58	0.00031	0.0035	0.0032	0.022	0.000062	0.37	49	0.012	0.00011
	August		0.11	3.5	0.037	0.0000071	456	59	0.00033	0.0037	0.0035	0.023	0.000067	0.33	52	0.013	0.00010
	September		0.11	3.7	0.038	0.0000073	456	58	0.00035	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.000090

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.12	3.8	0.040	0.0000076	456	56	0.00036	0.0040	0.0038	0.025	0.000072	0.27	56	0.014	0.000072
	November		0.12	4.1	0.042	0.0000078	456	56	0.00038	0.0041	0.0039	0.026	0.000076	0.21	59	0.014	0.000053
	December		0.12	4.3	0.040	0.0000075	456	55	0.00036	0.0040	0.0038	0.026	0.000073	0.20	61	0.014	0.000039
	January	2046	0.11	3.9	0.039	0.0000074	456	56	0.00035	0.0039	0.0037	0.025	0.000071	0.22	57	0.014	0.000068
	February		0.12	4.2	0.041	0.0000078	456	54	0.00037	0.0041	0.0039	0.026	0.000075	0.21	59	0.014	0.000048
	March		0.12	4.0	0.041	0.0000077	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.23	57	0.014	0.000062
	April		0.12	4.1	0.041	0.0000078	456	55	0.00037	0.0041	0.0039	0.026	0.000075	0.24	57	0.014	0.000059
	May		0.10	3.5	0.036	0.0000069	456	57	0.00033	0.0036	0.0034	0.023	0.000065	0.37	51	0.012	0.000096
	June		0.10	3.5	0.036	0.0000070	456	58	0.00033	0.0036	0.0034	0.023	0.000066	0.40	51	0.013	0.000098
	July		0.100	3.3	0.034	0.0000066	457	60	0.00031	0.0035	0.0032	0.022	0.000062	0.44	48	0.012	0.00011
	August		0.10	3.3	0.035	0.0000068	456	61	0.00031	0.0035	0.0033	0.022	0.000063	0.48	49	0.012	0.00013
	September		0.10	3.3	0.035	0.0000067	456	60	0.00031	0.0035	0.0033	0.022	0.000063	0.41	50	0.012	0.00012
	October		0.10	3.5	0.036	0.0000069	455	58	0.00033	0.0037	0.0034	0.023	0.000066	0.34	51	0.013	0.00010
	November		0.11	3.9	0.040	0.0000075	456	57	0.00036	0.0040	0.0037	0.025	0.000072	0.21	56	0.014	0.000089
	December		0.12	4.3	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000038
	January	2047	0.12	4.4	0.041	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000035
	February		0.12	4.5	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.11	3.6	0.037	0.0000070	456	55	0.00033	0.0037	0.0035	0.023	0.000066	0.34	50	0.013	0.000088
	April		0.11	3.8	0.039	0.0000075	456	56	0.00036	0.0039	0.0037	0.025	0.000072	0.26	55	0.014	0.000075
	May		0.11	3.5	0.036	0.0000070	456	57	0.00033	0.0036	0.0034	0.023	0.000066	0.40	52	0.013	0.000088
	June		0.11	3.6	0.037	0.0000072	456	58	0.00034	0.0038	0.0035	0.024	0.000068	0.30	53	0.013	0.000094
	July		0.098	3.2	0.034	0.0000065	456	59	0.00031	0.0034	0.0032	0.021	0.000061	0.46	48	0.012	0.00011
	August		0.099	3.2	0.034	0.0000066	457	62	0.00031	0.0035	0.0032	0.022	0.000062	0.48	49	0.012	0.00013
	September		0.10	3.4	0.036	0.0000069	456	58	0.00032	0.0036	0.0034	0.023	0.000065	0.35	50	0.012	0.00010
	October		0.11	3.7	0.038	0.0000073	456	60	0.00035	0.0039	0.0036	0.024	0.000069	0.26	57	0.013	0.000097
	November		0.12	4.0	0.041	0.0000077	456	55	0.00037	0.0041	0.0039	0.026	0.000074	0.23	57	0.014	0.000061
	December		0.12	4.3	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.15	63	0.014	0.000033
	January	2048	0.12	4.2	0.041	0.0000077	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.20	59	0.014	0.000051
	February		0.12	4.3	0.041	0.0000077	456	54	0.00037	0.0040	0.0039	0.026	0.000074	0.19	60	0.014	0.000046
	March		0.12	4.3	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.17	62	0.014	0.000037
	April		0.12	4.0	0.041	0.0000077	456	55	0.00037	0.0041	0.0038	0.026	0.000074	0.26	55	0.014	0.000070
	May		0.12	3.9	0.040	0.0000076	456	56	0.00036	0.0040	0.0038	0.026	0.000073	0.26	56	0.014	0.000069
	June		0.11	3.8	0.039	0.0000074	456	57	0.00035	0.0039	0.0037	0.025	0.000071	0.29	55	0.014	0.000078
	July		0.098	3.2	0.034	0.0000067	457	62	0.00031	0.0034	0.0032	0.021	0.000061	0.79	48	0.012	0.00013
	August		0.095	3.1	0.033	0.0000064	457	65	0.00030	0.0034	0.0031	0.021	0.000060	0.47	48	0.011	0.00014
	September		0.096	3.1	0.033	0.0000065	457	64	0.00030	0.0034	0.0031	0.021	0.000060	0.43	47	0.012	0.00014
	October		0.10	3.4	0.035	0.0000068	456	57	0.00032	0.0036	0.0033	0.022	0.000063	0.26	50	0.012	0.00012
	November		0.11	3.7	0.039	0.0000074	456	58	0.00035	0.0039	0.0037	0.025	0.000070	0.22	56	0.014	0.000095
	December		0.12	3.9	0.040	0.0000076	456	56	0.00037	0.0040	0.0038	0.026	0.000073	0.26	55	0.014	0.000076
	January	2049	0.12	4.3	0.041	0.0000077	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.15	62	0.014	0.000041
	February		0.12	4.5	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000033
	March		0.11	4.1	0.039	0.0000074	456	55	0.00035	0.0038	0.0037	0.025	0.000071	0.26	57	0.013	0.000054
	April		0.12	3.9	0.040	0.0000076	456	56	0.00036	0.0040	0.0038	0.025	0.000073	0.22	56	0.014	0.000076
	May		0.11	3.6	0.037	0.0000072	456	59	0.00034	0.0038	0.0035	0.024	0.000068	0.38	53	0.013	0.000094
	June		0.10	3.3	0.035	0.0000067	456	59	0.00032	0.0035	0.0033	0.022	0.000063	0.40	49	0.012	0.00011
	July		0.095	3.1	0.033	0.0000065	457	63	0.00030	0.0034	0.0031	0.021	0.000060	0.57	47	0.011	0.00014
	August		0.098	3.2	0.034	0.0000066	456	63	0.00031	0.0035	0.0032	0.021	0.000061	0.47	48	0.012	0.00014
	September		0.099	3.2	0.034	0.0000067	456	62	0.00031	0.0035	0.0032	0.022	0.000062	0.54	49	0.012	0.00013
	October		0.098	3.2	0.034	0.0000066	456	62	0.00031	0.0035	0.0032	0.022	0.000061	0.38	49	0.012	0.00013
	November		0.11	3.7	0.038	0.0000073	455	57	0.00035	0.0039	0.0036	0.024	0.000069	0.21	54	0.013	0.00010
	December		0.12	4.1	0.041	0.0000077	456	58	0.00037	0.0040	0.0038	0.026	0.000074	0.16	63	0.014	0.000060
	January	2050	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000036
	February		0.12	4.2	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000037
	March		0.11	3.7	0.038	0.0000072	456	56	0.00034	0.0038	0.0036	0.024	0.000068	0.30	54	0.013	0.000076
	April		0.10	3.3	0.036	0.0000069	456	58	0.00032	0.0036	0.0034	0.023	0.000065	0.35	51	0.012	0.00010
	May		0.11	3.5	0.038	0.0000072	456	57	0.00034	0.0038	0.0036	0.024	0.000069	0.30	53	0.013	0.000090
	June		0.10	3.3	0.036	0.0000069	456	59	0.00032	0.0036	0.0034	0.023	0.000065	0.39	50	0.012	0.00011
	July		0.11	3.7	0.039	0.0000075	456	58	0.00036	0.0039	0.0037	0.025	0.000071	0.28	57	0.014	0.000081
	August		0.11	3.6	0.039	0.0000075	456	58	0.00036	0.0039	0.0037	0.025	0.000072	0.28	55	0.014	0.000084
	September		0.10	3.2	0.035	0.0000068	456	59	0.00032	0.0035	0.0033	0.022	0.000063	0.42	49	0.012	0.00011
	October		0.11	3.7	0.040	0.0000076	456	58	0.00036	0.0040	0.0037	0.025	0.000072	0.24	56	0.014	0.000088
	November		0.12	3.9	0.041	0.0000078	456	56	0.00037	0.0041	0.0039	0.026	0.000075	0.22	59	0.014	0.000062
	December		0.12	4.2	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000037

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2051	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000038
	February		0.12	4.1	0.041	0.0000077	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.18	61	0.014	0.000052
	March		0.12	3.8	0.040	0.0000076	456	56	0.00036	0.0040	0.0038	0.025	0.000073	0.23	57	0.014	0.000069
	April		0.098	3.1	0.034	0.0000067	456	61	0.00031	0.0034	0.0032	0.021	0.000061	0.78	47	0.012	0.00013
	May		0.100	3.1	0.034	0.0000067	457	64	0.00031	0.0035	0.0032	0.022	0.000062	0.30	49	0.012	0.00014
	June		0.10	3.3	0.036	0.0000070	456	60	0.00033	0.0037	0.0034	0.023	0.000065	0.34	51	0.013	0.00012
	July		0.099	3.1	0.034	0.0000066	457	60	0.00031	0.0035	0.0032	0.022	0.000062	0.47	49	0.012	0.00012
	August		0.097	3.0	0.034	0.0000066	457	64	0.00030	0.0035	0.0032	0.021	0.000061	0.48	48	0.012	0.00015
	September		0.10	3.2	0.035	0.0000068	456	59	0.00032	0.0036	0.0033	0.022	0.000064	0.35	50	0.012	0.00012
	October		0.11	3.4	0.037	0.0000070	456	58	0.00033	0.0037	0.0034	0.023	0.000066	0.30	52	0.013	0.00011
	November		0.11	3.6	0.039	0.0000075	456	59	0.00036	0.0040	0.0037	0.025	0.000071	0.25	56	0.014	0.000094
	December		0.12	3.9	0.041	0.0000078	456	56	0.00038	0.0041	0.0039	0.026	0.000075	0.21	60	0.014	0.000060
	January	2052	0.059	4.7	0.020	0.0000040	458	52	0.00018	0.0020	0.0019	0.013	0.000037	0.19	55	0.0071	0.000056
	February		0.061	5.4	0.021	0.0000041	459	49	0.00019	0.0021	0.0020	0.013	0.000038	0.14	55	0.0073	0.000040
	March		0.054	4.8	0.019	0.0000037	458	51	0.00017	0.0019	0.0018	0.012	0.000034	0.22	54	0.0065	0.000051
	April		0.045	3.9	0.016	0.0000032	457	54	0.00014	0.0016	0.0015	0.0099	0.000028	0.29	47	0.0055	0.000099
	May		0.040	3.5	0.014	0.0000029	457	57	0.00013	0.0015	0.0013	0.0088	0.000025	0.38	48	0.0049	0.00010
	June		0.044	3.8	0.015	0.0000032	457	56	0.00014	0.0016	0.0014	0.0097	0.000028	0.29	52	0.0054	0.000093
	July		0.036	3.1	0.013	0.0000027	457	58	0.00011	0.0013	0.0012	0.0079	0.000023	0.51	46	0.0044	0.00012
	August		0.037	3.2	0.013	0.0000027	457	59	0.00012	0.0014	0.0012	0.0081	0.000023	0.38	48	0.0045	0.00012
	September		0.049	4.2	0.017	0.0000035	458	54	0.00015	0.0018	0.0016	0.011	0.000031	0.23	49	0.0060	0.00010
	October		0.053	4.6	0.018	0.0000036	458	53	0.00016	0.0018	0.0017	0.012	0.000033	0.23	52	0.0063	0.000074
	November		0.062	5.5	0.021	0.0000041	458	47	0.00019	0.0021	0.0020	0.014	0.000039	0.13	53	0.0074	0.000038
	December		0.053	4.7	0.018	0.0000037	458	52	0.00017	0.0018	0.0017	0.012	0.000033	0.19	55	0.0064	0.000056
		MINIMUM	0.036	3.0	0.013	0.0000027	426	47	0.00011	0.0013	0.0012	0.0079	0.000023	0.13	46	0.0044	0.0000099
		MAXIMUM	0.12	6.2	0.042	0.0000078	459	76	0.00038	0.0041	0.0039	0.026	0.000076	0.79	78	0.014	0.00015
		AVERAGE	0.11	3.9	0.037	0.0000070	456	57	0.00033	0.0037	0.0035	0.023	0.000067	0.30	56	0.013	0.000077
Decommissioning	January	2053	0.0037	5.0	0.0013	0.00000047	394	71	0.000011	0.00017	0.00012	0.00082	0.0000023	0.25	77	0.00050	0.000056
	February		0.0000063	4.8	0.000020	0.00000015	442	75	5.1E-08	0.0000047	0.00000049	0.000021	1.3E-08	0.19	89	0.000042	0.000025
	March		0.0000059	4.7	0.000033	0.00000027	412	74	7.5E-08	0.000028	0.0000015	0.000020	1.2E-08	0.43	83	0.000055	0.000041
	April		0.0000042	4.7	0.000047	0.00000034	284	72	0.00000018	0.00016	0.0000059	0.000016	8.2E-09	0.37	60	0.00013	0.00013
	May		0.0000047	4.6	0.000043	0.00000036	323	73	0.00000017	0.00016	0.0000059	0.000017	9.3E-09	0.38	68	0.00013	0.00011
	June		0.0000054	4.5	0.000036	0.00000028	370	74	0.00000012	0.000083	0.0000033	0.000018	1.1E-08	0.34	76	0.000086	0.000075
	July		0.0000049	4.4	0.000045	0.00000035	332	74	0.00000015	0.00012	0.0000048	0.000017	9.6E-09	0.43	69	0.00011	0.00010
	August		0.0000047	4.3	0.000053	0.00000042	318	73	0.00000016	0.00013	0.0000051	0.000017	9.2E-09	0.60	66	0.00011	0.00011
	September		0.0000040	4.2	0.000060	0.00000043	264	73	0.0000002	0.00017	0.0000065	0.000016	7.7E-09	0.55	56	0.00014	0.00015
	October		0.0000046	4.2	0.000044	0.00000038	310	73	0.00000018	0.00017	0.0000065	0.000016	8.9E-09	0.38	66	0.00014	0.00012
	November		0.0000048	4.2	0.000038	0.00000034	334	73	0.00000016	0.00016	0.0000059	0.000016	9.6E-09	0.33	70	0.00012	0.00011
	December		0.0000063	4.0	0.000021	0.00000016	436	75	5.6E-08	0.000012	0.00000076	0.000020	1.3E-08	0.20	88	0.000045	0.000031
	January	2054	0.0000047	3.9	0.000017	0.00000013	440	74	4.1E-08	0.0000038	0.00000039	0.000019	1.2E-08	0.19	89	0.000040	0.000020
	February		0.0000041	3.8	0.000015	0.00000012	438	74	3.7E-08	0.0000036	0.00000035	0.000019	1.2E-08	0.19	88	0.000039	0.000018
	March		0.0000035	3.8	0.000032	0.00000025	366	73	0.00000011	0.000083	0.0000033	0.000017	9.7E-09	0.35	75	0.000085	0.000070
	April		0.0000033	3.7	0.000038	0.0000003	338	72	0.00000013	0.00010	0.0000041	0.000016	9.0E-09	0.40	70	0.000096	0.000088
	May		0.0000031	3.6	0.000041	0.00000034	307	71	0.00000016	0.00015	0.0000057	0.000015	8.3E-09	0.40	65	0.00012	0.00011
	June		0.0000035	3.5	0.000034	0.00000028	363	74	0.00000012	0.000100	0.0000038	0.000017	9.7E-09	0.35	75	0.000094	0.000079
	July		0.0000032	3.4	0.000042	0.00000033	325	73	0.00000015	0.00013	0.0000050	0.000016	8.7E-09	0.43	68	0.00011	0.00010
	August		0.0000027	3.3	0.000061	0.00000046	266	72	0.00000019	0.00016	0.0000063	0.000015	7.2E-09	0.68	57	0.00013	0.00014
	September		0.0000031	3.3	0.000043	0.00000035	304	72	0.00000017	0.00017	0.0000062	0.000015	8.1E-09	0.39	64	0.00013	0.00012
	October		0.0000032	3.2	0.000037	0.00000033	325	72	0.00000016	0.00016	0.0000060	0.000015	8.7E-09	0.34	69	0.00013	0.00011
	November		0.0000034	3.1	0.000034	0.00000028	350	72	0.00000012	0.00010	0.0000040	0.000016	9.3E-09	0.36	73	0.000095	0.000083
	December		0.0000040	3.0	0.000020	0.00000016	419	74	5.7E-08	0.000027	0.0000012	0.000018	1.1E-08	0.23	85	0.000053	0.000033
	January	2055	0.0000038	2.9	0.000016	0.00000014	422	73	6.2E-08	0.000044	0.0000018	0.000018	1.1E-08	0.20	86	0.000061	0.000033
	February		0.0000038	2.8	0.000015	0.00000012	427	74	5.3E-08	0.000033	0.0000014	0.000018	1.1E-08	0.19	87	0.000054	0.000030
	March		0.0000039	2.7	0.000013	9.4E-08	440	74	3.4E-08	0.0000035	0.00000034	0.000018	1.1E-08	0.19	88	0.000039	0.000015
	April		0.0000032	2.7	0.000023	0.00000027	349	70	0.00000014	0.00017	0.0000061	0.000014	9.1E-09	0.20	73	0.00013	0.000087
	May		0.0000032	2.6	0.000023	0.00000028	360	73	0.00000015	0.00018	0.0000064	0.000015	9.4E-09	0.19	76	0.00013	0.000093
	June		0.0000032	2.6	0.000025	0.00000029	361	74	0.00000016	0.00019	0.0000069	0.000015	9.3E-09	0.21	76	0.00014	0.000099
	July		0.0000030	2.5	0.000026	0.00000033	316	69	0.00000019	0.00023	0.0000083	0.000013	8.3E-09	0.19	68	0.00016	0.00012
	August		0.0000031	2.4	0.000027	0.00000034	333	73	0.00000019	0.00024	0.0000087	0.000014	8.7E-09	0.18	72	0.00017	0.00012
	September		0.0000032	2.3	0.000026	0.00000032	358	75	0.00000018	0.00022	0.0000079	0.000015	9.3E-09	0.19	77	0.00015	0.00011
	October		0.0000033	2.2	0.000025	0.0000003	370	76	0.00000016	0.00020	0.0000071	0.000015	9.6E-09	0.19	79	0.00014	0.00010
	November		0.0000036	2.1	0.000020	0.00000021	403	76	0.00000011	0.00011	0.0000042	0.000017	1.1E-08	0.19	83	0.000097	0.000067
	December		0.0000038	2.0	0.000015	0.00000013	424	73	5.4E-08	0.000033	0.0000014	0.000018	1.1E-08	0.19	86	0.000055	0.000029

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.0000028	1.9	0.000011	7.4E-08	440	73	2.9E-08	0.0000027	0.00000024	0.000018	1.1E-08	0.19	88	0.000038	0.000012
	February		0.0000025	1.9	0.000010	6.7E-08	439	73	2.8E-08	0.0000025	0.00000021	0.000017	1.1E-08	0.19	88	0.000037	0.000011
	March		0.0000022	1.8	0.000019	0.00000022	387	74	0.00000012	0.00014	0.0000051	0.000015	9.5E-09	0.19	81	0.00011	0.000072
	April		0.0000022	1.8	0.000017	0.00000019	392	74	0.0000001	0.00012	0.0000042	0.000015	9.5E-09	0.19	81	0.000097	0.000064
	May		0.0000023	1.6	0.000017	0.00000018	399	73	9.8E-08	0.00011	0.0000039	0.000016	9.9E-09	0.19	82	0.000093	0.000057
	June		0.0000023	1.6	0.000017	0.00000019	396	74	0.0000001	0.00011	0.0000041	0.000015	9.8E-09	0.19	82	0.000096	0.000062
	July		0.0000021	1.5	0.000022	0.00000027	360	73	0.00000016	0.00019	0.0000069	0.000014	8.9E-09	0.19	76	0.00014	0.000096
	August		0.0000021	1.4	0.000023	0.00000029	355	74	0.00000017	0.00021	0.0000074	0.000014	8.7E-09	0.19	76	0.00015	0.00010
	September		0.0000020	1.3	0.000026	0.00000033	341	74	0.0000002	0.00025	0.0000089	0.000013	8.4E-09	0.18	74	0.00017	0.00012
	October		0.0000021	1.2	0.000023	0.00000028	371	76	0.00000016	0.00020	0.0000073	0.000014	9.2E-09	0.19	79	0.00014	0.00010
	November		0.0000024	1.1	0.000014	0.00000014	415	74	7.1E-08	0.000066	0.0000024	0.000017	1.0E-08	0.19	85	0.000070	0.000042
	December		0.0000025	1.0	0.000010	6.7E-08	438	73	2.8E-08	0.0000026	0.00000022	0.000017	1.1E-08	0.19	88	0.000037	0.000011
	January	**2057**	0.00000078	0.95	0.0000061	3.5E-08	439	72	1.7E-08	0.0000011	7.5E-08	0.000016	1.0E-08	0.19	88	0.000035	0.0000047
	February		0.00000029	0.90	0.0000080	7.8E-08	429	74	4.6E-08	0.000048	0.0000017	0.000015	9.6E-09	0.20	87	0.000059	0.000025
	March		0.00000029	0.80	0.0000049	2.6E-08	439	72	1.4E-08	0.00000092	4.4E-08	0.000015	9.9E-09	0.19	88	0.000035	0.0000032
	April		0.0000003	0.72	0.000016	0.00000022	382	74	0.00000013	0.00017	0.0000061	0.000013	8.6E-09	0.19	80	0.00012	0.000078
	May		0.00000028	0.65	0.000013	0.00000015	403	75	9.4E-08	0.00012	0.0000041	0.000014	9.1E-09	0.19	83	0.000095	0.000058
	June		0.00000029	0.54	0.0000094	9.9E-08	428	74	5.9E-08	0.000067	0.0000023	0.000015	9.8E-09	0.20	87	0.000069	0.000030
	July		0.00000029	0.47	0.000019	0.00000025	376	76	0.00000015	0.00020	0.0000072	0.000013	8.6E-09	0.19	80	0.00014	0.000094
	August		0.00000029	0.40	0.000020	0.00000028	380	78	0.00000017	0.00023	0.0000079	0.000013	8.6E-09	0.20	81	0.00015	0.00010
	September		0.00000028	0.31	0.000019	0.00000026	386	78	0.00000016	0.00021	0.0000075	0.000013	8.7E-09	0.20	82	0.00015	0.00010
	October		0.00000029	0.22	0.000012	0.00000014	412	75	8.3E-08	0.00010	0.0000036	0.000014	9.4E-09	0.19	85	0.000087	0.000050
	November		0.00000029	0.14	0.0000069	6.0E-08	427	72	3.6E-08	0.000032	0.0000011	0.000015	9.6E-09	0.19	86	0.000051	0.000018
	December		0.00000029	0.058	0.0000063	4.9E-08	433	72	2.8E-08	0.000022	0.00000078	0.000015	9.8E-09	0.19	87	0.000046	0.000012
		MINIMUM	0.00000028	0.058	0.0000049	2.6E-08	264	69	1.4E-08	0.00000092	4.4E-08	0.000013	7.2E-09	0.18	56	0.000035	0.0000032
		MAXIMUM	0.0037	5.0	0.0013	0.00000047	442	78	0.000011	0.00025	0.00012	0.00082	0.0000023	0.68	89	0.00050	0.00015
		AVERAGE	0.000064	2.5	0.000046	0.00000023	378	73	0.0000003	0.00011	0.0000061	0.000029	4.8E-08	0.26	78	0.00010	0.000071

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	**January**	**2025**	0.000053	0.000073	0.090	0.0075	0.0043	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000050	0.000069	0.085	0.0071	0.0062	0.0041	0.000045	1.3	0.028	1.4	0.0045	0.000048	0.00014	0.00075
	April		0.000041	0.000056	0.069	0.0058	0.0059	0.0034	0.000037	1.1	0.023	1.1	0.0037	0.000039	0.00012	0.00062
	May		0.000038	0.000053	0.065	0.0054	0.0061	0.0031	0.000034	1.00	0.022	1.1	0.0035	0.000037	0.00011	0.00058
	June		0.000038	0.000052	0.064	0.0053	0.0064	0.0031	0.000033	0.98	0.021	1.0	0.0034	0.000036	0.00011	0.00057
	July		0.000034	0.000047	0.058	0.0049	0.0063	0.0028	0.000031	0.89	0.019	0.94	0.0031	0.000033	0.000097	0.00052
	August		0.000033	0.000045	0.055	0.0046	0.0063	0.0027	0.000029	0.85	0.018	0.89	0.0029	0.000031	0.000092	0.00049
	September		0.000029	0.000040	0.049	0.0041	0.0059	0.0024	0.000026	0.76	0.017	0.80	0.0026	0.000028	0.000083	0.00044
	October		0.000027	0.000037	0.046	0.0038	0.0056	0.0022	0.000024	0.70	0.015	0.74	0.0024	0.000026	0.000076	0.00040
	November		0.000025	0.000035	0.043	0.0036	0.0054	0.0021	0.000023	0.66	0.014	0.69	0.0023	0.000024	0.000072	0.00038
	December		0.000025	0.000034	0.042	0.0035	0.0054	0.0020	0.000022	0.65	0.014	0.68	0.0023	0.000024	0.000071	0.00038
	January	**2026**	0.000024	0.000033	0.041	0.0035	0.0054	0.0020	0.000022	0.64	0.014	0.67	0.0022	0.000023	0.000069	0.00037
	February		0.000024	0.000033	0.041	0.0035	0.0055	0.0020	0.000022	0.64	0.014	0.67	0.0022	0.000023	0.000069	0.00037
	March		0.000016	0.000022	2.4	0.0048	0.0050	0.0013	0.000015	0.88	0.019	0.93	0.0031	0.000016	0.000046	0.00025
	April		0.0091	0.0000019	4.6	**0.011**	0.63	0.00052	0.0000025	6.4	0.031	4.9	0.0072	0.00013	0.0000037	0.000021
	May		0.0080	0.00000029	5.1	**0.011**	0.55	0.00037	0.0000013	5.8	0.031	4.5	0.0071	0.00011	0.00000022	0.0000031
	June		0.017	0.00000036	3.8	**0.014**	1.2	0.00077	0.0000022	11	0.031	7.9	0.0092	0.00023	6.1E-08	0.0000034
	July		0.021	0.00000038	3.9	**0.016**	1.5	0.00097	0.0000027	13	0.032	9.6	0.010	0.00029	3.9E-08	0.0000037
	August		0.036	0.00000052	3.0	**0.023**	2.4	0.0016	0.0000042	21	0.035	15	0.014	0.00049	5.3E-08	0.0000052
	September		0.025	0.00000053	3.3	**0.017**	1.7	0.0011	0.0000030	15	0.031	11	0.011	0.00034	4.2E-08	0.0000045
	October		0.013	0.00000041	4.4	**0.012**	0.87	0.00059	0.0000018	8.4	0.028	6.5	0.0083	0.00018	2.8E-08	0.0000033
	November		0.0042	0.00000017	6.2	0.0089	0.29	0.00020	0.0000008	3.7	0.029	3.1	0.0059	0.000058	1.7E-08	0.0000017
	December		0.025	0.0000005	4.3	**0.018**	1.6	0.0011	0.0000031	15	0.034	11	0.012	0.00033	4.2E-08	0.0000045
	January	**2027**	0.010	0.00000024	8.6	**0.012**	0.70	0.00047	0.0000015	7.3	0.033	5.6	0.0080	0.00014	2.6E-08	0.0000025
	February		0.015	0.00000032	6.2	**0.014**	0.99	0.00068	0.0000020	9.8	0.034	7.4	0.0092	0.00020	3.1E-08	0.0000032
	March		0.019	0.00000033	6.2	**0.016**	1.2	0.00084	0.0000024	12	0.035	8.8	0.010	0.00025	3.5E-08	0.0000034
	April		0.014	0.0000003	6.7	**0.014**	0.91	0.00062	0.0000019	9.0	0.033	6.8	0.0087	0.00019	2.9E-08	0.0000030
	May		0.015	0.00000032	6.7	**0.014**	1.0	0.00068	0.0000020	9.7	0.033	7.3	0.0090	0.00020	3.1E-08	0.0000031
	June		0.020	0.00000035	5.7	**0.016**	1.3	0.00089	0.0000025	12	0.033	9.1	0.010	0.00027	3.6E-08	0.0000035
	July		0.031	0.00000045	4.7	**0.021**	2.1	0.0014	0.0000037	19	0.036	13	0.013	0.00042	4.9E-08	0.0000047
	August		0.020	0.00000049	4.2	**0.015**	1.4	0.00092	0.0000026	13	0.030	9.4	0.010	0.00028	3.7E-08	0.0000041
	September		0.012	0.00000039	6.5	**0.012**	0.80	0.00054	0.0000017	7.8	0.029	6.1	0.0081	0.00016	2.7E-08	0.0000031
	October		0.016	0.00000033	6.1	**0.015**	1.1	0.00072	0.0000021	10	0.034	7.7	0.0094	0.00022	3.2E-08	0.0000032
	November		0.016	0.00000035	6.2	**0.015**	1.1	0.00073	0.0000022	10	0.034	7.9	0.0095	0.00022	3.3E-08	0.0000033
	December		0.0096	0.00000024	9.5	**0.012**	0.64	0.00044	0.0000014	6.9	0.034	5.4	0.0079	0.00013	2.5E-08	0.0000025
	January	**2028**	0.0018	8.7E-08	16	0.0097	0.15	0.000089	0.00000054	2.8	0.035	2.5	0.0062	0.000025	1.4E-08	0.0000012
	February		0.000068	5.0E-08	15	0.0093	0.019	0.0000089	0.00000032	1.8	0.037	1.9	0.0059	0.0000012	1.1E-08	0.00000091
	March		0.00088	0.00000099	13	0.0098	0.064	0.000050	0.00000096	2.1	0.036	3.0	0.0068	0.000022	1.4E-08	0.0000022
	April		0.0096	0.000013	9.0	**0.029**	0.73	0.00056	0.000010	7.5	0.055	24	0.033	0.00037	8.0E-08	0.000024
	May		0.0046	0.000050	6.0	**0.048**	0.42	0.00052	0.000032	4.7	0.090	64	0.070	0.00063	0.00000016	0.000070
	June		0.0051	0.000044	8.4	**0.044**	0.42	0.00050	0.000028	4.9	0.086	59	0.063	0.00056	0.00000014	0.000061
	July		0.0085	0.000059	6.5	**0.061**	0.69	0.00077	0.000038	7.1	0.11	79	0.087	0.00083	0.0000002	0.000084
	August		0.0060	0.000078	6.3	**0.067**	0.54	0.00070	0.000049	5.9	0.13	98	0.098	0.00087	0.00000022	0.00010
	September		0.0069	0.000071	6.3	**0.065**	0.59	0.00071	0.000045	6.4	0.12	96	0.095	0.00084	0.0000002	0.000096
	October		0.0034	0.000056	9.7	**0.050**	0.33	0.00043	0.000035	4.3	0.11	77	0.072	0.00055	0.00000014	0.000073
	November		0.0026	0.000030	11	**0.035**	0.26	0.00029	0.000019	3.7	0.076	46	0.048	0.00035	9.1E-08	0.000041
	December		0.00033	0.0000039	13	**0.015**	0.060	0.000042	0.0000027	2.1	0.045	11	0.015	0.000045	2.1E-08	0.0000061
		MINIMUM	0.000016	5.0E-08	0.041	0.0035	0.0043	0.0000089	0.00000032	0.64	0.014	0.67	0.0022	0.0000012	1.1E-08	0.00000091
		MAXIMUM	0.036	0.000078	16	**0.067**	2.4	0.0043	0.000049	21	0.13	98	0.098	0.00087	0.00015	0.00080
		AVERAGE	0.0085	0.000023	5.0	**0.017**	0.59	0.0013	0.000016	6.1	0.040	16	0.018	0.00022	0.000030	0.00017
Operations	**January**	**2029**	0.0036	0.0085	7.3	**0.017**	0.13	0.11	0.00049	827	0.30	**2709**	0.83	0.011	0.0016	0.0015
	February		0.0041	0.0094	6.2	**0.019**	0.16	0.13	0.00054	885	0.36	**2900**	1.0	0.012	0.0018	0.0016
	March		0.0065	0.0089	5.8	**0.038**	0.37	0.12	0.00052	885	0.36	**2900**	0.95	0.012	0.0017	0.0016
	April		0.0080	0.0078	5.2	**0.048**	0.52	0.11	0.00047	885	0.35	**2901**	0.89	0.011	0.0015	0.0014
	May		0.0063	0.0088	5.8	**0.044**	0.36	0.12	0.00053	887	0.38	**2905**	0.97	0.012	0.0017	0.0016
	June		0.0072	0.0084	5.5	**0.046**	0.45	0.11	0.00050	886	0.37	**2904**	0.95	0.012	0.0016	0.0015
	July		0.0077	0.0088	5.8	**0.045**	0.47	0.12	0.00052	887	0.38	**2906**	0.99	0.012	0.0017	0.0016
	August		0.0073	0.0081	5.3	**0.050**	0.47	0.11	0.00049	887	0.36	**2905**	0.92	0.011	0.0015	0.0015
	September		0.0076	0.0079	5.3	**0.050**	0.50	0.11	0.00048	885	0.35	**2900**	0.90	0.011	0.0015	0.0014
	October		0.0062	0.0094	6.1	**0.039**	0.34	0.13	0.00056	886	0.39	**2902**	1.0	0.013	0.0018	0.0017
	November		0.0053	0.0094	6.2	**0.029**	0.27	0.13	0.00055	885	0.38	**2900**	1.1	0.013	0.0018	0.0017
	December		0.0040	0.0094	6.2	**0.018**	0.16	0.13	0.00054	885	0.35	**2900**	1.0	0.012	0.0018	0.0016

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.0044	0.010	5.7	**0.018**	0.15	0.13	0.00058	885	0.32	**2900**	0.89	0.012	0.0019	0.0017
	February		0.0067	0.0098	5.5	**0.023**	0.30	0.12	0.00057	885	0.31	**2901**	0.85	0.011	0.0019	0.0017
	March		0.0062	0.0089	5.0	**0.039**	0.32	0.11	0.00053	885	0.32	**2901**	0.81	0.011	0.0017	0.0016
	April		0.0056	0.0092	5.1	**0.037**	0.28	0.12	0.00055	886	0.32	**2904**	0.82	0.011	0.0018	0.0016
	May		0.0078	0.0090	5.0	**0.039**	0.44	0.11	0.00053	886	0.32	**2903**	0.82	0.011	0.0017	0.0016
	June		0.0084	0.0082	4.5	**0.049**	0.51	0.10	0.00049	887	0.31	**2907**	0.74	0.0098	0.0016	0.0015
	July		0.0089	0.0082	4.5	**0.055**	0.56	0.10	0.00050	887	0.31	**2907**	0.74	0.0098	0.0016	0.0015
	August		0.0081	0.0082	4.6	**0.052**	0.49	0.10	0.00050	887	0.32	**2907**	0.76	0.0100	0.0016	0.0015
	September		0.0074	0.0084	4.7	**0.050**	0.43	0.11	0.00051	887	0.32	**2908**	0.76	0.010	0.0016	0.0015
	October		0.0071	0.0085	4.7	**0.044**	0.40	0.11	0.00051	886	0.32	**2903**	0.78	0.010	0.0016	0.0015
	November		0.0051	0.0100	5.5	**0.032**	0.21	0.13	0.00059	885	0.34	**2899**	0.89	0.012	0.0019	0.0018
	December		0.0055	0.0099	5.5	**0.029**	0.24	0.13	0.00058	885	0.33	**2899**	0.89	0.012	0.0019	0.0017
	January	2031	0.0054	0.010	5.0	**0.023**	0.20	0.13	0.00060	885	0.31	**2899**	0.81	0.011	0.0020	0.0018
	February		0.0045	0.010	5.2	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0066	0.0099	4.6	**0.031**	0.29	0.12	0.00058	885	0.29	**2898**	0.74	0.011	0.0019	0.0017
	April		0.0071	0.0094	4.4	**0.037**	0.36	0.12	0.00056	885	0.30	**2900**	0.75	0.010	0.0018	0.0017
	May		0.0064	0.0096	4.5	**0.036**	0.30	0.12	0.00057	886	0.29	**2903**	0.73	0.010	0.0019	0.0017
	June		0.0072	0.0094	4.4	**0.035**	0.35	0.12	0.00055	886	0.29	**2904**	0.74	0.010	0.0018	0.0017
	July		0.0070	0.0094	4.4	**0.039**	0.35	0.12	0.00056	886	0.29	**2903**	0.71	0.010	0.0018	0.0017
	August		0.0070	0.0092	4.2	**0.040**	0.36	0.11	0.00055	886	0.29	**2904**	0.71	0.010	0.0018	0.0016
	September		0.0073	0.0089	4.1	**0.041**	0.39	0.11	0.00053	886	0.29	**2904**	0.69	0.0099	0.0017	0.0016
	October		0.0065	0.0096	4.4	**0.035**	0.31	0.12	0.00056	885	0.30	**2899**	0.75	0.011	0.0018	0.0017
	November		0.0052	0.010	5.0	**0.025**	0.19	0.13	0.00061	885	0.31	**2900**	0.83	0.011	0.0020	0.0018
	December		0.0052	0.010	5.1	**0.021**	0.18	0.13	0.00059	885	0.30	**2899**	0.81	0.011	0.0020	0.0018
	January	2032	0.0052	0.010	5.4	**0.022**	0.18	0.13	0.00061	885	0.31	**2900**	0.82	0.011	0.0020	0.0018
	February		0.0046	0.010	5.8	**0.017**	0.14	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0087	0.0092	4.5	**0.043**	0.47	0.11	0.00055	884	0.28	**2898**	0.68	0.0099	0.0018	0.0016
	April		0.0060	0.0097	4.9	**0.035**	0.26	0.12	0.00058	884	0.29	**2898**	0.71	0.010	0.0019	0.0017
	May		0.0068	0.0098	4.8	**0.034**	0.31	0.12	0.00058	886	0.29	**2902**	0.72	0.010	0.0019	0.0017
	June		0.0070	0.0099	4.9	**0.033**	0.32	0.12	0.00058	885	0.29	**2901**	0.73	0.011	0.0019	0.0017
	July		0.0088	0.0086	4.2	**0.046**	0.50	0.11	0.00052	886	0.28	**2904**	0.66	0.0094	0.0017	0.0015
	August		0.0066	0.0091	4.5	**0.040**	0.32	0.11	0.00055	885	0.28	**2900**	0.68	0.0098	0.0018	0.0016
	September		0.0061	0.010	5.0	**0.033**	0.25	0.12	0.00060	886	0.30	**2903**	0.74	0.011	0.0019	0.0018
	October		0.0061	0.010	5.2	**0.028**	0.24	0.13	0.00060	885	0.30	**2901**	0.77	0.011	0.0020	0.0018
	November		0.0053	0.010	5.4	**0.023**	0.19	0.13	0.00060	885	0.31	**2899**	0.81	0.011	0.0020	0.0018
	December		0.0051	0.010	5.8	**0.019**	0.17	0.13	0.00059	885	0.31	**2900**	0.83	0.011	0.0020	0.0018
	January	2033	0.0067	0.0100	4.5	**0.034**	0.29	0.12	0.00059	884	0.29	**2897**	0.72	0.011	0.0019	0.0018
	February		0.0048	0.010	5.0	**0.019**	0.14	0.13	0.00060	885	0.32	**2900**	0.85	0.012	0.0020	0.0018
	March		0.0061	0.0100	4.9	**0.025**	0.24	0.12	0.00058	884	0.30	**2898**	0.77	0.011	0.0019	0.0017
	April		0.0072	0.0089	4.0	**0.039**	0.37	0.11	0.00053	885	0.28	**2900**	0.67	0.0096	0.0017	0.0016
	May		0.0064	0.0100	4.4	**0.034**	0.27	0.12	0.00059	886	0.30	**2903**	0.73	0.011	0.0019	0.0018
	June		0.0071	0.0094	4.1	**0.036**	0.34	0.12	0.00055	886	0.29	**2902**	0.71	0.010	0.0018	0.0017
	July		0.0068	0.010	4.4	**0.033**	0.30	0.12	0.00059	886	0.29	**2904**	0.73	0.011	0.0019	0.0018
	August		0.0076	0.0094	4.1	**0.041**	0.38	0.11	0.00056	885	0.29	**2900**	0.69	0.010	0.0018	0.0017
	September		0.0069	0.0096	4.3	**0.037**	0.33	0.12	0.00057	885	0.29	**2901**	0.70	0.010	0.0018	0.0017
	October		0.0069	0.0098	4.4	**0.035**	0.32	0.12	0.00058	884	0.29	**2897**	0.71	0.010	0.0019	0.0017
	November		0.0062	0.010	4.5	**0.030**	0.26	0.12	0.00059	885	0.30	**2899**	0.75	0.011	0.0019	0.0018
	December		0.0053	0.010	5.0	**0.021**	0.18	0.13	0.00060	885	0.31	**2900**	0.81	0.011	0.0020	0.0018
	January	2034	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0049	0.010	5.3	**0.018**	0.15	0.13	0.00059	885	0.31	**2899**	0.83	0.011	0.0020	0.0018
	March		0.0070	0.0095	4.2	**0.036**	0.33	0.12	0.00056	884	0.28	**2898**	0.69	0.010	0.0018	0.0017
	April		0.0074	0.0093	4.2	**0.037**	0.36	0.11	0.00055	885	0.29	**2902**	0.70	0.010	0.0018	0.0016
	May		0.0056	0.010	4.8	**0.026**	0.20	0.13	0.00061	886	0.30	**2903**	0.79	0.011	0.0020	0.0018
	June		0.013	0.0087	3.8	**0.051**	0.78	0.11	0.00052	886	0.28	**2902**	0.66	0.0095	0.0017	0.0016
	July		0.0096	0.0085	3.7	**0.054**	0.56	0.10	0.00051	887	0.28	**2905**	0.64	0.0093	0.0016	0.0015
	August		0.0073	0.0085	3.7	**0.051**	0.38	0.10	0.00051	887	0.28	**2906**	0.63	0.0092	0.0016	0.0015
	September		0.0077	0.0088	3.8	**0.048**	0.41	0.11	0.00053	886	0.29	**2903**	0.66	0.0095	0.0017	0.0016
	October		0.0053	0.0098	4.5	**0.036**	0.20	0.12	0.00058	885	0.30	**2899**	0.72	0.010	0.0019	0.0017
	November		0.0067	0.0094	4.3	**0.037**	0.31	0.12	0.00056	885	0.29	**2900**	0.71	0.010	0.0018	0.0017
	December		0.0059	0.0099	4.5	**0.029**	0.23	0.12	0.00058	885	0.30	**2900**	0.77	0.011	0.0019	0.0017
	January	2035	0.0051	0.010	5.2	**0.019**	0.16	0.13	0.00060	885	0.31	**2899**	0.84	0.011	0.0020	0.0018
	February		0.0059	0.010	4.8	**0.027**	0.23	0.13	0.00060	885	0.30	**2900**	0.78	0.011	0.0020	0.0018
	March		0.0047	0.010	5.2	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.0065	0.0099	4.5	**0.031**	0.28	0.12	0.00058	884	0.29	**2898**	0.73	0.011	0.0019	0.0017
	May		0.0080	0.0100	4.6	**0.030**	0.38	0.12	0.00058	885	0.29	**2902**	0.76	0.011	0.0019	0.0018
	June		0.0070	0.0090	4.0	**0.040**	0.34	0.11	0.00054	886	0.28	**2902**	0.67	0.0097	0.0017	0.0016
	July		0.0071	0.0090	3.9	**0.042**	0.36	0.11	0.00054	886	0.28	**2903**	0.68	0.0097	0.0017	0.0016
	August		0.0073	0.0095	4.2	**0.041**	0.36	0.12	0.00057	886	0.29	**2902**	0.71	0.010	0.0018	0.0017
	September		0.0070	0.0094	4.1	**0.039**	0.34	0.11	0.00056	885	0.29	**2900**	0.70	0.010	0.0018	0.0017
	October		0.0063	0.010	4.5	**0.032**	0.26	0.12	0.00059	885	0.30	**2900**	0.74	0.011	0.0019	0.0018
	November		0.0054	0.011	4.9	**0.022**	0.19	0.13	0.00061	885	0.31	**2899**	0.82	0.011	0.0020	0.0018
	December		0.0050	0.010	5.2	**0.019**	0.15	0.13	0.00060	885	0.31	**2900**	0.83	0.011	0.0020	0.0018
	January	2036	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0090	0.0092	4.2	**0.041**	0.48	0.11	0.00054	884	0.28	**2898**	0.69	0.0099	0.0018	0.0016
	April		0.0070	0.0091	4.1	**0.040**	0.34	0.11	0.00054	885	0.28	**2900**	0.68	0.0097	0.0017	0.0016
	May		0.0062	0.0098	4.4	**0.035**	0.26	0.12	0.00058	886	0.29	**2903**	0.70	0.010	0.0019	0.0017
	June		0.0074	0.0094	4.3	**0.037**	0.36	0.12	0.00056	885	0.29	**2902**	0.71	0.010	0.0018	0.0017
	July		0.0072	0.0092	4.1	**0.040**	0.36	0.11	0.00055	885	0.28	**2901**	0.68	0.0098	0.0018	0.0016
	August		0.0065	0.010	4.7	**0.030**	0.28	0.13	0.00060	886	0.30	**2904**	0.77	0.011	0.0020	0.0018
	September		0.0068	0.0098	4.4	**0.035**	0.31	0.12	0.00058	885	0.29	**2900**	0.73	0.010	0.0019	0.0017
	October		0.0070	0.0095	4.3	**0.036**	0.33	0.12	0.00056	884	0.29	**2897**	0.71	0.010	0.0018	0.0017
	November		0.0056	0.011	4.9	**0.024**	0.20	0.13	0.00061	885	0.31	**2900**	0.80	0.011	0.0020	0.0018
	December		0.0054	0.010	5.1	**0.022**	0.19	0.13	0.00061	885	0.31	**2900**	0.81	0.011	0.0020	0.0018
	January	2037	0.0047	0.010	5.1	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0085	0.0093	4.0	**0.040**	0.45	0.11	0.00055	884	0.28	**2897**	0.68	0.0099	0.0018	0.0017
	March		0.0059	0.010	4.3	**0.032**	0.22	0.12	0.00060	884	0.30	**2898**	0.74	0.011	0.0019	0.0018
	April		0.0060	0.010	4.5	**0.028**	0.24	0.13	0.00060	885	0.30	**2900**	0.76	0.011	0.0020	0.0018
	May		0.0062	0.010	4.5	**0.027**	0.24	0.13	0.00061	886	0.30	**2903**	0.77	0.011	0.0020	0.0018
	June		0.0093	0.0085	3.6	**0.046**	0.53	0.11	0.00051	886	0.28	**2903**	0.66	0.0094	0.0016	0.0015
	July		0.0089	0.0086	3.6	**0.049**	0.51	0.11	0.00052	886	0.28	**2903**	0.65	0.0094	0.0016	0.0015
	August		0.0065	0.0092	3.9	**0.040**	0.30	0.11	0.00055	885	0.29	**2901**	0.68	0.0098	0.0018	0.0016
	September		0.0074	0.0091	3.8	**0.041**	0.38	0.11	0.00054	885	0.28	**2901**	0.67	0.0097	0.0017	0.0016
	October		0.0053	0.010	4.4	**0.030**	0.20	0.12	0.00059	885	0.31	**2900**	0.79	0.011	0.0019	0.0018
	November		0.0061	0.010	4.6	**0.027**	0.24	0.13	0.00060	885	0.30	**2899**	0.77	0.011	0.0020	0.0018
	December		0.0047	0.010	4.9	**0.018**	0.14	0.13	0.00060	885	0.32	**2900**	0.85	0.012	0.0020	0.0018
	January	2038	0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0055	0.010	4.8	**0.022**	0.19	0.13	0.00061	884	0.31	**2898**	0.81	0.011	0.0020	0.0018
	March		0.0086	0.0089	3.8	**0.044**	0.46	0.11	0.00053	885	0.28	**2900**	0.65	0.0096	0.0017	0.0016
	April		0.0063	0.0096	4.1	**0.035**	0.27	0.12	0.00057	885	0.29	**2899**	0.70	0.010	0.0019	0.0017
	May		0.0067	0.010	4.3	**0.032**	0.29	0.12	0.00059	886	0.30	**2902**	0.74	0.011	0.0019	0.0018
	June		0.0073	0.0098	4.2	**0.033**	0.34	0.12	0.00057	885	0.30	**2901**	0.75	0.011	0.0019	0.0017
	July		0.0072	0.0090	3.8	**0.041**	0.37	0.11	0.00054	885	0.29	**2901**	0.68	0.0098	0.0017	0.0016
	August		0.0068	0.0099	4.1	**0.035**	0.31	0.12	0.00058	886	0.29	**2902**	0.72	0.010	0.0019	0.0017
	September		0.0088	0.0092	3.9	**0.041**	0.46	0.11	0.00055	885	0.29	**2901**	0.70	0.010	0.0018	0.0016
	October		0.0064	0.0093	3.9	**0.039**	0.30	0.11	0.00055	884	0.29	**2897**	0.69	0.0099	0.0018	0.0016
	November		0.0056	0.010	4.5	**0.028**	0.20	0.13	0.00061	885	0.31	**2901**	0.78	0.011	0.0020	0.0018
	December		0.0055	0.010	4.7	**0.023**	0.19	0.13	0.00060	885	0.31	**2900**	0.81	0.011	0.0020	0.0018
	January	2039	0.0048	0.010	5.0	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0060	0.010	4.6	**0.026**	0.22	0.13	0.00060	884	0.30	**2898**	0.78	0.011	0.0020	0.0018
	March		0.0062	0.010	4.5	**0.027**	0.24	0.13	0.00060	885	0.30	**2899**	0.77	0.011	0.0020	0.0018
	April		0.0064	0.010	4.4	**0.029**	0.26	0.12	0.00059	885	0.29	**2901**	0.74	0.011	0.0019	0.0018
	May		0.0066	0.010	4.4	**0.029**	0.26	0.13	0.00061	886	0.30	**2903**	0.75	0.011	0.0020	0.0018
	June		0.0070	0.010	4.4	**0.028**	0.29	0.13	0.00059	886	0.30	**2903**	0.77	0.011	0.0020	0.0018
	July		0.0075	0.0088	3.7	**0.043**	0.39	0.11	0.00053	885	0.29	**2899**	0.68	0.0097	0.0017	0.0016
	August		0.0098	0.0086	3.6	**0.052**	0.57	0.11	0.00052	886	0.28	**2904**	0.64	0.0094	0.0017	0.0015
	September		0.0064	0.0093	4.0	**0.038**	0.28	0.11	0.00056	885	0.29	**2900**	0.68	0.0099	0.0018	0.0017
	October		0.0071	0.0095	4.0	**0.039**	0.33	0.12	0.00057	884	0.29	**2898**	0.70	0.010	0.0018	0.0017
	November		0.0061	0.010	4.3	**0.030**	0.24	0.13	0.00060	884	0.31	**2898**	0.77	0.011	0.0020	0.0018
	December		0.0053	0.010	4.8	**0.021**	0.17	0.13	0.00060	885	0.31	**2900**	0.82	0.011	0.0020	0.0018
	January	2040	0.0049	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0050	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0098	0.0089	4.0	**0.046**	0.54	0.11	0.00053	885	0.28	**2899**	0.67	0.0097	0.0017	0.0016
	April		0.0060	0.0093	4.2	**0.036**	0.24	0.11	0.00056	885	0.29	**2900**	0.70	0.010	0.0018	0.0017
	May		0.0081	0.0094	4.2	**0.040**	0.40	0.12	0.00056	886	0.29	**2902**	0.70	0.010	0.0018	0.0017
	June		0.0085	0.0088	3.9	**0.043**	0.45	0.11	0.00053	886	0.29	**2902**	0.68	0.0096	0.0017	0.0016

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.0089	0.0087	3.8	**0.050**	0.49	0.11	0.00053	886	0.29	**2904**	0.66	0.0095	0.0017	0.0016
	August		0.0059	0.0098	4.5	**0.035**	0.22	0.12	0.00059	886	0.31	**2904**	0.73	0.010	0.0019	0.0017
	September		0.0069	0.010	4.6	**0.032**	0.29	0.12	0.00060	886	0.30	**2902**	0.73	0.011	0.0019	0.0018
	October		0.0067	0.0098	4.4	**0.033**	0.29	0.12	0.00058	885	0.30	**2901**	0.74	0.011	0.0019	0.0017
	November		0.0057	0.010	5.0	**0.023**	0.19	0.13	0.00061	885	0.31	**2900**	0.81	0.011	0.0020	0.0018
	December		0.0057	0.010	5.2	**0.022**	0.18	0.13	0.00060	885	0.31	**2899**	0.80	0.011	0.0020	0.0018
	January	2041	0.0052	0.010	5.2	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.84	0.012	0.0020	0.0018
	February		0.0053	0.010	5.3	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.83	0.011	0.0020	0.0018
	March		0.0085	0.0098	4.8	**0.029**	0.39	0.12	0.00058	885	0.30	**2901**	0.75	0.011	0.0019	0.0017
	April		0.0065	0.0089	4.0	**0.040**	0.30	0.11	0.00053	885	0.28	**2900**	0.66	0.0096	0.0017	0.0016
	May		0.0060	0.010	4.7	**0.030**	0.21	0.13	0.00061	886	0.31	**2903**	0.75	0.011	0.0020	0.0018
	June		0.0075	0.0097	4.4	**0.033**	0.34	0.12	0.00057	886	0.30	**2902**	0.73	0.010	0.0019	0.0017
	July		0.0089	0.0092	4.1	**0.042**	0.46	0.11	0.00055	886	0.29	**2902**	0.68	0.0099	0.0018	0.0016
	August		0.013	0.0085	3.7	**0.055**	0.83	0.10	0.00052	886	0.28	**2903**	0.64	0.0094	0.0016	0.0015
	September		0.0063	0.0085	3.7	**0.052**	0.30	0.10	0.00052	887	0.29	**2907**	0.65	0.0093	0.0016	0.0015
	October		0.0065	0.0092	4.1	**0.041**	0.27	0.11	0.00056	885	0.29	**2899**	0.68	0.0098	0.0018	0.0017
	November		0.0057	0.010	4.6	**0.033**	0.19	0.12	0.00061	885	0.31	**2899**	0.74	0.011	0.0020	0.0018
	December		0.0051	0.010	5.2	**0.018**	0.14	0.13	0.00060	885	0.32	**2900**	0.85	0.012	0.0020	0.0018
	January	2042	0.0051	0.010	5.4	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0069	0.0098	4.7	**0.028**	0.28	0.12	0.00057	885	0.29	**2899**	0.74	0.010	0.0019	0.0017
	April		0.0085	0.0091	4.1	**0.040**	0.43	0.11	0.00054	886	0.29	**2903**	0.69	0.0099	0.0018	0.0016
	May		0.0058	0.0100	4.5	**0.031**	0.20	0.12	0.00059	885	0.30	**2900**	0.74	0.011	0.0019	0.0018
	June		0.011	0.0086	3.8	**0.047**	0.63	0.11	0.00052	885	0.28	**2901**	0.66	0.0094	0.0016	0.0015
	July		0.0084	0.0084	3.7	**0.051**	0.44	0.10	0.00051	887	0.28	**2907**	0.64	0.0093	0.0016	0.0015
	August		0.0090	0.0086	3.8	**0.051**	0.49	0.10	0.00052	886	0.29	**2904**	0.65	0.0094	0.0016	0.0015
	September		0.0093	0.0091	4.0	**0.044**	0.48	0.11	0.00055	885	0.29	**2901**	0.67	0.0098	0.0017	0.0016
	October		0.0071	0.0092	4.1	**0.048**	0.34	0.11	0.00056	885	0.29	**2900**	0.66	0.0097	0.0018	0.0017
	November		0.0054	0.010	4.6	**0.031**	0.17	0.12	0.00060	884	0.31	**2897**	0.75	0.011	0.0019	0.0018
	December		0.0052	0.010	5.3	**0.018**	0.13	0.13	0.00060	885	0.32	**2900**	0.85	0.012	0.0020	0.0018
	January	2043	0.0052	0.010	5.4	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.4	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	March		0.0062	0.010	5.1	**0.023**	0.20	0.13	0.00059	885	0.31	**2899**	0.79	0.011	0.0020	0.0018
	April		0.0084	0.0088	3.9	**0.041**	0.43	0.11	0.00053	885	0.28	**2901**	0.65	0.0095	0.0017	0.0016
	May		0.0067	0.0098	4.4	**0.035**	0.27	0.12	0.00058	885	0.30	**2899**	0.70	0.010	0.0019	0.0017
	June		0.0090	0.0088	4.0	**0.043**	0.47	0.11	0.00053	885	0.28	**2900**	0.65	0.0095	0.0017	0.0016
	July		0.0092	0.0089	4.0	**0.044**	0.48	0.11	0.00053	885	0.29	**2900**	0.67	0.0096	0.0017	0.0016
	August		0.0091	0.0085	3.7	**0.052**	0.50	0.10	0.00052	886	0.29	**2903**	0.64	0.0093	0.0016	0.0015
	September		0.0097	0.0086	3.8	**0.050**	0.54	0.11	0.00052	885	0.29	**2900**	0.66	0.0095	0.0017	0.0016
	October		0.0077	0.0089	3.9	**0.048**	0.37	0.11	0.00054	885	0.29	**2899**	0.64	0.0095	0.0017	0.0016
	November		0.0058	0.0097	4.4	**0.035**	0.20	0.12	0.00058	884	0.30	**2897**	0.71	0.010	0.0019	0.0017
	December		0.0061	0.010	4.8	**0.027**	0.20	0.13	0.00062	885	0.31	**2900**	0.78	0.011	0.0020	0.0018
	January	2044	0.0052	0.010	5.2	**0.017**	0.14	0.13	0.00060	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0056	0.010	5.1	**0.020**	0.16	0.13	0.00060	885	0.31	**2900**	0.82	0.011	0.0020	0.0018
	March		0.0066	0.010	4.9	**0.023**	0.24	0.13	0.00059	885	0.31	**2900**	0.79	0.011	0.0020	0.0018
	April		0.0066	0.0095	4.2	**0.035**	0.28	0.12	0.00056	885	0.29	**2899**	0.70	0.010	0.0018	0.0017
	May		0.0073	0.0098	4.4	**0.033**	0.31	0.12	0.00058	885	0.30	**2901**	0.73	0.010	0.0019	0.0017
	June		0.0072	0.0098	4.4	**0.033**	0.30	0.12	0.00058	886	0.30	**2903**	0.73	0.011	0.0019	0.0017
	July		0.0087	0.0088	3.9	**0.044**	0.45	0.11	0.00053	886	0.28	**2904**	0.65	0.0095	0.0017	0.0016
	August		0.0068	0.0098	4.4	**0.035**	0.28	0.12	0.00058	886	0.30	**2903**	0.71	0.010	0.0019	0.0017
	September		0.0072	0.0100	4.5	**0.034**	0.30	0.12	0.00059	885	0.30	**2901**	0.74	0.011	0.0019	0.0018
	October		0.0065	0.010	4.6	**0.029**	0.24	0.13	0.00060	886	0.31	**2902**	0.77	0.011	0.0020	0.0018
	November		0.0062	0.010	4.8	**0.024**	0.21	0.13	0.00060	885	0.31	**2900**	0.80	0.011	0.0020	0.0018
	December		0.0060	0.011	4.9	**0.024**	0.19	0.13	0.00062	885	0.31	**2900**	0.79	0.011	0.0020	0.0019
	January	2045	0.0058	0.010	5.0	**0.021**	0.17	0.13	0.00061	885	0.31	**2900**	0.81	0.011	0.0020	0.0018
	February		0.0052	0.010	5.2	**0.017**	0.14	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	March		0.0070	0.0099	4.8	**0.027**	0.27	0.12	0.00058	885	0.30	**2899**	0.76	0.011	0.0019	0.0017
	April		0.0067	0.0098	4.4	**0.034**	0.27	0.12	0.00058	885	0.30	**2899**	0.73	0.010	0.0019	0.0017
	May		0.0080	0.0090	4.0	**0.040**	0.39	0.11	0.00054	885	0.28	**2900**	0.67	0.0096	0.0017	0.0016
	June		0.0082	0.0089	3.9	**0.042**	0.41	0.11	0.00053	886	0.29	**2902**	0.67	0.0096	0.0017	0.0016
	July		0.0076	0.0087	3.9	**0.042**	0.38	0.11	0.00052	885	0.28	**2902**	0.66	0.0095	0.0017	0.0016
	August		0.0074	0.0094	4.2	**0.040**	0.34	0.11	0.00056	886	0.30	**2903**	0.69	0.010	0.0018	0.0017
	September		0.0074	0.0097	4.3	**0.036**	0.32	0.12	0.00058	885	0.30	**2901**	0.72	0.010	0.0019	0.0017

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.0069	0.010	4.5	**0.031**	0.27	0.12	0.00060	885	0.30	**2899**	0.75	0.011	0.0019	0.0018
	November		0.0062	0.011	4.8	**0.025**	0.21	0.13	0.00062	885	0.31	**2900**	0.80	0.011	0.0020	0.0019
	December		0.0060	0.010	5.1	**0.021**	0.19	0.13	0.00059	885	0.32	**2899**	0.82	0.011	0.0020	0.0018
	January	2046	0.0060	0.0099	4.6	**0.029**	0.22	0.12	0.00059	885	0.31	**2899**	0.77	0.011	0.0019	0.0018
	February		0.0063	0.011	4.9	**0.023**	0.21	0.13	0.00061	885	0.31	**2900**	0.79	0.011	0.0020	0.0018
	March		0.0065	0.010	4.7	**0.027**	0.23	0.13	0.00061	885	0.30	**2901**	0.76	0.011	0.0020	0.0018
	April		0.0066	0.010	4.8	**0.027**	0.24	0.13	0.00061	885	0.30	**2900**	0.76	0.011	0.0020	0.0018
	May		0.0079	0.0092	4.1	**0.038**	0.38	0.11	0.00055	885	0.29	**2901**	0.69	0.0099	0.0018	0.0016
	June		0.0084	0.0092	4.1	**0.039**	0.41	0.11	0.00055	885	0.29	**2901**	0.69	0.0099	0.0018	0.0016
	July		0.0085	0.0087	3.8	**0.045**	0.45	0.11	0.00053	886	0.28	**2903**	0.65	0.0095	0.0017	0.0016
	August		0.0092	0.0089	3.9	**0.048**	0.49	0.11	0.00054	886	0.29	**2903**	0.66	0.0096	0.0017	0.0016
	September		0.0082	0.0088	3.9	**0.045**	0.41	0.11	0.00053	886	0.29	**2903**	0.66	0.0096	0.0017	0.0016
	October		0.0074	0.0092	4.1	**0.040**	0.35	0.11	0.00055	884	0.29	**2897**	0.68	0.0098	0.0018	0.0016
	November		0.0059	0.010	4.5	**0.033**	0.20	0.12	0.00060	885	0.31	**2899**	0.74	0.011	0.0019	0.0018
	December		0.0054	0.010	5.0	**0.020**	0.15	0.13	0.00060	885	0.32	**2899**	0.84	0.011	0.0020	0.0018
	January	2047	0.0055	0.010	5.2	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.83	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	March		0.0076	0.0093	4.2	**0.036**	0.34	0.11	0.00055	884	0.28	**2898**	0.68	0.0099	0.0018	0.0017
	April		0.0067	0.010	4.5	**0.031**	0.26	0.12	0.00059	885	0.30	**2901**	0.74	0.011	0.0019	0.0018
	May		0.0084	0.0093	4.2	**0.037**	0.41	0.11	0.00055	886	0.29	**2902**	0.70	0.0100	0.0018	0.0016
	June		0.0070	0.0095	4.2	**0.037**	0.30	0.12	0.00057	885	0.30	**2901**	0.70	0.010	0.0018	0.0017
	July		0.0088	0.0086	3.8	**0.045**	0.47	0.11	0.00052	886	0.28	**2902**	0.65	0.0094	0.0016	0.0015
	August		0.0090	0.0087	3.8	**0.049**	0.49	0.11	0.00053	886	0.29	**2904**	0.66	0.0095	0.0017	0.0016
	September		0.0075	0.0091	4.0	**0.040**	0.35	0.11	0.00055	885	0.29	**2901**	0.67	0.0098	0.0018	0.0016
	October		0.0064	0.0098	4.4	**0.036**	0.25	0.12	0.00058	885	0.31	**2900**	0.75	0.011	0.0019	0.0017
	November		0.0065	0.010	4.8	**0.027**	0.23	0.13	0.00061	885	0.31	**2900**	0.77	0.011	0.0020	0.0018
	December		0.0053	0.010	5.1	**0.018**	0.14	0.13	0.00060	885	0.32	**2900**	0.85	0.012	0.0020	0.0018
	January	2048	0.0061	0.010	4.9	**0.023**	0.20	0.13	0.00061	885	0.31	**2899**	0.79	0.011	0.0020	0.0018
	February		0.0060	0.010	5.1	**0.022**	0.18	0.13	0.00061	885	0.31	**2900**	0.80	0.011	0.0020	0.0018
	March		0.0057	0.010	5.1	**0.019**	0.16	0.13	0.00060	885	0.32	**2900**	0.83	0.011	0.0020	0.0018
	April		0.0069	0.010	4.7	**0.029**	0.26	0.13	0.00061	884	0.30	**2898**	0.74	0.011	0.0020	0.0018
	May		0.0068	0.010	4.5	**0.029**	0.26	0.13	0.00060	885	0.31	**2901**	0.76	0.011	0.0020	0.0018
	June		0.0071	0.0099	4.5	**0.032**	0.30	0.12	0.00059	886	0.30	**2902**	0.74	0.011	0.0019	0.0018
	July		0.014	0.0086	3.7	**0.051**	0.83	0.11	0.00052	886	0.28	**2905**	0.65	0.0095	0.0016	0.0015
	August		0.0087	0.0084	3.6	**0.054**	0.48	0.10	0.00051	887	0.29	**2905**	0.65	0.0093	0.0016	0.0015
	September		0.0083	0.0084	3.6	**0.052**	0.43	0.10	0.00051	887	0.28	**2906**	0.64	0.0092	0.0016	0.0015
	October		0.0063	0.0089	4.0	**0.041**	0.26	0.11	0.00054	885	0.29	**2899**	0.66	0.0095	0.0017	0.0016
	November		0.0060	0.0099	4.4	**0.034**	0.21	0.12	0.00059	885	0.31	**2898**	0.73	0.011	0.0019	0.0018
	December		0.0068	0.010	4.6	**0.031**	0.25	0.13	0.00061	885	0.30	**2899**	0.74	0.011	0.0020	0.0018
	January	2049	0.0055	0.010	5.0	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.84	0.012	0.0020	0.0018
	February		0.0053	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.85	0.011	0.0020	0.0018
	March		0.0069	0.0099	4.9	**0.025**	0.26	0.12	0.00058	885	0.30	**2900**	0.77	0.011	0.0019	0.0017
	April		0.0063	0.010	4.5	**0.030**	0.22	0.12	0.00060	885	0.30	**2900**	0.74	0.011	0.0020	0.0018
	May		0.0082	0.0095	4.3	**0.037**	0.38	0.12	0.00057	885	0.30	**2901**	0.71	0.010	0.0018	0.0017
	June		0.0082	0.0089	3.9	**0.042**	0.41	0.11	0.00053	886	0.29	**2902**	0.66	0.0096	0.0017	0.0016
	July		0.010	0.0084	3.6	**0.052**	0.59	0.10	0.00051	887	0.29	**2905**	0.64	0.0093	0.0016	0.0015
	August		0.0090	0.0086	3.8	**0.051**	0.48	0.11	0.00053	886	0.29	**2902**	0.65	0.0094	0.0017	0.0016
	September		0.010	0.0087	3.8	**0.050**	0.56	0.11	0.00053	886	0.29	**2902**	0.65	0.0095	0.0017	0.0016
	October		0.0077	0.0087	3.8	**0.048**	0.38	0.11	0.00053	886	0.29	**2902**	0.65	0.0094	0.0017	0.0016
	November		0.0057	0.0097	4.4	**0.035**	0.20	0.12	0.00058	884	0.30	**2897**	0.70	0.010	0.0019	0.0017
	December		0.0055	0.010	4.8	**0.024**	0.15	0.13	0.00061	885	0.33	**2899**	0.84	0.011	0.0020	0.0018
	January	2050	0.0053	0.010	5.1	**0.017**	0.14	0.13	0.00060	885	0.33	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0054	0.010	5.0	**0.017**	0.14	0.13	0.00060	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	March		0.0072	0.0096	4.3	**0.030**	0.30	0.12	0.00057	885	0.30	**2899**	0.72	0.010	0.0018	0.0017
	April		0.0077	0.0091	3.9	**0.039**	0.35	0.11	0.00054	885	0.29	**2899**	0.69	0.0098	0.0017	0.0016
	May		0.0071	0.0096	4.1	**0.034**	0.30	0.12	0.00057	885	0.30	**2900**	0.72	0.010	0.0019	0.0017
	June		0.0082	0.0091	3.9	**0.041**	0.40	0.11	0.00055	885	0.29	**2901**	0.67	0.0097	0.0017	0.0016
	July		0.0071	0.010	4.3	**0.031**	0.28	0.12	0.00059	886	0.31	**2903**	0.76	0.011	0.0019	0.0018
	August		0.0071	0.010	4.2	**0.032**	0.28	0.12	0.00059	886	0.31	**2903**	0.74	0.011	0.0019	0.0018
	September		0.0086	0.0089	3.8	**0.042**	0.43	0.11	0.00053	886	0.29	**2902**	0.66	0.0096	0.0017	0.0016
	October		0.0064	0.010	4.3	**0.033**	0.24	0.12	0.00060	885	0.31	**2900**	0.74	0.011	0.0019	0.0018
	November		0.0064	0.010	4.6	**0.025**	0.21	0.13	0.00061	885	0.31	**2901**	0.79	0.011	0.0020	0.0018
	December		0.0054	0.010	5.0	**0.017**	0.14	0.13	0.00060	885	0.33	**2900**	0.85	0.011	0.0020	0.0018

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**January**	**2051**	0.0054	0.010	5.0	**0.017**	0.13	0.13	0.00060	885	0.33	**2900**	0.85	0.011	0.0020	0.0018
	February		0.0060	0.010	4.8	**0.021**	0.17	0.13	0.00061	885	0.32	**2900**	0.82	0.011	0.0020	0.0018
	March		0.0066	0.010	4.5	**0.027**	0.23	0.13	0.00060	884	0.31	**2898**	0.77	0.011	0.0020	0.0018
	April		0.014	0.0086	3.6	**0.050**	0.82	0.11	0.00052	885	0.28	**2899**	0.64	0.0094	0.0017	0.0015
	May		0.0067	0.0088	3.6	**0.049**	0.29	0.11	0.00053	886	0.30	**2903**	0.66	0.0096	0.0017	0.0016
	June		0.0075	0.0092	3.9	**0.041**	0.34	0.11	0.00055	885	0.30	**2901**	0.68	0.0098	0.0018	0.0016
	July		0.0092	0.0087	3.6	**0.045**	0.48	0.11	0.00052	886	0.29	**2904**	0.66	0.0094	0.0017	0.0016
	August		0.0091	0.0086	3.5	**0.053**	0.49	0.10	0.00052	886	0.29	**2904**	0.64	0.0094	0.0016	0.0015
	September		0.0076	0.0090	3.8	**0.042**	0.35	0.11	0.00054	885	0.30	**2901**	0.67	0.0097	0.0017	0.0016
	October		0.0070	0.0093	3.9	**0.038**	0.29	0.11	0.00056	884	0.30	**2898**	0.68	0.0099	0.0018	0.0017
	November		0.0066	0.010	4.3	**0.033**	0.24	0.12	0.00060	884	0.32	**2898**	0.75	0.011	0.0019	0.0018
	December		0.0064	0.011	4.6	**0.024**	0.21	0.13	0.00062	885	0.32	**2900**	0.80	0.011	0.0020	0.0018
	January	**2052**	0.0040	0.0052	5.6	**0.023**	0.18	0.074	0.00031	890	0.30	**2915**	0.73	0.0081	0.00100	0.00092
	February		0.0033	0.0054	6.4	**0.018**	0.13	0.077	0.00032	891	0.30	**2920**	0.74	0.0082	0.0010	0.00095
	March		0.0045	0.0048	5.7	**0.022**	0.22	0.070	0.00029	888	0.29	**2911**	0.72	0.0079	0.00092	0.00085
	April		0.0047	0.0040	4.5	**0.036**	0.29	0.059	0.00025	887	0.28	**2906**	0.63	0.0069	0.00076	0.00074
	May		0.0060	0.0035	4.1	**0.039**	0.39	0.055	0.00023	887	0.28	**2906**	0.65	0.0068	0.00068	0.00067
	June		0.0047	0.0039	4.5	**0.034**	0.29	0.060	0.00025	888	0.29	**2909**	0.69	0.0072	0.00075	0.00072
	July		0.0077	0.0032	3.7	**0.045**	0.53	0.051	0.00021	886	0.28	**2904**	0.62	0.0065	0.00061	0.00061
	August		0.0057	0.0033	3.7	**0.043**	0.39	0.052	0.00021	886	0.28	**2905**	0.64	0.0067	0.00062	0.00062
	September		0.0041	0.0043	4.9	**0.035**	0.23	0.063	0.00028	888	0.28	**2910**	0.64	0.0071	0.00083	0.00081
	October		0.0043	0.0046	5.4	**0.028**	0.22	0.068	0.00028	889	0.29	**2912**	0.69	0.0076	0.00089	0.00084
	November		0.0034	0.0055	6.5	**0.017**	0.12	0.077	0.00032	889	0.28	**2915**	0.70	0.0080	0.0011	0.00096
	December		0.0037	0.0047	5.6	**0.023**	0.18	0.070	0.00028	889	0.30	**2914**	0.74	0.0079	0.00090	0.00084
		MINIMUM	0.0033	0.0032	3.5	**0.017**	0.12	0.051	0.00021	827	0.28	**2709**	0.62	0.0065	0.00061	0.00061
		MAXIMUM	0.014	0.011	7.3	**0.055**	0.83	0.13	0.00062	891	0.39	**2920**	1.1	0.013	0.0020	0.0019
		AVERAGE	0.0067	0.0094	4.6	**0.033**	0.30	0.12	0.00056	885	0.30	**2901**	0.75	0.010	0.0018	0.0017
Decommissioning	**January**	**2053**	0.0018	0.00034	5.9	**0.027**	0.25	0.037	0.000033	219	0.39	249	1.0	0.0084	0.000062	0.00011
	February		0.00060	0.0000033	5.7	**0.019**	0.19	0.040	0.0000060	184	0.43	7.7	1.2	0.0095	0.00000012	0.000040
	March		0.0044	0.0000098	5.5	**0.025**	0.44	0.037	0.000010	174	0.41	16	1.1	0.0089	0.00000014	0.000047
	April		0.0029	0.000046	5.5	**0.050**	0.37	0.025	0.000031	118	0.33	60	0.82	0.0064	0.00000021	0.000086
	May		0.0034	0.000046	5.4	**0.044**	0.38	0.029	0.000031	134	0.36	57	0.91	0.0072	0.00000019	0.000085
	June		0.0028	0.000025	5.3	**0.034**	0.34	0.033	0.000019	154	0.39	34	1.0	0.0081	0.00000016	0.000064
	July		0.0041	0.000037	5.2	**0.043**	0.43	0.030	0.000026	139	0.37	49	0.94	0.0075	0.00000019	0.000077
	August		0.0068	0.000038	5.0	**0.046**	0.62	0.028	0.000027	135	0.35	51	0.90	0.0072	0.0000002	0.000078
	September		0.0058	0.000049	5.0	**0.058**	0.56	0.023	0.000034	111	0.32	67	0.77	0.0061	0.00000023	0.000091
	October		0.0033	0.000051	4.9	**0.047**	0.38	0.027	0.000034	129	0.36	63	0.88	0.0069	0.0000002	0.000090
	November		0.0025	0.000046	4.9	**0.042**	0.32	0.030	0.000031	139	0.37	56	0.94	0.0074	0.00000019	0.000085
	December		0.00062	0.0000055	4.7	**0.021**	0.19	0.039	0.0000073	182	0.42	11	1.2	0.0094	0.00000012	0.000042
	January	**2054**	0.00050	0.0000029	4.6	**0.019**	0.19	0.040	0.0000049	184	0.42	5.9	1.2	0.0095	9.8E-08	0.000038
	February		0.00047	0.0000027	4.6	**0.019**	0.19	0.039	0.0000045	183	0.42	5.6	1.2	0.0094	9.0E-08	0.000037
	March		0.0028	0.000025	4.5	**0.034**	0.35	0.032	0.000018	153	0.38	32	1.0	0.0080	0.00000014	0.000062
	April		0.0036	0.000031	4.4	**0.040**	0.41	0.030	0.000022	141	0.36	41	0.95	0.0075	0.00000016	0.000068
	May		0.0037	0.000044	4.2	**0.045**	0.41	0.027	0.000029	128	0.34	55	0.87	0.0069	0.00000017	0.000082
	June		0.0029	0.000030	4.1	**0.037**	0.35	0.033	0.000021	152	0.38	38	1.0	0.0080	0.00000015	0.000068
	July		0.0041	0.000038	4.0	**0.044**	0.44	0.029	0.000026	136	0.36	49	0.92	0.0073	0.00000017	0.000077
	August		0.0078	0.000047	3.9	**0.056**	0.71	0.024	0.000032	113	0.32	64	0.77	0.0062	0.00000021	0.000088
	September		0.0035	0.000048	3.9	**0.048**	0.39	0.027	0.000032	127	0.35	61	0.87	0.0068	0.00000018	0.000087
	October		0.0026	0.000047	3.8	**0.044**	0.34	0.029	0.000031	135	0.36	57	0.92	0.0072	0.00000017	0.000085
	November		0.0029	0.000031	3.7	**0.038**	0.36	0.031	0.000021	147	0.37	41	0.98	0.0077	0.00000015	0.000068
	December		0.00095	0.0000093	3.6	**0.024**	0.22	0.038	0.0000085	175	0.41	14	1.2	0.0091	0.0000001	0.000045
	January	**2055**	0.00046	0.000014	3.5	**0.023**	0.19	0.038	0.000011	176	0.41	16	1.2	0.0091	9.2E-08	0.000049
	February		0.00035	0.000011	3.4	**0.023**	0.19	0.038	0.0000084	178	0.41	15	1.2	0.0092	8.2E-08	0.000046
	March		0.00035	0.0000026	3.3	**0.019**	0.19	0.040	0.0000037	184	0.42	4.9	1.2	0.0095	7.1E-08	0.000037
	April		0.00066	0.000048	3.2	**0.035**	0.19	0.031	0.000030	145	0.37	53	0.98	0.0076	0.00000013	0.000084
	May		0.00041	0.000051	3.1	**0.037**	0.18	0.032	0.000032	149	0.39	56	1.0	0.0078	0.00000014	0.000087
	June		0.00062	0.000055	3.0	**0.038**	0.19	0.032	0.000034	149	0.39	61	1.0	0.0078	0.00000014	0.000092
	July		0.00047	0.000066	2.9	**0.041**	0.17	0.028	0.000041	130	0.36	71	0.89	0.0070	0.00000015	0.00010
	August		0.00039	0.000069	2.8	**0.043**	0.17	0.029	0.000043	137	0.38	75	0.94	0.0074	0.00000016	0.00011
	September		0.00037	0.000063	2.7	**0.041**	0.17	0.032	0.000039	148	0.40	69	1.0	0.0079	0.00000015	0.00010
	October		0.00036	0.000057	2.6	**0.039**	0.18	0.033	0.000035	153	0.40	62	1.0	0.0081	0.00000015	0.000095
	November		0.00035	0.000033	2.5	**0.031**	0.18	0.036	0.000022	167	0.41	39	1.1	0.0088	0.00000011	0.000070
	December		0.00035	0.000011	2.4	**0.022**	0.18	0.039	0.0000085	177	0.41	14	1.2	0.0092	8.2E-08	0.000046

Table G-5: Scenario 5: Climate Change - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	**January**	**2056**	0.00027	0.0000022	2.3	**0.019**	0.19	0.040	0.0000029	184	0.42	3.9	1.2	0.0095	5.7E-08	0.000036
	February		0.00025	0.0000020	2.2	**0.019**	0.19	0.040	0.0000027	184	0.41	3.4	1.2	0.0095	5.3E-08	0.000036
	March		0.00030	0.000041	2.2	**0.033**	0.18	0.034	0.000025	161	0.40	44	1.1	0.0083	0.00000011	0.000076
	April		0.00027	0.000034	2.1	**0.031**	0.18	0.034	0.000021	163	0.40	38	1.1	0.0084	9.7E-08	0.000069
	May		0.00028	0.000031	1.9	**0.029**	0.18	0.036	0.000020	166	0.40	33	1.1	0.0087	9.5E-08	0.000067
	June		0.00027	0.000033	1.9	**0.031**	0.18	0.035	0.000021	164	0.40	37	1.1	0.0085	9.7E-08	0.000068
	July		0.00030	0.000056	1.8	**0.038**	0.17	0.032	0.000034	149	0.39	60	1.0	0.0078	0.00000013	0.000092
	August		0.00032	0.000060	1.7	**0.040**	0.17	0.031	0.000037	147	0.39	65	1.00	0.0077	0.00000013	0.000096
	September		0.00026	0.000072	1.6	**0.045**	0.17	0.030	0.000043	140	0.39	77	0.97	0.0075	0.00000015	0.00011
	October		0.00023	0.000059	1.5	**0.040**	0.17	0.033	0.000036	153	0.40	64	1.0	0.0081	0.00000013	0.000096
	November		0.00024	0.000020	1.3	**0.026**	0.18	0.038	0.000013	173	0.41	23	1.1	0.0091	7.9E-08	0.000055
	December		0.00025	0.0000021	1.3	**0.019**	0.19	0.040	0.0000027	183	0.41	3.5	1.2	0.0095	5.3E-08	0.000036
	January	**2057**	0.00011	0.0000013	1.2	**0.019**	0.19	0.040	0.0000011	184	0.41	1.7	1.2	0.0095	2.5E-08	0.000034
	February		0.000084	0.000014	1.1	**0.024**	0.19	0.038	0.0000084	179	0.41	16	1.2	0.0092	3.7E-08	0.000047
	March		0.000072	0.0000012	0.97	**0.019**	0.19	0.040	0.00000067	184	0.41	1.4	1.2	0.0095	1.7E-08	0.000033
	April		0.00014	0.000050	0.87	**0.036**	0.18	0.034	0.000029	158	0.40	51	1.1	0.0083	9.1E-08	0.000085
	May		0.000075	0.000034	0.79	**0.032**	0.18	0.036	0.000020	167	0.41	37	1.1	0.0087	6.7E-08	0.000068
	June		0.000089	0.000020	0.67	**0.026**	0.19	0.039	0.000012	179	0.41	19	1.2	0.0094	4.6E-08	0.000054
	July		0.00013	0.000058	0.57	**0.040**	0.18	0.034	0.000034	155	0.40	61	1.1	0.0083	0.00000011	0.000095
	August		0.00011	0.000064	0.49	**0.043**	0.18	0.034	0.000038	157	0.41	68	1.1	0.0083	0.00000011	0.00010
	September		0.000084	0.000061	0.39	**0.042**	0.18	0.034	0.000036	159	0.42	65	1.1	0.0084	0.00000011	0.000099
	October		0.000076	0.000029	0.29	**0.030**	0.18	0.037	0.000017	171	0.41	31	1.1	0.0091	6.1E-08	0.000064
	November		0.000074	0.000010	0.20	**0.023**	0.19	0.038	0.0000059	178	0.41	11	1.2	0.0092	3.0E-08	0.000042
	December		0.000075	0.0000071	0.10	**0.021**	0.19	0.039	0.0000042	181	0.41	7.0	1.2	0.0094	2.6E-08	0.000040
		MINIMUM	0.000072	0.0000012	0.10	**0.019**	0.17	0.023	0.00000067	111	0.32	1.4	0.77	0.0061	1.7E-08	0.000033
		MAXIMUM	0.0078	0.00034	5.9	**0.058**	0.71	0.040	0.000043	219	0.43	249	1.2	0.0095	0.000062	0.00011
		AVERAGE	0.0014	0.000038	2.9	**0.034**	0.26	0.034	0.000022	158	0.39	42	1.1	0.0083	0.0000011	0.000070

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2026	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2027	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2028	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	January	2029	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2031	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2032	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2033	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2034	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	April	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2036	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2037	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2038	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2039	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2041	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2042	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2043	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2044	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	October	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2046	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2047	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2048	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2049	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2050	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2052	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Decommissioning	January	2053	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2054	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2055	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2057	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Reclamation	January	2058	0.0017	0.0063	0.000019	0.0000016	0.030	0.048	0.0000080	0.000031	0.0000064	0.0010	0.0000016	0.00033	0.0089	0.0028	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.018	0.069	0.00021	0.000017	0.33	0.52	0.000088	0.00034	0.000070	0.011	0.000018	0.0036	0.099	0.031	0.0000016
	April		0.028	0.10	0.00031	0.000026	0.48	0.79	0.00013	0.00052	0.00011	0.016	0.000027	0.0054	0.14	0.047	0.0000024
	May		0.036	0.13	0.00040	0.000034	0.61	1.0	0.00017	0.00067	0.00014	0.021	0.000034	0.0069	0.18	0.061	0.0000030
	June		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	July		0.043	0.16	0.00049	0.000041	0.74	1.2	0.00021	0.00082	0.00016	0.026	0.000041	0.0083	0.22	0.074	0.0000037
	August		0.045	0.17	0.00051	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	September		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	October		0.032	0.12	0.00036	0.000030	0.55	0.91	0.00015	0.00060	0.00012	0.019	0.000031	0.0062	0.16	0.054	0.0000027
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		0.0019	0.0070	0.000021	0.0000018	0.032	0.053	0.0000089	0.000035	0.0000071	0.0011	0.0000018	0.00036	0.0095	0.0032	0.00000016
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	April		0.023	0.085	0.00026	0.000021	0.39	0.64	0.00011	0.00043	0.000086	0.013	0.000022	0.0044	0.12	0.039	0.0000019
	May		0.037	0.14	0.00042	0.000035	0.63	1.1	0.00018	0.00070	0.00014	0.022	0.000035	0.0071	0.19	0.063	0.0000032
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	August		0.034	0.13	0.00039	0.000032	0.59	0.98	0.00016	0.00065	0.00013	0.020	0.000033	0.0066	0.18	0.059	0.0000029
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000013	0.0021	0.0000033	0.00067	0.018	0.0059	0.0000003
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0051	0.019	0.000057	0.0000048	0.087	0.14	0.000024	0.000095	0.000019	0.0030	0.0000048	0.00097	0.026	0.0086	0.00000043
	April		0.019	0.072	0.00022	0.000018	0.33	0.54	0.000091	0.00036	0.000073	0.011	0.000018	0.0037	0.098	0.033	0.0000016
	May		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	September		0.041	0.15	0.00046	0.000038	0.70	1.2	0.00019	0.00077	0.00016	0.024	0.000039	0.0078	0.21	0.069	0.0000035
	October		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	November		0.010	0.039	0.00012	0.0000099	0.18	0.30	0.000050	0.00020	0.000040	0.0062	0.0000100	0.0020	0.053	0.018	0.00000089
	December		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Reclamation	January	2061	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.013	0.047	0.00014	0.000012	0.21	0.36	0.000060	0.00024	0.000048	0.0074	0.000012	0.0024	0.064	0.021	0.0000011
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.024	0.091	0.00027	0.000023	0.41	0.68	0.00011	0.00045	0.000092	0.014	0.000023	0.0046	0.12	0.041	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	November		0.018	0.067	0.00020	0.000017	0.30	0.50	0.000084	0.00033	0.000067	0.010	0.000017	0.0034	0.090	0.030	0.0000015
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	January	2062	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	February		0.0019	0.0070	0.000021	0.0000018	0.032	0.053	0.0000089	0.000035	0.0000071	0.0011	0.0000018	0.00036	0.0095	0.0032	0.00000016
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.010	0.039	0.00012	0.0000099	0.18	0.30	0.000050	0.00020	0.000040	0.0062	0.0000100	0.0020	0.053	0.018	0.00000089
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.037	0.14	0.00042	0.000035	0.63	1.1	0.00018	0.00070	0.00014	0.022	0.000035	0.0071	0.19	0.063	0.0000032
	November		0.019	0.072	0.00022	0.000018	0.33	0.54	0.000091	0.00036	0.000073	0.011	0.000018	0.0037	0.098	0.033	0.0000016
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.010	0.038	0.00011	0.0000095	0.17	0.29	0.000048	0.00019	0.000038	0.0060	0.0000097	0.0019	0.051	0.017	0.00000086
	February		0.0075	0.028	0.000085	0.0000070	0.13	0.21	0.000036	0.00014	0.000028	0.0044	0.0000071	0.0014	0.038	0.013	0.00000064
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	April		0.019	0.072	0.00022	0.000018	0.33	0.54	0.000091	0.00036	0.000073	0.011	0.000018	0.0037	0.098	0.033	0.0000016
	May		0.041	0.15	0.00046	0.000039	0.70	1.2	0.00019	0.00077	0.00016	0.024	0.000039	0.0079	0.21	0.070	0.0000035
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000034
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.039	0.15	0.00044	0.000036	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0074	0.20	0.066	0.0000033
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000095	0.17	0.29	0.000048	0.00019	0.000038	0.0060	0.0000097	0.0019	0.051	0.017	0.00000086
	April		0.013	0.048	0.00014	0.000012	0.22	0.36	0.000060	0.00024	0.000048	0.0075	0.000012	0.0024	0.064	0.021	0.0000011
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000080	0.00032	0.000064	0.0100	0.000016	0.0032	0.086	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.74	0.00012	0.00049	0.000099	0.015	0.000025	0.0050	0.13	0.044	0.0000022
	July		0.020	0.076	0.00023	0.000019	0.35	0.57	0.000096	0.00038	0.000077	0.012	0.000019	0.0039	0.10	0.034	0.0000017
	August		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	September		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	October		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.044	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	April		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	May		0.032	0.12	0.00036	0.000030	0.55	0.91	0.00015	0.00060	0.00012	0.019	0.000031	0.0062	0.16	0.054	0.0000027
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00024	0.00095	0.00019	0.030	0.000048	0.0097	0.26	0.086	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	November		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	February		0.019	0.070	0.00021	0.000018	0.32	0.53	0.000089	0.00035	0.000071	0.011	0.000018	0.0036	0.095	0.032	0.0000016
	March		0.022	0.083	0.00025	0.000021	0.37	0.62	0.00010	0.00041	0.000083	0.013	0.000021	0.0042	0.11	0.037	0.0000019

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Reclamation	**April**	**2066**	0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.86	0.00014	0.00057	0.00012	0.018	0.000029	0.0058	0.15	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	August		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.69	0.00012	0.00046	0.000093	0.014	0.000023	0.0047	0.12	0.041	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.049	0.0000083	0.000033	0.0000066	0.0010	0.0000017	0.00033	0.0089	0.0030	0.00000015
	December		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	January	**2067**	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	February		0.0019	0.0070	0.000021	0.0000018	0.032	0.053	0.0000089	0.000035	0.0000071	0.0011	0.0000018	0.00036	0.0095	0.0032	0.00000016
	March		0.0050	0.019	0.000056	0.0000047	0.085	0.14	0.000024	0.000094	0.000019	0.0029	0.0000048	0.00096	0.025	0.0085	0.00000042
	April		0.028	0.11	0.00032	0.000026	0.48	0.79	0.00013	0.00053	0.00011	0.016	0.000027	0.0054	0.14	0.047	0.0000024
	May		0.029	0.11	0.00033	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.017	0.000028	0.0055	0.15	0.049	0.0000025
	June		0.036	0.13	0.00040	0.000034	0.61	1.0	0.00017	0.00067	0.00014	0.021	0.000034	0.0069	0.18	0.061	0.0000030
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.028	0.000045	0.0091	0.24	0.080	0.0000040
	September		0.048	0.18	0.00055	0.000046	0.83	1.4	0.00023	0.00091	0.00018	0.029	0.000046	0.0093	0.25	0.082	0.0000041
	October		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	November		0.010	0.039	0.00012	0.0000099	0.18	0.30	0.000050	0.00020	0.000040	0.0062	0.0000100	0.0020	0.053	0.018	0.00000089
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0017	0.0063	0.000019	0.0000016	0.029	0.048	0.0000080	0.000031	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0028	0.00000014
		MAXIMUM	0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
		AVERAGE	0.027	0.10	0.00030	0.000025	0.46	0.76	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
Post-Closure	**January**	**≥2070**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		0.00067	0.0025	0.0000075	0.00000063	0.011	0.019	0.0000032	0.000013	0.0000025	0.00039	0.00000064	0.00013	0.0034	0.0011	5.7E-08
	March		0.0051	0.019	0.000057	0.0000048	0.087	0.14	0.000024	0.000095	0.000019	0.0030	0.0000048	0.00097	0.026	0.0086	0.00000043
	April		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00080	0.00016	0.025	0.000040	0.0081	0.22	0.072	0.0000036
	August		0.041	0.15	0.00046	0.000038	0.70	1.2	0.00019	0.00077	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000035
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.033	0.12	0.00037	0.000031	0.56	0.94	0.00016	0.00062	0.00013	0.020	0.000032	0.0063	0.17	0.056	0.0000028
	November		0.023	0.085	0.00026	0.000021	0.39	0.64	0.00011	0.00043	0.000086	0.013	0.000022	0.0044	0.12	0.039	0.0000019
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.00067	0.0025	0.0000075	0.00000063	0.011	0.019	0.0000032	0.000013	0.0000025	0.00039	0.00000064	0.00013	0.0034	0.0011	5.7E-08
		MAXIMUM	0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00080	0.00016	0.025	0.000040	0.0081	0.22	0.072	0.0000036
		AVERAGE	0.029	0.11	0.00033	0.000027	0.50	0.82	0.00014	0.00055	0.00011	0.017	0.000028	0.0056	0.15	0.049	0.0000025

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2026	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2027	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2028	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	January	2029	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2031	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2032	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2033	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
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	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2034	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2036	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2037	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2038	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2039	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2041	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2042	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	January	2043	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2044	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	October	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2046	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2047	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2048	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2049	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2050	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2052	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Decommissioning	January	2053	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2054	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2055	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2057	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Reclamation	January	2058	0.0000032	0.000041	0.0015	0.000058	0.000082	0.000082	0.0000016	0.015	0.00034	0.062	0.00016	0.0000016	0.0000064	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000035	0.00045	0.017	0.00064	0.00090	0.00091	0.000018	0.17	0.0038	0.69	0.0018	0.000018	0.000070	0.0012
	April		0.000053	0.00068	0.024	0.00092	0.0013	0.0013	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018
	May		0.000068	0.00087	0.031	0.0012	0.0017	0.0017	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00014	0.0024
	June		0.000089	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.7	0.0045	0.000045	0.00018	0.0031
	July		0.000082	0.0011	0.038	0.0014	0.0021	0.0021	0.000041	0.39	0.0086	1.6	0.0041	0.000041	0.00017	0.0029
	August		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0090	1.7	0.0043	0.000044	0.00017	0.0030
	September		0.000056	0.00073	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0059	1.1	0.0028	0.000028	0.00011	0.0020
	October		0.000061	0.00078	0.028	0.0011	0.0015	0.0016	0.000031	0.29	0.0063	1.2	0.0031	0.000031	0.00012	0.0021
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.00025	0.0000050	0.047	0.0010	0.19	0.00050	0.0000050	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		0.0000035	0.000046	0.0016	0.000062	0.000090	0.000090	0.0000018	0.017	0.00037	0.069	0.00018	0.0000018	0.0000071	0.00012
	March		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	April		0.000043	0.00055	0.020	0.00075	0.0011	0.0011	0.000022	0.20	0.0045	0.84	0.0022	0.000022	0.000086	0.0015
	May		0.000070	0.00091	0.033	0.0012	0.0018	0.0018	0.000035	0.33	0.0073	1.4	0.0035	0.000035	0.00014	0.0025
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	August		0.000065	0.00084	0.030	0.0011	0.0017	0.0017	0.000033	0.31	0.0068	1.3	0.0033	0.000033	0.00013	0.0023
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	November		0.0000066	0.000085	0.0031	0.00012	0.00017	0.00017	0.0000033	0.031	0.00069	0.13	0.00033	0.0000033	0.000013	0.00023
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000096	0.00012	0.0044	0.00017	0.00024	0.00024	0.0000048	0.045	0.00100	0.19	0.00048	0.0000048	0.000019	0.00033
	April		0.000036	0.00047	0.017	0.00063	0.00092	0.00093	0.000018	0.17	0.0038	0.71	0.0018	0.000018	0.000073	0.0013
	May		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000076	0.00099	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	August		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	September		0.000077	0.00100	0.036	0.0013	0.0020	0.0020	0.000039	0.36	0.0081	1.5	0.0039	0.000039	0.00016	0.0027
	October		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	November		0.000020	0.00026	0.0092	0.00035	0.00050	0.00051	0.0000100	0.093	0.0021	0.39	0.00100	0.000010	0.000040	0.00069
	December		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Reclamation	January	2061	0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000024	0.00031	0.011	0.00042	0.00061	0.00061	0.000012	0.11	0.0025	0.47	0.0012	0.000012	0.000048	0.00083
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000046	0.00059	0.021	0.00080	0.0012	0.0012	0.000023	0.21	0.0048	0.89	0.0023	0.000023	0.000092	0.0016
	June		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	July		0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	November		0.000034	0.00043	0.016	0.00058	0.00085	0.00086	0.000017	0.16	0.0035	0.66	0.0017	0.000017	0.000067	0.0012
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	January	2062	0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	February		0.0000035	0.000046	0.0016	0.000062	0.000090	0.000090	0.0000018	0.017	0.00037	0.069	0.00018	0.0000018	0.0000071	0.00012
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.00041	0.0000081	0.075	0.0017	0.31	0.00081	0.0000081	0.000032	0.00056
	April		0.000020	0.00026	0.0092	0.00035	0.00050	0.00051	0.0000100	0.093	0.0021	0.39	0.00100	0.000010	0.000040	0.00069
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000070	0.00091	0.033	0.0012	0.0018	0.0018	0.000035	0.33	0.0073	1.4	0.0035	0.000035	0.00014	0.0025
	November		0.000036	0.00047	0.017	0.00063	0.00092	0.00093	0.000018	0.17	0.0038	0.71	0.0018	0.000018	0.000073	0.0013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.000019	0.00025	0.0089	0.00033	0.00049	0.00049	0.0000097	0.090	0.0020	0.38	0.00097	0.0000097	0.000039	0.00067
	February		0.000014	0.00018	0.0066	0.00025	0.00036	0.00036	0.0000071	0.066	0.0015	0.28	0.00071	0.0000071	0.000028	0.00049
	March		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	April		0.000036	0.00047	0.017	0.00063	0.00092	0.00093	0.000018	0.17	0.0038	0.71	0.0018	0.000018	0.000073	0.0013
	May		0.000078	0.0010	0.036	0.0014	0.0020	0.0020	0.000039	0.36	0.0081	1.5	0.0039	0.000039	0.00016	0.0027
	June		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000075	0.00097	0.035	0.0013	0.0019	0.0019	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000073	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0026
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.0089	0.00033	0.00049	0.00049	0.0000097	0.090	0.0020	0.38	0.00097	0.0000097	0.000039	0.00067
	April		0.000024	0.00031	0.011	0.00042	0.00061	0.00061	0.000012	0.11	0.0025	0.47	0.0012	0.000012	0.000048	0.00083
	May		0.000032	0.00041	0.015	0.00056	0.00081	0.00082	0.000016	0.15	0.0033	0.63	0.0016	0.000016	0.000064	0.0011
	June		0.000050	0.00064	0.023	0.00086	0.0013	0.0013	0.000025	0.23	0.0052	0.97	0.0025	0.000025	0.000100	0.0017
	July		0.000038	0.00050	0.018	0.00067	0.00097	0.00098	0.000019	0.18	0.0040	0.75	0.0019	0.000019	0.000077	0.0013
	August		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	September		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	October		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.10	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	April		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	May		0.000061	0.00078	0.028	0.0011	0.0015	0.0016	0.000031	0.29	0.0063	1.2	0.0031	0.000031	0.00012	0.0021
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	August		0.000096	0.0012	0.044	0.0017	0.0024	0.0024	0.000048	0.45	0.0100	1.9	0.0048	0.000048	0.00019	0.0033
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0025
	October		0.000067	0.00087	0.031	0.0012	0.0017	0.0017	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00013	0.0023
	November		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	January	2066	0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	February		0.000035	0.00046	0.016	0.00062	0.00090	0.00090	0.000018	0.17	0.0037	0.69	0.0018	0.000018	0.000071	0.0012
	March		0.000042	0.00054	0.019	0.00072	0.0011	0.0011	0.000021	0.20	0.0043	0.81	0.0021	0.000021	0.000084	0.0014

Table G-6: Scenario 5: Climate Change - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Reclamation	**April**	**2066**	0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000058	0.00074	0.027	0.0010	0.0015	0.0015	0.000029	0.27	0.0060	1.1	0.0029	0.000029	0.00012	0.0020
	June		0.000040	0.00051	0.018	0.00069	0.0010	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000080	0.0014
	July		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	August		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	September		0.000046	0.00060	0.021	0.00081	0.0012	0.0012	0.000023	0.22	0.0048	0.91	0.0023	0.000023	0.000093	0.0016
	October		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	November		0.0000033	0.000043	0.0015	0.000058	0.000084	0.000084	0.0000017	0.016	0.00034	0.065	0.00017	0.0000017	0.0000066	0.00012
	December		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	January	**2067**	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	February		0.0000035	0.000046	0.0016	0.000062	0.000090	0.000090	0.0000018	0.017	0.00037	0.069	0.00018	0.0000018	0.0000071	0.00012
	March		0.0000094	0.00012	0.0044	0.00016	0.00024	0.00024	0.0000048	0.044	0.00098	0.18	0.00048	0.0000048	0.000019	0.00033
	April		0.000053	0.00068	0.024	0.00092	0.0013	0.0013	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018
	May		0.000055	0.00071	0.025	0.00095	0.0014	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	June		0.000068	0.00088	0.031	0.0012	0.0017	0.0017	0.000034	0.32	0.0071	1.3	0.0034	0.000034	0.00014	0.0024
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000090	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.8	0.0045	0.000045	0.00018	0.0031
	September		0.000092	0.0012	0.043	0.0016	0.0023	0.0023	0.000046	0.43	0.0096	1.8	0.0046	0.000046	0.00018	0.0032
	October		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	November		0.000020	0.00026	0.0092	0.00035	0.00050	0.00051	0.0000100	0.093	0.0021	0.39	0.00100	0.000010	0.000040	0.00069
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.062	0.00016	0.0000016	0.0000064	0.00011
		MAXIMUM	0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.00	0.0026	0.000026	0.00010	0.0018
Post-Closure	**January**	**≥2070**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		0.0000013	0.000016	0.00059	0.000022	0.000032	0.000032	0.00000064	0.0059	0.00013	0.025	0.000064	0.00000064	0.0000025	0.000044
	March		0.0000096	0.00012	0.0044	0.00017	0.00024	0.00024	0.0000048	0.045	0.00100	0.19	0.00048	0.0000048	0.000019	0.00033
	April		0.000056	0.00072	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0058	1.1	0.0028	0.000028	0.00011	0.0020
	May		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	June		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0084	1.6	0.0040	0.000041	0.00016	0.0028
	August		0.000077	0.00100	0.036	0.0013	0.0020	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00016	0.0027
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000063	0.00081	0.029	0.0011	0.0016	0.0016	0.000032	0.29	0.0065	1.2	0.0032	0.000032	0.00013	0.0022
	November		0.000043	0.00055	0.020	0.00075	0.0011	0.0011	0.000022	0.20	0.0045	0.84	0.0022	0.000022	0.000086	0.0015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000013	0.000016	0.00059	0.000022	0.000032	0.000032	0.00000064	0.0059	0.00013	0.025	0.000064	0.00000064	0.0000025	0.000044
		MAXIMUM	0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0084	1.6	0.0040	0.000041	0.00016	0.0028
		AVERAGE	0.000055	0.00071	0.025	0.00096	0.0014	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.000010	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.000100	0.037	1.4	0.057	0.0000040
	April		0.013	0.063	0.00016	0.000013	3.3	0.96	0.00043	0.00018	0.00042	**0.38**	0.000086	0.031	1.2	0.055	0.0000037
	May		0.018	0.079	0.00022	0.000018	2.8	0.99	0.00039	0.00028	0.00038	**0.31**	0.000077	0.027	0.99	0.057	0.0000036
	June		0.026	0.11	0.00031	0.000025	3.3	1.3	0.00046	0.00043	0.00044	**0.35**	0.000091	0.031	1.1	0.074	0.0000045
	July		0.037	0.15	0.00043	0.000036	3.4	1.6	0.00051	0.00064	0.00048	**0.35**	0.00010	0.032	1.2	0.092	0.0000055
	August		0.047	0.19	0.00054	0.000044	3.6	1.8	0.00055	0.00081	0.00052	**0.36**	0.00011	0.034	1.2	0.11	0.0000063
	September		0.047	0.19	0.00055	0.000045	3.1	1.8	0.00050	0.00084	0.00046	**0.31**	0.00010	0.030	1.1	0.10	0.0000060
	October		0.046	0.18	0.00053	0.000044	2.7	1.7	0.00045	0.00082	0.00041	0.26	0.000090	0.026	0.91	0.098	0.0000055
	November		0.043	0.17	0.00049	0.000041	2.4	1.5	0.00040	0.00077	0.00037	0.23	0.000081	0.023	0.80	0.090	0.0000050
	December		0.042	0.17	0.00049	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000079	0.023	0.78	0.089	0.0000049
	January	2026	0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000078	0.022	0.77	0.088	0.0000049
	February		0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000078	0.022	0.77	0.088	0.0000049
	March		0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00035	0.22	0.000078	0.022	0.77	0.088	0.0000049
	April		0.040	0.16	0.00046	0.000038	1.9	1.4	0.00034	0.00072	0.00031	0.18	0.000068	0.019	0.65	0.081	0.0000045
	May		0.055	0.21	0.00062	**0.000052**	2.6	1.9	0.00046	0.00099	0.00041	0.23	0.000091	0.025	0.85	0.11	0.0000060
	June		0.061	0.24	0.00070	**0.000058**	2.7	2.0	0.00049	0.0011	0.00043	0.23	0.000097	0.026	0.88	0.12	0.0000066
	July		0.071	0.27	0.00081	**0.000067**	2.9	2.3	0.00054	0.0013	0.00047	0.25	0.00011	0.028	0.94	0.14	0.0000074
	August		0.069	0.26	0.00078	**0.000065**	2.5	2.2	0.00049	0.0013	0.00043	0.21	0.000099	0.026	0.83	0.13	0.0000070
	September		0.069	0.27	0.00079	**0.000065**	2.4	2.2	0.00048	0.0013	0.00042	0.20	0.000096	0.025	0.79	0.13	0.0000069
	October		0.069	0.27	0.00079	**0.000066**	2.4	2.2	0.00048	0.0013	0.00042	0.19	0.000096	0.024	0.78	0.13	0.0000069
	November		0.071	0.27	0.00081	**0.000067**	2.4	2.3	0.00049	0.0013	0.00043	0.19	0.000098	0.025	0.79	0.13	0.0000071
	December		0.071	0.27	0.00081	**0.000067**	2.4	2.3	0.00049	0.0013	0.00043	0.19	0.000098	0.025	0.79	0.13	0.0000071
	January	2027	0.071	0.27	0.00081	**0.000067**	2.4	2.3	0.00049	0.0013	0.00043	0.19	0.000098	0.025	0.79	0.13	0.0000071
	February		0.071	0.27	0.00081	**0.000067**	2.4	2.3	0.00049	0.0013	0.00042	0.19	0.000097	0.024	0.79	0.13	0.0000071
	March		0.064	0.25	0.00073	**0.000061**	2.2	2.0	0.00044	0.0012	0.00038	0.17	0.000088	0.022	0.70	0.12	0.0000064
	April		0.053	0.21	0.00061	0.000051	1.7	1.7	0.00035	0.00099	0.00031	0.13	0.000071	0.017	0.55	0.100	0.0000052
	May		0.057	0.22	0.00065	**0.000054**	1.8	1.8	0.00037	0.0011	0.00032	0.13	0.000074	0.018	0.57	0.11	0.0000055
	June		0.069	0.26	0.00078	**0.000065**	2.1	2.1	0.00044	0.0013	0.00038	0.15	0.000088	0.021	0.66	0.13	0.0000066
	July		0.072	0.27	0.00082	**0.000068**	2.1	2.2	0.00045	0.0013	0.00038	0.15	0.000089	0.021	0.66	0.13	0.0000068
	August		0.086	0.33	0.00098	**0.000081**	2.4	2.6	0.00052	0.0016	0.00045	0.17	0.00010	0.025	0.76	0.16	0.0000081
	September		0.11	0.41	0.0012	**0.00010**	2.9	3.2	0.00065	0.0020	0.00055	0.21	0.00013	0.031	0.93	0.19	0.000010
	October		0.10	0.39	0.0012	**0.000098**	2.8	3.1	0.00062	0.0019	0.00053	0.20	0.00012	0.029	0.90	0.19	0.0000097
	November		0.091	0.35	0.0010	**0.000086**	2.5	2.8	0.00055	0.0017	0.00046	0.17	0.00011	0.026	0.78	0.16	0.0000085
	December		0.090	0.34	0.0010	**0.000085**	2.4	2.7	0.00054	0.0017	0.00046	0.17	0.00011	0.025	0.77	0.16	0.0000085
	January	2028	0.090	0.34	0.0010	**0.000085**	2.4	2.7	0.00054	0.0017	0.00046	0.17	0.00011	0.025	0.77	0.16	0.0000085
	February		0.090	0.34	0.0010	**0.000085**	2.4	2.7	0.00054	0.0017	0.00046	0.17	0.00011	0.025	0.77	0.16	0.0000085
	March		0.090	0.34	0.0010	**0.000085**	2.4	2.7	0.00054	0.0017	0.00046	0.17	0.00011	0.025	0.77	0.16	0.0000085
	April		0.079	0.30	0.00090	**0.000075**	2.1	2.4	0.00047	0.0015	0.00040	0.15	0.000095	0.022	0.67	0.14	0.0000074
	May		0.065	0.25	0.00074	**0.000061**	1.7	2.0	0.00038	0.0012	0.00032	0.11	0.000076	0.018	0.53	0.12	0.0000060
	June		0.076	0.29	0.00087	**0.000072**	2.0	2.3	0.00045	0.0014	0.00038	0.13	0.000090	0.021	0.62	0.14	0.0000071
	July		0.085	0.32	0.00096	**0.000080**	2.2	2.5	0.00049	0.0016	0.00042	0.14	0.000099	0.023	0.68	0.15	0.0000078
	August		0.084	0.32	0.00095	**0.000079**	2.1	2.5	0.00048	0.0016	0.00041	0.14	0.000097	0.022	0.66	0.15	0.0000077
	September		0.085	0.32	0.00096	**0.000080**	2.1	2.5	0.00049	0.0016	0.00041	0.14	0.000097	0.022	0.66	0.15	0.0000078
	October		0.092	0.35	0.0010	**0.000087**	2.3	2.7	0.00053	0.0017	0.00044	0.15	0.00011	0.024	0.71	0.16	0.0000084
	November		0.092	0.35	0.0010	**0.000087**	2.3	2.7	0.00053	0.0017	0.00044	0.15	0.00011	0.024	0.71	0.16	0.0000084
	December		0.092	0.35	0.0010	**0.000087**	2.3	2.7	0.00053	0.0017	0.00044	0.15	0.00011	0.024	0.71	0.16	0.0000084
		MINIMUM	0.010	0.054	0.00013	0.0000100	1.7	0.96	0.00034	0.00010	0.00031	0.11	0.000068	0.017	0.53	0.055	0.0000036
		MAXIMUM	0.11	0.41	0.0012	**0.00010**	4.0	3.2	0.00065	0.0020	0.00055	**0.46**	0.00013	0.037	1.4	0.19	0.000010
		AVERAGE	0.063	0.24	0.00072	**0.000059**	2.5	2.1	0.00048	0.0011	0.00042	0.22	0.000095	0.025	0.84	0.12	0.0000066
Operations	January	2029	0.092	0.35	0.0010	**0.000087**	2.3	2.7	0.00053	0.0017	0.00044	0.15	0.00011	0.024	0.71	0.16	0.0000084
	February		0.092	0.35	0.0010	**0.000087**	2.3	2.7	0.00053	0.0017	0.00044	0.15	0.00011	0.024	0.71	0.16	0.0000084
	March		0.089	0.34	0.0010	**0.000084**	2.2	2.7	0.00051	0.0017	0.00043	0.14	0.00010	0.023	0.69	0.16	0.0000082
	April		0.069	0.26	0.00078	**0.000065**	1.7	2.1	0.00039	0.0013	0.00033	0.11	0.000079	0.018	0.53	0.12	0.0000063
	May		0.068	0.26	0.00077	**0.000064**	1.6	2.0	0.00038	0.0013	0.00032	0.10	0.000077	0.017	0.51	0.12	0.0000062
	June		0.071	0.27	0.00081	**0.000067**	1.7	2.1	0.00040	0.0013	0.00034	0.11	0.000081	0.018	0.54	0.13	0.0000065
	July		0.086	0.33	0.00098	**0.000081**	2.1	2.6	0.00048	0.0016	0.00041	0.13	0.000097	0.022	0.64	0.15	0.0000078
	August		0.094	0.36	0.0011	**0.000089**	2.2	2.8	0.00053	0.0018	0.00044	0.14	0.00011	0.024	0.70	0.17	0.0000086
	September		0.089	0.34	0.0010	**0.000084**	2.1	2.6	0.00050	0.0017	0.00041	0.13	0.000099	0.022	0.65	0.16	0.0000081
	October		0.090	0.34	0.0010	**0.000085**	2.1	2.7	0.00050	0.0017	0.00042	0.13	0.00010	0.023	0.66	0.16	0.0000082
	November		0.087	0.33	0.00099	**0.000082**	2.1	2.6	0.00049	0.0016	0.00041	0.13	0.000098	0.022	0.64	0.15	0.0000079
	December		0.087	0.33	0.00099	**0.000082**	2.0	2.6	0.00049	0.0016	0.00041	0.13	0.000097	0.022	0.64	0.15	0.0000079

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2030	0.087	0.33	0.00099	**0.000082**	2.0	2.6	0.00049	0.0016	0.00041	0.13	0.000097	0.022	0.64	0.15	0.0000079
	February		0.085	0.33	0.00097	**0.000081**	2.0	2.5	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.63	0.15	0.0000078
	March		0.081	0.31	0.00092	**0.000076**	1.9	2.4	0.00045	0.0015	0.00038	0.12	0.000090	0.020	0.59	0.14	0.0000073
	April		0.067	0.25	0.00076	**0.000063**	1.6	2.0	0.00037	0.0013	0.00031	0.096	0.000075	0.017	0.49	0.12	0.0000061
	May		0.071	0.27	0.00081	**0.000067**	1.7	2.1	0.00040	0.0013	0.00033	0.10	0.000079	0.018	0.52	0.13	0.0000065
	June		0.063	0.24	0.00072	**0.000060**	1.5	1.9	0.00035	0.0012	0.00029	0.089	0.000070	0.016	0.46	0.11	0.0000057
	July		0.060	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.084	0.000067	0.015	0.43	0.11	0.0000055
	August		0.067	0.26	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00031	0.093	0.000074	0.017	0.48	0.12	0.0000061
	September		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0012	0.00028	0.085	0.000068	0.015	0.44	0.11	0.0000056
	October		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00034	0.0011	0.00028	0.083	0.000067	0.015	0.43	0.11	0.0000055
	November		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.077	0.000062	0.014	0.40	0.099	0.0000051
	December		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.075	0.000060	0.013	0.39	0.097	0.0000050
	January	2031	0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00100	0.00024	0.073	0.000059	0.013	0.38	0.094	0.0000048
	February		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.073	0.000058	0.013	0.38	0.094	0.0000048
	March		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00029	0.00098	0.00024	0.071	0.000057	0.013	0.37	0.092	0.0000047
	April		0.044	0.17	0.00050	0.000041	1.00	1.3	0.00024	0.00082	0.00020	0.060	0.000048	0.011	0.31	0.077	0.0000040
	May		0.045	0.17	0.00051	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	June		0.057	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.077	0.000062	0.014	0.40	0.100	0.0000051
	July		0.070	0.27	0.00080	**0.000066**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000077	0.017	0.50	0.12	0.0000064
	August		0.082	0.31	0.00093	**0.000077**	1.9	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.58	0.14	0.0000074
	September		0.079	0.30	0.00090	**0.000075**	1.8	2.3	0.00043	0.0015	0.00036	0.11	0.000087	0.019	0.56	0.14	0.0000072
	October		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00041	0.0014	0.00034	0.100	0.000081	0.018	0.52	0.13	0.0000067
	November		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00038	0.0013	0.00031	0.093	0.000076	0.017	0.48	0.12	0.0000062
	December		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00038	0.0013	0.00031	0.092	0.000075	0.017	0.48	0.12	0.0000062
	January	2032	0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000074	0.016	0.47	0.12	0.0000061
	February		0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000074	0.016	0.47	0.12	0.0000061
	March		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.079	0.000065	0.014	0.41	0.10	0.0000053
	April		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.085	0.0000044
	May		0.051	0.20	0.00058	0.000049	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	June		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	July		0.060	0.23	0.00068	**0.000057**	1.4	1.8	0.00033	0.0011	0.00027	0.081	0.000066	0.015	0.42	0.11	0.0000054
Operations	August		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000056
	September		0.070	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	October		0.072	0.27	0.00081	**0.000068**	1.6	2.1	0.00039	0.0013	0.00033	0.096	0.000078	0.017	0.50	0.13	0.0000065
	November		0.070	0.27	0.00080	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	December		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	January	2033	0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	February		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	March		0.070	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	April		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.094	0.0000048
	May		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	June		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.084	0.000068	0.015	0.44	0.11	0.0000056
	July		0.076	0.29	0.00086	**0.000072**	1.7	2.2	0.00042	0.0014	0.00035	0.10	0.000083	0.019	0.53	0.13	0.0000069
	August		0.082	0.31	0.00093	**0.000078**	1.9	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.58	0.14	0.0000074
	September		0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0015	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	October		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	November		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00039	0.0013	0.00033	0.096	0.000079	0.017	0.50	0.13	0.0000065
	December		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	January	2034	0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	February		0.071	0.27	0.00080	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.12	0.0000064
	March		0.066	0.25	0.00075	**0.000062**	1.5	2.0	0.00036	0.0012	0.00030	0.088	0.000073	0.016	0.46	0.12	0.0000060
	April		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000059	0.013	0.38	0.096	0.0000049
	May		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000061	0.013	0.39	0.098	0.0000050
	June		0.046	0.17	0.00052	0.000043	1.0	1.4	0.00025	0.00086	0.00021	0.061	0.000050	0.011	0.32	0.081	0.0000041
	July		0.043	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00081	0.00020	0.058	0.000048	0.011	0.30	0.077	0.0000039
	August		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.085	0.0000044
	September		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	October		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.070	0.000058	0.013	0.37	0.093	0.0000048
	November		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00028	0.00097	0.00024	0.069	0.000057	0.013	0.36	0.091	0.0000047
	December		0.050	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000055	0.012	0.35	0.088	0.0000045
	January	2035	0.049	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000054	0.012	0.35	0.087	0.0000045
	February		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	March		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	April	2035	0.045	0.17	0.00051	0.000042	1.0	1.3	0.00024	0.00083	0.00020	0.060	0.000049	0.011	0.31	0.079	0.0000040
	May		0.043	0.16	0.00049	0.000041	0.97	1.3	0.00024	0.00080	0.00020	0.057	0.000047	0.010	0.30	0.076	0.0000039
	June		0.047	0.18	0.00053	0.000045	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000052	0.012	0.33	0.083	0.0000043
	July		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.093	0.0000048
	August		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000056
	September		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00036	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	October		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	November		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00035	0.0012	0.00029	0.086	0.000070	0.016	0.45	0.11	0.0000058
	December		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00035	0.0012	0.00029	0.086	0.000070	0.016	0.45	0.11	0.0000058
	January	2036	0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00035	0.0012	0.00029	0.086	0.000070	0.016	0.45	0.11	0.0000058
	February		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00035	0.0012	0.00029	0.086	0.000070	0.016	0.45	0.11	0.0000058
	March		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0011	0.00028	0.082	0.000067	0.015	0.43	0.11	0.0000055
	April		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00088	0.00022	0.063	0.000052	0.011	0.33	0.083	0.0000043
	May		0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000052	0.011	0.33	0.083	0.0000042
	June		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	July		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.45	0.11	0.0000059
	August		0.086	0.33	0.00097	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000094	0.021	0.60	0.15	0.0000077
	September		0.094	0.36	0.0011	**0.000089**	2.1	2.8	0.00052	0.0018	0.00043	0.13	0.00010	0.023	0.66	0.17	0.0000085
	October		0.088	0.33	0.00099	**0.000083**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.61	0.15	0.0000079
	November		0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	December		0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	January	2037	0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	February		0.078	0.29	0.00088	**0.000073**	1.7	2.3	0.00043	0.0015	0.00035	0.10	0.000085	0.019	0.54	0.14	0.0000070
	March		0.075	0.28	0.00085	**0.000071**	1.7	2.2	0.00041	0.0014	0.00034	0.10	0.000082	0.018	0.52	0.13	0.0000068
	April		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.40	0.10	0.0000052
	May		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	June		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0012	0.00028	0.082	0.000067	0.015	0.43	0.11	0.0000055
	July		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000063	0.014	0.40	0.10	0.0000051
	August		0.072	0.27	0.00081	**0.000068**	1.6	2.1	0.00039	0.0013	0.00033	0.096	0.000079	0.018	0.50	0.13	0.0000065
	September		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	October		0.069	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	November		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00038	0.0013	0.00031	0.092	0.000075	0.017	0.48	0.12	0.0000062
	December		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000074	0.016	0.48	0.12	0.0000061
	January	2038	0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000074	0.016	0.48	0.12	0.0000061
	February		0.067	0.26	0.00076	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	March		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.10	0.0000051
	April		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	May		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	June		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.079	0.000065	0.014	0.41	0.10	0.0000053
	July		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000075	0.017	0.48	0.12	0.0000061
	August		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	September		0.080	0.30	0.00091	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000088	0.020	0.56	0.14	0.0000072
	October		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	November		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.45	0.11	0.0000058
	December		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	January	2039	0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.40	0.10	0.0000052
	March		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000061	0.013	0.39	0.097	0.0000050
	April		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.075	0.000061	0.014	0.39	0.099	0.0000051
	May		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	June		0.080	0.31	0.00091	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000088	0.019	0.56	0.14	0.0000073
	July		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	August		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00035	0.0012	0.00029	0.086	0.000070	0.016	0.45	0.11	0.0000058
	September		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	October		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.43	0.11	0.0000056
	November		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	December		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.075	0.000061	0.014	0.39	0.099	0.0000051
	January	2040	0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.075	0.000061	0.014	0.39	0.099	0.0000051
	February		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.075	0.000061	0.014	0.39	0.099	0.0000051
	March		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00086	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	April		0.041	0.16	0.00047	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.0100	0.29	0.072	0.0000037
	May		0.043	0.16	0.00048	0.000040	0.96	1.3	0.00023	0.00080	0.00019	0.057	0.000047	0.010	0.30	0.075	0.0000038
	June		0.046	0.17	0.00052	0.000043	1.0	1.4	0.00025	0.00086	0.00021	0.061	0.000050	0.011	0.32	0.081	0.0000041

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000051	0.011	0.33	0.083	0.0000042
	August		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	September		0.070	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	October		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	November		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	December		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	January	2041	0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	February		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	March		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000069	0.015	0.44	0.11	0.0000057
	April		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00028	0.00097	0.00024	0.069	0.000057	0.013	0.36	0.091	0.0000047
	May		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	June		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000077	0.017	0.49	0.12	0.0000063
	July		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00041	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000067
	August		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000056	0.012	0.36	0.090	0.0000046
	September		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	October		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	November		0.049	0.19	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	December		0.049	0.19	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	January	2042	0.049	0.19	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	February		0.049	0.19	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	March		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	April		0.041	0.16	0.00047	0.000039	0.93	1.2	0.00023	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.073	0.0000037
	May		0.043	0.16	0.00048	0.000040	0.96	1.3	0.00023	0.00080	0.00019	0.057	0.000047	0.010	0.30	0.075	0.0000038
	June		0.043	0.16	0.00049	0.000041	0.97	1.3	0.00024	0.00080	0.00020	0.057	0.000047	0.010	0.30	0.076	0.0000039
	July		0.043	0.16	0.00049	0.000041	0.97	1.3	0.00024	0.00081	0.00020	0.058	0.000047	0.011	0.30	0.076	0.0000039
	August		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	September		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00086	0.00021	0.061	0.000050	0.011	0.32	0.081	0.0000041
	October		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.072	0.0000037
	November		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	December		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	January	2043	0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
Operations	February		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0098	0.28	0.071	0.0000036
	March		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0098	0.28	0.071	0.0000036
	April		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	May		0.039	0.15	0.00044	0.000037	0.88	1.1	0.00021	0.00073	0.00018	0.052	0.000043	0.0095	0.27	0.069	0.0000035
	June		0.041	0.16	0.00047	0.000039	0.93	1.2	0.00023	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.073	0.0000037
	July		0.045	0.17	0.00051	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	August		0.044	0.17	0.00050	0.000042	0.99	1.3	0.00024	0.00082	0.00020	0.059	0.000048	0.011	0.31	0.078	0.0000040
	September		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	October		0.037	0.14	0.00041	0.000035	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0090	0.26	0.065	0.0000033
	November		0.034	0.13	0.00039	0.000032	0.77	1.0	0.00019	0.00064	0.00015	0.045	0.000037	0.0084	0.24	0.060	0.0000031
	December		0.034	0.13	0.00039	0.000032	0.77	1.0	0.00019	0.00064	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	January	2044	0.034	0.13	0.00039	0.000032	0.76	1.0	0.00019	0.00064	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	February		0.034	0.13	0.00039	0.000032	0.76	1.0	0.00019	0.00064	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	March		0.034	0.13	0.00038	0.000032	0.76	1.00	0.00019	0.00063	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	April		0.033	0.13	0.00038	0.000031	0.75	0.98	0.00018	0.00062	0.00015	0.045	0.000037	0.0081	0.23	0.059	0.0000030
	May		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	June		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	July		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.093	0.0000048
	August		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	September		0.084	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.021	0.59	0.15	0.0000076
	October		0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.12	0.000094	0.021	0.60	0.15	0.0000078
	November		0.088	0.34	0.0010	**0.000083**	2.0	2.6	0.00048	0.0017	0.00040	0.12	0.000097	0.022	0.62	0.16	0.0000080
	December		0.088	0.33	0.00100	**0.000083**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.61	0.15	0.0000079
	January	2045	0.088	0.33	0.00099	**0.000083**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.61	0.15	0.0000079
	February		0.088	0.33	0.00099	**0.000083**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.61	0.15	0.0000079
	March		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	April		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000075	0.017	0.48	0.12	0.0000061
	May		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000072	0.016	0.46	0.12	0.0000059
	June		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	July		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	August		0.080	0.30	0.00091	**0.000076**	1.8	2.4	0.00044	0.0015	0.00036	0.11	0.000088	0.020	0.56	0.14	0.0000072
	September		0.089	0.34	0.0010	**0.000084**	2.0	2.6	0.00049	0.0017	0.00040	0.12	0.000097	0.022	0.62	0.16	0.0000080

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.088	0.33	0.00100	**0.000083**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000096	0.021	0.62	0.16	0.0000079
	November		0.085	0.32	0.00096	**0.000080**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000093	0.021	0.59	0.15	0.0000077
	December		0.083	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.020	0.58	0.15	0.0000075
	January	2046	0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	February		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	March		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00041	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000067
	April		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	May		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	June		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	July		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0011	0.00028	0.082	0.000067	0.015	0.43	0.11	0.0000055
	August		0.059	0.23	0.00067	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.079	0.000065	0.014	0.42	0.10	0.0000054
	September		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000060	0.013	0.38	0.096	0.0000049
	October		0.050	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000054	0.012	0.35	0.088	0.0000045
	November		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	December		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	January	2047	0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	February		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	April		0.042	0.16	0.00048	0.000040	0.95	1.2	0.00023	0.00079	0.00019	0.056	0.000046	0.010	0.30	0.075	0.0000038
	May		0.042	0.16	0.00048	0.000040	0.95	1.2	0.00023	0.00079	0.00019	0.056	0.000046	0.010	0.29	0.074	0.0000038
	June		0.052	0.20	0.00058	0.000049	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000057	0.013	0.36	0.091	0.0000047
	July		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00029	0.00100	0.00024	0.071	0.000059	0.013	0.37	0.094	0.0000048
	August		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.093	0.0000048
	September		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.40	0.100	0.0000051
	October		0.060	0.23	0.00068	**0.000057**	1.3	1.8	0.00033	0.0011	0.00027	0.080	0.000066	0.015	0.42	0.11	0.0000054
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	December		0.058	0.22	0.00065	**0.000054**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.40	0.10	0.0000052
	January	2048	0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000063	0.014	0.40	0.10	0.0000052
	February		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.10	0.0000051
	March		0.057	0.22	0.00064	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.10	0.0000051
	April		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.094	0.0000048
Operations	May		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00029	0.0010	0.00024	0.071	0.000059	0.013	0.37	0.094	0.0000048
	June		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000072	0.016	0.46	0.12	0.0000059
	July		0.058	0.22	0.00065	**0.000054**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.40	0.10	0.0000052
	August		0.047	0.18	0.00053	0.000045	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000052	0.012	0.33	0.083	0.0000043
	September		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	October		0.044	0.17	0.00050	0.000041	0.99	1.3	0.00024	0.00082	0.00020	0.059	0.000048	0.011	0.31	0.077	0.0000040
	November		0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	December		0.043	0.16	0.00049	0.000040	0.96	1.3	0.00023	0.00080	0.00019	0.057	0.000047	0.010	0.30	0.076	0.0000039
	January	2049	0.041	0.15	0.00046	0.000038	0.92	1.2	0.00022	0.00076	0.00019	0.054	0.000045	0.0099	0.29	0.072	0.0000037
	February		0.040	0.15	0.00046	0.000038	0.90	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0098	0.28	0.071	0.0000036
	March		0.039	0.15	0.00044	0.000037	0.88	1.1	0.00021	0.00073	0.00018	0.052	0.000043	0.0095	0.27	0.069	0.0000035
	April		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	May		0.041	0.16	0.00047	0.000039	0.93	1.2	0.00023	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.073	0.0000037
	June		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	July		0.044	0.17	0.00050	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	August		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00088	0.00022	0.063	0.000052	0.012	0.33	0.083	0.0000043
	September		0.045	0.17	0.00051	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	October		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.072	0.0000037
	November		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0092	0.26	0.066	0.0000034
	December		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	January	2050	0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	February		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	March		0.037	0.14	0.00042	0.000035	0.83	1.1	0.00020	0.00069	0.00017	0.049	0.000040	0.0090	0.26	0.065	0.0000033
	April		0.034	0.13	0.00038	0.000032	0.76	0.99	0.00018	0.00063	0.00015	0.045	0.000037	0.0082	0.24	0.059	0.0000030
	May		0.035	0.13	0.00040	0.000033	0.79	1.0	0.00019	0.00065	0.00016	0.047	0.000038	0.0085	0.24	0.062	0.0000032
	June		0.038	0.14	0.00043	0.000036	0.86	1.1	0.00021	0.00071	0.00017	0.051	0.000042	0.0093	0.27	0.067	0.0000034
	July		0.054	0.21	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	August		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000072	0.016	0.46	0.12	0.0000059
	September		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	October		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.084	0.000069	0.015	0.44	0.11	0.0000056
	November		0.059	0.23	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.079	0.000065	0.014	0.41	0.10	0.0000053
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	March		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	April		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00076	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	May		0.041	0.15	0.00046	0.000038	0.92	1.2	0.00022	0.00076	0.00018	0.054	0.000045	0.0099	0.28	0.072	0.0000037
	June		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	July		0.051	0.20	0.00058	0.000049	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	August		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	September		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	October		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	November		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	December		0.044	0.17	0.00050	0.000041	0.99	1.3	0.00024	0.00082	0.00020	0.059	0.000048	0.011	0.31	0.077	0.0000040
	January	2052	0.044	0.17	0.00050	0.000041	0.99	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	February		0.044	0.17	0.00050	0.000041	0.99	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	March		0.044	0.17	0.00050	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	April		0.040	0.15	0.00045	0.000037	0.89	1.2	0.00022	0.00074	0.00018	0.053	0.000043	0.0097	0.28	0.070	0.0000036
	May		0.042	0.16	0.00047	0.000039	0.94	1.2	0.00023	0.00078	0.00019	0.056	0.000046	0.010	0.29	0.073	0.0000037
	June		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	July		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000056	0.012	0.36	0.090	0.0000046
	August		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00029	0.00098	0.00024	0.070	0.000057	0.013	0.37	0.093	0.0000047
	September		0.060	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000066	0.015	0.42	0.11	0.0000055
	October		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	November		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	December		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
		MINIMUM	0.033	0.13	0.00038	0.000031	0.75	0.98	0.00018	0.00062	0.00015	0.045	0.000037	0.0081	0.23	0.059	0.0000030
		MAXIMUM	0.094	0.36	0.0011	**0.000089**	2.3	2.8	0.00053	0.0018	0.00044	0.15	0.00011	0.024	0.71	0.17	0.0000086
		AVERAGE	0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.080	0.000065	0.014	0.42	0.10	0.0000053
Decommissioning	January	2053	0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	February		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	March		0.060	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000066	0.015	0.42	0.11	0.0000055
	April		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	May		0.051	0.19	0.00057	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000055	0.012	0.35	0.089	0.0000046
	June		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	July		0.082	0.31	0.00093	**0.000078**	1.9	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.58	0.15	0.0000074
	August		0.087	0.33	0.00098	**0.000082**	2.0	2.6	0.00047	0.0016	0.00039	0.12	0.000095	0.021	0.61	0.15	0.0000078
	September		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	October		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	November		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	December		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	January	2054	0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	February		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	March		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00100	0.00024	0.071	0.000058	0.013	0.37	0.094	0.0000048
	April		0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000051	0.011	0.33	0.083	0.0000042
	May		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	June		0.060	0.23	0.00068	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.080	0.000065	0.015	0.42	0.11	0.0000054
	July		0.073	0.28	0.00083	**0.000069**	1.7	2.2	0.00040	0.0014	0.00033	0.098	0.000081	0.018	0.51	0.13	0.0000066
	August		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	September		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	October		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	November		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	December		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	January	2055	0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	February		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	March		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	April		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000056	0.012	0.36	0.090	0.0000046
	May		0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000052	0.011	0.33	0.083	0.0000042
	June		0.050	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000054	0.012	0.35	0.088	0.0000045
	July		0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	August		0.051	0.19	0.00057	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000055	0.012	0.35	0.089	0.0000046
	September		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000060	0.013	0.38	0.096	0.0000049
	October		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	November		0.051	0.20	0.00058	0.000049	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	December		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	February		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.012	0.36	0.091	0.0000046
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	April		0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000051	0.011	0.33	0.083	0.0000042
	May		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00100	0.00024	0.071	0.000058	0.013	0.37	0.094	0.0000048
	June		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.084	0.000069	0.015	0.44	0.11	0.0000056
	July		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	August		0.066	0.25	0.00075	**0.000063**	1.5	2.0	0.00036	0.0012	0.00030	0.089	0.000073	0.016	0.46	0.12	0.0000060
	September		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	October		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	January	2057	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	April		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	May		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	June		0.069	0.26	0.00079	**0.000065**	1.6	2.0	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	July		0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	August		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.46	0.11	0.0000059
	September		0.075	0.28	0.00085	**0.000071**	1.7	2.2	0.00041	0.0014	0.00034	0.10	0.000082	0.018	0.53	0.13	0.0000068
	October		0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0015	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	November		0.083	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.020	0.58	0.15	0.0000075
	December		0.083	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
		MINIMUM	0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
		MAXIMUM	0.087	0.33	0.00098	**0.000082**	2.0	2.6	0.00047	0.0016	0.00039	0.12	0.000095	0.021	0.61	0.15	0.0000078
		AVERAGE	0.060	0.23	0.00068	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.080	0.000065	0.015	0.42	0.11	0.0000054
Reclamation	January	2058	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2059	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2060	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2062	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2063	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2064	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2065	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2066	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August	**2066**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	**February**		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July	**2067**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Post-Closure	**June**	**≥2070**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	**January**	**2025**	0.00010	0.00050	0.50	**0.050**	0.020	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.023	0.0100	0.00010	1.5	0.032	1.7	0.0100	0.00010	0.00050	0.0030
	March		0.000100	0.00050	0.50	**0.050**	0.025	0.0099	0.000100	1.5	0.032	1.7	0.0100	0.000100	0.00050	0.0030
	April		0.000091	0.00053	0.41	**0.041**	0.022	0.0083	0.000086	1.3	0.027	1.6	0.0086	0.000086	0.00042	0.0028
	May		0.000088	0.00062	0.34	**0.034**	0.020	0.0072	0.000077	1.1	0.024	1.6	0.0077	0.000077	0.00038	0.0028
	June		0.00011	0.00083	0.38	**0.037**	0.023	0.0083	0.000091	1.3	0.027	1.9	0.0091	0.000091	0.00044	0.0035
	July		0.00013	0.0011	0.39	**0.037**	0.024	0.0087	0.00010	1.3	0.029	2.3	0.010	0.00010	0.00048	0.0042
	August		0.00015	0.0013	0.40	**0.038**	0.026	0.0092	0.00011	1.4	0.031	2.7	0.011	0.00011	0.00052	0.0048
	September		0.00014	0.0013	0.34	**0.032**	0.023	0.0081	0.00010	1.3	0.027	2.6	0.010	0.00010	0.00046	0.0046
	October		0.00013	0.0013	0.29	**0.027**	0.021	0.0071	0.000090	1.1	0.024	2.4	0.0090	0.000090	0.00041	0.0042
	November		0.00012	0.0012	0.25	**0.023**	0.019	0.0062	0.000081	0.99	0.021	2.2	0.0081	0.000081	0.00037	0.0039
	December		0.00011	0.0011	0.25	**0.023**	0.019	0.0061	0.000079	0.97	0.021	2.1	0.0079	0.000079	0.00036	0.0038
	January	**2026**	0.00011	0.0011	0.24	**0.022**	0.019	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00036	0.0038
	February		0.00011	0.0011	0.24	**0.022**	0.020	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00036	0.0038
	March		0.00011	0.0011	0.24	**0.022**	0.020	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00035	0.0038
	April		0.00010	0.0011	0.20	**0.018**	0.017	0.0051	0.000068	0.82	0.018	1.9	0.0068	0.000068	0.00031	0.0034
	May		0.00014	0.0014	0.26	**0.024**	0.022	0.0068	0.000091	1.1	0.024	2.6	0.0091	0.000091	0.00041	0.0046
	June		0.00015	0.0016	0.27	**0.024**	0.023	0.0070	0.000097	1.1	0.025	2.8	0.0097	0.000097	0.00043	0.0051
	July		0.00017	0.0018	0.28	**0.025**	0.024	0.0076	0.00011	1.2	0.027	3.2	0.011	0.00011	0.00047	0.0057
	August		0.00016	0.0018	0.24	**0.021**	0.021	0.0068	0.000099	1.1	0.024	3.0	0.0099	0.000099	0.00043	0.0054
	September		0.00016	0.0018	0.23	**0.019**	0.020	0.0066	0.000096	1.1	0.023	3.0	0.0096	0.000096	0.00042	0.0054
	October		0.00016	0.0018	0.22	**0.019**	0.020	0.0064	0.000096	1.1	0.023	3.0	0.0096	0.000096	0.00042	0.0054
	November		0.00016	0.0018	0.23	**0.019**	0.021	0.0066	0.000098	1.1	0.024	3.1	0.0098	0.000098	0.00043	0.0055
	December		0.00016	0.0018	0.23	**0.019**	0.022	0.0066	0.000098	1.1	0.024	3.1	0.0098	0.000098	0.00043	0.0055
	January	**2027**	0.00016	0.0018	0.23	**0.019**	0.022	0.0066	0.000098	1.1	0.024	3.1	0.0098	0.000098	0.00043	0.0055
	February		0.00016	0.0018	0.23	**0.019**	0.022	0.0066	0.000097	1.1	0.024	3.1	0.0097	0.000097	0.00042	0.0055
	March		0.00015	0.0017	0.20	**0.017**	0.020	0.0058	0.000088	0.96	0.021	2.8	0.0088	0.000088	0.00038	0.0049
	April		0.00012	0.0014	0.16	**0.013**	0.015	0.0047	0.000071	0.77	0.017	2.3	0.0071	0.000071	0.00031	0.0041
	May		0.00013	0.0015	0.16	**0.013**	0.015	0.0048	0.000074	0.80	0.017	2.4	0.0074	0.000074	0.00032	0.0043
	June		0.00015	0.0017	0.18	**0.015**	0.018	0.0056	0.000088	0.94	0.021	2.9	0.0088	0.000088	0.00038	0.0051
	July		0.00015	0.0018	0.18	**0.014**	0.017	0.0056	0.000089	0.94	0.021	3.0	0.0089	0.000089	0.00038	0.0053
	August		0.00018	0.0022	0.20	**0.016**	0.019	0.0066	0.00010	1.1	0.024	3.5	0.010	0.00010	0.00045	0.0063
	September		0.00023	0.0027	0.25	**0.019**	0.024	0.0081	0.00013	1.4	0.030	4.3	0.013	0.00013	0.00055	0.0078
	October		0.00022	0.0026	0.24	**0.018**	0.024	0.0078	0.00012	1.3	0.029	4.2	0.012	0.00012	0.00053	0.0075
	November		0.00019	0.0023	0.21	**0.016**	0.021	0.0068	0.00011	1.1	0.025	3.7	0.011	0.00011	0.00046	0.0066
	December		0.00019	0.0023	0.20	**0.016**	0.022	0.0067	0.00011	1.1	0.025	3.7	0.011	0.00011	0.00046	0.0065
	January	**2028**	0.00019	0.0023	0.20	**0.016**	0.022	0.0067	0.00011	1.1	0.025	3.7	0.011	0.00011	0.00046	0.0065
	February		0.00019	0.0023	0.20	**0.016**	0.023	0.0067	0.00011	1.1	0.025	3.7	0.011	0.00011	0.00046	0.0065
	March		0.00019	0.0023	0.20	**0.016**	0.023	0.0067	0.00011	1.1	0.025	3.7	0.011	0.00011	0.00046	0.0065
	April		0.00017	0.0020	0.18	**0.014**	0.020	0.0059	0.000095	0.99	0.022	3.2	0.0095	0.000095	0.00040	0.0058
	May		0.00014	0.0016	0.14	**0.010**	0.015	0.0047	0.000076	0.79	0.017	2.6	0.0076	0.000076	0.00032	0.0047
	June		0.00016	0.0019	0.16	**0.012**	0.017	0.0055	0.000090	0.92	0.020	3.1	0.0090	0.000090	0.00038	0.0055
	July		0.00018	0.0021	0.17	**0.013**	0.018	0.0060	0.000099	1.0	0.022	3.4	0.0099	0.000099	0.00042	0.0061
	August		0.00017	0.0021	0.17	**0.012**	0.017	0.0058	0.000097	0.99	0.022	3.3	0.0097	0.000097	0.00041	0.0060
	September		0.00018	0.0021	0.17	**0.012**	0.017	0.0058	0.000097	0.99	0.022	3.4	0.0097	0.000097	0.00041	0.0060
	October		0.00019	0.0023	0.18	**0.013**	0.019	0.0063	0.00011	1.1	0.024	3.6	0.011	0.00011	0.00044	0.0065
	November		0.00019	0.0023	0.18	**0.013**	0.020	0.0063	0.00011	1.1	0.024	3.6	0.011	0.00011	0.00044	0.0065
	December		0.00019	0.0023	0.18	**0.013**	0.020	0.0063	0.00011	1.1	0.024	3.6	0.011	0.00011	0.00044	0.0065
		MINIMUM	0.000088	0.00050	0.14	**0.010**	0.015	0.0047	0.000068	0.77	0.017	1.6	0.0068	0.000068	0.00031	0.0028
		MAXIMUM	0.00023	0.0027	0.50	**0.050**	0.026	0.0100	0.00013	1.5	0.032	4.3	0.013	0.00013	0.00055	0.0078
		AVERAGE	0.00015	0.0016	0.25	**0.022**	0.020	0.0068	0.000095	1.1	0.024	2.8	0.0095	0.000095	0.00042	0.0051
Operations	**January**	**2029**	0.00019	0.0023	0.18	**0.013**	0.021	0.0063	0.00011	1.1	0.024	3.6	0.011	0.00011	0.00044	0.0065
	February		0.00019	0.0023	0.18	**0.013**	0.021	0.0063	0.00011	1.1	0.024	3.6	0.011	0.00011	0.00044	0.0065
	March		0.00018	0.0022	0.17	**0.013**	0.021	0.0061	0.00010	1.0	0.023	3.5	0.010	0.00010	0.00043	0.0064
	April		0.00014	0.0017	0.13	0.0095	0.015	0.0047	0.000079	0.80	0.018	2.7	0.0079	0.000079	0.00033	0.0049
	May		0.00014	0.0017	0.13	0.0092	0.015	0.0046	0.000077	0.78	0.017	2.7	0.0077	0.000077	0.00032	0.0048
	June		0.00015	0.0018	0.13	0.0096	0.015	0.0048	0.000081	0.82	0.018	2.8	0.0081	0.000081	0.00034	0.0051
	July		0.00018	0.0022	0.16	**0.011**	0.018	0.0057	0.000097	0.98	0.022	3.4	0.0097	0.000097	0.00041	0.0061
	August		0.00019	0.0024	0.17	**0.012**	0.019	0.0062	0.00011	1.1	0.023	3.7	0.011	0.00011	0.00044	0.0066
	September		0.00018	0.0022	0.16	**0.011**	0.017	0.0058	0.000099	1.00	0.022	3.5	0.0099	0.000099	0.00041	0.0063
	October		0.00018	0.0023	0.16	**0.012**	0.018	0.0059	0.00010	1.0	0.022	3.6	0.010	0.00010	0.00042	0.0064
	November		0.00018	0.0022	0.16	**0.011**	0.018	0.0057	0.000098	0.98	0.022	3.4	0.0098	0.000098	0.00041	0.0062
	December		0.00018	0.0022	0.16	**0.011**	0.018	0.0057	0.000097	0.98	0.021	3.4	0.0097	0.000097	0.00041	0.0061

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.00018	0.0022	0.16	**0.011**	0.019	0.0057	0.000097	0.98	0.021	3.4	0.0097	0.000097	0.00041	0.0061
	February		0.00017	0.0021	0.15	**0.011**	0.019	0.0056	0.000096	0.96	0.021	3.4	0.0096	0.000096	0.00040	0.0060
	March		0.00016	0.0020	0.15	**0.010**	0.018	0.0053	0.000090	0.91	0.020	3.2	0.0090	0.000090	0.00038	0.0057
	April		0.00014	0.0017	0.12	0.0084	0.014	0.0044	0.000075	0.75	0.016	2.6	0.0075	0.000075	0.00031	0.0047
	May		0.00015	0.0018	0.13	0.0089	0.015	0.0046	0.000079	0.80	0.018	2.8	0.0079	0.000079	0.00033	0.0050
	June		0.00013	0.0016	0.11	0.0078	0.012	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	July		0.00012	0.0015	0.11	0.0073	0.011	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0042
	August		0.00014	0.0017	0.12	0.0080	0.011	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	September		0.00013	0.0015	0.11	0.0073	0.010	0.0040	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	October		0.00012	0.0015	0.10	0.0072	0.010	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	November		0.00011	0.0014	0.096	0.0066	0.0099	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0039
	December		0.00011	0.0014	0.094	0.0065	0.010	0.0035	0.000060	0.60	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	January	2031	0.00011	0.0013	0.091	0.0063	0.010	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	February		0.00011	0.0013	0.091	0.0063	0.011	0.0034	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	March		0.00011	0.0013	0.089	0.0062	0.011	0.0033	0.000057	0.57	0.013	2.0	0.0057	0.000057	0.00024	0.0037
	April		0.000089	0.0011	0.075	0.0051	0.0083	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	May		0.000092	0.0011	0.077	0.0053	0.0080	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	June		0.00011	0.0014	0.096	0.0066	0.0100	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	July		0.00014	0.0018	0.12	0.0082	0.012	0.0045	0.000077	0.77	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	August		0.00017	0.0020	0.14	0.0095	0.014	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	September		0.00016	0.0020	0.13	0.0092	0.013	0.0050	0.000087	0.86	0.019	3.1	0.0087	0.000087	0.00036	0.0055
	October		0.00015	0.0018	0.13	0.0086	0.013	0.0047	0.000081	0.81	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	November		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00031	0.0048
	December		0.00014	0.0017	0.12	0.0079	0.013	0.0044	0.000075	0.75	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	January	2032	0.00014	0.0017	0.11	0.0078	0.014	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	February		0.00014	0.0017	0.11	0.0078	0.014	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	March		0.00012	0.0015	0.100	0.0068	0.012	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
	April		0.000098	0.0012	0.082	0.0056	0.0091	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	May		0.00010	0.0013	0.087	0.0059	0.0095	0.0033	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	June		0.00013	0.0016	0.11	0.0072	0.011	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0044
	July		0.00012	0.0015	0.10	0.0069	0.010	0.0038	0.000066	0.66	0.014	2.4	0.0066	0.000066	0.00027	0.0042
	August		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00029	0.0044
	September		0.00014	0.0017	0.12	0.0080	0.012	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	October		0.00014	0.0018	0.12	0.0082	0.013	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00033	0.0050
	November		0.00014	0.0017	0.12	0.0081	0.013	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	December		0.00014	0.0017	0.12	0.0081	0.014	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	January	2033	0.00014	0.0017	0.12	0.0081	0.014	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	February		0.00014	0.0017	0.12	0.0081	0.015	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	March		0.00014	0.0017	0.12	0.0080	0.015	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	April		0.00011	0.0013	0.090	0.0061	0.010	0.0034	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	May		0.00011	0.0014	0.093	0.0063	0.010	0.0035	0.000060	0.60	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	June		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0044
	July		0.00015	0.0019	0.13	0.0087	0.014	0.0048	0.000083	0.83	0.018	3.0	0.0083	0.000083	0.00035	0.0053
	August		0.00017	0.0020	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	September		0.00017	0.0021	0.14	0.0095	0.015	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	October		0.00017	0.0020	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	November		0.00015	0.0018	0.12	0.0083	0.013	0.0046	0.000079	0.78	0.017	2.8	0.0079	0.000079	0.00033	0.0050
	December		0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	January	2034	0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	February		0.00014	0.0018	0.12	0.0081	0.015	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	March		0.00013	0.0017	0.11	0.0076	0.014	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0046
	April		0.00011	0.0014	0.091	0.0062	0.011	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	May		0.00011	0.0014	0.093	0.0064	0.011	0.0035	0.000061	0.60	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	June		0.000093	0.0011	0.077	0.0053	0.0075	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	July		0.000088	0.0011	0.073	0.0050	0.0063	0.0027	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0030
	August		0.000098	0.0012	0.081	0.0056	0.0069	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	September		0.000097	0.0012	0.081	0.0055	0.0069	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	October		0.00011	0.0013	0.089	0.0061	0.0081	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	November		0.00010	0.0013	0.087	0.0059	0.0085	0.0033	0.000057	0.56	0.012	2.0	0.0057	0.000057	0.00024	0.0036
	December		0.00010	0.0012	0.084	0.0057	0.0087	0.0031	0.000055	0.54	0.012	1.9	0.0055	0.000055	0.00023	0.0035
	January	2035	0.00010	0.0012	0.083	0.0057	0.0091	0.0031	0.000054	0.54	0.012	1.9	0.0054	0.000054	0.00023	0.0035
	February		0.000098	0.0012	0.081	0.0055	0.0092	0.0031	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	March		0.000098	0.0012	0.081	0.0055	0.0096	0.0031	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.000090	0.0011	0.075	0.0051	0.0087	0.0028	0.000049	0.49	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	May		0.000087	0.0011	0.072	0.0049	0.0076	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	June		0.000095	0.0012	0.079	0.0054	0.0079	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00021	0.0033
	July		0.00011	0.0013	0.089	0.0061	0.0086	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	August	2035	0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00029	0.0044
	September		0.00013	0.0017	0.11	0.0076	0.011	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	October		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	November		0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	December		0.00013	0.0016	0.11	0.0074	0.012	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	January		0.00013	0.0016	0.11	0.0074	0.013	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	February		0.00013	0.0016	0.11	0.0074	0.013	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	March		0.00012	0.0015	0.10	0.0070	0.013	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	April		0.000096	0.0012	0.079	0.0054	0.0089	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00022	0.0033
	May		0.000095	0.0012	0.079	0.0054	0.0084	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00021	0.0033
	June		0.00012	0.0015	0.098	0.0067	0.010	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	July	2036	0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0045
	August		0.00017	0.0021	0.14	0.0098	0.015	0.0054	0.000094	0.93	0.021	3.3	0.0094	0.000094	0.00039	0.0060
	September		0.00019	0.0024	0.16	**0.011**	0.017	0.0060	0.00010	1.0	0.023	3.7	0.010	0.00010	0.00043	0.0066
	October		0.00018	0.0022	0.15	**0.010**	0.016	0.0055	0.000096	0.95	0.021	3.4	0.0096	0.000096	0.00040	0.0061
	November		0.00017	0.0021	0.14	0.0095	0.016	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	December		0.00017	0.0021	0.14	0.0095	0.016	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	January		0.00017	0.0021	0.14	0.0095	0.017	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	February		0.00016	0.0019	0.13	0.0089	0.016	0.0049	0.000085	0.84	0.019	3.0	0.0085	0.000085	0.00035	0.0054
	March		0.00015	0.0019	0.13	0.0086	0.016	0.0047	0.000082	0.82	0.018	2.9	0.0082	0.000082	0.00034	0.0052
	April		0.00012	0.0014	0.097	0.0066	0.011	0.0036	0.000063	0.63	0.014	2.2	0.0063	0.000063	0.00026	0.0040
	May		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	June	2037	0.00012	0.0015	0.10	0.0071	0.011	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	July		0.00012	0.0014	0.096	0.0066	0.0096	0.0036	0.000063	0.62	0.014	2.2	0.0063	0.000063	0.00026	0.0040
	August		0.00015	0.0018	0.12	0.0082	0.012	0.0045	0.000079	0.78	0.017	2.8	0.0079	0.000079	0.00033	0.0050
	September		0.00014	0.0017	0.11	0.0077	0.011	0.0042	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	October		0.00014	0.0017	0.12	0.0080	0.012	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
Operations	November		0.00014	0.0017	0.12	0.0079	0.013	0.0043	0.000075	0.75	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	December		0.00014	0.0017	0.11	0.0078	0.013	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	January		0.00014	0.0017	0.11	0.0078	0.014	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	February		0.00014	0.0017	0.11	0.0077	0.014	0.0043	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	March		0.00012	0.0014	0.096	0.0065	0.011	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	April		0.000094	0.0012	0.078	0.0053	0.0085	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	May		0.00010	0.0013	0.085	0.0058	0.0092	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	June		0.00012	0.0015	0.099	0.0068	0.011	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
	July	2038	0.00014	0.0017	0.11	0.0078	0.012	0.0043	0.000075	0.74	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	August		0.00016	0.0020	0.14	0.0093	0.014	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	September		0.00016	0.0020	0.13	0.0092	0.014	0.0051	0.000088	0.87	0.019	3.1	0.0088	0.000088	0.00037	0.0056
	October		0.00014	0.0017	0.11	0.0078	0.012	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	November		0.00013	0.0016	0.11	0.0074	0.012	0.0041	0.000071	0.70	0.016	2.5	0.0071	0.000071	0.00030	0.0045
	December		0.00013	0.0016	0.11	0.0074	0.012	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	January		0.00013	0.0016	0.11	0.0074	0.013	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	February		0.00012	0.0014	0.097	0.0066	0.012	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	March		0.00011	0.0014	0.093	0.0063	0.011	0.0035	0.000061	0.60	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	April		0.00011	0.0014	0.094	0.0064	0.011	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00026	0.0039
	May		0.00013	0.0016	0.11	0.0072	0.013	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	June		0.00016	0.0020	0.14	0.0092	0.016	0.0051	0.000088	0.88	0.019	3.1	0.0088	0.000088	0.00037	0.0056
	July	2039	0.00017	0.0020	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	August		0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000070	0.70	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	September		0.00013	0.0016	0.11	0.0076	0.011	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	October		0.00013	0.0015	0.10	0.0071	0.011	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	November		0.00011	0.0014	0.094	0.0064	0.010	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	December		0.00011	0.0014	0.094	0.0064	0.011	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00026	0.0039
	January		0.00011	0.0014	0.094	0.0064	0.011	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00026	0.0039
	February		0.00011	0.0014	0.094	0.0064	0.012	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00026	0.0039
	March		0.000093	0.0012	0.078	0.0053	0.0089	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	April	2040	0.000083	0.0010	0.069	0.0047	0.0074	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	May		0.000086	0.0011	0.072	0.0049	0.0073	0.0027	0.000047	0.46	0.010	1.7	0.0047	0.000047	0.00019	0.0030
	June		0.000093	0.0011	0.077	0.0053	0.0074	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.000095	0.0012	0.079	0.0054	0.0070	0.0030	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	August		0.00013	0.0016	0.11	0.0075	0.010	0.0042	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	September		0.00014	0.0017	0.12	0.0080	0.011	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	October		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	November		0.00013	0.0016	0.11	0.0076	0.012	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	December		0.00013	0.0016	0.11	0.0076	0.012	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	January	2041	0.00013	0.0016	0.11	0.0076	0.013	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	February		0.00013	0.0016	0.11	0.0076	0.013	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	March		0.00013	0.0016	0.11	0.0073	0.013	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	April		0.00010	0.0013	0.087	0.0060	0.010	0.0033	0.000057	0.56	0.012	2.0	0.0057	0.000057	0.00024	0.0036
	May		0.00011	0.0014	0.093	0.0063	0.010	0.0035	0.000060	0.60	0.013	2.2	0.0060	0.000060	0.00025	0.0039
	June		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	July		0.00015	0.0018	0.12	0.0085	0.013	0.0047	0.000081	0.81	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	August		0.00010	0.0013	0.086	0.0058	0.0079	0.0032	0.000056	0.55	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	September		0.000098	0.0012	0.081	0.0055	0.0073	0.0031	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	October		0.00010	0.0013	0.085	0.0058	0.0080	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	November		0.000099	0.0012	0.082	0.0056	0.0082	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	December		0.000099	0.0012	0.082	0.0056	0.0088	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	January	2042	0.000099	0.0012	0.082	0.0056	0.0093	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	February		0.000099	0.0012	0.082	0.0056	0.0097	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	March		0.000096	0.0012	0.080	0.0055	0.0097	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	April		0.000083	0.0010	0.069	0.0047	0.0078	0.0026	0.000045	0.45	0.0099	1.6	0.0045	0.000045	0.00019	0.0029
	May		0.000086	0.0011	0.072	0.0049	0.0077	0.0027	0.000047	0.46	0.010	1.7	0.0047	0.000047	0.00019	0.0030
	June		0.000087	0.0011	0.072	0.0049	0.0071	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	July		0.000087	0.0011	0.073	0.0050	0.0063	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	August		0.000090	0.0011	0.075	0.0051	0.0063	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	September		0.000093	0.0011	0.077	0.0053	0.0065	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	October		0.000083	0.0010	0.069	0.0047	0.0058	0.0026	0.000045	0.44	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	November		0.000082	0.0010	0.068	0.0046	0.0063	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	December		0.000082	0.0010	0.068	0.0046	0.0068	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
Operations	January	2043	0.000082	0.0010	0.068	0.0046	0.0073	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	February		0.000082	0.0010	0.068	0.0046	0.0077	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	March		0.000082	0.0010	0.068	0.0046	0.0081	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	April		0.000075	0.00093	0.063	0.0043	0.0070	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	May		0.000079	0.00097	0.065	0.0045	0.0067	0.0025	0.000043	0.42	0.0093	1.5	0.0043	0.000043	0.00018	0.0027
	June		0.000083	0.0010	0.069	0.0047	0.0066	0.0026	0.000045	0.45	0.0099	1.6	0.0045	0.000045	0.00019	0.0029
	July		0.000092	0.0011	0.076	0.0052	0.0068	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	August		0.000089	0.0011	0.074	0.0051	0.0062	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	September		0.000081	0.0010	0.068	0.0046	0.0055	0.0025	0.000044	0.44	0.0096	1.6	0.0044	0.000044	0.00018	0.0028
	October		0.000074	0.00091	0.062	0.0042	0.0050	0.0023	0.000040	0.40	0.0088	1.4	0.0040	0.000040	0.00017	0.0026
	November		0.000069	0.00085	0.057	0.0039	0.0049	0.0022	0.000037	0.37	0.0082	1.3	0.0037	0.000037	0.00015	0.0024
	December		0.000069	0.00085	0.057	0.0039	0.0054	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	January	2044	0.000069	0.00085	0.057	0.0039	0.0058	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	February		0.000069	0.00085	0.057	0.0039	0.0062	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	March		0.000068	0.00084	0.057	0.0039	0.0065	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	April		0.000067	0.00083	0.056	0.0038	0.0057	0.0021	0.000037	0.36	0.0080	1.3	0.0037	0.000037	0.00015	0.0023
	May		0.000082	0.0010	0.068	0.0046	0.0068	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	June		0.00010	0.0013	0.084	0.0058	0.0084	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	July		0.00011	0.0013	0.089	0.0061	0.0083	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	August		0.00014	0.0017	0.12	0.0080	0.011	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	September		0.00017	0.0021	0.14	0.0097	0.014	0.0053	0.000092	0.92	0.020	3.3	0.0092	0.000092	0.00038	0.0059
	October		0.00017	0.0021	0.14	0.0099	0.015	0.0055	0.000094	0.94	0.021	3.4	0.0094	0.000094	0.00039	0.0060
	November		0.00018	0.0022	0.15	**0.010**	0.016	0.0056	0.000097	0.96	0.021	3.4	0.0097	0.000097	0.00040	0.0062
	December		0.00018	0.0022	0.15	**0.010**	0.017	0.0056	0.000096	0.95	0.021	3.4	0.0096	0.000096	0.00040	0.0061
	January	2045	0.00018	0.0022	0.15	**0.010**	0.018	0.0055	0.000096	0.95	0.021	3.4	0.0096	0.000096	0.00040	0.0061
	February		0.00018	0.0022	0.15	**0.010**	0.018	0.0055	0.000096	0.95	0.021	3.4	0.0096	0.000096	0.00040	0.0061
	March		0.00017	0.0020	0.14	0.0094	0.017	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	April		0.00014	0.0017	0.11	0.0078	0.014	0.0043	0.000075	0.74	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	May		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000072	0.71	0.016	2.5	0.0072	0.000072	0.00030	0.0046
	June		0.00013	0.0017	0.11	0.0076	0.012	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	July		0.00014	0.0018	0.12	0.0082	0.013	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	August		0.00016	0.0020	0.13	0.0092	0.014	0.0051	0.000088	0.87	0.019	3.1	0.0088	0.000088	0.00036	0.0056
	September		0.00018	0.0022	0.15	**0.010**	0.016	0.0056	0.000097	0.96	0.021	3.5	0.0097	0.000097	0.00040	0.0062

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October		0.00018	0.0022	0.15	**0.010**	0.016	0.0056	0.000096	0.96	0.021	3.4	0.0096	0.000096	0.00040	0.0062
	November	2045	0.00017	0.0021	0.14	0.0097	0.016	0.0054	0.000093	0.92	0.020	3.3	0.0093	0.000093	0.00039	0.0059
	December		0.00017	0.0021	0.14	0.0096	0.017	0.0053	0.000092	0.91	0.020	3.3	0.0092	0.000092	0.00038	0.0058
	January		0.00016	0.0020	0.14	0.0093	0.016	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	February		0.00016	0.0020	0.14	0.0093	0.017	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	March		0.00015	0.0018	0.12	0.0085	0.016	0.0047	0.000081	0.81	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	April		0.00013	0.0016	0.11	0.0074	0.013	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	May		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	June	2046	0.00013	0.0016	0.11	0.0074	0.012	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	July		0.00012	0.0015	0.10	0.0071	0.011	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	August		0.00012	0.0015	0.100	0.0068	0.0099	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
	September		0.00011	0.0014	0.091	0.0062	0.0088	0.0034	0.000060	0.59	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	October		0.00010	0.0012	0.084	0.0057	0.0080	0.0031	0.000054	0.54	0.012	1.9	0.0054	0.000054	0.00023	0.0035
	November		0.000096	0.0012	0.080	0.0054	0.0080	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	December		0.000096	0.0012	0.080	0.0054	0.0085	0.0030	0.000052	0.52	0.011	1.8	0.0052	0.000052	0.00022	0.0033
	January		0.000096	0.0012	0.080	0.0054	0.0090	0.0030	0.000052	0.52	0.011	1.8	0.0052	0.000052	0.00022	0.0033
	February		0.000096	0.0012	0.080	0.0054	0.0094	0.0030	0.000052	0.52	0.011	1.8	0.0052	0.000052	0.00022	0.0033
	March		0.000094	0.0012	0.078	0.0053	0.0094	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	April		0.000085	0.0011	0.071	0.0048	0.0082	0.0027	0.000046	0.46	0.010	1.6	0.0046	0.000046	0.00019	0.0030
	May		0.000085	0.0011	0.071	0.0048	0.0075	0.0027	0.000046	0.46	0.010	1.6	0.0046	0.000046	0.00019	0.0029
	June	2047	0.00010	0.0013	0.087	0.0059	0.0089	0.0033	0.000057	0.56	0.012	2.0	0.0057	0.000057	0.00023	0.0036
	July		0.00011	0.0013	0.090	0.0061	0.0085	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	August		0.00011	0.0013	0.089	0.0061	0.0079	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	September		0.00011	0.0014	0.095	0.0065	0.0087	0.0036	0.000062	0.61	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	October		0.00012	0.0015	0.10	0.0069	0.0097	0.0038	0.000066	0.65	0.014	2.3	0.0066	0.000066	0.00027	0.0042
	November		0.00012	0.0015	0.098	0.0067	0.0100	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	December		0.00012	0.0014	0.097	0.0066	0.010	0.0036	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	January		0.00012	0.0014	0.096	0.0066	0.011	0.0036	0.000063	0.62	0.014	2.2	0.0063	0.000063	0.00026	0.0040
	February		0.00012	0.0014	0.096	0.0065	0.011	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	March		0.00011	0.0014	0.096	0.0065	0.012	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	April		0.00011	0.0013	0.089	0.0061	0.011	0.0034	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
Operations	May		0.00011	0.0013	0.090	0.0061	0.011	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	June	2048	0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000072	0.71	0.016	2.5	0.0072	0.000072	0.00030	0.0046
	July		0.00012	0.0014	0.097	0.0066	0.010	0.0036	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	August		0.000095	0.0012	0.079	0.0054	0.0072	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00021	0.0033
	September		0.000092	0.0011	0.077	0.0052	0.0068	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	October		0.000089	0.0011	0.074	0.0050	0.0068	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	November		0.000088	0.0011	0.073	0.0050	0.0073	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	December		0.000087	0.0011	0.072	0.0049	0.0076	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00019	0.0030
	January		0.000082	0.0010	0.069	0.0047	0.0074	0.0026	0.000045	0.44	0.0098	1.6	0.0045	0.000045	0.00019	0.0028
	February		0.000081	0.0010	0.068	0.0046	0.0076	0.0025	0.000044	0.44	0.0096	1.6	0.0044	0.000044	0.00018	0.0028
	March		0.000079	0.00097	0.065	0.0045	0.0075	0.0025	0.000043	0.42	0.0093	1.5	0.0043	0.000043	0.00018	0.0027
	April		0.000075	0.00093	0.063	0.0043	0.0069	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	May		0.000083	0.0010	0.069	0.0047	0.0073	0.0026	0.000045	0.45	0.0099	1.6	0.0045	0.000045	0.00019	0.0029
	June	2049	0.000090	0.0011	0.075	0.0051	0.0073	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	July		0.000088	0.0011	0.074	0.0050	0.0066	0.0028	0.000048	0.48	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	August		0.000096	0.0012	0.080	0.0054	0.0068	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00022	0.0033
	September		0.000092	0.0011	0.076	0.0052	0.0065	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	October		0.000083	0.0010	0.069	0.0047	0.0058	0.0026	0.000045	0.44	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	November		0.000076	0.00093	0.063	0.0043	0.0056	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	December		0.000075	0.00093	0.063	0.0043	0.0061	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	January		0.000075	0.00093	0.063	0.0043	0.0066	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	February		0.000075	0.00093	0.063	0.0043	0.0070	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	March		0.000075	0.00092	0.062	0.0042	0.0072	0.0023	0.000040	0.40	0.0088	1.4	0.0040	0.000040	0.00017	0.0026
	April		0.000068	0.00084	0.056	0.0039	0.0058	0.0021	0.000037	0.37	0.0080	1.3	0.0037	0.000037	0.00015	0.0023
	May		0.000071	0.00087	0.059	0.0040	0.0060	0.0022	0.000038	0.38	0.0084	1.4	0.0038	0.000038	0.00016	0.0024
	June	2050	0.000077	0.00095	0.064	0.0044	0.0061	0.0024	0.000042	0.41	0.0091	1.5	0.0042	0.000042	0.00017	0.0027
	July		0.00011	0.0013	0.091	0.0062	0.0089	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	August		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000072	0.71	0.016	2.5	0.0072	0.000072	0.00030	0.0046
	September		0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.68	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	October		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00028	0.0044
	November		0.00012	0.0015	0.100	0.0068	0.010	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
	December		0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	February		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	March		0.00011	0.0014	0.095	0.0065	0.012	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	April		0.000082	0.0010	0.068	0.0046	0.0069	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	May		0.000082	0.0010	0.068	0.0047	0.0065	0.0026	0.000045	0.44	0.0097	1.6	0.0045	0.000045	0.00018	0.0028
	June		0.000096	0.0012	0.080	0.0055	0.0076	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	July		0.00010	0.0013	0.087	0.0059	0.0079	0.0033	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	August		0.000096	0.0012	0.080	0.0054	0.0069	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	September		0.000096	0.0012	0.080	0.0055	0.0070	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	October		0.000092	0.0011	0.077	0.0052	0.0069	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	November		0.000092	0.0011	0.077	0.0052	0.0073	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	December		0.000089	0.0011	0.074	0.0050	0.0075	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	January	2052	0.000088	0.0011	0.074	0.0050	0.0079	0.0028	0.000048	0.48	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	February		0.000088	0.0011	0.074	0.0050	0.0084	0.0028	0.000048	0.48	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	March		0.000088	0.0011	0.073	0.0050	0.0087	0.0028	0.000048	0.48	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	April		0.000080	0.00099	0.067	0.0045	0.0072	0.0025	0.000043	0.43	0.0095	1.5	0.0043	0.000043	0.00018	0.0028
	May		0.000084	0.0010	0.070	0.0048	0.0070	0.0026	0.000046	0.45	0.0100	1.6	0.0046	0.000046	0.00019	0.0029
	June		0.000099	0.0012	0.083	0.0056	0.0082	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	July		0.00010	0.0013	0.085	0.0058	0.0079	0.0032	0.000056	0.55	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	August		0.00011	0.0013	0.088	0.0060	0.0079	0.0033	0.000057	0.57	0.013	2.0	0.0057	0.000057	0.00024	0.0037
	September		0.00012	0.0015	0.10	0.0069	0.0094	0.0038	0.000066	0.66	0.014	2.4	0.0066	0.000066	0.00028	0.0042
	October		0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	November		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.68	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	December		0.00013	0.0016	0.11	0.0072	0.012	0.0040	0.000069	0.68	0.015	2.5	0.0069	0.000069	0.00029	0.0044
		MINIMUM	0.000067	0.00083	0.056	0.0038	0.0049	0.0021	0.000037	0.36	0.0080	1.3	0.0037	0.000037	0.00015	0.0023
		MAXIMUM	0.00019	0.0024	0.18	**0.013**	0.021	0.0063	0.00011	1.1	0.024	3.7	0.011	0.00011	0.00044	0.0066
		AVERAGE	0.00012	0.0015	0.10	0.0069	0.011	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
Decommissioning	January	2053	0.00013	0.0016	0.11	0.0072	0.012	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00029	0.0044
	February		0.00013	0.0016	0.11	0.0072	0.013	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00029	0.0044
	March		0.00012	0.0015	0.10	0.0069	0.013	0.0038	0.000066	0.66	0.015	2.4	0.0066	0.000066	0.00028	0.0042
	April		0.000097	0.0012	0.081	0.0055	0.0090	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	May		0.00010	0.0013	0.085	0.0058	0.0091	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	June		0.00014	0.0017	0.11	0.0077	0.012	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	July		0.00017	0.0021	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0058
	August		0.00018	0.0022	0.15	0.0099	0.015	0.0055	0.000095	0.94	0.021	3.4	0.0095	0.000095	0.00039	0.0061
	September		0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	October		0.00011	0.0014	0.095	0.0065	0.0094	0.0036	0.000062	0.61	0.014	2.2	0.0062	0.000062	0.00026	0.0039
	November		0.00011	0.0013	0.091	0.0062	0.0093	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	December		0.00011	0.0013	0.091	0.0062	0.0099	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	January	2054	0.00011	0.0013	0.091	0.0062	0.010	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	February		0.00011	0.0013	0.091	0.0062	0.011	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	March		0.00011	0.0013	0.090	0.0061	0.011	0.0034	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	April		0.000095	0.0012	0.079	0.0054	0.0092	0.0030	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	May		0.000092	0.0011	0.077	0.0052	0.0082	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	June		0.00012	0.0015	0.10	0.0068	0.011	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
	July		0.00015	0.0018	0.12	0.0084	0.013	0.0046	0.000081	0.80	0.018	2.9	0.0081	0.000081	0.00033	0.0051
	August		0.00013	0.0016	0.11	0.0076	0.011	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	September		0.00014	0.0017	0.11	0.0077	0.011	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	October		0.00014	0.0017	0.11	0.0077	0.011	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	November		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.68	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	December		0.00013	0.0016	0.10	0.0072	0.012	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0044
	January	2055	0.00013	0.0016	0.10	0.0071	0.012	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0044
	February		0.00013	0.0016	0.10	0.0071	0.013	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	March		0.00013	0.0015	0.10	0.0071	0.013	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	April		0.00010	0.0013	0.086	0.0058	0.0099	0.0032	0.000056	0.55	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	May		0.000095	0.0012	0.079	0.0054	0.0085	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00021	0.0033
	June		0.00010	0.0012	0.084	0.0057	0.0086	0.0031	0.000054	0.54	0.012	1.9	0.0054	0.000054	0.00023	0.0035
	July		0.000088	0.0011	0.073	0.0050	0.0065	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	August		0.00010	0.0013	0.085	0.0058	0.0076	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	September		0.00011	0.0014	0.092	0.0063	0.0083	0.0035	0.000060	0.59	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	October		0.00011	0.0013	0.091	0.0062	0.0086	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	November		0.00010	0.0013	0.087	0.0059	0.0086	0.0033	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	December		0.00010	0.0013	0.086	0.0059	0.0092	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.00010	0.0013	0.086	0.0059	0.0097	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	February		0.00010	0.0013	0.086	0.0059	0.010	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	March		0.000094	0.0012	0.078	0.0053	0.0089	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	April		0.000095	0.0012	0.079	0.0054	0.0089	0.0030	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	May		0.00011	0.0013	0.090	0.0061	0.010	0.0034	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	June		0.00013	0.0016	0.11	0.0072	0.012	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00028	0.0044
	July		0.00013	0.0016	0.11	0.0076	0.011	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	August		0.00013	0.0017	0.11	0.0076	0.011	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0046
	September		0.00011	0.0013	0.091	0.0062	0.0086	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	October		0.00011	0.0014	0.095	0.0065	0.0093	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	November		0.00012	0.0015	0.098	0.0067	0.010	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	December		0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	January	2057	0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	February		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	March		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	April		0.000097	0.0012	0.081	0.0055	0.0094	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	May		0.00011	0.0014	0.094	0.0064	0.011	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	June		0.00014	0.0017	0.12	0.0080	0.014	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00032	0.0048
	July		0.00014	0.0017	0.11	0.0077	0.012	0.0043	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	August		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0046
	September		0.00015	0.0019	0.13	0.0086	0.013	0.0047	0.000082	0.82	0.018	2.9	0.0082	0.000082	0.00034	0.0052
	October		0.00017	0.0021	0.14	0.0095	0.015	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	November		0.00017	0.0021	0.14	0.0096	0.016	0.0053	0.000092	0.91	0.020	3.3	0.0092	0.000092	0.00038	0.0058
	December		0.00017	0.0021	0.14	0.0096	0.016	0.0053	0.000091	0.91	0.020	3.3	0.0091	0.000091	0.00038	0.0058
		MINIMUM	0.000088	0.0011	0.073	0.0050	0.0065	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0031
		MAXIMUM	0.00018	0.0022	0.15	0.0099	0.016	0.0055	0.000095	0.94	0.021	3.4	0.0095	0.000095	0.00039	0.0061
		AVERAGE	0.00012	0.0015	0.10	0.0068	0.011	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
Reclamation	January	2058	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2059	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2060	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2062	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2063	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2064	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2065	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2066	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation																

Table G-7: Scenario 11: Reasonable Upper Bound - West Surface Runoff Disch

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August	**2066**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	**February**		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July	**2067**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Post-Closure	**June**	**≥2070**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	**January**	**2025**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.0100	0.053	0.00013	0.0000099	4.0	0.99	0.00050	0.000099	0.00050	**0.46**	0.000099	0.037	1.4	0.056	0.0000040
	April		0.0087	0.047	0.00011	0.0000087	3.5	0.87	0.00044	0.000087	0.00044	**0.40**	0.000087	0.032	1.2	0.049	0.0000035
	May		0.0075	0.040	0.000097	0.0000075	3.0	0.75	0.00037	0.000075	0.00037	**0.35**	0.000075	0.027	1.0	0.042	0.0000030
	June		0.0073	0.039	0.000095	0.0000073	2.9	0.73	0.00037	0.000073	0.00037	**0.34**	0.000073	0.027	1.0	0.041	0.0000029
	July		0.0066	0.035	0.000086	0.0000066	2.6	0.66	0.00033	0.000066	0.00033	**0.31**	0.000066	0.024	0.93	0.037	0.0000026
	August		0.0062	0.033	0.000080	0.0000062	2.5	0.62	0.00031	0.000062	0.00031	0.28	0.000062	0.022	0.86	0.035	0.0000025
	September		0.0054	0.029	0.000071	0.0000054	2.2	0.54	0.00027	0.000054	0.00027	0.25	0.000054	0.020	0.76	0.031	0.0000022
	October		0.0049	0.026	0.000064	0.0000049	2.0	0.49	0.00025	0.000049	0.00025	0.23	0.000049	0.018	0.69	0.028	0.0000020
	November		0.0046	0.025	0.000060	0.0000046	1.9	0.46	0.00023	0.000046	0.00023	0.21	0.000046	0.017	0.65	0.026	0.0000019
	December		0.0046	0.024	0.000059	0.0000046	1.8	0.46	0.00023	0.000046	0.00023	0.21	0.000046	0.017	0.64	0.026	0.0000018
	January	**2026**	0.0046	0.024	0.000059	0.0000045	1.8	0.45	0.00023	0.000045	0.00023	0.21	0.000045	0.016	0.64	0.026	0.0000018
	February		0.0046	0.024	0.000059	0.0000045	1.8	0.45	0.00023	0.000045	0.00023	0.21	0.000045	0.016	0.64	0.026	0.0000018
	March		0.0030	2.0	0.000040	0.0000030	2.5	0.63	0.00015	0.000030	0.00015	0.14	0.000030	0.023	0.89	0.017	0.0000025
	April		0.00011	2.8	0.00011	0.0000012	4.7	2.7	0.0000057	0.0000017	0.0000072	0.0052	0.0000012	3.2	1.6	0.00072	0.000019
	May		0.0000013	3.4	0.000023	0.00000023	4.5	2.3	7.5E-08	0.00000017	0.00000039	0.000036	2.2E-08	2.6	1.5	0.000042	0.000016
	June		0.0000029	3.0	0.00018	0.0000018	5.6	4.2	0.00000017	0.00000079	0.0000027	0.0000078	0.00000011	6.2	1.8	0.000074	0.000034
	July		0.0000023	2.6	0.00015	0.0000015	6.1	5.0	0.00000013	0.00000063	0.0000022	0.0000043	9.1E-08	7.7	2.0	0.000049	0.000042
	August		0.0000029	2.5	0.00018	0.0000019	6.7	6.0	0.00000016	0.00000079	0.0000028	0.0000048	0.00000011	9.5	2.1	0.000057	0.000051
	September		0.0000019	2.5	0.00011	0.0000012	6.2	5.5	0.0000001	0.00000056	0.0000017	0.0000034	6.9E-08	8.4	1.9	0.000045	0.000046
	October		0.0000014	2.9	0.000082	0.00000086	6.2	5.3	7.8E-08	0.00000038	0.0000012	0.0000030	5.1E-08	8.0	2.0	0.000033	0.000044
	November		0.00000082	4.2	0.000042	0.00000043	6.1	4.5	5.5E-08	0.00000022	0.00000064	0.0000044	2.6E-08	6.3	2.0	0.000038	0.000036
	December		0.00000065	5.9	0.000019	0.0000002	5.2	2.6	6.0E-08	0.00000017	0.00000031	0.0000082	1.2E-08	2.7	1.8	0.000065	0.000018
	January	**2027**	0.00000054	8.4	0.0000078	7.8E-08	4.7	1.6	5.9E-08	0.00000014	0.00000015	0.0000095	5.5E-09	1.0	1.6	0.000073	0.0000094
	February		0.00000063	8.9	0.000012	0.00000013	4.6	1.5	6.5E-08	0.00000017	0.00000022	0.0000100	8.4E-09	0.70	1.6	0.000077	0.0000078
	March		0.0000023	5.6	0.00012	0.0000013	5.4	3.0	0.00000015	0.00000059	0.0000019	0.000010	7.7E-08	3.6	1.8	0.000089	0.000023
	April		0.0000024	3.4	0.00014	0.0000015	6.2	5.1	0.00000014	0.00000066	0.0000022	0.0000049	9.0E-08	7.7	2.0	0.000056	0.000043
	May		0.0000016	3.9	0.000092	0.00000096	6.2	5.0	9.1E-08	0.00000044	0.0000014	0.0000039	5.7E-08	7.4	2.0	0.000042	0.000042
	June		0.0000033	3.5	0.00021	0.0000022	6.5	5.5	0.00000019	0.00000086	0.0000031	0.0000067	0.00000013	8.5	2.1	0.000069	0.000047
	July		0.0000029	3.5	0.00018	0.0000019	6.8	5.9	0.00000017	0.00000078	0.0000028	0.0000054	0.00000012	9.3	2.2	0.000060	0.000051
	August		0.0000019	3.5	0.00011	0.0000011	6.0	5.1	0.0000001	0.00000056	0.0000016	0.0000040	6.7E-08	7.6	1.9	0.000051	0.000042
	September		0.0000012	4.1	0.000068	0.00000071	5.8	4.5	7.1E-08	0.00000033	0.0000010	0.0000036	4.3E-08	6.5	1.9	0.000037	0.000037
	October		0.0000020	5.7	0.00011	0.0000011	6.0	4.0	0.00000012	0.00000053	0.0000016	0.0000073	6.8E-08	5.5	2.0	0.000069	0.000032
	November		0.0000017	4.3	0.00010	0.0000011	6.2	4.7	0.0000001	0.00000047	0.0000015	0.0000044	6.3E-08	6.8	2.0	0.000046	0.000039
	December		0.00000032	5.9	0.0000081	7.9E-08	5.5	3.3	3.1E-08	8.7E-08	0.00000013	0.0000046	5.0E-09	4.2	1.8	0.000036	0.000026
	January	**2028**	0.00000037	13	0.0000023	2.0E-08	4.8	1.7	4.3E-08	9.7E-08	5.6E-08	0.0000074	1.9E-09	1.2	1.6	0.000057	0.000010
	February		0.0000004	13	0.00000094	6.9E-09	5.2	1.4	4.9E-08	0.00000011	4.2E-08	0.0000087	1.2E-09	0.20	1.8	0.000066	0.0000059
	March		0.0000004	13	0.0000009	6.6E-09	5.1	1.3	4.9E-08	0.00000011	4.1E-08	0.0000087	1.2E-09	0.064	1.8	0.000066	0.0000052
	April		0.0000020	8.4	0.00014	0.0000013	8.2	13	0.00000019	0.000035	0.0000029	0.000010	7.7E-08	3.6	2.9	0.000091	0.000062
	May		0.0000013	6.0	0.000096	0.00000086	15	38	0.00000024	0.00016	0.0000055	0.0000078	4.0E-08	4.0	7.2	0.00014	0.00018
	June		0.0000014	6.7	0.000100	0.00000091	14	36	0.00000023	0.00016	0.0000053	0.0000081	4.4E-08	3.1	7.3	0.00014	0.00017
	July		0.0000017	6.8	0.00014	0.0000013	18	49	0.0000003	0.00019	0.0000068	0.0000089	6.3E-08	4.2	9.5	0.00016	**0.00023**
	August		0.0000014	6.5	0.00011	0.0000011	20	55	0.00000031	0.00026	0.0000081	0.0000079	4.5E-08	3.7	11	0.00019	**0.00027**
	September		0.0000014	7.3	0.00012	0.0000011	19	53	0.00000031	0.00025	0.0000081	0.0000078	4.9E-08	3.4	12	0.00019	**0.00027**
	October		0.00000071	8.3	0.000050	0.00000047	15	37	0.00000014	0.00010	0.0000033	0.0000057	2.1E-08	2.3	8.7	0.000095	0.00019
	November		0.00000057	11	0.000030	0.00000028	12	27	0.00000011	0.000067	0.0000021	0.0000068	1.2E-08	1.6	6.9	0.000085	0.00014
	December		0.00000039	13	0.0000016	1.3E-08	6.7	6.7	4.9E-08	0.0000020	9.6E-08	0.0000084	1.4E-09	0.37	2.9	0.000065	0.000032
		MINIMUM	0.00000032	0.024	0.0000009	6.6E-09	1.8	0.45	3.1E-08	8.7E-08	4.1E-08	0.0000030	1.2E-09	0.016	0.64	0.000033	0.0000018
		MAXIMUM	0.010	13	0.00021	0.0000100	20	55	0.00050	0.00026	0.00050	**0.46**	0.00010	9.5	12	0.057	**0.00027**
		AVERAGE	0.0020	4.3	0.000086	0.0000026	6.3	8.7	0.00010	0.000046	0.00010	0.094	0.000020	3.2	2.7	0.012	0.000048
Operations	**January**	**2029**	0.094	7.8	0.032	0.0000059	427	**1877**	0.00029	0.0032	0.0031	0.021	0.000059	0.32	67	0.011	0.000024
	February		0.096	7.2	0.033	0.0000061	456	**2748**	0.00030	0.0032	0.0031	0.021	0.000060	0.28	96	0.012	0.000019
	March		0.092	6.8	0.032	0.0000060	456	**2714**	0.00029	0.0031	0.0030	0.020	0.000057	0.65	96	0.011	0.000046
	April		0.080	5.8	0.028	0.0000063	456	**2371**	0.00025	0.0029	0.0026	0.018	0.000050	3.7	88	0.0099	**0.00019**
	May		0.080	5.3	0.028	0.0000056	456	**2192**	0.00025	0.0029	0.0026	0.017	0.000050	1.6	83	0.0099	0.00018
	June		0.083	5.7	0.029	0.0000060	456	**2343**	0.00026	0.0030	0.0027	0.018	0.000052	2.4	88	0.010	0.00018
	July		0.083	5.8	0.029	0.0000060	456	**2349**	0.00026	0.0029	0.0027	0.018	0.000052	2.5	87	0.010	0.00016
	August		0.079	5.4	0.027	0.0000059	456	**2244**	0.00025	0.0029	0.0026	0.017	0.000049	2.8	85	0.0098	**0.00021**
	September		0.079	5.4	0.027	0.0000059	456	**2206**	0.00025	0.0029	0.0026	0.017	0.000049	2.9	84	0.0098	**0.00020**
	October		0.085	5.8	0.029	0.0000058	455	**2401**	0.00026	0.0030	0.0028	0.019	0.000053	1.5	88	0.010	0.00013
	November		0.092	6.6	0.032	0.0000060	455	**2635**	0.00029	0.0031	0.0030	0.020	0.000058	1.0	94	0.011	0.000075
	December		0.095	7.1	0.033	0.0000061	456	**2824**	0.00030	0.0032	0.0031	0.021	0.000060	0.33	99	0.012	0.000023

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2030	0.10	6.2	0.036	0.0000065	456	**2367**	0.00032	0.0035	0.0034	0.023	0.000065	0.21	83	0.013	0.000016
	February		0.10	5.7	0.035	0.0000065	456	**2162**	0.00031	0.0034	0.0033	0.022	0.000063	0.50	76	0.012	0.000032
	March		0.100	5.5	0.034	0.0000065	456	**2082**	0.00031	0.0034	0.0032	0.022	0.000062	0.68	75	0.012	0.000054
	April		0.089	4.8	0.031	0.0000066	459	**1842**	0.00028	0.0032	0.0029	0.019	0.000056	2.8	70	0.011	0.00018
	May		0.093	5.0	0.032	0.0000067	458	**1895**	0.00029	0.0033	0.0030	0.020	0.000058	2.4	71	0.011	0.00016
	June		0.088	4.7	0.031	0.0000067	459	**1830**	0.00028	0.0032	0.0029	0.019	0.000055	3.3	70	0.011	**0.00021**
	July		0.088	4.7	0.030	0.0000068	459	**1775**	0.00027	0.0032	0.0029	0.019	0.000055	3.7	69	0.011	**0.00024**
	August		0.088	4.7	0.031	0.0000066	458	**1839**	0.00028	0.0032	0.0029	0.019	0.000055	2.9	72	0.011	**0.00023**
	September		0.089	4.7	0.031	0.0000065	459	**1798**	0.00028	0.0032	0.0029	0.019	0.000055	2.6	70	0.011	**0.00022**
	October		0.089	4.7	0.031	0.0000065	459	**1833**	0.00028	0.0032	0.0029	0.020	0.000056	2.1	70	0.011	0.00017
	November		0.098	5.2	0.034	0.0000063	457	**1952**	0.00031	0.0034	0.0032	0.021	0.000061	0.54	72	0.012	0.000097
	December		0.10	5.6	0.035	0.0000065	456	**2102**	0.00032	0.0034	0.0033	0.022	0.000063	0.53	75	0.012	0.000045
	January	2031	0.11	5.0	0.036	0.0000068	456	**1922**	0.00033	0.0036	0.0034	0.023	0.000066	0.45	68	0.013	0.000038
	February		0.11	4.9	0.037	0.0000069	455	**1889**	0.00034	0.0037	0.0035	0.024	0.000068	0.19	67	0.013	0.000019
	March		0.11	4.8	0.037	0.0000069	456	**1842**	0.00033	0.0036	0.0034	0.023	0.000066	0.57	66	0.013	0.000043
	April		0.096	4.3	0.033	0.0000070	458	**1697**	0.00030	0.0034	0.0031	0.021	0.000060	2.7	63	0.012	0.00015
	May		0.095	4.0	0.033	0.0000066	459	**1601**	0.00030	0.0034	0.0031	0.021	0.000060	1.6	61	0.012	0.00015
	June		0.096	4.2	0.033	0.0000068	458	**1673**	0.00030	0.0034	0.0031	0.021	0.000060	1.7	63	0.012	0.00013
	July		0.096	4.1	0.033	0.0000067	458	**1669**	0.00030	0.0034	0.0031	0.021	0.000060	1.9	63	0.012	0.00014
	August		0.098	4.3	0.034	0.0000070	458	**1665**	0.00031	0.0035	0.0032	0.022	0.000062	2.1	63	0.012	0.00015
	September		0.095	4.1	0.033	0.0000068	458	**1643**	0.00030	0.0034	0.0031	0.021	0.000060	2.2	63	0.012	0.00017
	October		0.100	4.4	0.034	0.0000068	457	**1712**	0.00031	0.0035	0.0032	0.022	0.000062	1.4	64	0.012	0.00012
	November		0.11	4.7	0.037	0.0000069	455	**1822**	0.00034	0.0037	0.0035	0.024	0.000067	0.43	66	0.013	0.000048
	December		0.11	4.9	0.037	0.0000068	456	**1876**	0.00033	0.0036	0.0035	0.023	0.000067	0.25	66	0.013	0.000024
	January	2032	0.11	5.1	0.039	0.0000072	454	**1740**	0.00035	0.0038	0.0037	0.025	0.000071	0.25	62	0.014	0.000025
	February		0.11	5.2	0.039	0.0000072	455	**1744**	0.00035	0.0038	0.0037	0.025	0.000071	0.17	62	0.014	0.000019
	March		0.10	4.5	0.035	0.0000069	458	**1604**	0.00032	0.0035	0.0033	0.022	0.000063	1.4	59	0.012	0.000097
	April		0.096	4.3	0.033	0.0000070	458	**1540**	0.00030	0.0034	0.0031	0.021	0.000060	2.6	58	0.012	0.00016
	May		0.098	4.2	0.034	0.0000067	457	**1521**	0.00031	0.0035	0.0032	0.021	0.000061	1.3	58	0.012	0.00013
	June		0.10	4.5	0.035	0.0000070	458	**1588**	0.00032	0.0035	0.0033	0.022	0.000063	1.5	59	0.012	0.00011
	July		0.096	4.3	0.033	0.0000072	458	**1542**	0.00030	0.0034	0.0031	0.021	0.000060	3.2	59	0.012	0.00018
Operations	August		0.096	4.2	0.033	0.0000068	458	**1506**	0.00030	0.0034	0.0031	0.021	0.000060	1.8	58	0.012	0.00016
	September		0.10	4.4	0.035	0.0000068	458	**1574**	0.00031	0.0035	0.0033	0.022	0.000063	1.1	60	0.012	0.00012
	October		0.10	4.6	0.036	0.0000070	456	**1641**	0.00033	0.0036	0.0034	0.023	0.000066	1.0	60	0.013	0.000083
	November		0.11	5.0	0.038	0.0000071	455	**1718**	0.00034	0.0037	0.0036	0.024	0.000068	0.50	62	0.013	0.000047
	December		0.11	5.2	0.038	0.0000070	455	**1816**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	64	0.013	0.000021
	January	2033	0.11	4.8	0.038	0.0000069	455	**1823**	0.00034	0.0037	0.0035	0.024	0.000068	0.17	64	0.013	0.000021
	February		0.11	4.7	0.038	0.0000070	455	**1824**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000021
	March		0.11	4.7	0.038	0.0000070	455	**1813**	0.00034	0.0037	0.0036	0.024	0.000069	0.25	64	0.013	0.000027
	April		0.097	4.0	0.034	0.0000075	457	**1547**	0.00030	0.0034	0.0032	0.021	0.000061	3.8	59	0.012	0.00016
	May		0.095	3.8	0.033	0.0000066	458	**1520**	0.00030	0.0034	0.0031	0.021	0.000060	1.4	59	0.012	0.00018
	June		0.097	3.9	0.033	0.0000068	457	**1560**	0.00030	0.0034	0.0031	0.021	0.000061	1.7	60	0.012	0.00015
	July		0.10	4.1	0.035	0.0000070	457	**1616**	0.00032	0.0036	0.0033	0.022	0.000064	1.5	61	0.012	0.00013
	August		0.097	3.9	0.034	0.0000069	458	**1572**	0.00030	0.0034	0.0032	0.021	0.000061	2.0	60	0.012	0.00015
	September		0.099	4.0	0.034	0.0000069	458	**1585**	0.00031	0.0035	0.0032	0.022	0.000062	1.7	60	0.012	0.00013
	October		0.10	4.2	0.036	0.0000070	457	**1663**	0.00032	0.0036	0.0033	0.023	0.000064	1.4	62	0.013	0.00011
	November		0.10	4.3	0.036	0.0000070	456	**1674**	0.00033	0.0036	0.0034	0.023	0.000065	1.1	62	0.013	0.000095
	December		0.11	4.7	0.038	0.0000069	455	**1814**	0.00034	0.0037	0.0035	0.024	0.000068	0.22	64	0.013	0.000025
	January	2034	0.11	4.8	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000021
	February		0.11	4.7	0.037	0.0000069	456	**1804**	0.00034	0.0037	0.0035	0.024	0.000068	0.24	64	0.013	0.000026
	March		0.11	4.5	0.037	0.0000070	456	**1734**	0.00033	0.0036	0.0034	0.023	0.000066	0.76	63	0.013	0.000066
	April		0.098	4.1	0.034	0.0000071	457	**1630**	0.00031	0.0034	0.0032	0.021	0.000061	2.6	61	0.012	0.00014
	May		0.099	4.0	0.034	0.0000066	457	**1561**	0.00031	0.0035	0.0032	0.022	0.000062	0.77	59	0.012	0.00011
	June		0.096	3.9	0.033	0.0000077	456	**1462**	0.00030	0.0034	0.0031	0.021	0.000060	4.7	57	0.012	**0.00020**
	July		0.095	3.8	0.033	0.0000074	456	**1383**	0.00030	0.0034	0.0031	0.021	0.000060	3.7	55	0.012	**0.00023**
	August		0.095	3.7	0.033	0.0000070	456	**1416**	0.00030	0.0034	0.0031	0.021	0.000060	2.3	56	0.012	**0.00022**
	September		0.095	3.8	0.033	0.0000070	457	**1545**	0.00030	0.0035	0.0031	0.021	0.000060	2.5	62	0.012	**0.00022**
	October		0.096	3.9	0.033	0.0000065	458	**1553**	0.00030	0.0034	0.0031	0.021	0.000060	0.72	61	0.012	0.00015
	November		0.11	4.4	0.036	0.0000069	456	**1672**	0.00033	0.0036	0.0034	0.023	0.000066	0.59	62	0.013	0.000094
	December		0.11	4.6	0.037	0.0000070	456	**1748**	0.00034	0.0037	0.0035	0.024	0.000067	0.56	63	0.013	0.000052
	January	2035	0.11	4.7	0.038	0.0000070	455	**1814**	0.00034	0.0037	0.0036	0.024	0.000069	0.21	64	0.013	0.000024
	February		0.11	4.6	0.037	0.0000070	455	**1769**	0.00034	0.0037	0.0035	0.024	0.000067	0.50	63	0.013	0.000046
	March		0.11	4.7	0.038	0.0000070	455	**1819**	0.00034	0.0037	0.0036	0.024	0.000069	0.18	64	0.013	0.000022

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April	2035	0.10	4.3	0.035	0.0000071	457	**1710**	0.00032	0.0035	0.0033	0.022	0.000063	1.8	63	0.012	0.00010
	May		0.097	3.9	0.034	0.0000071	458	**1550**	0.00030	0.0034	0.0032	0.021	0.000061	2.5	59	0.012	0.00016
	June		0.098	3.9	0.034	0.0000069	457	**1569**	0.00031	0.0035	0.0032	0.021	0.000061	1.9	60	0.012	0.00016
	July		0.095	3.8	0.033	0.0000069	459	**1548**	0.00030	0.0034	0.0031	0.021	0.000060	2.2	60	0.012	0.00017
	August		0.095	3.8	0.033	0.0000068	459	**1524**	0.00030	0.0034	0.0031	0.021	0.000060	2.0	59	0.012	0.00017
	September		0.099	4.0	0.034	0.0000069	457	**1578**	0.00031	0.0035	0.0032	0.022	0.000062	1.7	60	0.012	0.00015
	October		0.10	4.1	0.035	0.0000068	456	**1651**	0.00031	0.0035	0.0033	0.022	0.000063	1.2	61	0.012	0.00010
	November		0.11	4.6	0.038	0.0000070	455	**1760**	0.00034	0.0037	0.0035	0.024	0.000068	0.42	63	0.013	0.000041
	December		0.11	4.7	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0035	0.024	0.000068	0.18	64	0.013	0.000022
	January	2036	0.11	4.8	0.038	0.0000070	455	**1822**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000022
	February		0.11	4.8	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000021
	March		0.11	4.6	0.037	0.0000071	456	**1777**	0.00034	0.0037	0.0035	0.024	0.000068	0.62	64	0.013	0.000054
	April		0.097	4.0	0.033	0.0000074	457	**1567**	0.00030	0.0034	0.0031	0.021	0.000060	3.4	60	0.012	0.00017
	May		0.097	4.0	0.034	0.0000067	457	**1600**	0.00030	0.0035	0.0032	0.021	0.000061	1.5	62	0.012	0.00016
	June		0.099	4.0	0.034	0.0000070	457	**1575**	0.00031	0.0035	0.0032	0.022	0.000062	1.8	60	0.012	0.00015
	July		0.097	3.9	0.034	0.0000069	457	**1510**	0.00030	0.0034	0.0032	0.021	0.000061	2.0	58	0.012	0.00016
	August		0.10	4.2	0.035	0.0000069	457	**1661**	0.00032	0.0035	0.0033	0.022	0.000064	1.2	61	0.012	0.000094
	September		0.10	4.1	0.035	0.0000069	457	**1605**	0.00031	0.0035	0.0033	0.022	0.000063	1.4	60	0.012	0.00012
	October		0.10	4.2	0.035	0.0000069	456	**1620**	0.00032	0.0035	0.0033	0.022	0.000064	1.3	60	0.012	0.00011
	November		0.11	4.6	0.037	0.0000070	455	**1756**	0.00034	0.0037	0.0035	0.024	0.000068	0.40	63	0.013	0.000043
	December		0.11	4.8	0.038	0.0000070	455	**1819**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	64	0.013	0.000022
	January	2037	0.11	4.6	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000021
	February		0.11	4.2	0.036	0.0000070	456	**1702**	0.00033	0.0036	0.0034	0.023	0.000066	0.82	62	0.013	0.000070
	March		0.11	4.3	0.036	0.0000069	456	**1762**	0.00033	0.0036	0.0034	0.023	0.000066	0.62	63	0.013	0.000054
	April		0.097	3.8	0.034	0.0000072	456	**1584**	0.00030	0.0034	0.0032	0.021	0.000061	3.0	60	0.012	0.00018
	May		0.10	3.9	0.035	0.0000068	457	**1638**	0.00032	0.0035	0.0033	0.022	0.000063	0.95	62	0.012	0.00012
	June		0.096	3.7	0.033	0.0000073	458	**1573**	0.00030	0.0034	0.0031	0.021	0.000060	3.3	60	0.012	0.00018
	July		0.097	3.7	0.034	0.0000073	458	**1500**	0.00030	0.0035	0.0032	0.021	0.000061	3.2	59	0.012	**0.00021**
	August		0.099	3.8	0.034	0.0000070	458	**1577**	0.00031	0.0035	0.0032	0.022	0.000062	1.6	62	0.012	0.00017
	September		0.096	3.7	0.033	0.0000069	458	**1521**	0.00030	0.0034	0.0031	0.021	0.000060	2.1	59	0.012	0.00016
	October		0.10	4.0	0.036	0.0000068	456	**1638**	0.00032	0.0036	0.0034	0.023	0.000065	0.73	62	0.013	0.00010
Operations	November		0.11	4.4	0.037	0.0000070	455	**1779**	0.00034	0.0037	0.0035	0.024	0.000068	0.41	64	0.013	0.000043
	December		0.11	4.5	0.038	0.0000070	455	**1810**	0.00034	0.0037	0.0036	0.024	0.000069	0.20	64	0.013	0.000024
	January	2038	0.11	4.5	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000023
	February		0.11	4.5	0.038	0.0000070	455	**1819**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	64	0.013	0.000025
	March		0.099	3.9	0.034	0.0000070	457	**1625**	0.00031	0.0035	0.0032	0.022	0.000062	1.8	61	0.012	0.00013
	April		0.096	3.7	0.033	0.0000070	458	**1534**	0.00030	0.0034	0.0031	0.021	0.000060	2.7	59	0.012	0.00017
	May		0.098	3.7	0.034	0.0000068	458	**1537**	0.00031	0.0035	0.0032	0.022	0.000062	1.3	59	0.012	0.00014
	June		0.10	4.0	0.035	0.0000070	457	**1636**	0.00032	0.0035	0.0033	0.022	0.000063	1.6	61	0.012	0.00011
	July		0.098	3.8	0.034	0.0000070	458	**1573**	0.00031	0.0035	0.0032	0.022	0.000061	1.9	60	0.012	0.00016
	August		0.100	3.8	0.034	0.0000069	457	**1558**	0.00031	0.0035	0.0032	0.022	0.000062	1.5	59	0.012	0.00013
	September		0.100	3.9	0.034	0.0000072	457	**1608**	0.00031	0.0035	0.0032	0.022	0.000062	2.4	61	0.012	0.00015
	October		0.096	3.7	0.033	0.0000067	459	**1530**	0.00030	0.0034	0.0031	0.021	0.000060	1.5	59	0.012	0.00015
	November		0.11	4.2	0.037	0.0000070	456	**1697**	0.00033	0.0037	0.0035	0.023	0.000067	0.59	62	0.013	0.000071
	December		0.11	4.5	0.038	0.0000070	455	**1814**	0.00034	0.0037	0.0036	0.024	0.000069	0.19	64	0.013	0.000026
	January	2039	0.11	4.5	0.038	0.0000070	455	**1822**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000026
	February		0.10	4.0	0.035	0.0000069	457	**1658**	0.00032	0.0035	0.0033	0.022	0.000064	1.2	61	0.012	0.00010
	March		0.11	4.3	0.037	0.0000071	455	**1728**	0.00033	0.0037	0.0035	0.023	0.000067	0.84	63	0.013	0.000077
	April		0.10	4.1	0.035	0.0000069	457	**1697**	0.00032	0.0035	0.0033	0.023	0.000064	1.0	62	0.013	0.000085
	May		0.10	4.1	0.036	0.0000069	457	**1699**	0.00032	0.0035	0.0034	0.023	0.000065	1.1	62	0.013	0.000089
	June		0.10	4.1	0.035	0.0000070	457	**1735**	0.00032	0.0035	0.0033	0.022	0.000064	1.3	63	0.012	0.000081
	July		0.096	3.7	0.033	0.0000069	458	**1530**	0.00030	0.0034	0.0031	0.021	0.000060	2.2	59	0.012	0.00017
	August		0.095	3.6	0.033	0.0000074	457	**1495**	0.00030	0.0034	0.0031	0.021	0.000060	3.6	59	0.012	**0.00022**
	September		0.095	3.7	0.033	0.0000067	458	**1540**	0.00030	0.0034	0.0031	0.021	0.000060	1.5	59	0.012	0.00016
	October		0.10	3.9	0.035	0.0000070	457	**1580**	0.00031	0.0036	0.0033	0.022	0.000063	1.5	61	0.012	0.00015
	November		0.10	4.2	0.036	0.0000070	456	**1674**	0.00033	0.0036	0.0034	0.023	0.000066	0.95	62	0.013	0.000096
	December		0.11	4.5	0.038	0.0000070	455	**1815**	0.00034	0.0037	0.0036	0.024	0.000068	0.19	64	0.013	0.000029
	January	2040	0.11	4.7	0.038	0.0000070	455	**1823**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000028
	February		0.11	4.8	0.038	0.0000070	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000029
	March		0.097	4.1	0.034	0.0000071	458	**1611**	0.00030	0.0034	0.0032	0.021	0.000061	2.5	60	0.012	0.00015
	April		0.096	3.9	0.033	0.0000068	458	**1529**	0.00030	0.0034	0.0031	0.021	0.000060	1.7	58	0.012	0.00015
	May		0.097	4.0	0.034	0.0000070	458	**1549**	0.00030	0.0034	0.0032	0.021	0.000061	2.2	59	0.012	0.00016
	June		0.097	3.9	0.033	0.0000071	458	**1538**	0.00030	0.0034	0.0031	0.021	0.000060	2.6	59	0.012	0.00018

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	July	2040	0.096	3.9	0.033	0.0000072	457	**1500**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	59	0.012	**0.00021**
	August		0.097	4.0	0.034	0.0000066	458	**1579**	0.00030	0.0034	0.0032	0.021	0.000061	0.87	61	0.012	0.00014
	September		0.10	4.3	0.035	0.0000070	456	**1668**	0.00032	0.0035	0.0033	0.022	0.000064	1.3	62	0.012	0.00011
	October		0.10	4.3	0.036	0.0000071	457	**1641**	0.00032	0.0036	0.0034	0.023	0.000065	1.5	62	0.013	0.00013
	November		0.11	4.7	0.037	0.0000070	455	**1797**	0.00034	0.0037	0.0035	0.024	0.000068	0.38	64	0.013	0.000047
	December		0.11	4.8	0.038	0.0000070	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	64	0.013	0.000029
	January	2041	0.11	4.8	0.038	0.0000070	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000030
	February		0.11	4.8	0.038	0.0000071	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000030
	March		0.10	4.6	0.036	0.0000070	456	**1782**	0.00033	0.0036	0.0034	0.023	0.000065	0.90	64	0.013	0.000066
	April		0.099	4.1	0.034	0.0000074	457	**1578**	0.00031	0.0035	0.0032	0.022	0.000062	2.8	60	0.012	0.00015
	May		0.098	4.0	0.034	0.0000067	457	**1592**	0.00031	0.0035	0.0032	0.021	0.000061	0.98	61	0.012	0.00016
	June		0.10	4.2	0.035	0.0000071	457	**1650**	0.00032	0.0035	0.0033	0.022	0.000063	1.6	61	0.012	0.00012
	July		0.097	4.0	0.033	0.0000071	458	**1558**	0.00030	0.0034	0.0032	0.021	0.000061	2.5	60	0.012	0.00017
	August		0.095	3.9	0.033	0.0000079	456	**1421**	0.00030	0.0034	0.0031	0.021	0.000060	5.2	56	0.012	**0.00024**
	September		0.095	3.7	0.033	0.0000067	456	**1437**	0.00030	0.0034	0.0031	0.021	0.000060	1.5	57	0.012	**0.00022**
	October		0.096	3.9	0.033	0.0000067	458	**1575**	0.00030	0.0035	0.0031	0.021	0.000060	1.2	62	0.012	0.00018
	November		0.10	4.2	0.035	0.0000067	457	**1620**	0.00032	0.0036	0.0033	0.022	0.000064	0.35	61	0.012	0.00011
	December		0.11	4.8	0.038	0.0000070	455	**1808**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	64	0.013	0.000036
	January	2042	0.11	4.8	0.038	0.0000071	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000031
	February		0.11	4.8	0.038	0.0000071	455	**1823**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000031
	March		0.11	4.7	0.037	0.0000071	455	**1766**	0.00034	0.0037	0.0035	0.024	0.000067	0.59	64	0.013	0.000060
	April		0.100	4.3	0.035	0.0000073	456	**1657**	0.00031	0.0035	0.0033	0.022	0.000063	2.6	61	0.012	0.00014
	May		0.098	4.0	0.034	0.0000067	458	**1562**	0.00031	0.0035	0.0032	0.022	0.000061	0.92	60	0.012	0.00014
	June		0.096	4.0	0.033	0.0000076	458	**1543**	0.00030	0.0034	0.0031	0.021	0.000060	3.8	59	0.012	**0.00019**
	July		0.095	3.8	0.033	0.0000071	456	**1407**	0.00030	0.0034	0.0031	0.021	0.000060	2.8	56	0.012	**0.00023**
	August		0.095	3.8	0.033	0.0000073	456	**1481**	0.00030	0.0035	0.0031	0.021	0.000060	3.0	59	0.012	**0.00024**
	September		0.096	3.9	0.033	0.0000072	458	**1542**	0.00030	0.0035	0.0031	0.021	0.000060	2.5	61	0.012	**0.00020**
	October		0.095	3.8	0.033	0.0000069	458	**1519**	0.00030	0.0034	0.0031	0.021	0.000060	2.1	60	0.012	**0.00021**
	November		0.10	4.1	0.035	0.0000067	457	**1608**	0.00032	0.0035	0.0033	0.022	0.000063	0.27	61	0.012	0.00010
	December		0.11	4.8	0.038	0.0000071	455	**1807**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000036
	January	2043	0.11	4.8	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000032
	February		0.11	4.8	0.038	0.0000071	455	**1823**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000032
	March		0.11	4.8	0.038	0.0000071	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000032
	April		0.10	4.3	0.035	0.0000075	457	**1654**	0.00032	0.0035	0.0033	0.022	0.000063	2.6	61	0.012	0.00011
	May		0.096	3.9	0.033	0.0000068	457	**1577**	0.00030	0.0034	0.0031	0.021	0.000060	1.7	61	0.012	0.00018
	June		0.096	3.9	0.033	0.0000072	458	**1524**	0.00030	0.0034	0.0031	0.021	0.000060	2.8	59	0.012	**0.00019**
	July		0.095	3.9	0.033	0.0000073	458	**1509**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	59	0.012	**0.00020**
	August		0.095	3.8	0.033	0.0000073	456	**1442**	0.00030	0.0034	0.0031	0.021	0.000060	3.2	58	0.012	**0.00024**
	September		0.095	3.8	0.033	0.0000074	457	**1492**	0.00030	0.0035	0.0031	0.021	0.000060	3.5	60	0.012	**0.00023**
	October		0.098	3.9	0.034	0.0000071	457	**1508**	0.00031	0.0035	0.0032	0.021	0.000061	2.0	60	0.012	**0.00021**
	November		0.099	4.0	0.034	0.0000068	458	**1561**	0.00031	0.0035	0.0032	0.022	0.000062	1.1	61	0.012	0.00015
	December		0.11	4.4	0.036	0.0000069	456	**1721**	0.00033	0.0036	0.0034	0.023	0.000066	0.30	63	0.013	0.000075
	January	2044	0.11	4.7	0.038	0.0000071	455	**1813**	0.00034	0.0037	0.0036	0.024	0.000069	0.19	64	0.013	0.000034
	February		0.11	4.7	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000032
	March		0.11	4.7	0.037	0.0000071	455	**1817**	0.00034	0.0037	0.0035	0.024	0.000067	0.36	65	0.013	0.000040
	April		0.096	3.9	0.033	0.0000070	458	**1553**	0.00030	0.0034	0.0031	0.021	0.000060	2.2	59	0.012	0.00016
	May		0.098	4.0	0.034	0.0000069	457	**1567**	0.00031	0.0034	0.0032	0.022	0.000061	1.5	59	0.012	0.00013
	June		0.10	4.1	0.035	0.0000070	457	**1637**	0.00031	0.0035	0.0033	0.022	0.000063	1.5	61	0.012	0.00012
	July		0.096	3.8	0.033	0.0000072	458	**1506**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	58	0.012	**0.00019**
	August		0.096	3.9	0.033	0.0000067	457	**1563**	0.00030	0.0034	0.0031	0.021	0.000060	1.3	60	0.012	0.00015
	September		0.099	4.0	0.034	0.0000069	457	**1576**	0.00031	0.0035	0.0032	0.022	0.000062	1.4	59	0.012	0.00012
	October		0.11	4.3	0.036	0.0000071	456	**1672**	0.00033	0.0036	0.0034	0.023	0.000066	0.95	61	0.013	0.000091
	November		0.11	4.6	0.037	0.0000070	455	**1764**	0.00034	0.0037	0.0035	0.024	0.000067	0.40	63	0.013	0.000050
	December		0.11	4.7	0.038	0.0000071	455	**1803**	0.00034	0.0037	0.0035	0.024	0.000068	0.23	64	0.013	0.000036
	January	2045	0.11	4.7	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	65	0.013	0.000032
	February		0.11	4.7	0.038	0.0000071	455	**1820**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000032
	March		0.10	4.5	0.036	0.0000072	456	**1777**	0.00033	0.0036	0.0034	0.023	0.000066	1.3	64	0.013	0.000065
	April		0.098	3.9	0.034	0.0000068	457	**1553**	0.00031	0.0035	0.0032	0.021	0.000061	1.5	59	0.012	0.00016
	May		0.097	3.9	0.033	0.0000070	458	**1555**	0.00030	0.0034	0.0032	0.021	0.000061	2.1	60	0.012	0.00017
	June		0.096	3.9	0.033	0.0000071	459	**1531**	0.00030	0.0034	0.0031	0.021	0.000060	2.3	59	0.012	0.00017
	July		0.096	3.8	0.033	0.0000070	458	**1518**	0.00030	0.0034	0.0031	0.021	0.000060	2.1	59	0.012	0.00017
	August		0.099	4.0	0.034	0.0000070	457	**1588**	0.00031	0.0035	0.0032	0.022	0.000062	1.7	60	0.012	0.00015
	September		0.099	4.0	0.034	0.0000070	457	**1612**	0.00031	0.0035	0.0032	0.022	0.000062	1.6	61	0.012	0.00014

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.10	4.2	0.035	0.0000070	457	**1657**	0.00032	0.0035	0.0033	0.022	0.000064	1.2	61	0.012	0.00011
	November		0.11	4.5	0.037	0.0000071	456	**1749**	0.00034	0.0037	0.0035	0.024	0.000067	0.65	63	0.013	0.000067
	December		0.11	4.7	0.038	0.0000071	456	**1807**	0.00034	0.0037	0.0035	0.024	0.000068	0.26	64	0.013	0.000038
	January	2046	0.11	4.6	0.037	0.0000071	455	**1767**	0.00034	0.0037	0.0035	0.024	0.000068	0.43	63	0.013	0.000051
	February		0.11	4.7	0.038	0.0000071	455	**1822**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	65	0.013	0.000032
	March		0.10	4.4	0.036	0.0000071	457	**1731**	0.00032	0.0036	0.0034	0.023	0.000065	1.2	63	0.013	0.000092
	April		0.099	4.0	0.034	0.0000068	457	**1603**	0.00031	0.0035	0.0032	0.022	0.000062	1.2	60	0.012	0.00012
	May		0.098	4.0	0.034	0.0000070	458	**1592**	0.00031	0.0034	0.0032	0.021	0.000061	1.7	60	0.012	0.00013
	June		0.098	4.0	0.034	0.0000072	457	**1583**	0.00030	0.0034	0.0032	0.021	0.000061	2.4	60	0.012	0.00016
	July		0.097	3.9	0.033	0.0000072	458	**1530**	0.00030	0.0034	0.0031	0.021	0.000060	2.9	59	0.012	**0.00020**
	August		0.096	3.8	0.033	0.0000073	457	**1517**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	59	0.012	**0.00021**
	September		0.097	3.8	0.033	0.0000072	457	**1540**	0.00030	0.0035	0.0031	0.021	0.000060	2.5	61	0.012	**0.00021**
	October		0.097	3.9	0.034	0.0000070	458	**1545**	0.00030	0.0035	0.0032	0.021	0.000061	1.8	60	0.012	0.00016
	November		0.10	4.2	0.036	0.0000069	457	**1616**	0.00032	0.0036	0.0034	0.023	0.000064	0.67	62	0.013	0.00013
	December		0.11	4.6	0.038	0.0000071	455	**1798**	0.00034	0.0037	0.0035	0.024	0.000068	0.22	64	0.013	0.000042
	January	2047	0.11	4.7	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000032
	February		0.11	4.7	0.038	0.0000071	455	**1823**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000032
	March		0.11	4.6	0.037	0.0000070	455	**1775**	0.00033	0.0036	0.0035	0.023	0.000067	0.45	64	0.013	0.000052
	April		0.10	4.2	0.035	0.0000073	457	**1640**	0.00031	0.0035	0.0033	0.022	0.000063	2.2	61	0.012	0.00013
	May		0.097	3.9	0.033	0.0000070	458	**1514**	0.00030	0.0034	0.0031	0.021	0.000060	2.1	58	0.012	0.00017
	June		0.099	4.0	0.034	0.0000069	457	**1572**	0.00031	0.0035	0.0032	0.022	0.000062	1.4	60	0.012	0.00014
	July		0.096	3.9	0.033	0.0000074	458	**1540**	0.00030	0.0034	0.0031	0.021	0.000060	3.5	59	0.012	**0.00020**
	August		0.095	3.8	0.033	0.0000072	457	**1484**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	59	0.012	**0.00022**
	September		0.096	3.9	0.033	0.0000070	458	**1554**	0.00030	0.0034	0.0031	0.021	0.000060	1.9	60	0.012	0.00018
	October		0.098	3.9	0.034	0.0000068	458	**1559**	0.00031	0.0035	0.0032	0.022	0.000061	1.1	60	0.012	0.00015
	November		0.11	4.4	0.037	0.0000070	456	**1723**	0.00033	0.0036	0.0035	0.023	0.000066	0.58	63	0.013	0.000070
	December		0.11	4.7	0.038	0.0000071	455	**1806**	0.00034	0.0037	0.0036	0.024	0.000068	0.24	64	0.013	0.000038
	January	2048	0.11	4.7	0.038	0.0000071	455	**1817**	0.00034	0.0037	0.0036	0.024	0.000068	0.26	65	0.013	0.000040
	February		0.11	4.7	0.038	0.0000071	455	**1811**	0.00034	0.0037	0.0035	0.024	0.000068	0.21	64	0.013	0.000036
	March		0.11	4.7	0.038	0.0000071	455	**1819**	0.00034	0.0037	0.0036	0.024	0.000068	0.18	64	0.013	0.000034
	April		0.10	4.4	0.035	0.0000071	457	**1708**	0.00032	0.0035	0.0033	0.022	0.000064	1.3	62	0.012	0.000096
Operations	May		0.10	4.2	0.036	0.0000069	456	**1648**	0.00032	0.0036	0.0034	0.023	0.000064	0.79	61	0.013	0.000097
	June		0.10	4.2	0.035	0.0000070	456	**1654**	0.00032	0.0035	0.0033	0.022	0.000063	1.3	61	0.012	0.00011
	July		0.096	3.9	0.033	0.0000080	457	**1512**	0.00030	0.0034	0.0031	0.021	0.000060	5.1	58	0.012	**0.00021**
	August		0.095	3.7	0.033	0.0000071	456	**1394**	0.00030	0.0034	0.0031	0.021	0.000060	2.9	55	0.012	**0.00023**
	September		0.095	3.7	0.033	0.0000071	456	**1421**	0.00030	0.0034	0.0031	0.021	0.000060	2.4	57	0.012	**0.00023**
	October		0.096	3.8	0.033	0.0000067	459	**1558**	0.00030	0.0035	0.0031	0.021	0.000060	1.1	62	0.012	0.00018
	November		0.10	4.2	0.036	0.0000069	457	**1681**	0.00032	0.0036	0.0034	0.023	0.000065	0.21	63	0.013	0.00011
	December		0.11	4.6	0.037	0.0000070	455	**1773**	0.00033	0.0036	0.0035	0.023	0.000067	0.44	64	0.013	0.000056
	January	2049	0.10	4.4	0.036	0.0000070	456	**1703**	0.00032	0.0036	0.0034	0.023	0.000065	0.92	62	0.013	0.000087
	February		0.11	4.7	0.038	0.0000071	455	**1802**	0.00034	0.0037	0.0036	0.024	0.000068	0.22	64	0.013	0.000043
	March		0.11	4.6	0.037	0.0000073	456	**1776**	0.00033	0.0036	0.0034	0.023	0.000066	1.3	64	0.013	0.000071
	April		0.099	4.0	0.034	0.0000068	458	**1612**	0.00031	0.0035	0.0032	0.022	0.000062	0.95	61	0.012	0.00013
	May		0.099	4.0	0.034	0.0000070	457	**1605**	0.00031	0.0034	0.0032	0.022	0.000062	1.8	60	0.012	0.00014
	June		0.097	3.9	0.033	0.0000071	458	**1529**	0.00030	0.0034	0.0032	0.021	0.000061	2.3	59	0.012	0.00018
	July		0.096	3.8	0.033	0.0000075	458	**1498**	0.00030	0.0034	0.0031	0.021	0.000060	3.6	59	0.012	**0.00023**
	August		0.096	3.8	0.033	0.0000072	458	**1513**	0.00030	0.0035	0.0031	0.021	0.000060	2.8	60	0.012	**0.00022**
	September		0.096	3.8	0.033	0.0000073	457	**1506**	0.00030	0.0034	0.0031	0.021	0.000060	3.0	59	0.012	**0.00021**
	October		0.096	3.8	0.033	0.0000071	457	**1566**	0.00030	0.0035	0.0031	0.021	0.000060	2.2	62	0.012	**0.00021**
	November		0.098	3.9	0.034	0.0000067	458	**1571**	0.00031	0.0035	0.0032	0.021	0.000061	0.87	61	0.012	0.00015
	December		0.11	4.6	0.038	0.0000071	455	**1765**	0.00034	0.0037	0.0035	0.024	0.000068	0.20	64	0.013	0.000060
	January	2050	0.11	4.6	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000068	0.17	65	0.013	0.000039
	February		0.11	4.5	0.038	0.0000071	455	**1821**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	65	0.013	0.000039
	March		0.11	4.5	0.038	0.0000072	455	**1804**	0.00034	0.0037	0.0035	0.024	0.000068	0.40	65	0.013	0.000054
	April		0.097	3.8	0.034	0.0000072	457	**1606**	0.00030	0.0034	0.0032	0.021	0.000061	2.7	61	0.012	0.00017
	May		0.098	3.8	0.034	0.0000068	457	**1569**	0.00031	0.0035	0.0032	0.022	0.000061	1.1	60	0.012	0.00014
	June		0.097	3.8	0.034	0.0000071	458	**1577**	0.00030	0.0034	0.0032	0.021	0.000061	2.2	60	0.012	0.00017
	July		0.10	4.1	0.035	0.0000071	457	**1705**	0.00032	0.0036	0.0033	0.022	0.000064	1.1	63	0.013	0.00011
	August		0.10	3.9	0.035	0.0000069	457	**1615**	0.00031	0.0035	0.0033	0.022	0.000063	1.4	60	0.012	0.00013
	September		0.099	3.9	0.034	0.0000072	458	**1612**	0.00031	0.0035	0.0032	0.022	0.000062	2.2	61	0.012	0.00017
	October		0.10	4.1	0.036	0.0000071	457	**1638**	0.00033	0.0036	0.0034	0.023	0.000065	1.0	61	0.013	0.00012
	November		0.11	4.2	0.036	0.0000070	456	**1725**	0.00033	0.0036	0.0034	0.023	0.000066	0.72	63	0.013	0.000081
	December		0.11	4.5	0.038	0.0000071	455	**1807**	0.00034	0.0037	0.0036	0.024	0.000068	0.24	64	0.013	0.000045

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.11	4.5	0.038	0.0000071	455	**1819**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	65	0.013	0.000041
	February		0.11	4.5	0.038	0.0000072	455	**1816**	0.00034	0.0037	0.0036	0.024	0.000069	0.17	64	0.013	0.000042
	March		0.11	4.3	0.037	0.0000071	456	**1766**	0.00034	0.0037	0.0035	0.023	0.000067	0.57	64	0.013	0.000070
	April		0.096	3.8	0.033	0.0000080	456	**1490**	0.00030	0.0034	0.0031	0.021	0.000060	5.1	57	0.012	**0.00020**
	May		0.096	3.5	0.033	0.0000068	457	**1481**	0.00030	0.0035	0.0031	0.021	0.000060	1.5	59	0.012	**0.00023**
	June		0.096	3.7	0.033	0.0000069	458	**1569**	0.00030	0.0034	0.0031	0.021	0.000060	1.8	61	0.012	0.00019
	July		0.096	3.7	0.033	0.0000073	458	**1504**	0.00030	0.0034	0.0031	0.021	0.000060	2.8	59	0.012	**0.00020**
	August		0.095	3.6	0.033	0.0000073	457	**1448**	0.00030	0.0035	0.0031	0.021	0.000060	3.2	58	0.012	**0.00024**
	September		0.096	3.6	0.033	0.0000070	458	**1529**	0.00030	0.0034	0.0031	0.021	0.000060	1.9	60	0.012	**0.00020**
	October		0.100	3.8	0.035	0.0000071	457	**1580**	0.00031	0.0036	0.0033	0.022	0.000063	1.7	61	0.012	0.00017
	November		0.10	3.9	0.035	0.0000069	457	**1612**	0.00032	0.0036	0.0033	0.022	0.000063	0.87	61	0.012	0.00013
	December		0.11	4.4	0.037	0.0000071	456	**1756**	0.00034	0.0037	0.0035	0.024	0.000068	0.46	63	0.013	0.000065
	January	2052	0.056	5.1	0.019	0.0000038	457	**1654**	0.00018	0.0019	0.0018	0.012	0.000035	0.18	59	0.0069	0.000041
	February		0.049	5.3	0.017	0.0000033	458	**1608**	0.00015	0.0017	0.0016	0.011	0.000031	0.16	57	0.0061	0.000040
	March		0.048	5.2	0.017	0.0000033	457	**1619**	0.00015	0.0016	0.0016	0.011	0.000030	0.19	58	0.0060	0.000042
	April		0.034	3.6	0.012	0.0000031	456	**1326**	0.00011	0.0013	0.0011	0.0075	0.000021	2.1	50	0.0043	0.00014
	May		0.034	3.5	0.012	0.0000030	456	**1310**	0.00011	0.0013	0.0011	0.0074	0.000021	1.8	51	0.0043	0.00015
	June		0.034	3.5	0.012	0.0000029	456	**1421**	0.00011	0.0013	0.0011	0.0075	0.000021	1.4	55	0.0044	0.00015
	July		0.034	3.5	0.012	0.0000034	456	**1205**	0.00011	0.0013	0.0011	0.0074	0.000021	2.9	48	0.0043	0.00018
	August		0.034	3.4	0.012	0.0000030	456	**1240**	0.00011	0.0013	0.0011	0.0074	0.000021	1.7	48	0.0043	0.00017
	September		0.034	3.5	0.012	0.0000028	455	**1430**	0.00011	0.0013	0.0011	0.0074	0.000021	1.2	56	0.0044	0.00016
	October		0.038	4.0	0.013	0.0000030	457	**1560**	0.00012	0.0014	0.0012	0.0083	0.000024	1.0	59	0.0048	0.00012
	November		0.049	5.1	0.017	0.0000033	458	**1588**	0.00015	0.0017	0.0016	0.011	0.000031	0.30	57	0.0061	0.000051
	December		0.049	5.2	0.017	0.0000033	457	**1609**	0.00015	0.0017	0.0016	0.011	0.000031	0.17	57	0.0061	0.000041
		MINIMUM	0.034	3.4	0.012	0.0000028	427	**1205**	0.00011	0.0013	0.0011	0.0074	0.000021	0.16	48	0.0043	0.000016
		MAXIMUM	0.11	7.8	0.039	0.0000080	459	**2824**	0.00035	0.0038	0.0037	0.025	0.000071	5.2	99	0.014	**0.00024**
		AVERAGE	0.098	4.3	0.034	0.0000068	456	**1690**	0.00031	0.0034	0.0032	0.022	0.000062	1.4	63	0.012	0.00012
Decommissioning	January	2053	0.0042	6.5	0.0015	0.00000045	691	**2330**	0.000013	0.00015	0.00014	0.00096	0.0000027	0.20	82	0.00081	0.000034
	February		0.0000056	6.6	0.000029	0.00000016	753	**2520**	7.3E-08	0.0000039	0.00000037	0.000047	5.2E-08	0.21	88	0.00032	0.000027
	March		0.0000058	6.4	0.000062	0.00000048	732	**2448**	0.00000012	0.000023	0.0000013	0.000046	6.9E-08	0.96	86	0.00033	0.000044
	April		0.0000061	5.6	0.00014	0.0000011	498	**1662**	0.0000003	0.00018	0.0000062	0.000040	8.5E-08	2.9	63	0.00036	0.00019
	May		0.0000055	5.6	0.000091	0.00000078	540	**1805**	0.00000026	0.00019	0.0000060	0.000040	6.8E-08	1.8	69	0.00038	0.00017
	June		0.0000058	5.8	0.000074	0.00000061	646	**2160**	0.00000021	0.00014	0.0000044	0.000044	6.6E-08	1.3	80	0.00038	0.00014
	July		0.0000062	5.6	0.00011	0.0000009	590	**1972**	0.00000026	0.00016	0.0000055	0.000043	7.9E-08	2.2	74	0.00038	0.00017
	August		0.0000066	5.5	0.00014	0.0000013	588	**1962**	0.00000028	0.00015	0.0000056	0.000043	0.0000001	3.2	73	0.00037	0.00016
	September		0.0000054	5.0	0.00014	0.0000011	453	**1512**	0.00000032	0.00021	0.0000070	0.000038	8.2E-08	2.9	59	0.00036	**0.00021**
	October		0.0000055	5.1	0.000088	0.00000077	528	**1764**	0.00000027	0.00021	0.0000064	0.000040	6.6E-08	1.7	68	0.00038	0.00018
	November		0.0000053	5.2	0.000060	0.0000005	631	**2109**	0.0000002	0.00015	0.0000047	0.000043	5.8E-08	1.0	79	0.00038	0.00014
	December		0.0000055	5.4	0.000029	0.00000016	746	**2496**	7.4E-08	0.0000047	0.00000039	0.000047	5.2E-08	0.26	88	0.00032	0.000039
	January	2054	0.0000044	5.4	0.000027	0.00000014	757	**2534**	6.6E-08	0.0000034	0.0000003	0.000046	5.2E-08	0.21	89	0.00032	0.000023
	February		0.0000041	5.2	0.000026	0.00000014	756	**2531**	6.4E-08	0.0000032	0.00000029	0.000046	5.2E-08	0.21	88	0.00032	0.000020
	March		0.0000041	5.1	0.000037	0.00000024	733	**2451**	9.0E-08	0.000026	0.0000010	0.000045	5.5E-08	0.46	86	0.00033	0.000038
	April		0.0000045	4.7	0.00012	0.0000010	608	**2031**	0.00000022	0.00010	0.0000040	0.000042	8.8E-08	2.5	74	0.00034	0.00011
	May		0.0000043	4.4	0.00010	0.00000086	507	**1693**	0.00000027	0.00019	0.0000060	0.000039	7.1E-08	2.1	65	0.00037	0.00018
	June		0.0000044	4.5	0.000080	0.00000068	610	**2038**	0.00000023	0.00017	0.0000054	0.000042	6.7E-08	1.5	77	0.00038	0.00016
	July		0.0000049	4.4	0.00010	0.00000086	583	**1950**	0.00000024	0.00016	0.0000052	0.000041	7.7E-08	2.2	73	0.00037	0.00016
	August		0.0000050	4.1	0.00016	0.0000014	483	**1614**	0.00000033	0.00020	0.0000071	0.000039	0.0000001	3.7	62	0.00036	**0.00020**
	September		0.0000044	4.0	0.000094	0.0000008	524	**1751**	0.00000026	0.00020	0.0000062	0.000039	6.9E-08	1.9	67	0.00038	0.00018
	October		0.0000042	4.0	0.000081	0.00000071	587	**1960**	0.00000024	0.00019	0.0000059	0.000041	6.6E-08	1.6	74	0.00039	0.00017
	November		0.0000041	4.1	0.000061	0.00000048	662	**2213**	0.00000015	0.000082	0.0000028	0.000044	6.3E-08	1.3	80	0.00035	0.00010
	December		0.0000041	4.1	0.000026	0.00000014	747	**2501**	6.4E-08	0.0000034	0.00000028	0.000046	5.2E-08	0.30	88	0.00032	0.000028
	January	2055	0.0000040	4.0	0.000025	0.00000013	755	**2526**	6.4E-08	0.0000058	0.00000034	0.000045	5.2E-08	0.22	88	0.00032	0.000020
	February		0.0000039	3.9	0.000025	0.00000012	755	**2527**	6.2E-08	0.0000041	0.00000029	0.000045	5.2E-08	0.21	88	0.00032	0.000018
	March		0.0000039	3.8	0.000025	0.00000012	756	**2531**	6.1E-08	0.0000030	0.00000026	0.000045	5.2E-08	0.21	88	0.00032	0.000017
	April		0.0000035	3.5	0.000041	0.00000035	653	**2183**	0.00000019	0.00018	0.0000050	0.000040	5.1E-08	0.44	81	0.00038	0.00010
	May		0.0000035	3.4	0.000040	0.00000037	648	**2164**	0.00000021	0.00021	0.0000060	0.000041	4.8E-08	0.31	82	0.00041	0.00014
	June		0.0000036	3.3	0.000042	0.00000039	640	**2139**	0.00000022	0.00022	0.0000061	0.000040	4.9E-08	0.36	81	0.00041	0.00014
	July		0.0000036	3.0	0.000044	0.00000045	570	**1901**	0.00000026	0.00028	0.0000078	0.000037	4.5E-08	0.38	75	0.00042	0.00017
	August		0.0000036	3.0	0.000044	0.00000044	601	**2004**	0.00000026	0.00029	0.0000079	0.000039	4.6E-08	0.28	79	0.00044	0.00018
	September		0.0000037	3.0	0.000041	0.00000039	651	**2174**	0.00000023	0.00024	0.0000067	0.000041	4.8E-08	0.27	84	0.00042	0.00016
	October		0.0000034	2.8	0.000039	0.00000036	648	**2163**	0.00000022	0.00022	0.0000061	0.000041	4.7E-08	0.25	83	0.00041	0.00015
	November		0.0000036	2.8	0.000029	0.0000002	700	**2339**	0.00000011	0.000076	0.0000022	0.000044	5.0E-08	0.23	85	0.00035	0.000077
	December		0.0000039	2.8	0.000025	0.00000012	751	**2513**	6.1E-08	0.0000031	0.00000027	0.000045	5.2E-08	0.21	88	0.00032	0.000021

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	**January**	**2056**	0.0000032	2.7	0.000023	0.00000011	756	**2532**	5.8E-08	0.0000025	0.00000021	0.000045	5.1E-08	0.21	88	0.00032	0.000014
	February		0.0000029	2.6	0.000023	0.0000001	755	**2528**	5.7E-08	0.0000024	0.00000018	0.000045	5.1E-08	0.21	88	0.00032	0.000013
	March		0.0000027	2.4	0.000033	0.00000027	681	**2277**	0.00000016	0.00015	0.0000042	0.000041	4.8E-08	0.25	83	0.00038	0.000088
	April		0.0000027	2.3	0.000030	0.00000023	684	**2286**	0.00000014	0.00012	0.0000033	0.000042	4.9E-08	0.24	84	0.00037	0.000091
	May		0.0000027	2.2	0.000030	0.00000022	705	**2357**	0.00000013	0.00010	0.0000029	0.000043	4.9E-08	0.24	85	0.00036	0.000071
	June		0.0000027	2.1	0.000031	0.00000024	695	**2324**	0.00000014	0.00012	0.0000034	0.000042	4.9E-08	0.24	85	0.00037	0.000089
	July		0.0000027	1.9	0.000037	0.00000035	649	**2168**	0.00000021	0.00022	0.0000060	0.000040	4.7E-08	0.26	82	0.00041	0.00013
	August		0.0000026	1.8	0.000038	0.00000036	633	**2114**	0.00000021	0.00022	0.0000062	0.000039	4.7E-08	0.26	81	0.00041	0.00014
	September		0.0000025	1.6	0.000042	0.00000043	606	**2023**	0.00000026	0.00029	0.0000080	0.000038	4.5E-08	0.25	79	0.00044	0.00018
	October		0.0000026	1.6	0.000037	0.00000035	657	**2195**	0.00000022	0.00023	0.0000063	0.000041	4.7E-08	0.22	84	0.00042	0.00015
	November		0.0000028	1.5	0.000026	0.00000016	720	**2408**	9.3E-08	0.000053	0.0000015	0.000044	5.0E-08	0.21	87	0.00034	0.000064
	December		0.0000030	1.4	0.000023	0.0000001	754	**2523**	5.7E-08	0.0000024	0.00000018	0.000045	5.1E-08	0.21	88	0.00032	0.000015
	January	**2057**	0.0000018	1.3	0.000020	7.8E-08	755	**2527**	5.0E-08	0.0000014	9.2E-08	0.000044	5.1E-08	0.21	88	0.00032	0.0000076
	February		0.0000013	1.2	0.000019	7.2E-08	755	**2528**	4.8E-08	0.0000012	6.1E-08	0.000043	5.1E-08	0.21	88	0.00032	0.0000047
	March		0.0000013	1.1	0.000019	7.2E-08	755	**2527**	4.8E-08	0.0000012	6.0E-08	0.000043	5.1E-08	0.21	88	0.00032	0.0000045
	April		0.0000012	0.96	0.000031	0.00000028	684	**2286**	0.00000018	0.00018	0.0000049	0.000040	4.8E-08	0.25	85	0.00039	0.000097
	May		0.0000012	0.86	0.000027	0.00000022	692	**2312**	0.00000014	0.00013	0.0000036	0.000041	4.8E-08	0.22	85	0.00037	0.000097
	June		0.0000013	0.77	0.000024	0.00000015	734	**2457**	9.8E-08	0.000071	0.0000020	0.000042	5.0E-08	0.22	88	0.00035	0.000044
	July		0.0000012	0.64	0.000034	0.00000033	667	**2230**	0.00000021	0.00023	0.0000061	0.000039	4.7E-08	0.25	84	0.00041	0.00013
	August		0.0000012	0.52	0.000035	0.00000035	662	**2210**	0.00000022	0.00025	0.0000067	0.000039	4.7E-08	0.24	85	0.00042	0.00015
	September		0.0000012	0.42	0.000034	0.00000034	668	**2232**	0.00000022	0.00024	0.0000064	0.000040	4.7E-08	0.22	85	0.00042	0.00015
	October		0.0000012	0.32	0.000025	0.00000017	711	**2378**	0.00000011	0.000092	0.0000025	0.000042	4.9E-08	0.22	87	0.00036	0.000077
	November		0.0000013	0.22	0.000021	0.00000011	739	**2474**	6.8E-08	0.000030	0.00000085	0.000043	5.0E-08	0.21	87	0.00033	0.000029
	December		0.0000013	0.11	0.000019	7.5E-08	754	**2523**	4.9E-08	0.0000032	0.00000011	0.000043	5.1E-08	0.21	88	0.00032	0.0000072
		MINIMUM	0.0000012	0.11	0.000019	7.2E-08	453	**1512**	4.8E-08	0.0000012	6.0E-08	0.000037	4.5E-08	0.20	59	0.00032	0.0000045
		MAXIMUM	0.0042	6.6	0.0015	0.0000014	757	**2534**	0.000013	0.00029	0.00014	0.00096	0.0000027	3.7	89	0.00081	**0.00021**
		AVERAGE	0.000073	3.2	0.000074	0.00000041	666	**2226**	0.00000038	0.00012	0.0000059	0.000057	0.0000001	0.76	81	0.00037	0.000099

Notes:
Bold values represent values greater than the proposed environmental release target
Non-applicable values represent periods of time when there is no discharge

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	**January**	**2025**	0.00010	0.00050	0.50	**0.050**	0.020	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.023	0.0100	0.00010	1.5	0.032	1.7	0.0100	0.00010	0.00050	0.0030
	March		0.000099	0.00050	0.50	**0.050**	0.025	0.0099	0.000099	1.5	0.032	1.7	0.0099	0.000099	0.00050	0.0030
	April		0.000087	0.00044	0.44	**0.044**	0.023	0.0087	0.000087	1.3	0.028	1.5	0.0087	0.000087	0.00044	0.0026
	May		0.000075	0.00037	0.37	**0.037**	0.021	0.0075	0.000075	1.1	0.024	1.3	0.0075	0.000075	0.00037	0.0022
	June		0.000073	0.00037	0.37	**0.037**	0.022	0.0073	0.000073	1.1	0.023	1.2	0.0073	0.000073	0.00037	0.0022
	July		0.000066	0.00033	0.33	**0.033**	0.020	0.0066	0.000066	0.99	0.021	1.1	0.0066	0.000066	0.00033	0.0020
	August		0.000062	0.00031	0.31	**0.031**	0.020	0.0062	0.000062	0.93	0.020	1.0	0.0062	0.000062	0.00031	0.0019
	September		0.000054	0.00027	0.27	**0.027**	0.018	0.0054	0.000054	0.81	0.017	0.92	0.0054	0.000054	0.00027	0.0016
	October		0.000049	0.00025	0.25	**0.025**	0.016	0.0049	0.000049	0.74	0.016	0.84	0.0049	0.000049	0.00025	0.0015
	November		0.000046	0.00023	0.23	**0.023**	0.016	0.0046	0.000046	0.69	0.015	0.79	0.0046	0.000046	0.00023	0.0014
	December		0.000046	0.00023	0.23	**0.023**	0.016	0.0046	0.000046	0.69	0.015	0.78	0.0046	0.000046	0.00023	0.0014
	January	**2026**	0.000045	0.00023	0.23	**0.023**	0.016	0.0045	0.000045	0.68	0.015	0.77	0.0045	0.000045	0.00023	0.0014
	February		0.000045	0.00023	0.23	**0.023**	0.016	0.0045	0.000045	0.68	0.015	0.77	0.0045	0.000045	0.00023	0.0014
	March		0.000030	0.00015	2.7	**0.032**	0.017	0.0030	0.000031	0.95	0.020	1.1	0.0063	0.000031	0.00015	0.00091
	April		0.038	0.000010	3.5	**0.047**	3.5	0.0021	0.0000066	1.6	0.051	17	0.023	**0.043**	0.0000065	0.000040
	May		0.0078	0.0000011	4.2	**0.047**	2.8	0.00043	0.0000014	1.6	0.047	14	0.020	0.0091	0.00000024	0.0000027
	June		0.062	0.0000069	3.5	**0.049**	6.8	0.0033	0.0000083	1.8	0.071	31	0.035	**0.069**	0.0000015	0.0000080
	July		0.051	0.0000057	2.9	**0.050**	8.4	0.0027	0.0000068	1.9	0.082	39	0.041	**0.057**	0.0000013	0.0000060
	August		0.065	0.0000072	2.6	**0.051**	10	0.0034	0.0000086	2.0	0.094	48	0.049	**0.072**	0.0000016	0.0000075
	September		0.039	0.0000044	2.7	**0.047**	9.2	0.0021	0.0000053	1.9	0.086	43	0.044	**0.044**	0.00000098	0.0000050
	October		0.029	0.0000033	3.2	**0.048**	8.7	0.0015	0.0000039	1.9	0.084	41	0.042	**0.032**	0.00000072	0.0000037
	November		0.015	0.0000018	4.8	**0.053**	6.9	0.00077	0.0000022	2.0	0.076	33	0.037	0.016	0.00000038	0.0000030
	December		0.0064	0.0000010	7.2	**0.056**	2.9	0.00035	0.0000015	1.8	0.054	15	0.022	0.0072	0.00000019	0.0000039
	January	**2027**	0.0024	0.00000064	10	**0.055**	1.1	0.00014	0.0000010	1.7	0.042	6.8	0.015	0.0027	0.0000001	0.0000040
	February		0.0040	0.00000083	11	**0.055**	0.73	0.00023	0.0000013	1.7	0.040	5.1	0.014	0.0045	0.00000014	0.0000044
	March		0.043	0.0000051	6.8	**0.056**	3.9	0.0023	0.0000063	1.9	0.059	20	0.025	**0.048**	0.0000011	0.0000078
	April		0.051	0.0000057	3.9	**0.050**	8.4	0.0027	0.0000068	1.9	0.083	40	0.041	**0.056**	0.0000013	0.0000065
	May		0.032	0.0000037	4.4	**0.051**	8.0	0.0017	0.0000044	2.0	0.082	38	0.040	**0.036**	0.00000081	0.0000044
	June		0.073	0.0000081	3.9	**0.052**	9.2	0.0038	0.0000097	2.0	0.089	43	0.045	**0.080**	0.0000018	0.0000088
	July		0.065	0.0000072	3.9	**0.053**	10	0.0034	0.0000087	2.1	0.095	48	0.048	**0.072**	0.0000016	0.0000077
	August		0.038	0.0000043	4.0	**0.048**	8.3	0.0020	0.0000051	1.9	0.081	39	0.041	**0.042**	0.00000094	0.0000052
	September		0.024	0.0000027	4.8	**0.049**	7.1	0.0013	0.0000033	1.9	0.075	34	0.037	0.027	0.0000006	0.0000036
	October		0.038	0.0000044	6.7	**0.056**	5.9	0.0020	0.0000054	2.0	0.072	29	0.033	**0.042**	0.00000097	0.0000063
	November		0.035	0.0000040	4.9	**0.053**	7.3	0.0019	0.0000049	2.0	0.079	35	0.038	**0.039**	0.0000009	0.0000049
	December		0.0025	0.00000046	7.0	**0.053**	4.6	0.00014	0.00000069	1.8	0.062	23	0.028	0.0029	8.2E-08	0.0000021
	January	**2028**	0.00049	0.00000035	15	**0.055**	1.3	0.000038	0.00000064	1.7	0.043	7.7	0.016	0.00057	4.4E-08	0.0000030
	February		0.000011	0.00000034	16	**0.064**	0.19	0.000014	0.00000067	1.9	0.042	3.0	0.014	0.000014	3.8E-08	0.0000035
	March		0.00000056	0.00000034	15	**0.063**	0.044	0.000014	0.00000067	1.9	0.041	2.2	0.013	0.0000011	3.8E-08	0.0000035
	April		0.043	0.000015	10	**0.079**	3.9	0.0024	0.000013	2.0	0.079	34	0.041	**0.048**	0.0000012	0.000024
	May		0.022	0.000048	7.0	**0.12**	4.3	0.0014	0.000032	2.1	0.14	92	0.079	0.025	0.0000007	0.000070
	June		0.024	0.000045	7.9	**0.12**	3.3	0.0015	0.000031	2.1	0.13	89	0.073	0.027	0.00000075	0.000066
	July		0.036	0.000057	8.0	**0.15**	4.6	0.0021	0.000039	2.4	0.17	120	0.098	**0.040**	0.0000011	0.000083
	August		0.025	0.000073	7.7	**0.16**	4.0	0.0016	0.000048	2.4	0.18	141	0.11	0.029	0.00000083	0.00010
	September		0.027	0.000072	8.6	**0.16**	3.7	0.0017	0.000048	2.4	0.19	145	0.10	**0.031**	0.00000088	0.00010
	October		0.012	0.000029	9.9	**0.12**	2.4	0.00073	0.000020	2.1	0.14	99	0.073	0.013	0.00000038	0.000042
	November		0.0066	0.000019	13	**0.11**	1.8	0.00042	0.000013	2.2	0.11	73	0.057	0.0074	0.00000024	0.000028
	December		0.00015	0.00000085	15	**0.075**	0.38	0.000023	0.0000010	2.0	0.057	17	0.022	0.00017	4.1E-08	0.0000041
		MINIMUM	0.00000056	0.00000034	0.23	**0.023**	0.016	0.000014	0.00000064	0.68	0.015	0.77	0.0045	0.0000011	3.8E-08	0.0000021
		MAXIMUM	0.073	0.00050	16	**0.16**	10	0.0100	0.00010	2.4	0.19	145	0.11	**0.080**	0.00050	0.0030
		AVERAGE	0.019	0.00011	5.2	**0.060**	3.4	0.0031	0.000028	1.7	0.065	31	0.032	0.021	0.00010	0.00063
Operations	**January**	**2029**	0.0035	0.0082	9.5	**0.081**	0.31	0.11	0.00047	827	13	**2711**	0.89	0.0099	0.0016	0.0015
	February		0.0036	0.0084	8.8	**0.086**	0.26	0.11	0.00048	885	19	**2900**	1.3	0.011	0.0016	0.0016
	March		0.0076	0.0081	8.3	**0.096**	0.66	0.11	0.00047	884	18	**2898**	1.3	0.015	0.0016	0.0015
	April		0.036	0.0071	6.9	**0.16**	4.0	0.098	0.00044	885	16	**2899**	1.2	**0.047**	0.0014	0.0014
	May		0.014	0.0070	6.4	**0.14**	1.7	0.096	0.00044	884	15	**2897**	1.1	0.022	0.0013	0.0014
	June		0.022	0.0073	6.8	**0.15**	2.6	0.100	0.00045	886	16	**2903**	1.1	**0.031**	0.0014	0.0014
	July		0.024	0.0073	6.9	**0.14**	2.6	0.10	0.00045	885	16	**2899**	1.1	**0.033**	0.0014	0.0014
	August		0.025	0.0070	6.4	**0.16**	3.0	0.096	0.00043	884	15	**2898**	1.1	**0.034**	0.0013	0.0014
	September		0.025	0.0070	6.4	**0.16**	3.1	0.096	0.00043	884	15	**2898**	1.1	**0.034**	0.0013	0.0014
	October		0.013	0.0075	7.0	**0.13**	1.6	0.10	0.00045	884	16	**2896**	1.2	0.021	0.0014	0.0015
	November		0.0080	0.0081	7.9	**0.11**	1.1	0.11	0.00047	884	18	**2896**	1.3	0.015	0.0016	0.0016
	December		0.0036	0.0084	8.6	**0.088**	0.32	0.11	0.00048	884	19	**2898**	1.3	0.011	0.0016	0.0016

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.0039	0.0090	7.6	**0.080**	0.19	0.12	0.00052	885	16	**2901**	1.1	0.010	0.0017	0.0017
	February		0.0078	0.0088	7.0	**0.084**	0.50	0.11	0.00051	886	15	**2902**	1.0	0.014	0.0017	0.0017
	March		0.0082	0.0088	6.8	**0.092**	0.70	0.11	0.00051	886	14	**2903**	0.99	0.015	0.0017	0.0017
	April		0.028	0.0078	5.7	**0.14**	3.0	0.10	0.00048	890	12	**2917**	0.91	**0.037**	0.0015	0.0015
	May		0.026	0.0082	6.0	**0.13**	2.5	0.11	0.00050	888	13	**2910**	0.93	**0.034**	0.0016	0.0016
	June		0.033	0.0078	5.6	**0.15**	3.6	0.10	0.00048	891	12	**2918**	0.92	**0.042**	0.0015	0.0015
	July		0.036	0.0078	5.5	**0.16**	4.0	0.10	0.00049	890	12	**2916**	0.90	**0.045**	0.0015	0.0015
	August		0.029	0.0078	5.6	**0.16**	3.1	0.10	0.00049	889	12	**2914**	0.92	**0.037**	0.0015	0.0015
	September		0.025	0.0078	5.5	**0.15**	2.8	0.10	0.00049	890	12	**2917**	0.90	**0.033**	0.0015	0.0015
	October		0.023	0.0079	5.7	**0.14**	2.3	0.10	0.00048	891	12	**2919**	0.90	**0.031**	0.0015	0.0015
	November		0.0041	0.0086	6.3	**0.11**	0.54	0.11	0.00051	887	13	**2907**	0.94	0.010	0.0016	0.0016
	December		0.0070	0.0088	6.9	**0.088**	0.53	0.11	0.00051	886	14	**2902**	1.00	0.014	0.0017	0.0017
	January	2031	0.0064	0.0092	6.2	**0.084**	0.45	0.12	0.00054	885	13	**2899**	0.91	0.012	0.0018	0.0017
	February		0.0042	0.0095	6.1	**0.077**	0.17	0.12	0.00055	884	13	**2895**	0.89	0.0099	0.0018	0.0018
	March		0.0086	0.0093	5.9	**0.086**	0.57	0.12	0.00054	885	13	**2900**	0.87	0.015	0.0018	0.0017
	April		0.030	0.0084	5.1	**0.13**	2.9	0.11	0.00051	889	11	**2914**	0.84	**0.039**	0.0016	0.0016
	May		0.016	0.0084	4.9	**0.12**	1.7	0.10	0.00051	890	11	**2917**	0.79	0.022	0.0016	0.0016
	June		0.020	0.0085	5.1	**0.12**	1.8	0.11	0.00051	888	11	**2911**	0.82	0.027	0.0016	0.0016
	July		0.020	0.0084	5.0	**0.12**	2.0	0.11	0.00051	889	11	**2913**	0.82	0.027	0.0016	0.0016
	August		0.022	0.0087	5.2	**0.13**	2.2	0.11	0.00053	889	11	**2912**	0.82	0.029	0.0017	0.0017
	September		0.023	0.0084	5.0	**0.13**	2.4	0.11	0.00051	888	11	**2911**	0.81	**0.031**	0.0016	0.0016
	October		0.016	0.0088	5.3	**0.11**	1.5	0.11	0.00052	888	12	**2908**	0.83	0.023	0.0017	0.0017
	November		0.0048	0.0094	5.9	**0.087**	0.43	0.12	0.00055	884	12	**2897**	0.87	0.011	0.0018	0.0017
	December		0.0049	0.0094	6.1	**0.078**	0.23	0.12	0.00054	885	13	**2900**	0.89	0.011	0.0018	0.0017
	January	2032	0.0050	0.0099	6.3	**0.076**	0.24	0.12	0.00057	882	12	**2890**	0.82	0.010	0.0019	0.0018
	February		0.0044	0.0099	6.5	**0.074**	0.14	0.12	0.00057	883	12	**2892**	0.82	0.0098	0.0019	0.0018
	March		0.017	0.0089	5.6	**0.10**	1.4	0.11	0.00053	888	11	**2911**	0.78	0.023	0.0017	0.0017
	April		0.028	0.0085	5.1	**0.13**	2.8	0.11	0.00051	889	10	**2912**	0.77	**0.036**	0.0016	0.0016
	May		0.015	0.0086	5.2	**0.11**	1.4	0.11	0.00052	887	10	**2908**	0.75	0.021	0.0017	0.0016
	June		0.018	0.0089	5.5	**0.11**	1.6	0.11	0.00053	888	11	**2911**	0.77	0.025	0.0017	0.0017
	July		0.035	0.0085	5.1	**0.14**	3.4	0.11	0.00052	890	10	**2915**	0.77	**0.043**	0.0016	0.0016
	August		0.019	0.0085	5.1	**0.13**	2.0	0.11	0.00052	890	10	**2915**	0.75	0.026	0.0016	0.0016
	September		0.013	0.0088	5.4	**0.11**	1.2	0.11	0.00053	888	11	**2911**	0.77	0.019	0.0017	0.0017
	October		0.012	0.0092	5.7	**0.097**	1.1	0.11	0.00054	886	11	**2902**	0.79	0.018	0.0018	0.0017
	November		0.0068	0.0096	6.2	**0.084**	0.51	0.12	0.00056	884	12	**2895**	0.82	0.013	0.0018	0.0018
	December		0.0043	0.0096	6.5	**0.076**	0.16	0.12	0.00055	883	12	**2893**	0.86	0.0098	0.0018	0.0018
	January	2033	0.0043	0.0095	6.1	**0.076**	0.15	0.12	0.00055	882	12	**2892**	0.86	0.0099	0.0018	0.0018
	February		0.0043	0.0096	5.9	**0.076**	0.15	0.12	0.00055	883	12	**2895**	0.86	0.0099	0.0018	0.0018
	March		0.0053	0.0096	5.9	**0.078**	0.23	0.12	0.00056	882	12	**2892**	0.86	0.011	0.0019	0.0018
	April		0.043	0.0085	4.8	**0.13**	4.1	0.11	0.00052	886	10	**2903**	0.77	**0.052**	0.0016	0.0016
	May		0.014	0.0084	4.6	**0.13**	1.5	0.10	0.00051	889	10	**2912**	0.76	0.021	0.0016	0.0016
	June		0.019	0.0085	4.7	**0.12**	1.8	0.11	0.00052	886	11	**2904**	0.77	0.026	0.0016	0.0016
	July		0.017	0.0089	5.1	**0.12**	1.6	0.11	0.00054	888	11	**2909**	0.79	0.023	0.0017	0.0017
	August		0.022	0.0086	4.8	**0.13**	2.2	0.11	0.00052	888	11	**2911**	0.78	0.029	0.0016	0.0016
	September		0.018	0.0087	4.9	**0.12**	1.8	0.11	0.00052	888	11	**2911**	0.78	0.025	0.0017	0.0017
	October		0.017	0.0090	5.2	**0.11**	1.5	0.11	0.00054	888	11	**2909**	0.81	0.023	0.0017	0.0017
	November		0.012	0.0091	5.3	**0.10**	1.2	0.11	0.00054	886	11	**2902**	0.81	0.018	0.0018	0.0017
	December		0.0044	0.0095	5.9	**0.077**	0.20	0.12	0.00055	883	12	**2892**	0.86	0.0099	0.0018	0.0018
	January	2034	0.0043	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2893**	0.86	0.0098	0.0018	0.0018
	February		0.0053	0.0095	5.9	**0.078**	0.22	0.12	0.00055	884	12	**2897**	0.85	0.011	0.0018	0.0018
	March		0.0098	0.0093	5.6	**0.092**	0.79	0.11	0.00054	885	12	**2901**	0.83	0.016	0.0018	0.0017
	April		0.029	0.0086	5.0	**0.12**	2.7	0.11	0.00052	887	11	**2906**	0.80	**0.037**	0.0017	0.0016
	May		0.0083	0.0087	5.0	**0.11**	0.80	0.11	0.00052	887	11	**2908**	0.76	0.014	0.0017	0.0016
	June		0.051	0.0084	4.6	**0.15**	5.1	0.11	0.00052	885	9.8	**2902**	0.74	**0.061**	0.0016	0.0016
	July		0.040	0.0084	4.4	**0.16**	4.1	0.10	0.00052	885	9.2	**2900**	0.71	**0.049**	0.0016	0.0016
	August		0.025	0.0084	4.5	**0.16**	2.4	0.10	0.00052	885	9.5	**2900**	0.72	**0.033**	0.0016	0.0016
	September		0.026	0.0084	4.6	**0.15**	2.7	0.11	0.00053	886	10	**2904**	0.78	**0.033**	0.0016	0.0016
	October		0.0084	0.0085	4.8	**0.12**	0.74	0.10	0.00052	888	10	**2910**	0.76	0.014	0.0016	0.0016
	November		0.0080	0.0092	5.4	**0.10**	0.61	0.11	0.00055	885	11	**2900**	0.80	0.014	0.0018	0.0017
	December		0.0078	0.0094	5.7	**0.087**	0.57	0.12	0.00055	885	12	**2899**	0.83	0.014	0.0018	0.0017
	January	2035	0.0047	0.0096	5.9	**0.077**	0.19	0.12	0.00055	883	12	**2895**	0.86	0.010	0.0018	0.0018
	February		0.0073	0.0094	5.7	**0.085**	0.50	0.12	0.00055	884	12	**2896**	0.84	0.013	0.0018	0.0018
	March		0.0043	0.0096	5.9	**0.076**	0.16	0.12	0.00055	883	12	**2893**	0.86	0.0099	0.0018	0.0018

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.023	0.0089	5.3	**0.11**	2.0	0.11	0.00053	887	12	**2908**	0.83	**0.030**	0.0017	0.0017
	May		0.028	0.0085	4.7	**0.13**	2.7	0.11	0.00052	888	10	**2910**	0.77	**0.036**	0.0016	0.0016
	June		0.020	0.0086	4.8	**0.13**	2.1	0.11	0.00052	887	11	**2908**	0.78	0.028	0.0017	0.0016
	July		0.023	0.0084	4.7	**0.13**	2.3	0.10	0.00051	890	10	**2918**	0.77	**0.031**	0.0016	0.0016
	August	**2035**	0.021	0.0084	4.6	**0.13**	2.1	0.10	0.00051	890	10	**2917**	0.76	0.028	0.0016	0.0016
	September		0.018	0.0087	4.9	**0.12**	1.8	0.11	0.00053	887	11	**2908**	0.78	0.025	0.0017	0.0017
	October		0.013	0.0088	5.1	**0.11**	1.3	0.11	0.00052	885	11	**2901**	0.80	0.020	0.0017	0.0017
	November		0.0056	0.0096	5.7	**0.083**	0.42	0.12	0.00055	883	12	**2893**	0.83	0.011	0.0018	0.0018
	December		0.0043	0.0096	5.9	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0098	0.0018	0.0018
	January		0.0043	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2895**	0.86	0.0099	0.0018	0.0018
	February		0.0043	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	March		0.0090	0.0095	5.8	**0.088**	0.63	0.12	0.00055	885	12	**2898**	0.85	0.015	0.0018	0.0018
	April		0.038	0.0085	4.8	**0.14**	3.6	0.11	0.00052	887	11	**2907**	0.78	**0.047**	0.0016	0.0016
	May		0.015	0.0086	4.8	**0.13**	1.6	0.11	0.00052	887	11	**2908**	0.79	0.021	0.0016	0.0016
	June		0.021	0.0087	4.9	**0.12**	1.9	0.11	0.00053	888	11	**2909**	0.78	0.028	0.0017	0.0017
	July	**2036**	0.022	0.0085	4.7	**0.13**	2.1	0.11	0.00052	888	10	**2909**	0.75	0.029	0.0016	0.0016
	August		0.014	0.0090	5.2	**0.10**	1.3	0.11	0.00053	886	11	**2905**	0.80	0.021	0.0017	0.0017
	September		0.016	0.0088	5.1	**0.11**	1.5	0.11	0.00053	887	11	**2906**	0.78	0.023	0.0017	0.0017
	October		0.015	0.0090	5.2	**0.11**	1.4	0.11	0.00053	886	11	**2902**	0.79	0.021	0.0017	0.0017
	November		0.0056	0.0095	5.8	**0.083**	0.40	0.12	0.00055	883	12	**2893**	0.83	0.011	0.0018	0.0018
	December		0.0043	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	January		0.0043	0.0096	5.7	**0.076**	0.15	0.12	0.00055	883	12	**2893**	0.86	0.0099	0.0018	0.0018
	February		0.011	0.0092	5.3	**0.094**	0.85	0.11	0.00054	885	12	**2899**	0.82	0.017	0.0018	0.0017
	March		0.0092	0.0093	5.4	**0.088**	0.63	0.11	0.00054	885	12	**2900**	0.84	0.015	0.0018	0.0017
	April		0.032	0.0086	4.6	**0.14**	3.2	0.11	0.00052	885	11	**2901**	0.79	**0.040**	0.0016	0.0016
	May		0.011	0.0089	4.8	**0.11**	0.99	0.11	0.00053	886	11	**2904**	0.80	0.017	0.0017	0.0017
	June	**2037**	0.036	0.0085	4.5	**0.14**	3.5	0.11	0.00052	889	11	**2912**	0.79	**0.045**	0.0016	0.0016
	July		0.034	0.0086	4.4	**0.15**	3.4	0.11	0.00053	888	10	**2910**	0.76	**0.042**	0.0016	0.0016
	August		0.018	0.0087	4.6	**0.13**	1.7	0.11	0.00054	889	11	**2913**	0.78	0.024	0.0017	0.0017
	September		0.022	0.0084	4.4	**0.13**	2.3	0.10	0.00052	889	10	**2913**	0.76	0.030	0.0016	0.0016
	October		0.0084	0.0091	5.0	**0.10**	0.75	0.11	0.00054	885	11	**2901**	0.79	0.014	0.0017	0.0017
Operations	November		0.0066	0.0095	5.5	**0.083**	0.41	0.12	0.00055	884	12	**2896**	0.84	0.012	0.0018	0.0018
	December		0.0044	0.0096	5.6	**0.077**	0.18	0.12	0.00055	884	12	**2896**	0.85	0.0099	0.0018	0.0018
	January		0.0044	0.0096	5.7	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	February		0.0045	0.0096	5.7	**0.076**	0.16	0.12	0.00055	883	12	**2894**	0.86	0.010	0.0018	0.0018
	March		0.021	0.0087	4.8	**0.12**	1.9	0.11	0.00053	888	11	**2909**	0.80	0.028	0.0017	0.0017
	April		0.028	0.0084	4.4	**0.13**	2.9	0.11	0.00051	889	10	**2914**	0.77	**0.036**	0.0016	0.0016
	May		0.015	0.0087	4.6	**0.11**	1.4	0.11	0.00052	888	10	**2910**	0.75	0.021	0.0017	0.0016
	June	**2038**	0.019	0.0089	4.9	**0.11**	1.7	0.11	0.00053	887	11	**2905**	0.80	0.026	0.0017	0.0017
	July		0.021	0.0086	4.6	**0.13**	2.1	0.11	0.00053	888	11	**2910**	0.78	0.028	0.0017	0.0016
	August		0.016	0.0088	4.7	**0.11**	1.6	0.11	0.00053	887	11	**2908**	0.76	0.023	0.0017	0.0017
	September		0.028	0.0088	4.8	**0.13**	2.6	0.11	0.00053	888	11	**2909**	0.79	**0.036**	0.0017	0.0017
	October		0.015	0.0085	4.5	**0.12**	1.6	0.11	0.00052	890	10	**2916**	0.75	0.021	0.0016	0.0016
	November		0.0073	0.0094	5.2	**0.092**	0.60	0.12	0.00055	884	12	**2898**	0.81	0.013	0.0018	0.0017
	December		0.0044	0.0096	5.7	**0.076**	0.16	0.12	0.00056	883	12	**2893**	0.86	0.0099	0.0019	0.0018
	January		0.0044	0.0096	5.7	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	February		0.014	0.0089	5.0	**0.10**	1.2	0.11	0.00053	888	11	**2909**	0.80	0.021	0.0017	0.0017
	March		0.011	0.0093	5.3	**0.094**	0.87	0.12	0.00055	884	12	**2897**	0.83	0.017	0.0018	0.0017
	April		0.013	0.0090	5.1	**0.098**	1.1	0.11	0.00053	886	12	**2903**	0.82	0.019	0.0017	0.0017
	May		0.013	0.0090	5.1	**0.100**	1.2	0.11	0.00053	886	12	**2903**	0.82	0.019	0.0017	0.0017
	June	**2039**	0.016	0.0090	5.1	**0.097**	1.3	0.11	0.00053	887	12	**2906**	0.83	0.023	0.0017	0.0017
	July		0.024	0.0085	4.5	**0.13**	2.4	0.11	0.00052	889	10	**2912**	0.76	**0.031**	0.0016	0.0016
	August		0.038	0.0084	4.3	**0.15**	3.9	0.11	0.00052	887	10	**2905**	0.76	**0.047**	0.0016	0.0016
	September		0.016	0.0084	4.5	**0.12**	1.6	0.10	0.00051	889	10	**2915**	0.76	0.023	0.0016	0.0016
	October		0.017	0.0089	4.7	**0.12**	1.6	0.11	0.00054	887	11	**2905**	0.78	0.024	0.0017	0.0017
	November		0.011	0.0092	5.2	**0.10**	1.00	0.11	0.00054	884	11	**2897**	0.81	0.017	0.0018	0.0017
	December		0.0044	0.0096	5.7	**0.077**	0.17	0.12	0.00055	883	12	**2893**	0.86	0.0098	0.0018	0.0018
	January		0.0045	0.0096	5.9	**0.076**	0.15	0.12	0.00055	883	12	**2895**	0.86	0.0099	0.0018	0.0018
	February		0.0046	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	March		0.028	0.0086	5.0	**0.12**	2.7	0.11	0.00052	888	11	**2911**	0.80	**0.036**	0.0016	0.0016
	April	**2040**	0.019	0.0084	4.7	**0.12**	1.8	0.11	0.00051	889	10	**2913**	0.75	0.026	0.0016	0.0016
	May		0.025	0.0085	4.8	**0.13**	2.3	0.11	0.00052	888	10	**2910**	0.77	**0.032**	0.0016	0.0016
	June		0.029	0.0085	4.7	**0.13**	2.8	0.11	0.00052	889	10	**2911**	0.77	**0.036**	0.0016	0.0016

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	July	2040	0.031	0.0084	4.6	**0.15**	3.2	0.10	0.00052	887	10	**2907**	0.76	**0.039**	0.0016	0.0016
	August		0.010	0.0086	4.9	**0.11**	0.90	0.11	0.00052	889	11	**2912**	0.77	0.016	0.0016	0.0016
	September		0.015	0.0090	5.3	**0.11**	1.4	0.11	0.00054	886	11	**2902**	0.81	0.021	0.0017	0.0017
	October		0.017	0.0091	5.2	**0.11**	1.6	0.11	0.00055	887	11	**2907**	0.80	0.023	0.0017	0.0017
	November		0.0058	0.0095	5.9	**0.083**	0.38	0.12	0.00055	883	12	**2894**	0.85	0.011	0.0018	0.0018
	December		0.0046	0.0096	6.0	**0.076**	0.15	0.12	0.00055	884	12	**2896**	0.86	0.0099	0.0018	0.0018
	January	2041	0.0046	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2893**	0.86	0.0098	0.0018	0.0018
	February		0.0046	0.0096	6.0	**0.076**	0.15	0.12	0.00056	883	12	**2893**	0.86	0.0099	0.0019	0.0018
	March		0.013	0.0092	5.7	**0.091**	0.93	0.11	0.00054	886	12	**2902**	0.85	0.019	0.0018	0.0017
	April		0.032	0.0087	5.0	**0.12**	3.0	0.11	0.00053	886	11	**2903**	0.78	**0.040**	0.0017	0.0017
	May		0.0099	0.0086	4.9	**0.12**	1.0	0.11	0.00052	887	11	**2908**	0.78	0.016	0.0017	0.0016
	June		0.019	0.0089	5.2	**0.11**	1.7	0.11	0.00053	887	11	**2908**	0.80	0.026	0.0017	0.0017
	July		0.029	0.0085	4.8	**0.13**	2.7	0.11	0.00052	889	10	**2912**	0.77	**0.037**	0.0016	0.0016
	August		0.055	0.0084	4.5	**0.16**	5.7	0.11	0.00053	885	9.5	**2900**	0.73	**0.066**	0.0016	0.0016
	September		0.015	0.0084	4.5	**0.15**	1.6	0.10	0.00052	886	9.6	**2903**	0.73	0.021	0.0016	0.0016
	October		0.015	0.0085	4.8	**0.13**	1.3	0.11	0.00052	889	11	**2913**	0.78	0.021	0.0016	0.0016
	November		0.0050	0.0090	5.2	**0.10**	0.34	0.11	0.00054	887	11	**2906**	0.78	0.010	0.0017	0.0017
	December		0.0046	0.0096	6.0	**0.078**	0.15	0.12	0.00055	883	12	**2893**	0.85	0.0098	0.0018	0.0018
	January	2042	0.0047	0.0096	6.0	**0.076**	0.15	0.12	0.00056	883	12	**2894**	0.86	0.0099	0.0019	0.0018
	February		0.0047	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0098	0.0018	0.0018
	March		0.0090	0.0094	5.8	**0.087**	0.60	0.12	0.00055	884	12	**2897**	0.84	0.015	0.0018	0.0018
	April		0.029	0.0088	5.2	**0.12**	2.7	0.11	0.00053	886	11	**2902**	0.81	**0.037**	0.0017	0.0017
	May		0.010	0.0086	4.9	**0.11**	0.96	0.11	0.00052	888	11	**2910**	0.76	0.016	0.0017	0.0016
	June		0.044	0.0084	4.8	**0.14**	4.1	0.11	0.00052	888	10	**2910**	0.78	**0.053**	0.0016	0.0016
	July		0.029	0.0084	4.5	**0.16**	3.0	0.10	0.00053	885	9.4	**2901**	0.72	**0.037**	0.0016	0.0016
	August		0.033	0.0084	4.5	**0.16**	3.3	0.10	0.00053	886	9.9	**2903**	0.75	**0.041**	0.0016	0.0016
	September		0.029	0.0084	4.7	**0.14**	2.7	0.11	0.00053	888	10	**2911**	0.77	**0.036**	0.0016	0.0016
	October		0.021	0.0084	4.6	**0.14**	2.3	0.10	0.00052	888	10	**2910**	0.76	0.027	0.0016	0.0016
	November		0.0045	0.0089	5.2	**0.098**	0.26	0.11	0.00053	887	11	**2908**	0.77	0.0095	0.0017	0.0017
	December		0.0047	0.0096	6.0	**0.077**	0.15	0.12	0.00056	883	12	**2894**	0.85	0.0099	0.0019	0.0018
	January	2043	0.0047	0.0096	6.0	**0.076**	0.15	0.12	0.00056	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	February		0.0047	0.0096	6.0	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0098	0.0018	0.0018
	March		0.0048	0.0096	6.0	**0.076**	0.15	0.12	0.00056	883	12	**2893**	0.86	0.0099	0.0019	0.0018
	April		0.032	0.0088	5.3	**0.11**	2.8	0.11	0.00053	886	11	**2904**	0.81	**0.040**	0.0017	0.0017
	May		0.017	0.0085	4.7	**0.14**	1.8	0.11	0.00052	888	11	**2909**	0.78	0.023	0.0016	0.0016
	June		0.031	0.0084	4.6	**0.14**	3.0	0.11	0.00052	888	10	**2910**	0.76	**0.039**	0.0016	0.0016
	July		0.034	0.0084	4.6	**0.14**	3.3	0.10	0.00052	888	10	**2910**	0.76	**0.042**	0.0016	0.0016
	August		0.034	0.0084	4.5	**0.16**	3.5	0.10	0.00053	885	9.6	**2900**	0.74	**0.042**	0.0016	0.0016
	September		0.036	0.0084	4.6	**0.15**	3.7	0.11	0.00053	886	10	**2905**	0.76	**0.045**	0.0016	0.0016
	October		0.021	0.0086	4.7	**0.14**	2.1	0.11	0.00054	887	10	**2906**	0.76	0.028	0.0017	0.0017
	November		0.012	0.0087	4.9	**0.12**	1.1	0.11	0.00053	889	11	**2912**	0.76	0.017	0.0017	0.0017
	December		0.0058	0.0092	5.6	**0.090**	0.29	0.11	0.00054	885	12	**2899**	0.82	0.011	0.0018	0.0017
	January	2044	0.0048	0.0096	5.9	**0.077**	0.17	0.12	0.00056	883	12	**2893**	0.85	0.0099	0.0018	0.0018
	February		0.0047	0.0096	5.9	**0.076**	0.15	0.12	0.00056	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	March		0.0072	0.0094	5.8	**0.079**	0.35	0.12	0.00055	884	12	**2896**	0.86	0.013	0.0018	0.0017
	April		0.024	0.0085	4.8	**0.12**	2.3	0.11	0.00052	889	10	**2912**	0.77	**0.031**	0.0016	0.0016
	May		0.018	0.0086	4.9	**0.11**	1.6	0.11	0.00052	887	11	**2907**	0.77	0.024	0.0017	0.0016
	June		0.017	0.0088	5.1	**0.11**	1.6	0.11	0.00053	887	11	**2906**	0.80	0.024	0.0017	0.0017
	July		0.033	0.0084	4.6	**0.14**	3.3	0.11	0.00052	888	10	**2911**	0.76	**0.041**	0.0016	0.0016
	August		0.015	0.0085	4.8	**0.12**	1.4	0.11	0.00052	888	11	**2909**	0.77	0.021	0.0016	0.0016
	September		0.016	0.0087	5.0	**0.11**	1.5	0.11	0.00052	887	11	**2908**	0.77	0.022	0.0017	0.0016
	October		0.011	0.0093	5.4	**0.098**	1.00	0.11	0.00055	885	11	**2899**	0.80	0.017	0.0018	0.0017
	November		0.0063	0.0094	5.7	**0.082**	0.40	0.12	0.00055	884	12	**2897**	0.84	0.012	0.0018	0.0017
	December		0.0053	0.0095	5.9	**0.077**	0.21	0.12	0.00055	884	12	**2895**	0.85	0.010	0.0018	0.0018
	January	2045	0.0047	0.0096	5.9	**0.076**	0.15	0.12	0.00056	884	12	**2895**	0.86	0.0099	0.0018	0.0018
	February		0.0048	0.0096	5.9	**0.076**	0.15	0.12	0.00056	883	12	**2892**	0.86	0.0099	0.0019	0.0018
	March		0.019	0.0092	5.6	**0.090**	1.3	0.11	0.00054	884	12	**2898**	0.85	0.025	0.0018	0.0017
	April		0.015	0.0086	4.8	**0.12**	1.6	0.11	0.00053	887	10	**2908**	0.77	0.021	0.0017	0.0016
	May		0.024	0.0085	4.7	**0.13**	2.2	0.11	0.00052	888	10	**2911**	0.77	**0.031**	0.0016	0.0016
	June		0.026	0.0085	4.7	**0.13**	2.5	0.11	0.00052	890	10	**2916**	0.76	**0.033**	0.0016	0.0016
	July		0.023	0.0085	4.6	**0.13**	2.3	0.11	0.00052	889	10	**2914**	0.75	0.030	0.0016	0.0016
	August		0.019	0.0087	4.9	**0.12**	1.9	0.11	0.00053	887	11	**2908**	0.78	0.026	0.0017	0.0017
	September		0.018	0.0087	4.9	**0.12**	1.7	0.11	0.00053	887	11	**2908**	0.79	0.025	0.0017	0.0017

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	October	2045	0.015	0.0089	5.2	**0.10**	1.3	0.11	0.00053	886	11	**2905**	0.80	0.021	0.0017	0.0017
	November		0.0083	0.0095	5.6	**0.089**	0.67	0.12	0.00055	885	12	**2899**	0.83	0.014	0.0018	0.0018
	December		0.0054	0.0095	5.9	**0.078**	0.24	0.12	0.00055	884	12	**2897**	0.85	0.011	0.0018	0.0018
	January	2046	0.0069	0.0095	5.7	**0.083**	0.43	0.12	0.00055	883	12	**2894**	0.84	0.012	0.0018	0.0018
	February		0.0047	0.0096	5.9	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0098	0.0018	0.0018
	March		0.016	0.0091	5.4	**0.099**	1.2	0.11	0.00054	886	12	**2903**	0.83	0.022	0.0017	0.0017
	April		0.013	0.0087	5.0	**0.11**	1.3	0.11	0.00052	887	11	**2906**	0.78	0.019	0.0017	0.0016
	May		0.021	0.0086	4.9	**0.11**	1.8	0.11	0.00052	888	11	**2911**	0.78	0.027	0.0017	0.0016
	June		0.027	0.0086	4.8	**0.13**	2.5	0.11	0.00052	888	11	**2909**	0.78	**0.035**	0.0016	0.0016
	July		0.030	0.0085	4.6	**0.14**	3.1	0.11	0.00052	889	10	**2914**	0.77	**0.037**	0.0016	0.0016
	August		0.033	0.0084	4.6	**0.15**	3.2	0.11	0.00052	888	10	**2909**	0.76	**0.040**	0.0016	0.0016
	September		0.027	0.0085	4.6	**0.14**	2.7	0.11	0.00053	888	10	**2908**	0.77	**0.034**	0.0016	0.0016
	October		0.020	0.0086	4.8	**0.12**	2.0	0.11	0.00052	888	10	**2911**	0.76	0.027	0.0016	0.0016
	November		0.0079	0.0091	5.2	**0.11**	0.69	0.11	0.00055	887	11	**2905**	0.78	0.013	0.0017	0.0017
	December		0.0050	0.0095	5.8	**0.079**	0.20	0.12	0.00055	883	12	**2894**	0.85	0.010	0.0018	0.0018
	January	2047	0.0048	0.0096	5.9	**0.076**	0.15	0.12	0.00056	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	February		0.0047	0.0096	5.9	**0.076**	0.15	0.12	0.00055	883	12	**2894**	0.86	0.0098	0.0018	0.0018
	March		0.0073	0.0094	5.7	**0.083**	0.45	0.12	0.00055	883	12	**2893**	0.84	0.013	0.0018	0.0017
	April		0.028	0.0088	5.1	**0.11**	2.4	0.11	0.00053	887	11	**2907**	0.80	**0.035**	0.0017	0.0017
	May		0.022	0.0085	4.7	**0.13**	2.2	0.11	0.00052	889	10	**2913**	0.75	0.029	0.0016	0.0016
	June		0.016	0.0087	4.9	**0.12**	1.5	0.11	0.00053	887	11	**2906**	0.77	0.022	0.0017	0.0017
	July		0.038	0.0084	4.6	**0.15**	3.8	0.11	0.00052	889	10	**2912**	0.78	**0.046**	0.0016	0.0016
	August		0.032	0.0084	4.5	**0.15**	3.3	0.10	0.00053	887	9.9	**2905**	0.75	**0.040**	0.0016	0.0016
	September		0.021	0.0085	4.7	**0.13**	2.1	0.11	0.00052	889	10	**2912**	0.77	0.028	0.0016	0.0016
	October		0.013	0.0086	4.9	**0.12**	1.1	0.11	0.00053	889	11	**2913**	0.76	0.018	0.0017	0.0016
	November		0.0080	0.0093	5.5	**0.090**	0.59	0.12	0.00055	885	12	**2900**	0.82	0.013	0.0018	0.0017
	December		0.0048	0.0096	5.9	**0.078**	0.22	0.12	0.00056	883	12	**2893**	0.85	0.0100	0.0018	0.0018
	January	2048	0.0057	0.0096	5.9	**0.078**	0.25	0.12	0.00056	883	12	**2895**	0.86	0.011	0.0018	0.0018
	February		0.0051	0.0096	5.9	**0.077**	0.19	0.12	0.00055	883	12	**2894**	0.85	0.010	0.0018	0.0018
	March		0.0048	0.0096	5.9	**0.076**	0.16	0.12	0.00056	883	12	**2893**	0.86	0.0099	0.0018	0.0018
	April		0.017	0.0090	5.4	**0.10**	1.4	0.11	0.00054	887	12	**2907**	0.82	0.024	0.0017	0.0017
	May		0.0093	0.0090	5.2	**0.098**	0.82	0.11	0.00054	886	11	**2903**	0.79	0.015	0.0017	0.0017
	June		0.016	0.0089	5.1	**0.11**	1.4	0.11	0.00053	886	11	**2902**	0.80	0.022	0.0017	0.0017
	July		0.058	0.0085	4.6	**0.15**	5.5	0.11	0.00052	887	10	**2907**	0.77	**0.069**	0.0016	0.0016
	August		0.029	0.0084	4.4	**0.15**	3.1	0.10	0.00053	885	9.3	**2900**	0.71	**0.036**	0.0016	0.0016
	September		0.026	0.0084	4.4	**0.15**	2.6	0.10	0.00053	885	9.5	**2899**	0.72	**0.033**	0.0016	0.0016
	October		0.012	0.0085	4.7	**0.13**	1.2	0.11	0.00053	890	11	**2918**	0.77	0.018	0.0016	0.0016
	November		0.0047	0.0091	5.3	**0.100**	0.19	0.11	0.00055	886	11	**2903**	0.81	0.0097	0.0018	0.0017
	December		0.0072	0.0094	5.7	**0.084**	0.44	0.12	0.00055	883	12	**2894**	0.84	0.012	0.0018	0.0017
	January	2049	0.012	0.0091	5.4	**0.095**	0.96	0.11	0.00054	886	12	**2902**	0.82	0.018	0.0017	0.0017
	February		0.0048	0.0096	5.9	**0.078**	0.20	0.12	0.00056	883	12	**2895**	0.85	0.0099	0.0018	0.0018
	March		0.018	0.0093	5.7	**0.091**	1.3	0.12	0.00055	885	12	**2900**	0.85	0.025	0.0018	0.0017
	April		0.010	0.0087	5.0	**0.11**	1.00	0.11	0.00053	888	11	**2910**	0.78	0.016	0.0017	0.0017
	May		0.021	0.0087	4.9	**0.11**	1.9	0.11	0.00052	888	11	**2908**	0.78	0.028	0.0017	0.0016
	June		0.026	0.0085	4.7	**0.13**	2.5	0.11	0.00052	889	10	**2914**	0.76	**0.033**	0.0016	0.0016
	July		0.039	0.0084	4.5	**0.15**	3.9	0.11	0.00053	889	10	**2913**	0.76	**0.048**	0.0016	0.0016
	August		0.030	0.0084	4.5	**0.15**	3.0	0.11	0.00053	889	10	**2912**	0.76	**0.038**	0.0016	0.0016
	September		0.033	0.0084	4.6	**0.15**	3.3	0.11	0.00053	888	10	**2909**	0.76	**0.041**	0.0016	0.0016
	October		0.024	0.0085	4.6	**0.14**	2.3	0.11	0.00053	888	11	**2910**	0.78	**0.031**	0.0016	0.0016
	November		0.0089	0.0086	4.8	**0.11**	0.91	0.11	0.00053	889	11	**2914**	0.77	0.014	0.0016	0.0016
	December		0.0048	0.0095	5.7	**0.084**	0.18	0.12	0.00056	883	12	**2893**	0.84	0.0098	0.0018	0.0018
	January	2050	0.0049	0.0096	5.7	**0.076**	0.15	0.12	0.00056	883	12	**2894**	0.86	0.0099	0.0018	0.0018
	February		0.0049	0.0096	5.7	**0.076**	0.15	0.12	0.00056	883	12	**2892**	0.86	0.0099	0.0019	0.0018
	March		0.0071	0.0096	5.6	**0.082**	0.39	0.12	0.00056	883	12	**2895**	0.85	0.012	0.0018	0.0018
	April		0.030	0.0085	4.6	**0.13**	2.9	0.11	0.00052	888	11	**2909**	0.80	**0.038**	0.0016	0.0016
	May		0.014	0.0086	4.6	**0.11**	1.2	0.11	0.00053	888	11	**2908**	0.77	0.019	0.0017	0.0016
	June		0.025	0.0086	4.6	**0.13**	2.4	0.11	0.00052	888	11	**2911**	0.78	**0.032**	0.0016	0.0016
	July		0.015	0.0090	5.1	**0.10**	1.2	0.11	0.00054	887	12	**2907**	0.82	0.021	0.0017	0.0017
	August		0.015	0.0088	4.8	**0.11**	1.5	0.11	0.00053	887	11	**2906**	0.79	0.021	0.0017	0.0017
	September		0.026	0.0087	4.7	**0.13**	2.4	0.11	0.00053	888	11	**2910**	0.79	**0.033**	0.0017	0.0017
	October		0.011	0.0092	5.0	**0.11**	1.1	0.11	0.00055	886	11	**2904**	0.79	0.017	0.0018	0.0017
	November		0.0097	0.0092	5.3	**0.091**	0.75	0.11	0.00054	885	12	**2899**	0.82	0.015	0.0018	0.0017
	December		0.0050	0.0096	5.6	**0.078**	0.22	0.12	0.00056	883	12	**2893**	0.85	0.0100	0.0018	0.0018

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.0049	0.0096	5.7	**0.076**	0.15	0.12	0.00056	883	12	**2893**	0.86	0.0099	0.0019	0.0018
	February		0.0049	0.0096	5.7	**0.076**	0.15	0.12	0.00056	883	12	**2893**	0.85	0.0099	0.0019	0.0018
	March		0.0088	0.0094	5.4	**0.086**	0.58	0.12	0.00055	886	12	**2902**	0.84	0.014	0.0018	0.0017
	April		0.057	0.0085	4.5	**0.14**	5.5	0.11	0.00053	884	10	**2898**	0.76	**0.067**	0.0016	0.0016
	May		0.017	0.0084	4.3	**0.15**	1.6	0.10	0.00053	887	9.9	**2906**	0.75	0.023	0.0016	0.0016
	June		0.021	0.0084	4.5	**0.13**	2.0	0.11	0.00052	888	11	**2910**	0.78	0.027	0.0016	0.0016
	July		0.032	0.0084	4.4	**0.14**	3.1	0.11	0.00052	889	10	**2913**	0.75	**0.040**	0.0016	0.0016
	August		0.033	0.0084	4.3	**0.16**	3.4	0.10	0.00053	887	9.7	**2905**	0.74	**0.041**	0.0016	0.0016
	September		0.021	0.0085	4.4	**0.13**	2.0	0.10	0.00052	889	10	**2914**	0.76	0.027	0.0016	0.0016
	October		0.019	0.0088	4.7	**0.12**	1.8	0.11	0.00054	888	11	**2909**	0.78	0.025	0.0017	0.0017
	November		0.011	0.0089	4.9	**0.11**	0.91	0.11	0.00054	887	11	**2907**	0.78	0.017	0.0017	0.0017
	December		0.0066	0.0095	5.5	**0.084**	0.46	0.12	0.00055	884	12	**2897**	0.83	0.012	0.0018	0.0018
	January	2052	0.0029	0.0049	6.4	**0.076**	0.16	0.070	0.00029	888	11	**2908**	0.78	0.0071	0.00095	0.00096
	February		0.0027	0.0043	6.6	**0.076**	0.13	0.064	0.00026	888	11	**2911**	0.76	0.0068	0.00083	0.00086
	March		0.0031	0.0042	6.5	**0.076**	0.17	0.063	0.00025	888	11	**2909**	0.76	0.0072	0.00081	0.00084
	April		0.023	0.0030	4.5	**0.12**	2.2	0.049	0.00020	885	8.9	**2900**	0.66	0.029	0.00057	0.00066
	May		0.020	0.0030	4.3	**0.12**	2.0	0.048	0.00020	885	8.8	**2900**	0.65	0.026	0.00057	0.00067
	June		0.014	0.0030	4.4	**0.12**	1.5	0.049	0.00021	886	9.6	**2903**	0.70	0.020	0.00057	0.00068
	July		0.031	0.0030	4.2	**0.13**	3.1	0.048	0.00021	885	8.1	**2901**	0.61	**0.038**	0.00057	0.00067
	August		0.018	0.0030	4.2	**0.12**	1.9	0.048	0.00020	885	8.3	**2901**	0.62	0.024	0.00057	0.00067
	September		0.011	0.0030	4.4	**0.12**	1.2	0.049	0.00021	884	9.7	**2896**	0.70	0.016	0.00057	0.00068
	October		0.011	0.0033	5.0	**0.11**	1.1	0.054	0.00022	887	11	**2906**	0.76	0.016	0.00064	0.00072
	November		0.0035	0.0043	6.4	**0.080**	0.29	0.063	0.00025	888	11	**2910**	0.75	0.0076	0.00082	0.00085
	December		0.0028	0.0043	6.6	**0.076**	0.15	0.063	0.00025	888	11	**2909**	0.76	0.0069	0.00082	0.00085
		MINIMUM	0.0027	0.0030	4.2	**0.074**	0.13	0.048	0.00020	827	8.1	**2711**	0.61	0.0068	0.00057	0.00066
		MAXIMUM	0.058	0.0099	9.5	**0.16**	5.7	0.12	0.00057	891	19	**2919**	1.3	**0.069**	0.0019	0.0018
		AVERAGE	0.016	0.0086	5.3	**0.11**	1.5	0.11	0.00052	886	11	**2903**	0.82	0.023	0.0017	0.0016
Decommissioning	January	2053	0.00074	0.00037	8.3	**0.071**	0.19	0.032	0.000027	447	16	634	1.1	0.0067	0.000070	0.00022
	February		0.00043	0.0000046	8.4	**0.069**	0.19	0.029	0.0000047	333	17	40	1.2	0.0066	0.00000011	0.00016
	March		0.011	0.000011	8.2	**0.076**	1.0	0.029	0.0000093	316	17	20	1.2	0.018	0.00000038	0.00017
	April		0.027	0.000054	7.0	**0.13**	3.1	0.023	0.000038	211	11	89	0.83	**0.035**	0.0000009	0.00019
	May		0.015	0.000056	7.0	**0.12**	1.9	0.024	0.000038	230	12	89	0.89	0.022	0.00000057	0.00020
	June		0.011	0.000042	7.4	**0.11**	1.3	0.027	0.000029	277	15	72	1.0	0.018	0.00000043	0.00020
	July		0.020	0.000049	7.0	**0.13**	2.4	0.026	0.000034	252	13	84	0.96	0.027	0.00000069	0.00020
	August		0.032	0.000046	6.9	**0.13**	3.4	0.026	0.000033	251	13	83	0.96	**0.041**	0.0000010	0.00019
	September		0.026	0.000062	6.2	**0.15**	3.1	0.022	0.000043	191	10	103	0.77	**0.034**	0.0000009	0.00020
	October		0.014	0.000061	6.4	**0.13**	1.8	0.024	0.000040	225	12	96	0.87	0.020	0.00000055	0.00020
	November		0.0066	0.000046	6.6	**0.11**	1.1	0.027	0.000031	270	14	77	1.0	0.013	0.00000033	0.00020
	December		0.00043	0.0000048	7.0	**0.074**	0.24	0.029	0.0000048	322	17	16	1.2	0.0066	0.0000001	0.00016
	January	2054	0.00036	0.0000043	6.9	**0.069**	0.19	0.029	0.0000039	327	17	7.0	1.2	0.0066	8.9E-08	0.00016
	February		0.00034	0.0000042	6.7	**0.069**	0.19	0.029	0.0000036	327	17	5.9	1.2	0.0066	8.6E-08	0.00016
	March		0.0029	0.000011	6.5	**0.076**	0.46	0.029	0.0000079	316	17	16	1.2	0.0093	0.00000016	0.00017
	April		0.026	0.000033	6.0	**0.11**	2.7	0.026	0.000024	260	14	53	0.98	**0.034**	0.0000008	0.00018
	May		0.018	0.000055	5.4	**0.13**	2.2	0.023	0.000037	215	11	89	0.84	0.025	0.00000065	0.00020
	June		0.013	0.000051	5.7	**0.12**	1.6	0.026	0.000034	260	14	83	0.99	0.020	0.00000048	0.00020
	July		0.019	0.000047	5.5	**0.12**	2.3	0.025	0.000032	249	13	80	0.95	0.027	0.00000065	0.00019
	August		0.037	0.000060	5.0	**0.14**	4.0	0.023	0.000042	204	11	102	0.81	**0.046**	0.0000012	0.00020
	September		0.016	0.000058	5.0	**0.13**	2.0	0.024	0.000039	223	12	92	0.86	0.023	0.00000059	0.00020
	October		0.013	0.000056	5.1	**0.12**	1.7	0.026	0.000037	250	13	89	0.96	0.020	0.0000005	0.00021
	November		0.0091	0.000026	5.2	**0.10**	1.3	0.028	0.000018	284	15	52	1.1	0.016	0.00000035	0.00018
	December		0.00035	0.0000042	5.3	**0.072**	0.29	0.029	0.0000037	323	17	10	1.2	0.0066	8.7E-08	0.00016
	January	2055	0.00031	0.0000048	5.2	**0.070**	0.20	0.029	0.0000036	326	17	6.6	1.2	0.0066	7.7E-08	0.00016
	February		0.00027	0.0000044	5.1	**0.070**	0.19	0.029	0.0000032	326	17	6.1	1.2	0.0066	7.2E-08	0.00016
	March		0.00026	0.0000040	4.9	**0.069**	0.19	0.029	0.0000030	327	17	5.4	1.2	0.0066	7.1E-08	0.00016
	April		0.0024	0.000051	4.5	**0.094**	0.44	0.026	0.000032	280	15	60	1.0	0.0090	0.00000018	0.00020
	May		0.00090	0.000061	4.4	**0.11**	0.29	0.027	0.000038	277	15	87	1.0	0.0071	0.00000017	0.00022
	June		0.0018	0.000062	4.2	**0.11**	0.35	0.026	0.000039	274	14	87	1.0	0.0082	0.00000019	0.00021
	July		0.0016	0.000079	3.9	**0.11**	0.37	0.024	0.000049	243	13	104	0.92	0.0076	0.00000021	0.00022
	August		0.00090	0.000081	3.8	**0.12**	0.26	0.025	0.000050	256	14	112	0.97	0.0069	0.0000002	0.00023
	September		0.00066	0.000068	3.8	**0.12**	0.24	0.027	0.000042	278	15	99	1.0	0.0068	0.00000017	0.00022
	October		0.00061	0.000063	3.7	**0.11**	0.23	0.026	0.000039	277	15	89	1.0	0.0067	0.00000016	0.00022
	November		0.00037	0.000024	3.7	**0.089**	0.20	0.028	0.000015	301	16	44	1.1	0.0066	9.8E-08	0.00018
	December		0.00026	0.0000041	3.7	**0.071**	0.19	0.029	0.0000031	324	17	8.3	1.2	0.0066	7.1E-08	0.00016

Table G-8: Scenario 11: Reasonable Upper Bound - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.00021	0.0000038	3.6	**0.069**	0.19	0.029	0.0000025	327	17	4.6	1.2	0.0066	6.1E-08	0.00016
	February		0.00019	0.0000037	3.4	**0.069**	0.19	0.029	0.0000024	326	17	4.0	1.2	0.0066	5.8E-08	0.00016
	March		0.00062	0.000044	3.1	**0.093**	0.24	0.027	0.000027	293	15	52	1.1	0.0068	0.00000013	0.00020
	April		0.00044	0.000035	3.0	**0.094**	0.22	0.028	0.000022	294	16	54	1.1	0.0067	0.00000011	0.00019
	May		0.00044	0.000031	2.9	**0.088**	0.22	0.028	0.000019	303	16	42	1.1	0.0067	0.00000011	0.00019
	June		0.00043	0.000035	2.7	**0.094**	0.22	0.028	0.000022	299	16	53	1.1	0.0067	0.00000011	0.00019
	July		0.00067	0.000061	2.5	**0.11**	0.24	0.026	0.000038	278	15	80	1.0	0.0068	0.00000016	0.00021
	August		0.00076	0.000064	2.4	**0.11**	0.24	0.026	0.000039	271	14	89	1.0	0.0069	0.00000016	0.00021
	September		0.00059	0.000082	2.2	**0.12**	0.23	0.025	0.000051	259	14	110	0.98	0.0066	0.00000018	0.00023
	October		0.00029	0.000065	2.1	**0.12**	0.20	0.027	0.000040	281	15	95	1.1	0.0064	0.00000015	0.00022
	November		0.00019	0.000017	2.1	**0.087**	0.19	0.029	0.000011	310	16	37	1.1	0.0065	7.7E-08	0.00017
	December		0.00019	0.0000037	2.0	**0.070**	0.19	0.029	0.0000024	326	17	5.7	1.2	0.0066	5.9E-08	0.00016
	January	2057	0.000094	0.0000032	1.9	**0.069**	0.19	0.029	0.0000013	326	17	2.6	1.2	0.0066	3.9E-08	0.00016
	February		0.000068	0.0000031	1.8	**0.069**	0.19	0.029	0.00000095	326	17	1.7	1.2	0.0066	3.2E-08	0.00016
	March		0.000068	0.0000031	1.6	**0.069**	0.19	0.029	0.00000095	326	17	1.7	1.2	0.0066	3.1E-08	0.00016
	April		0.00046	0.000052	1.4	**0.099**	0.23	0.027	0.000031	294	16	61	1.1	0.0068	0.00000011	0.00021
	May		0.000097	0.000038	1.3	**0.10**	0.19	0.028	0.000023	297	16	60	1.1	0.0064	9.0E-08	0.00019
	June		0.00015	0.000022	1.2	**0.083**	0.20	0.029	0.000013	317	17	27	1.2	0.0066	6.5E-08	0.00018
	July		0.00044	0.000064	0.98	**0.11**	0.23	0.027	0.000038	286	15	84	1.1	0.0068	0.00000014	0.00022
	August		0.00027	0.000069	0.84	**0.12**	0.21	0.027	0.000042	283	15	94	1.1	0.0066	0.00000014	0.00023
	September		0.00017	0.000066	0.71	**0.12**	0.20	0.027	0.000040	286	15	94	1.1	0.0065	0.00000013	0.00022
	October		0.00010	0.000028	0.61	**0.094**	0.19	0.028	0.000016	306	16	48	1.1	0.0065	7.1E-08	0.00018
	November		0.000086	0.000011	0.49	**0.078**	0.19	0.029	0.0000058	319	17	18	1.2	0.0066	4.6E-08	0.00017
	December		0.000069	0.0000036	0.36	**0.070**	0.19	0.029	0.0000013	326	17	3.4	1.2	0.0066	3.2E-08	0.00016
		MINIMUM	0.000068	0.0000031	0.36	**0.069**	0.19	0.022	0.00000095	191	10	1.7	0.77	0.0064	3.1E-08	0.00016
		MAXIMUM	0.037	0.00037	8.4	**0.15**	4.0	0.032	0.000051	447	17	634	1.2	**0.046**	0.000070	0.00023
		AVERAGE	0.0056	0.000042	4.2	**0.098**	0.78	0.027	0.000024	289	15	65	1.1	0.012	0.0000014	0.00019

Notes:
Bold values represent values greater than the proposed environmental release target
Non-applicable values represent periods of time when there is no discharge

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2026	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2027	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2028	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Operations	January	2029	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2031	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2032	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2033	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2034	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2035	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**April**	**2035**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2036**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2037**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2038**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2039**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2040**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2041	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2042	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2043	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2044	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2045	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2046	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2047	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2048	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2049	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2050	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2052**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Decommissioning	**January**	**2053**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2054**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2055**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2057**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Reclamation	**January**	**2058**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0067	0.025	0.000076	0.0000064	0.12	0.19	0.000033	0.00013	0.000026	0.0048	0.0000066	0.0013	0.035	0.012	0.00000058
	April		0.021	0.079	0.00023	0.000020	0.52	0.62	0.00012	0.00039	0.00010	0.034	0.000024	0.0056	0.16	0.037	0.0000019
	May		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00014	0.025	0.000034	0.0071	0.18	0.061	0.0000030
	June		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.033	0.000046	0.0094	0.24	0.081	0.0000040
	July		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	August		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	September		0.030	0.11	0.00034	0.000028	0.51	0.85	0.00014	0.00056	0.00012	0.021	0.000029	0.0059	0.15	0.051	0.0000025
	October		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.050	0.0000085	0.000033	0.0000068	0.0012	0.0000017	0.00035	0.0090	0.0030	0.00000015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2059**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000034	0.00013	0.000027	0.0049	0.0000068	0.0014	0.036	0.012	0.0000006
	May		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.028	0.000038	0.0079	0.20	0.068	0.0000034
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.031	0.000042	0.0087	0.22	0.075	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	September		0.037	0.14	0.00041	0.000035	0.63	1.0	0.00018	0.00069	0.00014	0.026	0.000036	0.0073	0.19	0.063	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2060**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
	April		0.021	0.079	0.00024	0.000020	0.36	0.60	0.00010	0.00039	0.000082	0.015	0.000020	0.0042	0.11	0.036	0.0000018
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.031	0.000042	0.0087	0.22	0.075	0.0000037
	July		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00016	0.028	0.000038	0.0079	0.20	0.068	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	October		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000014	0.0025	0.0000034	0.00070	0.018	0.0060	0.0000003
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000057	0.00022	0.000046	0.0084	0.000011	0.0024	0.061	0.020	0.0000010
	April		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	May		0.023	0.087	0.00026	0.000022	0.40	0.66	0.00011	0.00043	0.000090	0.016	0.000022	0.0046	0.12	0.039	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.90	1.5	0.00025	0.00099	0.00020	0.037	0.000051	0.010	0.27	0.089	0.0000045
	August		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00014	0.025	0.000034	0.0071	0.18	0.061	0.0000030
	November		0.0052	0.020	0.000059	0.0000049	0.090	0.15	0.000025	0.000099	0.000020	0.0037	0.0000051	0.0010	0.027	0.0089	0.00000045
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0084	0.032	0.000096	0.0000080	0.15	0.24	0.000041	0.00016	0.000033	0.0060	0.0000082	0.0017	0.043	0.014	0.00000072
	April		0.0087	0.033	0.000099	0.0000082	0.15	0.25	0.000042	0.00016	0.000034	0.0062	0.0000085	0.0017	0.045	0.015	0.00000075
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.78	1.3	0.00022	0.00085	0.00018	0.032	0.000044	0.0090	0.23	0.078	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	October		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	November		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.011	0.000015	0.0031	0.081	0.027	0.0000013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	February		0.0037	0.014	0.000042	0.0000035	0.064	0.11	0.000018	0.000070	0.000015	0.0026	0.0000036	0.00075	0.019	0.0064	0.00000032
	March		0.0084	0.032	0.000096	0.0000080	0.15	0.24	0.000041	0.00016	0.000033	0.0060	0.0000082	0.0017	0.043	0.014	0.00000072
	April		0.016	0.060	0.00018	0.000015	0.27	0.45	0.000077	0.00030	0.000062	0.011	0.000015	0.0032	0.082	0.027	0.0000014
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	July		0.046	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00018	0.032	0.000044	0.0091	0.23	0.078	0.0000039
	August		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00074	0.00015	0.028	0.000038	0.0078	0.20	0.067	0.0000034
	September		0.037	0.14	0.00041	0.000035	0.63	1.0	0.00018	0.00069	0.00014	0.026	0.000036	0.0073	0.19	0.063	0.0000031
	October		0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	April		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.011	0.000015	0.0031	0.081	0.027	0.0000013
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000082	0.00032	0.000066	0.012	0.000016	0.0034	0.087	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.75	0.00013	0.00049	0.00010	0.019	0.000025	0.0052	0.13	0.045	0.0000022
	July		0.021	0.080	0.00024	0.000020	0.37	0.61	0.00010	0.00040	0.000083	0.015	0.000021	0.0042	0.11	0.036	0.0000018
	August		0.040	0.15	0.00046	0.000038	0.70	1.2	0.00020	0.00076	0.00016	0.029	0.000039	0.0081	0.21	0.069	0.0000035
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00019	0.00072	0.00015	0.027	0.000037	0.0077	0.20	0.066	0.0000033
	October		0.015	0.057	0.00017	0.000014	0.26	0.43	0.000074	0.00029	0.000059	0.011	0.000015	0.0030	0.078	0.026	0.0000013
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000095	0.17	0.29	0.000049	0.00019	0.000039	0.0071	0.0000097	0.0020	0.052	0.017	0.00000086
	April		0.030	0.11	0.00034	0.000028	0.51	0.85	0.00014	0.00056	0.00012	0.021	0.000029	0.0059	0.15	0.051	0.0000025
	May		0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	June		0.045	0.17	0.00051	0.000043	0.78	1.3	0.00022	0.00085	0.00018	0.032	0.000044	0.0090	0.23	0.078	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00025	0.00095	0.00020	0.036	0.000049	0.010	0.26	0.087	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00019	0.00072	0.00015	0.027	0.000037	0.0077	0.20	0.066	0.0000033
	October		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	November		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	February		0.015	0.056	0.00017	0.000014	0.26	0.43	0.000073	0.00028	0.000059	0.011	0.000015	0.0030	0.077	0.026	0.0000013
	March		0.022	0.083	0.00025	0.000021	0.38	0.63	0.00011	0.00041	0.000086	0.016	0.000021	0.0044	0.11	0.038	0.0000019

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.87	0.00015	0.00057	0.00012	0.021	0.000030	0.0061	0.16	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.60	0.00010	0.00039	0.000082	0.015	0.000020	0.0042	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	August	**2066**	0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.70	0.00012	0.00046	0.000096	0.017	0.000024	0.0049	0.13	0.042	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000057	0.00022	0.000046	0.0084	0.000011	0.0024	0.061	0.020	0.0000010
	November		0.0052	0.020	0.000059	0.0000049	0.090	0.15	0.000025	0.000099	0.000020	0.0037	0.0000051	0.0010	0.027	0.0089	0.00000045
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
Reclamation	**January**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	April		0.028	0.11	0.00032	0.000026	0.48	0.80	0.00014	0.00053	0.00011	0.020	0.000027	0.0056	0.14	0.048	0.0000024
	May		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	June		0.033	0.13	0.00038	0.000031	0.57	0.94	0.00016	0.00062	0.00013	0.023	0.000032	0.0066	0.17	0.057	0.0000028
	July	**2067**	0.046	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00018	0.032	0.000044	0.0091	0.23	0.078	0.0000039
	August		0.047	0.18	0.00054	0.000045	0.81	1.3	0.00023	0.00089	0.00019	0.033	0.000046	0.0094	0.24	0.081	0.0000041
	September		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.033	0.000046	0.0094	0.24	0.081	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	November		0.0048	0.018	0.000054	0.0000045	0.083	0.14	0.000023	0.000090	0.000019	0.0034	0.0000047	0.00096	0.025	0.0082	0.00000041
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
		MAXIMUM	0.052	0.20	0.00059	0.000049	0.90	1.5	0.00025	0.00099	0.00020	0.037	0.000051	0.010	0.27	0.089	0.0000045
		AVERAGE	0.027	0.10	0.00031	0.000026	0.48	0.78	0.00013	0.00052	0.00011	0.020	0.000027	0.0055	0.14	0.047	0.0000024
Post-Closure	**January**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	April		0.023	0.086	0.00026	0.000021	0.39	0.65	0.00011	0.00043	0.000089	0.016	0.000022	0.0045	0.12	0.039	0.0000019
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00063	0.00013	0.024	0.000033	0.0067	0.17	0.057	0.0000029
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	July	**≥2070**	0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	August		0.040	0.15	0.00046	0.000038	0.70	1.2	0.00020	0.00076	0.00016	0.029	0.000039	0.0081	0.21	0.069	0.0000035
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	October		0.032	0.12	0.00036	0.000030	0.55	0.91	0.00016	0.00060	0.00013	0.023	0.000031	0.0064	0.16	0.055	0.0000028
	November		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000034	0.00013	0.000027	0.0049	0.0000068	0.0014	0.036	0.012	0.0000006
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
		MAXIMUM	0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
		AVERAGE	0.029	0.11	0.00033	0.000027	0.50	0.83	0.00014	0.00055	0.00011	0.021	0.000028	0.0058	0.15	0.050	0.0000025

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2026	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2027	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2028	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Operations	January	2029	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**January**	**2030**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2031**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2032**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2033**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2034**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2035**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**April**	**2035**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2036**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2037**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2038**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2039**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2040**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2041	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2042	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2043	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2044	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2045	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2046	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2047	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2048	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2049	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2050	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**January**	**2051**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2052**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Decommissioning	**January**	**2053**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2054**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2055**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2057	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000013	0.00017	0.0068	0.00031	0.00036	0.00034	0.0000066	0.060	0.0013	0.25	0.00066	0.0000066	0.000026	0.00045
	April		0.000043	0.00052	0.042	0.0031	0.0019	0.0014	0.000024	0.25	0.0054	0.83	0.0024	0.000024	0.00010	0.0015
	May		0.000068	0.00087	0.036	0.0016	0.0019	0.0018	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00014	0.0024
	June		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0093	1.8	0.0046	0.000046	0.00018	0.0031
	July		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	August		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	September		0.000057	0.00073	0.030	0.0014	0.0016	0.0015	0.000029	0.26	0.0059	1.1	0.0029	0.000029	0.00012	0.0020
	October		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	November		0.0000033	0.000043	0.0018	0.000081	0.000092	0.000087	0.0000017	0.016	0.00035	0.065	0.00017	0.0000017	0.0000068	0.00012
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000013	0.00017	0.0070	0.00032	0.00037	0.00035	0.0000068	0.062	0.0014	0.26	0.00068	0.0000068	0.000027	0.00047
	May		0.000076	0.00097	0.040	0.0018	0.0021	0.0020	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	June		0.000083	0.0011	0.044	0.0020	0.0023	0.0022	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	August		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	September		0.000070	0.00090	0.037	0.0017	0.0019	0.0018	0.000036	0.33	0.0073	1.4	0.0036	0.000036	0.00014	0.0024
	October		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	April		0.000040	0.00051	0.021	0.00097	0.0011	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000082	0.0014
	May		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	June		0.000083	0.0011	0.044	0.0020	0.0023	0.0022	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000076	0.00098	0.040	0.0018	0.0021	0.0020	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00016	0.0026
	August		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	September		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	October		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	November		0.0000067	0.000086	0.0035	0.00016	0.00018	0.00017	0.0000034	0.031	0.00069	0.13	0.00034	0.0000034	0.000014	0.00023
	December		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000023	0.00029	0.012	0.00055	0.00063	0.00059	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000046	0.00079
	April		0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000044	0.00057	0.023	0.0011	0.0012	0.0012	0.000022	0.21	0.0046	0.86	0.0022	0.000022	0.000090	0.0015
	June		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	July		0.00010	0.0013	0.053	0.0024	0.0028	0.0026	0.000051	0.47	0.010	1.9	0.0051	0.000051	0.00020	0.0035
	August		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	September		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	October		0.000068	0.00087	0.036	0.0016	0.0019	0.0018	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00014	0.0024
	November		0.0000100	0.00013	0.0053	0.00024	0.00028	0.00026	0.0000051	0.047	0.0010	0.19	0.00051	0.0000051	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000016	0.00021	0.0085	0.00039	0.00045	0.00042	0.0000082	0.075	0.0017	0.31	0.00082	0.0000082	0.000033	0.00056
	April		0.000017	0.00021	0.0088	0.00040	0.00046	0.00044	0.0000085	0.078	0.0017	0.32	0.00085	0.0000085	0.000034	0.00058
	May		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	June		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.40	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	July		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	August		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	September		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	October		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	November		0.000030	0.00039	0.016	0.00073	0.00083	0.00079	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000061	0.0010
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	February		0.0000071	0.000092	0.0038	0.00017	0.00020	0.00019	0.0000036	0.033	0.00074	0.14	0.00036	0.0000036	0.000015	0.00025
	March		0.000016	0.00021	0.0085	0.00039	0.00045	0.00042	0.0000082	0.075	0.0017	0.31	0.00082	0.0000082	0.000033	0.00056
	April		0.000030	0.00039	0.016	0.00074	0.00084	0.00080	0.000015	0.14	0.0032	0.59	0.0015	0.000015	0.000062	0.0011
	May		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	June		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	July		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	August		0.000075	0.00096	0.039	0.0018	0.0021	0.0020	0.000038	0.35	0.0077	1.5	0.0038	0.000038	0.00015	0.0026
	September		0.000070	0.00090	0.037	0.0017	0.0019	0.0018	0.000036	0.33	0.0073	1.4	0.0036	0.000036	0.00014	0.0024
	October		0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	April		0.000030	0.00039	0.016	0.00073	0.00083	0.00079	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000061	0.0010
	May		0.000032	0.00042	0.017	0.00078	0.00089	0.00085	0.000016	0.15	0.0033	0.63	0.0016	0.000016	0.000066	0.0011
	June		0.000050	0.00064	0.026	0.0012	0.0014	0.0013	0.000025	0.23	0.0052	0.97	0.0025	0.000025	0.00010	0.0017
	July		0.000041	0.00052	0.021	0.00098	0.0011	0.0011	0.000021	0.19	0.0042	0.79	0.0021	0.000021	0.000083	0.0014
	August		0.000077	0.00100	0.041	0.0019	0.0021	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00016	0.0027
	September		0.000073	0.00094	0.039	0.0018	0.0020	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0026
	October		0.000029	0.00037	0.015	0.00070	0.00080	0.00076	0.000015	0.14	0.0030	0.56	0.0015	0.000015	0.000059	0.0010
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.010	0.00046	0.00053	0.00050	0.0000097	0.090	0.0020	0.37	0.00097	0.0000097	0.000039	0.00067
	April		0.000057	0.00073	0.030	0.0014	0.0016	0.0015	0.000029	0.26	0.0059	1.1	0.0029	0.000029	0.00012	0.0020
	May		0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	June		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.40	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	July		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	August		0.000097	0.0012	0.051	0.0023	0.0027	0.0025	0.000049	0.45	0.010	1.9	0.0049	0.000049	0.00020	0.0034
	September		0.000073	0.00094	0.039	0.0018	0.0020	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0026
	October		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	November		0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	January	2066	0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	February		0.000029	0.00037	0.015	0.00069	0.00079	0.00075	0.000015	0.13	0.0030	0.56	0.0015	0.000015	0.000059	0.00100
	March		0.000042	0.00054	0.022	0.0010	0.0012	0.0011	0.000021	0.20	0.0043	0.82	0.0021	0.000021	0.000086	0.0015

Table G-9: Scenario 11: Reasonable Upper Bound - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000058	0.00075	0.031	0.0014	0.0016	0.0015	0.000030	0.27	0.0060	1.1	0.0030	0.000030	0.00012	0.0020
	June		0.000040	0.00051	0.021	0.00097	0.0011	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000082	0.0014
	July		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	August	**2066**	0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	September		0.000047	0.00060	0.025	0.0011	0.0013	0.0012	0.000024	0.22	0.0048	0.91	0.0024	0.000024	0.000096	0.0016
	October		0.000023	0.00029	0.012	0.00055	0.00063	0.00059	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000046	0.00079
	November		0.0000100	0.00013	0.0053	0.00024	0.00028	0.00026	0.0000051	0.047	0.0010	0.19	0.00051	0.0000051	0.000020	0.00035
	December		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reclamation	**February**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	April		0.000053	0.00069	0.028	0.0013	0.0015	0.0014	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0019
	May		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	June		0.000063	0.00082	0.033	0.0015	0.0018	0.0017	0.000032	0.30	0.0066	1.2	0.0032	0.000032	0.00013	0.0022
	July	**2067**	0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	August		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0094	1.8	0.0046	0.000046	0.00019	0.0032
	September		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0093	1.8	0.0046	0.000046	0.00018	0.0031
	October		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	November		0.0000092	0.00012	0.0048	0.00022	0.00025	0.00024	0.0000047	0.043	0.00095	0.18	0.00047	0.0000047	0.000019	0.00032
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
		MAXIMUM	0.00010	0.0013	0.053	0.0031	0.0028	0.0026	0.000051	0.47	0.010	1.9	0.0051	0.000051	0.00020	0.0035
		AVERAGE	0.000053	0.00068	0.028	0.0013	0.0015	0.0014	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	April		0.000043	0.00056	0.023	0.0010	0.0012	0.0011	0.000022	0.20	0.0045	0.84	0.0022	0.000022	0.000089	0.0015
	May		0.000064	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0066	1.2	0.0033	0.000033	0.00013	0.0022
Post-Closure	**June**	**≥2070**	0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	July		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	August		0.000077	0.00100	0.041	0.0019	0.0021	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00016	0.0027
	September		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	October		0.000061	0.00079	0.032	0.0015	0.0017	0.0016	0.000031	0.29	0.0063	1.2	0.0031	0.000031	0.00013	0.0021
	November		0.000013	0.00017	0.0070	0.00032	0.00037	0.00035	0.0000068	0.062	0.0014	0.26	0.00068	0.0000068	0.000027	0.00047
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
		MAXIMUM	0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
		AVERAGE	0.000056	0.00071	0.029	0.0013	0.0015	0.0015	0.000028	0.26	0.0058	1.1	0.0028	0.000028	0.00011	0.0019

Notes:
Bold values represent values greater than the proposed environmental release target.
NA indicates Non-applicable periods of time when there is no discharge.

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.000010	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.000100	0.037	1.4	0.057	0.0000040
	April		0.013	0.063	0.00016	0.000013	3.3	0.96	0.00043	0.00018	0.00042	**0.38**	0.000086	0.031	1.2	0.055	0.0000037
	May		0.018	0.079	0.00022	0.000018	2.8	0.99	0.00039	0.00028	0.00038	**0.31**	0.000077	0.027	0.99	0.057	0.0000036
	June		0.026	0.11	0.00031	0.000025	3.3	1.3	0.00046	0.00043	0.00044	**0.35**	0.000091	0.031	1.1	0.074	0.0000045
	July		0.037	0.15	0.00043	0.000036	3.4	1.6	0.00051	0.00064	0.00048	**0.35**	0.00010	0.032	1.2	0.092	0.0000055
	August		0.047	0.19	0.00054	0.000044	3.6	1.8	0.00055	0.00081	0.00052	**0.36**	0.00011	0.034	1.2	0.11	0.0000063
	September		0.047	0.19	0.00055	0.000045	3.1	1.8	0.00050	0.00084	0.00046	**0.31**	0.00010	0.030	1.1	0.10	0.0000060
	October		0.046	0.18	0.00053	0.000044	2.7	1.7	0.00045	0.00082	0.00041	0.26	0.000090	0.026	0.91	0.098	0.0000055
	November		0.043	0.17	0.00049	0.000041	2.4	1.5	0.00040	0.00077	0.00037	0.23	0.000081	0.023	0.80	0.090	0.0000050
	December		0.042	0.17	0.00049	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000079	0.023	0.78	0.089	0.0000049
	January	2026	0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000078	0.022	0.77	0.088	0.0000049
	February		0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00036	0.22	0.000078	0.022	0.77	0.088	0.0000049
	March		0.042	0.17	0.00048	0.000040	2.3	1.5	0.00039	0.00076	0.00035	0.22	0.000078	0.022	0.77	0.088	0.0000049
	April		0.040	0.16	0.00046	0.000038	1.9	1.4	0.00034	0.00072	0.00031	0.18	0.000068	0.019	0.65	0.081	0.0000045
	May		0.054	0.21	0.00062	**0.000052**	2.6	1.9	0.00046	0.00099	0.00041	0.23	0.000091	0.025	0.85	0.11	0.0000060
	June		0.061	0.24	0.00070	**0.000058**	2.7	2.0	0.00049	0.0011	0.00043	0.23	0.000097	0.026	0.88	0.12	0.0000066
	July		0.069	0.27	0.00079	**0.000065**	2.8	2.3	0.00052	0.0013	0.00046	0.24	0.00010	0.028	0.92	0.13	0.0000072
	August		0.066	0.26	0.00076	**0.000063**	2.4	2.1	0.00048	0.0012	0.00042	0.20	0.000095	0.025	0.80	0.13	0.0000068
	September		0.066	0.26	0.00076	**0.000063**	2.3	2.1	0.00046	0.0012	0.00040	0.19	0.000092	0.024	0.76	0.13	0.0000067
	October		0.067	0.26	0.00076	**0.000063**	2.3	2.1	0.00046	0.0012	0.00040	0.18	0.000092	0.023	0.74	0.13	0.0000067
	November		0.069	0.26	0.00078	**0.000065**	2.3	2.2	0.00047	0.0013	0.00041	0.19	0.000094	0.024	0.76	0.13	0.0000068
	December		0.069	0.26	0.00078	**0.000065**	2.3	2.2	0.00047	0.0013	0.00041	0.19	0.000094	0.024	0.76	0.13	0.0000068
	January	2027	0.069	0.26	0.00078	**0.000065**	2.3	2.2	0.00047	0.0013	0.00041	0.19	0.000094	0.024	0.76	0.13	0.0000068
	February		0.068	0.26	0.00078	**0.000065**	2.3	2.2	0.00047	0.0013	0.00041	0.18	0.000093	0.023	0.75	0.13	0.0000068
	March		0.062	0.24	0.00071	**0.000059**	2.1	2.0	0.00042	0.0011	0.00036	0.16	0.000084	0.021	0.67	0.12	0.0000062
	April		0.051	0.20	0.00058	0.000048	1.6	1.6	0.00034	0.00095	0.00029	0.12	0.000067	0.016	0.52	0.095	0.0000050
	May		0.056	0.21	0.00063	**0.000053**	1.7	1.7	0.00036	0.0010	0.00031	0.13	0.000072	0.017	0.55	0.10	0.0000054
	June		0.067	0.26	0.00076	**0.000063**	2.0	2.1	0.00042	0.0012	0.00036	0.15	0.000084	0.020	0.64	0.12	0.0000064
	July		0.065	0.25	0.00074	**0.000062**	1.8	2.0	0.00040	0.0012	0.00034	0.13	0.000081	0.019	0.59	0.12	0.0000062
	August		0.076	0.29	0.00086	**0.000072**	2.1	2.3	0.00046	0.0014	0.00039	0.14	0.000092	0.022	0.66	0.14	0.0000071
	September		0.095	0.36	0.0011	**0.000090**	2.6	2.9	0.00057	0.0018	0.00048	0.18	0.00011	0.027	0.81	0.17	0.0000089
	October		0.095	0.36	0.0011	**0.000090**	2.5	2.9	0.00057	0.0018	0.00048	0.17	0.00011	0.027	0.80	0.17	0.0000089
	November		0.084	0.32	0.00095	**0.000079**	2.2	2.5	0.00050	0.0016	0.00042	0.15	0.000100	0.023	0.70	0.15	0.0000078
	December		0.083	0.32	0.00094	**0.000078**	2.2	2.5	0.00049	0.0015	0.00042	0.15	0.000098	0.023	0.69	0.15	0.0000077
	January	2028	0.083	0.32	0.00094	**0.000078**	2.2	2.5	0.00049	0.0015	0.00042	0.15	0.000098	0.023	0.69	0.15	0.0000077
	February		0.083	0.32	0.00094	**0.000078**	2.2	2.5	0.00049	0.0015	0.00042	0.15	0.000098	0.023	0.69	0.15	0.0000077
	March		0.083	0.32	0.00094	**0.000078**	2.2	2.5	0.00049	0.0015	0.00042	0.15	0.000098	0.023	0.69	0.15	0.0000077
	April		0.073	0.28	0.00083	**0.000069**	1.9	2.2	0.00043	0.0014	0.00037	0.13	0.000087	0.020	0.61	0.13	0.0000068
	May		0.061	0.23	0.00070	**0.000058**	1.6	1.8	0.00036	0.0011	0.00030	0.10	0.000071	0.016	0.49	0.11	0.0000057
	June		0.074	0.28	0.00084	**0.000069**	1.9	2.2	0.00043	0.0014	0.00036	0.12	0.000085	0.020	0.59	0.13	0.0000068
	July		0.082	0.31	0.00093	**0.000078**	2.1	2.5	0.00047	0.0015	0.00040	0.13	0.000095	0.022	0.65	0.15	0.0000076
	August		0.081	0.31	0.00092	**0.000077**	2.0	2.4	0.00047	0.0015	0.00039	0.13	0.000093	0.021	0.63	0.15	0.0000075
	September		0.084	0.32	0.00095	**0.000079**	2.0	2.5	0.00048	0.0016	0.00040	0.13	0.000095	0.022	0.64	0.15	0.0000077
	October		0.091	0.35	0.0010	**0.000086**	2.2	2.7	0.00052	0.0017	0.00044	0.14	0.00010	0.024	0.70	0.16	0.0000084
	November		0.091	0.35	0.0010	**0.000086**	2.2	2.7	0.00052	0.0017	0.00044	0.14	0.00010	0.023	0.70	0.16	0.0000084
	December		0.091	0.35	0.0010	**0.000086**	2.2	2.7	0.00052	0.0017	0.00044	0.14	0.00010	0.023	0.70	0.16	0.0000084
		MINIMUM	0.010	0.054	0.00013	0.0000100	1.6	0.96	0.00034	0.00010	0.00029	0.10	0.000067	0.016	0.49	0.055	0.0000036
		MAXIMUM	0.095	0.36	0.0011	**0.000090**	4.0	2.9	0.00057	0.0018	0.00052	**0.46**	0.00011	0.037	1.4	0.17	0.0000089
		AVERAGE	0.060	0.23	0.00069	**0.000057**	2.5	2.0	0.00046	0.0011	0.00041	0.21	0.000092	0.024	0.81	0.12	0.0000063
Operations	January	2029	0.091	0.35	0.0010	**0.000086**	2.2	2.7	0.00052	0.0017	0.00044	0.14	0.00010	0.023	0.70	0.16	0.0000084
	February		0.091	0.35	0.0010	**0.000086**	2.2	2.7	0.00052	0.0017	0.00044	0.14	0.00010	0.023	0.70	0.16	0.0000084
	March		0.089	0.34	0.0010	**0.000084**	2.2	2.7	0.00051	0.0017	0.00042	0.14	0.00010	0.023	0.68	0.16	0.0000081
	April		0.070	0.26	0.00079	**0.000066**	1.7	2.1	0.00039	0.0013	0.00033	0.11	0.000079	0.018	0.53	0.12	0.0000064
	May		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00039	0.0013	0.00032	0.10	0.000078	0.017	0.52	0.12	0.0000063
	June		0.072	0.27	0.00081	**0.000068**	1.7	2.1	0.00040	0.0013	0.00034	0.11	0.000081	0.018	0.53	0.13	0.0000065
	July		0.086	0.33	0.00098	**0.000082**	2.0	2.6	0.00049	0.0016	0.00041	0.13	0.000097	0.022	0.64	0.15	0.0000079
	August		0.097	0.37	0.0011	**0.000092**	2.3	2.9	0.00054	0.0018	0.00045	0.14	0.00011	0.024	0.71	0.17	0.0000088
	September		0.091	0.35	0.0010	**0.000086**	2.1	2.7	0.00051	0.0017	0.00042	0.13	0.00010	0.023	0.67	0.16	0.0000083
	October		0.092	0.35	0.0010	**0.000087**	2.2	2.7	0.00051	0.0017	0.00043	0.13	0.00010	0.023	0.67	0.16	0.0000084
	November		0.089	0.34	0.0010	**0.000084**	2.1	2.6	0.00050	0.0017	0.00041	0.13	0.000099	0.022	0.65	0.16	0.0000081
	December		0.089	0.34	0.0010	**0.000084**	2.1	2.6	0.00049	0.0017	0.00041	0.13	0.000099	0.022	0.65	0.16	0.0000081

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2030	0.089	0.34	0.0010	**0.000084**	2.1	2.6	0.00049	0.0017	0.00041	0.13	0.000099	0.022	0.65	0.16	0.0000081
	February		0.087	0.33	0.00099	**0.000082**	2.0	2.6	0.00049	0.0016	0.00041	0.13	0.000097	0.022	0.64	0.15	0.0000079
	March		0.082	0.31	0.00093	**0.000078**	1.9	2.4	0.00046	0.0015	0.00038	0.12	0.000092	0.020	0.60	0.15	0.0000075
	April		0.068	0.26	0.00077	**0.000064**	1.6	2.0	0.00038	0.0013	0.00031	0.096	0.000075	0.017	0.49	0.12	0.0000061
	May		0.072	0.27	0.00082	**0.000068**	1.7	2.1	0.00040	0.0013	0.00033	0.10	0.000080	0.018	0.52	0.13	0.0000065
	June		0.064	0.24	0.00073	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.090	0.000071	0.016	0.46	0.11	0.0000058
	July		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00034	0.0011	0.00028	0.084	0.000067	0.015	0.43	0.11	0.0000055
	August		0.066	0.25	0.00075	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.091	0.000073	0.016	0.47	0.12	0.0000060
	September		0.060	0.23	0.00068	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.083	0.000067	0.015	0.43	0.11	0.0000055
	October		0.060	0.23	0.00068	**0.000056**	1.4	1.8	0.00033	0.0011	0.00027	0.081	0.000066	0.015	0.42	0.11	0.0000054
	November		0.055	0.21	0.00062	**0.000052**	1.3	1.6	0.00030	0.0010	0.00025	0.075	0.000061	0.013	0.39	0.097	0.0000050
	December		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000059	0.013	0.38	0.095	0.0000049
	January	2031	0.052	0.20	0.00059	0.000049	1.2	1.5	0.00029	0.00097	0.00024	0.071	0.000057	0.013	0.37	0.092	0.0000047
	February		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00028	0.00097	0.00024	0.070	0.000057	0.013	0.37	0.091	0.0000047
	March		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00095	0.00023	0.069	0.000056	0.012	0.36	0.090	0.0000046
	April		0.043	0.16	0.00049	0.000041	0.98	1.3	0.00024	0.00081	0.00020	0.058	0.000047	0.011	0.30	0.076	0.0000039
	May		0.045	0.17	0.00051	0.000042	1.0	1.3	0.00025	0.00084	0.00020	0.061	0.000049	0.011	0.32	0.079	0.0000040
	June		0.056	0.21	0.00063	**0.000053**	1.3	1.6	0.00031	0.0010	0.00026	0.075	0.000061	0.014	0.39	0.099	0.0000050
	July		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00038	0.0013	0.00031	0.093	0.000076	0.017	0.48	0.12	0.0000062
	August		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	September		0.079	0.30	0.00089	**0.000074**	1.8	2.3	0.00043	0.0015	0.00036	0.11	0.000086	0.019	0.55	0.14	0.0000071
	October		0.073	0.28	0.00083	**0.000069**	1.7	2.2	0.00040	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000066
	November		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.092	0.000075	0.017	0.48	0.12	0.0000062
	December		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000075	0.017	0.48	0.12	0.0000061
	January	2032	0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000073	0.016	0.47	0.12	0.0000060
	February		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000073	0.016	0.47	0.12	0.0000060
	March		0.058	0.22	0.00065	**0.000054**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000063	0.014	0.41	0.10	0.0000052
	April		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.34	0.084	0.0000043
	May		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000056	0.012	0.36	0.090	0.0000046
	June		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0011	0.00028	0.082	0.000067	0.015	0.43	0.11	0.0000055
	July		0.060	0.23	0.00068	**0.000057**	1.4	1.8	0.00033	0.0011	0.00027	0.081	0.000066	0.015	0.42	0.11	0.0000054
Operations	August		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000069	0.015	0.44	0.11	0.0000057
	September		0.070	0.27	0.00080	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000064
	October		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00040	0.0014	0.00033	0.097	0.000079	0.018	0.51	0.13	0.0000065
	November		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	December		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	January	2033	0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	February		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	March		0.071	0.27	0.00080	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000077	0.017	0.49	0.12	0.0000064
	April		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	May		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	June		0.064	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000070	0.015	0.45	0.11	0.0000057
	July		0.077	0.29	0.00087	**0.000072**	1.7	2.3	0.00042	0.0014	0.00035	0.10	0.000084	0.019	0.54	0.14	0.0000069
	August		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000074
	September		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	October		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	November		0.072	0.27	0.00081	**0.000068**	1.6	2.1	0.00039	0.0013	0.00033	0.096	0.000078	0.017	0.50	0.13	0.0000065
	December		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	January	2034	0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.095	0.000078	0.017	0.50	0.13	0.0000064
	February		0.071	0.27	0.00080	**0.000067**	1.6	2.1	0.00039	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000064
	March		0.066	0.25	0.00075	**0.000063**	1.5	2.0	0.00036	0.0012	0.00030	0.089	0.000073	0.016	0.46	0.12	0.0000060
	April		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000060	0.013	0.38	0.096	0.0000049
	May		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	June		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00086	0.00021	0.062	0.000051	0.011	0.32	0.081	0.0000042
	July		0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	August		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	September		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	October		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.070	0.000058	0.013	0.37	0.093	0.0000048
	November		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00028	0.00097	0.00024	0.069	0.000057	0.013	0.36	0.092	0.0000047
	December		0.050	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.067	0.000055	0.012	0.35	0.088	0.0000045
	January	2035	0.049	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000054	0.012	0.35	0.087	0.0000045
	February		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	March		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.045	0.17	0.00051	0.000042	1.0	1.3	0.00024	0.00083	0.00020	0.060	0.000049	0.011	0.31	0.079	0.0000040
	May		0.043	0.16	0.00049	0.000041	0.97	1.3	0.00024	0.00080	0.00020	0.057	0.000047	0.010	0.30	0.076	0.0000039
	June		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	July		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.090	0.0000046
	August	2035	0.061	0.23	0.00069	**0.000058**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.43	0.11	0.0000055
	September		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	October		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000069	0.016	0.44	0.11	0.0000057
	November		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.43	0.11	0.0000056
	December		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.43	0.11	0.0000056
	January		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.43	0.11	0.0000056
	February		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.43	0.11	0.0000056
	March		0.060	0.23	0.00068	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.080	0.000065	0.014	0.42	0.11	0.0000054
	April		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	May		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	June	2036	0.057	0.22	0.00064	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.10	0.0000051
	July		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.087	0.000071	0.016	0.45	0.11	0.0000058
	August		0.086	0.33	0.00097	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000094	0.021	0.60	0.15	0.0000077
	September		0.092	0.35	0.0010	**0.000087**	2.1	2.7	0.00050	0.0017	0.00042	0.12	0.00010	0.022	0.64	0.16	0.0000083
	October		0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000094	0.021	0.60	0.15	0.0000078
	November		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	December		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	January		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	February		0.076	0.29	0.00087	**0.000072**	1.7	2.3	0.00042	0.0014	0.00035	0.10	0.000084	0.018	0.53	0.13	0.0000069
	March		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00040	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000067
	April		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.10	0.0000051
	May		0.065	0.25	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	June	2037	0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000066	0.015	0.42	0.11	0.0000055
	July		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	August		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00039	0.0013	0.00033	0.096	0.000078	0.017	0.50	0.13	0.0000064
	September		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000074	0.017	0.48	0.12	0.0000061
	October		0.070	0.27	0.00080	**0.000066**	1.6	2.1	0.00039	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
Operations	November		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	December		0.069	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	January		0.069	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	February		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00038	0.0013	0.00031	0.092	0.000076	0.017	0.48	0.12	0.0000062
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.41	0.10	0.0000052
	April		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00026	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	May		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.012	0.36	0.091	0.0000046
	June	2038	0.060	0.23	0.00068	**0.000057**	1.4	1.8	0.00033	0.0011	0.00027	0.080	0.000066	0.015	0.42	0.11	0.0000054
	July		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00038	0.0013	0.00031	0.092	0.000076	0.017	0.48	0.12	0.0000062
	August		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	September		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	October		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.091	0.000075	0.017	0.48	0.12	0.0000061
	November		0.065	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.46	0.12	0.0000059
	December		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.46	0.11	0.0000059
	January		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.46	0.11	0.0000059
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	March		0.056	0.21	0.00063	**0.000053**	1.3	1.6	0.00031	0.0010	0.00025	0.075	0.000061	0.014	0.39	0.098	0.0000050
	April		0.057	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.076	0.000062	0.014	0.40	0.100	0.0000051
	May		0.064	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000070	0.015	0.45	0.11	0.0000058
	June	2039	0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00044	0.0015	0.00037	0.11	0.000089	0.020	0.57	0.14	0.0000073
	July		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.57	0.14	0.0000074
	August		0.064	0.24	0.00073	**0.000061**	1.5	1.9	0.00035	0.0012	0.00029	0.086	0.000071	0.016	0.45	0.11	0.0000058
	September		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	October		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00034	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.41	0.10	0.0000052
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.41	0.10	0.0000052
	January		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.41	0.10	0.0000052
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.077	0.000063	0.014	0.41	0.10	0.0000052
	March		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	April	2040	0.042	0.16	0.00048	0.000040	0.95	1.2	0.00023	0.00079	0.00019	0.056	0.000046	0.010	0.29	0.074	0.0000038
	May		0.043	0.16	0.00049	0.000041	0.98	1.3	0.00024	0.00081	0.00020	0.058	0.000048	0.011	0.30	0.077	0.0000039
	June		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000051	0.011	0.33	0.083	0.0000042
	August		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	September		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000077	0.017	0.49	0.12	0.0000063
	October		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	November		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	December		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	January	2041	0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	February		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	March		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000070	0.015	0.44	0.11	0.0000057
	April		0.052	0.20	0.00059	0.000049	1.2	1.5	0.00029	0.00097	0.00024	0.070	0.000057	0.013	0.36	0.092	0.0000047
	May		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000061	0.013	0.39	0.098	0.0000050
	June		0.070	0.27	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.094	0.000077	0.017	0.49	0.12	0.0000063
	July		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00041	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000067
	August		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00027	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.088	0.0000045
	September		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	October		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	November		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	December		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	January	2042	0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	February		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	March		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	April		0.042	0.16	0.00047	0.000039	0.94	1.2	0.00023	0.00078	0.00019	0.056	0.000046	0.010	0.29	0.074	0.0000038
	May		0.043	0.16	0.00048	0.000040	0.96	1.3	0.00023	0.00080	0.00019	0.057	0.000047	0.010	0.30	0.075	0.0000038
	June		0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	August		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	September		0.047	0.18	0.00053	0.000044	1.1	1.4	0.00026	0.00088	0.00021	0.063	0.000052	0.012	0.33	0.083	0.0000042
	October		0.041	0.16	0.00047	0.000039	0.93	1.2	0.00023	0.00078	0.00019	0.055	0.000046	0.010	0.29	0.073	0.0000037
	November		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.072	0.0000037
	December		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.010	0.29	0.072	0.0000037
	January	2043	0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.0100	0.29	0.072	0.0000037
Operations	February		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.0100	0.29	0.072	0.0000037
	March		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.0100	0.29	0.072	0.0000037
	April		0.038	0.14	0.00043	0.000036	0.85	1.1	0.00021	0.00071	0.00017	0.050	0.000041	0.0092	0.26	0.067	0.0000034
	May		0.039	0.15	0.00045	0.000037	0.89	1.2	0.00022	0.00074	0.00018	0.053	0.000043	0.0096	0.28	0.069	0.0000035
	June		0.042	0.16	0.00047	0.000039	0.94	1.2	0.00023	0.00078	0.00019	0.056	0.000046	0.010	0.29	0.074	0.0000038
	July		0.046	0.17	0.00052	0.000043	1.0	1.4	0.00025	0.00086	0.00021	0.061	0.000050	0.011	0.32	0.081	0.0000041
	August		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	September		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00076	0.00018	0.054	0.000044	0.0099	0.28	0.071	0.0000036
	October		0.037	0.14	0.00041	0.000034	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0090	0.26	0.064	0.0000033
	November		0.034	0.13	0.00039	0.000032	0.77	1.0	0.00019	0.00064	0.00015	0.045	0.000037	0.0084	0.24	0.060	0.0000031
	December		0.034	0.13	0.00038	0.000032	0.76	1.00	0.00019	0.00063	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	January	2044	0.034	0.13	0.00038	0.000032	0.76	1.00	0.00019	0.00063	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	February		0.034	0.13	0.00038	0.000032	0.76	1.00	0.00019	0.00063	0.00015	0.045	0.000037	0.0083	0.24	0.060	0.0000031
	March		0.034	0.13	0.00038	0.000032	0.76	1.00	0.00018	0.00063	0.00015	0.045	0.000037	0.0082	0.24	0.060	0.0000030
	April		0.033	0.13	0.00037	0.000031	0.74	0.98	0.00018	0.00062	0.00015	0.044	0.000036	0.0081	0.23	0.058	0.0000030
	May		0.041	0.15	0.00046	0.000038	0.92	1.2	0.00022	0.00076	0.00019	0.054	0.000045	0.0100	0.28	0.072	0.0000037
	June		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.068	0.000056	0.013	0.36	0.090	0.0000046
	July		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.096	0.0000049
	August		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00040	0.0014	0.00033	0.097	0.000079	0.018	0.51	0.13	0.0000065
	September		0.087	0.33	0.00098	**0.000082**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000095	0.021	0.61	0.15	0.0000078
	October		0.089	0.34	0.0010	**0.000084**	2.0	2.6	0.00049	0.0017	0.00040	0.12	0.000097	0.022	0.62	0.16	0.0000080
	November		0.091	0.35	0.0010	**0.000086**	2.0	2.7	0.00050	0.0017	0.00041	0.12	0.000100	0.022	0.64	0.16	0.0000082
	December		0.090	0.34	0.0010	**0.000085**	2.0	2.7	0.00050	0.0017	0.00041	0.12	0.000099	0.022	0.63	0.16	0.0000082
	January	2045	0.090	0.34	0.0010	**0.000085**	2.0	2.7	0.00049	0.0017	0.00041	0.12	0.000099	0.022	0.63	0.16	0.0000081
	February		0.090	0.34	0.0010	**0.000085**	2.0	2.7	0.00049	0.0017	0.00041	0.12	0.000099	0.022	0.63	0.16	0.0000081
	March		0.084	0.32	0.00096	**0.000080**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000093	0.020	0.59	0.15	0.0000076
	April		0.069	0.26	0.00079	**0.000065**	1.6	2.0	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000062
	May		0.067	0.26	0.00076	**0.000063**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	June		0.069	0.26	0.00079	**0.000066**	1.6	2.1	0.00038	0.0013	0.00032	0.093	0.000076	0.017	0.49	0.12	0.0000063
	July		0.074	0.28	0.00084	**0.000070**	1.7	2.2	0.00041	0.0014	0.00034	0.099	0.000081	0.018	0.52	0.13	0.0000067
	August		0.082	0.31	0.00093	**0.000078**	1.9	2.4	0.00045	0.0015	0.00037	0.11	0.000090	0.020	0.58	0.15	0.0000074
	September		0.091	0.35	0.0010	**0.000086**	2.1	2.7	0.00050	0.0017	0.00041	0.12	0.000100	0.022	0.64	0.16	0.0000082

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.091	0.35	0.0010	**0.000086**	2.1	2.7	0.00050	0.0017	0.00041	0.12	0.000100	0.022	0.64	0.16	0.0000082
	November		0.088	0.34	0.0010	**0.000083**	2.0	2.6	0.00048	0.0017	0.00040	0.12	0.000097	0.021	0.62	0.16	0.0000080
	December		0.087	0.33	0.00099	**0.000082**	2.0	2.6	0.00048	0.0016	0.00040	0.12	0.000095	0.021	0.61	0.15	0.0000078
	January	2046	0.084	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.020	0.59	0.15	0.0000076
	February		0.084	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.020	0.59	0.15	0.0000076
	March		0.077	0.29	0.00087	**0.000072**	1.7	2.3	0.00042	0.0014	0.00035	0.10	0.000084	0.019	0.54	0.14	0.0000069
	April		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	May		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00037	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	June		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	July		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000070	0.015	0.44	0.11	0.0000057
	August		0.060	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000066	0.015	0.42	0.11	0.0000054
	September		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	October		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	November		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	December		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	January	2047	0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	February		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	April		0.042	0.16	0.00048	0.000040	0.95	1.2	0.00023	0.00079	0.00019	0.056	0.000046	0.010	0.30	0.075	0.0000038
	May		0.042	0.16	0.00048	0.000040	0.96	1.3	0.00023	0.00079	0.00019	0.057	0.000047	0.010	0.30	0.075	0.0000038
	June		0.052	0.20	0.00060	0.000050	1.2	1.5	0.00029	0.00098	0.00024	0.070	0.000058	0.013	0.37	0.093	0.0000047
	July		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	August		0.054	0.21	0.00061	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.096	0.0000049
	September		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	October		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0011	0.00028	0.082	0.000067	0.015	0.43	0.11	0.0000055
	November		0.060	0.23	0.00068	**0.000057**	1.4	1.8	0.00033	0.0011	0.00027	0.080	0.000066	0.015	0.42	0.11	0.0000054
	December		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.079	0.000065	0.014	0.41	0.10	0.0000053
	January	2048	0.059	0.22	0.00067	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	April		0.054	0.21	0.00061	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
Operations	May		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.37	0.094	0.0000048
	June		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	July		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000064	0.014	0.41	0.10	0.0000052
	August		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	September		0.046	0.17	0.00052	0.000043	1.0	1.4	0.00025	0.00086	0.00021	0.061	0.000050	0.011	0.32	0.081	0.0000041
	October		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000048	0.011	0.31	0.078	0.0000040
	November		0.044	0.17	0.00050	0.000041	0.99	1.3	0.00024	0.00082	0.00020	0.059	0.000048	0.011	0.31	0.077	0.0000040
	December		0.043	0.16	0.00049	0.000041	0.97	1.3	0.00024	0.00080	0.00020	0.057	0.000047	0.010	0.30	0.076	0.0000039
	January	2049	0.041	0.15	0.00046	0.000038	0.92	1.2	0.00022	0.00076	0.00019	0.054	0.000045	0.0099	0.29	0.072	0.0000037
	February		0.040	0.15	0.00046	0.000038	0.91	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0098	0.28	0.071	0.0000036
	March		0.039	0.15	0.00044	0.000037	0.88	1.1	0.00021	0.00073	0.00018	0.052	0.000043	0.0095	0.27	0.069	0.0000035
	April		0.037	0.14	0.00042	0.000035	0.84	1.1	0.00020	0.00070	0.00017	0.050	0.000041	0.0091	0.26	0.066	0.0000034
	May		0.041	0.16	0.00046	0.000039	0.92	1.2	0.00022	0.00077	0.00019	0.055	0.000045	0.0100	0.29	0.072	0.0000037
	June		0.044	0.17	0.00050	0.000042	0.99	1.3	0.00024	0.00082	0.00020	0.059	0.000048	0.011	0.31	0.078	0.0000040
	July		0.043	0.16	0.00049	0.000041	0.98	1.3	0.00024	0.00081	0.00020	0.058	0.000048	0.011	0.30	0.077	0.0000039
	August		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	September		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.90	1.2	0.00022	0.00074	0.00018	0.053	0.000044	0.0098	0.28	0.070	0.0000036
	November		0.036	0.14	0.00041	0.000034	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0089	0.25	0.064	0.0000033
	December		0.036	0.14	0.00041	0.000034	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0089	0.25	0.064	0.0000033
	January	2050	0.036	0.14	0.00041	0.000034	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0089	0.25	0.064	0.0000033
	February		0.036	0.14	0.00041	0.000034	0.82	1.1	0.00020	0.00068	0.00017	0.049	0.000040	0.0089	0.25	0.064	0.0000033
	March		0.036	0.14	0.00041	0.000034	0.81	1.1	0.00020	0.00067	0.00016	0.048	0.000039	0.0088	0.25	0.063	0.0000032
	April		0.033	0.13	0.00038	0.000031	0.75	0.98	0.00018	0.00062	0.00015	0.044	0.000036	0.0081	0.23	0.058	0.0000030
	May		0.035	0.13	0.00039	0.000033	0.78	1.0	0.00019	0.00065	0.00016	0.046	0.000038	0.0085	0.24	0.061	0.0000031
	June		0.038	0.14	0.00043	0.000036	0.85	1.1	0.00021	0.00071	0.00017	0.051	0.000042	0.0093	0.27	0.067	0.0000034
	July		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.38	0.095	0.0000049
	August		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.45	0.11	0.0000059
	September		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.084	0.000069	0.015	0.44	0.11	0.0000056
	October		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	November		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00032	0.0011	0.00027	0.079	0.000065	0.014	0.41	0.10	0.0000053
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000064	0.014	0.41	0.10	0.0000052

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000064	0.014	0.41	0.10	0.0000052
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000064	0.014	0.41	0.10	0.0000052
	March		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00030	0.0010	0.00025	0.074	0.000060	0.013	0.39	0.097	0.0000050
	April		0.039	0.15	0.00045	0.000037	0.89	1.2	0.00022	0.00074	0.00018	0.053	0.000043	0.0096	0.28	0.070	0.0000036
	May		0.040	0.15	0.00045	0.000038	0.90	1.2	0.00022	0.00074	0.00018	0.053	0.000044	0.0097	0.28	0.070	0.0000036
	June		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	July		0.051	0.20	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	August		0.047	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.063	0.000052	0.012	0.33	0.084	0.0000043
	September		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00089	0.00022	0.064	0.000052	0.012	0.33	0.084	0.0000043
	October		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00086	0.00021	0.062	0.000051	0.011	0.32	0.081	0.0000042
	November		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00086	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	December		0.045	0.17	0.00051	0.000042	1.0	1.3	0.00024	0.00083	0.00020	0.060	0.000049	0.011	0.31	0.079	0.0000040
	January	2052	0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	February		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	March		0.044	0.17	0.00050	0.000042	1.00	1.3	0.00024	0.00083	0.00020	0.059	0.000049	0.011	0.31	0.078	0.0000040
	April		0.040	0.15	0.00045	0.000038	0.90	1.2	0.00022	0.00075	0.00018	0.054	0.000044	0.0098	0.28	0.071	0.0000036
	May		0.042	0.16	0.00048	0.000040	0.95	1.2	0.00023	0.00079	0.00019	0.056	0.000046	0.010	0.29	0.074	0.0000038
	June		0.050	0.19	0.00056	0.000047	1.1	1.5	0.00027	0.00093	0.00023	0.066	0.000054	0.012	0.35	0.087	0.0000045
	July		0.051	0.19	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.068	0.000056	0.013	0.36	0.090	0.0000046
	August		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.070	0.000058	0.013	0.37	0.093	0.0000048
	September		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.43	0.11	0.0000055
	October		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.085	0.000069	0.016	0.44	0.11	0.0000057
	November		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	December		0.063	0.24	0.00072	**0.000060**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
		MINIMUM	0.033	0.13	0.00037	0.000031	0.74	0.98	0.00018	0.00062	0.00015	0.044	0.000036	0.0081	0.23	0.058	0.0000030
		MAXIMUM	0.097	0.37	0.0011	**0.000092**	2.3	2.9	0.00054	0.0018	0.00045	0.14	0.00011	0.024	0.71	0.17	0.0000088
		AVERAGE	0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00033	0.0011	0.00027	0.080	0.000065	0.014	0.42	0.10	0.0000053
Decommissioning	January	2053	0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	February		0.063	0.24	0.00071	**0.000059**	1.4	1.9	0.00035	0.0012	0.00029	0.084	0.000069	0.015	0.44	0.11	0.0000057
	March		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.43	0.11	0.0000055
	April		0.049	0.18	0.00055	0.000046	1.1	1.4	0.00027	0.00091	0.00022	0.065	0.000053	0.012	0.34	0.086	0.0000044
	May		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000056	0.012	0.36	0.090	0.0000046
	June		0.067	0.26	0.00077	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	July		0.084	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000092	0.020	0.59	0.15	0.0000076
	August		0.086	0.33	0.00097	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000094	0.021	0.60	0.15	0.0000077
	September		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.084	0.000069	0.015	0.44	0.11	0.0000056
	October		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00025	0.075	0.000061	0.014	0.39	0.099	0.0000051
	November		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.38	0.095	0.0000048
	December		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.37	0.094	0.0000048
	January	2054	0.053	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.37	0.094	0.0000048
	February		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.37	0.094	0.0000048
	March		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.093	0.0000048
	April		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00026	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	May		0.045	0.17	0.00051	0.000043	1.0	1.3	0.00025	0.00085	0.00021	0.061	0.000050	0.011	0.32	0.080	0.0000041
	June		0.059	0.23	0.00067	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.079	0.000065	0.014	0.42	0.10	0.0000054
	July		0.073	0.28	0.00083	**0.000069**	1.6	2.2	0.00040	0.0014	0.00033	0.098	0.000080	0.018	0.51	0.13	0.0000066
	August		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	September		0.066	0.25	0.00075	**0.000063**	1.5	2.0	0.00036	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	October		0.066	0.25	0.00075	**0.000063**	1.5	2.0	0.00036	0.0012	0.00030	0.089	0.000073	0.016	0.47	0.12	0.0000060
	November		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00034	0.0012	0.00028	0.082	0.000068	0.015	0.43	0.11	0.0000056
	December		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.43	0.11	0.0000055
	January	2055	0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.43	0.11	0.0000055
	February		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.42	0.11	0.0000055
	March		0.061	0.23	0.00069	**0.000057**	1.4	1.8	0.00033	0.0011	0.00028	0.081	0.000067	0.015	0.42	0.11	0.0000055
	April		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00028	0.00094	0.00023	0.067	0.000055	0.012	0.35	0.089	0.0000045
	May		0.046	0.18	0.00052	0.000044	1.0	1.4	0.00025	0.00086	0.00021	0.062	0.000051	0.011	0.32	0.081	0.0000042
	June		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00027	0.00092	0.00022	0.066	0.000054	0.012	0.34	0.087	0.0000044
	July		0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
	August		0.051	0.19	0.00057	0.000048	1.1	1.5	0.00028	0.00095	0.00023	0.068	0.000055	0.012	0.35	0.089	0.0000046
	September		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00030	0.0010	0.00025	0.073	0.000060	0.013	0.38	0.096	0.0000049
	October		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00030	0.0010	0.00025	0.072	0.000059	0.013	0.38	0.095	0.0000049
	November		0.051	0.20	0.00058	0.000049	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	December		0.051	0.20	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.051	0.20	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.013	0.36	0.091	0.0000046
	February		0.051	0.20	0.00058	0.000048	1.2	1.5	0.00028	0.00096	0.00023	0.069	0.000056	0.012	0.36	0.091	0.0000046
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.32	0.082	0.0000042
	April		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00025	0.00087	0.00021	0.062	0.000051	0.011	0.33	0.082	0.0000042
	May		0.053	0.20	0.00060	0.000050	1.2	1.6	0.00029	0.00099	0.00024	0.071	0.000058	0.013	0.37	0.093	0.0000048
	June		0.062	0.24	0.00070	**0.000059**	1.4	1.8	0.00034	0.0012	0.00028	0.083	0.000068	0.015	0.44	0.11	0.0000056
	July		0.066	0.25	0.00074	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000059
	August		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00036	0.0012	0.00030	0.088	0.000072	0.016	0.46	0.12	0.0000060
	September		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00029	0.0010	0.00024	0.072	0.000059	0.013	0.38	0.095	0.0000048
	October		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0011	0.00026	0.075	0.000062	0.014	0.39	0.099	0.0000051
	November		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00026	0.078	0.000064	0.014	0.41	0.10	0.0000052
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	January	2057	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00032	0.0011	0.00027	0.078	0.000064	0.014	0.41	0.10	0.0000053
	April		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00026	0.00090	0.00022	0.064	0.000053	0.012	0.34	0.085	0.0000043
	May		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00031	0.0010	0.00025	0.075	0.000061	0.014	0.39	0.099	0.0000050
	June		0.069	0.26	0.00078	**0.000065**	1.6	2.0	0.00038	0.0013	0.00031	0.092	0.000076	0.017	0.48	0.12	0.0000062
	July		0.067	0.26	0.00076	**0.000064**	1.5	2.0	0.00037	0.0013	0.00031	0.090	0.000074	0.016	0.47	0.12	0.0000061
	August		0.065	0.25	0.00074	**0.000061**	1.5	1.9	0.00036	0.0012	0.00030	0.087	0.000071	0.016	0.46	0.11	0.0000059
	September		0.075	0.28	0.00085	**0.000071**	1.7	2.2	0.00041	0.0014	0.00034	0.10	0.000082	0.018	0.52	0.13	0.0000068
	October		0.083	0.31	0.00094	**0.000078**	1.9	2.4	0.00045	0.0015	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000074
	November		0.083	0.32	0.00095	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
	December		0.083	0.32	0.00094	**0.000079**	1.9	2.5	0.00046	0.0016	0.00038	0.11	0.000091	0.020	0.58	0.15	0.0000075
		MINIMUM	0.044	0.17	0.00049	0.000041	0.98	1.3	0.00024	0.00082	0.00020	0.058	0.000048	0.011	0.31	0.077	0.0000039
		MAXIMUM	0.086	0.33	0.00097	**0.000081**	1.9	2.5	0.00047	0.0016	0.00039	0.11	0.000094	0.021	0.60	0.15	0.0000077
		AVERAGE	0.059	0.23	0.00067	**0.000056**	1.3	1.8	0.00033	0.0011	0.00027	0.079	0.000065	0.014	0.42	0.10	0.0000054
Reclamation	January	2058	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2059	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2060	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2062	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2063	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2064	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2065	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2066	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August	**2066**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
Reclamation	**February**		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July	**2067**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.00010	0.00050	0.50	**0.050**	0.020	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.023	0.0100	0.00010	1.5	0.032	1.7	0.0100	0.00010	0.00050	0.0030
	March		0.000100	0.00050	0.50	**0.050**	0.025	0.0099	0.000100	1.5	0.032	1.7	0.0100	0.000100	0.00050	0.0030
	April		0.000091	0.00053	0.41	**0.041**	0.022	0.0083	0.000086	1.3	0.027	1.6	0.0086	0.000086	0.00042	0.0028
	May		0.000088	0.00062	0.34	**0.034**	0.020	0.0072	0.000077	1.1	0.024	1.6	0.0077	0.000077	0.00038	0.0028
	June		0.00011	0.00083	0.38	**0.037**	0.023	0.0083	0.000091	1.3	0.027	1.9	0.0091	0.000091	0.00044	0.0035
	July		0.00013	0.0011	0.39	**0.037**	0.024	0.0087	0.00010	1.3	0.029	2.3	0.010	0.00010	0.00048	0.0042
	August		0.00015	0.0013	0.40	**0.038**	0.026	0.0092	0.00011	1.4	0.031	2.7	0.011	0.00011	0.00052	0.0048
	September		0.00014	0.0013	0.34	**0.032**	0.023	0.0081	0.00010	1.3	0.027	2.6	0.010	0.00010	0.00046	0.0046
	October		0.00013	0.0013	0.29	**0.027**	0.021	0.0071	0.000090	1.1	0.024	2.4	0.0090	0.000090	0.00041	0.0042
	November		0.00012	0.0012	0.25	**0.023**	0.019	0.0062	0.000081	0.99	0.021	2.2	0.0081	0.000081	0.00037	0.0039
	December		0.00011	0.0011	0.25	**0.023**	0.019	0.0061	0.000079	0.97	0.021	2.1	0.0079	0.000079	0.00036	0.0038
	January	2026	0.00011	0.0011	0.24	**0.022**	0.019	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00036	0.0038
	February		0.00011	0.0011	0.24	**0.022**	0.020	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00036	0.0038
	March		0.00011	0.0011	0.24	**0.022**	0.020	0.0060	0.000078	0.96	0.021	2.1	0.0078	0.000078	0.00035	0.0038
	April		0.00010	0.0011	0.20	**0.018**	0.017	0.0051	0.000068	0.82	0.018	1.9	0.0068	0.000068	0.00031	0.0034
	May		0.00014	0.0014	0.26	**0.024**	0.022	0.0068	0.000091	1.1	0.024	2.6	0.0091	0.000091	0.00041	0.0046
	June		0.00015	0.0016	0.27	**0.024**	0.023	0.0070	0.000097	1.1	0.025	2.8	0.0097	0.000097	0.00043	0.0051
	July		0.00017	0.0018	0.27	**0.024**	0.023	0.0074	0.00010	1.2	0.026	3.1	0.010	0.00010	0.00046	0.0056
	August		0.00015	0.0017	0.23	**0.020**	0.020	0.0066	0.000095	1.1	0.023	2.9	0.0095	0.000095	0.00042	0.0052
	September		0.00015	0.0017	0.22	**0.018**	0.019	0.0063	0.000092	1.0	0.022	2.9	0.0092	0.000092	0.00040	0.0052
	October		0.00015	0.0017	0.21	**0.018**	0.019	0.0062	0.000092	1.0	0.022	2.9	0.0092	0.000092	0.00040	0.0052
	November		0.00016	0.0018	0.22	**0.018**	0.020	0.0063	0.000094	1.0	0.023	3.0	0.0094	0.000094	0.00041	0.0053
	December		0.00016	0.0018	0.22	**0.018**	0.020	0.0063	0.000094	1.0	0.023	3.0	0.0094	0.000094	0.00041	0.0053
	January	2027	0.00016	0.0018	0.22	**0.018**	0.021	0.0063	0.000094	1.0	0.023	3.0	0.0094	0.000094	0.00041	0.0053
	February		0.00016	0.0018	0.22	**0.018**	0.021	0.0063	0.000093	1.0	0.023	2.9	0.0093	0.000093	0.00041	0.0053
	March		0.00014	0.0016	0.19	**0.016**	0.019	0.0056	0.000084	0.92	0.020	2.7	0.0084	0.000084	0.00036	0.0048
	April		0.00011	0.0013	0.15	**0.012**	0.014	0.0044	0.000067	0.73	0.016	2.2	0.0067	0.000067	0.00029	0.0039
	May		0.00012	0.0014	0.15	**0.012**	0.015	0.0047	0.000072	0.77	0.017	2.3	0.0072	0.000072	0.00031	0.0042
	June		0.00015	0.0017	0.17	**0.014**	0.017	0.0054	0.000084	0.90	0.020	2.8	0.0084	0.000084	0.00036	0.0050
	July		0.00014	0.0017	0.16	**0.012**	0.015	0.0051	0.000081	0.85	0.019	2.7	0.0081	0.000081	0.00034	0.0048
	August		0.00016	0.0019	0.17	**0.013**	0.016	0.0057	0.000092	0.96	0.021	3.1	0.0092	0.000092	0.00039	0.0055
	September		0.00020	0.0024	0.21	**0.016**	0.020	0.0071	0.00011	1.2	0.026	3.9	0.011	0.00011	0.00048	0.0069
	October		0.00020	0.0024	0.21	**0.016**	0.021	0.0070	0.00011	1.2	0.026	3.8	0.011	0.00011	0.00048	0.0069
	November		0.00018	0.0021	0.18	**0.014**	0.019	0.0061	0.000100	1.0	0.023	3.4	0.0100	0.000100	0.00042	0.0061
	December		0.00017	0.0021	0.18	**0.014**	0.019	0.0060	0.000098	1.0	0.022	3.3	0.0098	0.000098	0.00042	0.0060
	January	2028	0.00017	0.0021	0.18	**0.014**	0.020	0.0060	0.000098	1.0	0.022	3.3	0.0098	0.000098	0.00042	0.0060
	February		0.00017	0.0021	0.18	**0.014**	0.020	0.0060	0.000098	1.0	0.022	3.3	0.0098	0.000098	0.00042	0.0060
	March		0.00017	0.0021	0.18	**0.014**	0.021	0.0060	0.000098	1.0	0.022	3.3	0.0098	0.000098	0.00042	0.0060
	April		0.00015	0.0018	0.16	**0.012**	0.018	0.0053	0.000087	0.90	0.020	2.9	0.0087	0.000087	0.00037	0.0053
	May		0.00013	0.0015	0.13	0.0094	0.014	0.0043	0.000071	0.73	0.016	2.5	0.0071	0.000071	0.00030	0.0044
	June		0.00015	0.0018	0.15	**0.011**	0.016	0.0052	0.000085	0.88	0.019	2.9	0.0085	0.000085	0.00036	0.0053
	July		0.00017	0.0021	0.16	**0.012**	0.017	0.0057	0.000095	0.97	0.021	3.3	0.0095	0.000095	0.00040	0.0059
	August		0.00017	0.0020	0.16	**0.012**	0.016	0.0056	0.000093	0.95	0.021	3.2	0.0093	0.000093	0.00039	0.0058
	September		0.00017	0.0021	0.16	**0.012**	0.017	0.0057	0.000095	0.97	0.021	3.3	0.0095	0.000095	0.00040	0.0059
	October		0.00019	0.0023	0.17	**0.013**	0.019	0.0062	0.00010	1.1	0.023	3.6	0.010	0.00010	0.00044	0.0065
	November		0.00019	0.0023	0.17	**0.013**	0.019	0.0062	0.00010	1.1	0.023	3.6	0.010	0.00010	0.00044	0.0065
	December		0.00019	0.0023	0.17	**0.013**	0.020	0.0062	0.00010	1.1	0.023	3.6	0.010	0.00010	0.00044	0.0065
		MINIMUM	0.000088	0.00050	0.13	0.0094	0.014	0.0043	0.000067	0.73	0.016	1.6	0.0067	0.000067	0.00029	0.0028
		MAXIMUM	0.00020	0.0024	0.50	**0.050**	0.026	0.0100	0.00011	1.5	0.032	3.9	0.011	0.00011	0.00052	0.0069
		AVERAGE	0.00014	0.0016	0.24	**0.021**	0.020	0.0065	0.000092	1.1	0.023	2.7	0.0092	0.000092	0.00041	0.0049
Operations	January	2029	0.00019	0.0023	0.17	**0.013**	0.021	0.0062	0.00010	1.1	0.023	3.6	0.010	0.00010	0.00044	0.0065
	February		0.00019	0.0023	0.17	**0.013**	0.021	0.0062	0.00010	1.1	0.023	3.6	0.010	0.00010	0.00044	0.0065
	March		0.00018	0.0022	0.17	**0.012**	0.021	0.0060	0.00010	1.0	0.023	3.5	0.010	0.00010	0.00042	0.0063
	April		0.00014	0.0017	0.13	0.0094	0.015	0.0047	0.000079	0.80	0.018	2.8	0.0079	0.000079	0.00033	0.0049
	May		0.00014	0.0017	0.13	0.0092	0.015	0.0046	0.000078	0.78	0.017	2.7	0.0078	0.000078	0.00032	0.0049
	June		0.00015	0.0018	0.13	0.0094	0.015	0.0048	0.000081	0.81	0.018	2.8	0.0081	0.000081	0.00034	0.0051
	July		0.00018	0.0022	0.16	**0.011**	0.018	0.0057	0.000097	0.98	0.022	3.4	0.0097	0.000097	0.00041	0.0061
	August		0.00020	0.0024	0.18	**0.012**	0.019	0.0064	0.00011	1.1	0.024	3.8	0.011	0.00011	0.00045	0.0068
	September		0.00019	0.0023	0.16	**0.012**	0.018	0.0060	0.00010	1.0	0.022	3.6	0.010	0.00010	0.00042	0.0064
	October		0.00019	0.0023	0.17	**0.012**	0.018	0.0060	0.00010	1.0	0.023	3.6	0.010	0.00010	0.00043	0.0065
	November		0.00018	0.0022	0.16	**0.011**	0.018	0.0058	0.000099	1.00	0.022	3.5	0.0099	0.000099	0.00041	0.0063
	December		0.00018	0.0022	0.16	**0.011**	0.019	0.0058	0.000099	0.99	0.022	3.5	0.0099	0.000099	0.00041	0.0062

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2030	0.00018	0.0022	0.16	**0.011**	0.019	0.0058	0.000099	0.99	0.022	3.5	0.0099	0.000099	0.00041	0.0062
	February		0.00018	0.0022	0.16	**0.011**	0.019	0.0057	0.000097	0.97	0.021	3.4	0.0097	0.000097	0.00041	0.0061
	March		0.00017	0.0021	0.15	**0.010**	0.018	0.0054	0.000092	0.92	0.020	3.2	0.0092	0.000092	0.00038	0.0058
	April		0.00014	0.0017	0.12	0.0084	0.014	0.0044	0.000075	0.75	0.017	2.7	0.0075	0.000075	0.00031	0.0048
	May		0.00015	0.0018	0.13	0.0088	0.015	0.0047	0.000080	0.80	0.018	2.8	0.0080	0.000080	0.00033	0.0051
	June		0.00013	0.0016	0.11	0.0078	0.012	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0045
	July		0.00012	0.0015	0.11	0.0073	0.011	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	August		0.00013	0.0017	0.11	0.0079	0.011	0.0043	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	September		0.00012	0.0015	0.10	0.0071	0.0099	0.0039	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0042
	October		0.00012	0.0015	0.10	0.0070	0.0100	0.0038	0.000066	0.65	0.014	2.3	0.0066	0.000066	0.00027	0.0042
	November		0.00011	0.0014	0.094	0.0065	0.0096	0.0035	0.000061	0.60	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	December		0.00011	0.0013	0.092	0.0063	0.0099	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	January	2031	0.00011	0.0013	0.089	0.0061	0.0099	0.0033	0.000057	0.57	0.013	2.0	0.0057	0.000057	0.00024	0.0036
	February		0.00010	0.0013	0.088	0.0061	0.010	0.0033	0.000057	0.57	0.012	2.0	0.0057	0.000057	0.00024	0.0036
	March		0.00010	0.0013	0.087	0.0060	0.010	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	April		0.000087	0.0011	0.073	0.0050	0.0082	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	May		0.000091	0.0011	0.076	0.0052	0.0079	0.0028	0.000049	0.49	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	June		0.00011	0.0014	0.095	0.0065	0.0098	0.0036	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00026	0.0039
	July		0.00014	0.0017	0.12	0.0080	0.012	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00031	0.0048
	August		0.00016	0.0020	0.14	0.0094	0.014	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	September		0.00016	0.0020	0.13	0.0091	0.013	0.0050	0.000086	0.86	0.019	3.1	0.0086	0.000086	0.00036	0.0055
	October		0.00015	0.0018	0.12	0.0085	0.013	0.0047	0.000081	0.80	0.018	2.9	0.0081	0.000081	0.00034	0.0051
	November		0.00014	0.0017	0.12	0.0079	0.012	0.0043	0.000075	0.74	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	December		0.00014	0.0017	0.11	0.0079	0.013	0.0043	0.000075	0.74	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	January	2032	0.00014	0.0017	0.11	0.0077	0.013	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00031	0.0047
	February		0.00014	0.0017	0.11	0.0077	0.014	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00031	0.0047
	March		0.00012	0.0014	0.098	0.0067	0.012	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	April		0.000097	0.0012	0.081	0.0055	0.0089	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	May		0.00010	0.0013	0.086	0.0059	0.0093	0.0032	0.000056	0.55	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	June		0.00012	0.0015	0.10	0.0071	0.011	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	July		0.00012	0.0015	0.10	0.0069	0.010	0.0038	0.000066	0.65	0.014	2.3	0.0066	0.000066	0.00027	0.0042
	August		0.00013	0.0016	0.11	0.0073	0.011	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	September		0.00014	0.0018	0.12	0.0081	0.012	0.0045	0.000077	0.77	0.017	2.8	0.0077	0.000077	0.00032	0.0049
	October		0.00015	0.0018	0.12	0.0083	0.013	0.0046	0.000079	0.79	0.017	2.8	0.0079	0.000079	0.00033	0.0051
	November		0.00014	0.0018	0.12	0.0082	0.013	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	December		0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	January	2033	0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	February		0.00014	0.0018	0.12	0.0082	0.015	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	March		0.00014	0.0018	0.12	0.0081	0.015	0.0045	0.000077	0.77	0.017	2.8	0.0077	0.000077	0.00032	0.0049
	April		0.00011	0.0013	0.091	0.0062	0.011	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	May		0.00011	0.0014	0.095	0.0065	0.010	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	June		0.00013	0.0016	0.11	0.0073	0.011	0.0040	0.000070	0.69	0.015	2.5	0.0070	0.000070	0.00029	0.0044
	July		0.00016	0.0019	0.13	0.0088	0.014	0.0049	0.000084	0.84	0.018	3.0	0.0084	0.000084	0.00035	0.0054
	August		0.00016	0.0020	0.14	0.0094	0.014	0.0052	0.000089	0.89	0.020	3.2	0.0089	0.000089	0.00037	0.0057
	September		0.00017	0.0020	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	October		0.00016	0.0020	0.14	0.0093	0.015	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	November		0.00014	0.0018	0.12	0.0082	0.013	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00033	0.0050
	December		0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	January	2034	0.00014	0.0018	0.12	0.0082	0.014	0.0045	0.000078	0.77	0.017	2.8	0.0078	0.000078	0.00032	0.0050
	February		0.00014	0.0018	0.12	0.0081	0.015	0.0045	0.000077	0.77	0.017	2.8	0.0077	0.000077	0.00032	0.0049
	March		0.00013	0.0017	0.11	0.0076	0.014	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0046
	April		0.00011	0.0014	0.091	0.0062	0.011	0.0034	0.000060	0.59	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	May		0.00011	0.0014	0.093	0.0063	0.011	0.0035	0.000060	0.60	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	June		0.000093	0.0012	0.078	0.0053	0.0076	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	July		0.000088	0.0011	0.073	0.0050	0.0063	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0030
	August		0.000098	0.0012	0.082	0.0056	0.0069	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	September		0.000098	0.0012	0.081	0.0055	0.0069	0.0031	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	October		0.00011	0.0013	0.089	0.0061	0.0081	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	November		0.00011	0.0013	0.087	0.0060	0.0086	0.0033	0.000057	0.56	0.012	2.0	0.0057	0.000057	0.00024	0.0036
	December		0.00010	0.0012	0.084	0.0057	0.0087	0.0031	0.000055	0.54	0.012	1.9	0.0055	0.000055	0.00023	0.0035
	January	2035	0.00010	0.0012	0.083	0.0057	0.0091	0.0031	0.000054	0.54	0.012	1.9	0.0054	0.000054	0.00023	0.0035
	February		0.000098	0.0012	0.081	0.0055	0.0092	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	March		0.000098	0.0012	0.081	0.0055	0.0096	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.000090	0.0011	0.075	0.0051	0.0087	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	May		0.000087	0.0011	0.072	0.0049	0.0077	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	June		0.000094	0.0012	0.078	0.0053	0.0078	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	July		0.00010	0.0013	0.086	0.0059	0.0082	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	August	2035	0.00012	0.0015	0.10	0.0070	0.0097	0.0039	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	September		0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000071	0.70	0.016	2.5	0.0071	0.000071	0.00029	0.0045
	October		0.00013	0.0016	0.11	0.0073	0.011	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	November		0.00013	0.0015	0.10	0.0071	0.011	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	December		0.00013	0.0015	0.10	0.0071	0.012	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	January		0.00013	0.0015	0.10	0.0071	0.012	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	February		0.00013	0.0015	0.10	0.0071	0.013	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	March		0.00012	0.0015	0.10	0.0069	0.012	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
	April		0.000094	0.0012	0.078	0.0053	0.0087	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	May		0.000092	0.0011	0.077	0.0052	0.0080	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	June		0.00012	0.0014	0.096	0.0065	0.0099	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	July	2036	0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000071	0.70	0.016	2.5	0.0071	0.000071	0.00029	0.0045
	August		0.00017	0.0021	0.14	0.0098	0.015	0.0054	0.000094	0.93	0.021	3.3	0.0094	0.000094	0.00039	0.0060
	September		0.00019	0.0023	0.15	**0.011**	0.016	0.0058	0.00010	1.0	0.022	3.6	0.010	0.00010	0.00042	0.0064
	October		0.00017	0.0021	0.14	0.0099	0.015	0.0054	0.000094	0.94	0.021	3.4	0.0094	0.000094	0.00039	0.0060
	November		0.00016	0.0020	0.14	0.0093	0.015	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	December		0.00016	0.0020	0.14	0.0093	0.016	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	January		0.00016	0.0020	0.14	0.0093	0.017	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	February		0.00015	0.0019	0.13	0.0088	0.016	0.0048	0.000084	0.83	0.018	3.0	0.0084	0.000084	0.00035	0.0053
	March		0.00015	0.0018	0.12	0.0085	0.016	0.0047	0.000081	0.80	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	April		0.00012	0.0014	0.096	0.0065	0.011	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	May		0.00013	0.0016	0.11	0.0074	0.012	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	June	2037	0.00012	0.0015	0.10	0.0070	0.011	0.0038	0.000066	0.66	0.015	2.4	0.0066	0.000066	0.00028	0.0042
	July		0.00011	0.0014	0.095	0.0065	0.0094	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	August		0.00014	0.0018	0.12	0.0082	0.012	0.0045	0.000078	0.78	0.017	2.8	0.0078	0.000078	0.00033	0.0050
	September		0.00014	0.0017	0.11	0.0078	0.011	0.0043	0.000074	0.74	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	October		0.00014	0.0018	0.12	0.0081	0.012	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
Operations	November		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	December		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	January		0.00014	0.0017	0.12	0.0080	0.014	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	February		0.00014	0.0017	0.12	0.0079	0.014	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00031	0.0048
	March		0.00012	0.0014	0.097	0.0066	0.012	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0041
	April		0.000094	0.0012	0.078	0.0053	0.0085	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	May		0.00010	0.0013	0.086	0.0059	0.0094	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	June		0.00012	0.0015	0.10	0.0069	0.011	0.0038	0.000066	0.65	0.014	2.3	0.0066	0.000066	0.00027	0.0042
	July	2038	0.00014	0.0017	0.12	0.0079	0.012	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00031	0.0048
	August		0.00017	0.0020	0.14	0.0094	0.014	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	September		0.00016	0.0020	0.14	0.0093	0.014	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	October		0.00014	0.0017	0.11	0.0078	0.012	0.0043	0.000075	0.74	0.016	2.7	0.0075	0.000075	0.00031	0.0048
	November		0.00013	0.0016	0.11	0.0075	0.012	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0046
	December		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0046
	January		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0046
	February		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	March		0.00011	0.0014	0.094	0.0064	0.011	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	April		0.00011	0.0014	0.095	0.0065	0.011	0.0036	0.000062	0.62	0.014	2.2	0.0062	0.000062	0.00026	0.0040
	May		0.00013	0.0016	0.11	0.0073	0.013	0.0040	0.000070	0.69	0.015	2.5	0.0070	0.000070	0.00029	0.0045
	June		0.00016	0.0020	0.14	0.0093	0.016	0.0051	0.000089	0.88	0.019	3.2	0.0089	0.000089	0.00037	0.0057
	July	2039	0.00017	0.0020	0.14	0.0094	0.016	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0057
	August		0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000071	0.70	0.015	2.5	0.0071	0.000071	0.00029	0.0045
	September		0.00013	0.0017	0.11	0.0077	0.012	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	October		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00029	0.0044
	November		0.00012	0.0014	0.097	0.0066	0.011	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0041
	December		0.00012	0.0014	0.097	0.0066	0.011	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	January		0.00012	0.0014	0.097	0.0066	0.012	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	February		0.00012	0.0014	0.097	0.0066	0.012	0.0037	0.000063	0.63	0.014	2.3	0.0063	0.000063	0.00026	0.0040
	March		0.000097	0.0012	0.080	0.0055	0.0093	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	April	2040	0.000085	0.0010	0.071	0.0048	0.0077	0.0027	0.000046	0.46	0.010	1.6	0.0046	0.000046	0.00019	0.0029
	May		0.000088	0.0011	0.073	0.0050	0.0075	0.0027	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0030
	June		0.000094	0.0012	0.078	0.0053	0.0075	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	July	2040	0.000095	0.0012	0.079	0.0054	0.0070	0.0030	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	August		0.00013	0.0016	0.11	0.0075	0.010	0.0042	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	September		0.00014	0.0017	0.12	0.0080	0.011	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	October		0.00013	0.0016	0.11	0.0075	0.011	0.0042	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	November		0.00013	0.0016	0.11	0.0076	0.012	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	December		0.00013	0.0016	0.11	0.0076	0.012	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	January	2041	0.00013	0.0016	0.11	0.0076	0.013	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	February		0.00013	0.0016	0.11	0.0076	0.013	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	March		0.00013	0.0016	0.11	0.0073	0.013	0.0040	0.000070	0.69	0.015	2.5	0.0070	0.000070	0.00029	0.0044
	April		0.00011	0.0013	0.088	0.0060	0.010	0.0033	0.000057	0.57	0.012	2.0	0.0057	0.000057	0.00024	0.0036
	May		0.00011	0.0014	0.093	0.0063	0.010	0.0035	0.000061	0.60	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	June		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000077	0.76	0.017	2.7	0.0077	0.000077	0.00032	0.0049
	July		0.00015	0.0019	0.12	0.0085	0.013	0.0047	0.000081	0.81	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	August		0.00010	0.0013	0.084	0.0058	0.0077	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	September		0.000097	0.0012	0.080	0.0055	0.0072	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	October		0.00010	0.0013	0.085	0.0058	0.0079	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	November		0.000099	0.0012	0.083	0.0056	0.0083	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	December		0.000099	0.0012	0.083	0.0056	0.0089	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	January	2042	0.000099	0.0012	0.083	0.0056	0.0094	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	February		0.000099	0.0012	0.083	0.0056	0.0098	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	March		0.000097	0.0012	0.081	0.0055	0.0098	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	April		0.000084	0.0010	0.070	0.0048	0.0079	0.0026	0.000046	0.45	0.0100	1.6	0.0046	0.000046	0.00019	0.0029
	May		0.000086	0.0011	0.072	0.0049	0.0077	0.0027	0.000047	0.46	0.010	1.7	0.0047	0.000047	0.00019	0.0030
	June		0.000088	0.0011	0.073	0.0050	0.0073	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0030
	July		0.000090	0.0011	0.075	0.0051	0.0066	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	August		0.000092	0.0011	0.077	0.0052	0.0065	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	September		0.000095	0.0012	0.079	0.0054	0.0068	0.0030	0.000052	0.51	0.011	1.8	0.0052	0.000052	0.00021	0.0033
	October		0.000084	0.0010	0.070	0.0048	0.0060	0.0026	0.000046	0.45	0.0099	1.6	0.0046	0.000046	0.00019	0.0029
	November		0.000083	0.0010	0.069	0.0047	0.0064	0.0026	0.000045	0.44	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	December		0.000083	0.0010	0.069	0.0047	0.0070	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
Operations	January	2043	0.000083	0.0010	0.069	0.0047	0.0075	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	February		0.000083	0.0010	0.069	0.0047	0.0079	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	March		0.000083	0.0010	0.069	0.0047	0.0082	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	April		0.000076	0.00094	0.063	0.0043	0.0072	0.0024	0.000041	0.41	0.0090	1.5	0.0041	0.000041	0.00017	0.0026
	May		0.000080	0.00098	0.066	0.0045	0.0068	0.0025	0.000043	0.43	0.0094	1.5	0.0043	0.000043	0.00018	0.0028
	June		0.000084	0.0010	0.070	0.0048	0.0067	0.0026	0.000046	0.45	0.0100	1.6	0.0046	0.000046	0.00019	0.0029
	July		0.000093	0.0011	0.077	0.0053	0.0070	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	August		0.000090	0.0011	0.074	0.0051	0.0063	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	September		0.000082	0.0010	0.068	0.0046	0.0055	0.0026	0.000044	0.44	0.0097	1.6	0.0044	0.000044	0.00018	0.0028
	October		0.000074	0.00091	0.061	0.0042	0.0050	0.0023	0.000040	0.40	0.0088	1.4	0.0040	0.000040	0.00017	0.0026
	November		0.000069	0.00085	0.057	0.0039	0.0049	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	December		0.000069	0.00085	0.057	0.0039	0.0054	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	January	2044	0.000069	0.00084	0.057	0.0039	0.0058	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	February		0.000069	0.00084	0.057	0.0039	0.0062	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	March		0.000068	0.00084	0.057	0.0039	0.0065	0.0021	0.000037	0.37	0.0081	1.3	0.0037	0.000037	0.00015	0.0024
	April		0.000067	0.00082	0.056	0.0038	0.0056	0.0021	0.000036	0.36	0.0079	1.3	0.0036	0.000036	0.00015	0.0023
	May		0.000082	0.0010	0.068	0.0047	0.0068	0.0026	0.000045	0.44	0.0097	1.6	0.0045	0.000045	0.00019	0.0028
	June		0.00010	0.0013	0.086	0.0059	0.0086	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	July		0.00011	0.0014	0.091	0.0062	0.0086	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	August		0.00015	0.0018	0.12	0.0083	0.012	0.0046	0.000079	0.79	0.017	2.8	0.0079	0.000079	0.00033	0.0051
	September		0.00018	0.0022	0.15	0.0100	0.014	0.0055	0.000095	0.94	0.021	3.4	0.0095	0.000095	0.00040	0.0061
	October		0.00018	0.0022	0.15	**0.010**	0.015	0.0056	0.000097	0.97	0.021	3.5	0.0097	0.000097	0.00040	0.0062
	November		0.00018	0.0023	0.15	**0.010**	0.017	0.0058	0.000100	0.99	0.022	3.5	0.0100	0.000100	0.00041	0.0064
	December		0.00018	0.0023	0.15	**0.010**	0.017	0.0057	0.000099	0.98	0.022	3.5	0.0099	0.000099	0.00041	0.0063
	January	2045	0.00018	0.0023	0.15	**0.010**	0.018	0.0057	0.000099	0.98	0.022	3.5	0.0099	0.000099	0.00041	0.0063
	February		0.00018	0.0023	0.15	**0.010**	0.019	0.0057	0.000099	0.98	0.022	3.5	0.0099	0.000099	0.00041	0.0063
	March		0.00017	0.0021	0.14	0.0097	0.018	0.0053	0.000093	0.92	0.020	3.3	0.0093	0.000093	0.00038	0.0059
	April		0.00014	0.0017	0.12	0.0080	0.014	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00032	0.0048
	May		0.00014	0.0017	0.11	0.0077	0.013	0.0043	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	June		0.00014	0.0017	0.12	0.0080	0.013	0.0044	0.000076	0.76	0.017	2.7	0.0076	0.000076	0.00032	0.0049
	July		0.00015	0.0018	0.12	0.0085	0.013	0.0047	0.000081	0.80	0.018	2.9	0.0081	0.000081	0.00034	0.0052
	August		0.00017	0.0021	0.14	0.0094	0.015	0.0052	0.000090	0.89	0.020	3.2	0.0090	0.000090	0.00037	0.0058
	September		0.00018	0.0023	0.15	**0.010**	0.016	0.0058	0.000100	0.99	0.022	3.6	0.0100	0.000100	0.00041	0.0064

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	October	2045	0.00018	0.0023	0.15	**0.010**	0.017	0.0058	0.000100	0.99	0.022	3.6	0.0100	0.000100	0.00041	0.0064
	November		0.00018	0.0022	0.15	**0.010**	0.017	0.0056	0.000097	0.96	0.021	3.4	0.0097	0.000097	0.00040	0.0062
	December		0.00018	0.0022	0.15	0.0100	0.017	0.0055	0.000095	0.94	0.021	3.4	0.0095	0.000095	0.00040	0.0061
	January	2046	0.00017	0.0021	0.14	0.0096	0.017	0.0053	0.000092	0.91	0.020	3.3	0.0092	0.000092	0.00038	0.0059
	February		0.00017	0.0021	0.14	0.0096	0.018	0.0053	0.000092	0.91	0.020	3.3	0.0092	0.000092	0.00038	0.0059
	March		0.00016	0.0019	0.13	0.0088	0.016	0.0049	0.000084	0.83	0.018	3.0	0.0084	0.000084	0.00035	0.0054
	April		0.00013	0.0017	0.11	0.0077	0.014	0.0042	0.000073	0.73	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	May		0.00013	0.0017	0.11	0.0076	0.013	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	June		0.00013	0.0016	0.11	0.0076	0.013	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	July		0.00013	0.0016	0.11	0.0073	0.011	0.0040	0.000070	0.69	0.015	2.5	0.0070	0.000070	0.00029	0.0044
	August		0.00012	0.0015	0.10	0.0069	0.010	0.0038	0.000066	0.66	0.014	2.4	0.0066	0.000066	0.00028	0.0042
	September		0.00011	0.0014	0.093	0.0063	0.0090	0.0035	0.000060	0.60	0.013	2.1	0.0060	0.000060	0.00025	0.0039
	October		0.00010	0.0013	0.084	0.0058	0.0082	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	November		0.000096	0.0012	0.080	0.0055	0.0080	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	December		0.000096	0.0012	0.080	0.0054	0.0085	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	January	2047	0.000096	0.0012	0.080	0.0054	0.0090	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	February		0.000096	0.0012	0.080	0.0054	0.0094	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	March		0.000094	0.0012	0.078	0.0053	0.0094	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	April		0.000086	0.0011	0.071	0.0049	0.0082	0.0027	0.000046	0.46	0.010	1.6	0.0046	0.000046	0.00019	0.0030
	May		0.000086	0.0011	0.071	0.0049	0.0075	0.0027	0.000047	0.46	0.010	1.7	0.0047	0.000047	0.00019	0.0030
	June		0.00011	0.0013	0.088	0.0060	0.0091	0.0033	0.000058	0.57	0.013	2.0	0.0058	0.000058	0.00024	0.0037
	July		0.00011	0.0014	0.093	0.0063	0.0089	0.0035	0.000060	0.60	0.013	2.2	0.0060	0.000060	0.00025	0.0039
	August		0.00011	0.0014	0.091	0.0062	0.0083	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	September		0.00012	0.0015	0.098	0.0067	0.0091	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	October		0.00012	0.0015	0.10	0.0071	0.010	0.0039	0.000067	0.67	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	November		0.00012	0.0015	0.10	0.0069	0.010	0.0038	0.000066	0.65	0.014	2.3	0.0066	0.000066	0.00027	0.0042
	December		0.00012	0.0015	0.100	0.0068	0.011	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
	January	2048	0.00012	0.0015	0.099	0.0067	0.011	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	February		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.64	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	March		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	April		0.00011	0.0013	0.091	0.0062	0.011	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
Operations	May		0.00011	0.0013	0.090	0.0061	0.011	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	June		0.00013	0.0016	0.11	0.0075	0.013	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	July		0.00012	0.0014	0.098	0.0067	0.010	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00026	0.0041
	August		0.000097	0.0012	0.080	0.0055	0.0074	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	September		0.000093	0.0011	0.077	0.0053	0.0069	0.0029	0.000050	0.50	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	October		0.000089	0.0011	0.074	0.0051	0.0069	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	November		0.000089	0.0011	0.074	0.0050	0.0074	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	December		0.000087	0.0011	0.072	0.0049	0.0076	0.0027	0.000047	0.47	0.010	1.7	0.0047	0.000047	0.00020	0.0030
	January	2049	0.000082	0.0010	0.069	0.0047	0.0074	0.0026	0.000045	0.44	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	February		0.000081	0.0010	0.068	0.0046	0.0076	0.0025	0.000044	0.44	0.0096	1.6	0.0044	0.000044	0.00018	0.0028
	March		0.000079	0.00097	0.065	0.0045	0.0075	0.0025	0.000043	0.42	0.0093	1.5	0.0043	0.000043	0.00018	0.0027
	April		0.000075	0.00093	0.063	0.0043	0.0069	0.0024	0.000041	0.41	0.0089	1.5	0.0041	0.000041	0.00017	0.0026
	May		0.000083	0.0010	0.069	0.0047	0.0073	0.0026	0.000045	0.45	0.0098	1.6	0.0045	0.000045	0.00019	0.0029
	June		0.000089	0.0011	0.074	0.0051	0.0073	0.0028	0.000048	0.48	0.011	1.7	0.0048	0.000048	0.00020	0.0031
	July		0.000088	0.0011	0.073	0.0050	0.0065	0.0027	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0030
	August		0.000094	0.0012	0.078	0.0053	0.0067	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	September		0.000090	0.0011	0.075	0.0051	0.0062	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	October		0.000081	0.00099	0.067	0.0046	0.0056	0.0025	0.000044	0.43	0.0095	1.6	0.0044	0.000044	0.00018	0.0028
	November		0.000074	0.00091	0.061	0.0042	0.0054	0.0023	0.000040	0.40	0.0087	1.4	0.0040	0.000040	0.00017	0.0025
	December		0.000073	0.00091	0.061	0.0042	0.0059	0.0023	0.000040	0.40	0.0087	1.4	0.0040	0.000040	0.00017	0.0025
	January	2050	0.000073	0.00091	0.061	0.0042	0.0064	0.0023	0.000040	0.40	0.0087	1.4	0.0040	0.000040	0.00017	0.0025
	February		0.000073	0.00091	0.061	0.0042	0.0068	0.0023	0.000040	0.40	0.0087	1.4	0.0040	0.000040	0.00017	0.0025
	March		0.000073	0.00090	0.060	0.0041	0.0069	0.0023	0.000039	0.39	0.0086	1.4	0.0039	0.000039	0.00016	0.0025
	April		0.000067	0.00083	0.056	0.0038	0.0057	0.0021	0.000036	0.36	0.0079	1.3	0.0036	0.000036	0.00015	0.0023
	May		0.000070	0.00086	0.058	0.0040	0.0060	0.0022	0.000038	0.38	0.0083	1.4	0.0038	0.000038	0.00016	0.0024
	June		0.000077	0.00095	0.064	0.0044	0.0061	0.0024	0.000042	0.41	0.0091	1.5	0.0042	0.000042	0.00017	0.0027
	July		0.00011	0.0013	0.091	0.0062	0.0089	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00024	0.0038
	August		0.00013	0.0016	0.11	0.0074	0.011	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0045
	September		0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00028	0.0044
	October		0.00013	0.0016	0.10	0.0071	0.010	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	November		0.00012	0.0015	0.099	0.0068	0.010	0.0037	0.000065	0.64	0.014	2.3	0.0065	0.000065	0.00027	0.0041
	December		0.00012	0.0014	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00026	0.0041

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Operations	January	2051	0.00012	0.0014	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00026	0.0041
	February		0.00012	0.0014	0.098	0.0067	0.012	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00026	0.0041
	March		0.00011	0.0014	0.093	0.0063	0.011	0.0035	0.000060	0.60	0.013	2.2	0.0060	0.000060	0.00025	0.0039
	April		0.000080	0.00099	0.066	0.0045	0.0067	0.0025	0.000043	0.43	0.0095	1.5	0.0043	0.000043	0.00018	0.0028
	May		0.000081	0.00099	0.067	0.0046	0.0063	0.0025	0.000044	0.43	0.0095	1.6	0.0044	0.000044	0.00018	0.0028
	June		0.000096	0.0012	0.080	0.0055	0.0075	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	July		0.00010	0.0013	0.086	0.0059	0.0079	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	August		0.000096	0.0012	0.080	0.0054	0.0069	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	September		0.000097	0.0012	0.080	0.0055	0.0070	0.0030	0.000052	0.52	0.011	1.9	0.0052	0.000052	0.00022	0.0033
	October		0.000093	0.0012	0.078	0.0053	0.0070	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	November		0.000093	0.0012	0.078	0.0053	0.0074	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	December		0.000090	0.0011	0.075	0.0051	0.0076	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	January	2052	0.000090	0.0011	0.075	0.0051	0.0081	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	February		0.000090	0.0011	0.075	0.0051	0.0085	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	March		0.000090	0.0011	0.075	0.0051	0.0089	0.0028	0.000049	0.48	0.011	1.7	0.0049	0.000049	0.00020	0.0031
	April		0.000081	0.00100	0.067	0.0046	0.0073	0.0025	0.000044	0.44	0.0096	1.6	0.0044	0.000044	0.00018	0.0028
	May		0.000085	0.0010	0.071	0.0048	0.0071	0.0027	0.000046	0.46	0.010	1.6	0.0046	0.000046	0.00019	0.0029
	June		0.00010	0.0012	0.083	0.0057	0.0083	0.0031	0.000054	0.54	0.012	1.9	0.0054	0.000054	0.00023	0.0035
	July		0.00010	0.0013	0.086	0.0059	0.0080	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	August		0.00011	0.0013	0.089	0.0060	0.0080	0.0033	0.000058	0.57	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	September		0.00012	0.0015	0.10	0.0070	0.0095	0.0038	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0042
	October		0.00013	0.0016	0.11	0.0073	0.010	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	November		0.00013	0.0016	0.11	0.0072	0.011	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	December		0.00013	0.0016	0.11	0.0072	0.012	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
		MINIMUM	0.000067	0.00082	0.056	0.0038	0.0049	0.0021	0.000036	0.36	0.0079	1.3	0.0036	0.000036	0.00015	0.0023
		MAXIMUM	0.00020	0.0024	0.18	**0.013**	0.021	0.0064	0.00011	1.1	0.024	3.8	0.011	0.00011	0.00045	0.0068
		AVERAGE	0.00012	0.0015	0.10	0.0069	0.011	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0041
Decommissioning	January	2053	0.00013	0.0016	0.11	0.0072	0.012	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	February		0.00013	0.0016	0.11	0.0072	0.013	0.0040	0.000069	0.69	0.015	2.5	0.0069	0.000069	0.00029	0.0044
	March		0.00012	0.0015	0.10	0.0070	0.013	0.0039	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	April		0.000098	0.0012	0.082	0.0056	0.0092	0.0031	0.000053	0.53	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	May		0.00010	0.0013	0.086	0.0059	0.0092	0.0032	0.000056	0.55	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	June		0.00014	0.0017	0.11	0.0077	0.012	0.0043	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	July		0.00017	0.0021	0.14	0.0097	0.015	0.0053	0.000092	0.91	0.020	3.3	0.0092	0.000092	0.00038	0.0059
	August		0.00017	0.0021	0.14	0.0098	0.015	0.0054	0.000094	0.93	0.021	3.3	0.0094	0.000094	0.00039	0.0060
	September		0.00013	0.0016	0.11	0.0072	0.010	0.0040	0.000069	0.68	0.015	2.4	0.0069	0.000069	0.00028	0.0044
	October		0.00011	0.0014	0.094	0.0064	0.0094	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	November		0.00011	0.0013	0.090	0.0061	0.0093	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	December		0.00011	0.0013	0.090	0.0061	0.0099	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	January	2054	0.00011	0.0013	0.090	0.0061	0.010	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	February		0.00011	0.0013	0.090	0.0061	0.011	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0037
	March		0.00011	0.0013	0.089	0.0061	0.011	0.0033	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	April		0.000094	0.0012	0.078	0.0053	0.0092	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	May		0.000092	0.0011	0.076	0.0052	0.0081	0.0029	0.000050	0.49	0.011	1.8	0.0050	0.000050	0.00021	0.0032
	June		0.00012	0.0015	0.10	0.0068	0.011	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
	July		0.00015	0.0018	0.12	0.0084	0.013	0.0046	0.000080	0.79	0.018	2.8	0.0080	0.000080	0.00033	0.0051
	August		0.00013	0.0016	0.11	0.0075	0.011	0.0042	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	September		0.00013	0.0017	0.11	0.0076	0.011	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	October		0.00013	0.0017	0.11	0.0076	0.011	0.0042	0.000073	0.72	0.016	2.6	0.0073	0.000073	0.00030	0.0047
	November		0.00012	0.0015	0.10	0.0071	0.011	0.0039	0.000068	0.67	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	December		0.00012	0.0015	0.10	0.0070	0.011	0.0039	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	January	2055	0.00012	0.0015	0.10	0.0070	0.012	0.0038	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0043
	February		0.00012	0.0015	0.10	0.0070	0.012	0.0038	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0042
	March		0.00012	0.0015	0.10	0.0070	0.013	0.0038	0.000067	0.66	0.015	2.4	0.0067	0.000067	0.00028	0.0042
	April		0.00010	0.0013	0.084	0.0058	0.0098	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	May		0.000093	0.0012	0.078	0.0053	0.0083	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	June		0.000099	0.0012	0.082	0.0056	0.0085	0.0031	0.000054	0.53	0.012	1.9	0.0054	0.000054	0.00022	0.0034
	July		0.000088	0.0011	0.073	0.0050	0.0065	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0031
	August		0.00010	0.0013	0.085	0.0058	0.0076	0.0032	0.000055	0.55	0.012	2.0	0.0055	0.000055	0.00023	0.0035
	September		0.00011	0.0014	0.092	0.0063	0.0083	0.0034	0.000060	0.59	0.013	2.1	0.0060	0.000060	0.00025	0.0038
	October		0.00011	0.0013	0.091	0.0062	0.0085	0.0034	0.000059	0.59	0.013	2.1	0.0059	0.000059	0.00025	0.0038
	November		0.00010	0.0013	0.087	0.0059	0.0086	0.0033	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	December		0.00010	0.0013	0.086	0.0059	0.0092	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Decommissioning	January	2056	0.00010	0.0013	0.086	0.0059	0.0098	0.0032	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	February		0.00010	0.0013	0.086	0.0059	0.010	0.0033	0.000056	0.56	0.012	2.0	0.0056	0.000056	0.00023	0.0036
	March		0.000094	0.0012	0.078	0.0053	0.0089	0.0029	0.000051	0.50	0.011	1.8	0.0051	0.000051	0.00021	0.0032
	April		0.000094	0.0012	0.078	0.0053	0.0088	0.0029	0.000051	0.51	0.011	1.8	0.0051	0.000051	0.00021	0.0033
	May		0.00011	0.0013	0.089	0.0061	0.0099	0.0033	0.000058	0.58	0.013	2.1	0.0058	0.000058	0.00024	0.0037
	June		0.00013	0.0016	0.10	0.0071	0.011	0.0039	0.000068	0.68	0.015	2.4	0.0068	0.000068	0.00028	0.0043
	July		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000072	0.71	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	August		0.00013	0.0016	0.11	0.0076	0.011	0.0042	0.000072	0.72	0.016	2.6	0.0072	0.000072	0.00030	0.0046
	September		0.00011	0.0013	0.090	0.0062	0.0086	0.0034	0.000059	0.58	0.013	2.1	0.0059	0.000059	0.00024	0.0038
	October		0.00011	0.0014	0.094	0.0064	0.0092	0.0036	0.000062	0.61	0.013	2.2	0.0062	0.000062	0.00026	0.0039
	November		0.00012	0.0014	0.098	0.0067	0.010	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00026	0.0041
	December		0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	January	2057	0.00012	0.0015	0.098	0.0067	0.011	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	February		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	March		0.00012	0.0015	0.098	0.0067	0.012	0.0037	0.000064	0.63	0.014	2.3	0.0064	0.000064	0.00027	0.0041
	April		0.000097	0.0012	0.081	0.0055	0.0093	0.0030	0.000053	0.52	0.012	1.9	0.0053	0.000053	0.00022	0.0034
	May		0.00011	0.0014	0.094	0.0064	0.011	0.0035	0.000061	0.61	0.013	2.2	0.0061	0.000061	0.00025	0.0039
	June		0.00014	0.0017	0.12	0.0079	0.014	0.0044	0.000076	0.75	0.017	2.7	0.0076	0.000076	0.00031	0.0048
	July		0.00014	0.0017	0.11	0.0077	0.012	0.0043	0.000074	0.73	0.016	2.6	0.0074	0.000074	0.00031	0.0047
	August		0.00013	0.0016	0.11	0.0075	0.011	0.0041	0.000071	0.71	0.016	2.5	0.0071	0.000071	0.00030	0.0045
	September		0.00015	0.0019	0.13	0.0086	0.013	0.0047	0.000082	0.81	0.018	2.9	0.0082	0.000082	0.00034	0.0052
	October		0.00017	0.0021	0.14	0.0095	0.015	0.0052	0.000091	0.90	0.020	3.2	0.0091	0.000091	0.00038	0.0058
	November		0.00017	0.0021	0.14	0.0096	0.016	0.0053	0.000091	0.91	0.020	3.3	0.0091	0.000091	0.00038	0.0058
	December		0.00017	0.0021	0.14	0.0096	0.016	0.0053	0.000091	0.91	0.020	3.2	0.0091	0.000091	0.00038	0.0058
		MINIMUM	0.000088	0.0011	0.073	0.0050	0.0065	0.0028	0.000048	0.47	0.010	1.7	0.0048	0.000048	0.00020	0.0031
		MAXIMUM	0.00017	0.0021	0.14	0.0098	0.016	0.0054	0.000094	0.93	0.021	3.3	0.0094	0.000094	0.00039	0.0060
		AVERAGE	0.00012	0.0015	0.100	0.0068	0.011	0.0038	0.000065	0.65	0.014	2.3	0.0065	0.000065	0.00027	0.0042
Reclamation	January	2058	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2059	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2060	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	January	2061	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2062	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2063	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2064	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2065	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2066	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-10: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August	**2066**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	**February**		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July	**2067**	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.0025	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.0100	0.053	0.00013	0.0000099	4.0	0.99	0.00050	0.000099	0.00050	**0.46**	0.000099	0.037	1.4	0.056	0.0000040
	April		0.0087	0.047	0.00011	0.0000087	3.5	0.87	0.00044	0.000087	0.00044	**0.40**	0.000087	0.032	1.2	0.049	0.0000035
	May		0.0075	0.040	0.000097	0.0000075	3.0	0.75	0.00037	0.000075	0.00037	**0.35**	0.000075	0.027	1.0	0.042	0.0000030
	June		0.0073	0.039	0.000095	0.0000073	2.9	0.73	0.00037	0.000073	0.00037	**0.34**	0.000073	0.027	1.0	0.041	0.0000029
	July		0.0066	0.035	0.000086	0.0000066	2.6	0.66	0.00033	0.000066	0.00033	**0.31**	0.000066	0.024	0.93	0.037	0.0000026
	August		0.0062	0.033	0.000080	0.0000062	2.5	0.62	0.00031	0.000062	0.00031	0.28	0.000062	0.022	0.86	0.035	0.0000025
	September		0.0054	0.029	0.000071	0.0000054	2.2	0.54	0.00027	0.000054	0.00027	0.25	0.000054	0.020	0.76	0.031	0.0000022
	October		0.0049	0.026	0.000064	0.0000049	2.0	0.49	0.00025	0.000049	0.00025	0.23	0.000049	0.018	0.69	0.028	0.0000020
	November		0.0046	0.025	0.000060	0.0000046	1.9	0.46	0.00023	0.000046	0.00023	0.21	0.000046	0.017	0.65	0.026	0.0000019
	December		0.0046	0.024	0.000059	0.0000046	1.8	0.46	0.00023	0.000046	0.00023	0.21	0.000046	0.017	0.64	0.026	0.0000018
	January	2026	0.0046	0.024	0.000059	0.0000045	1.8	0.45	0.00023	0.000045	0.00023	0.21	0.000045	0.016	0.64	0.026	0.0000018
	February		0.0046	0.024	0.000059	0.0000045	1.8	0.45	0.00023	0.000045	0.00023	0.21	0.000045	0.016	0.64	0.026	0.0000018
	March		0.0031	2.0	0.000040	0.0000031	2.5	0.63	0.00015	0.000031	0.00015	0.14	0.000031	0.023	0.89	0.017	0.0000025
	April		0.00049	3.0	0.00018	0.000012	4.2	2.2	0.000015	0.0000057	0.00014	0.0090	0.000041	2.4	1.4	0.0013	0.000015
	May		0.00016	2.9	0.000081	0.0000052	4.2	2.3	0.0000041	0.0000019	0.000059	0.0016	0.000017	2.7	1.4	0.00027	0.000017
	June		0.00048	2.5	0.00029	0.000020	5.3	3.9	0.000011	0.0000055	0.00022	0.0021	0.000063	5.7	1.7	0.00043	0.000031
	July		0.00051	2.7	0.00032	0.000021	5.9	4.7	0.000012	0.0000057	0.00023	0.0020	0.000067	7.2	1.9	0.00041	0.000039
	August		0.00068	2.5	0.00043	0.000029	6.6	5.9	0.000016	0.0000077	0.00031	0.0024	0.000090	9.3	2.1	0.00051	0.000050
	September		0.00046	2.5	0.00027	0.000018	6.1	5.4	0.000010	0.0000055	0.00019	0.0017	0.000055	8.2	1.9	0.00041	0.000045
	October		0.00033	2.8	0.00020	0.000013	6.0	5.2	0.0000076	0.0000038	0.00014	0.0014	0.000041	7.9	1.9	0.00029	0.000044
	November		0.00010	3.7	0.000055	0.0000037	6.3	5.0	0.0000028	0.0000012	0.000040	0.0010	0.000012	7.3	2.0	0.00017	0.000041
	December		0.000065	5.1	0.0000093	0.00000056	5.9	3.7	0.0000029	0.00000072	0.0000081	0.0025	0.0000021	4.8	1.9	0.00034	0.000029
	January	2027	0.000096	8.3	0.0000052	0.00000029	5.1	2.2	0.0000047	0.0000011	0.0000067	0.0042	0.0000015	1.9	1.7	0.00058	0.000014
	February		0.00013	9.9	0.000015	0.00000097	5.0	1.7	0.0000059	0.0000014	0.000015	0.0050	0.0000037	0.93	1.7	0.00070	0.0000092
	March		0.00046	5.8	0.00025	0.000017	5.5	2.9	0.000013	0.0000051	0.00018	0.0049	0.000052	3.3	1.8	0.00076	0.000021
	April		0.00052	3.7	0.00031	0.000021	6.0	4.8	0.000012	0.0000061	0.00023	0.0022	0.000064	7.2	1.9	0.00047	0.000041
	May		0.00032	4.1	0.00019	0.000013	5.7	4.4	0.0000077	0.0000037	0.00014	0.0018	0.000040	6.4	1.8	0.00034	0.000036
	June		0.00047	4.1	0.00029	0.000020	6.1	4.8	0.000011	0.0000052	0.00021	0.0021	0.000061	7.1	2.0	0.00041	0.000040
	July		0.00074	3.6	0.00047	0.000032	6.8	5.9	0.000017	0.0000082	0.00034	0.0028	0.000099	9.3	2.2	0.00056	0.000051
	August		0.00048	3.4	0.00027	0.000018	5.9	5.1	0.000010	0.0000058	0.00019	0.0020	0.000056	7.6	1.9	0.00046	0.000042
	September		0.00028	3.8	0.00015	0.0000098	5.4	4.2	0.0000063	0.0000035	0.00011	0.0016	0.000031	5.9	1.7	0.00034	0.000034
	October		0.00030	4.3	0.00017	0.000012	5.6	4.2	0.0000071	0.0000034	0.00013	0.0017	0.000036	5.9	1.8	0.00032	0.000034
	November		0.00026	4.3	0.00015	0.000010	5.5	4.0	0.0000063	0.0000030	0.00011	0.0016	0.000031	5.5	1.8	0.00029	0.000032
	December		0.000057	5.6	0.000012	0.00000077	5.3	3.2	0.0000023	0.00000064	0.0000098	0.0018	0.0000026	3.9	1.8	0.00026	0.000024
	January	2028	0.000074	13	0.0000035	0.00000019	4.8	1.8	0.0000036	0.00000082	0.0000048	0.0033	0.0000011	1.4	1.6	0.00045	0.0000011
	February		0.000086	13	0.0000020	9.6E-08	5.1	1.4	0.0000043	0.00000096	0.0000044	0.0040	0.00000087	0.36	1.8	0.00055	0.0000066
	March		0.000092	13	0.0000021	9.8E-08	5.1	1.3	0.0000046	0.0000010	0.0000046	0.0042	0.00000092	0.085	1.8	0.00058	0.0000053
	April		0.00045	9.6	0.00029	0.000019	8.4	13	0.000017	0.00032	0.00030	0.0051	0.000056	3.4	3.0	0.00081	0.000060
	May		0.00027	6.0	0.00020	0.000011	14	37	0.000021	0.0015	0.00057	0.0036	0.000027	3.4	7.0	0.0012	0.00017
	June		0.00024	8.1	0.00017	0.000010	13	33	0.000017	0.0011	0.00045	0.0032	0.000026	2.6	7.1	0.00097	0.00016
	July		0.00038	6.6	0.00032	0.000019	18	48	0.000028	0.0019	0.00076	0.0042	0.000048	4.0	9.3	0.0014	**0.00023**
	August		0.00031	6.5	0.00026	0.000016	20	55	0.000030	0.0025	0.00092	0.0038	0.000035	3.6	12	0.0017	**0.00027**
	September		0.00031	7.3	0.00026	0.000016	19	52	0.000029	0.0024	0.00088	0.0038	0.000036	3.3	12	0.0016	**0.00027**
	October		0.00016	9.0	0.00011	0.0000066	14	35	0.000013	0.00091	0.00034	0.0029	0.000016	2.2	8.4	0.00081	0.00018
	November		0.000099	10	0.000050	0.0000030	11	25	0.0000075	0.00045	0.00017	0.0026	0.0000070	1.6	6.3	0.00057	0.00012
	December		0.000083	13	0.0000026	0.00000013	6.7	7.5	0.0000042	0.0000078	0.0000065	0.0038	0.0000009	0.44	3.0	0.00053	0.000036
		MINIMUM	0.000057	0.024	0.0000020	9.6E-08	1.8	0.45	0.0000023	0.00000064	0.0000044	0.0010	0.00000087	0.016	0.64	0.00017	0.0000018
		MAXIMUM	0.010	13	0.00047	0.000032	20	55	0.00050	0.0025	0.00092	**0.46**	0.00010	9.3	12	0.057	**0.00027**
		AVERAGE	0.0023	4.3	0.00015	0.0000099	6.2	8.5	0.00011	0.00025	0.00026	0.096	0.000044	3.1	2.6	0.012	0.000047
Operations	January	2029	**20**	8.1	**0.070**	**0.000084**	417	**1729**	**0.026**	0.029	**0.32**	**9.5**	**0.043**	0.31	61	0.096	0.000023
	February		**22**	7.2	**0.077**	**0.000091**	456	**2742**	**0.029**	0.032	**0.35**	**10**	**0.047**	0.27	96	0.10	0.000018
	March		**21**	6.8	**0.074**	**0.000090**	456	**2732**	**0.027**	0.031	**0.34**	**9.9**	**0.045**	0.66	97	0.10	0.000047
	April		**18**	5.8	**0.064**	**0.000093**	455	**2372**	**0.024**	0.028	**0.29**	**8.6**	**0.039**	3.5	88	0.088	0.00018
	May		**19**	5.4	**0.065**	**0.000085**	456	**2208**	**0.024**	0.028	**0.30**	**8.7**	**0.040**	1.6	84	0.089	0.00018
	June		**18**	5.4	**0.064**	**0.000087**	456	**2208**	**0.024**	0.028	**0.29**	**8.6**	**0.039**	2.4	83	0.088	0.00017
	July		**19**	5.7	**0.066**	**0.000090**	456	**2326**	**0.025**	0.028	**0.30**	**8.9**	**0.040**	2.4	86	0.091	0.00016
	August		**19**	5.5	**0.065**	**0.000089**	456	**2221**	**0.024**	0.028	**0.30**	**8.7**	**0.039**	2.6	84	0.089	**0.00020**
	September		**18**	5.4	**0.064**	**0.000090**	456	**2259**	**0.024**	0.028	**0.29**	**8.6**	**0.039**	3.0	85	0.088	**0.00020**
	October		**20**	5.9	**0.068**	**0.000087**	455	**2430**	**0.025**	0.029	**0.31**	**9.1**	**0.041**	1.5	90	0.093	0.00014
	November		**21**	6.6	**0.074**	**0.000091**	456	**2655**	**0.028**	0.031	**0.34**	**10.0**	**0.045**	0.99	95	0.10	0.000074
	December		**22**	7.1	**0.077**	**0.000091**	456	**2826**	**0.028**	0.031	**0.35**	**10**	**0.047**	0.33	99	0.10	0.000023

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	**24**	6.2	**0.082**	**0.000098**	456	**2375**	**0.031**	0.034	**0.38**	**11**	**0.050**	0.22	83	0.11	0.000016
	February		**23**	5.7	**0.081**	**0.000098**	457	**2165**	**0.030**	0.033	**0.37**	**11**	**0.049**	0.49	77	0.11	0.000032
	March		**23**	5.5	**0.080**	**0.000098**	456	**2093**	**0.030**	0.033	**0.37**	**11**	**0.049**	0.69	75	0.11	0.000055
	April		**21**	4.8	**0.071**	**0.000100**	459	**1860**	**0.026**	0.031	**0.33**	**9.6**	**0.044**	2.9	70	0.097	0.00018
	May		**21**	4.9	**0.074**	**0.00010**	458	**1879**	**0.027**	0.032	**0.34**	**9.9**	**0.045**	2.4	71	0.10	0.00017
	June		**20**	4.7	**0.071**	**0.00010**	459	**1825**	**0.026**	0.031	**0.32**	**9.5**	**0.043**	3.2	70	0.096	**0.00020**
	July		**20**	4.7	**0.071**	**0.00010**	458	**1757**	**0.026**	0.031	**0.32**	**9.4**	**0.043**	3.7	68	0.096	**0.00024**
	August		**20**	4.6	**0.070**	**0.00010**	458	**1790**	**0.026**	0.031	**0.32**	**9.4**	**0.043**	3.2	70	0.096	**0.00023**
	September		**20**	4.6	**0.070**	**0.000097**	458	**1786**	**0.026**	0.031	**0.32**	**9.4**	**0.043**	2.7	70	0.096	**0.00022**
	October		**21**	4.8	**0.072**	**0.000098**	459	**1846**	**0.027**	0.031	**0.33**	**9.6**	**0.044**	2.1	71	0.098	0.00018
	November		**22**	5.1	**0.078**	**0.000094**	457	**1940**	**0.029**	0.033	**0.36**	**10**	**0.047**	0.52	72	0.11	0.000099
	December		**23**	5.6	**0.081**	**0.000098**	456	**2119**	**0.030**	0.033	**0.37**	**11**	**0.049**	0.54	76	0.11	0.000046
	January	2031	**24**	5.0	**0.085**	**0.00010**	456	**1927**	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.52	69	0.11	0.000043
	February		**25**	4.9	**0.087**	**0.00010**	455	**1889**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.19	67	0.12	0.000020
	March		**24**	4.8	**0.085**	**0.00010**	456	**1833**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.55	65	0.11	0.000042
	April		**22**	4.3	**0.077**	**0.00011**	458	**1677**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.7	63	0.10	0.00015
	May		**22**	4.1	**0.077**	**0.00010**	459	**1615**	**0.029**	0.033	**0.35**	**10**	**0.047**	1.6	62	0.11	0.00015
	June		**22**	4.2	**0.077**	**0.00010**	458	**1652**	**0.029**	0.033	**0.35**	**10**	**0.047**	1.7	62	0.10	0.00013
	July		**23**	4.2	**0.078**	**0.00010**	458	**1652**	**0.029**	0.033	**0.36**	**10**	**0.048**	1.9	62	0.11	0.00014
	August		**23**	4.4	**0.080**	**0.00011**	457	**1712**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	2.1	65	0.11	0.00016
	September		**22**	4.2	**0.078**	**0.00010**	458	**1663**	**0.029**	0.033	**0.36**	**10**	**0.047**	2.2	64	0.11	0.00017
	October		**23**	4.4	**0.081**	**0.00010**	457	**1712**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.4	64	0.11	0.00012
	November		**25**	4.7	**0.086**	**0.00010**	455	**1818**	**0.032**	**0.035**	**0.39**	**12**	**0.053**	0.45	65	0.12	0.000050
	December		**25**	4.9	**0.086**	**0.00010**	455	**1890**	**0.032**	**0.035**	**0.39**	**12**	**0.052**	0.24	67	0.12	0.000023
	January	2032	**26**	5.1	**0.090**	**0.00011**	455	**1778**	**0.034**	**0.037**	**0.41**	**12**	**0.055**	0.26	63	0.12	0.000026
	February		**26**	5.2	**0.091**	**0.00011**	455	**1740**	**0.034**	**0.037**	**0.42**	**12**	**0.056**	0.17	62	0.12	0.000019
	March		**23**	4.5	**0.081**	**0.00010**	458	**1607**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	1.5	60	0.11	0.00010
	April		**22**	4.3	**0.078**	**0.00011**	458	**1542**	**0.029**	0.033	**0.36**	**10**	**0.048**	2.6	59	0.11	0.00016
	May		**23**	4.3	**0.079**	**0.00010**	457	**1530**	**0.029**	0.034	**0.36**	**11**	**0.048**	1.4	59	0.11	0.00014
	June		**23**	4.4	**0.081**	**0.00010**	458	**1583**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.5	59	0.11	0.00011
	July		**22**	4.3	**0.077**	**0.00011**	458	**1531**	**0.029**	0.033	**0.35**	**10**	**0.047**	3.0	59	0.10	0.00018
	August		**22**	4.2	**0.077**	**0.00010**	458	**1502**	**0.029**	0.033	**0.35**	**10**	**0.047**	1.8	58	0.10	0.00016
	September		**24**	4.5	**0.083**	**0.00011**	456	**1572**	**0.031**	**0.035**	**0.38**	**11**	**0.051**	1.1	59	0.11	0.00012
	October		**24**	4.6	**0.084**	**0.00011**	457	**1603**	**0.031**	**0.035**	**0.39**	**11**	**0.051**	0.99	59	0.11	0.000081
	November		**25**	5.0	**0.088**	**0.00011**	455	**1716**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.49	62	0.12	0.000046
	December		**25**	5.2	**0.088**	**0.00010**	455	**1814**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.18	64	0.12	0.000021
	January	2033	**25**	4.8	**0.088**	**0.00010**	455	**1820**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	64	0.12	0.000021
	February		**25**	4.7	**0.088**	**0.00010**	455	**1822**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	64	0.12	0.000021
	March		**25**	4.7	**0.088**	**0.00011**	455	**1822**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.26	65	0.12	0.000028
	April		**23**	4.1	**0.079**	**0.00011**	456	**1563**	**0.029**	0.034	**0.36**	**11**	**0.048**	3.8	59	0.11	0.00017
	May		**22**	3.8	**0.077**	**0.000099**	458	**1539**	**0.028**	0.033	**0.35**	**10**	**0.047**	1.4	60	0.10	0.00017
	June		**22**	3.9	**0.077**	**0.00010**	457	**1533**	**0.029**	0.033	**0.35**	**10**	**0.047**	1.7	59	0.10	0.00015
	July		**23**	4.1	**0.080**	**0.00010**	457	**1624**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	1.6	61	0.11	0.00013
	August		**22**	3.9	**0.078**	**0.00010**	458	**1535**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.1	59	0.11	0.00015
	September		**23**	4.0	**0.080**	**0.00010**	457	**1560**	**0.030**	0.034	**0.37**	**11**	**0.049**	1.7	59	0.11	0.00013
	October		**24**	4.2	**0.082**	**0.00011**	457	**1636**	**0.031**	**0.035**	**0.38**	**11**	**0.050**	1.4	61	0.11	0.00011
	November		**24**	4.3	**0.084**	**0.00011**	457	**1672**	**0.031**	**0.035**	**0.38**	**11**	**0.051**	1.1	62	0.11	0.000092
	December		**25**	4.7	**0.088**	**0.00011**	455	**1809**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.22	64	0.12	0.000025
	January	2034	**25**	4.8	**0.088**	**0.00010**	455	**1820**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	64	0.12	0.000021
	February		**25**	4.7	**0.087**	**0.00010**	456	**1817**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.25	64	0.12	0.000027
	March		**25**	4.5	**0.085**	**0.00010**	456	**1741**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.72	63	0.12	0.000061
	April		**23**	4.1	**0.079**	**0.00011**	458	**1606**	**0.029**	0.033	**0.36**	**11**	**0.048**	2.6	60	0.11	0.00014
	May		**23**	4.0	**0.079**	**0.000099**	458	**1574**	**0.029**	0.034	**0.36**	**11**	**0.048**	0.78	60	0.11	0.00012
	June		**22**	3.9	**0.077**	**0.00012**	456	**1466**	**0.028**	0.033	**0.35**	**10**	**0.047**	4.6	57	0.10	**0.00020**
	July		**22**	3.8	**0.077**	**0.00011**	456	**1383**	**0.028**	0.033	**0.35**	**10**	**0.047**	3.7	55	0.10	**0.00023**
	August		**22**	3.7	**0.077**	**0.00010**	456	**1416**	**0.028**	0.033	**0.35**	**10**	**0.047**	2.3	56	0.10	**0.00022**
	September		**22**	3.8	**0.077**	**0.00011**	457	**1544**	**0.028**	0.034	**0.35**	**10**	**0.047**	2.5	62	0.10	**0.00022**
	October		**22**	3.9	**0.078**	**0.000099**	457	**1560**	**0.029**	0.034	**0.36**	**10**	**0.048**	0.72	61	0.11	0.00015
	November		**24**	4.4	**0.084**	**0.00010**	456	**1691**	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.57	63	0.11	0.000092
	December		**24**	4.5	**0.085**	**0.00010**	456	**1735**	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.58	63	0.11	0.000053
	January	2035	**25**	4.7	**0.088**	**0.00011**	455	**1814**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.21	64	0.12	0.000024
	February		**25**	4.7	**0.087**	**0.00011**	455	**1782**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.50	64	0.12	0.000046
	March		**25**	4.7	**0.088**	**0.00010**	455	**1821**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.18	64	0.12	0.000022

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	23	4.3	0.081	0.00011	457	1705	0.030	0.034	0.37	11	0.050	1.9	63	0.11	0.00010
	May		22	3.8	0.077	0.00010	457	1517	0.028	0.033	0.35	10	0.047	2.4	58	0.10	0.00016
	June		22	3.9	0.078	0.00010	458	1553	0.029	0.033	0.36	10	0.048	2.1	60	0.11	0.00017
	July		22	3.9	0.078	0.00010	458	1552	0.029	0.034	0.36	10	0.048	2.2	60	0.11	0.00017
	August		23	3.9	0.079	0.00010	457	1553	0.029	0.034	0.36	11	0.048	2.0	60	0.11	0.00017
	September		22	3.9	0.078	0.00010	458	1556	0.029	0.033	0.36	10	0.047	1.7	60	0.11	0.00016
	October		23	4.1	0.081	0.00010	457	1624	0.030	0.034	0.37	11	0.050	1.2	60	0.11	0.00010
	November		25	4.6	0.087	0.00010	455	1761	0.032	0.036	0.40	12	0.053	0.43	63	0.12	0.000041
	December		25	4.7	0.088	0.00011	455	1816	0.033	0.036	0.40	12	0.054	0.18	64	0.12	0.000022
	January	2036	25	4.8	0.088	0.00011	455	1819	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000021
	February		25	4.8	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000021
	March		25	4.6	0.085	0.00010	456	1772	0.032	0.035	0.39	11	0.052	0.58	64	0.12	0.000051
	April		22	4.0	0.077	0.00011	457	1556	0.029	0.033	0.35	10	0.047	3.6	59	0.10	0.00017
	May		22	3.9	0.077	0.00010	457	1560	0.029	0.033	0.35	10	0.047	1.6	60	0.10	0.00017
	June		23	4.1	0.080	0.00011	457	1585	0.030	0.034	0.37	11	0.049	1.8	61	0.11	0.00015
	July		22	3.9	0.078	0.00010	458	1573	0.029	0.033	0.36	10	0.047	2.0	60	0.11	0.00016
	August		23	4.2	0.081	0.00010	456	1683	0.030	0.034	0.37	11	0.050	1.2	62	0.11	0.000090
	September		23	4.1	0.079	0.00010	457	1632	0.029	0.034	0.36	11	0.048	1.5	61	0.11	0.00012
	October		24	4.2	0.082	0.00010	457	1631	0.030	0.034	0.37	11	0.050	1.3	61	0.11	0.00011
	November		25	4.7	0.088	0.00011	455	1757	0.033	0.036	0.40	12	0.054	0.39	63	0.12	0.000042
	December		25	4.8	0.087	0.00010	455	1826	0.032	0.036	0.40	12	0.053	0.18	65	0.12	0.000022
	January	2037	25	4.6	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000021
	February		24	4.2	0.084	0.00010	456	1721	0.031	0.035	0.38	11	0.051	0.80	63	0.11	0.000068
	March		24	4.3	0.085	0.00010	456	1749	0.032	0.035	0.39	11	0.052	0.61	63	0.11	0.000053
	April		22	3.8	0.078	0.00011	457	1576	0.029	0.033	0.36	10	0.047	3.0	60	0.11	0.00018
	May		22	3.8	0.078	0.000099	456	1592	0.029	0.033	0.36	10	0.048	0.93	60	0.11	0.00012
	June		22	3.7	0.078	0.00011	458	1569	0.029	0.033	0.35	10	0.047	3.2	60	0.11	0.00018
	July		22	3.7	0.077	0.00011	458	1503	0.028	0.033	0.35	10	0.047	3.2	59	0.10	**0.00021**
	August		22	3.7	0.078	0.00010	458	1582	0.029	0.034	0.36	10	0.047	1.6	62	0.11	0.00017
	September		22	3.6	0.077	0.00010	458	1517	0.029	0.033	0.35	10	0.047	2.0	59	0.10	0.00016
	October		24	4.1	0.084	0.00010	456	1657	0.031	0.035	0.38	11	0.051	0.75	62	0.11	0.00010
	November		25	4.4	0.087	0.00011	456	1806	0.032	0.036	0.40	12	0.053	0.33	64	0.12	0.000035
	December		25	4.5	0.088	0.00010	455	1821	0.033	0.036	0.40	12	0.054	0.19	64	0.12	0.000023
	January	2038	25	4.5	0.088	0.00010	455	1821	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000023
	February		25	4.5	0.088	0.00011	455	1819	0.033	0.036	0.40	12	0.054	0.18	64	0.12	0.000025
	March		23	3.9	0.079	0.00010	458	1606	0.029	0.034	0.36	11	0.048	1.9	60	0.11	0.00013
	April		22	3.7	0.077	0.00010	458	1526	0.028	0.033	0.35	10	0.047	2.6	59	0.10	0.00018
	May		23	3.8	0.078	0.00010	457	1582	0.029	0.034	0.36	11	0.048	1.3	60	0.11	0.00014
	June		23	4.0	0.081	0.00011	457	1656	0.030	0.034	0.37	11	0.050	1.6	61	0.11	0.00011
	July		22	3.7	0.078	0.00010	458	1551	0.029	0.033	0.36	10	0.048	1.9	59	0.11	0.00015
	August		23	3.8	0.078	0.00010	457	1596	0.029	0.033	0.36	10	0.048	1.5	60	0.11	0.00013
	September		23	3.8	0.079	0.00011	458	1597	0.029	0.034	0.36	11	0.048	2.4	60	0.11	0.00015
	October		22	3.7	0.078	0.00010	458	1528	0.029	0.033	0.36	10	0.047	1.5	59	0.11	0.00015
	November		25	4.3	0.086	0.00011	455	1723	0.032	0.036	0.40	12	0.053	0.58	63	0.12	0.000072
	December		25	4.5	0.088	0.00011	455	1818	0.033	0.036	0.40	12	0.054	0.19	64	0.12	0.000026
	January	2039	25	4.5	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000026
	February		24	4.1	0.082	0.00010	457	1653	0.030	0.034	0.37	11	0.050	1.1	61	0.11	0.000097
	March		24	4.2	0.084	0.00010	456	1716	0.031	0.035	0.38	11	0.051	0.82	62	0.11	0.000075
	April		24	4.1	0.083	0.00010	456	1694	0.031	0.035	0.38	11	0.051	1.0	62	0.11	0.000084
	May		23	3.9	0.080	0.00010	457	1675	0.030	0.033	0.36	11	0.049	1.1	61	0.11	0.000086
	June		24	4.1	0.083	0.00011	457	1727	0.031	0.034	0.38	11	0.051	1.3	63	0.11	0.000083
	July		22	3.7	0.077	0.00010	458	1529	0.028	0.033	0.35	10	0.047	2.2	59	0.10	0.00017
	August		22	3.6	0.077	0.00011	457	1496	0.028	0.033	0.35	10	0.047	3.6	59	0.10	**0.00022**
	September		22	3.7	0.077	0.00010	458	1578	0.029	0.033	0.35	10	0.047	1.5	61	0.11	0.00016
	October		23	3.9	0.081	0.00011	457	1599	0.030	0.035	0.37	11	0.050	1.5	61	0.11	0.00015
	November		24	4.2	0.085	0.00010	456	1683	0.032	0.035	0.39	11	0.052	0.75	61	0.11	0.000078
	December		25	4.5	0.088	0.00011	455	1817	0.033	0.036	0.40	12	0.054	0.19	64	0.12	0.000028
	January	2040	25	4.7	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000028
	February		25	4.8	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000029
	March		23	4.1	0.079	0.00011	458	1608	0.029	0.033	0.36	11	0.048	2.4	60	0.11	0.00014
	April		22	3.9	0.077	0.00010	458	1513	0.029	0.033	0.35	10	0.047	1.8	58	0.10	0.00015
	May		22	4.0	0.078	0.00011	458	1557	0.029	0.033	0.36	10	0.047	2.1	60	0.11	0.00016
	June		22	3.9	0.078	0.00011	458	1533	0.029	0.033	0.36	10	0.047	2.6	59	0.11	0.00018

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	22	3.8	0.077	0.00011	457	1479	0.028	0.033	0.35	10	0.047	3.0	58	0.10	0.00022
	August		22	3.9	0.077	0.000099	458	1562	0.029	0.033	0.35	10	0.047	0.88	60	0.11	0.00014
	September		23	4.2	0.081	0.00010	457	1654	0.030	0.034	0.37	11	0.049	1.3	62	0.11	0.00011
	October		23	4.1	0.080	0.00010	456	1630	0.030	0.034	0.37	11	0.049	1.5	61	0.11	0.00013
	November		25	4.7	0.087	0.00011	455	1767	0.032	0.036	0.40	12	0.053	0.36	63	0.12	0.000044
	December		25	4.8	0.088	0.00011	455	1819	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000029
	January	2041	25	4.8	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000030
	February		25	4.8	0.088	0.00011	455	1823	0.033	0.036	0.40	12	0.054	0.17	65	0.12	0.000030
	March		24	4.6	0.084	0.00011	456	1768	0.031	0.035	0.38	11	0.051	0.88	64	0.11	0.000065
	April		23	4.2	0.080	0.00011	456	1581	0.030	0.034	0.36	11	0.049	2.8	60	0.11	0.00015
	May		22	3.9	0.077	0.000098	457	1591	0.029	0.033	0.35	10	0.047	0.96	61	0.10	0.00015
	June		23	4.2	0.082	0.00011	457	1640	0.030	0.034	0.37	11	0.050	1.6	61	0.11	0.00012
	July		22	4.0	0.078	0.00011	458	1584	0.029	0.033	0.36	10	0.048	2.6	61	0.11	0.00017
	August		22	3.9	0.077	0.00012	456	1394	0.028	0.033	0.35	10	0.047	5.4	55	0.10	0.00024
	September		22	3.7	0.077	0.00010	456	1439	0.028	0.034	0.35	10	0.047	1.5	57	0.10	0.00022
	October		22	3.9	0.076	0.00010	458	1552	0.028	0.033	0.35	10	0.047	1.2	61	0.10	0.00017
	November		23	4.2	0.082	0.00010	457	1633	0.030	0.035	0.37	11	0.050	0.34	62	0.11	0.00011
	December		25	4.8	0.088	0.00011	455	1811	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000036
	January	2042	25	4.8	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	65	0.12	0.000031
	February		25	4.8	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	65	0.12	0.000031
	March		25	4.6	0.086	0.00011	456	1761	0.032	0.036	0.39	12	0.052	0.52	63	0.12	0.000056
	April		23	4.3	0.080	0.00011	456	1662	0.030	0.034	0.37	11	0.049	2.5	62	0.11	0.00014
	May		22	3.9	0.078	0.000100	458	1579	0.029	0.033	0.36	10	0.048	0.99	60	0.11	0.00014
	June		22	4.0	0.078	0.00011	457	1539	0.029	0.033	0.36	10	0.048	3.5	59	0.11	0.00019
	July		22	3.8	0.077	0.00011	457	1469	0.028	0.033	0.35	10	0.047	2.9	58	0.10	0.00023
	August		22	3.8	0.077	0.00011	457	1513	0.028	0.034	0.35	10	0.047	3.0	60	0.10	0.00023
	September		22	3.9	0.078	0.00011	458	1544	0.029	0.034	0.36	10	0.047	2.6	60	0.11	0.00019
	October		22	3.9	0.077	0.00010	457	1525	0.029	0.034	0.35	10	0.047	2.2	60	0.10	0.00021
	November		23	4.2	0.081	0.00010	457	1623	0.030	0.034	0.37	11	0.050	0.28	61	0.11	0.00010
	December		25	4.8	0.088	0.00011	455	1810	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000035
	January	2043	25	4.8	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000032
	February		25	4.8	0.088	0.00011	455	1824	0.033	0.036	0.40	12	0.054	0.17	65	0.12	0.000032
	March		25	4.8	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000032
	April		23	4.4	0.082	0.00011	456	1677	0.030	0.034	0.37	11	0.050	2.5	62	0.11	0.00012
	May		22	3.9	0.077	0.00010	458	1571	0.028	0.033	0.35	10	0.047	1.7	60	0.10	0.00018
	June		22	3.9	0.077	0.00011	458	1515	0.028	0.033	0.35	10	0.047	2.8	58	0.10	0.00019
	July		22	3.9	0.077	0.00011	458	1515	0.029	0.033	0.35	10	0.047	3.0	59	0.10	0.00020
	August		22	3.8	0.077	0.00011	456	1434	0.028	0.034	0.35	10	0.047	3.2	57	0.10	0.00024
	September		22	3.8	0.077	0.00011	457	1487	0.028	0.034	0.35	10	0.047	3.5	59	0.10	0.00023
	October		22	3.8	0.077	0.00011	457	1497	0.029	0.034	0.35	10	0.047	2.0	59	0.11	0.00021
	November		22	3.9	0.078	0.00010	458	1540	0.029	0.034	0.36	10	0.047	1.0	60	0.11	0.00015
	December		25	4.5	0.085	0.00010	456	1728	0.032	0.035	0.39	11	0.052	0.32	63	0.12	0.000077
	January	2044	25	4.7	0.088	0.00011	455	1816	0.033	0.036	0.40	12	0.054	0.19	64	0.12	0.000035
	February		25	4.7	0.088	0.00011	455	1821	0.033	0.036	0.40	12	0.054	0.17	65	0.12	0.000032
	March		25	4.7	0.087	0.00011	456	1817	0.032	0.036	0.40	12	0.053	0.36	65	0.12	0.000039
	April		22	3.9	0.077	0.00011	458	1543	0.029	0.033	0.35	10	0.047	2.3	59	0.10	0.00016
	May		23	4.0	0.080	0.00010	457	1589	0.030	0.034	0.37	11	0.049	1.4	60	0.11	0.00013
	June		23	4.2	0.081	0.00011	457	1652	0.030	0.034	0.37	11	0.049	1.4	61	0.11	0.00012
	July		22	3.9	0.078	0.00011	457	1531	0.029	0.033	0.36	10	0.048	2.9	59	0.11	0.00019
	August		22	4.0	0.078	0.00010	457	1595	0.029	0.033	0.36	10	0.048	1.3	61	0.11	0.00015
	September		23	4.1	0.080	0.00010	456	1605	0.030	0.034	0.37	11	0.049	1.4	60	0.11	0.00012
	October		24	4.3	0.083	0.00010	456	1701	0.031	0.035	0.38	11	0.051	0.95	62	0.11	0.000093
	November		25	4.6	0.087	0.00011	455	1787	0.032	0.036	0.40	12	0.053	0.41	64	0.12	0.000050
	December		25	4.7	0.087	0.00011	455	1807	0.032	0.036	0.40	12	0.053	0.23	64	0.12	0.000036
	January	2045	25	4.7	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.18	64	0.12	0.000032
	February		25	4.7	0.088	0.00011	455	1820	0.033	0.036	0.40	12	0.054	0.17	64	0.12	0.000032
	March		24	4.6	0.084	0.00011	456	1800	0.031	0.035	0.39	11	0.051	1.3	65	0.11	0.000066
	April		22	3.8	0.077	0.00010	458	1519	0.029	0.033	0.35	10	0.047	1.5	58	0.10	0.00016
	May		22	3.8	0.077	0.00010	458	1528	0.029	0.033	0.35	10	0.047	1.9	59	0.10	0.00016
	June		23	4.0	0.079	0.00011	458	1570	0.029	0.034	0.36	11	0.048	2.2	60	0.11	0.00017
	July		22	3.8	0.077	0.00010	458	1511	0.029	0.033	0.35	10	0.047	2.1	58	0.10	0.00017
	August		23	4.0	0.080	0.00011	457	1571	0.030	0.034	0.36	11	0.049	1.8	60	0.11	0.00015
	September		23	4.1	0.081	0.00011	458	1608	0.030	0.034	0.37	11	0.049	1.5	60	0.11	0.00013

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	**23**	4.2	**0.081**	**0.00010**	457	**1690**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.2	62	0.11	0.00011
	November		**25**	4.5	**0.086**	**0.00011**	456	**1738**	**0.032**	**0.035**	**0.39**	**12**	**0.052**	0.60	63	0.12	0.000064
	December		**25**	4.7	**0.087**	**0.00011**	456	**1811**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.25	64	0.12	0.000037
	January	2046	**25**	4.6	**0.087**	**0.00011**	455	**1765**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.44	63	0.12	0.000052
	February		**25**	4.7	**0.088**	**0.00011**	455	**1822**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.18	65	0.12	0.000032
	March		**24**	4.3	**0.082**	**0.00011**	457	**1705**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.2	62	0.11	0.000092
	April		**23**	4.0	**0.079**	**0.00010**	457	**1589**	**0.029**	0.034	**0.36**	**11**	**0.048**	1.1	60	0.11	0.00012
	May		**23**	4.0	**0.078**	**0.00010**	458	**1595**	**0.029**	0.033	**0.36**	**11**	**0.048**	1.8	60	0.11	0.00014
	June		**23**	4.0	**0.080**	**0.00011**	458	**1566**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	2.3	60	0.11	0.00016
	July		**22**	3.8	**0.077**	**0.00011**	458	**1504**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.8	58	0.10	0.00019
	August		**22**	3.8	**0.077**	**0.00011**	457	**1511**	**0.028**	0.033	**0.35**	**10**	**0.047**	3.0	59	0.10	**0.00021**
	September		**22**	3.8	**0.077**	**0.00011**	458	**1565**	**0.028**	0.033	**0.35**	**10**	**0.047**	2.5	61	0.10	**0.00021**
	October		**22**	3.8	**0.077**	**0.00010**	458	**1515**	**0.028**	0.033	**0.35**	**10**	**0.047**	1.8	58	0.10	0.00016
	November		**24**	4.1	**0.082**	**0.00010**	457	**1579**	**0.030**	**0.035**	**0.38**	**11**	**0.050**	0.70	60	0.11	0.00013
	December		**25**	4.7	**0.088**	**0.00011**	455	**1790**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.21	64	0.12	0.000043
	January	2047	**25**	4.7	**0.088**	**0.00011**	455	**1821**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	64	0.12	0.000032
	February		**25**	4.7	**0.088**	**0.00011**	455	**1823**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	65	0.12	0.000032
	March		**25**	4.6	**0.086**	**0.00011**	456	**1760**	**0.032**	**0.036**	**0.39**	**12**	**0.053**	0.46	63	0.12	0.000053
	April		**23**	4.2	**0.080**	**0.00011**	457	**1646**	**0.030**	0.034	**0.37**	**11**	**0.049**	2.3	61	0.11	0.00013
	May		**22**	3.8	**0.077**	**0.00010**	458	**1534**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.0	59	0.11	0.00017
	June		**23**	4.1	**0.081**	**0.00011**	456	**1622**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	1.4	61	0.11	0.00014
	July		**22**	3.9	**0.077**	**0.00011**	458	**1538**	**0.029**	0.033	**0.35**	**10**	**0.047**	3.2	59	0.11	**0.00019**
	August		**22**	3.8	**0.077**	**0.00011**	457	**1497**	**0.028**	0.033	**0.35**	**10**	**0.047**	3.1	59	0.10	**0.00022**
	September		**22**	3.8	**0.077**	**0.00010**	458	**1538**	**0.028**	0.033	**0.35**	**10**	**0.047**	1.9	59	0.10	0.00017
	October		**23**	4.0	**0.080**	**0.00010**	457	**1588**	**0.030**	**0.034**	**0.36**	**11**	**0.049**	1.1	61	0.11	0.00015
	November		**25**	4.5	**0.086**	**0.00011**	456	**1738**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.56	63	0.12	0.000067
	December		**25**	4.7	**0.088**	**0.00011**	455	**1808**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.24	64	0.12	0.000038
	January	2048	**25**	4.7	**0.088**	**0.00011**	455	**1814**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.27	65	0.12	0.000040
	February		**25**	4.7	**0.087**	**0.00011**	455	**1824**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.21	65	0.12	0.000037
	March		**25**	4.7	**0.088**	**0.00011**	455	**1821**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.18	65	0.12	0.000034
	April		**24**	4.3	**0.082**	**0.00011**	457	**1712**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.4	62	0.11	0.000098
	May		**24**	4.1	**0.082**	**0.00010**	456	**1609**	**0.030**	**0.034**	**0.38**	**11**	**0.050**	0.87	60	0.11	0.00011
	June		**23**	4.2	**0.081**	**0.00011**	457	**1662**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.3	62	0.11	0.00011
	July		**22**	3.9	**0.077**	**0.00012**	457	**1504**	**0.029**	0.033	**0.35**	**10**	**0.047**	5.0	58	0.10	**0.00021**
	August		**22**	3.7	**0.077**	**0.00011**	456	**1394**	**0.028**	0.033	**0.35**	**10**	**0.047**	2.9	55	0.10	**0.00023**
	September		**22**	3.7	**0.077**	**0.00011**	456	**1421**	**0.028**	0.033	**0.35**	**10**	**0.047**	2.4	57	0.10	**0.00023**
	October		**22**	3.9	**0.078**	**0.00010**	458	**1574**	**0.029**	0.034	**0.36**	**10**	**0.047**	1.1	62	0.11	0.00018
	November		**24**	4.3	**0.084**	**0.00010**	456	**1692**	**0.031**	**0.035**	**0.39**	**11**	**0.051**	0.22	64	0.11	0.00010
	December		**25**	4.6	**0.087**	**0.00011**	455	**1784**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.47	64	0.12	0.000059
	January	2049	**24**	4.4	**0.083**	**0.00011**	457	**1689**	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.95	62	0.11	0.000089
	February		**25**	4.7	**0.088**	**0.00011**	455	**1801**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.22	64	0.12	0.000043
	March		**24**	4.6	**0.085**	**0.00011**	456	**1776**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	1.2	64	0.11	0.000071
	April		**23**	4.0	**0.080**	**0.00010**	458	**1623**	**0.030**	0.034	**0.36**	**11**	**0.049**	0.94	61	0.11	0.00013
	May		**23**	4.0	**0.079**	**0.00011**	457	**1611**	**0.029**	0.033	**0.36**	**11**	**0.048**	1.8	60	0.11	0.00014
	June		**22**	3.9	**0.077**	**0.00011**	458	**1524**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.3	59	0.10	0.00018
	July		**22**	3.8	**0.077**	**0.00011**	458	**1502**	**0.029**	0.033	**0.35**	**10**	**0.047**	3.7	59	0.10	**0.00023**
	August		**22**	3.8	**0.077**	**0.00011**	457	**1525**	**0.028**	0.034	**0.35**	**10**	**0.047**	3.0	60	0.10	**0.00023**
	September		**22**	3.8	**0.077**	**0.00011**	457	**1509**	**0.029**	0.034	**0.35**	**10**	**0.047**	3.1	60	0.11	**0.00022**
	October		**22**	3.8	**0.078**	**0.00011**	458	**1535**	**0.029**	0.034	**0.36**	**10**	**0.047**	2.2	61	0.11	**0.00022**
	November		**22**	3.8	**0.077**	**0.000099**	459	**1519**	**0.029**	0.033	**0.35**	**10**	**0.047**	0.93	59	0.10	0.00015
	December		**25**	4.5	**0.087**	**0.00011**	455	**1760**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.19	64	0.12	0.000061
	January	2050	**25**	4.6	**0.088**	**0.00011**	455	**1820**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	65	0.12	0.000039
	February		**25**	4.5	**0.088**	**0.00011**	455	**1824**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	65	0.12	0.000039
	March		**25**	4.4	**0.087**	**0.00011**	456	**1779**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.41	64	0.12	0.000056
	April		**22**	3.8	**0.078**	**0.00011**	458	**1589**	**0.029**	0.033	**0.36**	**10**	**0.048**	2.5	60	0.11	0.00017
	May		**23**	3.8	**0.081**	**0.00010**	458	**1599**	**0.030**	**0.034**	**0.37**	**11**	**0.049**	1.1	61	0.11	0.00014
	June		**23**	3.8	**0.078**	**0.00011**	457	**1576**	**0.029**	0.034	**0.36**	**11**	**0.048**	2.2	60	0.11	0.00017
	July		**24**	4.1	**0.082**	**0.00011**	457	**1689**	**0.031**	**0.035**	**0.38**	**11**	**0.050**	1.2	62	0.11	0.00011
	August		**24**	4.0	**0.082**	**0.00011**	457	**1610**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.3	60	0.11	0.00013
	September		**22**	3.8	**0.078**	**0.00011**	458	**1592**	**0.029**	0.033	**0.36**	**10**	**0.048**	2.2	61	0.11	0.00017
	October		**23**	3.9	**0.081**	**0.00010**	457	**1618**	**0.030**	**0.034**	**0.37**	**11**	**0.050**	1.0	61	0.11	0.00012
	November		**24**	4.2	**0.085**	**0.00011**	456	**1720**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.71	62	0.11	0.000080
	December		**25**	4.5	**0.088**	**0.00011**	455	**1804**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.24	64	0.12	0.000046

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2051	**25**	4.5	**0.088**	**0.00011**	455	**1823**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	65	0.12	0.000041
	February		**25**	4.5	**0.088**	**0.00011**	455	**1820**	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.17	65	0.12	0.000042
	March		**24**	4.3	**0.085**	**0.00011**	456	**1748**	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.72	63	0.11	0.000082
	April		**22**	3.8	**0.077**	**0.00012**	456	**1489**	**0.029**	0.033	**0.35**	**10**	**0.047**	5.2	57	0.10	**0.00020**
	May		**22**	3.5	**0.077**	**0.00010**	457	**1494**	**0.028**	0.034	**0.35**	**10**	**0.047**	1.5	59	0.10	**0.00023**
	June		**22**	3.6	**0.077**	**0.00010**	458	**1539**	**0.028**	0.033	**0.35**	**10**	**0.047**	1.7	60	0.10	0.00018
	July		**22**	3.7	**0.077**	**0.00011**	458	**1504**	**0.029**	0.033	**0.35**	**10**	**0.047**	2.9	59	0.10	**0.00020**
	August		**22**	3.6	**0.077**	**0.00011**	456	**1458**	**0.028**	0.034	**0.35**	**10**	**0.047**	3.2	58	0.10	**0.00025**
	September		**23**	3.7	**0.078**	**0.00011**	458	**1544**	**0.029**	**0.034**	**0.36**	**11**	**0.048**	1.9	61	0.11	**0.00020**
	October		**22**	3.6	**0.077**	**0.00010**	458	**1510**	**0.029**	0.033	**0.35**	**10**	**0.047**	1.5	58	0.10	0.00016
	November		**24**	4.0	**0.082**	**0.00011**	457	**1673**	**0.031**	**0.035**	**0.38**	**11**	**0.050**	0.91	63	0.11	0.00013
	December		**25**	4.3	**0.087**	**0.00011**	455	**1776**	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.48	64	0.12	0.000066
	January	2052	**13**	5.1	**0.045**	**0.000057**	457	**1650**	**0.017**	0.018	**0.21**	**6.0**	**0.028**	0.18	59	0.062	0.000041
	February		**11**	5.3	0.040	0.000050	458	**1608**	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.16	57	0.055	0.000040
	March		**11**	5.2	0.038	0.000049	457	**1619**	**0.014**	0.016	**0.18**	**5.2**	**0.023**	0.19	58	0.053	0.000042
	April		**7.9**	3.6	0.027	0.000047	456	**1327**	**0.010**	0.012	**0.13**	**3.7**	**0.017**	2.1	50	0.039	0.00014
	May		**7.8**	3.5	0.027	0.000046	456	**1310**	**0.010**	0.013	**0.12**	**3.7**	**0.017**	1.8	51	0.039	0.00015
	June		**7.8**	3.5	0.027	0.000044	456	**1424**	**0.010**	0.013	**0.12**	**3.7**	**0.017**	1.4	55	0.039	0.00015
	July		**7.8**	3.5	0.027	0.000051	456	**1205**	**0.010**	0.013	**0.12**	**3.7**	**0.017**	2.9	48	0.039	0.00018
	August		**7.8**	3.4	0.027	0.000045	456	**1240**	**0.010**	0.013	**0.12**	**3.7**	**0.017**	1.7	48	0.039	0.00017
	September		**7.8**	3.5	0.027	0.000042	455	**1430**	**0.010**	0.013	**0.12**	**3.7**	**0.017**	1.2	56	0.039	0.00016
	October		**8.8**	4.0	0.030	0.000045	457	**1560**	**0.011**	0.013	**0.14**	**4.1**	**0.019**	1.0	59	0.043	0.00012
	November		**11**	5.1	0.039	0.000050	458	**1588**	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.30	57	0.054	0.000051
	December		**11**	5.2	0.039	0.000050	457	**1609**	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.17	57	0.054	0.000041
		MINIMUM	**7.8**	3.4	0.027	0.000042	417	**1205**	**0.010**	0.012	**0.12**	**3.7**	**0.017**	0.16	48	0.039	0.000016
		MAXIMUM	**26**	8.1	**0.091**	**0.00012**	459	**2826**	**0.034**	**0.037**	**0.42**	**12**	**0.056**	5.4	99	0.12	**0.00025**
		AVERAGE	**23**	4.3	**0.079**	**0.00010**	456	**1689**	**0.029**	0.033	**0.36**	**11**	**0.048**	1.4	63	0.11	0.00012
Decommissioning	January	2053	**0.97**	6.5	0.0035	0.0000069	691	**2330**	0.0013	0.0014	0.015	**0.48**	0.0021	0.20	82	0.0073	0.000034
	February		0.0013	6.6	0.000069	0.0000024	753	**2520**	0.0000070	0.000038	0.000042	0.023	0.000041	0.21	88	0.0029	0.000027
	March		0.0013	6.4	0.00013	0.0000065	733	**2451**	0.000010	0.00019	0.00013	0.023	0.000052	0.84	86	0.0029	0.000041
	April		0.0013	5.6	0.00031	0.000017	502	**1676**	0.000028	0.0017	0.00069	0.020	0.000067	2.8	63	0.0032	0.00018
	May		0.0013	5.6	0.00021	0.000012	541	**1806**	0.000025	0.0019	0.00068	0.020	0.000053	1.8	69	0.0034	0.00017
	June		0.0013	5.8	0.00017	0.0000092	647	**2162**	0.000020	0.0014	0.00051	0.022	0.000052	1.3	80	0.0034	0.00014
	July		0.0013	5.6	0.00023	0.000013	605	**2020**	0.000023	0.0014	0.00056	0.021	0.000060	2.1	75	0.0033	0.00016
	August		0.0015	5.5	0.00033	0.000019	593	**1979**	0.000026	0.0014	0.00064	0.021	0.000079	3.2	74	0.0033	0.00016
	September		0.0012	5.0	0.00032	0.000017	453	**1513**	0.000031	0.0020	0.00079	0.019	0.000064	2.9	59	0.0032	**0.00021**
	October		0.0013	5.1	0.00021	0.000012	529	**1765**	0.000025	0.0020	0.00072	0.020	0.000051	1.7	68	0.0034	0.00018
	November		0.0012	5.2	0.00014	0.0000076	632	**2110**	0.000019	0.0015	0.00053	0.021	0.000046	1.0	79	0.0034	0.00014
	December		0.0013	5.4	0.000068	0.0000024	746	**2497**	0.0000070	0.000047	0.000044	0.023	0.000041	0.26	88	0.0029	0.000039
	January	2054	0.0010	5.4	0.000063	0.0000021	757	**2534**	0.0000063	0.000033	0.000034	0.023	0.000041	0.21	89	0.0029	0.000023
	February		0.00096	5.2	0.000061	0.0000021	757	**2532**	0.0000061	0.000031	0.000031	0.022	0.000041	0.21	88	0.0029	0.000020
	March		0.00094	5.1	0.000085	0.0000036	733	**2451**	0.0000086	0.00025	0.00011	0.022	0.000043	0.46	86	0.0029	0.000038
	April		0.0010	4.7	0.00027	0.000015	608	**2031**	0.000021	0.00098	0.00045	0.020	0.000069	2.5	74	0.0030	0.00011
	May		0.0011	4.4	0.00024	0.000013	507	**1695**	0.000025	0.0018	0.00067	0.019	0.000056	2.1	65	0.0033	0.00018
	June		0.0010	4.5	0.00019	0.000010	609	**2036**	0.000022	0.0017	0.00061	0.021	0.000052	1.5	77	0.0034	0.00016
	July		0.00098	4.3	0.00024	0.000013	581	**1942**	0.000023	0.0015	0.00059	0.020	0.000061	2.2	73	0.0033	0.00016
	August		0.0012	4.1	0.00038	0.000022	481	**1606**	0.000032	0.0019	0.00080	0.019	0.000080	3.7	62	0.0032	**0.00021**
	September		0.0010	4.0	0.00022	0.000012	525	**1753**	0.000025	0.0019	0.00070	0.019	0.000054	1.9	67	0.0034	0.00018
	October		0.0010	4.0	0.00019	0.000011	588	**1963**	0.000023	0.0019	0.00067	0.020	0.000052	1.6	75	0.0035	0.00017
	November		0.00098	4.1	0.00016	0.0000083	653	**2183**	0.000016	0.00096	0.00037	0.021	0.000052	1.4	80	0.0032	0.00012
	December		0.00096	4.1	0.000061	0.0000021	746	**2498**	0.0000061	0.000036	0.000033	0.022	0.000041	0.32	88	0.0029	0.000030
	January	2055	0.00092	4.0	0.000059	0.0000019	754	**2523**	0.0000062	0.000064	0.000041	0.022	0.000040	0.22	88	0.0029	0.000020
	February		0.00092	3.9	0.000057	0.0000018	755	**2526**	0.0000059	0.000040	0.000032	0.022	0.000040	0.21	88	0.0029	0.000018
	March		0.00092	3.8	0.000057	0.0000018	756	**2529**	0.0000058	0.000029	0.000030	0.022	0.000040	0.21	88	0.0029	0.000017
	April		0.00082	3.5	0.000095	0.0000052	652	**2178**	0.000018	0.0017	0.00056	0.020	0.000040	0.44	80	0.0034	0.00010
	May		0.00079	3.3	0.000091	0.0000054	633	**2114**	0.000020	0.0021	0.00067	0.020	0.000037	0.30	81	0.0036	0.00014
	June		0.00081	3.3	0.000098	0.0000058	643	**2147**	0.000021	0.0021	0.00069	0.020	0.000039	0.36	82	0.0036	0.00014
	July		0.00087	3.0	0.00010	0.0000067	572	**1910**	0.000025	0.0027	0.00088	0.018	0.000036	0.38	75	0.0038	0.00017
	August		0.00082	3.0	0.00010	0.0000066	604	**2016**	0.000025	0.0028	0.00089	0.019	0.000036	0.28	79	0.0039	0.00018
	September		0.00087	2.9	0.000094	0.0000058	649	**2165**	0.000022	0.0023	0.00075	0.020	0.000037	0.27	83	0.0038	0.00016
	October		0.00079	2.8	0.000090	0.0000055	649	**2166**	0.000021	0.0022	0.00069	0.020	0.000037	0.25	83	0.0037	0.00015
	November		0.00085	2.8	0.000067	0.0000029	703	**2349**	0.000010	0.00066	0.00023	0.021	0.000039	0.22	85	0.0031	0.000073
	December		0.00092	2.8	0.000057	0.0000018	752	**2516**	0.0000059	0.000032	0.000031	0.022	0.000040	0.21	88	0.0029	0.000021

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	January	2056	0.00074	2.7	0.000054	0.0000016	755	**2528**	0.0000056	0.000025	0.000022	0.022	0.000040	0.21	88	0.0029	0.000014
	February		0.00069	2.6	0.000053	0.0000015	756	**2531**	0.0000055	0.000024	0.000021	0.022	0.000040	0.21	88	0.0028	0.000013
	March		0.00061	2.4	0.000077	0.0000042	678	**2268**	0.000016	0.0015	0.00049	0.020	0.000038	0.26	83	0.0034	0.000091
	April		0.00064	2.3	0.000071	0.0000036	680	**2275**	0.000013	0.0012	0.00038	0.021	0.000038	0.24	84	0.0033	0.000092
	May		0.00063	2.2	0.000069	0.0000033	704	**2354**	0.000012	0.0010	0.00033	0.021	0.000039	0.24	85	0.0032	0.000072
	June		0.00063	2.1	0.000071	0.0000036	695	**2324**	0.000013	0.0012	0.00038	0.021	0.000039	0.24	85	0.0033	0.000089
	July		0.00061	1.9	0.000086	0.0000052	649	**2168**	0.000020	0.0021	0.00067	0.020	0.000037	0.26	82	0.0036	0.00013
	August		0.00061	1.8	0.000088	0.0000054	633	**2114**	0.000020	0.0022	0.00070	0.019	0.000037	0.27	81	0.0036	0.00014
	September		0.00058	1.6	0.000097	0.0000065	606	**2023**	0.000025	0.0029	0.00091	0.019	0.000035	0.25	79	0.0039	0.00018
	October		0.00061	1.6	0.000086	0.0000053	657	**2195**	0.000021	0.0022	0.00071	0.020	0.000037	0.22	84	0.0037	0.00015
	November		0.00065	1.5	0.000060	0.0000024	720	**2409**	0.0000089	0.00052	0.00017	0.022	0.000039	0.21	87	0.0030	0.000064
	December		0.00068	1.4	0.000053	0.0000015	754	**2524**	0.0000055	0.000024	0.000021	0.022	0.000040	0.21	88	0.0028	0.000015
	January	2057	0.00039	1.3	0.000046	0.0000012	755	**2528**	0.0000047	0.000014	0.000010	0.021	0.000040	0.21	88	0.0028	0.0000076
	February		0.00031	1.2	0.000044	0.0000011	755	**2529**	0.0000045	0.000011	0.0000069	0.021	0.000040	0.21	88	0.0028	0.0000047
	March		0.00030	1.1	0.000044	0.0000011	755	**2528**	0.0000045	0.000011	0.0000068	0.021	0.000040	0.21	88	0.0028	0.0000046
	April		0.00028	0.96	0.000073	0.0000042	684	**2286**	0.000017	0.0018	0.00056	0.020	0.000037	0.25	85	0.0035	0.000097
	May		0.00028	0.86	0.000063	0.0000033	692	**2312**	0.000013	0.0013	0.00040	0.020	0.000038	0.22	85	0.0033	0.000097
	June		0.00029	0.77	0.000055	0.0000023	734	**2458**	0.0000093	0.00069	0.00022	0.021	0.000039	0.22	88	0.0031	0.000044
	July		0.00027	0.64	0.000080	0.0000050	667	**2230**	0.000020	0.0022	0.00069	0.019	0.000037	0.25	84	0.0037	0.00013
	August		0.00027	0.52	0.000082	0.0000052	662	**2210**	0.000021	0.0024	0.00075	0.019	0.000037	0.24	85	0.0038	0.00015
	September		0.00028	0.42	0.000080	0.0000050	668	**2232**	0.000021	0.0023	0.00072	0.020	0.000037	0.22	85	0.0038	0.00015
	October		0.00028	0.32	0.000057	0.0000026	711	**2378**	0.000011	0.00089	0.00028	0.021	0.000038	0.22	87	0.0032	0.000077
	November		0.00030	0.22	0.000048	0.0000016	739	**2475**	0.0000065	0.00030	0.000095	0.021	0.000039	0.21	88	0.0029	0.000029
	December		0.00030	0.11	0.000044	0.0000011	754	**2524**	0.0000047	0.000031	0.000013	0.021	0.000040	0.21	88	0.0028	0.0000072
		MINIMUM	0.00027	0.11	0.000044	0.0000011	453	**1513**	0.0000045	0.000011	0.0000068	0.018	0.000035	0.20	59	0.0028	0.0000046
		MAXIMUM	**0.97**	6.6	0.0035	0.000022	757	**2534**	0.0013	0.0029	0.015	**0.48**	0.0021	3.7	89	0.0073	**0.00021**
		AVERAGE	0.017	3.2	0.00017	0.0000061	666	**2227**	0.000036	0.0012	0.00067	0.028	0.000079	0.75	81	0.0033	0.000099

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.00010	0.00050	0.50	**0.050**	0.020	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.023	0.0100	0.00010	1.5	0.032	1.7	0.0100	0.00010	0.00050	0.0030
	March		0.000099	0.00050	0.50	**0.050**	0.025	0.0099	0.000099	1.5	0.032	1.7	0.0099	0.000099	0.00050	0.0030
	April		0.000087	0.00044	0.44	**0.044**	0.023	0.0087	0.000087	1.3	0.028	1.5	0.0087	0.000087	0.00044	0.0026
	May		0.000075	0.00037	0.37	**0.037**	0.021	0.0075	0.000075	1.1	0.024	1.3	0.0075	0.000075	0.00037	0.0022
	June		0.000073	0.00037	0.37	**0.037**	0.022	0.0073	0.000073	1.1	0.023	1.2	0.0073	0.000073	0.00037	0.0022
	July		0.000066	0.00033	0.33	**0.033**	0.020	0.0066	0.000066	0.99	0.021	1.1	0.0066	0.000066	0.00033	0.0020
	August		0.000062	0.00031	0.31	**0.031**	0.020	0.0062	0.000062	0.93	0.020	1.0	0.0062	0.000062	0.00031	0.0019
	September		0.000054	0.00027	0.27	**0.027**	0.018	0.0054	0.000054	0.81	0.017	0.92	0.0054	0.000054	0.00027	0.0016
	October		0.000049	0.00025	0.25	**0.025**	0.016	0.0049	0.000049	0.74	0.016	0.84	0.0049	0.000049	0.00025	0.0015
	November		0.000046	0.00023	0.23	**0.023**	0.016	0.0046	0.000046	0.69	0.015	0.79	0.0046	0.000046	0.00023	0.0014
	December		0.000046	0.00023	0.23	**0.023**	0.016	0.0046	0.000046	0.69	0.015	0.78	0.0046	0.000046	0.00023	0.0014
	January	2026	0.000045	0.00023	0.23	**0.023**	0.016	0.0045	0.000045	0.68	0.015	0.77	0.0045	0.000045	0.00023	0.0014
	February		0.000045	0.00023	0.23	**0.023**	0.016	0.0045	0.000045	0.68	0.015	0.77	0.0045	0.000045	0.00023	0.0014
	March		0.000031	0.00015	2.7	**0.032**	0.017	0.0031	0.000031	0.95	0.020	1.1	0.0063	0.000031	0.00015	0.00092
	April		0.26	0.000053	3.7	**0.044**	2.7	0.011	0.000011	1.5	0.044	13	0.019	**0.089**	0.000091	0.000083
	May		0.12	0.000021	3.5	**0.043**	2.9	0.0050	0.0000042	1.5	0.045	14	0.020	**0.039**	0.000037	0.000021
	June		0.43	0.000072	3.0	**0.046**	6.2	0.018	0.000014	1.7	0.066	29	0.032	**0.14**	0.00014	0.000049
	July		0.46	0.000077	3.0	**0.049**	7.8	0.020	0.000015	1.8	0.077	36	0.039	**0.15**	0.00015	0.000051
	August		0.63	0.00010	2.7	**0.050**	10	0.026	0.000020	2.0	0.093	47	0.048	**0.21**	0.00020	0.000067
	September		0.39	0.000065	2.7	**0.046**	9.0	0.016	0.000013	1.9	0.084	42	0.043	**0.13**	0.00012	0.000046
	October		0.29	0.000048	3.1	**0.047**	8.6	0.012	0.0000095	1.9	0.083	41	0.042	**0.094**	0.000092	0.000034
	November		0.079	0.000014	4.2	**0.052**	7.9	0.0033	0.0000029	2.0	0.082	38	0.040	0.026	0.000026	0.000014
	December		0.011	0.0000046	6.1	**0.056**	5.2	0.00052	0.0000013	2.0	0.068	25	0.031	0.0038	0.0000061	0.000019
	January	2027	0.0043	0.0000056	10	**0.057**	2.0	0.00029	0.0000017	1.8	0.049	11	0.019	0.0015	0.0000059	0.000031
	February		0.018	0.0000088	12	**0.059**	0.98	0.00089	0.0000024	1.8	0.044	6.4	0.015	0.0060	0.000011	0.000038
	March		0.36	0.000064	7.1	**0.057**	3.5	0.015	0.000013	1.9	0.058	18	0.025	**0.12**	0.00012	0.000064
	April		0.45	0.000076	4.2	**0.049**	7.8	0.019	0.000015	1.9	0.079	37	0.039	**0.15**	0.00014	0.000054
	May		0.28	0.000047	4.7	**0.049**	6.9	0.012	0.0000093	1.8	0.074	33	0.036	**0.091**	0.000089	0.000035
	June		0.42	0.000071	4.7	**0.051**	7.7	0.018	0.000014	1.9	0.079	37	0.039	**0.14**	0.00014	0.000049
	July		**0.69**	0.00011	4.0	**0.053**	10	0.029	0.000022	2.1	0.095	48	0.048	**0.23**	0.00022	0.000074
	August		0.39	0.000066	3.8	**0.047**	8.3	0.016	0.000013	1.8	0.081	39	0.041	**0.13**	0.00012	0.000048
	September		0.21	0.000037	4.4	**0.045**	6.5	0.0089	0.0000073	1.7	0.069	31	0.034	**0.070**	0.000068	0.000031
	October		0.25	0.000043	5.0	**0.049**	6.4	0.010	0.0000084	1.8	0.071	31	0.034	**0.082**	0.000081	0.000033
	November		0.22	0.000037	5.1	**0.048**	6.0	0.0091	0.0000074	1.8	0.068	29	0.032	**0.071**	0.000071	0.000030
	December		0.016	0.0000047	6.7	**0.052**	4.2	0.00071	0.0000012	1.8	0.060	21	0.026	0.0054	0.0000069	0.000015
	January	2028	0.0025	0.0000042	15	**0.054**	1.5	0.00019	0.0000013	1.7	0.044	8.6	0.017	0.00088	0.0000043	0.000024
	February		0.000084	0.0000046	16	**0.062**	0.37	0.00010	0.0000015	1.9	0.042	3.7	0.014	0.000036	0.0000043	0.000029
	March		0.0000045	0.0000049	15	**0.064**	0.066	0.00011	0.0000016	1.9	0.041	2.4	0.013	0.0000029	0.0000046	0.000031
	April		0.38	0.00019	11	**0.083**	3.7	0.017	0.000029	2.1	0.079	33	0.040	**0.13**	0.00013	0.00021
	May		0.19	0.00063	7.1	**0.12**	3.7	0.0093	0.000071	2.0	0.13	88	0.076	**0.062**	0.000077	0.00058
	June		0.18	0.00049	9.6	**0.11**	2.8	0.0085	0.000056	2.0	0.12	83	0.068	**0.059**	0.000070	0.00045
	July		0.33	0.00081	7.8	**0.15**	4.3	0.016	0.000092	2.3	0.16	117	0.095	**0.11**	0.00013	0.00073
	August		0.24	0.0011	7.7	**0.16**	3.9	0.012	0.00012	2.4	0.18	141	0.10	**0.080**	0.00010	0.00091
	September		0.25	0.00100	8.6	**0.16**	3.6	0.012	0.00011	2.4	0.18	143	0.10	**0.083**	0.00010	0.00086
	October		0.11	0.00039	11	**0.12**	2.4	0.0053	0.000043	2.1	0.13	95	0.071	**0.036**	0.000045	0.00034
	November		0.046	0.00019	12	**0.10**	1.7	0.0023	0.000022	2.0	0.10	66	0.053	0.015	0.000021	0.00018
	December		0.00056	0.0000073	15	**0.073**	0.45	0.00012	0.0000018	1.9	0.057	19	0.023	0.00021	0.0000044	0.000030
		MINIMUM	0.0000045	0.0000042	0.23	**0.023**	0.016	0.00010	0.0000012	0.68	0.015	0.77	0.0045	0.0000029	0.0000043	0.000014
		MAXIMUM	**0.69**	0.0011	16	**0.16**	10	0.029	0.00012	2.4	0.18	143	0.10	**0.23**	0.00050	0.0030
		AVERAGE	0.16	0.00022	5.2	**0.059**	3.3	0.0090	0.000036	1.6	0.064	30	0.031	**0.053**	0.00016	0.00072
Operations	January	2029	0.032	0.11	9.8	**0.079**	0.30	0.77	0.0010	809	12	**2650**	0.82	0.026	**0.18**	0.013
	February		0.035	0.12	8.8	**0.085**	0.24	0.87	0.0011	885	19	**2900**	1.3	**0.031**	**0.20**	0.014
	March		0.074	0.12	8.3	**0.097**	0.67	0.84	0.0011	884	19	**2898**	1.3	**0.043**	**0.19**	0.014
	April		0.32	0.10	6.8	**0.16**	3.7	0.75	0.0010	883	16	**2894**	1.2	**0.12**	**0.17**	0.013
	May		0.13	0.10	6.5	**0.14**	1.7	0.74	0.0010	884	15	**2897**	1.1	**0.061**	**0.17**	0.013
	June		0.22	0.10	6.4	**0.14**	2.6	0.74	0.0010	885	15	**2901**	1.1	**0.089**	**0.17**	0.012
	July		0.23	0.10	6.8	**0.14**	2.6	0.77	0.0011	886	16	**2902**	1.1	**0.093**	**0.17**	0.013
	August		0.22	0.10	6.5	**0.15**	2.8	0.74	0.0010	885	15	**2899**	1.1	**0.090**	**0.17**	0.013
	September		0.26	0.10	6.4	**0.16**	3.3	0.74	0.0010	885	15	**2901**	1.1	**0.10**	**0.17**	0.013
	October		0.13	0.11	7.1	**0.13**	1.6	0.78	0.0011	884	16	**2896**	1.2	**0.061**	**0.18**	0.013
	November		0.075	0.12	7.9	**0.11**	1.0	0.84	0.0011	886	18	**2903**	1.3	**0.044**	**0.19**	0.014
	December		0.035	0.12	8.6	**0.088**	0.31	0.87	0.0011	885	19	**2899**	1.3	**0.031**	**0.20**	0.014

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.038	0.13	7.6	**0.081**	0.19	**0.89**	0.0012	885	16	**2901**	1.1	0.030	**0.21**	0.015
	February		0.074	0.13	7.0	**0.084**	0.49	0.87	0.0012	886	15	**2903**	1.0	**0.041**	**0.21**	0.015
	March		0.079	0.13	6.8	**0.092**	0.70	0.86	0.0012	886	14	**2903**	0.99	**0.043**	**0.21**	0.015
	April		0.28	0.11	5.7	**0.14**	3.1	0.78	0.0011	890	13	**2918**	0.92	**0.11**	**0.19**	0.014
	May		0.25	0.12	5.9	**0.14**	2.6	0.80	0.0012	889	13	**2913**	0.92	**0.097**	**0.19**	0.014
	June		0.31	0.11	5.5	**0.15**	3.5	0.78	0.0011	891	12	**2921**	0.91	**0.12**	**0.18**	0.014
	July		0.35	0.11	5.4	**0.16**	4.0	0.77	0.0012	889	12	**2912**	0.89	**0.13**	**0.18**	0.014
	August		0.31	0.11	5.5	**0.16**	3.5	0.77	0.0012	889	12	**2912**	0.90	**0.12**	**0.18**	0.014
	September		0.24	0.11	5.5	**0.16**	2.9	0.77	0.0011	888	12	**2911**	0.89	**0.095**	**0.18**	0.014
	October		0.22	0.11	5.7	**0.14**	2.3	0.78	0.0012	890	12	**2918**	0.91	**0.088**	**0.19**	0.014
	November		0.039	0.12	6.3	**0.11**	0.53	0.83	0.0012	887	13	**2906**	0.93	0.029	**0.20**	0.014
	December		0.069	0.13	6.9	**0.089**	0.55	0.87	0.0012	885	14	**2902**	1.0	**0.039**	**0.21**	0.015
	January	2031	0.068	0.13	6.2	**0.086**	0.53	**0.89**	0.0013	885	13	**2899**	0.91	**0.038**	**0.22**	0.015
	February		0.040	0.14	6.1	**0.077**	0.17	**0.90**	0.0013	883	13	**2895**	0.89	0.028	**0.23**	0.016
	March		0.081	0.13	5.9	**0.085**	0.55	**0.88**	0.0013	886	12	**2903**	0.87	**0.042**	**0.22**	0.015
	April		0.29	0.12	5.1	**0.13**	2.8	0.82	0.0012	889	11	**2914**	0.83	**0.11**	**0.20**	0.014
	May		0.15	0.12	5.0	**0.12**	1.7	0.81	0.0012	890	11	**2916**	0.80	**0.065**	**0.20**	0.014
	June		0.19	0.12	5.1	**0.12**	1.8	0.81	0.0012	889	11	**2912**	0.81	**0.078**	**0.20**	0.014
	July		0.19	0.12	5.1	**0.12**	2.0	0.82	0.0012	889	11	**2912**	0.81	**0.078**	**0.20**	0.015
	August		0.21	0.13	5.3	**0.13**	2.2	0.84	0.0013	887	12	**2906**	0.84	**0.083**	**0.21**	0.015
	September		0.23	0.12	5.1	**0.13**	2.4	0.82	0.0012	889	11	**2912**	0.82	**0.090**	**0.20**	0.015
	October		0.15	0.13	5.4	**0.11**	1.5	0.85	0.0013	886	12	**2905**	0.83	**0.064**	**0.21**	0.015
	November		0.047	0.14	5.9	**0.087**	0.45	**0.89**	0.0013	884	12	**2897**	0.86	**0.031**	**0.22**	0.016
	December		0.047	0.14	6.1	**0.078**	0.23	**0.90**	0.0013	884	13	**2895**	0.89	**0.031**	**0.22**	0.016
	January	2032	0.048	0.14	6.4	**0.077**	0.24	**0.92**	0.0014	882	12	**2891**	0.84	**0.030**	**0.24**	0.016
	February		0.043	0.14	6.5	**0.074**	0.14	**0.93**	0.0014	882	12	**2891**	0.82	0.028	**0.24**	0.016
	March		0.17	0.13	5.5	**0.11**	1.5	0.84	0.0013	889	11	**2912**	0.78	**0.070**	**0.21**	0.015
	April		0.27	0.12	5.2	**0.13**	2.8	0.81	0.0012	889	10	**2913**	0.77	**0.10**	**0.20**	0.015
	May		0.15	0.12	5.2	**0.12**	1.4	0.82	0.0012	888	10	**2908**	0.75	**0.062**	**0.20**	0.015
	June		0.17	0.13	5.4	**0.11**	1.6	0.84	0.0013	888	11	**2911**	0.77	**0.070**	**0.21**	0.015
	July		0.32	0.12	5.1	**0.14**	3.3	0.81	0.0012	889	10	**2915**	0.77	**0.12**	**0.20**	0.014
	August		0.18	0.12	5.1	**0.12**	1.9	0.80	0.0012	890	10	**2915**	0.74	**0.074**	**0.20**	0.014
	September		0.12	0.13	5.6	**0.11**	1.2	0.86	0.0013	886	11	**2902**	0.77	**0.053**	**0.22**	0.015
	October		0.12	0.13	5.7	**0.096**	1.0	0.87	0.0013	887	11	**2906**	0.77	**0.052**	**0.22**	0.015
	November		0.065	0.14	6.2	**0.084**	0.50	**0.90**	0.0013	884	12	**2895**	0.82	**0.036**	**0.23**	0.016
	December		0.041	0.14	6.5	**0.076**	0.16	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	January	2033	0.042	0.14	6.1	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.042	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.052	0.14	5.9	**0.078**	0.24	**0.91**	0.0013	884	12	**2896**	0.86	**0.031**	**0.23**	0.016
	April		0.41	0.12	4.9	**0.13**	4.1	0.83	0.0013	886	11	**2902**	0.78	**0.15**	**0.20**	0.015
	May		0.14	0.12	4.6	**0.13**	1.5	0.80	0.0012	889	10	**2912**	0.76	**0.059**	**0.20**	0.014
	June		0.18	0.12	4.7	**0.12**	1.8	0.80	0.0012	888	10	**2909**	0.76	**0.074**	**0.20**	0.014
	July		0.16	0.13	5.0	**0.12**	1.7	0.84	0.0013	887	11	**2906**	0.79	**0.068**	**0.21**	0.015
	August		0.22	0.12	4.7	**0.13**	2.2	0.81	0.0012	889	10	**2914**	0.76	**0.086**	**0.20**	0.015
	September		0.18	0.13	4.9	**0.12**	1.8	0.83	0.0012	887	11	**2908**	0.77	**0.071**	**0.21**	0.015
	October		0.16	0.13	5.2	**0.11**	1.5	0.85	0.0013	887	11	**2905**	0.80	**0.066**	**0.21**	0.015
	November		0.11	0.13	5.3	**0.10**	1.1	0.87	0.0013	886	11	**2904**	0.81	**0.052**	**0.22**	0.015
	December		0.043	0.14	5.9	**0.077**	0.20	**0.91**	0.0013	883	12	**2894**	0.85	0.028	**0.23**	0.016
	January	2034	0.042	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.052	0.14	5.9	**0.078**	0.23	**0.90**	0.0013	885	12	**2898**	0.86	**0.031**	**0.23**	0.016
	March		0.090	0.13	5.6	**0.090**	0.74	**0.88**	0.0013	885	12	**2901**	0.83	**0.044**	**0.22**	0.015
	April		0.29	0.12	5.0	**0.12**	2.8	0.82	0.0012	888	11	**2910**	0.79	**0.11**	**0.20**	0.015
	May		0.080	0.12	4.9	**0.11**	0.81	0.82	0.0012	888	11	**2910**	0.77	**0.040**	**0.21**	0.015
	June		0.48	0.12	4.6	**0.14**	5.0	0.81	0.0012	886	9.9	**2902**	0.75	**0.17**	**0.20**	0.014
	July		0.39	0.12	4.4	**0.16**	4.1	0.80	0.0012	885	9.2	**2900**	0.71	**0.14**	**0.20**	0.014
	August		0.24	0.12	4.5	**0.16**	2.4	0.79	0.0012	885	9.5	**2900**	0.72	**0.094**	**0.20**	0.015
	September		0.25	0.12	4.6	**0.15**	2.7	0.80	0.0012	886	10	**2904**	0.78	**0.095**	**0.20**	0.015
	October		0.081	0.12	4.9	**0.12**	0.74	0.81	0.0012	888	11	**2909**	0.76	**0.040**	**0.20**	0.015
	November		0.074	0.13	5.4	**0.10**	0.58	0.87	0.0013	885	11	**2901**	0.81	**0.038**	**0.22**	0.015
	December		0.077	0.13	5.6	**0.087**	0.59	0.88	0.0013	884	12	**2898**	0.83	**0.039**	**0.22**	0.015
	January	2035	0.045	0.14	5.9	**0.077**	0.19	**0.91**	0.0013	883	12	**2894**	0.86	0.029	**0.23**	0.016
	February		0.071	0.14	5.8	**0.085**	0.51	**0.90**	0.0013	883	12	**2894**	0.85	**0.038**	**0.23**	0.016
	March		0.042	0.14	5.9	**0.076**	0.16	**0.91**	0.0013	884	12	**2895**	0.86	0.028	**0.23**	0.016

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.22	0.13	5.2	**0.11**	2.0	0.85	0.0013	887	12	**2907**	0.83	**0.087**	**0.21**	0.015
	May		0.26	0.12	4.6	**0.13**	2.6	0.80	0.0012	888	10	**2909**	0.75	**0.099**	**0.20**	0.014
	June		0.21	0.12	4.7	**0.13**	2.2	0.81	0.0012	889	10	**2914**	0.77	**0.084**	**0.20**	0.015
	July		0.22	0.12	4.7	**0.13**	2.4	0.81	0.0012	889	10	**2914**	0.77	**0.087**	**0.20**	0.015
	August		0.21	0.12	4.8	**0.13**	2.2	0.82	0.0012	887	10	**2908**	0.77	**0.082**	**0.20**	0.015
	September		0.18	0.12	4.7	**0.13**	1.8	0.81	0.0012	888	10	**2910**	0.77	**0.074**	**0.20**	0.015
	October		0.12	0.13	5.1	**0.11**	1.2	0.84	0.0013	887	11	**2905**	0.79	**0.055**	**0.21**	0.015
	November		0.055	0.14	5.7	**0.083**	0.43	**0.90**	0.0013	883	12	**2895**	0.84	**0.032**	**0.23**	0.016
	December		0.042	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2895**	0.86	0.028	**0.23**	0.016
	January	2036	0.042	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.042	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.083	0.13	5.7	**0.087**	0.59	**0.88**	0.0013	885	12	**2899**	0.84	**0.041**	**0.22**	0.015
	April		0.39	0.12	4.8	**0.14**	3.9	0.81	0.0012	887	10	**2906**	0.78	**0.14**	**0.20**	0.014
	May		0.14	0.12	4.7	**0.13**	1.7	0.80	0.0012	887	11	**2907**	0.77	**0.061**	**0.20**	0.014
	June		0.20	0.13	5.0	**0.12**	1.9	0.83	0.0013	888	11	**2909**	0.78	**0.081**	**0.21**	0.015
	July		0.20	0.12	4.8	**0.13**	2.1	0.81	0.0012	888	11	**2911**	0.78	**0.081**	**0.20**	0.015
	August		0.13	0.13	5.2	**0.10**	1.3	0.85	0.0012	885	11	**2901**	0.81	**0.058**	**0.21**	0.015
	September		0.16	0.12	5.0	**0.11**	1.6	0.83	0.0012	887	11	**2908**	0.80	**0.065**	**0.21**	0.015
	October		0.14	0.13	5.2	**0.11**	1.4	0.85	0.0013	886	11	**2905**	0.79	**0.060**	**0.21**	0.015
	November		0.054	0.14	5.8	**0.083**	0.39	**0.90**	0.0013	883	12	**2894**	0.83	**0.032**	**0.23**	0.016
	December		0.042	0.14	6.0	**0.076**	0.15	**0.90**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	January	2037	0.042	0.14	5.8	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.10	0.13	5.3	**0.093**	0.83	0.87	0.0013	885	12	**2901**	0.82	**0.047**	**0.22**	0.015
	March		0.088	0.13	5.4	**0.087**	0.62	0.88	0.0013	884	12	**2897**	0.83	**0.043**	**0.22**	0.015
	April		0.31	0.12	4.5	**0.14**	3.2	0.82	0.0012	887	11	**2907**	0.79	**0.12**	**0.20**	0.015
	May		0.11	0.12	4.7	**0.11**	0.97	0.81	0.0012	886	11	**2903**	0.77	**0.049**	**0.20**	0.014
	June		0.35	0.12	4.5	**0.14**	3.5	0.82	0.0012	888	11	**2911**	0.79	**0.13**	**0.20**	0.015
	July		0.33	0.12	4.4	**0.15**	3.4	0.80	0.0012	888	10	**2910**	0.76	**0.12**	**0.20**	0.015
	August		0.17	0.12	4.5	**0.13**	1.7	0.81	0.0012	889	11	**2913**	0.78	**0.069**	**0.20**	0.015
	September		0.21	0.12	4.4	**0.13**	2.2	0.80	0.0012	889	10	**2914**	0.75	**0.082**	**0.20**	0.014
	October		0.085	0.13	5.1	**0.10**	0.78	0.87	0.0013	885	11	**2900**	0.80	**0.042**	**0.22**	0.015
	November		0.055	0.14	5.6	**0.081**	0.32	**0.90**	0.0013	884	12	**2897**	0.85	**0.032**	**0.23**	0.016
	December		0.042	0.14	5.7	**0.076**	0.17	**0.91**	0.0013	883	12	**2895**	0.86	0.028	**0.23**	0.016
	January	2038	0.042	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.044	0.14	5.7	**0.076**	0.16	**0.91**	0.0013	883	12	**2894**	0.86	0.029	**0.23**	0.016
	March		0.22	0.12	4.7	**0.12**	2.0	0.82	0.0012	888	11	**2911**	0.79	**0.084**	**0.21**	0.015
	April		0.26	0.12	4.4	**0.13**	2.8	0.80	0.0012	888	10	**2910**	0.76	**0.099**	**0.20**	0.014
	May		0.15	0.12	4.7	**0.12**	1.4	0.82	0.0012	887	11	**2908**	0.77	**0.062**	**0.20**	0.015
	June		0.18	0.13	4.9	**0.11**	1.7	0.85	0.0013	886	11	**2903**	0.80	**0.074**	**0.21**	0.015
	July		0.20	0.12	4.6	**0.12**	2.0	0.81	0.0012	889	10	**2913**	0.77	**0.079**	**0.20**	0.015
	August		0.16	0.12	4.6	**0.11**	1.6	0.82	0.0012	888	11	**2908**	0.78	**0.065**	**0.20**	0.015
	September		0.27	0.12	4.7	**0.13**	2.6	0.83	0.0012	889	11	**2912**	0.79	**0.10**	**0.20**	0.015
	October		0.15	0.12	4.5	**0.12**	1.6	0.81	0.0012	890	10	**2915**	0.75	**0.062**	**0.20**	0.015
	November		0.069	0.14	5.3	**0.092**	0.59	**0.89**	0.0013	884	12	**2896**	0.82	**0.037**	**0.22**	0.016
	December		0.042	0.14	5.7	**0.076**	0.16	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	January	2039	0.043	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2892**	0.86	0.028	**0.23**	0.016
	February		0.13	0.13	5.0	**0.10**	1.2	0.85	0.0013	886	11	**2903**	0.80	**0.058**	**0.21**	0.015
	March		0.10	0.13	5.2	**0.093**	0.85	0.87	0.0013	885	12	**2899**	0.82	**0.047**	**0.22**	0.015
	April		0.13	0.13	5.1	**0.097**	1.1	0.86	0.0013	886	11	**2903**	0.81	**0.055**	**0.22**	0.015
	May		0.12	0.13	4.9	**0.098**	1.1	0.83	0.0012	887	11	**2908**	0.81	**0.052**	**0.21**	0.015
	June		0.16	0.13	5.1	**0.098**	1.4	0.86	0.0013	886	12	**2903**	0.83	**0.066**	**0.22**	0.015
	July		0.22	0.12	4.5	**0.13**	2.3	0.80	0.0012	889	10	**2913**	0.76	**0.087**	**0.20**	0.014
	August		0.36	0.12	4.3	**0.15**	3.9	0.80	0.0012	887	10	**2905**	0.76	**0.13**	**0.20**	0.015
	September		0.15	0.12	4.5	**0.12**	1.6	0.81	0.0012	889	11	**2913**	0.78	**0.064**	**0.20**	0.014
	October		0.17	0.13	4.8	**0.12**	1.6	0.84	0.0013	886	11	**2905**	0.79	**0.069**	**0.21**	0.015
	November		0.085	0.13	5.2	**0.094**	0.78	0.88	0.0013	884	11	**2898**	0.81	**0.042**	**0.22**	0.015
	December		0.043	0.14	5.7	**0.076**	0.17	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	January	2040	0.044	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	February		0.044	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.26	0.12	5.0	**0.12**	2.5	0.82	0.0012	888	11	**2911**	0.79	**0.098**	**0.20**	0.015
	April		0.20	0.12	4.7	**0.12**	1.9	0.80	0.0012	890	10	**2915**	0.75	**0.077**	**0.20**	0.014
	May		0.23	0.12	4.8	**0.13**	2.3	0.81	0.0012	889	10	**2914**	0.77	**0.090**	**0.20**	0.015
	June		0.28	0.12	4.7	**0.13**	2.8	0.81	0.0012	889	10	**2913**	0.76	**0.11**	**0.20**	0.015

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.30	0.12	4.6	**0.15**	3.2	0.80	0.0012	886	9.9	**2905**	0.75	**0.11**	**0.20**	0.015
	August		0.10	0.12	4.9	**0.12**	0.92	0.81	0.0012	888	11	**2911**	0.76	**0.047**	**0.20**	0.015
	September		0.15	0.13	5.2	**0.11**	1.4	0.84	0.0013	886	11	**2904**	0.80	**0.061**	**0.21**	0.015
	October		0.16	0.13	5.1	**0.12**	1.6	0.83	0.0012	886	11	**2903**	0.80	**0.067**	**0.21**	0.015
	November		0.055	0.14	5.8	**0.081**	0.36	**0.90**	0.0013	883	12	**2894**	0.84	**0.031**	**0.23**	0.016
	December		0.044	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2895**	0.86	0.028	**0.23**	0.016
	January	2041	0.045	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.045	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.13	0.13	5.7	**0.090**	0.91	0.87	0.0013	886	12	**2902**	0.84	**0.055**	**0.22**	0.015
	April		0.30	0.13	5.0	**0.12**	3.0	0.83	0.0013	885	11	**2901**	0.78	**0.11**	**0.21**	0.015
	May		0.093	0.12	4.8	**0.12**	1.0	0.80	0.0012	886	11	**2905**	0.78	**0.044**	**0.20**	0.014
	June		0.19	0.13	5.2	**0.11**	1.7	0.85	0.0013	887	11	**2906**	0.80	**0.075**	**0.21**	0.015
	July		0.28	0.12	4.8	**0.13**	2.8	0.82	0.0012	889	11	**2914**	0.79	**0.11**	**0.20**	0.015
	August		0.55	0.12	4.5	**0.16**	5.8	0.80	0.0012	885	9.3	**2900**	0.72	**0.19**	**0.20**	0.014
	September		0.15	0.12	4.5	**0.15**	1.6	0.79	0.0012	886	9.6	**2903**	0.73	**0.061**	**0.20**	0.015
	October		0.13	0.12	4.8	**0.12**	1.2	0.80	0.0012	889	10	**2912**	0.77	**0.057**	**0.20**	0.014
	November		0.049	0.13	5.2	**0.10**	0.33	0.84	0.0013	887	11	**2905**	0.79	0.029	**0.21**	0.015
	December		0.045	0.14	6.0	**0.078**	0.15	**0.91**	0.0013	883	12	**2894**	0.85	0.028	**0.23**	0.016
	January	2042	0.045	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.045	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.080	0.14	5.8	**0.085**	0.53	**0.89**	0.0013	884	12	**2898**	0.84	**0.039**	**0.22**	0.016
	April		0.27	0.13	5.2	**0.12**	2.6	0.84	0.0013	885	11	**2902**	0.82	**0.10**	**0.21**	0.015
	May		0.10	0.12	4.9	**0.11**	1.0	0.81	0.0012	889	11	**2913**	0.77	**0.047**	**0.20**	0.015
	June		0.39	0.12	4.8	**0.14**	3.8	0.82	0.0012	888	10	**2909**	0.77	**0.14**	**0.20**	0.015
	July		0.29	0.12	4.5	**0.16**	3.2	0.80	0.0012	886	9.8	**2903**	0.75	**0.11**	**0.20**	0.015
	August		0.31	0.12	4.6	**0.16**	3.2	0.80	0.0013	887	10	**2906**	0.77	**0.11**	**0.20**	0.015
	September		0.28	0.12	4.7	**0.13**	2.8	0.81	0.0013	888	10	**2910**	0.77	**0.11**	**0.20**	0.015
	October		0.21	0.12	4.7	**0.14**	2.4	0.80	0.0012	887	10	**2906**	0.77	**0.081**	**0.20**	0.015
	November		0.044	0.13	5.2	**0.097**	0.26	0.84	0.0013	887	11	**2907**	0.78	0.027	**0.21**	0.015
	December		0.045	0.14	6.0	**0.077**	0.15	**0.91**	0.0013	883	12	**2893**	0.85	0.028	**0.23**	0.016
	January	2043	0.046	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	February		0.046	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.046	0.14	6.0	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	April		0.30	0.13	5.3	**0.11**	2.7	0.85	0.0013	885	11	**2899**	0.82	**0.11**	**0.21**	0.015
	May		0.16	0.12	4.7	**0.14**	1.8	0.80	0.0012	888	11	**2910**	0.78	**0.064**	**0.20**	0.014
	June		0.30	0.12	4.6	**0.14**	3.0	0.80	0.0012	889	10	**2912**	0.76	**0.11**	**0.20**	0.014
	July		0.33	0.12	4.7	**0.14**	3.3	0.81	0.0012	888	10	**2910**	0.76	**0.12**	**0.20**	0.014
	August		0.33	0.12	4.5	**0.16**	3.5	0.80	0.0012	885	9.6	**2899**	0.73	**0.12**	**0.20**	0.015
	September		0.35	0.12	4.5	**0.15**	3.8	0.80	0.0013	887	10.0	**2906**	0.76	**0.13**	**0.20**	0.015
	October		0.21	0.12	4.6	**0.14**	2.2	0.80	0.0013	888	10	**2909**	0.75	**0.081**	**0.20**	0.015
	November		0.11	0.12	4.8	**0.12**	1.1	0.81	0.0012	890	10	**2915**	0.75	**0.049**	**0.20**	0.015
	December		0.058	0.13	5.6	**0.091**	0.31	**0.88**	0.0013	884	12	**2898**	0.82	**0.032**	**0.22**	0.016
	January	2044	0.046	0.14	5.9	**0.077**	0.17	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	March		0.070	0.14	5.9	**0.079**	0.35	**0.90**	0.0013	884	12	**2898**	0.86	**0.036**	**0.23**	0.016
	April		0.24	0.12	4.7	**0.13**	2.4	0.80	0.0012	889	10	**2915**	0.76	**0.092**	**0.20**	0.014
	May		0.16	0.13	5.0	**0.11**	1.5	0.83	0.0013	887	11	**2907**	0.78	**0.066**	**0.21**	0.015
	June		0.16	0.13	5.1	**0.11**	1.5	0.84	0.0013	887	11	**2906**	0.80	**0.066**	**0.21**	0.015
	July		0.30	0.12	4.7	**0.14**	3.1	0.81	0.0012	888	10	**2909**	0.77	**0.11**	**0.20**	0.015
	August		0.14	0.12	4.9	**0.12**	1.4	0.81	0.0012	888	11	**2909**	0.78	**0.059**	**0.20**	0.015
	September		0.16	0.13	5.0	**0.11**	1.5	0.83	0.0012	886	11	**2903**	0.78	**0.064**	**0.21**	0.015
	October		0.11	0.13	5.3	**0.099**	1.00	0.86	0.0013	885	12	**2900**	0.82	**0.048**	**0.22**	0.015
	November		0.062	0.14	5.7	**0.082**	0.41	**0.90**	0.0013	884	12	**2896**	0.85	**0.033**	**0.23**	0.016
	December		0.051	0.14	5.9	**0.077**	0.21	**0.90**	0.0013	883	12	**2895**	0.85	0.030	**0.23**	0.016
	January	2045	0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	February		0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	March		0.18	0.13	5.7	**0.091**	1.4	**0.88**	0.0013	885	12	**2900**	0.86	**0.074**	**0.22**	0.015
	April		0.14	0.12	4.7	**0.12**	1.5	0.80	0.0012	889	10	**2913**	0.75	**0.058**	**0.20**	0.014
	May		0.22	0.12	4.7	**0.12**	2.0	0.80	0.0012	889	10	**2914**	0.76	**0.083**	**0.20**	0.014
	June		0.24	0.12	4.8	**0.13**	2.4	0.82	0.0013	888	11	**2911**	0.78	**0.092**	**0.20**	0.015
	July		0.22	0.12	4.6	**0.13**	2.3	0.80	0.0012	889	10	**2914**	0.75	**0.084**	**0.20**	0.014
	August		0.19	0.13	4.9	**0.12**	1.9	0.83	0.0013	887	11	**2906**	0.77	**0.076**	**0.21**	0.015
	September		0.17	0.13	5.0	**0.11**	1.6	0.84	0.0013	888	11	**2910**	0.78	**0.068**	**0.21**	0.015

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.14	0.13	5.2	**0.10**	1.3	0.85	0.0013	888	11	**2909**	0.82	**0.058**	**0.21**	0.015
	November		0.076	0.13	5.6	**0.088**	0.62	**0.89**	0.0013	885	12	**2899**	0.83	**0.038**	**0.22**	0.016
	December		0.051	0.14	5.8	**0.078**	0.23	**0.90**	0.0013	884	12	**2897**	0.85	0.030	**0.23**	0.016
	January	2046	0.068	0.14	5.7	**0.083**	0.44	**0.90**	0.0013	883	12	**2894**	0.84	**0.035**	**0.23**	0.016
	February		0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2895**	0.86	0.028	**0.23**	0.016
	March		0.16	0.13	5.3	**0.099**	1.3	0.85	0.0013	886	12	**2905**	0.82	**0.065**	**0.21**	0.015
	April		0.12	0.13	4.9	**0.11**	1.2	0.82	0.0012	887	11	**2905**	0.77	**0.053**	**0.21**	0.015
	May		0.21	0.12	4.9	**0.12**	1.9	0.82	0.0012	888	11	**2911**	0.78	**0.080**	**0.20**	0.015
	June		0.25	0.13	4.9	**0.12**	2.4	0.83	0.0013	888	11	**2910**	0.77	**0.095**	**0.21**	0.015
	July		0.28	0.12	4.6	**0.14**	3.0	0.81	0.0012	890	10	**2915**	0.75	**0.11**	**0.20**	0.014
	August		0.32	0.12	4.5	**0.15**	3.3	0.80	0.0012	888	10	**2909**	0.76	**0.12**	**0.20**	0.015
	September		0.26	0.12	4.6	**0.14**	2.7	0.81	0.0012	889	11	**2913**	0.78	**0.098**	**0.20**	0.015
	October		0.20	0.12	4.6	**0.12**	2.0	0.80	0.0012	889	10	**2915**	0.75	**0.077**	**0.20**	0.014
	November		0.079	0.13	5.1	**0.11**	0.73	0.84	0.0013	886	11	**2904**	0.77	**0.039**	**0.21**	0.015
	December		0.048	0.14	5.8	**0.080**	0.20	**0.90**	0.0013	883	12	**2894**	0.85	0.029	**0.23**	0.016
	January	2047	0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	February		0.046	0.14	5.9	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.073	0.14	5.7	**0.084**	0.46	**0.89**	0.0013	884	12	**2898**	0.83	**0.037**	**0.22**	0.016
	April		0.27	0.13	5.1	**0.12**	2.4	0.84	0.0013	888	11	**2908**	0.81	**0.10**	**0.21**	0.015
	May		0.21	0.12	4.7	**0.13**	2.2	0.81	0.0012	889	10	**2912**	0.76	**0.081**	**0.20**	0.014
	June		0.15	0.13	5.0	**0.12**	1.5	0.84	0.0013	885	11	**2901**	0.79	**0.064**	**0.21**	0.015
	July		0.34	0.12	4.6	**0.14**	3.4	0.81	0.0012	889	10	**2911**	0.77	**0.12**	**0.20**	0.015
	August		0.31	0.12	4.5	**0.15**	3.3	0.80	0.0012	886	10	**2904**	0.76	**0.11**	**0.20**	0.015
	September		0.20	0.12	4.7	**0.13**	2.0	0.80	0.0012	890	10	**2915**	0.76	**0.078**	**0.20**	0.014
	October		0.12	0.13	4.9	**0.12**	1.2	0.83	0.0013	887	11	**2905**	0.78	**0.053**	**0.21**	0.015
	November		0.076	0.13	5.6	**0.088**	0.57	**0.89**	0.0013	885	12	**2898**	0.83	**0.038**	**0.22**	0.016
	December		0.047	0.14	5.9	**0.078**	0.22	**0.91**	0.0013	883	12	**2895**	0.85	0.028	**0.23**	0.016
	January	2048	0.056	0.14	5.9	**0.078**	0.25	**0.91**	0.0013	883	12	**2893**	0.86	**0.031**	**0.23**	0.016
	February		0.049	0.14	5.9	**0.077**	0.19	**0.90**	0.0013	884	12	**2897**	0.86	0.029	**0.23**	0.016
	March		0.046	0.14	5.9	**0.076**	0.16	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	April		0.18	0.13	5.3	**0.10**	1.5	0.85	0.0013	886	12	**2904**	0.83	**0.071**	**0.21**	0.015
	May		0.097	0.13	5.1	**0.10**	0.90	0.85	0.0013	886	11	**2903**	0.78	**0.044**	**0.21**	0.015
	June		0.15	0.13	5.1	**0.11**	1.4	0.85	0.0013	886	11	**2904**	0.80	**0.063**	**0.21**	0.015
	July		0.55	0.12	4.6	**0.15**	5.4	0.81	0.0012	887	10	**2907**	0.76	**0.19**	**0.20**	0.014
	August		0.28	0.12	4.4	**0.16**	3.1	0.79	0.0012	885	9.3	**2900**	0.71	**0.10**	**0.20**	0.015
	September		0.25	0.12	4.4	**0.15**	2.6	0.79	0.0012	885	9.5	**2899**	0.72	**0.095**	**0.20**	0.015
	October		0.12	0.12	4.7	**0.13**	1.2	0.81	0.0013	889	11	**2913**	0.78	**0.052**	**0.20**	0.015
	November		0.046	0.13	5.4	**0.099**	0.20	0.87	0.0013	885	11	**2899**	0.81	0.028	**0.22**	0.015
	December		0.073	0.14	5.8	**0.085**	0.48	**0.90**	0.0013	884	12	**2897**	0.85	**0.037**	**0.23**	0.016
	January	2049	0.12	0.13	5.4	**0.096**	0.99	0.86	0.0013	886	11	**2903**	0.81	**0.052**	**0.22**	0.015
	February		0.047	0.14	5.9	**0.078**	0.20	**0.91**	0.0013	883	12	**2894**	0.85	0.028	**0.23**	0.016
	March		0.17	0.13	5.7	**0.091**	1.3	**0.88**	0.0013	885	12	**2900**	0.85	**0.070**	**0.22**	0.015
	April		0.097	0.13	5.0	**0.11**	0.98	0.83	0.0012	888	11	**2910**	0.79	**0.044**	**0.21**	0.015
	May		0.21	0.12	4.9	**0.11**	1.9	0.83	0.0012	887	11	**2907**	0.79	**0.081**	**0.21**	0.015
	June		0.24	0.12	4.7	**0.13**	2.5	0.81	0.0012	889	10	**2912**	0.76	**0.093**	**0.20**	0.014
	July		0.39	0.12	4.5	**0.16**	4.0	0.81	0.0012	888	10	**2910**	0.76	**0.14**	**0.20**	0.015
	August		0.30	0.12	4.5	**0.15**	3.2	0.81	0.0013	887	10	**2906**	0.77	**0.11**	**0.20**	0.015
	September		0.33	0.12	4.6	**0.15**	3.4	0.81	0.0013	886	10	**2903**	0.76	**0.12**	**0.20**	0.015
	October		0.23	0.12	4.6	**0.14**	2.4	0.81	0.0013	888	10	**2910**	0.77	**0.088**	**0.20**	0.015
	November		0.095	0.12	4.7	**0.11**	0.98	0.80	0.0012	890	10	**2916**	0.74	**0.043**	**0.20**	0.014
	December		0.046	0.14	5.7	**0.084**	0.17	**0.90**	0.0013	883	12	**2894**	0.83	0.028	**0.23**	0.016
	January	2050	0.047	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	February		0.047	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2894**	0.86	0.028	**0.23**	0.016
	March		0.070	0.14	5.5	**0.082**	0.40	**0.90**	0.0013	884	12	**2898**	0.84	**0.035**	**0.23**	0.016
	April		0.27	0.12	4.6	**0.13**	2.7	0.82	0.0012	888	11	**2910**	0.79	**0.10**	**0.20**	0.015
	May		0.13	0.13	4.8	**0.11**	1.1	0.84	0.0013	889	11	**2914**	0.78	**0.054**	**0.21**	0.015
	June		0.24	0.12	4.6	**0.13**	2.4	0.82	0.0012	887	11	**2908**	0.78	**0.091**	**0.20**	0.015
	July		0.15	0.13	5.0	**0.10**	1.3	0.86	0.0013	886	11	**2905**	0.82	**0.061**	**0.21**	0.015
	August		0.14	0.13	4.9	**0.11**	1.4	0.85	0.0013	888	11	**2908**	0.78	**0.060**	**0.21**	0.015
	September		0.25	0.12	4.6	**0.13**	2.4	0.82	0.0012	889	11	**2912**	0.79	**0.095**	**0.20**	0.015
	October		0.11	0.13	4.9	**0.11**	1.1	0.84	0.0013	887	11	**2906**	0.78	**0.048**	**0.21**	0.015
	November		0.094	0.13	5.3	**0.091**	0.74	0.88	0.0013	885	12	**2900**	0.82	**0.043**	**0.22**	0.015
	December		0.048	0.14	5.6	**0.078**	0.23	**0.91**	0.0013	883	12	**2894**	0.85	0.028	**0.23**	0.016

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.047	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2895**	0.86	0.028	**0.23**	0.016
	February		0.047	0.14	5.7	**0.076**	0.15	**0.91**	0.0013	883	12	**2893**	0.86	0.028	**0.23**	0.016
	March		0.099	0.13	5.3	**0.091**	0.74	**0.88**	0.0013	886	12	**2902**	0.83	**0.045**	**0.22**	0.016
	April		0.56	0.12	4.4	**0.14**	5.6	0.81	0.0012	885	10	**2900**	0.76	**0.20**	**0.20**	0.014
	May		0.15	0.12	4.3	**0.15**	1.5	0.80	0.0012	886	10	**2904**	0.75	**0.062**	**0.20**	0.015
	June		0.19	0.12	4.4	**0.13**	1.8	0.80	0.0012	889	10	**2913**	0.76	**0.075**	**0.20**	0.014
	July		0.31	0.12	4.4	**0.14**	3.1	0.81	0.0012	889	10	**2914**	0.75	**0.11**	**0.20**	0.015
	August		0.33	0.12	4.3	**0.16**	3.5	0.80	0.0013	886	9.8	**2903**	0.74	**0.12**	**0.20**	0.015
	September		0.20	0.12	4.5	**0.13**	2.0	0.82	0.0013	888	10	**2910**	0.77	**0.077**	**0.20**	0.015
	October		0.16	0.12	4.5	**0.12**	1.6	0.80	0.0012	889	10	**2912**	0.74	**0.066**	**0.20**	0.014
	November		0.11	0.13	5.0	**0.11**	0.95	0.86	0.0013	887	11	**2906**	0.81	**0.050**	**0.21**	0.015
	December		0.065	0.14	5.4	**0.085**	0.48	**0.89**	0.0013	884	12	**2896**	0.84	**0.034**	**0.23**	0.016
	January	2052	0.028	0.071	6.4	**0.076**	0.16	0.53	0.00069	888	11	**2909**	0.78	0.020	**0.12**	0.0086
	February		0.026	0.062	6.6	**0.076**	0.13	0.49	0.00061	888	11	**2911**	0.76	0.019	**0.10**	0.0077
	March		0.030	0.060	6.5	**0.076**	0.17	0.48	0.00059	888	11	**2909**	0.76	0.021	**0.100**	0.0075
	April		0.22	0.043	4.5	**0.12**	2.2	0.37	0.00048	885	8.9	**2900**	0.66	**0.082**	**0.071**	0.0059
	May		0.19	0.043	4.3	**0.12**	2.0	0.37	0.00048	885	8.8	**2900**	0.65	**0.073**	**0.071**	0.0060
	June		0.14	0.043	4.4	**0.12**	1.5	0.38	0.00049	886	9.6	**2903**	0.70	**0.056**	**0.071**	0.0061
	July		0.30	0.043	4.2	**0.13**	3.1	0.37	0.00050	885	8.1	**2901**	0.61	**0.11**	**0.071**	0.0060
	August		0.18	0.043	4.2	**0.12**	1.9	0.37	0.00049	885	8.3	**2901**	0.62	**0.068**	**0.071**	0.0060
	September		0.11	0.043	4.4	**0.12**	1.2	0.38	0.00049	884	9.7	**2897**	0.70	**0.046**	**0.071**	0.0061
	October		0.10	0.048	5.0	**0.11**	1.1	0.41	0.00051	887	11	**2906**	0.76	**0.045**	**0.079**	0.0065
	November		0.033	0.062	6.4	**0.080**	0.29	0.48	0.00060	888	11	**2910**	0.75	0.022	**0.10**	0.0076
	December		0.027	0.062	6.6	**0.076**	0.15	0.48	0.00060	888	11	**2909**	0.76	0.020	**0.10**	0.0076
		MINIMUM	0.026	0.043	4.2	**0.074**	0.13	0.37	0.00048	809	8.1	**2650**	0.61	0.019	**0.071**	0.0059
		MAXIMUM	0.56	0.14	9.8	**0.16**	5.8	**0.93**	0.0014	891	19	**2921**	1.3	**0.20**	**0.24**	0.016
		AVERAGE	0.16	0.12	5.3	**0.11**	1.5	0.83	0.0012	886	11	**2903**	0.82	**0.065**	**0.21**	0.015
Decommissioning	January	2053	0.0072	0.0054	8.3	**0.071**	0.19	0.25	0.000064	447	16	634	1.1	0.019	0.0088	0.0020
	February		0.0042	0.000066	8.4	**0.069**	0.19	0.22	0.000011	333	17	40	1.2	0.019	0.000013	0.0014
	March		0.087	0.00014	8.2	**0.075**	0.87	0.22	0.000020	317	17	18	1.2	**0.045**	0.000041	0.0015
	April		0.26	0.00077	7.0	**0.13**	3.0	0.18	0.000089	213	11	87	0.83	**0.099**	0.00011	0.0017
	May		0.15	0.00081	7.0	**0.12**	1.9	0.19	0.000090	230	12	89	0.89	**0.063**	0.000070	0.0018
	June		0.10	0.00061	7.4	**0.11**	1.4	0.21	0.000069	277	15	73	1.0	**0.050**	0.000054	0.0018
	July		0.18	0.00065	7.1	**0.12**	2.2	0.20	0.000075	258	14	79	0.98	**0.074**	0.000079	0.0017
	August		0.31	0.00067	6.9	**0.13**	3.4	0.20	0.000080	253	13	83	0.97	**0.12**	0.00012	0.0017
	September		0.25	0.00089	6.2	**0.15**	3.1	0.17	0.00010	191	10	103	0.77	**0.096**	0.00011	0.0018
	October		0.13	0.00087	6.4	**0.13**	1.8	0.18	0.000096	225	12	95	0.87	**0.059**	0.000067	0.0018
	November		0.064	0.00066	6.6	**0.11**	1.1	0.21	0.000073	270	14	77	1.0	**0.037**	0.000041	0.0018
	December		0.0042	0.000069	7.0	**0.074**	0.24	0.22	0.000011	322	17	16	1.2	0.019	0.000013	0.0014
	January	2054	0.0035	0.000061	6.9	**0.069**	0.19	0.22	0.0000092	327	17	7.0	1.2	0.019	0.000011	0.0014
	February		0.0033	0.000060	6.7	**0.069**	0.19	0.22	0.0000087	327	17	5.9	1.2	0.019	0.000011	0.0014
	March		0.028	0.00015	6.5	**0.076**	0.46	0.22	0.000019	316	17	16	1.2	0.027	0.000020	0.0015
	April		0.25	0.00047	6.0	**0.11**	2.7	0.20	0.000057	260	14	53	0.98	**0.097**	0.000099	0.0016
	May		0.18	0.00079	5.4	**0.13**	2.2	0.18	0.000088	215	11	89	0.84	**0.072**	0.000080	0.0017
	June		0.12	0.00074	5.7	**0.12**	1.6	0.20	0.000081	260	14	83	0.99	**0.056**	0.000059	0.0018
	July		0.19	0.00068	5.5	**0.12**	2.4	0.19	0.000077	248	13	81	0.95	**0.078**	0.000082	0.0017
	August		0.36	0.00086	5.0	**0.14**	4.0	0.18	0.000100	203	11	103	0.81	**0.13**	0.00014	0.0018
	September		0.15	0.00084	5.0	**0.13**	2.0	0.18	0.000092	223	12	92	0.87	**0.065**	0.000073	0.0018
	October		0.12	0.00081	5.1	**0.12**	1.7	0.20	0.000088	251	13	90	0.96	**0.056**	0.000061	0.0018
	November		0.10	0.00045	5.2	**0.11**	1.5	0.21	0.000051	280	15	59	1.0	**0.051**	0.000050	0.0016
	December		0.0035	0.000062	5.3	**0.073**	0.31	0.22	0.0000089	322	17	12	1.2	0.019	0.000011	0.0014
	January	2055	0.0029	0.000073	5.2	**0.070**	0.20	0.22	0.0000090	326	17	7.0	1.2	0.019	0.0000096	0.0014
	February		0.0026	0.000063	5.1	**0.070**	0.19	0.22	0.0000077	326	17	6.2	1.2	0.019	0.0000090	0.0014
	March		0.0025	0.000058	4.9	**0.069**	0.19	0.22	0.0000072	326	17	5.4	1.2	0.019	0.0000089	0.0014
	April		0.023	0.00072	4.5	**0.094**	0.44	0.20	0.000075	280	15	59	1.0	0.026	0.000023	0.0018
	May		0.0083	0.00087	4.3	**0.11**	0.28	0.20	0.000089	271	14	86	1.0	0.020	0.000020	0.0019
	June		0.017	0.00090	4.2	**0.11**	0.34	0.20	0.000093	275	15	88	1.0	0.023	0.000023	0.0019
	July		0.015	0.0011	3.9	**0.12**	0.37	0.19	0.00012	244	13	105	0.93	0.022	0.000025	0.0020
	August		0.0087	0.0012	3.8	**0.12**	0.26	0.20	0.00012	258	14	111	0.98	0.020	0.000024	0.0021
	September		0.0064	0.00097	3.8	**0.12**	0.24	0.20	0.000100	277	15	98	1.0	0.019	0.000021	0.0020
	October		0.0058	0.00091	3.7	**0.11**	0.23	0.20	0.000093	278	15	89	1.0	0.019	0.000020	0.0019
	November		0.0035	0.00031	3.7	**0.087**	0.20	0.22	0.000033	302	16	42	1.1	0.019	0.000012	0.0016
	December		0.0025	0.000059	3.7	**0.071**	0.19	0.22	0.0000073	325	17	8.2	1.2	0.019	0.0000089	0.0014

Table G-11: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	**January**	**2056**	0.0020	0.000054	3.6	**0.069**	0.19	0.22	0.0000060	326	17	4.6	1.2	0.019	0.0000076	0.0014
	February		0.0018	0.000053	3.4	**0.069**	0.19	0.22	0.0000056	327	17	4.0	1.2	0.019	0.0000073	0.0014
	March		0.0060	0.00065	3.1	**0.093**	0.24	0.21	0.000066	292	15	54	1.1	0.020	0.000016	0.0018
	April		0.0044	0.00052	3.0	**0.094**	0.22	0.21	0.000052	292	15	55	1.1	0.019	0.000014	0.0017
	May		0.0043	0.00045	2.9	**0.088**	0.22	0.21	0.000046	303	16	42	1.1	0.019	0.000013	0.0017
	June		0.0041	0.00051	2.7	**0.094**	0.22	0.21	0.000052	299	16	53	1.1	0.019	0.000013	0.0017
	July		0.0065	0.00088	2.5	**0.11**	0.24	0.20	0.000090	278	15	80	1.0	0.019	0.000019	0.0019
	August		0.0073	0.00092	2.4	**0.11**	0.24	0.20	0.000093	271	14	89	1.0	0.020	0.000020	0.0019
	September		0.0057	0.0012	2.2	**0.12**	0.23	0.19	0.00012	259	14	110	0.98	0.019	0.000023	0.0021
	October		0.0028	0.00094	2.1	**0.12**	0.20	0.20	0.000095	281	15	95	1.1	0.018	0.000019	0.0020
	November		0.0018	0.00025	2.1	**0.087**	0.19	0.22	0.000026	310	16	37	1.1	0.019	0.0000099	0.0015
	December		0.0018	0.000053	2.0	**0.070**	0.19	0.22	0.0000056	326	17	5.7	1.2	0.019	0.0000073	0.0014
	January	**2057**	0.00091	0.000046	1.9	**0.069**	0.19	0.22	0.0000030	326	17	2.6	1.2	0.019	0.0000047	0.0014
	February		0.00066	0.000044	1.8	**0.069**	0.19	0.22	0.0000022	327	17	1.7	1.2	0.019	0.0000040	0.0014
	March		0.00066	0.000044	1.6	**0.069**	0.19	0.22	0.0000022	326	17	1.7	1.2	0.019	0.0000039	0.0014
	April		0.0045	0.00075	1.4	**0.099**	0.23	0.21	0.000073	294	16	61	1.1	0.019	0.000014	0.0018
	May		0.00094	0.00055	1.3	**0.10**	0.19	0.21	0.000054	297	16	60	1.1	0.018	0.000011	0.0017
	June		0.0015	0.00032	1.2	**0.083**	0.20	0.22	0.000030	317	17	27	1.2	0.019	0.0000080	0.0016
	July		0.0042	0.00092	0.98	**0.11**	0.23	0.21	0.000091	286	15	84	1.1	0.019	0.000017	0.0020
	August		0.0026	0.00100	0.84	**0.12**	0.21	0.21	0.000099	283	15	94	1.1	0.019	0.000017	0.0020
	September		0.0016	0.00096	0.71	**0.12**	0.20	0.21	0.000095	286	15	94	1.1	0.018	0.000016	0.0020
	October		0.00099	0.00040	0.61	**0.094**	0.19	0.22	0.000038	306	16	48	1.1	0.019	0.0000088	0.0016
	November		0.00083	0.00016	0.49	**0.078**	0.19	0.22	0.000014	319	17	18	1.2	0.019	0.0000056	0.0015
	December		0.00067	0.000052	0.36	**0.070**	0.19	0.22	0.0000030	326	17	3.4	1.2	0.019	0.0000040	0.0014
		MINIMUM	0.00066	0.000044	0.36	**0.069**	0.19	0.17	0.0000022	191	10	1.7	0.77	0.018	0.0000039	0.0014
		MAXIMUM	0.36	0.0054	8.4	**0.15**	4.0	0.25	0.00012	447	17	634	1.2	**0.13**	0.0088	0.0021
		AVERAGE	0.054	0.00061	4.2	**0.098**	0.78	0.21	0.000056	289	15	65	1.1	**0.035**	0.00018	0.0017

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2026	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2027	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2028	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Operations	January	2029	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2031	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2032	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2033	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2034	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2035	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2036	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2037	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2038	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2039	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2040	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2041	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2042	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2043	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2044	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2045	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2046	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2047	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2048	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2049	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	2050	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2052**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Decommissioning	**January**	**2053**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2054**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2055**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	January	**2057**	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	February		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	March		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	April		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	May		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	June		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	July		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	August		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	September		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	October		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	November		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
	December		0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MINIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		MAXIMUM	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
		AVERAGE	0.010	0.054	0.00013	0.0000100	4.0	1.0	0.00050	0.00010	0.00050	**0.46**	0.00010	0.037	1.4	0.057	0.0000040
Reclamation	**January**	**2058**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0067	0.025	0.000076	0.0000064	0.12	0.19	0.000033	0.00013	0.000026	0.0048	0.0000066	0.0013	0.035	0.012	0.00000058
	April		0.021	0.079	0.00023	0.000020	0.52	0.62	0.00012	0.00039	0.00010	0.034	0.000024	0.0056	0.16	0.037	0.0000019
	May		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00014	0.025	0.000034	0.0071	0.18	0.061	0.0000030
	June		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.033	0.000046	0.0094	0.24	0.081	0.0000040
	July		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	August		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	September		0.030	0.11	0.00034	0.000028	0.51	0.85	0.00014	0.00056	0.00012	0.021	0.000029	0.0059	0.15	0.051	0.0000025
	October		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.050	0.0000085	0.000033	0.0000068	0.0012	0.0000017	0.00035	0.0090	0.0030	0.00000015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2059**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000034	0.00013	0.000027	0.0049	0.0000068	0.0014	0.036	0.012	0.0000006
	May		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.028	0.000038	0.0079	0.20	0.068	0.0000034
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.031	0.000042	0.0087	0.22	0.075	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	September		0.037	0.14	0.00041	0.000035	0.63	1.0	0.00018	0.00069	0.00014	0.026	0.000036	0.0073	0.19	0.063	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2060**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
	April		0.021	0.079	0.00024	0.000020	0.36	0.60	0.00010	0.00039	0.000082	0.015	0.000020	0.0042	0.11	0.036	0.0000018
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.031	0.000042	0.0087	0.22	0.075	0.0000037
	July		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00016	0.028	0.000038	0.0079	0.20	0.068	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	October		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000014	0.0025	0.0000034	0.00070	0.018	0.0060	0.0000003
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000057	0.00022	0.000046	0.0084	0.000011	0.0024	0.061	0.020	0.0000010
	April		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	May		0.023	0.087	0.00026	0.000022	0.40	0.66	0.00011	0.00043	0.000090	0.016	0.000022	0.0046	0.12	0.039	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.90	1.5	0.00025	0.00099	0.00020	0.037	0.000051	0.010	0.27	0.089	0.0000045
	August		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00014	0.025	0.000034	0.0071	0.18	0.061	0.0000030
	November		0.0052	0.020	0.000059	0.0000049	0.090	0.15	0.000025	0.000099	0.000020	0.0037	0.0000051	0.0010	0.027	0.0089	0.00000045
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0084	0.032	0.000096	0.0000080	0.15	0.24	0.000041	0.00016	0.000033	0.0060	0.0000082	0.0017	0.043	0.014	0.00000072
	April		0.0087	0.033	0.000099	0.0000082	0.15	0.25	0.000042	0.00016	0.000034	0.0062	0.0000085	0.0017	0.045	0.015	0.00000075
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.78	1.3	0.00022	0.00085	0.00018	0.032	0.000044	0.0090	0.23	0.078	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.73	1.2	0.00020	0.00079	0.00017	0.030	0.000041	0.0084	0.22	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.030	0.000041	0.0084	0.21	0.072	0.0000036
	October		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	November		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.011	0.000015	0.0031	0.081	0.027	0.0000013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	February		0.0037	0.014	0.000042	0.0000035	0.064	0.11	0.000018	0.000070	0.000015	0.0026	0.0000036	0.00075	0.019	0.0064	0.00000032
	March		0.0084	0.032	0.000096	0.0000080	0.15	0.24	0.000041	0.00016	0.000033	0.0060	0.0000082	0.0017	0.043	0.014	0.00000072
	April		0.016	0.060	0.00018	0.000015	0.27	0.45	0.000077	0.00030	0.000062	0.011	0.000015	0.0032	0.082	0.027	0.0000014
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.027	0.000038	0.0077	0.20	0.066	0.0000033
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	July		0.046	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00018	0.032	0.000044	0.0091	0.23	0.078	0.0000039
	August		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00074	0.00015	0.028	0.000038	0.0078	0.20	0.067	0.0000034
	September		0.037	0.14	0.00041	0.000035	0.63	1.0	0.00018	0.00069	0.00014	0.026	0.000036	0.0073	0.19	0.063	0.0000031
	October		0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	April		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.011	0.000015	0.0031	0.081	0.027	0.0000013
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000082	0.00032	0.000066	0.012	0.000016	0.0034	0.087	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.75	0.00013	0.00049	0.00010	0.019	0.000025	0.0052	0.13	0.045	0.0000022
	July		0.021	0.080	0.00024	0.000020	0.37	0.61	0.00010	0.00040	0.000083	0.015	0.000021	0.0042	0.11	0.036	0.0000018
	August		0.040	0.15	0.00046	0.000038	0.70	1.2	0.00020	0.00076	0.00016	0.029	0.000039	0.0081	0.21	0.069	0.0000035
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00019	0.00072	0.00015	0.027	0.000037	0.0077	0.20	0.066	0.0000033
	October		0.015	0.057	0.00017	0.000014	0.26	0.43	0.000074	0.00029	0.000059	0.011	0.000015	0.0030	0.078	0.026	0.0000013
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000095	0.17	0.29	0.000049	0.00019	0.000039	0.0071	0.0000097	0.0020	0.052	0.017	0.00000086
	April		0.030	0.11	0.00034	0.000028	0.51	0.85	0.00014	0.00056	0.00012	0.021	0.000029	0.0059	0.15	0.051	0.0000025
	May		0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	June		0.045	0.17	0.00051	0.000043	0.78	1.3	0.00022	0.00085	0.00018	0.032	0.000044	0.0090	0.23	0.078	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.76	1.3	0.00021	0.00083	0.00017	0.031	0.000043	0.0088	0.23	0.075	0.0000038
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00025	0.00095	0.00020	0.036	0.000049	0.010	0.26	0.087	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00019	0.00072	0.00015	0.027	0.000037	0.0077	0.20	0.066	0.0000033
	October		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.024	0.000033	0.0067	0.17	0.058	0.0000029
	November		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	February		0.015	0.056	0.00017	0.000014	0.26	0.43	0.000073	0.00028	0.000059	0.011	0.000015	0.0030	0.077	0.026	0.0000013
	March		0.022	0.083	0.00025	0.000021	0.38	0.63	0.00011	0.00041	0.000086	0.016	0.000021	0.0044	0.11	0.038	0.0000019

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April		0.031	0.12	0.00036	0.000030	0.54	0.90	0.00015	0.00059	0.00012	0.022	0.000030	0.0063	0.16	0.054	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.87	0.00015	0.00057	0.00012	0.021	0.000030	0.0061	0.16	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.60	0.00010	0.00039	0.000082	0.015	0.000020	0.0042	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.41	0.67	0.00011	0.00045	0.000093	0.017	0.000023	0.0047	0.12	0.040	0.0000020
	August	**2066**	0.027	0.10	0.00031	0.000025	0.47	0.77	0.00013	0.00051	0.00011	0.019	0.000026	0.0054	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.70	0.00012	0.00046	0.000096	0.017	0.000024	0.0049	0.13	0.042	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000057	0.00022	0.000046	0.0084	0.000011	0.0024	0.061	0.020	0.0000010
	November		0.0052	0.020	0.000059	0.0000049	0.090	0.15	0.000025	0.000099	0.000020	0.0037	0.0000051	0.0010	0.027	0.0089	0.00000045
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reclamation	**February**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0024	0.0000033	0.00067	0.017	0.0058	0.00000029
	April		0.028	0.11	0.00032	0.000026	0.48	0.80	0.00014	0.00053	0.00011	0.020	0.000027	0.0056	0.14	0.048	0.0000024
	May		0.029	0.11	0.00032	0.000027	0.49	0.82	0.00014	0.00054	0.00011	0.020	0.000028	0.0057	0.15	0.049	0.0000025
	June		0.033	0.13	0.00038	0.000031	0.57	0.94	0.00016	0.00062	0.00013	0.023	0.000032	0.0066	0.17	0.057	0.0000028
	July	**2067**	0.046	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00018	0.032	0.000044	0.0091	0.23	0.078	0.0000039
	August		0.047	0.18	0.00054	0.000045	0.81	1.3	0.00023	0.00089	0.00019	0.033	0.000046	0.0094	0.24	0.081	0.0000041
	September		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.033	0.000046	0.0094	0.24	0.081	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00016	0.028	0.000039	0.0080	0.21	0.069	0.0000034
	November		0.0048	0.018	0.000054	0.0000045	0.083	0.14	0.000023	0.000090	0.000019	0.0034	0.0000047	0.00096	0.025	0.0082	0.00000041
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000082	0.000032	0.0000066	0.0012	0.0000016	0.00034	0.0087	0.0029	0.00000014
		MAXIMUM	0.052	0.20	0.00059	0.000049	0.90	1.5	0.00025	0.00099	0.00020	0.037	0.000051	0.010	0.27	0.089	0.0000045
		AVERAGE	0.027	0.10	0.00031	0.000026	0.48	0.78	0.00013	0.00052	0.00011	0.020	0.000027	0.0055	0.14	0.047	0.0000024

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2026	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2027	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2028	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Operations	January	2029	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2031	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2032	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2033	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2034	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2035	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**April**	**2035**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2036**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2037**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2038**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2039**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2040**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**July**	**2040**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2041**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2042**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2043**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2044**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	**2045**	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2046	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2047	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2048	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2049	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2050	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2052	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Decommissioning	January	2053	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2054	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2055	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	January	2057	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	February		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	March		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	April		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	May		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	June		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	July		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	August		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	September		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	October		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	November		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
	December		0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MINIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		MAXIMUM	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
		AVERAGE	0.00010	0.00050	0.50	**0.050**	0.019	0.0100	0.00010	1.5	0.032	1.7	0.010	0.00010	0.00050	0.0030
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000013	0.00017	0.0068	0.00031	0.00036	0.00034	0.0000066	0.060	0.0013	0.25	0.00066	0.0000066	0.000026	0.00045
	April		0.000043	0.00052	0.042	0.0031	0.0019	0.0014	0.000024	0.25	0.0054	0.83	0.0024	0.000024	0.00010	0.0015
	May		0.000068	0.00087	0.036	0.0016	0.0019	0.0018	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00014	0.0024
	June		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0093	1.8	0.0046	0.000046	0.00018	0.0031
	July		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	August		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	September		0.000057	0.00073	0.030	0.0014	0.0016	0.0015	0.000029	0.26	0.0059	1.1	0.0029	0.000029	0.00012	0.0020
	October		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	November		0.0000033	0.000043	0.0018	0.000081	0.000092	0.000087	0.0000017	0.016	0.00035	0.065	0.00017	0.0000017	0.0000068	0.00012
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000013	0.00017	0.0070	0.00032	0.00037	0.00035	0.0000068	0.062	0.0014	0.26	0.00068	0.0000068	0.000027	0.00047
	May		0.000076	0.00097	0.040	0.0018	0.0021	0.0020	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	June		0.000083	0.0011	0.044	0.0020	0.0023	0.0022	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	August		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	September		0.000070	0.00090	0.037	0.0017	0.0019	0.0018	0.000036	0.33	0.0073	1.4	0.0036	0.000036	0.00014	0.0024
	October		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	April		0.000040	0.00051	0.021	0.00097	0.0011	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000082	0.0014
	May		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	June		0.000083	0.0011	0.044	0.0020	0.0023	0.0022	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000076	0.00098	0.040	0.0018	0.0021	0.0020	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00016	0.0026
	August		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	September		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	October		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	November		0.0000067	0.000086	0.0035	0.00016	0.00018	0.00017	0.0000034	0.031	0.00069	0.13	0.00034	0.0000034	0.000014	0.00023
	December		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000023	0.00029	0.012	0.00055	0.00063	0.00059	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000046	0.00079
	April		0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000044	0.00057	0.023	0.0011	0.0012	0.0012	0.000022	0.21	0.0046	0.86	0.0022	0.000022	0.000090	0.0015
	June		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	July		0.00010	0.0013	0.053	0.0024	0.0028	0.0026	0.000051	0.47	0.010	1.9	0.0051	0.000051	0.00020	0.0035
	August		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	September		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	October		0.000068	0.00087	0.036	0.0016	0.0019	0.0018	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00014	0.0024
	November		0.0000100	0.00013	0.0053	0.00024	0.00028	0.00026	0.0000051	0.047	0.0010	0.19	0.00051	0.0000051	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000016	0.00021	0.0085	0.00039	0.00045	0.00042	0.0000082	0.075	0.0017	0.31	0.00082	0.0000082	0.000033	0.00056
	April		0.000017	0.00021	0.0088	0.00040	0.00046	0.00044	0.0000085	0.078	0.0017	0.32	0.00085	0.0000085	0.000034	0.00058
	May		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	June		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.40	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	July		0.000081	0.0010	0.042	0.0020	0.0022	0.0021	0.000041	0.38	0.0084	1.6	0.0041	0.000041	0.00017	0.0028
	August		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	September		0.000080	0.0010	0.042	0.0019	0.0022	0.0021	0.000041	0.37	0.0083	1.6	0.0041	0.000041	0.00016	0.0028
	October		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	November		0.000030	0.00039	0.016	0.00073	0.00083	0.00079	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000061	0.0010
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	February		0.0000071	0.000092	0.0038	0.00017	0.00020	0.00019	0.0000036	0.033	0.00074	0.14	0.00036	0.0000036	0.000015	0.00025
	March		0.000016	0.00021	0.0085	0.00039	0.00045	0.00042	0.0000082	0.075	0.0017	0.31	0.00082	0.0000082	0.000033	0.00056
	April		0.000030	0.00039	0.016	0.00074	0.00084	0.00080	0.000015	0.14	0.0032	0.59	0.0015	0.000015	0.000062	0.0011
	May		0.000074	0.00095	0.039	0.0018	0.0021	0.0019	0.000038	0.35	0.0077	1.4	0.0038	0.000038	0.00015	0.0026
	June		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	July		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	August		0.000075	0.00096	0.039	0.0018	0.0021	0.0020	0.000038	0.35	0.0077	1.5	0.0038	0.000038	0.00015	0.0026
	September		0.000070	0.00090	0.037	0.0017	0.0019	0.0018	0.000036	0.33	0.0073	1.4	0.0036	0.000036	0.00014	0.0024
	October		0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	April		0.000030	0.00039	0.016	0.00073	0.00083	0.00079	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000061	0.0010
	May		0.000032	0.00042	0.017	0.00078	0.00089	0.00085	0.000016	0.15	0.0033	0.63	0.0016	0.000016	0.000066	0.0011
	June		0.000050	0.00064	0.026	0.0012	0.0014	0.0013	0.000025	0.23	0.0052	0.97	0.0025	0.000025	0.00010	0.0017
	July		0.000041	0.00052	0.021	0.00098	0.0011	0.0011	0.000021	0.19	0.0042	0.79	0.0021	0.000021	0.000083	0.0014
	August		0.000077	0.00100	0.041	0.0019	0.0021	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00016	0.0027
	September		0.000073	0.00094	0.039	0.0018	0.0020	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0026
	October		0.000029	0.00037	0.015	0.00070	0.00080	0.00076	0.000015	0.14	0.0030	0.56	0.0015	0.000015	0.000059	0.0010
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.010	0.00046	0.00053	0.00050	0.0000097	0.090	0.0020	0.37	0.00097	0.0000097	0.000039	0.00067
	April		0.000057	0.00073	0.030	0.0014	0.0016	0.0015	0.000029	0.26	0.0059	1.1	0.0029	0.000029	0.00012	0.0020
	May		0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	June		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.40	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	July		0.000084	0.0011	0.044	0.0020	0.0023	0.0022	0.000043	0.39	0.0087	1.6	0.0043	0.000043	0.00017	0.0029
	August		0.000097	0.0012	0.051	0.0023	0.0027	0.0025	0.000049	0.45	0.010	1.9	0.0049	0.000049	0.00020	0.0034
	September		0.000073	0.00094	0.039	0.0018	0.0020	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0026
	October		0.000065	0.00083	0.034	0.0016	0.0018	0.0017	0.000033	0.30	0.0067	1.3	0.0033	0.000033	0.00013	0.0023
	November		0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	January	2066	0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	February		0.000029	0.00037	0.015	0.00069	0.00079	0.00075	0.000015	0.13	0.0030	0.56	0.0015	0.000015	0.000059	0.00100
	March		0.000042	0.00054	0.022	0.0010	0.0012	0.0011	0.000021	0.20	0.0043	0.82	0.0021	0.000021	0.000086	0.0015

Table G-12: Scenario 12: Reasonable Upper Bound and Low Treatment Efficier

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	**April**	**2066**	0.000060	0.00077	0.032	0.0015	0.0017	0.0016	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000058	0.00075	0.031	0.0014	0.0016	0.0015	0.000030	0.27	0.0060	1.1	0.0030	0.000030	0.00012	0.0020
	June		0.000040	0.00051	0.021	0.00097	0.0011	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000082	0.0014
	July		0.000045	0.00058	0.024	0.0011	0.0013	0.0012	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000093	0.0016
	August		0.000052	0.00066	0.027	0.0012	0.0014	0.0014	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00011	0.0018
	September		0.000047	0.00060	0.025	0.0011	0.0013	0.0012	0.000024	0.22	0.0048	0.91	0.0024	0.000024	0.000096	0.0016
	October		0.000023	0.00029	0.012	0.00055	0.00063	0.00059	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000046	0.00079
	November		0.0000100	0.00013	0.0053	0.00024	0.00028	0.00026	0.0000051	0.047	0.0010	0.19	0.00051	0.0000051	0.000020	0.00035
	December		0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
	January	**2067**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000065	0.000083	0.0034	0.00016	0.00018	0.00017	0.0000033	0.030	0.00067	0.13	0.00033	0.0000033	0.000013	0.00023
	April		0.000053	0.00069	0.028	0.0013	0.0015	0.0014	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0019
	May		0.000055	0.00071	0.029	0.0013	0.0015	0.0014	0.000028	0.26	0.0057	1.1	0.0028	0.000028	0.00011	0.0019
	June		0.000063	0.00082	0.033	0.0015	0.0018	0.0017	0.000032	0.30	0.0066	1.2	0.0032	0.000032	0.00013	0.0022
	July		0.000087	0.0011	0.046	0.0021	0.0024	0.0023	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00018	0.0030
	August		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0094	1.8	0.0046	0.000046	0.00019	0.0032
	September		0.000090	0.0012	0.047	0.0022	0.0025	0.0024	0.000046	0.42	0.0093	1.8	0.0046	0.000046	0.00018	0.0031
	October		0.000077	0.00099	0.040	0.0019	0.0021	0.0020	0.000039	0.36	0.0079	1.5	0.0039	0.000039	0.00016	0.0027
	November		0.0000092	0.00012	0.0048	0.00022	0.00025	0.00024	0.0000047	0.043	0.00095	0.18	0.00047	0.0000047	0.000019	0.00032
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000042	0.0017	0.000078	0.000089	0.000085	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000066	0.00011
		MAXIMUM	0.00010	0.0013	0.053	0.0031	0.0028	0.0026	0.000051	0.47	0.010	1.9	0.0051	0.000051	0.00020	0.0035
		AVERAGE	0.000053	0.00068	0.028	0.0013	0.0015	0.0014	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000094	0.0000049	3.5	0.57	0.00020	0.000050	0.00012	0.085	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0033	0.019	0.000082	0.0000043	3.1	0.50	0.00017	0.000044	0.00011	0.075	0.000041	0.011	1.1	0.018	0.0000012
	May		0.0029	0.016	0.000071	0.0000037	2.7	0.43	0.00015	0.000037	0.000093	0.064	0.000035	0.0096	0.92	0.016	0.0000010
	June		0.0028	0.016	0.000070	0.0000036	2.6	0.42	0.00015	0.000037	0.000091	0.063	0.000035	0.0094	0.90	0.015	0.0000010
	July		0.0025	0.015	0.000063	0.0000032	2.4	0.38	0.00013	0.000033	0.000082	0.057	0.000031	0.0085	0.82	0.014	0.00000092
	August		0.0024	0.014	0.000059	0.0000030	2.2	0.35	0.00012	0.000031	0.000077	0.053	0.000029	0.0079	0.76	0.013	0.00000086
	September		0.0021	0.012	0.000052	0.0000027	1.9	0.31	0.00011	0.000027	0.000068	0.047	0.000026	0.0070	0.67	0.011	0.00000076
	October		0.0019	0.011	0.000047	0.0000024	1.8	0.28	0.000099	0.000025	0.000062	0.043	0.000023	0.0063	0.61	0.010	0.00000069
	November		0.0018	0.010	0.000044	0.0000023	1.7	0.27	0.000092	0.000023	0.000058	0.040	0.000022	0.0059	0.57	0.0097	0.00000065
	December		0.0018	0.010	0.000044	0.0000022	1.6	0.26	0.000091	0.000023	0.000057	0.040	0.000022	0.0058	0.57	0.0096	0.00000064
	January	2026	0.0018	0.010	0.000043	0.0000022	1.6	0.26	0.000091	0.000023	0.000057	0.039	0.000022	0.0058	0.56	0.0096	0.00000064
	February		0.0018	0.010	0.000043	0.0000022	1.6	0.26	0.000091	0.000023	0.000057	0.039	0.000022	0.0058	0.56	0.0096	0.00000064
	March		0.0012	2.0	0.000030	0.0000015	2.3	0.36	0.000061	0.000015	0.000038	0.027	0.000015	0.0082	0.78	0.0065	0.00000089
	April		0.00018	3.8	0.000039	0.0000024	3.1	0.82	0.0000071	0.0000032	0.000035	0.0028	0.0000016	0.39	1.1	0.00081	0.0000035
	May		0.000097	4.2	0.000032	0.0000020	3.1	0.81	0.0000026	0.0000021	0.000029	0.00086	0.00000051	0.35	1.1	0.00035	0.0000033
	June		0.00019	3.8	0.00011	0.0000070	3.0	1.4	0.0000038	0.0000049	0.000095	0.00076	0.00000052	1.2	1.2	0.00052	0.0000080
	July		0.00021	3.7	0.00013	0.0000088	2.7	1.6	0.0000041	0.0000057	0.00012	0.00068	0.00000049	1.4	1.1	0.00055	0.0000095
	August		0.00026	2.8	0.00019	0.000013	2.1	2.0	0.0000047	0.0000074	0.00017	0.00053	0.00000044	2.0	0.96	0.00063	0.000013
	September		0.00027	2.9	0.00014	0.0000092	2.1	1.7	0.0000041	0.0000071	0.00012	0.00054	0.00000045	1.5	0.89	0.00064	0.000010
	October		0.00020	3.9	0.000076	0.0000051	2.5	1.2	0.0000031	0.0000048	0.000067	0.00063	0.00000046	0.80	0.96	0.00050	0.0000063
	November		0.000092	5.4	0.000027	0.0000017	3.2	0.80	0.0000024	0.0000020	0.000023	0.00079	0.00000047	0.28	1.1	0.00033	0.0000031
	December		0.000058	5.9	0.000010	0.00000065	3.5	0.65	0.0000021	0.0000011	0.0000091	0.00084	0.00000047	0.11	1.2	0.00027	0.0000020
	January	2027	0.000090	7.1	0.000033	0.0000022	3.5	0.86	0.0000026	0.0000020	0.000029	0.00084	0.0000005	0.34	1.2	0.00033	0.0000035
	February		0.00014	7.4	0.000066	0.0000044	3.3	1.2	0.0000032	0.0000035	0.000059	0.00081	0.00000051	0.71	1.2	0.00043	0.0000056
	March		0.00012	6.6	0.000068	0.0000046	3.2	1.1	0.0000031	0.0000031	0.000061	0.00079	0.00000049	0.73	1.2	0.00040	0.0000056
	April		0.00020	4.7	0.00012	0.0000078	2.6	1.5	0.0000038	0.0000052	0.00010	0.00065	0.00000046	1.2	1.0	0.00052	0.0000086
	May		0.00023	4.1	0.00010	0.0000068	2.4	1.5	0.0000036	0.0000057	0.000090	0.00061	0.00000046	1.1	0.95	0.00056	0.0000079
	June		0.00019	5.0	0.00010	0.0000067	2.7	1.4	0.0000035	0.0000048	0.000090	0.00066	0.00000046	1.1	1.0	0.00049	0.0000077
	July		0.00023	4.2	0.00017	0.000011	2.4	1.8	0.0000045	0.0000065	0.00015	0.00060	0.00000046	1.8	1.1	0.00058	0.000012
	August		0.00030	4.1	0.00014	0.0000094	2.5	1.9	0.0000044	0.0000076	0.00012	0.00065	0.00000053	1.5	1.0	0.00071	0.000011
	September		0.00019	6.0	0.000062	0.0000041	2.7	1.2	0.0000030	0.0000044	0.000054	0.00067	0.00000047	0.65	1.00	0.00048	0.0000055
	October		0.00016	4.8	0.000088	0.0000059	2.8	1.3	0.0000033	0.0000042	0.000079	0.00070	0.00000047	0.94	1.1	0.00045	0.0000068
	November		0.00017	5.2	0.000080	0.0000054	2.9	1.2	0.0000033	0.0000043	0.000072	0.00071	0.00000048	0.85	1.1	0.00047	0.0000065
	December		0.00013	8.3	0.000049	0.0000033	3.5	1.1	0.0000030	0.0000030	0.000044	0.00086	0.00000053	0.52	1.3	0.00041	0.0000047
	January	2028	0.000052	13	0.000010	0.00000066	3.9	0.73	0.0000020	0.00000096	0.0000091	0.00078	0.00000044	0.12	1.4	0.00025	0.0000022
	February		0.000035	12	0.0000018	6.8E-08	4.3	0.70	0.0000018	0.00000051	0.0000014	0.00076	0.00000042	0.026	1.5	0.00021	0.0000018
	March		0.000036	12	0.0000015	4.9E-08	4.5	0.72	0.0000018	0.00000051	0.0000012	0.00079	0.00000044	0.017	1.6	0.00022	0.0000018
	April		0.000069	9.7	0.000064	0.0000034	5.4	7.6	0.0000055	0.00025	0.00014	0.0013	0.00000044	0.51	2.1	0.00040	0.000030
	May		0.00014	4.9	0.00010	0.0000048	9.9	28	0.0000017	0.0015	0.00066	0.0022	0.00000054	0.43	5.3	0.0011	0.00012
	June		0.00013	6.2	0.000100	0.0000050	9.8	26	0.000016	0.0015	0.00067	0.0020	0.00000054	0.44	5.5	0.0011	0.00012
	July		0.00012	5.5	0.00014	0.0000069	12	36	0.000021	0.0020	0.00087	0.0026	0.00000057	0.65	6.7	0.0013	0.00016
	August		0.00013	5.6	0.00014	0.0000072	13	40	0.000025	0.0026	0.0011	0.0024	0.00000062	0.53	8.4	0.0017	0.00019
	September		0.00012	5.7	0.00014	0.0000072	13	39	0.000024	0.0025	0.0011	0.0024	0.00000059	0.57	8.4	0.0016	0.00018
	October		0.000077	8.2	0.000068	0.0000038	9.7	24	0.000014	0.0015	0.00063	0.0015	0.0000005	0.28	6.0	0.00100	0.00011
	November		0.000060	9.2	0.000044	0.0000024	7.6	15	0.0000091	0.00088	0.00037	0.0012	0.00000046	0.20	4.2	0.00067	0.000072
	December		0.000034	11	0.0000033	0.00000016	4.6	2.4	0.0000021	0.000046	0.000020	0.00075	0.0000004	0.035	1.8	0.00022	0.000010
		MINIMUM	0.000034	0.010	0.0000015	4.9E-08	1.6	0.26	0.0000018	0.00000051	0.0000012	0.00053	0.0000004	0.0058	0.56	0.00021	0.00000064
		MAXIMUM	0.0038	13	0.00019	0.000013	13	40	0.00020	0.0026	0.0011	0.086	0.000047	2.0	8.4	0.021	0.00019
		AVERAGE	0.00088	4.4	0.000074	0.0000044	4.1	5.3	0.000045	0.00028	0.00017	0.018	0.000010	0.49	1.8	0.0047	0.000024
Operations	January	2029	**20**	7.7	**0.071**	**0.000084**	417	50	**0.026**	0.029	**0.33**	**9.5**	**0.043**	0.15	60	0.094	0.000012
	February		**22**	7.2	**0.077**	**0.000091**	456	78	**0.029**	0.032	**0.35**	**10**	**0.047**	0.21	94	0.10	0.000013
	March		**21**	6.8	**0.074**	**0.000087**	456	81	**0.027**	0.030	**0.34**	**9.9**	**0.045**	0.27	94	0.097	0.000033
	April		**18**	5.7	**0.064**	**0.000080**	455	93	**0.024**	0.027	**0.29**	**8.6**	**0.039**	0.70	85	0.086	0.00012
	May		**19**	5.4	**0.065**	**0.000080**	456	85	**0.024**	0.028	**0.30**	**8.7**	**0.040**	0.40	80	0.087	0.00012
	June		**19**	5.5	**0.066**	**0.000081**	456	87	**0.024**	0.028	**0.30**	**8.8**	**0.040**	0.50	82	0.088	0.00012
	July		**19**	5.7	**0.066**	**0.000081**	456	86	**0.025**	0.028	**0.30**	**8.8**	**0.040**	0.50	84	0.088	0.00010
	August		**19**	5.4	**0.065**	**0.000079**	457	87	**0.024**	0.028	**0.30**	**8.7**	**0.039**	0.51	81	0.086	0.00012
	September		**18**	5.4	**0.064**	**0.000079**	456	89	**0.024**	0.027	**0.29**	**8.6**	**0.039**	0.59	82	0.085	0.00013
	October		**20**	5.8	**0.068**	**0.000082**	456	82	**0.025**	0.029	**0.31**	**9.1**	**0.041**	0.36	85	0.090	0.000085
	November		**21**	6.4	**0.073**	**0.000087**	456	81	**0.027**	0.030	**0.34**	**9.8**	**0.045**	0.31	91	0.097	0.000049
	December		**22**	7.1	**0.077**	**0.000090**	456	81	**0.028**	0.031	**0.35**	**10**	**0.047**	0.22	97	0.10	0.000017

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	**24**	6.2	**0.083**	**0.000098**	456	68	**0.031**	0.034	**0.38**	**11**	**0.051**	0.18	82	0.11	0.000014
	February		**23**	5.7	**0.081**	**0.000096**	456	64	**0.030**	0.033	**0.37**	**11**	**0.049**	0.21	75	0.11	0.000023
	March		**23**	5.5	**0.080**	**0.000095**	456	65	**0.030**	0.033	**0.37**	**11**	**0.049**	0.23	73	0.11	0.000038
	April		**20**	4.6	**0.070**	**0.000087**	459	74	**0.026**	0.030	**0.32**	**9.4**	**0.043**	0.51	65	0.094	0.00011
	May		**21**	4.9	**0.074**	**0.000091**	458	74	**0.028**	0.031	**0.34**	**10.0**	**0.045**	0.47	69	0.099	0.00011
	June		**20**	4.6	**0.071**	**0.000088**	459	78	**0.026**	0.030	**0.32**	**9.5**	**0.043**	0.60	66	0.094	0.00013
	July		**20**	4.5	**0.070**	**0.000088**	458	80	**0.026**	0.030	**0.32**	**9.4**	**0.043**	0.65	64	0.094	0.00015
	August		**20**	4.6	**0.071**	**0.000088**	458	81	**0.026**	0.031	**0.33**	**9.5**	**0.043**	0.54	68	0.095	0.00015
	September		**20**	4.6	**0.070**	**0.000087**	459	78	**0.026**	0.030	**0.32**	**9.4**	**0.043**	0.50	67	0.094	0.00014
	October		**21**	4.6	**0.072**	**0.000088**	459	72	**0.027**	0.031	**0.33**	**9.6**	**0.044**	0.42	67	0.096	0.00011
	November		**23**	5.2	**0.079**	**0.000094**	457	65	**0.029**	0.033	**0.36**	**11**	**0.048**	0.21	69	0.10	0.000063
	December		**23**	5.6	**0.081**	**0.000097**	457	64	**0.030**	0.033	**0.37**	**11**	**0.050**	0.21	74	0.11	0.000032
	January	2031	**25**	5.0	**0.085**	**0.00010**	456	58	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.19	67	0.11	0.000028
	February		**25**	4.9	**0.087**	**0.00010**	456	55	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.15	66	0.12	0.000016
	March		**25**	4.8	**0.085**	**0.00010**	456	57	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.20	65	0.11	0.000031
	April		**22**	4.2	**0.077**	**0.000094**	458	68	**0.028**	0.032	**0.35**	**10**	**0.047**	0.50	61	0.10	0.000096
	May		**22**	4.0	**0.076**	**0.000093**	459	62	**0.028**	0.032	**0.35**	**10**	**0.047**	0.33	58	0.10	0.000095
	June		**22**	4.2	**0.078**	**0.000095**	458	65	**0.029**	0.033	**0.36**	**10**	**0.047**	0.37	62	0.10	0.000090
	July		**22**	4.1	**0.077**	**0.000094**	458	64	**0.029**	0.032	**0.35**	**10**	**0.047**	0.38	60	0.10	0.000094
	August		**22**	4.1	**0.078**	**0.000095**	458	67	**0.029**	0.033	**0.36**	**10**	**0.047**	0.41	61	0.10	0.00010
	September		**22**	4.0	**0.076**	**0.000093**	458	66	**0.028**	0.032	**0.35**	**10**	**0.047**	0.42	59	0.10	0.00011
	October		**23**	4.4	**0.081**	**0.000098**	457	63	**0.030**	0.034	**0.37**	**11**	**0.050**	0.33	62	0.11	0.000079
	November		**25**	4.7	**0.086**	**0.00010**	456	56	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.18	64	0.11	0.000035
	December		**25**	4.9	**0.086**	**0.00010**	456	55	**0.032**	**0.035**	**0.40**	**12**	**0.053**	0.16	65	0.11	0.000018
	January	2032	**26**	5.1	**0.090**	**0.00011**	454	52	**0.033**	**0.037**	**0.41**	**12**	**0.055**	0.15	62	0.12	0.000020
	February		**26**	5.2	**0.091**	**0.00011**	455	51	**0.034**	**0.037**	**0.41**	**12**	**0.055**	0.14	61	0.12	0.000017
	March		**24**	4.6	**0.083**	**0.000100**	457	57	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.30	57	0.11	0.000066
	April		**22**	4.2	**0.077**	**0.000095**	458	65	**0.029**	0.033	**0.35**	**10**	**0.047**	0.49	55	0.10	0.00011
	May		**22**	4.1	**0.078**	**0.000095**	457	58	**0.029**	0.033	**0.36**	**10**	**0.047**	0.29	55	0.10	0.000089
	June		**23**	4.3	**0.079**	**0.000096**	457	58	**0.029**	0.033	**0.36**	**11**	**0.048**	0.32	56	0.11	0.000073
	July		**22**	4.1	**0.077**	**0.000095**	458	66	**0.029**	0.033	**0.35**	**10**	**0.047**	0.55	55	0.10	0.00012
	August		**22**	4.1	**0.077**	**0.000094**	458	62	**0.029**	0.033	**0.35**	**10**	**0.047**	0.37	55	0.10	0.00010
	September		**23**	4.3	**0.080**	**0.000097**	457	58	**0.030**	0.034	**0.37**	**11**	**0.049**	0.27	57	0.11	0.000082
	October		**24**	4.5	**0.082**	**0.000099**	457	56	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.25	58	0.11	0.000056
	November		**25**	4.9	**0.088**	**0.00010**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.19	60	0.12	0.000034
	December		**25**	5.2	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000018
	January	2033	**25**	4.8	**0.087**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.053**	0.14	63	0.12	0.000018
	February		**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000018
	March		**25**	4.7	**0.087**	**0.00010**	456	54	**0.033**	**0.036**	**0.40**	**12**	**0.053**	0.16	63	0.12	0.000023
	April		**23**	3.9	**0.079**	**0.000098**	456	65	**0.029**	0.033	**0.36**	**11**	**0.048**	0.64	57	0.11	0.00010
	May		**22**	3.8	**0.077**	**0.000095**	458	67	**0.029**	0.033	**0.35**	**10**	**0.047**	0.31	57	0.10	0.00012
	June		**22**	3.8	**0.077**	**0.000094**	457	61	**0.029**	0.033	**0.35**	**10**	**0.047**	0.35	56	0.10	0.00010
	July		**23**	4.0	**0.081**	**0.000098**	457	62	**0.030**	**0.034**	**0.37**	**11**	**0.050**	0.33	59	0.11	0.000088
	August		**22**	3.8	**0.078**	**0.000096**	457	63	**0.029**	0.033	**0.36**	**10**	**0.048**	0.40	57	0.10	0.00010
	September		**23**	3.9	**0.080**	**0.000097**	457	62	**0.030**	0.033	**0.36**	**11**	**0.049**	0.35	57	0.11	0.000091
	October		**23**	4.0	**0.080**	**0.000097**	457	58	**0.030**	0.034	**0.37**	**11**	**0.049**	0.30	58	0.11	0.000072
	November		**24**	4.3	**0.084**	**0.00010**	456	58	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.27	59	0.11	0.000063
	December		**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000021
	January	2034	**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	February		**25**	4.7	**0.086**	**0.00010**	455	53	**0.032**	**0.035**	**0.40**	**12**	**0.053**	0.15	63	0.11	0.000022
	March		**25**	4.5	**0.085**	**0.00010**	456	57	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.23	62	0.11	0.000047
	April		**23**	4.0	**0.079**	**0.000097**	457	64	**0.029**	0.033	**0.36**	**11**	**0.048**	0.48	58	0.10	0.000092
	May		**23**	4.0	**0.079**	**0.000096**	458	58	**0.029**	0.033	**0.36**	**11**	**0.048**	0.23	56	0.10	0.000083
	June		**22**	3.8	**0.077**	**0.000096**	456	66	**0.029**	0.033	**0.35**	**10**	**0.047**	0.74	54	0.10	0.00012
	July		**22**	3.6	**0.076**	**0.000095**	456	68	**0.028**	0.033	**0.35**	**10**	**0.047**	0.63	51	0.10	0.00014
	August		**22**	3.6	**0.076**	**0.000095**	456	70	**0.028**	0.033	**0.35**	**10**	**0.047**	0.43	53	0.10	0.00015
	September		**22**	3.7	**0.076**	**0.000095**	457	71	**0.028**	0.033	**0.35**	**10**	**0.047**	0.47	58	0.10	0.00014
	October		**22**	3.9	**0.077**	**0.000095**	458	60	**0.029**	0.033	**0.36**	**10**	**0.047**	0.22	58	0.10	0.00010
	November		**24**	4.4	**0.084**	**0.00010**	456	58	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.20	61	0.11	0.000063
	December		**25**	4.6	**0.086**	**0.00010**	455	55	**0.032**	**0.036**	**0.39**	**12**	**0.053**	0.19	61	0.11	0.000037
	January	2035	**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000020
	February		**25**	4.6	**0.087**	**0.00010**	455	54	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.18	62	0.11	0.000031
	March		**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

Time Period	Month	Year	Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
			mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	**23**	4.2	**0.081**	**0.000098**	457	60	**0.030**	0.034	**0.37**	**11**	**0.049**	0.37	60	0.11	0.000067
	May		**22**	3.8	**0.077**	**0.000095**	458	64	**0.029**	0.033	**0.35**	**10**	**0.047**	0.48	56	0.10	0.00011
	June		**22**	3.8	**0.078**	**0.000095**	457	66	**0.029**	0.033	**0.36**	**10**	**0.047**	0.39	58	0.10	0.00011
	July		**22**	3.8	**0.077**	**0.000095**	458	64	**0.029**	0.033	**0.35**	**10**	**0.047**	0.41	56	0.10	0.00011
	August		**23**	3.8	**0.079**	**0.000096**	457	64	**0.029**	0.033	**0.36**	**11**	**0.048**	0.39	56	0.10	0.00011
	September		**22**	3.9	**0.078**	**0.000095**	457	62	**0.029**	0.033	**0.36**	**10**	**0.047**	0.35	57	0.10	0.000098
	October		**23**	4.0	**0.079**	**0.000096**	457	57	**0.030**	0.033	**0.36**	**11**	**0.049**	0.27	57	0.11	0.000065
	November		**25**	4.5	**0.087**	**0.00010**	455	54	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.17	61	0.12	0.000029
	December		**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	January	2036	**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	February		**25**	4.8	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	March		**25**	4.5	**0.085**	**0.00010**	456	56	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.20	62	0.11	0.000037
	April		**22**	3.9	**0.077**	**0.000096**	457	67	**0.029**	0.033	**0.35**	**10**	**0.047**	0.60	56	0.10	0.00011
	May		**22**	3.8	**0.077**	**0.000095**	457	63	**0.029**	0.033	**0.35**	**10**	**0.047**	0.31	57	0.10	0.00011
	June		**23**	3.9	**0.078**	**0.000096**	458	62	**0.029**	0.033	**0.36**	**11**	**0.048**	0.36	57	0.10	0.000096
	July		**23**	3.9	**0.078**	**0.000096**	457	63	**0.029**	0.033	**0.36**	**10**	**0.048**	0.40	56	0.10	0.00011
	August		**23**	4.1	**0.081**	**0.000098**	457	58	**0.030**	0.034	**0.37**	**11**	**0.050**	0.28	59	0.11	0.000061
	September		**23**	4.0	**0.078**	**0.000095**	457	59	**0.029**	0.033	**0.36**	**11**	**0.048**	0.31	57	0.10	0.000079
	October		**24**	4.2	**0.082**	**0.000100**	457	58	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.29	58	0.11	0.000070
	November		**25**	4.6	**0.088**	**0.00010**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.053**	0.17	61	0.12	0.000032
	December		**25**	4.7	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	January	2037	**25**	4.5	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000019
	February		**24**	4.2	**0.084**	**0.00010**	456	56	**0.031**	**0.035**	**0.39**	**11**	**0.051**	0.23	60	0.11	0.000049
	March		**24**	4.3	**0.085**	**0.00010**	456	56	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.20	62	0.11	0.000039
	April		**22**	3.6	**0.077**	**0.000095**	457	67	**0.029**	0.033	**0.35**	**10**	**0.047**	0.53	57	0.10	0.00011
	May		**22**	3.7	**0.077**	**0.000094**	457	59	**0.029**	0.033	**0.36**	**10**	**0.047**	0.25	58	0.10	0.000081
	June		**22**	3.6	**0.077**	**0.000096**	458	68	**0.029**	0.033	**0.35**	**10**	**0.047**	0.57	57	0.10	0.00012
	July		**22**	3.5	**0.077**	**0.000095**	458	68	**0.029**	0.033	**0.35**	**10**	**0.047**	0.54	55	0.10	0.00013
	August		**22**	3.6	**0.077**	**0.000094**	458	65	**0.028**	0.033	**0.35**	**10**	**0.047**	0.35	58	0.10	0.00011
	September		**22**	3.6	**0.077**	**0.000094**	458	63	**0.028**	0.033	**0.35**	**10**	**0.047**	0.39	56	0.10	0.00011
	October		**24**	4.0	**0.083**	**0.00010**	456	58	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.22	60	0.11	0.000067
	November		**25**	4.4	**0.086**	**0.00010**	455	54	**0.032**	**0.035**	**0.39**	**12**	**0.053**	0.16	62	0.11	0.000027
	December		**25**	4.5	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000020
	January	2038	**25**	4.5	**0.088**	**0.00010**	455	53	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000021
	February		**25**	4.5	**0.087**	**0.00010**	455	54	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.14	63	0.12	0.000022
	March		**23**	3.8	**0.078**	**0.000096**	458	61	**0.029**	0.033	**0.36**	**11**	**0.048**	0.36	57	0.10	0.000088
	April		**23**	3.7	**0.079**	**0.000098**	457	66	**0.029**	0.033	**0.36**	**11**	**0.048**	0.50	56	0.11	0.00011
	May		**22**	3.7	**0.078**	**0.000095**	458	60	**0.029**	0.033	**0.36**	**10**	**0.048**	0.29	56	0.10	0.000094
	June		**24**	3.9	**0.082**	**0.000100**	457	59	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.33	58	0.11	0.000073
	July		**23**	3.7	**0.079**	**0.000096**	457	64	**0.029**	0.033	**0.36**	**11**	**0.048**	0.38	57	0.10	0.00010
	August		**23**	3.8	**0.081**	**0.000098**	457	61	**0.030**	0.034	**0.37**	**11**	**0.049**	0.33	57	0.11	0.000088
	September		**23**	3.8	**0.078**	**0.000096**	458	64	**0.029**	0.033	**0.36**	**10**	**0.048**	0.45	58	0.10	0.000098
	October		**22**	3.6	**0.078**	**0.000095**	457	62	**0.029**	0.033	**0.36**	**10**	**0.048**	0.33	56	0.10	0.00010
	November		**25**	4.2	**0.086**	**0.00010**	455	57	**0.032**	**0.036**	**0.39**	**12**	**0.053**	0.20	61	0.11	0.000056
	December		**25**	4.5	**0.088**	**0.00010**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000023
	January	2039	**25**	4.5	**0.088**	**0.00010**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000023
	February		**24**	4.0	**0.082**	**0.000099**	457	60	**0.030**	**0.034**	**0.37**	**11**	**0.050**	0.28	60	0.11	0.000071
	March		**25**	4.2	**0.085**	**0.00010**	455	58	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.23	61	0.11	0.000055
	April		**24**	4.1	**0.082**	**0.000099**	457	58	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.26	60	0.11	0.000060
	May		**24**	4.1	**0.084**	**0.00010**	457	60	**0.031**	**0.035**	**0.39**	**11**	**0.051**	0.27	61	0.11	0.000063
	June		**24**	4.1	**0.083**	**0.00010**	456	58	**0.031**	**0.034**	**0.38**	**11**	**0.051**	0.30	60	0.11	0.000056
	July		**22**	3.6	**0.077**	**0.000095**	458	66	**0.029**	0.033	**0.35**	**10**	**0.047**	0.43	56	0.10	0.00012
	August		**22**	3.5	**0.076**	**0.000096**	457	70	**0.028**	0.033	**0.35**	**10**	**0.047**	0.61	54	0.10	0.00014
	September		**22**	3.6	**0.077**	**0.000095**	458	63	**0.029**	0.033	**0.35**	**10**	**0.047**	0.32	57	0.10	0.00011
	October		**23**	3.7	**0.079**	**0.000097**	458	62	**0.029**	0.033	**0.36**	**11**	**0.048**	0.33	57	0.11	0.00010
	November		**24**	4.1	**0.085**	**0.00010**	456	58	**0.032**	**0.035**	**0.39**	**11**	**0.052**	0.23	60	0.11	0.000061
	December		**25**	4.5	**0.088**	**0.00010**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000025
	January	2040	**25**	4.7	**0.088**	**0.00011**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000025
	February		**25**	4.8	**0.088**	**0.00011**	455	54	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000026
	March		**23**	4.0	**0.078**	**0.000097**	458	65	**0.029**	0.033	**0.36**	**11**	**0.048**	0.46	58	0.10	0.000098
	April		**22**	3.8	**0.077**	**0.000095**	458	62	**0.029**	0.032	**0.35**	**10**	**0.047**	0.35	56	0.10	0.00010
	May		**23**	3.9	**0.079**	**0.000097**	458	63	**0.029**	0.033	**0.36**	**11**	**0.048**	0.41	56	0.10	0.00011
	June		**22**	3.8	**0.077**	**0.000095**	458	66	**0.028**	0.032	**0.35**	**10**	**0.047**	0.48	55	0.10	0.00012

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	22	3.7	0.076	0.000096	457	70	0.028	0.033	0.35	10	0.047	0.52	55	0.10	0.00014
	August		23	3.9	0.078	0.000096	457	60	0.029	0.033	0.36	11	0.048	0.24	57	0.10	0.000096
	September		23	4.1	0.081	0.000098	457	60	0.030	0.034	0.37	11	0.049	0.29	59	0.11	0.000079
	October		23	4.1	0.081	0.000100	457	62	0.030	0.034	0.37	11	0.050	0.34	58	0.11	0.000093
	November		25	4.6	0.087	0.00010	455	55	0.032	0.036	0.40	12	0.053	0.17	62	0.12	0.000036
	December		25	4.8	0.088	0.00011	455	54	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000026
	January	2041	25	4.8	0.087	0.00010	455	54	0.032	0.036	0.40	12	0.053	0.14	63	0.12	0.000027
	February		25	4.8	0.088	0.00011	455	54	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000028
	March		24	4.6	0.085	0.00010	456	57	0.031	0.035	0.39	11	0.052	0.23	62	0.11	0.000047
	April		23	4.0	0.079	0.000098	456	63	0.030	0.033	0.36	11	0.048	0.50	57	0.11	0.000099
	May		22	3.9	0.078	0.000096	457	64	0.029	0.033	0.36	10	0.048	0.27	57	0.10	0.00011
	June		23	4.2	0.081	0.000100	457	61	0.030	0.034	0.37	11	0.050	0.32	59	0.11	0.000078
	July		23	3.9	0.078	0.000097	458	65	0.029	0.033	0.36	11	0.048	0.47	57	0.10	0.00011
	August		22	3.7	0.076	0.000097	456	69	0.028	0.033	0.35	10	0.047	0.85	52	0.10	0.00015
	September		22	3.7	0.076	0.000095	456	70	0.028	0.033	0.35	10	0.047	0.34	53	0.10	0.00015
	October		23	3.9	0.078	0.000097	458	64	0.029	0.033	0.36	11	0.048	0.29	57	0.10	0.00012
	November		24	4.2	0.082	0.00010	457	59	0.031	0.035	0.38	11	0.050	0.17	60	0.11	0.000082
	December		25	4.7	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000032
	January	2042	25	4.8	0.088	0.00011	455	54	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000028
	February		25	4.8	0.088	0.00011	455	54	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	March		25	4.6	0.085	0.00010	455	56	0.032	0.035	0.39	11	0.052	0.19	62	0.11	0.000044
	April		23	4.2	0.080	0.000099	456	65	0.030	0.033	0.37	11	0.049	0.47	60	0.11	0.000093
	May		23	3.9	0.078	0.000096	458	62	0.029	0.033	0.36	10	0.048	0.27	57	0.10	0.00010
	June		22	3.8	0.077	0.000097	458	67	0.029	0.033	0.35	10	0.047	0.61	56	0.10	0.00013
	July		22	3.7	0.076	0.000096	456	71	0.028	0.033	0.35	10	0.047	0.52	53	0.10	0.00015
	August		22	3.7	0.076	0.000096	456	72	0.028	0.033	0.35	10	0.047	0.55	55	0.10	0.00016
	September		22	3.8	0.077	0.000096	458	66	0.029	0.033	0.35	10	0.047	0.46	56	0.10	0.00013
	October		22	3.8	0.078	0.000097	456	70	0.029	0.033	0.36	10	0.047	0.42	57	0.10	0.00014
	November		23	4.2	0.081	0.000099	457	59	0.030	0.034	0.37	11	0.050	0.16	60	0.11	0.000079
	December		25	4.8	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000032
	January	2043	25	4.8	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	February		25	4.8	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	March		25	4.8	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	April		23	4.2	0.081	0.00010	456	61	0.030	0.034	0.37	11	0.049	0.47	59	0.11	0.000078
	May		22	3.8	0.077	0.000095	457	69	0.028	0.033	0.35	10	0.047	0.36	57	0.10	0.00013
	June		22	3.8	0.077	0.000096	458	67	0.029	0.033	0.35	10	0.047	0.51	55	0.10	0.00013
	July		22	3.8	0.077	0.000097	457	67	0.029	0.033	0.35	10	0.047	0.53	55	0.10	0.00013
	August		22	3.7	0.076	0.000096	456	72	0.028	0.033	0.35	10	0.047	0.56	54	0.10	0.00016
	September		22	3.7	0.077	0.000097	457	71	0.028	0.033	0.35	10	0.047	0.58	55	0.10	0.00015
	October		22	3.8	0.077	0.000097	457	69	0.029	0.033	0.35	10	0.047	0.40	57	0.10	0.00014
	November		22	3.9	0.077	0.000096	458	61	0.029	0.033	0.35	10	0.047	0.26	57	0.10	0.00010
	December		25	4.6	0.087	0.00011	455	57	0.032	0.036	0.40	12	0.053	0.16	62	0.12	0.000057
	January	2044	25	4.7	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.15	63	0.12	0.000031
	February		25	4.7	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	March		25	4.6	0.086	0.00010	455	56	0.032	0.035	0.40	12	0.053	0.17	63	0.11	0.000034
	April		22	3.8	0.077	0.000095	458	64	0.028	0.032	0.35	10	0.047	0.41	56	0.10	0.00011
	May		23	3.9	0.079	0.000097	458	60	0.029	0.033	0.36	11	0.048	0.31	57	0.10	0.000090
	June		24	4.1	0.082	0.00010	457	61	0.031	0.034	0.38	11	0.050	0.32	59	0.11	0.000080
	July		22	3.7	0.077	0.000096	458	68	0.029	0.033	0.35	10	0.047	0.52	56	0.10	0.00013
	August		22	3.8	0.077	0.000096	458	61	0.029	0.033	0.35	10	0.047	0.30	57	0.10	0.00010
	September		23	4.0	0.080	0.000099	457	61	0.030	0.034	0.37	11	0.049	0.31	58	0.11	0.000087
	October		24	4.3	0.083	0.00010	456	58	0.031	0.035	0.38	11	0.051	0.25	60	0.11	0.000066
	November		25	4.6	0.087	0.00011	455	56	0.032	0.036	0.40	12	0.053	0.17	63	0.12	0.000040
	December		25	4.7	0.087	0.00011	455	55	0.032	0.036	0.40	12	0.053	0.14	63	0.12	0.000030
	January	2045	25	4.7	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	February		25	4.7	0.088	0.00011	455	55	0.033	0.036	0.40	12	0.054	0.14	63	0.12	0.000029
	March		24	4.5	0.085	0.00010	456	58	0.031	0.035	0.39	11	0.052	0.31	63	0.11	0.000048
	April		23	3.8	0.078	0.000097	458	63	0.029	0.033	0.36	10	0.048	0.32	55	0.10	0.00011
	May		22	3.8	0.077	0.000096	458	66	0.029	0.033	0.35	10	0.047	0.41	57	0.10	0.00012
	June		23	3.8	0.079	0.000098	458	65	0.029	0.033	0.36	11	0.048	0.43	57	0.10	0.00012
	July		22	3.8	0.077	0.000097	458	66	0.029	0.033	0.35	10	0.047	0.43	56	0.10	0.00012
	August		22	3.8	0.078	0.000096	457	63	0.029	0.033	0.36	10	0.047	0.36	56	0.10	0.00011
	September		23	4.0	0.081	0.000100	457	62	0.030	0.034	0.37	11	0.049	0.33	58	0.11	0.000093

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	**24**	4.2	**0.082**	**0.00010**	456	60	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.28	59	0.11	0.000075
	November		**24**	4.4	**0.085**	**0.00010**	456	57	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.21	62	0.11	0.000051
	December		**25**	4.6	**0.087**	**0.00010**	456	55	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.15	63	0.12	0.000032
	January	2046	**25**	4.6	**0.087**	**0.00010**	455	56	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.17	62	0.11	0.000040
	February		**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000029
	March		**24**	4.3	**0.082**	**0.00010**	457	59	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.28	60	0.11	0.000066
	April		**23**	4.0	**0.081**	**0.000099**	458	60	**0.030**	0.034	**0.37**	**11**	**0.049**	0.28	57	0.11	0.000088
	May		**22**	3.8	**0.077**	**0.000096**	458	60	**0.029**	0.032	**0.35**	**10**	**0.047**	0.35	56	0.10	0.000090
	June		**23**	3.9	**0.078**	**0.000098**	458	64	**0.029**	0.033	**0.36**	**11**	**0.048**	0.44	58	0.10	0.00010
	July		**22**	3.7	**0.077**	**0.000096**	458	68	**0.029**	0.033	**0.35**	**10**	**0.047**	0.52	55	0.10	0.00013
	August		**22**	3.7	**0.077**	**0.000096**	457	69	**0.028**	0.033	**0.35**	**10**	**0.047**	0.53	55	0.10	0.00014
	September		**22**	3.7	**0.077**	**0.000096**	458	69	**0.028**	0.033	**0.35**	**10**	**0.047**	0.46	57	0.10	0.00014
	October		**22**	3.7	**0.077**	**0.000095**	458	63	**0.028**	0.032	**0.35**	**10**	**0.047**	0.36	56	0.10	0.00011
	November		**23**	4.0	**0.081**	**0.000100**	456	59	**0.030**	**0.034**	**0.37**	**11**	**0.050**	0.21	59	0.11	0.000088
	December		**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000035
	January	2047	**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000029
	February		**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000029
	March		**25**	4.5	**0.086**	**0.00010**	456	56	**0.032**	**0.035**	**0.39**	**12**	**0.052**	0.18	62	0.11	0.000042
	April		**23**	4.1	**0.081**	**0.000100**	457	63	**0.030**	0.034	**0.37**	**11**	**0.049**	0.42	58	0.11	0.000090
	May		**22**	3.7	**0.077**	**0.000095**	458	64	**0.028**	0.032	**0.35**	**10**	**0.047**	0.39	55	0.10	0.00011
	June		**23**	3.9	**0.079**	**0.000097**	458	62	**0.029**	0.033	**0.36**	**11**	**0.048**	0.31	57	0.10	0.000098
	July		**22**	3.7	**0.077**	**0.000096**	458	69	**0.028**	0.032	**0.35**	**10**	**0.047**	0.56	56	0.10	0.00013
	August		**22**	3.7	**0.077**	**0.000097**	457	70	**0.029**	0.033	**0.35**	**10**	**0.047**	0.53	55	0.10	0.00014
	September		**22**	3.8	**0.077**	**0.000096**	458	65	**0.029**	0.033	**0.35**	**10**	**0.047**	0.39	57	0.10	0.00012
	October		**23**	3.9	**0.079**	**0.000098**	458	61	**0.029**	0.033	**0.36**	**11**	**0.048**	0.27	57	0.11	0.00010
	November		**25**	4.4	**0.086**	**0.00010**	455	57	**0.032**	**0.035**	**0.39**	**12**	**0.052**	0.20	61	0.11	0.000053
	December		**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000033
	January	2048	**25**	4.6	**0.087**	**0.00011**	455	56	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.16	63	0.12	0.000036
	February		**25**	4.7	**0.087**	**0.00011**	455	55	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.15	63	0.12	0.000033
	March		**25**	4.7	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000031
	April		**24**	4.3	**0.083**	**0.00010**	457	60	**0.031**	**0.034**	**0.38**	**11**	**0.050**	0.30	60	0.11	0.000069
	May		**24**	4.2	**0.083**	**0.00010**	456	59	**0.031**	**0.034**	**0.38**	**11**	**0.051**	0.24	59	0.11	0.000074
	June		**23**	4.0	**0.079**	**0.000098**	457	60	**0.029**	0.033	**0.36**	**11**	**0.048**	0.29	59	0.11	0.000078
	July		**22**	3.7	**0.077**	**0.000098**	457	68	**0.029**	0.033	**0.35**	**10**	**0.047**	0.78	55	0.10	0.00013
	August		**22**	3.6	**0.076**	**0.000096**	456	70	**0.028**	0.033	**0.35**	**10**	**0.047**	0.52	52	0.10	0.00015
	September		**22**	3.6	**0.076**	**0.000096**	456	70	**0.028**	0.033	**0.35**	**10**	**0.047**	0.45	53	0.10	0.00015
	October		**22**	3.8	**0.077**	**0.000096**	459	65	**0.029**	0.033	**0.35**	**10**	**0.047**	0.28	58	0.10	0.00013
	November		**24**	4.3	**0.084**	**0.00010**	456	58	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.15	61	0.11	0.000073
	December		**25**	4.6	**0.087**	**0.00011**	456	57	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.18	62	0.11	0.000046
	January	2049	**24**	4.4	**0.084**	**0.00010**	456	59	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.25	61	0.11	0.000066
	February		**25**	4.7	**0.088**	**0.00011**	455	56	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000038
	March		**24**	4.5	**0.084**	**0.00010**	456	59	**0.031**	**0.035**	**0.38**	**11**	**0.051**	0.28	62	0.11	0.000054
	April		**23**	3.9	**0.079**	**0.000097**	458	59	**0.029**	0.033	**0.36**	**11**	**0.048**	0.24	57	0.11	0.000088
	May		**23**	4.0	**0.079**	**0.000098**	457	62	**0.029**	0.033	**0.36**	**11**	**0.048**	0.36	58	0.11	0.000095
	June		**22**	3.8	**0.078**	**0.000097**	458	66	**0.029**	0.033	**0.36**	**10**	**0.047**	0.42	56	0.10	0.00012
	July		**22**	3.7	**0.077**	**0.000097**	458	71	**0.029**	0.033	**0.35**	**10**	**0.047**	0.62	55	0.10	0.00015
	August		**22**	3.7	**0.076**	**0.000097**	457	71	**0.028**	0.033	**0.35**	**10**	**0.047**	0.52	56	0.10	0.00015
	September		**22**	3.7	**0.077**	**0.000097**	457	70	**0.029**	0.033	**0.35**	**10**	**0.047**	0.54	56	0.10	0.00015
	October		**22**	3.7	**0.077**	**0.000097**	458	70	**0.029**	0.033	**0.35**	**10**	**0.047**	0.44	57	0.10	0.00014
	November		**22**	3.8	**0.078**	**0.000096**	459	61	**0.029**	0.033	**0.36**	**10**	**0.047**	0.25	57	0.10	0.00011
	December		**25**	4.5	**0.087**	**0.00011**	455	56	**0.032**	**0.036**	**0.40**	**12**	**0.053**	0.15	62	0.12	0.000052
	January	2050	**25**	4.5	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000036
	February		**25**	4.5	**0.088**	**0.00011**	455	55	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000036
	March		**25**	4.4	**0.086**	**0.00010**	455	57	**0.032**	**0.035**	**0.39**	**12**	**0.053**	0.17	63	0.11	0.000045
	April		**22**	3.7	**0.077**	**0.000097**	458	67	**0.029**	0.033	**0.35**	**10**	**0.047**	0.47	58	0.10	0.00011
	May		**23**	3.8	**0.080**	**0.000099**	457	62	**0.030**	0.034	**0.37**	**11**	**0.049**	0.28	57	0.11	0.00010
	June		**23**	3.7	**0.078**	**0.000098**	457	66	**0.029**	0.033	**0.36**	**10**	**0.048**	0.42	57	0.10	0.00012
	July		**24**	4.0	**0.082**	**0.00010**	457	61	**0.030**	0.034	**0.37**	**11**	**0.050**	0.28	60	0.11	0.000082
	August		**23**	3.9	**0.081**	**0.000100**	457	61	**0.030**	0.034	**0.37**	**11**	**0.050**	0.30	58	0.11	0.000090
	September		**22**	3.7	**0.077**	**0.000097**	458	66	**0.029**	0.033	**0.35**	**10**	**0.047**	0.44	57	0.10	0.00011
	October		**24**	3.9	**0.082**	**0.00010**	457	61	**0.030**	**0.034**	**0.37**	**11**	**0.050**	0.26	58	0.11	0.000094
	November		**24**	4.2	**0.085**	**0.00010**	456	58	**0.031**	**0.035**	**0.39**	**11**	**0.052**	0.21	61	0.11	0.000062
	December		**25**	4.4	**0.088**	**0.00011**	455	56	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.15	63	0.12	0.000041

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	**25**	4.5	**0.088**	**0.00011**	455	56	**0.033**	**0.036**	**0.40**	**12**	**0.053**	0.14	64	0.12	0.000038
	February		**25**	4.5	**0.088**	**0.00011**	455	56	**0.033**	**0.036**	**0.40**	**12**	**0.054**	0.14	63	0.12	0.000039
	March		**25**	4.3	**0.086**	**0.00011**	456	59	**0.032**	**0.036**	**0.39**	**12**	**0.053**	0.20	63	0.11	0.000057
	April		**22**	3.6	**0.077**	**0.000098**	456	67	**0.029**	0.033	**0.35**	**10**	**0.047**	0.82	54	0.10	0.00013
	May		**22**	3.5	**0.077**	**0.000096**	457	72	**0.028**	0.033	**0.35**	**10**	**0.047**	0.33	56	0.10	0.00016
	June		**22**	3.6	**0.076**	**0.000095**	458	64	**0.028**	0.032	**0.35**	**10**	**0.047**	0.35	56	0.10	0.00012
	July		**22**	3.6	**0.077**	**0.000097**	458	68	**0.028**	0.033	**0.35**	**10**	**0.047**	0.51	56	0.10	0.00013
	August		**22**	3.5	**0.076**	**0.000097**	457	73	**0.028**	0.033	**0.35**	**10**	**0.047**	0.56	54	0.10	0.00016
	September		**22**	3.6	**0.077**	**0.000096**	459	68	**0.029**	0.033	**0.35**	**10**	**0.047**	0.38	57	0.10	0.00014
	October		**22**	3.6	**0.077**	**0.000096**	458	63	**0.029**	0.033	**0.35**	**10**	**0.047**	0.33	56	0.10	0.00012
	November		**23**	3.9	**0.081**	**0.000100**	457	61	**0.030**	0.034	**0.37**	**11**	**0.049**	0.24	59	0.11	0.000095
	December		**25**	4.3	**0.086**	**0.00010**	456	57	**0.032**	**0.035**	**0.39**	**12**	**0.053**	0.18	62	0.11	0.000054
	January	**2052**	**13**	5.1	**0.045**	**0.000056**	457	51	**0.017**	0.019	**0.21**	**6.1**	**0.028**	0.13	58	0.060	0.000038
	February		**11**	5.3	0.040	0.000050	458	50	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.13	56	0.053	0.000037
	March		**11**	5.2	0.038	0.000048	457	50	**0.014**	0.016	**0.18**	**5.2**	**0.023**	0.13	57	0.051	0.000038
	April		**7.9**	3.5	0.027	0.000037	456	56	**0.010**	0.012	**0.13**	**3.7**	**0.017**	0.39	48	0.037	0.000098
	May		**7.8**	3.4	0.027	0.000037	456	56	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.35	48	0.037	0.00011
	June		**7.8**	3.5	0.027	0.000037	456	59	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.30	52	0.037	0.00011
	July		**7.8**	3.3	0.027	0.000038	456	56	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.49	45	0.037	0.00012
	August		**7.8**	3.3	0.027	0.000037	456	57	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.34	46	0.037	0.00011
	September		**7.8**	3.5	0.027	0.000037	455	59	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.27	53	0.037	0.00011
	October		**8.8**	3.9	0.030	0.000040	457	58	**0.011**	0.013	**0.14**	**4.1**	**0.019**	0.25	56	0.041	0.000088
	November		**11**	5.1	0.039	0.000049	458	51	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.15	56	0.052	0.000044
	December		**11**	5.2	0.039	0.000049	457	50	**0.015**	0.016	**0.18**	**5.3**	**0.024**	0.13	56	0.052	0.000038
		MINIMUM	**7.8**	3.3	0.027	0.000037	417	50	**0.010**	0.012	**0.12**	**3.6**	**0.017**	0.13	45	0.037	0.000012
		MAXIMUM	**26**	7.7	**0.091**	**0.00011**	459	93	**0.034**	**0.037**	**0.41**	**12**	**0.055**	0.85	97	0.12	0.00016
		AVERAGE	**23**	4.3	**0.079**	**0.000096**	456	62	**0.029**	0.033	**0.36**	**11**	**0.048**	0.31	60	0.10	0.000080
Decommissioning	**January**	**2053**	**0.96**	6.0	0.0034	0.0000061	437	69	0.0012	0.0014	0.015	**0.45**	0.0020	0.18	80	0.0047	0.000032
	February		0.0017	4.8	0.000048	0.0000022	441	75	0.0000051	0.000045	0.000058	0.010	0.000010	0.19	89	0.00036	0.000025
	March		0.0014	4.6	0.000068	0.0000034	421	75	0.0000067	0.00022	0.00014	0.0098	0.0000094	0.33	85	0.00046	0.000038
	April		0.00095	4.5	0.00013	0.0000059	278	72	0.000017	0.0014	0.00064	0.0079	0.0000063	0.51	59	0.0011	0.00013
	May		0.0011	4.4	0.000095	0.0000053	309	71	0.000016	0.0015	0.00067	0.0078	0.0000071	0.36	65	0.0011	0.00011
	June		0.0012	4.3	0.000082	0.0000045	365	75	0.000013	0.0011	0.00050	0.0088	0.0000083	0.30	76	0.00092	0.000088
	July		0.0012	4.3	0.00010	0.0000051	334	74	0.000014	0.0012	0.00053	0.0085	0.0000077	0.42	70	0.00096	0.00010
	August		0.0011	4.2	0.00012	0.0000061	321	72	0.000015	0.0012	0.00054	0.0083	0.0000074	0.59	67	0.00096	0.00010
	September		0.00092	4.1	0.00014	0.0000062	257	71	0.000019	0.0016	0.00071	0.0076	0.0000059	0.53	55	0.0012	0.00014
	October		0.0011	4.1	0.000099	0.0000056	305	72	0.000017	0.0017	0.00073	0.0077	0.0000070	0.36	65	0.0012	0.00012
	November		0.0012	4.0	0.000075	0.0000046	359	74	0.000014	0.0014	0.00059	0.0085	0.0000081	0.26	75	0.0010	0.000094
	December		0.0015	3.8	0.000047	0.0000023	437	74	0.0000050	0.000063	0.000062	0.010	0.0000099	0.19	88	0.00038	0.000027
	January	**2054**	0.0011	3.7	0.000038	0.0000019	437	74	0.0000040	0.000037	0.000044	0.0094	0.0000094	0.19	88	0.00036	0.000020
	February		0.00098	3.7	0.000036	0.0000018	439	74	0.0000037	0.000035	0.000041	0.0092	0.0000092	0.19	88	0.00035	0.000018
	March		0.00093	3.6	0.000047	0.0000024	413	73	0.0000057	0.00028	0.00014	0.0089	0.0000087	0.23	84	0.00048	0.000034
	April		0.00083	3.5	0.000096	0.0000045	347	72	0.000011	0.00078	0.00037	0.0082	0.0000074	0.48	71	0.00075	0.000078
	May		0.00072	3.5	0.00010	0.0000052	299	71	0.000016	0.0015	0.00064	0.0073	0.0000063	0.41	63	0.0011	0.00011
	June		0.00081	3.4	0.000080	0.0000045	346	73	0.000013	0.0013	0.00056	0.0078	0.0000075	0.33	72	0.00099	0.000092
	July		0.00077	3.3	0.000094	0.0000048	328	72	0.000014	0.0012	0.00054	0.0078	0.0000070	0.41	68	0.00097	0.000098
	August		0.00070	3.2	0.00014	0.0000067	270	71	0.000018	0.0015	0.00068	0.0073	0.0000058	0.67	57	0.0011	0.00013
	September		0.00074	3.2	0.000096	0.0000052	304	72	0.000016	0.0016	0.00068	0.0073	0.0000065	0.38	64	0.0011	0.00012
	October		0.00076	3.1	0.000083	0.0000049	331	72	0.000015	0.0016	0.00067	0.0075	0.0000070	0.33	70	0.0011	0.00011
	November		0.00087	3.1	0.000067	0.0000035	377	74	0.0000096	0.00077	0.00035	0.0083	0.0000079	0.31	77	0.00073	0.000068
	December		0.00098	2.9	0.000036	0.0000018	439	74	0.0000037	0.000038	0.000043	0.0093	0.0000092	0.19	88	0.00035	0.000018
	January	**2055**	0.00094	2.8	0.000032	0.0000015	438	73	0.0000035	0.000053	0.000047	0.0090	0.0000090	0.19	88	0.00036	0.000017
	February		0.00091	2.8	0.000030	0.0000014	438	73	0.0000033	0.000039	0.000041	0.0089	0.0000090	0.19	88	0.00035	0.000016
	March		0.00092	2.7	0.000031	0.0000014	441	74	0.0000033	0.000032	0.000038	0.0090	0.0000091	0.19	89	0.00035	0.000015
	April		0.00086	2.6	0.000053	0.0000038	364	72	0.000013	0.0015	0.00062	0.0073	0.0000077	0.21	76	0.0011	0.000080
	May		0.00078	2.6	0.000054	0.0000041	355	72	0.000014	0.0017	0.00072	0.0071	0.0000074	0.19	75	0.0012	0.000094
	June		0.00082	2.4	0.000058	0.0000044	359	73	0.000015	0.0018	0.00077	0.0072	0.0000075	0.20	76	0.0012	0.000098
	July		0.00076	2.4	0.000062	0.0000050	319	70	0.000018	0.0023	0.00094	0.0064	0.0000068	0.19	69	0.0014	0.00012
	August		0.00076	2.3	0.000064	0.0000053	334	74	0.000019	0.0024	0.0010	0.0066	0.0000071	0.19	72	0.0015	0.00013
	September		0.00078	2.2	0.000059	0.0000047	363	76	0.000016	0.0020	0.00085	0.0073	0.0000075	0.19	77	0.0013	0.00011
	October		0.00081	2.2	0.000057	0.0000044	369	75	0.000015	0.0019	0.00078	0.0074	0.0000076	0.19	78	0.0012	0.000100
	November		0.00085	2.0	0.000040	0.0000026	405	73	0.0000079	0.00075	0.00033	0.0082	0.0000084	0.19	83	0.00069	0.000050
	December		0.00091	1.9	0.000031	0.0000014	439	73	0.0000033	0.000035	0.000040	0.0089	0.0000091	0.19	88	0.00035	0.000015

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.00067	1.9	0.000026	0.0000011	438	73	0.0000028	0.000026	0.000028	0.0086	0.0000088	0.19	88	0.00034	0.000012
	February		0.00058	1.8	0.000024	0.0000010	436	72	0.0000027	0.000024	0.000025	0.0085	0.0000086	0.19	88	0.00033	0.000011
	March		0.00055	1.8	0.000044	0.0000032	380	72	0.000011	0.0013	0.00056	0.0073	0.0000075	0.19	79	0.00097	0.000070
	April		0.00055	1.7	0.000041	0.0000029	389	73	0.000010	0.0012	0.00048	0.0075	0.0000077	0.19	81	0.00087	0.000065
	May		0.00056	1.6	0.000037	0.0000025	404	73	0.0000086	0.00091	0.00039	0.0078	0.0000079	0.19	83	0.00077	0.000051
	June		0.00053	1.5	0.000040	0.0000028	398	74	0.0000096	0.0011	0.00045	0.0077	0.0000078	0.19	82	0.00084	0.000060
	July		0.00055	1.5	0.000051	0.0000040	366	74	0.000015	0.0018	0.00075	0.0069	0.0000071	0.19	77	0.0012	0.000092
	August		0.00054	1.4	0.000052	0.0000041	357	73	0.000015	0.0019	0.00078	0.0068	0.0000071	0.19	76	0.0012	0.000098
	September		0.00051	1.3	0.000058	0.0000049	334	73	0.000018	0.0024	0.00098	0.0064	0.0000067	0.18	72	0.0015	0.00012
	October		0.00051	1.2	0.000053	0.0000043	367	76	0.000016	0.0020	0.00083	0.0070	0.0000072	0.19	78	0.0013	0.00010
	November		0.00056	1.1	0.000034	0.0000021	422	75	0.0000069	0.00066	0.00028	0.0082	0.0000083	0.19	86	0.00063	0.000043
	December		0.00058	1.0	0.000024	0.0000010	438	73	0.0000027	0.000024	0.000025	0.0085	0.0000086	0.19	88	0.00033	0.000011
	January	**2057**	0.00019	0.92	0.000014	0.00000052	439	72	0.0000017	0.000010	0.0000089	0.0078	0.0000080	0.19	88	0.00032	0.0000048
	February		0.000068	0.84	0.000011	0.00000038	436	71	0.0000014	0.0000066	0.0000041	0.0075	0.0000079	0.19	88	0.00031	0.0000027
	March		0.000068	0.77	0.000011	0.00000038	436	71	0.0000014	0.0000066	0.0000041	0.0075	0.0000078	0.19	88	0.00031	0.0000027
	April		0.00012	0.72	0.000037	0.0000031	389	75	0.000012	0.0016	0.00064	0.0066	0.0000071	0.20	81	0.0011	0.000074
	May		0.000065	0.62	0.000029	0.0000023	400	74	0.0000088	0.0011	0.00045	0.0068	0.0000072	0.19	83	0.00083	0.000057
	June		0.000068	0.53	0.000021	0.0000014	426	74	0.0000053	0.00060	0.00024	0.0072	0.0000076	0.20	87	0.00059	0.000029
	July		0.000098	0.47	0.000043	0.0000037	382	77	0.000014	0.0019	0.00079	0.0064	0.0000069	0.20	81	0.0012	0.000093
	August		0.000092	0.38	0.000045	0.0000040	378	77	0.000016	0.0021	0.00086	0.0064	0.0000067	0.19	81	0.0013	0.00010
	September		0.000071	0.29	0.000044	0.0000039	388	78	0.000015	0.0021	0.00085	0.0065	0.0000069	0.20	82	0.0013	0.000099
	October		0.000068	0.21	0.000023	0.0000017	419	74	0.0000064	0.00076	0.00031	0.0073	0.0000076	0.19	86	0.00067	0.000039
	November		0.000069	0.14	0.000016	0.00000084	429	72	0.0000032	0.00027	0.00011	0.0074	0.0000077	0.19	87	0.00044	0.000016
	December		0.000068	0.056	0.000012	0.00000042	438	72	0.0000015	0.000030	0.000014	0.0075	0.0000079	0.19	88	0.00032	0.0000038
		MINIMUM	0.000065	0.056	0.000011	0.00000038	257	69	0.0000014	0.0000066	0.0000041	0.0064	0.0000058	0.18	55	0.00031	0.0000027
		MAXIMUM	**0.96**	6.0	0.0034	0.0000067	441	78	0.0012	0.0024	0.015	**0.45**	0.0020	0.67	89	0.0047	0.00014
		AVERAGE	0.017	2.4	0.00011	0.0000033	382	73	0.000031	0.0010	0.00069	0.015	0.000042	0.26	79	0.00090	0.000067
Reclamation	**January**	**2058**	0.0057	1.3	0.000050	0.00000038	899	145	0.0000084	0.000019	0.000094	0.017	0.000027	0.11	177	0.00051	0.0000085
	February		0.00030	0.040	0.000041	0.00000074	2069	338	0.0000027	0.000025	0.000014	0.038	0.000041	0.041	414	0.0012	0.00000025
	March		0.00012	0.00019	0.000040	0.00000075	2105	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	1.2E-09
	April		0.00012	0.00000061	0.000041	0.00000076	2145	350	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	430	0.0013	3.8E-12
	May		0.00013	2.6E-09	0.000043	0.0000008	2244	366	0.0000027	0.000027	0.000012	0.041	0.000044	0.043	449	0.0013	1.6E-14
	June		0.00013	1.2E-11	0.000044	0.00000082	2293	374	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	459	0.0014	7.6E-17
	July		0.00013	6.8E-14	0.000045	0.00000083	2337	381	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	468	0.0014	4.2E-19
	August		0.00013	3.6E-16	0.000044	0.00000082	2310	377	0.0000028	0.000028	0.000012	0.043	0.000045	0.044	463	0.0014	2.2E-21
	September		0.00013	1.8E-18	0.000043	0.0000008	2244	366	0.0000027	0.000027	0.000012	0.041	0.000044	0.043	449	0.0013	1.1E-23
	October		0.00012	8.5E-21	0.000042	0.00000078	2178	355	0.0000026	0.000026	0.000011	0.040	0.000043	0.041	436	0.0013	5.2E-26
	November		0.00012	2.8E-23	0.000040	0.00000075	2105	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	1.7E-28
	December		0.00012	9.9E-26	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	6.1E-31
	January	**2059**	0.00012	3.0E-28	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	1.8E-33
	February		0.00012	9.7E-31	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	6.0E-36
	March		0.00012	4.6E-33	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	April		0.00012	1.4E-35	0.000040	0.00000075	2107	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	May		0.00013	1.6E-38	0.000043	0.00000079	2227	363	0.0000027	0.000027	0.000012	0.041	0.000043	0.042	446	0.0013	0
	June		0.00013	0	0.000044	0.00000082	2288	373	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	458	0.0013	0
	July		0.00013	0	0.000044	0.00000083	2327	380	0.0000028	0.000028	0.000012	0.043	0.000045	0.044	466	0.0014	0
	August		0.00013	0	0.000045	0.00000083	2330	380	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	467	0.0014	0
	September		0.00013	0	0.000044	0.00000081	2282	372	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	457	0.0013	0
	October		0.00012	0	0.000042	0.00000077	2173	355	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	435	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2110	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	423	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	**2060**	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	April		0.00012	0	0.000041	0.00000076	2125	347	0.0000026	0.000025	0.000011	0.039	0.000042	0.040	426	0.0013	0
	May		0.00013	0	0.000042	0.00000079	2210	361	0.0000027	0.000026	0.000012	0.041	0.000043	0.042	443	0.0013	0
	June		0.00013	0	0.000043	0.00000081	2270	370	0.0000027	0.000027	0.000012	0.042	0.000044	0.043	455	0.0013	0
	July		0.00014	0	0.000045	0.00000085	2370	387	0.0000028	0.000028	0.000013	0.044	0.000046	0.045	475	0.0014	0
	August		0.00013	0	0.000045	0.00000083	2336	381	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	468	0.0014	0
	September		0.00013	0	0.000043	0.0000008	2231	364	0.0000027	0.000027	0.000012	0.041	0.000044	0.042	447	0.0013	0
	October		0.00012	0	0.000041	0.00000077	2171	354	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	435	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2109	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2106	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	April		0.00012	0	0.000041	0.00000077	2172	354	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	435	0.0013	0
	May		0.00013	0	0.000043	0.00000081	2270	370	0.0000027	0.000027	0.000012	0.042	0.000044	0.043	455	0.0013	0
	June		0.00013	0	0.000044	0.00000082	2303	376	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	461	0.0014	0
	July		0.00013	0	0.000045	0.00000083	2330	380	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	467	0.0014	0
	August		0.00013	0	0.000044	0.00000082	2301	375	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	461	0.0014	0
	September		0.00013	0	0.000043	0.0000008	2237	365	0.0000027	0.000027	0.000012	0.041	0.000044	0.043	448	0.0013	0
	October		0.00013	0	0.000042	0.00000078	2193	358	0.0000026	0.000026	0.000012	0.040	0.000043	0.042	439	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2114	345	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	423	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	2062	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	April		0.00012	0	0.000041	0.00000076	2139	349	0.0000026	0.000026	0.000011	0.039	0.000042	0.041	428	0.0013	0
	May		0.00013	0	0.000044	0.00000081	2282	372	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	457	0.0013	0
	June		0.00013	0	0.000044	0.00000082	2294	374	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	459	0.0014	0
	July		0.00013	0	0.000045	0.00000084	2346	383	0.0000028	0.000028	0.000012	0.043	0.000046	0.045	470	0.0014	0
	August		0.00013	0	0.000044	0.00000082	2295	374	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	460	0.0014	0
	September		0.00013	0	0.000043	0.00000079	2227	363	0.0000027	0.000027	0.000012	0.041	0.000043	0.042	446	0.0013	0
	October		0.00012	0	0.000041	0.00000077	2156	352	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	432	0.0013	0
	November		0.00012	0	0.000041	0.00000076	2123	346	0.0000026	0.000025	0.000011	0.039	0.000041	0.040	425	0.0013	0
	December		0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	2063	0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2106	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2105	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	April		0.00012	0	0.000041	0.00000077	2153	351	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	431	0.0013	0
	May		0.00013	0	0.000043	0.0000008	2233	364	0.0000027	0.000027	0.000012	0.041	0.000044	0.042	447	0.0013	0
	June		0.00013	0	0.000044	0.00000082	2287	373	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	458	0.0013	0
	July		0.00013	0	0.000045	0.00000084	2344	382	0.0000028	0.000028	0.000012	0.043	0.000046	0.045	469	0.0014	0
	August		0.00013	0	0.000045	0.00000083	2340	382	0.0000028	0.000028	0.000012	0.043	0.000046	0.045	469	0.0014	0
	September		0.00013	0	0.000044	0.00000082	2287	373	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	458	0.0013	0
	October		0.00012	0	0.000042	0.00000078	2174	355	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	435	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2107	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	2064	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2104	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	April		0.00012	0	0.000041	0.00000076	2137	349	0.0000026	0.000025	0.000011	0.039	0.000042	0.041	428	0.0013	0
	May		0.00013	0	0.000044	0.00000081	2277	372	0.0000027	0.000027	0.000012	0.042	0.000044	0.043	456	0.0013	0
	June		0.00013	0	0.000044	0.00000082	2297	375	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	460	0.0014	0
	July		0.00013	0	0.000044	0.00000083	2322	379	0.0000028	0.000028	0.000012	0.043	0.000045	0.044	465	0.0014	0
	August		0.00013	0	0.000045	0.00000083	2330	380	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	467	0.0014	0
	September		0.00013	0	0.000042	0.00000079	2212	361	0.0000027	0.000026	0.000012	0.041	0.000043	0.042	443	0.0013	0
	October		0.00012	0	0.000041	0.00000076	2140	349	0.0000026	0.000026	0.000011	0.039	0.000042	0.041	429	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2113	345	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	423	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	2065	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2116	345	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	424	0.0012	0
	April		0.00012	0	0.000041	0.00000077	2164	353	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	433	0.0013	0
	May		0.00013	0	0.000043	0.00000079	2225	363	0.0000027	0.000027	0.000012	0.041	0.000043	0.042	446	0.0013	0
	June		0.00013	0	0.000044	0.00000081	2281	372	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	457	0.0013	0
	July		0.00013	0	0.000044	0.00000083	2325	379	0.0000028	0.000028	0.000012	0.043	0.000045	0.044	466	0.0014	0
	August		0.00013	0	0.000043	0.00000081	2270	370	0.0000027	0.000027	0.000012	0.042	0.000044	0.043	455	0.0013	0
	September		0.00013	0	0.000042	0.00000079	2212	361	0.0000027	0.000026	0.000012	0.041	0.000043	0.042	443	0.0013	0
	October		0.00012	0	0.000041	0.00000077	2154	351	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	431	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2104	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	2066	0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	**April**	**2066**	0.00012	0	0.000040	0.00000075	2108	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	May		0.00013	0	0.000042	0.00000079	2209	360	0.0000027	0.000026	0.000012	0.041	0.000043	0.042	442	0.0013	0
	June		0.00013	0	0.000043	0.0000008	2247	367	0.0000027	0.000027	0.000012	0.041	0.000044	0.043	450	0.0013	0
	July		0.00013	0	0.000043	0.00000081	2274	371	0.0000027	0.000027	0.000012	0.042	0.000044	0.043	455	0.0013	0
	August		0.00013	0	0.000044	0.00000082	2286	373	0.0000027	0.000027	0.000012	0.042	0.000045	0.043	458	0.0013	0
	September		0.00013	0	0.000042	0.00000079	2203	360	0.0000026	0.000026	0.000012	0.041	0.000043	0.042	441	0.0013	0
	October		0.00012	0	0.000041	0.00000077	2148	350	0.0000026	0.000026	0.000011	0.040	0.000042	0.041	430	0.0013	0
	November		0.00012	0	0.000040	0.00000075	2105	344	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	422	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2103	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	January	**2067**	0.00012	0	0.000040	0.00000075	2104	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	February		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	March		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
	April		0.00012	0	0.000042	0.00000078	2179	356	0.0000026	0.000026	0.000012	0.040	0.000043	0.041	436	0.0013	0
	May		0.00013	0	0.000045	0.00000083	2334	381	0.0000028	0.000028	0.000012	0.043	0.000046	0.044	467	0.0014	0
	June		0.00013	0	0.000044	0.00000082	2289	374	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	458	0.0013	0
	July		0.00013	0	0.000045	0.00000083	2341	382	0.0000028	0.000028	0.000012	0.043	0.000046	0.045	469	0.0014	0
	August		0.00013	0	0.000044	0.00000082	2295	374	0.0000028	0.000027	0.000012	0.042	0.000045	0.044	460	0.0014	0
	September		0.00013	0	0.000042	0.00000079	2221	362	0.0000027	0.000026	0.000012	0.041	0.000043	0.042	445	0.0013	0
	October		0.00012	0	0.000042	0.00000078	2178	355	0.0000026	0.000026	0.000011	0.040	0.000043	0.041	436	0.0013	0
	November		0.00012	0	0.000041	0.00000076	2122	346	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	425	0.0012	0
	December		0.00012	0	0.000040	0.00000075	2102	343	0.0000025	0.000025	0.000011	0.039	0.000041	0.040	421	0.0012	0
		MINIMUM	0.00012	0	0.000040	0.00000038	899	145	0.0000025	0.000019	0.000011	0.017	0.000027	0.040	177	0.00051	0
		MAXIMUM	0.0057	1.3	0.000050	0.00000085	2370	387	0.0000084	0.000028	0.000094	0.044	0.000046	0.11	475	0.0014	0.0000085
		AVERAGE	0.00017	0.011	0.000042	0.00000078	2177	355	0.0000027	0.000026	0.000012	0.040	0.000043	0.042	436	0.0013	7.3E-08

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	January		0.000053	0.000073	0.090	0.0075	0.0043	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000072	0.089	0.0075	0.0066	0.0043	0.000047	1.4	0.030	1.4	0.0048	0.000050	0.00015	0.00079
	April		0.000046	0.000063	0.078	0.0065	0.0066	0.0038	0.000041	1.2	0.026	1.3	0.0042	0.000044	0.00013	0.00069
	May		0.000040	0.000054	0.067	0.0056	0.0063	0.0033	0.000035	1.0	0.022	1.1	0.0036	0.000038	0.00011	0.00060
	June		0.000039	0.000053	0.066	0.0055	0.0067	0.0032	0.000035	1.0	0.022	1.1	0.0035	0.000037	0.00011	0.00059
	July	**2025**	0.000035	0.000048	0.060	0.0050	0.0064	0.0029	0.000031	0.92	0.020	0.97	0.0032	0.000034	0.000100	0.00053
	August		0.000033	0.000045	0.056	0.0047	0.0063	0.0027	0.000029	0.86	0.019	0.90	0.0030	0.000031	0.000093	0.00049
	September		0.000029	0.000040	0.049	0.0041	0.0058	0.0024	0.000026	0.75	0.016	0.79	0.0026	0.000028	0.000082	0.00044
	October		0.000026	0.000036	0.045	0.0037	0.0055	0.0022	0.000023	0.69	0.015	0.72	0.0024	0.000025	0.000075	0.00040
	November		0.000025	0.000034	0.042	0.0035	0.0053	0.0020	0.000022	0.64	0.014	0.68	0.0022	0.000024	0.000070	0.00037
	December		0.000024	0.000033	0.041	0.0035	0.0053	0.0020	0.000022	0.64	0.014	0.67	0.0022	0.000023	0.000069	0.00037
	January		0.000024	0.000033	0.041	0.0034	0.0054	0.0020	0.000022	0.63	0.014	0.67	0.0022	0.000023	0.000069	0.00037
	February		0.000024	0.000033	0.041	0.0034	0.0055	0.0020	0.000022	0.63	0.014	0.67	0.0022	0.000023	0.000069	0.00037
	March		0.000016	0.000022	2.4	0.0048	0.0050	0.0013	0.000015	0.88	0.019	0.93	0.0031	0.000016	0.000046	0.00025
	April		0.059	0.0000039	4.5	0.0095	0.43	0.0023	0.0000035	4.7	0.029	3.7	0.0062	0.00024	0.0000058	0.000034
	May		0.051	0.0000024	4.9	0.0093	0.37	0.0019	0.0000022	4.2	0.029	3.4	0.0061	0.00021	0.0000024	0.000016
	June		0.18	0.0000050	4.4	**0.016**	1.2	0.0064	0.0000056	12	0.034	8.5	0.010	0.00071	0.0000042	0.000031
	July	**2026**	0.22	0.0000056	4.2	**0.018**	1.6	0.0080	0.0000068	14	0.034	10	0.011	0.00089	0.0000048	0.000035
	August		0.31	0.0000071	3.1	**0.021**	2.2	0.011	0.0000092	19	0.034	14	0.013	0.0013	0.0000061	0.000044
	September		0.23	0.0000073	3.3	**0.017**	1.6	0.0081	0.0000069	14	0.030	11	0.011	0.00092	0.0000049	0.000039
	October		0.12	0.0000052	4.5	**0.012**	0.87	0.0044	0.0000041	8.4	0.028	6.4	0.0081	0.00050	0.0000034	0.000027
	November		0.042	0.0000023	6.3	0.0090	0.29	0.0015	0.0000019	3.7	0.029	3.1	0.0059	0.00017	0.0000021	0.000015
Construction	**December**		0.015	0.0000013	6.9	0.0081	0.11	0.00057	0.0000012	2.2	0.030	2.1	0.0052	0.000060	0.0000017	0.000011
	January		0.052	0.0000022	8.3	**0.010**	0.36	0.0019	0.0000023	4.4	0.032	3.6	0.0065	0.00021	0.0000024	0.000016
	February		0.11	0.0000036	8.6	**0.013**	0.75	0.0039	0.0000038	7.8	0.034	6.0	0.0082	0.00044	0.0000033	0.000023
	March		0.11	0.0000032	7.8	**0.013**	0.77	0.0040	0.0000039	7.9	0.033	6.0	0.0081	0.00045	0.0000033	0.000022
	April		0.19	0.0000052	5.4	**0.016**	1.3	0.0069	0.0000060	12	0.032	9.2	0.010	0.00077	0.0000044	0.000032
	May		0.17	0.0000060	4.8	**0.014**	1.2	0.0060	0.0000053	11	0.029	8.2	0.0093	0.00067	0.0000041	0.000032
	June		0.17	0.0000049	5.8	**0.015**	1.2	0.0060	0.0000053	11	0.031	8.1	0.0094	0.00067	0.0000040	0.000029
	July	**2027**	0.28	0.0000061	4.8	**0.020**	2.0	0.010	0.0000084	18	0.035	13	0.013	0.0011	0.0000057	0.000040
	August		0.23	0.0000080	4.6	**0.018**	1.6	0.0083	0.0000071	15	0.034	11	0.012	0.00093	0.0000052	0.000042
	September		0.099	0.0000048	7.0	**0.011**	0.70	0.0036	0.0000035	7.0	0.028	5.5	0.0075	0.00040	0.0000031	0.000025
	October		0.15	0.0000042	5.6	**0.014**	1.0	0.0052	0.0000047	9.8	0.032	7.3	0.0088	0.00059	0.0000037	0.000027
	November		0.13	0.0000044	6.0	**0.013**	0.92	0.0047	0.0000044	9.0	0.031	6.8	0.0085	0.00053	0.0000036	0.000026
	December		0.080	0.0000032	9.7	**0.012**	0.56	0.0029	0.0000031	6.1	0.034	4.9	0.0076	0.00032	0.0000029	0.000021
	January		0.015	0.0000012	15	0.0091	0.12	0.00058	0.0000012	2.5	0.034	2.3	0.0058	0.000061	0.0000016	0.000010
	February		0.00053	0.00000071	15	0.0092	0.017	0.000063	0.00000074	1.8	0.036	1.8	0.0059	0.0000028	0.0000014	0.0000080
	March		0.000018	0.00000072	15	0.0095	0.0063	0.000047	0.00000075	1.8	0.038	1.8	0.0061	0.00000079	0.0000014	0.0000083
	April		0.072	0.00011	11	**0.021**	0.53	0.0032	0.000014	6.1	0.048	15	0.022	0.00070	0.0000067	0.00012
	May		0.046	0.00065	5.7	**0.047**	0.43	0.0040	0.000069	4.9	0.087	59	0.068	0.0018	0.000019	0.00058
	June		0.052	0.00065	7.2	**0.046**	0.45	0.0040	0.000068	5.1	0.088	60	0.065	0.0017	0.000018	0.00057
	July	**2028**	0.081	0.00084	6.4	**0.060**	0.67	0.0058	0.000089	7.0	0.11	78	0.086	0.0023	0.000024	0.00074
	August		0.060	0.0011	6.5	**0.065**	0.54	0.0054	0.00011	5.9	0.12	96	0.096	0.0025	0.000026	0.00092
	September		0.066	0.0010	6.7	**0.065**	0.58	0.0055	0.00011	6.3	0.12	96	0.095	0.0024	0.000026	0.00088
	October		0.027	0.00062	9.6	**0.042**	0.27	0.0027	0.000064	3.7	0.090	62	0.059	0.0013	0.000014	0.00051
	November		0.019	0.00037	11	**0.030**	0.20	0.0017	0.000038	3.1	0.068	39	0.039	0.00080	0.0000093	0.00031
	December		0.00075	0.000020	13	**0.011**	0.025	0.00012	0.0000026	1.8	0.039	6.2	0.0096	0.000038	0.0000017	0.000023
		MINIMUM	0.000016	0.00000071	0.041	0.0034	0.0043	0.000047	0.00000074	0.63	0.014	0.67	0.0022	0.00000079	0.0000014	0.0000080
		MAXIMUM	0.31	0.0011	15	**0.065**	2.2	0.011	0.00011	19	0.12	96	0.096	0.0025	0.00015	0.00092
		AVERAGE	0.072	0.00013	5.1	**0.016**	0.52	0.0038	0.000024	5.5	0.039	14	0.016	0.00055	0.000036	0.00027
	January		0.032	0.11	9.1	**0.018**	0.14	0.77	0.0011	809	0.30	**2650**	0.82	0.026	**0.18**	0.012
	February		0.035	0.12	8.4	**0.022**	0.20	0.86	0.0011	885	0.45	**2900**	1.3	**0.031**	**0.20**	0.013
	March		0.039	0.12	8.0	**0.028**	0.26	0.82	0.0011	884	0.45	**2898**	1.3	**0.030**	**0.19**	0.013
	April		0.081	0.10	6.6	**0.059**	0.72	0.73	0.0010	884	0.44	**2897**	1.2	0.028	**0.17**	0.011
	May		0.046	0.10	6.3	**0.052**	0.40	0.73	0.0010	886	0.42	**2902**	1.1	0.028	**0.17**	0.011
	June		0.058	0.10	6.5	**0.053**	0.50	0.74	0.0010	886	0.43	**2902**	1.1	0.028	**0.17**	0.012
Operations	**July**	**2029**	0.060	0.10	6.6	**0.050**	0.51	0.75	0.0010	885	0.43	**2901**	1.1	0.028	**0.17**	0.012
	August		0.058	0.10	6.3	**0.055**	0.52	0.73	0.0010	886	0.43	**2903**	1.1	0.028	**0.17**	0.011
	September		0.066	0.10	6.3	**0.058**	0.61	0.72	0.0010	885	0.43	**2900**	1.1	0.028	**0.17**	0.011
	October		0.045	0.11	6.8	**0.042**	0.36	0.77	0.0010	886	0.43	**2902**	1.1	0.029	**0.18**	0.012
	November		0.040	0.12	7.5	**0.032**	0.31	0.82	0.0011	884	0.44	**2898**	1.2	0.030	**0.19**	0.013
	December		0.034	0.12	8.3	**0.023**	0.22	0.85	0.0011	885	0.46	**2899**	1.3	**0.031**	**0.20**	0.013

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.038	0.13	7.3	**0.020**	0.18	0.88	0.0012	886	0.39	**2902**	1.1	0.030	**0.22**	0.014
	February		0.043	0.13	6.7	**0.022**	0.20	0.85	0.0012	886	0.37	**2903**	1.0	0.029	**0.21**	0.014
	March		0.043	0.13	6.5	**0.026**	0.23	0.85	0.0012	886	0.36	**2903**	0.99	0.029	**0.21**	0.014
	April		0.070	0.11	5.4	**0.050**	0.52	0.75	0.0011	891	0.35	**2920**	0.89	0.027	**0.18**	0.012
	May		0.068	0.12	5.7	**0.047**	0.48	0.79	0.0012	888	0.36	**2910**	0.93	0.028	**0.19**	0.013
	June		0.078	0.11	5.4	**0.057**	0.61	0.76	0.0011	891	0.36	**2919**	0.90	0.027	**0.18**	0.012
	July		0.083	0.11	5.2	**0.062**	0.67	0.75	0.0011	889	0.36	**2914**	0.87	0.027	**0.18**	0.012
	August		0.071	0.11	5.4	**0.060**	0.55	0.76	0.0011	889	0.38	**2912**	0.91	0.027	**0.18**	0.013
	September		0.065	0.11	5.3	**0.057**	0.51	0.75	0.0011	890	0.37	**2918**	0.90	0.027	**0.18**	0.012
	October		0.062	0.11	5.4	**0.047**	0.43	0.77	0.0011	890	0.36	**2917**	0.90	0.027	**0.19**	0.013
	November		0.037	0.12	6.1	**0.032**	0.20	0.83	0.0012	887	0.35	**2905**	0.93	0.028	**0.21**	0.014
	December		0.042	0.13	6.6	**0.024**	0.21	0.86	0.0012	886	0.36	**2904**	1.00	0.029	**0.21**	0.014
	January	2031	0.043	0.13	5.8	**0.022**	0.19	0.88	0.0013	884	0.33	**2898**	0.91	0.028	**0.22**	0.014
	February		0.040	0.14	5.8	**0.018**	0.14	**0.89**	0.0013	884	0.32	**2897**	0.89	0.028	**0.23**	0.015
	March		0.046	0.13	5.6	**0.023**	0.20	0.88	0.0013	884	0.33	**2898**	0.88	0.028	**0.22**	0.014
	April		0.076	0.12	4.9	**0.044**	0.51	0.80	0.0012	889	0.33	**2914**	0.83	0.027	**0.20**	0.013
	May		0.053	0.12	4.7	**0.041**	0.33	0.79	0.0012	890	0.31	**2916**	0.77	0.026	**0.20**	0.013
	June		0.062	0.12	4.9	**0.040**	0.37	0.81	0.0012	889	0.33	**2912**	0.83	0.027	**0.20**	0.013
	July		0.060	0.12	4.8	**0.042**	0.39	0.80	0.0012	888	0.32	**2910**	0.80	0.026	**0.20**	0.013
	August		0.063	0.12	4.8	**0.045**	0.42	0.81	0.0012	888	0.33	**2911**	0.82	0.027	**0.20**	0.014
	September		0.065	0.12	4.7	**0.045**	0.43	0.79	0.0012	888	0.32	**2911**	0.79	0.026	**0.20**	0.013
	October		0.056	0.13	5.1	**0.037**	0.33	0.84	0.0012	888	0.33	**2909**	0.84	0.027	**0.21**	0.014
	November		0.041	0.14	5.6	**0.023**	0.18	**0.89**	0.0013	884	0.32	**2897**	0.86	0.028	**0.22**	0.015
	December		0.041	0.14	5.7	**0.019**	0.15	**0.89**	0.0013	884	0.32	**2898**	0.88	0.028	**0.22**	0.015
	January	2032	0.043	0.14	6.0	**0.018**	0.14	**0.91**	0.0013	882	0.31	**2889**	0.84	0.028	**0.23**	0.015
	February		0.042	0.14	6.1	**0.017**	0.13	**0.91**	0.0014	883	0.30	**2892**	0.82	0.028	**0.24**	0.015
	March		0.058	0.13	5.4	**0.032**	0.31	0.84	0.0013	887	0.30	**2906**	0.77	0.027	**0.22**	0.014
	April		0.076	0.12	4.9	**0.047**	0.51	0.79	0.0012	889	0.31	**2912**	0.75	0.026	**0.20**	0.013
	May		0.053	0.12	4.8	**0.037**	0.29	0.79	0.0012	888	0.30	**2909**	0.73	0.026	**0.20**	0.013
	June		0.058	0.12	5.0	**0.034**	0.32	0.81	0.0012	888	0.30	**2909**	0.75	0.026	**0.21**	0.014
	July		0.082	0.12	4.8	**0.050**	0.56	0.79	0.0012	889	0.31	**2914**	0.75	0.026	**0.20**	0.013
	August		0.060	0.12	4.8	**0.043**	0.37	0.79	0.0012	890	0.30	**2915**	0.74	0.026	**0.20**	0.013
	September		0.051	0.13	5.0	**0.035**	0.27	0.82	0.0012	887	0.31	**2906**	0.75	0.026	**0.21**	0.014
	October		0.051	0.13	5.3	**0.029**	0.25	0.84	0.0012	886	0.30	**2904**	0.78	0.027	**0.21**	0.014
	November		0.045	0.14	5.8	**0.022**	0.18	**0.89**	0.0013	884	0.31	**2897**	0.81	0.028	**0.23**	0.015
	December		0.041	0.14	6.2	**0.018**	0.14	**0.90**	0.0013	883	0.31	**2894**	0.85	0.028	**0.23**	0.015
	January	2033	0.041	0.14	5.7	**0.017**	0.14	**0.89**	0.0013	883	0.32	**2892**	0.85	0.028	**0.23**	0.015
	February		0.041	0.14	5.6	**0.017**	0.13	**0.89**	0.0013	883	0.32	**2894**	0.86	0.028	**0.23**	0.015
	March		0.043	0.14	5.5	**0.019**	0.15	**0.89**	0.0013	884	0.32	**2898**	0.86	0.028	**0.23**	0.015
	April		0.097	0.12	4.6	**0.047**	0.67	0.81	0.0012	885	0.31	**2899**	0.77	0.026	**0.21**	0.014
	May		0.052	0.12	4.4	**0.047**	0.31	0.79	0.0012	888	0.32	**2910**	0.77	0.026	**0.20**	0.014
	June		0.060	0.12	4.4	**0.041**	0.35	0.79	0.0012	887	0.31	**2905**	0.75	0.026	**0.20**	0.013
	July		0.058	0.13	4.7	**0.038**	0.33	0.83	0.0012	887	0.32	**2905**	0.80	0.027	**0.21**	0.014
	August		0.066	0.12	4.5	**0.043**	0.41	0.80	0.0012	888	0.32	**2909**	0.77	0.026	**0.20**	0.014
	September		0.060	0.13	4.6	**0.039**	0.36	0.82	0.0012	887	0.31	**2906**	0.77	0.026	**0.21**	0.014
	October		0.056	0.13	4.8	**0.033**	0.30	0.82	0.0012	887	0.31	**2908**	0.77	0.027	**0.21**	0.014
	November		0.052	0.13	5.0	**0.031**	0.26	0.86	0.0013	885	0.31	**2900**	0.80	0.027	**0.22**	0.014
	December		0.042	0.14	5.5	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	January	2034	0.042	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	February		0.042	0.14	5.5	**0.018**	0.14	**0.88**	0.0013	884	0.32	**2895**	0.85	0.028	**0.23**	0.015
	March		0.049	0.13	5.3	**0.026**	0.23	0.87	0.0013	884	0.32	**2898**	0.84	0.028	**0.22**	0.015
	April		0.078	0.12	4.7	**0.042**	0.49	0.81	0.0012	888	0.31	**2909**	0.78	0.026	**0.20**	0.014
	May		0.045	0.12	4.6	**0.035**	0.23	0.81	0.0012	888	0.30	**2910**	0.75	0.026	**0.21**	0.014
	June		0.11	0.12	4.4	**0.052**	0.77	0.78	0.0012	886	0.31	**2903**	0.73	0.026	**0.20**	0.013
	July		0.092	0.12	4.2	**0.058**	0.65	0.77	0.0012	885	0.30	**2900**	0.70	0.025	**0.20**	0.013
	August		0.069	0.12	4.2	**0.057**	0.44	0.78	0.0012	885	0.31	**2901**	0.71	0.026	**0.20**	0.013
	September		0.070	0.12	4.4	**0.055**	0.48	0.79	0.0012	886	0.33	**2904**	0.77	0.026	**0.20**	0.014
	October		0.044	0.12	4.6	**0.038**	0.21	0.80	0.0012	889	0.32	**2913**	0.76	0.026	**0.20**	0.014
	November		0.046	0.13	5.1	**0.029**	0.19	0.86	0.0013	885	0.32	**2900**	0.81	0.027	**0.22**	0.014
	December		0.046	0.14	5.4	**0.023**	0.19	0.88	0.0013	884	0.31	**2897**	0.82	0.028	**0.22**	0.015
	January	2035	0.042	0.14	5.6	**0.018**	0.14	**0.90**	0.0013	884	0.32	**2895**	0.85	0.028	**0.23**	0.015
	February		0.045	0.14	5.4	**0.021**	0.17	**0.88**	0.0013	884	0.31	**2896**	0.84	0.028	**0.23**	0.015
	March		0.042	0.14	5.5	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.067	0.13	4.9	**0.034**	0.37	0.83	0.0012	888	0.32	**2909**	0.81	0.027	**0.21**	0.014
	May		0.075	0.12	4.4	**0.045**	0.49	0.79	0.0012	888	0.31	**2911**	0.75	0.026	**0.20**	0.013
	June		0.062	0.12	4.5	**0.046**	0.39	0.80	0.0012	888	0.32	**2909**	0.78	0.026	**0.20**	0.014
	July		0.066	0.12	4.4	**0.045**	0.42	0.79	0.0012	890	0.31	**2915**	0.76	0.026	**0.20**	0.013
	August		0.064	0.12	4.5	**0.045**	0.39	0.80	0.0012	887	0.31	**2908**	0.76	0.026	**0.20**	0.014
	September		0.060	0.12	4.5	**0.041**	0.35	0.80	0.0012	888	0.31	**2909**	0.76	0.026	**0.20**	0.014
	October		0.051	0.13	4.7	**0.031**	0.27	0.82	0.0012	887	0.31	**2908**	0.77	0.026	**0.21**	0.014
	November		0.043	0.14	5.3	**0.021**	0.17	**0.89**	0.0013	884	0.31	**2895**	0.83	0.028	**0.23**	0.015
	December		0.042	0.14	5.5	**0.017**	0.14	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January	2036	0.042	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	February		0.042	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	March		0.047	0.13	5.4	**0.023**	0.19	0.87	0.0013	885	0.32	**2899**	0.84	0.028	**0.22**	0.015
	April		0.092	0.12	4.5	**0.049**	0.62	0.79	0.0012	888	0.32	**2909**	0.77	0.026	**0.20**	0.014
	May		0.052	0.12	4.5	**0.043**	0.31	0.79	0.0012	888	0.31	**2909**	0.76	0.026	**0.20**	0.013
	June		0.063	0.12	4.6	**0.040**	0.36	0.80	0.0012	888	0.31	**2911**	0.76	0.026	**0.20**	0.014
	July		0.065	0.12	4.5	**0.044**	0.40	0.80	0.0012	887	0.31	**2907**	0.75	0.026	**0.20**	0.014
	August		0.053	0.13	4.9	**0.030**	0.28	0.83	0.0012	887	0.31	**2906**	0.79	0.027	**0.21**	0.014
	September		0.056	0.12	4.6	**0.036**	0.31	0.81	0.0012	887	0.31	**2908**	0.77	0.026	**0.20**	0.014
	October		0.055	0.13	4.9	**0.033**	0.29	0.84	0.0013	887	0.31	**2905**	0.78	0.027	**0.21**	0.014
	November		0.043	0.14	5.5	**0.021**	0.16	**0.89**	0.0013	883	0.31	**2894**	0.83	0.028	**0.23**	0.015
	December		0.042	0.14	5.6	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January	2037	0.042	0.14	5.4	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.050	0.13	4.9	**0.027**	0.23	0.86	0.0013	885	0.31	**2901**	0.81	0.027	**0.22**	0.014
	March		0.048	0.13	5.1	**0.023**	0.20	0.87	0.0013	886	0.32	**2902**	0.83	0.028	**0.22**	0.014
	April		0.080	0.12	4.2	**0.048**	0.55	0.79	0.0012	886	0.32	**2903**	0.77	0.026	**0.20**	0.013
	May		0.048	0.12	4.4	**0.035**	0.24	0.80	0.0012	887	0.31	**2906**	0.77	0.026	**0.20**	0.013
	June		0.086	0.12	4.2	**0.050**	0.58	0.79	0.0012	888	0.32	**2910**	0.77	0.026	**0.20**	0.013
	July		0.081	0.12	4.1	**0.053**	0.56	0.79	0.0012	888	0.32	**2911**	0.74	0.026	**0.20**	0.013
	August		0.057	0.12	4.2	**0.045**	0.35	0.79	0.0012	889	0.32	**2915**	0.77	0.026	**0.20**	0.013
	September		0.063	0.12	4.2	**0.044**	0.39	0.79	0.0012	890	0.31	**2916**	0.75	0.026	**0.20**	0.013
	October		0.047	0.13	4.7	**0.031**	0.22	0.85	0.0013	886	0.32	**2902**	0.80	0.027	**0.22**	0.014
	November		0.043	0.14	5.2	**0.020**	0.16	**0.88**	0.0013	884	0.32	**2895**	0.84	0.028	**0.22**	0.015
	December		0.042	0.14	5.3	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January	2038	0.042	0.14	5.3	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.042	0.14	5.3	**0.018**	0.14	**0.89**	0.0013	883	0.32	**2893**	0.86	0.028	**0.23**	0.015
	March		0.063	0.12	4.4	**0.038**	0.36	0.81	0.0012	889	0.31	**2912**	0.77	0.026	**0.20**	0.014
	April		0.077	0.12	4.3	**0.048**	0.51	0.81	0.0012	888	0.32	**2909**	0.76	0.026	**0.21**	0.014
	May		0.054	0.12	4.3	**0.038**	0.29	0.80	0.0012	889	0.31	**2912**	0.75	0.026	**0.20**	0.014
	June		0.062	0.13	4.6	**0.034**	0.34	0.84	0.0013	886	0.31	**2904**	0.78	0.027	**0.21**	0.014
	July		0.063	0.12	4.3	**0.042**	0.38	0.81	0.0012	887	0.32	**2907**	0.77	0.026	**0.20**	0.014
	August		0.058	0.13	4.5	**0.037**	0.33	0.82	0.0012	887	0.31	**2907**	0.77	0.027	**0.21**	0.014
	September		0.075	0.12	4.4	**0.042**	0.46	0.81	0.0012	888	0.32	**2910**	0.79	0.027	**0.20**	0.014
	October		0.055	0.12	4.2	**0.041**	0.33	0.80	0.0012	888	0.31	**2909**	0.75	0.026	**0.20**	0.014
	November		0.046	0.14	5.0	**0.027**	0.20	0.88	0.0013	884	0.32	**2897**	0.82	0.028	**0.22**	0.015
	December		0.042	0.14	5.3	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	January	2039	0.043	0.14	5.3	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.055	0.13	4.7	**0.032**	0.28	0.84	0.0012	887	0.32	**2906**	0.81	0.027	**0.21**	0.014
	March		0.051	0.13	5.0	**0.027**	0.23	0.87	0.0013	884	0.32	**2897**	0.82	0.028	**0.22**	0.015
	April		0.054	0.13	4.8	**0.029**	0.26	0.84	0.0012	886	0.32	**2905**	0.81	0.027	**0.21**	0.014
	May		0.054	0.13	4.9	**0.030**	0.27	0.86	0.0013	886	0.32	**2904**	0.83	0.028	**0.22**	0.014
	June		0.060	0.13	4.8	**0.028**	0.30	0.85	0.0013	886	0.32	**2902**	0.81	0.027	**0.22**	0.014
	July		0.069	0.12	4.2	**0.046**	0.44	0.79	0.0012	889	0.32	**2913**	0.76	0.026	**0.20**	0.013
	August		0.089	0.12	4.1	**0.056**	0.63	0.78	0.0012	886	0.32	**2904**	0.73	0.026	**0.20**	0.013
	September		0.056	0.12	4.2	**0.041**	0.32	0.80	0.0012	889	0.32	**2913**	0.76	0.026	**0.20**	0.013
	October		0.059	0.12	4.4	**0.040**	0.33	0.81	0.0012	888	0.32	**2910**	0.76	0.026	**0.21**	0.014
	November		0.049	0.13	4.9	**0.028**	0.23	0.87	0.0013	885	0.32	**2901**	0.81	0.027	**0.22**	0.015
	December		0.043	0.14	5.3	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January	2040	0.044	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	February		0.044	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	March		0.077	0.12	4.7	**0.042**	0.48	0.80	0.0012	889	0.32	**2912**	0.78	0.026	**0.20**	0.014
	April		0.062	0.12	4.5	**0.040**	0.35	0.79	0.0012	889	0.31	**2913**	0.75	0.026	**0.20**	0.013
	May		0.071	0.12	4.6	**0.042**	0.42	0.80	0.0012	889	0.31	**2912**	0.75	0.026	**0.20**	0.014
	June		0.077	0.12	4.4	**0.047**	0.50	0.79	0.0012	888	0.31	**2910**	0.75	0.026	**0.20**	0.013

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	July		0.078	0.12	4.4	**0.054**	0.53	0.78	0.0012	887	0.32	**2907**	0.74	0.026	**0.20**	0.013
	August		0.049	0.12	4.6	**0.036**	0.23	0.80	0.0012	888	0.32	**2909**	0.76	0.026	**0.20**	0.014
	September	**2040**	0.057	0.13	4.9	**0.034**	0.29	0.83	0.0012	886	0.32	**2905**	0.79	0.027	**0.21**	0.014
	October		0.061	0.13	4.8	**0.038**	0.34	0.83	0.0013	887	0.32	**2907**	0.78	0.027	**0.21**	0.014
	November		0.045	0.14	5.4	**0.020**	0.16	**0.89**	0.0013	883	0.32	**2895**	0.83	0.028	**0.23**	0.015
	December		0.044	0.14	5.6	**0.017**	0.14	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January		0.044	0.14	5.6	**0.017**	0.13	**0.89**	0.0013	882	0.32	**2892**	0.86	0.028	**0.23**	0.015
	February		0.044	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	March		0.054	0.13	5.4	**0.024**	0.22	0.87	0.0013	886	0.32	**2903**	0.84	0.028	**0.22**	0.014
	April		0.083	0.13	4.7	**0.041**	0.51	0.81	0.0012	885	0.32	**2901**	0.77	0.026	**0.21**	0.014
	May		0.049	0.12	4.6	**0.041**	0.26	0.80	0.0012	887	0.32	**2905**	0.77	0.026	**0.20**	0.014
	June		0.063	0.13	4.9	**0.034**	0.33	0.83	0.0012	887	0.32	**2906**	0.80	0.027	**0.21**	0.014
	July	**2041**	0.078	0.12	4.6	**0.045**	0.48	0.80	0.0012	888	0.32	**2910**	0.77	0.026	**0.20**	0.014
	August		0.12	0.12	4.2	**0.059**	0.89	0.78	0.0012	885	0.31	**2899**	0.70	0.025	**0.20**	0.013
	September		0.056	0.12	4.3	**0.055**	0.33	0.78	0.0012	886	0.31	**2903**	0.72	0.026	**0.20**	0.013
	October		0.056	0.12	4.5	**0.043**	0.28	0.80	0.0012	889	0.32	**2912**	0.75	0.026	**0.20**	0.014
	November		0.043	0.13	4.9	**0.031**	0.16	0.84	0.0013	887	0.32	**2906**	0.79	0.027	**0.21**	0.014
	December		0.045	0.14	5.6	**0.018**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	January		0.045	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.045	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	March		0.050	0.13	5.4	**0.022**	0.18	0.87	0.0013	884	0.32	**2897**	0.83	0.028	**0.22**	0.015
	April		0.079	0.13	4.9	**0.040**	0.48	0.82	0.0012	885	0.33	**2902**	0.81	0.027	**0.21**	0.014
	May		0.051	0.12	4.6	**0.038**	0.26	0.80	0.0012	888	0.32	**2911**	0.76	0.026	**0.20**	0.014
	June		0.097	0.12	4.4	**0.050**	0.63	0.79	0.0012	889	0.32	**2912**	0.75	0.026	**0.20**	0.013
	July	**2042**	0.079	0.12	4.3	**0.058**	0.53	0.78	0.0012	885	0.32	**2899**	0.72	0.026	**0.20**	0.013
	August		0.084	0.12	4.3	**0.057**	0.56	0.78	0.0012	886	0.33	**2902**	0.74	0.026	**0.20**	0.013
	September		0.077	0.12	4.4	**0.048**	0.47	0.79	0.0012	888	0.32	**2911**	0.75	0.026	**0.20**	0.013
	October		0.065	0.12	4.4	**0.052**	0.42	0.79	0.0012	886	0.33	**2902**	0.76	0.026	**0.20**	0.014
	November		0.042	0.13	4.9	**0.030**	0.15	0.84	0.0013	887	0.33	**2906**	0.80	0.027	**0.21**	0.014
	December		0.045	0.14	5.6	**0.018**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	January		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
Operations	**February**		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	March		0.046	0.14	5.7	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	April		0.085	0.13	5.0	**0.034**	0.48	0.83	0.0012	886	0.32	**2903**	0.80	0.027	**0.21**	0.014
	May		0.059	0.12	4.5	**0.048**	0.36	0.79	0.0012	888	0.33	**2909**	0.77	0.026	**0.20**	0.013
	June		0.082	0.12	4.4	**0.049**	0.52	0.79	0.0012	888	0.32	**2911**	0.75	0.026	**0.20**	0.013
	July	**2043**	0.085	0.12	4.4	**0.049**	0.54	0.79	0.0012	888	0.32	**2909**	0.75	0.026	**0.20**	0.013
	August		0.085	0.12	4.3	**0.059**	0.57	0.78	0.0012	885	0.32	**2899**	0.72	0.026	**0.20**	0.013
	September		0.088	0.12	4.3	**0.056**	0.60	0.78	0.0012	887	0.33	**2905**	0.74	0.026	**0.20**	0.014
	October		0.066	0.12	4.4	**0.052**	0.40	0.79	0.0012	887	0.33	**2906**	0.75	0.026	**0.20**	0.014
	November		0.051	0.12	4.6	**0.038**	0.25	0.79	0.0012	889	0.32	**2913**	0.75	0.026	**0.20**	0.013
	December		0.047	0.14	5.4	**0.025**	0.15	**0.89**	0.0013	883	0.33	**2894**	0.83	0.028	**0.23**	0.015
	January		0.046	0.14	5.6	**0.018**	0.14	**0.90**	0.0013	883	0.32	**2895**	0.86	0.028	**0.23**	0.015
	February		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	March		0.049	0.14	5.5	**0.019**	0.16	**0.88**	0.0013	884	0.33	**2896**	0.85	0.028	**0.22**	0.015
	April		0.070	0.12	4.4	**0.042**	0.42	0.79	0.0012	889	0.31	**2913**	0.76	0.026	**0.20**	0.013
	May		0.061	0.12	4.6	**0.036**	0.31	0.81	0.0012	888	0.31	**2910**	0.76	0.026	**0.21**	0.014
	June		0.062	0.13	4.9	**0.034**	0.32	0.84	0.0013	886	0.32	**2904**	0.80	0.027	**0.21**	0.014
	July	**2044**	0.082	0.12	4.4	**0.050**	0.54	0.79	0.0012	889	0.32	**2914**	0.75	0.026	**0.20**	0.013
	August		0.057	0.12	4.5	**0.039**	0.29	0.79	0.0012	888	0.32	**2910**	0.75	0.026	**0.20**	0.013
	September		0.060	0.13	4.7	**0.035**	0.31	0.82	0.0012	887	0.32	**2906**	0.78	0.027	**0.21**	0.014
	October		0.054	0.13	5.0	**0.029**	0.24	0.85	0.0013	886	0.32	**2903**	0.80	0.027	**0.22**	0.014
	November		0.048	0.14	5.4	**0.021**	0.17	**0.89**	0.0013	884	0.33	**2896**	0.85	0.028	**0.23**	0.015
	December		0.046	0.14	5.5	**0.018**	0.14	**0.89**	0.0013	883	0.32	**2893**	0.86	0.028	**0.23**	0.015
	January		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2892**	0.85	0.028	**0.23**	0.015
	March		0.067	0.13	5.3	**0.024**	0.31	0.87	0.0013	885	0.33	**2900**	0.84	0.028	**0.22**	0.014
	April		0.056	0.12	4.5	**0.041**	0.32	0.80	0.0012	888	0.31	**2911**	0.74	0.026	**0.20**	0.014
	May	**2045**	0.071	0.12	4.4	**0.045**	0.42	0.79	0.0012	889	0.32	**2911**	0.77	0.026	**0.20**	0.013
	June		0.073	0.12	4.5	**0.045**	0.44	0.80	0.0012	889	0.32	**2912**	0.76	0.026	**0.20**	0.014
	July		0.071	0.12	4.4	**0.046**	0.44	0.79	0.0012	888	0.32	**2911**	0.76	0.026	**0.20**	0.014
	August		0.064	0.12	4.5	**0.042**	0.36	0.80	0.0012	888	0.32	**2909**	0.75	0.026	**0.20**	0.014
	September		0.063	0.13	4.7	**0.037**	0.34	0.83	0.0012	887	0.32	**2907**	0.78	0.027	**0.21**	0.014

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	October		0.058	0.13	4.9	**0.032**	0.28	0.84	0.0013	886	0.32	**2902**	0.79	0.027	**0.21**	0.014
	November	**2045**	0.049	0.13	5.2	**0.024**	0.20	0.87	0.0013	885	0.32	**2900**	0.83	0.028	**0.22**	0.014
	December		0.046	0.14	5.5	**0.018**	0.14	**0.89**	0.0013	884	0.32	**2897**	0.85	0.028	**0.23**	0.015
	January		0.048	0.14	5.4	**0.021**	0.17	**0.89**	0.0013	884	0.32	**2896**	0.84	0.028	**0.23**	0.015
	February		0.046	0.14	5.6	**0.017**	0.14	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	March		0.061	0.13	5.0	**0.029**	0.28	0.84	0.0013	887	0.32	**2906**	0.81	0.027	**0.21**	0.014
	April		0.056	0.13	4.7	**0.035**	0.28	0.82	0.0012	888	0.31	**2910**	0.76	0.026	**0.21**	0.014
	May		0.065	0.12	4.5	**0.037**	0.35	0.79	0.0012	889	0.31	**2912**	0.75	0.026	**0.20**	0.013
	June		0.075	0.12	4.6	**0.042**	0.45	0.81	0.0012	889	0.32	**2912**	0.78	0.027	**0.20**	0.014
	July	**2046**	0.080	0.12	4.3	**0.050**	0.53	0.79	0.0012	889	0.32	**2914**	0.75	0.026	**0.20**	0.013
	August		0.083	0.12	4.3	**0.053**	0.54	0.79	0.0012	887	0.32	**2908**	0.75	0.026	**0.20**	0.013
	September		0.074	0.12	4.3	**0.051**	0.46	0.79	0.0012	888	0.33	**2911**	0.76	0.026	**0.20**	0.013
	October		0.063	0.12	4.4	**0.041**	0.36	0.79	0.0012	889	0.31	**2914**	0.75	0.026	**0.20**	0.013
	November		0.048	0.13	4.8	**0.033**	0.20	0.83	0.0013	885	0.32	**2899**	0.78	0.027	**0.21**	0.014
	December		0.046	0.14	5.5	**0.019**	0.14	**0.89**	0.0013	883	0.32	**2893**	0.84	0.028	**0.23**	0.015
	January		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2894**	0.85	0.028	**0.23**	0.015
	February		0.046	0.14	5.6	**0.017**	0.13	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	March		0.049	0.14	5.3	**0.021**	0.18	0.88	0.0013	884	0.32	**2898**	0.83	0.028	**0.22**	0.015
	April		0.077	0.13	4.8	**0.037**	0.43	0.83	0.0012	887	0.32	**2907**	0.79	0.027	**0.21**	0.014
	May		0.066	0.12	4.4	**0.044**	0.40	0.79	0.0012	890	0.31	**2916**	0.75	0.026	**0.20**	0.013
	June		0.059	0.12	4.6	**0.038**	0.31	0.81	0.0012	888	0.32	**2911**	0.77	0.026	**0.21**	0.014
	July	**2047**	0.087	0.12	4.4	**0.051**	0.57	0.79	0.0012	889	0.32	**2913**	0.76	0.026	**0.20**	0.013
	August		0.082	0.12	4.3	**0.054**	0.54	0.79	0.0012	887	0.32	**2906**	0.74	0.026	**0.20**	0.014
	September		0.067	0.12	4.4	**0.044**	0.39	0.79	0.0012	889	0.32	**2914**	0.76	0.026	**0.20**	0.013
	October		0.054	0.12	4.6	**0.038**	0.26	0.81	0.0012	889	0.32	**2912**	0.76	0.026	**0.21**	0.014
	November		0.050	0.14	5.2	**0.024**	0.19	0.88	0.0013	884	0.32	**2897**	0.82	0.028	**0.22**	0.015
	December		0.046	0.14	5.5	**0.019**	0.15	**0.90**	0.0013	883	0.32	**2895**	0.85	0.028	**0.23**	0.015
	January		0.048	0.14	5.5	**0.019**	0.15	**0.89**	0.0013	884	0.32	**2895**	0.85	0.028	**0.23**	0.015
	February		0.046	0.14	5.5	**0.018**	0.14	**0.89**	0.0013	883	0.33	**2894**	0.85	0.028	**0.23**	0.015
	March		0.046	0.14	5.5	**0.017**	0.14	**0.90**	0.0013	883	0.32	**2893**	0.85	0.028	**0.23**	0.015
	April		0.063	0.13	5.1	**0.030**	0.30	0.84	0.0013	887	0.32	**2906**	0.81	0.027	**0.21**	0.014
Operations	**May**		0.052	0.13	4.9	**0.030**	0.23	0.85	0.0013	886	0.32	**2902**	0.79	0.027	**0.22**	0.014
	June		0.059	0.13	4.7	**0.032**	0.29	0.82	0.0012	886	0.32	**2905**	0.79	0.027	**0.21**	0.014
	July	**2048**	0.12	0.12	4.3	**0.053**	0.82	0.79	0.0012	886	0.32	**2904**	0.74	0.026	**0.20**	0.013
	August		0.078	0.12	4.2	**0.057**	0.53	0.77	0.0012	885	0.31	**2900**	0.70	0.025	**0.20**	0.013
	September		0.073	0.12	4.2	**0.056**	0.45	0.78	0.0012	885	0.32	**2899**	0.72	0.026	**0.20**	0.013
	October		0.053	0.12	4.4	**0.043**	0.27	0.79	0.0012	890	0.33	**2917**	0.77	0.026	**0.20**	0.014
	November		0.044	0.13	5.1	**0.028**	0.14	0.86	0.0013	886	0.33	**2902**	0.80	0.027	**0.22**	0.015
	December		0.050	0.14	5.4	**0.022**	0.18	**0.89**	0.0013	884	0.32	**2897**	0.84	0.028	**0.23**	0.015
	January		0.056	0.13	5.2	**0.028**	0.25	0.86	0.0013	884	0.33	**2897**	0.82	0.027	**0.22**	0.014
	February		0.046	0.14	5.5	**0.019**	0.14	**0.90**	0.0013	883	0.33	**2893**	0.85	0.028	**0.23**	0.015
	March		0.064	0.13	5.3	**0.025**	0.29	0.86	0.0013	885	0.33	**2900**	0.84	0.028	**0.22**	0.014
	April		0.050	0.12	4.6	**0.033**	0.24	0.81	0.0012	888	0.31	**2910**	0.76	0.026	**0.21**	0.014
	May		0.068	0.12	4.7	**0.037**	0.37	0.81	0.0012	887	0.32	**2908**	0.78	0.026	**0.21**	0.014
	June		0.072	0.12	4.4	**0.045**	0.43	0.79	0.0012	890	0.32	**2916**	0.75	0.026	**0.20**	0.014
	July	**2049**	0.095	0.12	4.3	**0.055**	0.64	0.79	0.0012	889	0.32	**2914**	0.75	0.026	**0.20**	0.014
	August		0.081	0.12	4.3	**0.055**	0.53	0.78	0.0012	887	0.33	**2908**	0.75	0.026	**0.20**	0.013
	September		0.086	0.12	4.3	**0.053**	0.55	0.79	0.0012	887	0.33	**2908**	0.75	0.026	**0.20**	0.014
	October		0.073	0.12	4.3	**0.051**	0.44	0.79	0.0012	888	0.33	**2911**	0.76	0.026	**0.20**	0.014
	November		0.050	0.12	4.5	**0.038**	0.25	0.80	0.0012	890	0.32	**2916**	0.75	0.026	**0.20**	0.014
	December		0.046	0.14	5.3	**0.022**	0.14	**0.89**	0.0013	883	0.33	**2894**	0.83	0.028	**0.23**	0.015
	January		0.047	0.14	5.4	**0.018**	0.13	**0.90**	0.0013	883	0.33	**2894**	0.85	0.028	**0.23**	0.015
	February		0.047	0.14	5.3	**0.017**	0.13	**0.90**	0.0013	883	0.33	**2893**	0.85	0.028	**0.23**	0.015
	March		0.049	0.14	5.2	**0.020**	0.16	**0.88**	0.0013	884	0.33	**2896**	0.84	0.028	**0.22**	0.015
	April		0.079	0.12	4.3	**0.044**	0.48	0.80	0.0012	888	0.33	**2910**	0.78	0.026	**0.20**	0.013
	May		0.058	0.13	4.4	**0.037**	0.28	0.82	0.0012	887	0.32	**2905**	0.76	0.026	**0.21**	0.014
	June		0.072	0.12	4.3	**0.043**	0.43	0.80	0.0012	887	0.32	**2906**	0.77	0.026	**0.20**	0.014
	July	**2050**	0.059	0.13	4.7	**0.032**	0.28	0.84	0.0013	886	0.33	**2904**	0.81	0.027	**0.21**	0.014
	August		0.060	0.13	4.5	**0.034**	0.30	0.83	0.0012	887	0.32	**2907**	0.78	0.027	**0.21**	0.014
	September		0.076	0.12	4.3	**0.043**	0.45	0.80	0.0012	888	0.33	**2911**	0.77	0.026	**0.20**	0.013
	October		0.054	0.13	4.6	**0.035**	0.26	0.84	0.0013	886	0.32	**2904**	0.78	0.027	**0.21**	0.014
	November		0.053	0.13	4.9	**0.025**	0.21	0.87	0.0013	885	0.32	**2899**	0.82	0.027	**0.22**	0.015
	December		0.047	0.14	5.3	**0.019**	0.15	**0.90**	0.0013	883	0.33	**2895**	0.85	0.028	**0.23**	0.015

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**January**	**2051**	0.047	0.14	5.3	**0.017**	0.13	**0.89**	0.0013	883	0.33	**2894**	0.85	0.028	**0.23**	0.015
	February		0.047	0.14	5.3	**0.017**	0.13	**0.90**	0.0013	883	0.33	**2892**	0.85	0.028	**0.23**	0.015
	March		0.053	0.14	5.1	**0.023**	0.20	**0.88**	0.0013	885	0.33	**2901**	0.84	0.028	**0.22**	0.015
	April		0.12	0.12	4.2	**0.051**	0.86	0.78	0.0012	885	0.32	**2899**	0.73	0.026	**0.20**	0.013
	May		0.059	0.12	4.1	**0.054**	0.32	0.78	0.0012	886	0.33	**2905**	0.75	0.026	**0.20**	0.014
	June		0.064	0.12	4.2	**0.042**	0.35	0.78	0.0012	889	0.32	**2913**	0.74	0.026	**0.20**	0.013
	July		0.083	0.12	4.2	**0.049**	0.52	0.79	0.0012	890	0.33	**2915**	0.75	0.026	**0.20**	0.013
	August		0.086	0.12	4.0	**0.058**	0.57	0.78	0.0012	886	0.33	**2904**	0.73	0.026	**0.20**	0.014
	September		0.067	0.12	4.2	**0.047**	0.39	0.79	0.0012	890	0.33	**2916**	0.76	0.026	**0.20**	0.013
	October		0.061	0.12	4.2	**0.041**	0.33	0.79	0.0012	890	0.32	**2915**	0.75	0.026	**0.20**	0.013
	November		0.054	0.13	4.6	**0.033**	0.23	0.83	0.0012	887	0.33	**2906**	0.78	0.027	**0.21**	0.014
	December		0.049	0.14	5.1	**0.022**	0.18	**0.88**	0.0013	884	0.33	**2897**	0.84	0.028	**0.22**	0.015
	January	**2052**	0.028	0.071	6.0	**0.017**	0.13	0.53	0.00069	888	0.31	**2909**	0.77	0.020	**0.12**	0.0078
	February		0.026	0.062	6.2	**0.017**	0.12	0.48	0.00060	888	0.30	**2911**	0.75	0.019	**0.10**	0.0068
	March		0.026	0.060	6.1	**0.017**	0.12	0.47	0.00059	888	0.30	**2909**	0.76	0.019	**0.100**	0.0066
	April		0.051	0.043	4.2	**0.037**	0.39	0.36	0.00045	885	0.28	**2900**	0.65	0.017	**0.071**	0.0050
	May		0.047	0.043	4.0	**0.038**	0.36	0.36	0.00046	885	0.28	**2900**	0.64	0.017	**0.071**	0.0050
	June		0.038	0.043	4.1	**0.038**	0.30	0.37	0.00046	886	0.30	**2902**	0.69	0.017	**0.071**	0.0051
	July		0.063	0.043	3.9	**0.044**	0.50	0.35	0.00046	885	0.27	**2901**	0.60	0.016	**0.071**	0.0051
	August		0.044	0.043	3.9	**0.042**	0.34	0.35	0.00046	885	0.27	**2901**	0.61	0.016	**0.071**	0.0051
	September		0.033	0.043	4.1	**0.038**	0.27	0.37	0.00047	884	0.30	**2897**	0.70	0.017	**0.071**	0.0051
	October		0.034	0.048	4.6	**0.032**	0.25	0.40	0.00049	887	0.31	**2906**	0.75	0.018	**0.079**	0.0055
	November		0.027	0.062	6.0	**0.019**	0.14	0.47	0.00060	888	0.30	**2910**	0.75	0.019	**0.10**	0.0068
	December		0.026	0.062	6.2	**0.017**	0.12	0.48	0.00060	888	0.30	**2909**	0.75	0.019	**0.10**	0.0068
		MINIMUM	0.026	0.043	3.9	**0.017**	0.12	0.35	0.00045	809	0.27	**2650**	0.60	0.016	**0.071**	0.0050
		MAXIMUM	0.12	0.14	9.1	**0.062**	0.89	**0.91**	0.0014	891	0.46	**2920**	1.3	**0.031**	**0.24**	0.015
		AVERAGE	0.058	0.12	5.0	**0.034**	0.31	0.81	0.0012	886	0.32	**2903**	0.81	0.027	**0.21**	0.014
Decommissioning	**January**	**2053**	0.0072	0.0053	7.1	**0.018**	0.17	0.25	0.000063	334	0.39	642	1.1	0.021	0.0087	0.00083
	February		0.0057	0.000049	5.7	**0.019**	0.19	0.30	0.000014	190	0.43	30	1.2	0.027	0.000017	0.00035
	March		0.028	0.00012	5.4	**0.024**	0.34	0.29	0.000022	177	0.41	16	1.2	0.026	0.000017	0.00041
	April		0.050	0.00062	5.3	**0.052**	0.52	0.19	0.000072	117	0.33	60	0.80	0.018	0.000026	0.00075
	May		0.029	0.00066	5.2	**0.043**	0.36	0.21	0.000073	129	0.35	57	0.88	0.020	0.000023	0.00075
	June		0.022	0.00050	5.1	**0.037**	0.30	0.25	0.000058	152	0.39	43	1.0	0.023	0.000022	0.00066
	July		0.038	0.00052	5.0	**0.042**	0.42	0.23	0.000061	140	0.37	48	0.94	0.021	0.000023	0.00067
	August		0.064	0.00051	4.9	**0.044**	0.62	0.22	0.000061	137	0.36	51	0.91	0.020	0.000024	0.00067
	September		0.052	0.00069	4.8	**0.056**	0.54	0.17	0.000078	108	0.31	67	0.75	0.017	0.000028	0.00079
	October		0.030	0.00073	4.8	**0.046**	0.36	0.21	0.000080	127	0.35	64	0.87	0.019	0.000024	0.00080
	November		0.015	0.00059	4.7	**0.037**	0.26	0.24	0.000066	149	0.39	50	1.0	0.022	0.000022	0.00071
	December		0.0057	0.000055	4.5	**0.019**	0.19	0.30	0.000015	182	0.42	8.5	1.2	0.027	0.000015	0.00036
	January	**2054**	0.0048	0.000041	4.4	**0.019**	0.19	0.30	0.000011	183	0.42	5.9	1.2	0.027	0.000012	0.00034
	February		0.0045	0.000039	4.4	**0.019**	0.19	0.30	0.000011	183	0.42	5.3	1.2	0.027	0.000011	0.00034
	March		0.011	0.00014	4.3	**0.024**	0.23	0.28	0.000021	173	0.40	14	1.1	0.025	0.000013	0.00040
	April		0.047	0.00035	4.1	**0.039**	0.49	0.24	0.000043	147	0.36	36	0.97	0.022	0.000019	0.00055
	May		0.037	0.00064	4.1	**0.047**	0.42	0.20	0.000070	125	0.34	57	0.85	0.019	0.000022	0.00073
	June		0.025	0.00056	4.0	**0.039**	0.33	0.24	0.000062	144	0.37	47	0.97	0.022	0.000020	0.00068
	July		0.036	0.00053	3.9	**0.043**	0.42	0.22	0.000060	137	0.36	48	0.93	0.021	0.000021	0.00067
	August		0.074	0.00066	3.8	**0.055**	0.70	0.18	0.000074	115	0.32	64	0.78	0.018	0.000026	0.00077
	September		0.032	0.00067	3.7	**0.047**	0.38	0.21	0.000073	127	0.35	59	0.87	0.019	0.000022	0.00076
	October		0.024	0.00067	3.6	**0.043**	0.33	0.23	0.000072	138	0.37	56	0.93	0.021	0.000021	0.00075
	November		0.021	0.00034	3.6	**0.034**	0.31	0.26	0.000041	158	0.39	33	1.1	0.023	0.000017	0.00054
	December		0.0045	0.000040	3.4	**0.019**	0.19	0.30	0.000011	183	0.42	5.7	1.2	0.027	0.000012	0.00034
	January	**2055**	0.0037	0.000046	3.3	**0.019**	0.19	0.30	0.0000100	183	0.42	5.5	1.2	0.027	0.0000097	0.00034
	February		0.0033	0.000039	3.3	**0.019**	0.19	0.30	0.0000088	183	0.42	5.2	1.2	0.027	0.0000089	0.00033
	March		0.0034	0.000037	3.2	**0.019**	0.19	0.30	0.0000086	184	0.42	4.8	1.2	0.027	0.0000089	0.00033
	April		0.0068	0.00063	3.1	**0.033**	0.20	0.24	0.000066	152	0.38	50	1.0	0.022	0.000017	0.00071
	May		0.0039	0.00073	3.0	**0.037**	0.18	0.24	0.000076	147	0.38	57	0.99	0.022	0.000017	0.00078
	June		0.0059	0.00078	2.9	**0.038**	0.19	0.24	0.000080	149	0.39	61	1.0	0.022	0.000018	0.00081
	July		0.0047	0.00096	2.8	**0.041**	0.17	0.22	0.000097	132	0.36	73	0.90	0.020	0.000020	0.00091
	August		0.0038	0.0010	2.7	**0.044**	0.17	0.22	0.00010	138	0.38	78	0.94	0.021	0.000021	0.00097
	September		0.0036	0.00087	2.6	**0.040**	0.18	0.25	0.000089	150	0.40	66	1.0	0.023	0.000019	0.00088
	October		0.0035	0.00079	2.6	**0.039**	0.18	0.25	0.000081	153	0.40	61	1.0	0.023	0.000018	0.00083
	November		0.0033	0.00033	2.4	**0.027**	0.18	0.28	0.000037	169	0.41	28	1.1	0.025	0.000012	0.00052
	December		0.0034	0.000038	2.3	**0.019**	0.19	0.30	0.0000087	183	0.42	5.0	1.2	0.027	0.0000089	0.00033

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.0026	0.000031	2.2	**0.019**	0.19	0.30	0.0000069	183	0.41	3.8	1.2	0.027	0.0000072	0.00032
	February		0.0024	0.000029	2.1	**0.019**	0.19	0.30	0.0000063	182	0.41	3.4	1.2	0.027	0.0000067	0.00032
	March		0.0030	0.00057	2.1	**0.032**	0.18	0.26	0.000059	158	0.39	43	1.1	0.023	0.000013	0.00067
	April		0.0026	0.00050	2.0	**0.031**	0.18	0.26	0.000052	162	0.40	39	1.1	0.024	0.000013	0.00062
	May		0.0027	0.00040	1.9	**0.028**	0.18	0.27	0.000042	168	0.40	30	1.1	0.025	0.000011	0.00056
	June		0.0026	0.00046	1.8	**0.030**	0.18	0.27	0.000048	165	0.40	36	1.1	0.025	0.000012	0.00060
	July		0.0028	0.00077	1.7	**0.038**	0.18	0.24	0.000078	152	0.39	58	1.0	0.023	0.000016	0.00080
	August		0.0031	0.00080	1.6	**0.039**	0.17	0.24	0.000081	148	0.39	62	1.0	0.022	0.000017	0.00082
	September		0.0026	0.0010	1.5	**0.043**	0.16	0.22	0.00010	138	0.38	76	0.95	0.021	0.000019	0.00095
	October		0.0022	0.00085	1.4	**0.041**	0.17	0.25	0.000086	151	0.40	65	1.0	0.023	0.000017	0.00086
	November		0.0023	0.00029	1.3	**0.027**	0.19	0.29	0.000032	175	0.42	24	1.2	0.026	0.000010	0.00050
	December		0.0024	0.000029	1.2	**0.019**	0.19	0.30	0.0000063	183	0.41	3.6	1.2	0.027	0.0000066	0.00032
	January	2057	0.0011	0.000019	1.1	**0.019**	0.19	0.30	0.0000026	183	0.41	1.7	1.2	0.027	0.0000032	0.00030
	February		0.00069	0.000017	1.0	**0.019**	0.19	0.30	0.0000015	182	0.41	1.1	1.2	0.027	0.0000021	0.00029
	March		0.00069	0.000017	0.94	**0.019**	0.19	0.30	0.0000015	182	0.41	1.1	1.2	0.027	0.0000021	0.00029
	April		0.0014	0.00067	0.87	**0.035**	0.18	0.26	0.000065	162	0.40	49	1.1	0.024	0.000011	0.00073
	May		0.00072	0.00047	0.76	**0.031**	0.18	0.27	0.000046	166	0.40	36	1.1	0.025	0.0000083	0.00060
	June		0.00084	0.00026	0.66	**0.025**	0.19	0.29	0.000025	177	0.41	18	1.2	0.026	0.0000053	0.00046
	July		0.0013	0.00082	0.58	**0.040**	0.18	0.26	0.000080	159	0.41	61	1.1	0.024	0.000013	0.00084
	August		0.00098	0.00089	0.48	**0.042**	0.18	0.26	0.000087	157	0.41	66	1.1	0.024	0.000014	0.00089
	September		0.00085	0.00088	0.37	**0.042**	0.18	0.26	0.000085	160	0.42	63	1.1	0.024	0.000014	0.00088
	October		0.00075	0.00033	0.28	**0.028**	0.19	0.29	0.000032	175	0.41	24	1.2	0.026	0.0000063	0.00051
	November		0.00072	0.00013	0.19	**0.022**	0.19	0.30	0.000012	179	0.41	9.8	1.2	0.026	0.0000036	0.00037
	December		0.00069	0.000026	0.100	**0.019**	0.19	0.30	0.0000024	183	0.41	1.8	1.2	0.027	0.0000022	0.00030
		MINIMUM	0.00069	0.000017	0.100	**0.018**	0.16	0.17	0.0000015	108	0.31	1.1	0.75	0.017	0.0000021	0.00029
		MAXIMUM	0.074	0.0053	7.1	**0.056**	0.70	0.30	0.00010	334	0.43	642	1.2	0.027	0.0087	0.00097
		AVERAGE	0.013	0.00053	2.9	**0.033**	0.25	0.26	0.000049	162	0.39	47	1.1	0.024	0.00016	0.00060
Reclamation	January	2058	0.00034	0.000064	1.5	0.0095	0.096	0.088	0.0000012	438	0.20	259	0.59	0.0078	0.000052	0.00059
	February		0.00036	0.000081	0.087	0.00013	0.012	0.00029	0.00000086	867	0.0027	9.0	0.027	0.000016	0.0000026	0.0015
	March		0.00037	0.000082	0.040	0.00000062	0.011	0.00012	0.00000086	880	0.000013	0.84	0.020	0.00000084	0.0000010	0.0016
	April		0.00038	0.000083	0.041	2.0E-09	0.011	0.00012	0.00000088	897	4.1E-08	0.82	0.020	0.00000078	0.0000010	0.0016
	May		0.00039	0.000087	0.043	8.4E-12	0.012	0.00012	0.00000092	938	1.7E-10	0.85	0.021	0.00000082	0.0000011	0.0017
	June		0.00040	0.000089	0.044	4.0E-14	0.012	0.00013	0.00000094	959	8.3E-13	0.87	0.022	0.00000084	0.0000011	0.0017
	July		0.00041	0.000091	0.044	2.2E-16	0.012	0.00013	0.00000096	977	4.6E-15	0.89	0.022	0.00000085	0.0000011	0.0018
	August		0.00040	0.000090	0.044	1.2E-18	0.012	0.00013	0.00000095	966	2.4E-17	0.88	0.022	0.00000084	0.0000011	0.0017
	September		0.00039	0.000087	0.043	5.7E-21	0.012	0.00012	0.00000092	938	1.2E-19	0.85	0.021	0.00000082	0.0000011	0.0017
	October		0.00038	0.000085	0.041	2.8E-23	0.012	0.00012	0.00000089	911	5.7E-22	0.83	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	9.2E-26	0.011	0.00012	0.00000086	880	1.9E-24	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	3.2E-28	0.011	0.00012	0.00000086	879	6.6E-27	0.80	0.020	0.00000077	0.0000010	0.0016
	January	2059	0.00037	0.000082	0.040	9.6E-31	0.011	0.00012	0.00000086	879	2.0E-29	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	3.2E-33	0.011	0.00012	0.00000086	879	6.5E-32	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	1.5E-35	0.011	0.00012	0.00000086	879	3.1E-34	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00037	0.000082	0.040	7.9E-39	0.011	0.00012	0.00000086	881	9.3E-37	0.80	0.020	0.00000077	0.0000010	0.0016
	May		0.00039	0.000086	0.042	0	0.012	0.00012	0.00000091	931	0	0.85	0.021	0.00000081	0.0000011	0.0017
	June		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	957	0	0.87	0.022	0.00000083	0.0000011	0.0017
	July		0.00041	0.000090	0.044	0	0.012	0.00013	0.00000095	973	0	0.89	0.022	0.00000085	0.0000011	0.0017
	August		0.00041	0.000090	0.044	0	0.012	0.00013	0.00000095	974	0	0.89	0.022	0.00000085	0.0000011	0.0017
	September		0.00040	0.000089	0.043	0	0.012	0.00012	0.00000093	954	0	0.87	0.022	0.00000083	0.0000011	0.0017
	October		0.00038	0.000084	0.041	0	0.012	0.00012	0.00000089	909	0	0.83	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	882	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	2060	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00037	0.000083	0.040	0	0.011	0.00012	0.00000087	889	0	0.81	0.020	0.00000077	0.0000010	0.0016
	May		0.00039	0.000086	0.042	0	0.012	0.00012	0.0000009	924	0	0.84	0.021	0.00000081	0.0000011	0.0017
	June		0.00040	0.000088	0.043	0	0.012	0.00012	0.00000093	949	0	0.86	0.022	0.00000083	0.0000011	0.0017
	July		0.00041	0.000092	0.045	0	0.013	0.00013	0.00000097	991	0	0.90	0.023	0.00000086	0.0000011	0.0018
	August		0.00041	0.000091	0.044	0	0.012	0.00013	0.00000096	977	0	0.89	0.022	0.00000085	0.0000011	0.0018
	September		0.00039	0.000087	0.042	0	0.012	0.00012	0.00000091	933	0	0.85	0.021	0.00000081	0.0000011	0.0017
	October		0.00038	0.000084	0.041	0	0.012	0.00012	0.00000089	908	0	0.83	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	882	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	**January**	**2061**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	881	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00038	0.000084	0.041	0	0.011	0.00012	0.00000089	908	0	0.83	0.021	0.00000079	0.0000010	0.0016
	May		0.00040	0.000088	0.043	0	0.012	0.00012	0.00000093	949	0	0.86	0.022	0.00000083	0.0000011	0.0017
	June		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	963	0	0.88	0.022	0.00000084	0.0000011	0.0017
	July		0.00041	0.000090	0.044	0	0.012	0.00013	0.00000095	974	0	0.89	0.022	0.00000085	0.0000011	0.0017
	August		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	962	0	0.88	0.022	0.00000084	0.0000011	0.0017
	September		0.00039	0.000087	0.043	0	0.012	0.00012	0.00000092	935	0	0.85	0.021	0.00000082	0.0000011	0.0017
	October		0.00038	0.000085	0.042	0	0.012	0.00012	0.0000009	917	0	0.83	0.021	0.0000008	0.0000011	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	884	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	**2062**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00037	0.000083	0.041	0	0.011	0.00012	0.00000088	895	0	0.81	0.020	0.00000078	0.0000010	0.0016
	May		0.00040	0.000089	0.043	0	0.012	0.00012	0.00000093	954	0	0.87	0.022	0.00000083	0.0000011	0.0017
	June		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	959	0	0.87	0.022	0.00000084	0.0000011	0.0017
	July		0.00041	0.000091	0.045	0	0.012	0.00013	0.00000096	981	0	0.89	0.022	0.00000086	0.0000011	0.0018
	August		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	960	0	0.87	0.022	0.00000084	0.0000011	0.0017
	September		0.00039	0.000086	0.042	0	0.012	0.00012	0.00000091	931	0	0.85	0.021	0.00000081	0.0000011	0.0017
	October		0.00038	0.000084	0.041	0	0.011	0.00012	0.00000088	901	0	0.82	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000087	888	0	0.81	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	**2063**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	881	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00038	0.000084	0.041	0	0.011	0.00012	0.00000088	900	0	0.82	0.020	0.00000078	0.0000010	0.0016
	May		0.00039	0.000087	0.043	0	0.012	0.00012	0.00000091	934	0	0.85	0.021	0.00000081	0.0000011	0.0017
	June		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	956	0	0.87	0.022	0.00000083	0.0000011	0.0017
	July		0.00041	0.000091	0.045	0	0.012	0.00013	0.00000096	980	0	0.89	0.022	0.00000085	0.0000011	0.0018
	August		0.00041	0.000091	0.045	0	0.012	0.00013	0.00000096	979	0	0.89	0.022	0.00000085	0.0000011	0.0018
	September		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	956	0	0.87	0.022	0.00000083	0.0000011	0.0017
	October		0.00038	0.000084	0.041	0	0.012	0.00012	0.00000089	909	0	0.83	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	881	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	**2064**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00037	0.000083	0.041	0	0.011	0.00012	0.00000087	894	0	0.81	0.020	0.00000078	0.0000010	0.0016
	May		0.00040	0.000088	0.043	0	0.012	0.00012	0.00000093	952	0	0.87	0.022	0.00000083	0.0000011	0.0017
	June		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	961	0	0.87	0.022	0.00000084	0.0000011	0.0017
	July		0.00041	0.000090	0.044	0	0.012	0.00013	0.00000095	971	0	0.88	0.022	0.00000085	0.0000011	0.0017
	August		0.00041	0.000091	0.044	0	0.012	0.00013	0.00000095	975	0	0.89	0.022	0.00000085	0.0000011	0.0017
	September		0.00039	0.000086	0.042	0	0.012	0.00012	0.0000009	925	0	0.84	0.021	0.00000081	0.0000011	0.0017
	October		0.00037	0.000083	0.041	0	0.011	0.00012	0.00000088	895	0	0.81	0.020	0.00000078	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	884	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	**2065**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000087	885	0	0.81	0.020	0.00000077	0.0000010	0.0016
	April		0.00038	0.000084	0.041	0	0.011	0.00012	0.00000089	905	0	0.82	0.021	0.00000079	0.0000010	0.0016
	May		0.00039	0.000086	0.042	0	0.012	0.00012	0.00000091	930	0	0.85	0.021	0.00000081	0.0000011	0.0017
	June		0.00040	0.000089	0.043	0	0.012	0.00012	0.00000093	954	0	0.87	0.022	0.00000083	0.0000011	0.0017
	July		0.00041	0.000090	0.044	0	0.012	0.00013	0.00000095	972	0	0.88	0.022	0.00000085	0.0000011	0.0017
	August		0.00040	0.000088	0.043	0	0.012	0.00012	0.00000093	949	0	0.86	0.022	0.00000083	0.0000011	0.0017
	September		0.00039	0.000086	0.042	0	0.012	0.00012	0.00000091	925	0	0.84	0.021	0.00000081	0.0000011	0.0017
	October		0.00038	0.000084	0.041	0	0.011	0.00012	0.00000088	901	0	0.82	0.020	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January	**2066**	0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	February		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016

Table G-13: Scenario 13: Low Treatment Efficiency - Treated Effluent Discharge

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	882	0	0.80	0.020	0.00000077	0.0000010	0.0016
	May		0.00039	0.000086	0.042	0	0.012	0.00012	0.0000009	924	0	0.84	0.021	0.00000081	0.0000011	0.0017
	June		0.00039	0.000087	0.043	0	0.012	0.00012	0.00000092	940	0	0.86	0.021	0.00000082	0.0000011	0.0017
	July		0.00040	0.000088	0.043	0	0.012	0.00012	0.00000093	951	0	0.87	0.022	0.00000083	0.0000011	0.0017
	August	**2066**	0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	956	0	0.87	0.022	0.00000083	0.0000011	0.0017
	September		0.00039	0.000086	0.042	0	0.012	0.00012	0.0000009	921	0	0.84	0.021	0.0000008	0.0000011	0.0017
	October		0.00038	0.000083	0.041	0	0.011	0.00012	0.00000088	898	0	0.82	0.020	0.00000078	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	January		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	880	0	0.80	0.020	0.00000077	0.0000010	0.0016
Reclamation	**February**		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	March		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
	April		0.00038	0.000085	0.041	0	0.012	0.00012	0.00000089	911	0	0.83	0.021	0.00000079	0.0000010	0.0016
	May		0.00041	0.000091	0.044	0	0.012	0.00013	0.00000095	976	0	0.89	0.022	0.00000085	0.0000011	0.0017
	June	**2067**	0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	957	0	0.87	0.022	0.00000083	0.0000011	0.0017
	July		0.00041	0.000091	0.045	0	0.012	0.00013	0.00000096	979	0	0.89	0.022	0.00000085	0.0000011	0.0018
	August		0.00040	0.000089	0.044	0	0.012	0.00013	0.00000094	960	0	0.87	0.022	0.00000084	0.0000011	0.0017
	September		0.00039	0.000086	0.042	0	0.012	0.00012	0.00000091	929	0	0.85	0.021	0.00000081	0.0000011	0.0017
	October		0.00038	0.000085	0.041	0	0.012	0.00012	0.00000089	911	0	0.83	0.021	0.00000079	0.0000010	0.0016
	November		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000087	887	0	0.81	0.020	0.00000077	0.0000010	0.0016
	December		0.00037	0.000082	0.040	0	0.011	0.00012	0.00000086	879	0	0.80	0.020	0.00000077	0.0000010	0.0016
		MINIMUM	0.00034	0.000064	0.040	0	0.011	0.00012	0.00000086	438	0	0.80	0.020	0.00000077	0.0000010	0.00059
		MAXIMUM	0.00041	0.000092	1.5	0.0095	0.096	0.088	0.0000012	991	0.20	259	0.59	0.0078	0.000052	0.0018
		AVERAGE	0.00038	0.000085	0.054	0.000081	0.012	0.00085	0.0000009	911	0.0017	3.1	0.026	0.000066	0.0000015	0.0016

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0041	0.023	0.000097	0.0000051	3.5	0.57	0.00020	0.000055	0.00012	0.085	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0083	0.037	0.00014	0.0000088	3.0	0.61	0.00018	0.00014	0.00012	0.072	0.000043	0.011	1.0	0.026	0.0000016
	May		0.014	0.058	0.00019	0.000014	2.6	0.71	0.00019	0.00025	0.00013	0.064	0.000042	0.011	0.88	0.033	0.0000019
	June		0.021	0.086	0.00028	0.000021	2.9	0.95	0.00023	0.00039	0.00016	0.074	0.000053	0.013	1.0	0.047	0.0000026
	July		0.032	0.13	0.00040	0.000031	3.1	1.3	0.00029	0.00059	0.00020	0.080	0.000063	0.015	1.0	0.066	0.0000035
	August		0.042	0.16	0.00051	0.000040	3.3	1.5	0.00033	0.00077	0.00024	0.086	0.000072	0.017	1.1	0.081	0.0000043
	September		0.043	0.17	0.00052	0.000041	2.9	1.5	0.00032	0.00080	0.00023	0.076	0.000068	0.016	0.96	0.082	0.0000043
	October		0.042	0.16	0.00051	0.000041	2.5	1.4	0.00029	0.00079	0.00022	0.068	0.000063	0.014	0.84	0.079	0.0000042
	November		0.040	0.15	0.00048	0.000038	2.2	1.3	0.00027	0.00074	0.00020	0.060	0.000057	0.013	0.74	0.074	0.0000039
	December		0.039	0.15	0.00047	0.000038	2.2	1.3	0.00027	0.00073	0.00020	0.059	0.000056	0.013	0.72	0.073	0.0000038
	January	2026	0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	February		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	March		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.058	0.000056	0.012	0.71	0.073	0.0000038
	April		0.037	0.14	0.00044	0.000035	1.8	1.2	0.00024	0.00069	0.00018	0.051	0.000051	0.011	0.61	0.068	0.0000035
	May		0.051	0.20	0.00060	0.000049	2.5	1.7	0.00033	0.00095	0.00025	0.069	0.000069	0.015	0.83	0.094	0.0000049
	June		0.055	0.21	0.00064	**0.000052**	2.6	1.8	0.00035	0.0010	0.00026	0.072	0.000073	0.016	0.86	0.10	0.0000052
	July		0.062	0.24	0.00073	**0.000059**	2.9	2.0	0.00039	0.0012	0.00029	0.080	0.000082	0.018	0.95	0.11	0.0000058
	August		0.054	0.21	0.00064	**0.000052**	2.5	1.7	0.00034	0.0010	0.00026	0.069	0.000071	0.016	0.81	0.099	0.0000051
	September		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.065	0.000067	0.015	0.76	0.093	0.0000048
	October		0.050	0.19	0.00059	0.000048	2.3	1.6	0.00031	0.00094	0.00023	0.063	0.000065	0.014	0.74	0.091	0.0000047
	November		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	December		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	January	2027	0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	February		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	March		0.047	0.18	0.00055	0.000044	2.1	1.5	0.00029	0.00087	0.00022	0.058	0.000060	0.013	0.68	0.085	0.0000044
	April		0.038	0.15	0.00045	0.000037	1.7	1.2	0.00024	0.00072	0.00018	0.048	0.000050	0.011	0.56	0.070	0.0000036
	May		0.041	0.16	0.00048	0.000039	1.8	1.3	0.00025	0.00077	0.00019	0.051	0.000053	0.012	0.59	0.075	0.0000038
	June		0.049	0.19	0.00057	0.000046	2.1	1.6	0.00030	0.00091	0.00023	0.060	0.000063	0.014	0.70	0.088	0.0000045
	July		0.049	0.19	0.00057	0.000047	2.1	1.6	0.00030	0.00092	0.00023	0.060	0.000063	0.014	0.70	0.089	0.0000046
	August		0.056	0.21	0.00066	**0.000053**	2.4	1.8	0.00034	0.0010	0.00026	0.069	0.000072	0.016	0.80	0.10	0.0000052
	September		0.068	0.26	0.00080	**0.000065**	2.9	2.2	0.00042	0.0013	0.00031	0.083	0.000087	0.019	0.96	0.12	0.0000063
	October		0.071	0.27	0.00083	**0.000067**	3.1	2.3	0.00043	0.0013	0.00033	0.086	0.000091	0.020	1.0	0.13	0.0000066
	November		0.062	0.24	0.00072	**0.000059**	2.7	2.0	0.00038	0.0011	0.00028	0.075	0.000079	0.017	0.88	0.11	0.0000057
	December		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	January	2028	0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	February		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	March		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	April		0.054	0.21	0.00076	**0.000052**	2.4	2.3	0.00035	0.0010	0.00030	0.073	0.000069	0.016	0.76	0.098	0.0000070
	May		0.047	0.18	0.00073	0.000046	2.0	2.3	0.00030	0.00090	0.00028	0.062	0.000058	0.014	0.60	0.085	0.0000070
	June		0.057	0.22	0.00085	**0.000055**	2.3	2.7	0.00036	0.0011	0.00032	0.071	0.000069	0.016	0.69	0.10	0.0000081
	July		0.065	0.25	0.00094	**0.000063**	2.4	2.9	0.00039	0.0012	0.00035	0.076	0.000076	0.017	0.73	0.12	0.0000087
	August		0.067	0.25	0.00093	**0.000064**	2.3	2.8	0.00039	0.0013	0.00034	0.073	0.000077	0.017	0.70	0.12	0.0000084
	September		0.069	0.26	0.00094	**0.000066**	2.3	2.8	0.00040	0.0013	0.00035	0.072	0.000078	0.017	0.69	0.12	0.0000084
	October		0.076	0.29	0.0010	**0.000073**	2.5	3.0	0.00044	0.0014	0.00038	0.078	0.000085	0.019	0.75	0.13	0.0000090
	November		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	December		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
		MINIMUM	0.0038	0.022	0.000095	0.0000049	1.7	0.57	0.00018	0.000050	0.00012	0.048	0.000042	0.011	0.56	0.021	0.0000014
		MAXIMUM	0.076	0.29	0.0010	**0.000073**	3.6	3.0	0.00044	0.0014	0.00038	0.086	0.000091	0.020	1.2	0.13	0.0000090
		AVERAGE	0.048	0.18	0.00059	0.000046	2.5	1.7	0.00032	0.00089	0.00024	0.070	0.000066	0.015	0.82	0.088	0.0000050
Operations	January	2029	0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	February		0.076	0.29	0.0010	**0.000073**	2.4	3.0	0.00043	0.0014	0.00037	0.077	0.000085	0.019	0.74	0.13	0.0000090
	March		0.074	0.28	0.00099	**0.000071**	2.4	2.9	0.00042	0.0014	0.00036	0.075	0.000083	0.018	0.72	0.13	0.0000087
	April		0.058	0.22	0.00076	**0.000056**	1.8	2.2	0.00033	0.0011	0.00028	0.056	0.000064	0.014	0.54	0.10	0.0000066
	May		0.058	0.22	0.00075	**0.000055**	1.7	2.1	0.00032	0.0011	0.00027	0.054	0.000063	0.014	0.52	0.10	0.0000064
	June		0.062	0.23	0.00079	**0.000059**	1.8	2.2	0.00034	0.0012	0.00028	0.056	0.000067	0.014	0.54	0.11	0.0000066
	July		0.076	0.29	0.00095	**0.000072**	2.1	2.7	0.00041	0.0014	0.00034	0.067	0.000082	0.017	0.65	0.13	0.0000080
	August		0.088	0.33	0.0011	**0.000084**	2.4	3.0	0.00047	0.0017	0.00039	0.076	0.000094	0.020	0.73	0.15	0.0000091
	September		0.083	0.32	0.0010	**0.000079**	2.2	2.8	0.00045	0.0016	0.00037	0.071	0.000089	0.019	0.68	0.14	0.0000084
	October		0.085	0.32	0.0010	**0.000081**	2.2	2.9	0.00045	0.0016	0.00037	0.072	0.000090	0.019	0.69	0.15	0.0000085
	November		0.082	0.31	0.0010	**0.000078**	2.2	2.7	0.00044	0.0016	0.00036	0.069	0.000087	0.018	0.66	0.14	0.0000082
	December		0.082	0.31	0.0010	**0.000078**	2.1	2.7	0.00043	0.0015	0.00036	0.069	0.000087	0.018	0.66	0.14	0.0000082

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2030**	0.082	0.31	0.0010	**0.000078**	2.1	2.7	0.00043	0.0015	0.00036	0.069	0.000087	0.018	0.66	0.14	0.0000082
	February		0.080	0.31	0.00099	**0.000076**	2.1	2.7	0.00043	0.0015	0.00035	0.067	0.000085	0.018	0.65	0.14	0.0000080
	March		0.076	0.29	0.00093	**0.000072**	2.0	2.5	0.00040	0.0014	0.00033	0.063	0.000081	0.017	0.61	0.13	0.0000076
	April		0.064	0.24	0.00077	**0.000060**	1.6	2.1	0.00034	0.0012	0.00027	0.052	0.000067	0.014	0.50	0.11	0.0000062
	May		0.068	0.26	0.00082	**0.000065**	1.7	2.2	0.00036	0.0013	0.00029	0.055	0.000071	0.015	0.53	0.12	0.0000066
	June		0.061	0.23	0.00072	**0.000058**	1.5	1.9	0.00032	0.0011	0.00026	0.048	0.000063	0.013	0.46	0.11	0.0000058
	July		0.058	0.22	0.00068	**0.000055**	1.4	1.8	0.00030	0.0011	0.00024	0.045	0.000060	0.012	0.43	0.10	0.0000054
	August		0.065	0.25	0.00076	**0.000061**	1.5	2.0	0.00033	0.0012	0.00027	0.049	0.000067	0.014	0.47	0.11	0.0000059
	September		0.060	0.23	0.00071	**0.000057**	1.4	1.8	0.00031	0.0011	0.00025	0.045	0.000062	0.013	0.43	0.10	0.0000055
	October		0.060	0.23	0.00070	**0.000057**	1.4	1.8	0.00030	0.0011	0.00024	0.044	0.000062	0.013	0.43	0.10	0.0000054
	November		0.055	0.21	0.00064	**0.000052**	1.3	1.7	0.00028	0.0010	0.00022	0.041	0.000057	0.012	0.39	0.095	0.0000050
	December		0.054	0.20	0.00063	**0.000051**	1.2	1.6	0.00028	0.0010	0.00022	0.040	0.000056	0.011	0.38	0.093	0.0000049
	January	**2031**	0.052	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.00099	0.00021	0.039	0.000054	0.011	0.37	0.090	0.0000047
	February		0.052	0.20	0.00061	0.000049	1.2	1.6	0.00027	0.00098	0.00021	0.039	0.000054	0.011	0.37	0.090	0.0000047
	March		0.051	0.19	0.00060	0.000049	1.2	1.5	0.00026	0.00097	0.00021	0.038	0.000053	0.011	0.36	0.089	0.0000046
	April		0.043	0.16	0.00050	0.000041	0.99	1.3	0.00022	0.00081	0.00017	0.032	0.000044	0.0090	0.30	0.074	0.0000039
	May		0.045	0.17	0.00052	0.000042	1.0	1.3	0.00023	0.00084	0.00018	0.033	0.000046	0.0094	0.31	0.077	0.0000040
	June		0.056	0.21	0.00064	**0.000053**	1.3	1.7	0.00028	0.0010	0.00022	0.041	0.000057	0.012	0.39	0.096	0.0000049
	July		0.068	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	August		0.079	0.30	0.00090	**0.000074**	1.8	2.3	0.00040	0.0015	0.00031	0.057	0.000080	0.016	0.54	0.14	0.0000069
	September		0.076	0.29	0.00088	**0.000072**	1.7	2.3	0.00039	0.0014	0.00031	0.055	0.000078	0.016	0.53	0.13	0.0000067
	October		0.071	0.27	0.00082	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000063
	November		0.066	0.25	0.00076	**0.000063**	1.5	2.0	0.00033	0.0012	0.00026	0.048	0.000068	0.014	0.46	0.11	0.0000058
	December		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.048	0.000067	0.014	0.46	0.11	0.0000058
	January	**2032**	0.065	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.013	0.45	0.11	0.0000057
	February		0.065	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.013	0.45	0.11	0.0000057
	March		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.098	0.0000050
	April		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00087	0.00019	0.033	0.000047	0.0096	0.32	0.080	0.0000041
	May		0.049	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	June		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	July		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.10	0.0000051
	August		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.42	0.10	0.0000053
	September		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	October		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.47	0.12	0.0000061
	November		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000069	0.014	0.46	0.12	0.0000059
	December		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	January	**2033**	0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	February		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	March		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	April		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	May		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.093	0.0000047
	June		0.061	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	July		0.075	0.28	0.00086	**0.000071**	1.7	2.2	0.00038	0.0014	0.00030	0.053	0.000076	0.015	0.51	0.13	0.0000065
	August		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000082	0.017	0.55	0.14	0.0000070
	September		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000070
	October		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	November		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000062
	December		0.070	0.27	0.00080	**0.000067**	1.6	2.1	0.00035	0.0013	0.00028	0.050	0.000072	0.014	0.48	0.12	0.0000061
	January	**2034**	0.070	0.27	0.00080	**0.000067**	1.6	2.1	0.00035	0.0013	0.00028	0.050	0.000072	0.014	0.48	0.12	0.0000061
	February		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	March		0.065	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000067	0.013	0.44	0.11	0.0000057
	April		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	May		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.092	0.0000047
	June		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0094	0.31	0.079	0.0000040
	July		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00081	0.00017	0.031	0.000044	0.0089	0.29	0.074	0.0000037
	August		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	September		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.32	0.082	0.0000041
	October		0.052	0.20	0.00060	0.000049	1.2	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	November		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.089	0.0000045
	December		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	January	**2035**	0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00093	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	February		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	March		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0091	0.30	0.077	0.0000039
	May		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	June		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0096	0.31	0.080	0.0000040
	July		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	August		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	September		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	October		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	November		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	December		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	January	2036	0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	February		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	March		0.061	0.23	0.00069	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	April		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	May		0.046	0.17	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.080	0.0000040
	June		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	July		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000056
	August		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.017	0.58	0.15	0.0000074
	September		0.092	0.35	0.0011	**0.000087**	2.0	2.7	0.00046	0.0017	0.00037	0.065	0.000094	0.019	0.63	0.16	0.0000080
	October		0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.58	0.15	0.0000075
	November		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	December		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	January	2037	0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	February		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000078	0.016	0.52	0.13	0.0000066
	March		0.074	0.28	0.00084	**0.000070**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	April		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	May		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	July		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	August		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0013	0.00028	0.051	0.000073	0.015	0.49	0.12	0.0000062
	September		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	October		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	November		0.070	0.27	0.00080	**0.000067**	1.6	2.1	0.00035	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	December		0.070	0.27	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	January	2038	0.070	0.27	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	February		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.10	0.0000050
	April		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	May		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.010	0.35	0.088	0.0000044
	June		0.060	0.23	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.40	0.10	0.0000052
	July		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	August		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	September		0.080	0.30	0.00092	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	October		0.067	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	November		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000056
	December		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	January	2039	0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	February		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.099	0.0000050
	March		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	April		0.056	0.21	0.00063	**0.000053**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000057	0.011	0.38	0.096	0.0000048
	May		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.43	0.11	0.0000054
	June		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	July		0.080	0.30	0.00091	**0.000075**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	August		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	September		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	October		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.11	0.0000053
	November		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.096	0.0000049
	December		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000049
	January	2040	0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000049
	February		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000049
	March		0.046	0.17	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0094	0.31	0.079	0.0000040
	April		0.041	0.15	0.00047	0.000039	0.90	1.2	0.00021	0.00077	0.00016	0.029	0.000042	0.0084	0.28	0.070	0.0000035
	May		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	June		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0096	0.31	0.080	0.0000040
	August		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	September		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	October		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	November		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	December		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	January	2041	0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	February		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	March		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	April		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000045
	May		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	June		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	July		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.49	0.13	0.0000063
	August		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	September		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	October		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	November		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	December		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	January	2042	0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	February		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	March		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	April		0.041	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.28	0.070	0.0000035
	May		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.29	0.073	0.0000037
	July		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00081	0.00017	0.030	0.000044	0.0089	0.29	0.074	0.0000037
	August		0.044	0.17	0.00050	0.000041	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	September		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	October		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.069	0.0000035
	November		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0083	0.27	0.069	0.0000034
	December		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.069	0.0000035
	January	2043	0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.069	0.0000035
	February		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.069	0.0000035
	March		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000040	0.0082	0.27	0.069	0.0000035
	April		0.037	0.14	0.00042	0.000035	0.81	1.1	0.00018	0.00069	0.00015	0.026	0.000037	0.0076	0.25	0.063	0.0000032
	May		0.038	0.15	0.00044	0.000036	0.85	1.1	0.00019	0.00072	0.00015	0.027	0.000039	0.0079	0.26	0.066	0.0000033
	June		0.041	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	July		0.045	0.17	0.00051	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	August		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000045	0.0091	0.30	0.075	0.0000038
	September		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	October		0.036	0.14	0.00041	0.000034	0.80	1.1	0.00018	0.00068	0.00014	0.026	0.000037	0.0076	0.25	0.063	0.0000032
	November		0.034	0.13	0.00039	0.000032	0.75	0.98	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	December		0.034	0.13	0.00039	0.000032	0.74	0.98	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	January	2044	0.034	0.13	0.00039	0.000032	0.74	0.98	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	February		0.034	0.13	0.00039	0.000032	0.74	0.98	0.00017	0.00064	0.00013	0.024	0.000034	0.0070	0.23	0.058	0.0000029
	March		0.034	0.13	0.00038	0.000032	0.74	0.98	0.00017	0.00063	0.00013	0.024	0.000034	0.0069	0.23	0.058	0.0000029
	April		0.033	0.13	0.00038	0.000031	0.73	0.96	0.00017	0.00062	0.00013	0.023	0.000034	0.0068	0.22	0.057	0.0000029
	May		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.070	0.0000035
	June		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	July		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	August		0.071	0.27	0.00080	**0.000067**	1.6	2.1	0.00035	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000061
	September		0.085	0.32	0.00097	**0.000080**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000086	0.018	0.58	0.15	0.0000074
	October		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000089	0.018	0.59	0.15	0.0000076
	November		0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00035	0.063	0.000091	0.018	0.61	0.15	0.0000078
	December		0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00035	0.064	0.000091	0.018	0.61	0.15	0.0000078
	January	2045	0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00036	0.064	0.000091	0.018	0.61	0.15	0.0000078
	February		0.090	0.34	0.0010	**0.000085**	2.0	2.6	0.00045	0.0017	0.00036	0.064	0.000091	0.018	0.61	0.15	0.0000078
	March		0.083	0.32	0.00095	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000072
	April		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	May		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	July		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.47	0.12	0.0000061
	August		0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.52	0.13	0.0000067
	September		0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.58	0.15	0.0000075

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.086	0.33	0.00098	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000087	0.018	0.58	0.15	0.0000075
	November		0.083	0.32	0.00095	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000072
	December		0.082	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0015	0.00033	0.058	0.000084	0.017	0.56	0.14	0.0000071
	January	2046	0.080	0.30	0.00091	**0.000075**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	February		0.080	0.30	0.00091	**0.000075**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000081	0.016	0.54	0.14	0.0000069
	March		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	April		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	May		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	June		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	July		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	August		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000050
	September		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	October		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	November		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	December		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	January	2047	0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	February		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	March		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	April		0.042	0.16	0.00047	0.000039	0.92	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.072	0.0000036
	May		0.042	0.16	0.00048	0.000039	0.92	1.2	0.00021	0.00078	0.00016	0.030	0.000042	0.0086	0.28	0.072	0.0000036
	June		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	July		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.093	0.0000047
	August		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	September		0.057	0.21	0.00065	**0.000054**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.38	0.098	0.0000049
	October		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	November		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	January	2048	0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.040	0.000058	0.012	0.39	0.098	0.0000049
	February		0.057	0.21	0.00065	**0.000054**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.39	0.098	0.0000049
	March		0.057	0.21	0.00065	**0.000054**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.38	0.098	0.0000049
	April		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	May		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	June		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	July		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	August		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	September		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0095	0.31	0.079	0.0000040
	October		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	November		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	December		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00081	0.00017	0.030	0.000044	0.0088	0.29	0.074	0.0000037
	January	2049	0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	February		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00076	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	March		0.039	0.15	0.00044	0.000037	0.85	1.1	0.00019	0.00073	0.00015	0.028	0.000039	0.0080	0.26	0.067	0.0000034
	April		0.037	0.14	0.00042	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.026	0.000038	0.0076	0.25	0.064	0.0000032
	May		0.041	0.15	0.00047	0.000039	0.90	1.2	0.00021	0.00077	0.00016	0.029	0.000042	0.0084	0.28	0.070	0.0000035
	June		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0091	0.30	0.075	0.0000038
	August		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0096	0.31	0.080	0.0000040
	September		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00083	0.00018	0.031	0.000045	0.0092	0.30	0.076	0.0000038
	October		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	November		0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.25	0.062	0.0000031
	December		0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.24	0.062	0.0000031
	January	2050	0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.24	0.062	0.0000031
	February		0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00068	0.00014	0.026	0.000037	0.0074	0.24	0.062	0.0000031
	March		0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00067	0.00014	0.025	0.000036	0.0074	0.24	0.061	0.0000031
	April		0.033	0.12	0.00037	0.000031	0.72	0.95	0.00016	0.00062	0.00013	0.023	0.000033	0.0068	0.22	0.056	0.0000028
	May		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00014	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	June		0.037	0.14	0.00043	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.027	0.000038	0.0077	0.25	0.064	0.0000032
	July		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	August		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.44	0.11	0.0000056
	September		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.42	0.11	0.0000053
	October		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000061	0.012	0.41	0.10	0.0000052
	November		0.057	0.22	0.00065	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000058	0.012	0.39	0.098	0.0000050
	December		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	February		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	March		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	April		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00074	0.00015	0.028	0.000040	0.0081	0.27	0.067	0.0000034
	May		0.039	0.15	0.00045	0.000037	0.87	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0082	0.27	0.068	0.0000034
	June		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	July		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	August		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	September		0.047	0.18	0.00054	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0098	0.32	0.081	0.0000041
	October		0.045	0.17	0.00052	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	November		0.045	0.17	0.00051	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	December		0.044	0.16	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	January	**2052**	0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.29	0.075	0.0000038
	February		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0089	0.29	0.075	0.0000038
	March		0.043	0.16	0.00049	0.000041	0.95	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0089	0.29	0.075	0.0000038
	April		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0081	0.27	0.068	0.0000034
	May		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	July		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	August		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	September		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	October		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	November		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	December		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
		MINIMUM	0.033	0.12	0.00037	0.000031	0.72	0.95	0.00016	0.00062	0.00013	0.023	0.000033	0.0068	0.22	0.056	0.0000028
		MAXIMUM	0.092	0.35	0.0011	**0.000087**	2.4	3.0	0.00047	0.0017	0.00039	0.077	0.000094	0.020	0.74	0.16	0.0000091
		AVERAGE	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.042	0.000059	0.012	0.40	0.100	0.0000051
Decommissioning	**January**	**2053**	0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	February		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	March		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	April		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	May		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	June		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00034	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.12	0.0000058
	July		0.083	0.31	0.00095	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	August		0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.060	0.000085	0.017	0.57	0.14	0.0000073
	September		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	October		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	November		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.089	0.0000045
	December		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000045
	January	**2054**	0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000045
	February		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000045
	March		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	April		0.045	0.17	0.00051	0.000043	0.99	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0092	0.31	0.078	0.0000039
	May		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	June		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	July		0.073	0.28	0.00084	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	August		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	October		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	November		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000062	0.013	0.41	0.10	0.0000053
	December		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	January	**2055**	0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	February		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	March		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	April		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	May		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	June		0.048	0.18	0.00055	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.33	0.083	0.0000042
	July		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.073	0.0000037
	August		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	September		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	October		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	November		0.050	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	December		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	February		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	March		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00018	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	April		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	May		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	June		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	July		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	August		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	October		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	November		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	December		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	January	**2057**	0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	February		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	March		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	April		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	May		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	June		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00034	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.12	0.0000058
	July		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	August		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.074	0.28	0.00085	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.053	0.000075	0.015	0.50	0.13	0.0000064
	October		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.56	0.14	0.0000071
	November		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
	December		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00041	0.0016	0.00033	0.059	0.000084	0.017	0.56	0.14	0.0000072
		MINIMUM	0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.073	0.0000037
		MAXIMUM	0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.060	0.000085	0.017	0.57	0.14	0.0000073
		AVERAGE	0.058	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.000053	0.000073	0.090	0.0075	0.0043	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000079	0.089	0.0075	0.0066	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00081
	April		0.000053	0.00019	0.077	0.0062	0.0063	0.0038	0.000043	1.2	0.025	1.4	0.0044	0.000046	0.00014	0.00099
	May		0.000057	0.00033	0.070	0.0054	0.0063	0.0034	0.000042	1.0	0.022	1.4	0.0043	0.000045	0.00014	0.0013
	June		0.000075	0.00051	0.082	0.0061	0.0080	0.0041	0.000053	1.2	0.026	1.8	0.0053	0.000055	0.00018	0.0018
	July		0.000095	0.00078	0.091	0.0064	0.0093	0.0046	0.000063	1.3	0.028	2.2	0.0063	0.000065	0.00022	0.0025
	August		0.00011	0.0010	0.100	0.0068	0.011	0.0051	0.000072	1.4	0.030	2.5	0.0072	0.000074	0.00026	0.0032
	September		0.00011	0.0010	0.090	0.0059	0.010	0.0046	0.000068	1.2	0.026	2.4	0.0068	0.000070	0.00025	0.0032
	October		0.00010	0.0010	0.081	0.0052	0.0094	0.0042	0.000063	1.1	0.023	2.2	0.0063	0.000065	0.00023	0.0031
	November		0.000096	0.00097	0.073	0.0046	0.0089	0.0038	0.000057	0.95	0.021	2.1	0.0058	0.000059	0.00021	0.0029
	December		0.000095	0.00096	0.072	0.0045	0.0093	0.0037	0.000056	0.93	0.020	2.0	0.0057	0.000058	0.00021	0.0028
	January	2026	0.000094	0.00096	0.071	0.0044	0.0097	0.0037	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	February		0.000094	0.00096	0.071	0.0044	0.010	0.0037	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	March		0.000094	0.00095	0.071	0.0044	0.011	0.0036	0.000056	0.91	0.020	2.0	0.0056	0.000057	0.00021	0.0028
	April		0.000086	0.00090	0.062	0.0038	0.0085	0.0032	0.000051	0.80	0.017	1.8	0.0051	0.000052	0.00019	0.0026
	May		0.00012	0.0012	0.085	0.0051	0.012	0.0044	0.000069	1.1	0.024	2.5	0.0070	0.000071	0.00026	0.0036
	June		0.00013	0.0013	0.089	0.0053	0.011	0.0046	0.000073	1.1	0.025	2.7	0.0074	0.000075	0.00027	0.0039
	July		0.00014	0.0015	0.099	0.0059	0.012	0.0052	0.000082	1.3	0.027	3.0	0.0082	0.000084	0.00031	0.0044
	August		0.00012	0.0013	0.086	0.0051	0.0096	0.0045	0.000071	1.1	0.024	2.6	0.0072	0.000073	0.00027	0.0038
	September		0.00012	0.0012	0.080	0.0047	0.0088	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	October		0.00011	0.0012	0.079	0.0046	0.0089	0.0041	0.000065	0.98	0.022	2.4	0.0066	0.000067	0.00025	0.0035
	November		0.00012	0.0012	0.080	0.0047	0.0097	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	December		0.00012	0.0012	0.080	0.0047	0.010	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	January	2027	0.00012	0.0012	0.080	0.0047	0.011	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	February		0.00012	0.0012	0.080	0.0047	0.012	0.0042	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	March		0.00011	0.0011	0.073	0.0042	0.010	0.0038	0.000060	0.91	0.020	2.2	0.0061	0.000062	0.00023	0.0033
	April		0.000087	0.00093	0.059	0.0035	0.0076	0.0031	0.000050	0.74	0.016	1.8	0.0050	0.000051	0.00019	0.0027
	May		0.000093	0.0010	0.064	0.0037	0.0077	0.0033	0.000053	0.79	0.017	1.9	0.0053	0.000054	0.00020	0.0029
	June		0.00011	0.0012	0.075	0.0043	0.0087	0.0039	0.000063	0.93	0.020	2.3	0.0063	0.000064	0.00024	0.0034
	July		0.00011	0.0012	0.075	0.0044	0.0078	0.0039	0.000063	0.94	0.021	2.3	0.0063	0.000064	0.00024	0.0034
	August		0.00013	0.0014	0.086	0.0050	0.0088	0.0045	0.000072	1.1	0.023	2.6	0.0072	0.000074	0.00027	0.0039
	September		0.00015	0.0017	0.10	0.0060	0.011	0.0054	0.000087	1.3	0.028	3.2	0.0088	0.000089	0.00033	0.0048
	October		0.00016	0.0017	0.11	0.0063	0.013	0.0056	0.000091	1.3	0.030	3.3	0.0091	0.000093	0.00034	0.0050
	November		0.00014	0.0015	0.094	0.0055	0.011	0.0049	0.000079	1.2	0.026	2.9	0.0079	0.000081	0.00030	0.0043
	December		0.00014	0.0015	0.093	0.0054	0.012	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	January	2028	0.00014	0.0015	0.093	0.0054	0.013	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	February		0.00014	0.0015	0.093	0.0054	0.014	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	March		0.00014	0.0015	0.093	0.0054	0.014	0.0048	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	April		0.00024	0.0013	0.081	0.0055	0.013	0.0092	0.000081	1.0	0.023	2.9	0.0083	0.0026	0.00030	0.0042
	May		0.00027	0.0012	0.065	0.0048	0.0099	0.010	0.000074	0.80	0.019	2.7	0.0076	0.0035	0.00027	0.0039
	June		0.00030	0.0014	0.077	0.0054	0.012	0.011	0.000086	0.93	0.021	3.1	0.0088	0.0038	0.00032	0.0046
	July		0.00031	0.0016	0.084	0.0056	0.012	0.011	0.000093	1.0	0.023	3.4	0.0095	0.0037	0.00035	0.0051
	August		0.00029	0.0017	0.083	0.0053	0.012	0.010	0.000091	0.98	0.022	3.3	0.0092	0.0032	0.00034	0.0051
	September		0.00028	0.0017	0.084	0.0052	0.012	0.0099	0.000092	0.98	0.022	3.4	0.0093	0.0029	0.00034	0.0052
	October		0.00030	0.0019	0.091	0.0056	0.014	0.010	0.000099	1.1	0.024	3.7	0.010	0.0030	0.00037	0.0057
	November		0.00029	0.0019	0.091	0.0055	0.014	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	December		0.00029	0.0019	0.091	0.0055	0.015	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
		MINIMUM	0.000053	0.000073	0.059	0.0035	0.0043	0.0031	0.000042	0.74	0.016	1.4	0.0043	0.000045	0.00014	0.00080
		MAXIMUM	0.00031	0.0019	0.11	0.0075	0.015	0.011	0.000099	1.4	0.030	3.7	0.010	0.0038	0.00037	0.0057
		AVERAGE	0.00014	0.0012	0.083	0.0053	0.010	0.0054	0.000069	1.1	0.023	2.5	0.0070	0.00065	0.00025	0.0035
Operations	January	2029	0.00029	0.0019	0.091	0.0055	0.016	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	February		0.00029	0.0019	0.091	0.0055	0.016	0.010	0.000099	1.1	0.024	3.7	0.010	0.0029	0.00037	0.0056
	March		0.00028	0.0018	0.088	0.0054	0.016	0.010	0.000096	1.0	0.023	3.5	0.0097	0.0028	0.00036	0.0055
	April		0.00021	0.0014	0.068	0.0040	0.012	0.0072	0.000073	0.78	0.018	2.7	0.0074	0.0019	0.00028	0.0043
	May		0.00020	0.0014	0.066	0.0038	0.011	0.0067	0.000071	0.76	0.017	2.7	0.0072	0.0017	0.00027	0.0042
	June		0.00020	0.0015	0.070	0.0039	0.011	0.0067	0.000074	0.80	0.018	2.8	0.0075	0.0016	0.00028	0.0044
	July		0.00023	0.0019	0.084	0.0046	0.013	0.0078	0.000090	0.96	0.022	3.4	0.0090	0.0018	0.00034	0.0054
	August		0.00026	0.0022	0.097	0.0052	0.015	0.0085	0.00010	1.1	0.025	3.8	0.010	0.0018	0.00039	0.0062
	September		0.00024	0.0021	0.091	0.0047	0.014	0.0077	0.000096	1.0	0.023	3.6	0.0096	0.0015	0.00037	0.0059
	October		0.00024	0.0021	0.092	0.0048	0.014	0.0076	0.000097	1.0	0.023	3.7	0.0098	0.0015	0.00037	0.0060
	November		0.00023	0.0020	0.089	0.0046	0.014	0.0073	0.000093	1.00	0.022	3.5	0.0094	0.0014	0.00036	0.0058
	December		0.00023	0.0020	0.088	0.0046	0.015	0.0072	0.000093	0.99	0.022	3.5	0.0094	0.0014	0.00036	0.0057

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.00023	0.0020	0.088	0.0046	0.016	0.0073	0.000093	0.99	0.022	3.5	0.0094	0.0014	0.00036	0.0057
	February		0.00022	0.0020	0.087	0.0045	0.016	0.0071	0.000091	0.97	0.022	3.4	0.0092	0.0013	0.00035	0.0056
	March		0.00021	0.0019	0.082	0.0042	0.015	0.0067	0.000086	0.92	0.021	3.2	0.0087	0.0012	0.00033	0.0053
	April		0.00017	0.0016	0.068	0.0034	0.012	0.0053	0.000071	0.76	0.017	2.7	0.0071	0.00090	0.00027	0.0044
	May		0.00017	0.0017	0.072	0.0036	0.012	0.0054	0.000075	0.80	0.018	2.8	0.0076	0.00088	0.00029	0.0047
	June		0.00015	0.0015	0.064	0.0031	0.0096	0.0045	0.000066	0.70	0.016	2.5	0.0067	0.00064	0.00026	0.0042
	July		0.00014	0.0014	0.060	0.0028	0.0084	0.0041	0.000062	0.66	0.015	2.4	0.0062	0.00048	0.00024	0.0040
	August		0.00015	0.0016	0.067	0.0031	0.0090	0.0044	0.000069	0.73	0.016	2.6	0.0069	0.00045	0.00027	0.0044
	September		0.00013	0.0015	0.062	0.0029	0.0082	0.0039	0.000064	0.68	0.015	2.4	0.0064	0.00036	0.00025	0.0041
	October		0.00013	0.0015	0.061	0.0028	0.0083	0.0038	0.000063	0.67	0.015	2.4	0.0063	0.00032	0.00025	0.0040
	November		0.00012	0.0014	0.056	0.0026	0.0080	0.0035	0.000058	0.61	0.014	2.2	0.0058	0.00028	0.00023	0.0037
	December		0.00012	0.0013	0.055	0.0025	0.0083	0.0034	0.000057	0.60	0.013	2.2	0.0057	0.00027	0.00022	0.0037
	January	2031	0.00011	0.0013	0.053	0.0024	0.0084	0.0033	0.000055	0.58	0.013	2.1	0.0055	0.00026	0.00021	0.0035
	February		0.00011	0.0013	0.053	0.0024	0.0088	0.0033	0.000055	0.58	0.013	2.1	0.0055	0.00026	0.00021	0.0035
	March		0.00011	0.0013	0.052	0.0024	0.0089	0.0032	0.000054	0.57	0.013	2.1	0.0054	0.00025	0.00021	0.0035
	April		0.000092	0.0011	0.044	0.0020	0.0068	0.0026	0.000045	0.48	0.011	1.7	0.0045	0.00018	0.00018	0.0029
	May		0.000094	0.0011	0.045	0.0020	0.0065	0.0027	0.000046	0.49	0.011	1.8	0.0047	0.00016	0.00018	0.0030
	June		0.00012	0.0014	0.056	0.0025	0.0081	0.0033	0.000058	0.61	0.014	2.2	0.0058	0.00018	0.00023	0.0038
	July		0.00014	0.0017	0.069	0.0031	0.0096	0.0040	0.000070	0.75	0.017	2.7	0.0071	0.00020	0.00028	0.0046
	August		0.00016	0.0019	0.079	0.0035	0.011	0.0045	0.000081	0.86	0.019	3.1	0.0081	0.00021	0.00032	0.0053
	September		0.00016	0.0019	0.077	0.0034	0.011	0.0044	0.000079	0.83	0.018	3.0	0.0079	0.00018	0.00031	0.0051
	October		0.00014	0.0017	0.072	0.0032	0.010	0.0041	0.000073	0.78	0.017	2.8	0.0073	0.00016	0.00029	0.0048
	November		0.00013	0.0016	0.067	0.0029	0.0099	0.0038	0.000068	0.72	0.016	2.6	0.0068	0.00015	0.00027	0.0045
	December		0.00013	0.0016	0.066	0.0029	0.010	0.0038	0.000068	0.72	0.016	2.6	0.0068	0.00015	0.00027	0.0044
	January	2032	0.00013	0.0016	0.066	0.0029	0.011	0.0037	0.000067	0.71	0.016	2.6	0.0067	0.00015	0.00026	0.0044
	February		0.00013	0.0016	0.066	0.0029	0.011	0.0037	0.000067	0.71	0.016	2.6	0.0067	0.00015	0.00026	0.0044
	March		0.00012	0.0014	0.057	0.0025	0.0096	0.0032	0.000058	0.62	0.014	2.2	0.0059	0.00012	0.00023	0.0038
	April		0.000093	0.0011	0.047	0.0020	0.0071	0.0026	0.000048	0.50	0.011	1.8	0.0048	0.000089	0.00019	0.0031
	May		0.000099	0.0012	0.050	0.0022	0.0074	0.0028	0.000051	0.54	0.012	1.9	0.0051	0.000089	0.00020	0.0033
	June		0.00012	0.0015	0.060	0.0026	0.0088	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.00010	0.00024	0.0040
	July		0.00012	0.0014	0.058	0.0026	0.0081	0.0032	0.000060	0.63	0.014	2.3	0.0060	0.000092	0.00023	0.0039
	August		0.00012	0.0015	0.061	0.0027	0.0082	0.0034	0.000062	0.66	0.015	2.4	0.0062	0.000090	0.00024	0.0041
	September		0.00013	0.0017	0.068	0.0030	0.0094	0.0037	0.000069	0.73	0.016	2.7	0.0069	0.000097	0.00027	0.0045
	October		0.00014	0.0017	0.070	0.0030	0.010	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000098	0.00028	0.0047
	November		0.00014	0.0017	0.068	0.0030	0.010	0.0038	0.000070	0.74	0.016	2.7	0.0070	0.000095	0.00027	0.0046
	December		0.00014	0.0017	0.068	0.0030	0.011	0.0038	0.000069	0.74	0.016	2.7	0.0070	0.000095	0.00027	0.0046
	January	2033	0.00014	0.0017	0.068	0.0030	0.011	0.0038	0.000069	0.74	0.016	2.7	0.0070	0.000095	0.00027	0.0046
	February		0.00014	0.0017	0.068	0.0030	0.012	0.0038	0.000069	0.74	0.016	2.7	0.0070	0.000095	0.00027	0.0046
	March		0.00013	0.0017	0.068	0.0030	0.012	0.0037	0.000069	0.73	0.016	2.6	0.0069	0.000094	0.00027	0.0045
	April		0.00010	0.0013	0.052	0.0023	0.0083	0.0029	0.000053	0.56	0.012	2.0	0.0053	0.000069	0.00021	0.0035
	May		0.00011	0.0013	0.054	0.0024	0.0081	0.0030	0.000055	0.59	0.013	2.1	0.0055	0.000069	0.00022	0.0036
	June		0.00012	0.0015	0.062	0.0027	0.0090	0.0034	0.000063	0.66	0.015	2.4	0.0063	0.000076	0.00025	0.0041
	July		0.00015	0.0018	0.075	0.0033	0.011	0.0041	0.000076	0.81	0.018	2.9	0.0076	0.000091	0.00030	0.0050
	August		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.2	0.0083	0.000096	0.00032	0.0054
	September		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000095	0.00032	0.0054
	October		0.00016	0.0020	0.081	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000094	0.00032	0.0054
	November		0.00014	0.0017	0.071	0.0031	0.011	0.0039	0.000072	0.77	0.017	2.8	0.0072	0.000082	0.00028	0.0048
	December		0.00014	0.0017	0.070	0.0031	0.011	0.0038	0.000072	0.76	0.017	2.7	0.0072	0.000081	0.00028	0.0047
	January	2034	0.00014	0.0017	0.070	0.0031	0.012	0.0038	0.000072	0.76	0.017	2.7	0.0072	0.000081	0.00028	0.0047
	February		0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000081	0.00028	0.0047
	March		0.00013	0.0016	0.065	0.0028	0.011	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000075	0.00026	0.0044
	April		0.00011	0.0013	0.053	0.0023	0.0087	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000060	0.00021	0.0036
	May		0.00011	0.0013	0.054	0.0023	0.0084	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000060	0.00022	0.0036
	June		0.000090	0.0011	0.046	0.0020	0.0060	0.0025	0.000046	0.49	0.011	1.8	0.0047	0.000050	0.00018	0.0031
	July		0.000085	0.0011	0.043	0.0019	0.0049	0.0023	0.000044	0.47	0.010	1.7	0.0044	0.000046	0.00017	0.0029
	August		0.000094	0.0012	0.048	0.0021	0.0054	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000050	0.00019	0.0032
	September		0.000094	0.0012	0.048	0.0021	0.0054	0.0026	0.000049	0.51	0.011	1.9	0.0049	0.000050	0.00019	0.0032
	October		0.00010	0.0013	0.052	0.0023	0.0064	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000055	0.00021	0.0035
	November		0.00010	0.0013	0.051	0.0022	0.0068	0.0028	0.000052	0.56	0.012	2.0	0.0052	0.000054	0.00021	0.0034
	December		0.000097	0.0012	0.049	0.0021	0.0070	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000052	0.00020	0.0033
	January	2035	0.000097	0.0012	0.049	0.0021	0.0074	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	February		0.000095	0.0012	0.048	0.0021	0.0076	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000050	0.00019	0.0032
	March		0.000095	0.0012	0.048	0.0021	0.0080	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000050	0.00019	0.0032

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.000087	0.0011	0.044	0.0019	0.0071	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	May		0.000083	0.0010	0.042	0.0018	0.0061	0.0023	0.000043	0.46	0.010	1.7	0.0043	0.000044	0.00017	0.0028
	June		0.000091	0.0011	0.046	0.0020	0.0063	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	July		0.00010	0.0013	0.052	0.0023	0.0068	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000054	0.00021	0.0035
	August		0.00012	0.0015	0.062	0.0027	0.0080	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0041
	September		0.00013	0.0016	0.066	0.0029	0.0087	0.0036	0.000067	0.71	0.016	2.6	0.0067	0.000068	0.00026	0.0044
	October		0.00013	0.0016	0.064	0.0028	0.0088	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	November		0.00012	0.0016	0.063	0.0028	0.0092	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	December		0.00012	0.0016	0.063	0.0028	0.0098	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	January	2036	0.00012	0.0016	0.063	0.0028	0.010	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	February		0.00012	0.0016	0.063	0.0028	0.011	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	March		0.00012	0.0015	0.061	0.0026	0.011	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00024	0.0041
	April		0.000091	0.0011	0.047	0.0020	0.0072	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	May		0.000091	0.0011	0.046	0.0020	0.0067	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	June		0.00011	0.0014	0.058	0.0025	0.0082	0.0031	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	July		0.00013	0.0016	0.064	0.0028	0.0088	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	August		0.00017	0.0021	0.085	0.0037	0.012	0.0046	0.000086	0.92	0.020	3.3	0.0086	0.000087	0.00034	0.0057
	September		0.00018	0.0023	0.092	0.0040	0.013	0.0050	0.000094	1.00	0.022	3.6	0.0094	0.000095	0.00037	0.0062
	October		0.00017	0.0021	0.086	0.0037	0.013	0.0047	0.000088	0.93	0.021	3.4	0.0088	0.000088	0.00034	0.0058
	November		0.00016	0.0020	0.081	0.0035	0.013	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0055
	December		0.00016	0.0020	0.081	0.0035	0.013	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0055
	January	2037	0.00016	0.0020	0.081	0.0035	0.014	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00033	0.0055
	February		0.00015	0.0019	0.076	0.0033	0.013	0.0041	0.000078	0.82	0.018	3.0	0.0078	0.000078	0.00031	0.0051
	March		0.00014	0.0018	0.074	0.0032	0.013	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	April		0.00011	0.0014	0.056	0.0025	0.0090	0.0031	0.000057	0.61	0.013	2.2	0.0058	0.000058	0.00023	0.0038
	May		0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000066	0.69	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00012	0.0015	0.060	0.0026	0.0089	0.0033	0.000061	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0040
	July		0.00011	0.0014	0.056	0.0025	0.0076	0.0031	0.000057	0.61	0.013	2.2	0.0058	0.000058	0.00023	0.0038
	August		0.00014	0.0018	0.071	0.0031	0.0096	0.0039	0.000073	0.77	0.017	2.8	0.0073	0.000073	0.00029	0.0048
	September		0.00013	0.0017	0.068	0.0030	0.0091	0.0037	0.000069	0.74	0.016	2.7	0.0069	0.000070	0.00027	0.0046
	October		0.00014	0.0017	0.071	0.0031	0.0099	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000072	0.00028	0.0047
	November		0.00014	0.0017	0.070	0.0031	0.011	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000072	0.00028	0.0047
	December		0.00014	0.0017	0.070	0.0030	0.011	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	January	2038	0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.76	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	February		0.00014	0.0017	0.070	0.0030	0.012	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	March		0.00011	0.0014	0.058	0.0025	0.0096	0.0032	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	April		0.000092	0.0011	0.047	0.0020	0.0071	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	May		0.00010	0.0012	0.051	0.0022	0.0076	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	June		0.00012	0.0015	0.060	0.0026	0.0088	0.0032	0.000061	0.64	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	July		0.00014	0.0017	0.069	0.0030	0.0099	0.0037	0.000070	0.74	0.016	2.7	0.0070	0.000070	0.00028	0.0046
	August		0.00016	0.0020	0.082	0.0035	0.012	0.0044	0.000083	0.88	0.019	3.2	0.0083	0.000084	0.00033	0.0055
	September		0.00016	0.0020	0.080	0.0035	0.012	0.0044	0.000082	0.87	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	October		0.00013	0.0016	0.067	0.0029	0.0095	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	November		0.00013	0.0016	0.064	0.0028	0.0095	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	December		0.00013	0.0016	0.064	0.0028	0.010	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	January	2039	0.00013	0.0016	0.064	0.0028	0.011	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	February		0.00011	0.0014	0.057	0.0025	0.0094	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000059	0.00023	0.0038
	March		0.00011	0.0013	0.055	0.0024	0.0091	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	April		0.00011	0.0014	0.056	0.0024	0.0093	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	May		0.00012	0.0015	0.063	0.0027	0.010	0.0034	0.000064	0.68	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	June		0.00016	0.0020	0.080	0.0035	0.013	0.0043	0.000081	0.86	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	July		0.00016	0.0020	0.080	0.0035	0.012	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000082	0.00032	0.0053
	August		0.00012	0.0015	0.063	0.0027	0.0088	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	September		0.00013	0.0016	0.065	0.0028	0.0091	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	October		0.00012	0.0015	0.061	0.0026	0.0087	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000062	0.00024	0.0041
	November		0.00011	0.0014	0.056	0.0024	0.0082	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0038
	December		0.00011	0.0014	0.056	0.0024	0.0087	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	January	2040	0.00011	0.0014	0.056	0.0024	0.0092	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	February		0.00011	0.0014	0.056	0.0024	0.0096	0.0030	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	March		0.000091	0.0011	0.046	0.0020	0.0073	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	April		0.000080	0.0010	0.041	0.0018	0.0061	0.0022	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00016	0.0027
	May		0.000083	0.0010	0.042	0.0018	0.0059	0.0023	0.000043	0.46	0.010	1.7	0.0043	0.000043	0.00017	0.0028
	June		0.000089	0.0011	0.045	0.0020	0.0058	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.000091	0.0011	0.046	0.0020	0.0055	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	August		0.00013	0.0016	0.065	0.0028	0.0082	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	September		0.00014	0.0017	0.069	0.0030	0.0090	0.0037	0.000070	0.74	0.016	2.7	0.0070	0.000071	0.00028	0.0046
	October		0.00013	0.0016	0.064	0.0028	0.0085	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	November		0.00013	0.0016	0.065	0.0028	0.0092	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	December		0.00013	0.0016	0.065	0.0028	0.0098	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	January	2041	0.00013	0.0016	0.065	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	February		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	March		0.00012	0.0015	0.062	0.0027	0.011	0.0034	0.000063	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	April		0.00010	0.0013	0.051	0.0022	0.0082	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	May		0.00011	0.0013	0.054	0.0023	0.0082	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	June		0.00013	0.0017	0.069	0.0030	0.010	0.0037	0.000070	0.74	0.016	2.7	0.0070	0.000070	0.00027	0.0046
	July		0.00014	0.0018	0.073	0.0032	0.010	0.0039	0.000074	0.78	0.017	2.8	0.0074	0.000074	0.00029	0.0049
	August		0.000097	0.0012	0.049	0.0021	0.0060	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	September		0.000092	0.0011	0.047	0.0020	0.0056	0.0025	0.000048	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	October		0.000096	0.0012	0.049	0.0021	0.0062	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000094	0.0012	0.048	0.0021	0.0064	0.0026	0.000048	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	December		0.000094	0.0012	0.048	0.0021	0.0070	0.0026	0.000048	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	January	2042	0.000094	0.0012	0.048	0.0021	0.0074	0.0026	0.000048	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	February		0.000094	0.0012	0.048	0.0021	0.0078	0.0026	0.000048	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	March		0.000092	0.0011	0.047	0.0020	0.0078	0.0025	0.000047	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	April		0.000080	0.00099	0.041	0.0018	0.0063	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	May		0.000081	0.0010	0.041	0.0018	0.0060	0.0022	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00017	0.0028
	June		0.000083	0.0010	0.042	0.0018	0.0056	0.0023	0.000043	0.45	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	July		0.000084	0.0010	0.043	0.0019	0.0050	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	August		0.000086	0.0011	0.044	0.0019	0.0049	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	September		0.000089	0.0011	0.045	0.0020	0.0051	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	October		0.000079	0.00099	0.040	0.0017	0.0045	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	November		0.000078	0.00097	0.040	0.0017	0.0049	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	December		0.000078	0.00097	0.040	0.0017	0.0054	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	January	2043	0.000078	0.00097	0.040	0.0017	0.0059	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	February		0.000078	0.00097	0.040	0.0017	0.0062	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	March		0.000078	0.00097	0.040	0.0017	0.0066	0.0022	0.000040	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	April		0.000072	0.00090	0.037	0.0016	0.0057	0.0020	0.000037	0.40	0.0088	1.4	0.0037	0.000038	0.00015	0.0025
	May		0.000075	0.00094	0.038	0.0017	0.0053	0.0021	0.000039	0.41	0.0092	1.5	0.0039	0.000039	0.00015	0.0026
	June		0.000080	0.00099	0.041	0.0018	0.0052	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	July		0.000089	0.0011	0.045	0.0020	0.0054	0.0024	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	August		0.000086	0.0011	0.044	0.0019	0.0049	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	September		0.000079	0.00098	0.040	0.0017	0.0043	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	October		0.000071	0.00089	0.036	0.0016	0.0039	0.0020	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	November		0.000067	0.00083	0.034	0.0015	0.0039	0.0018	0.000034	0.37	0.0081	1.3	0.0034	0.000035	0.00014	0.0023
	December		0.000066	0.00083	0.034	0.0015	0.0043	0.0018	0.000034	0.36	0.0081	1.3	0.0034	0.000035	0.00014	0.0023
	January	2044	0.000066	0.00083	0.034	0.0015	0.0047	0.0018	0.000034	0.36	0.0081	1.3	0.0034	0.000035	0.00014	0.0023
	February		0.000066	0.00083	0.034	0.0015	0.0051	0.0018	0.000034	0.36	0.0081	1.3	0.0034	0.000035	0.00014	0.0023
	March		0.000066	0.00082	0.034	0.0015	0.0053	0.0018	0.000034	0.36	0.0080	1.3	0.0034	0.000034	0.00013	0.0023
	April		0.000065	0.00081	0.033	0.0014	0.0046	0.0018	0.000034	0.36	0.0079	1.3	0.0034	0.000034	0.00013	0.0022
	May		0.000079	0.00099	0.040	0.0018	0.0055	0.0022	0.000041	0.44	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	June		0.000099	0.0012	0.051	0.0022	0.0069	0.0027	0.000051	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	July		0.00010	0.0013	0.053	0.0023	0.0068	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	August		0.00014	0.0017	0.071	0.0031	0.0092	0.0038	0.000072	0.76	0.017	2.8	0.0072	0.000072	0.00028	0.0047
	September		0.00017	0.0021	0.085	0.0037	0.011	0.0046	0.000086	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	October		0.00017	0.0021	0.087	0.0038	0.012	0.0047	0.000089	0.94	0.021	3.4	0.0089	0.000089	0.00035	0.0058
	November		0.00018	0.0022	0.089	0.0039	0.013	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	December		0.00018	0.0022	0.090	0.0039	0.014	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	January	2045	0.00018	0.0022	0.090	0.0039	0.015	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	February		0.00018	0.0022	0.090	0.0039	0.015	0.0049	0.000091	0.97	0.021	3.5	0.0091	0.000092	0.00036	0.0060
	March		0.00016	0.0020	0.083	0.0036	0.015	0.0045	0.000085	0.90	0.020	3.3	0.0085	0.000085	0.00033	0.0056
	April		0.00013	0.0017	0.068	0.0030	0.011	0.0037	0.000069	0.73	0.016	2.7	0.0069	0.000070	0.00027	0.0046
	May		0.00013	0.0016	0.065	0.0028	0.010	0.0035	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00013	0.0016	0.067	0.0029	0.010	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	July		0.00014	0.0017	0.070	0.0030	0.010	0.0038	0.000071	0.75	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	August		0.00015	0.0019	0.077	0.0034	0.011	0.0042	0.000079	0.83	0.018	3.0	0.0079	0.000079	0.00031	0.0052
	September		0.00017	0.0021	0.086	0.0037	0.012	0.0047	0.000088	0.93	0.021	3.4	0.0088	0.000088	0.00034	0.0058

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.00017	0.0021	0.086	0.0037	0.013	0.0047	0.000087	0.93	0.021	3.4	0.0088	0.000088	0.00034	0.0058
	November		0.00016	0.0020	0.083	0.0036	0.013	0.0045	0.000085	0.90	0.020	3.3	0.0085	0.000085	0.00033	0.0056
	December		0.00016	0.0020	0.082	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000084	0.00033	0.0055
	January	2046	0.00016	0.0020	0.080	0.0035	0.013	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000082	0.00032	0.0053
	February		0.00016	0.0020	0.080	0.0035	0.014	0.0043	0.000081	0.86	0.019	3.1	0.0081	0.000082	0.00032	0.0053
	March		0.00014	0.0018	0.073	0.0032	0.013	0.0040	0.000074	0.79	0.017	2.8	0.0074	0.000075	0.00029	0.0049
	April		0.00012	0.0015	0.063	0.0027	0.011	0.0034	0.000064	0.68	0.015	2.5	0.0064	0.000065	0.00025	0.0042
	May		0.00012	0.0016	0.063	0.0028	0.010	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	June		0.00012	0.0016	0.063	0.0028	0.0100	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	July		0.00012	0.0015	0.061	0.0026	0.0087	0.0033	0.000062	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	August		0.00011	0.0014	0.058	0.0025	0.0078	0.0032	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	September		0.00010	0.0013	0.053	0.0023	0.0069	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	October		0.000096	0.0012	0.049	0.0021	0.0064	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000092	0.0011	0.047	0.0020	0.0064	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	December		0.000092	0.0011	0.047	0.0020	0.0068	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	January	2047	0.000092	0.0011	0.047	0.0020	0.0073	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	February		0.000092	0.0011	0.047	0.0020	0.0077	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	March		0.000090	0.0011	0.046	0.0020	0.0076	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	April		0.000082	0.0010	0.042	0.0018	0.0066	0.0023	0.000042	0.45	0.0099	1.6	0.0042	0.000043	0.00017	0.0028
	May		0.000082	0.0010	0.042	0.0018	0.0060	0.0023	0.000042	0.45	0.0099	1.6	0.0042	0.000043	0.00017	0.0028
	June		0.00010	0.0013	0.051	0.0022	0.0072	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00021	0.0034
	July		0.00011	0.0013	0.054	0.0023	0.0069	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	August		0.00010	0.0013	0.053	0.0023	0.0065	0.0029	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	September		0.00011	0.0014	0.057	0.0025	0.0070	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	October		0.00012	0.0015	0.060	0.0026	0.0078	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	November		0.00011	0.0014	0.058	0.0025	0.0081	0.0032	0.000059	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
	December		0.00011	0.0014	0.058	0.0025	0.0086	0.0031	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	January	2048	0.00011	0.0014	0.057	0.0025	0.0090	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	February		0.00011	0.0014	0.057	0.0025	0.0093	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	March		0.00011	0.0014	0.057	0.0025	0.0097	0.0031	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	April		0.00010	0.0013	0.053	0.0023	0.0090	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	May		0.00010	0.0013	0.053	0.0023	0.0087	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	June		0.00013	0.0016	0.065	0.0028	0.011	0.0035	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	July		0.00011	0.0014	0.058	0.0025	0.0082	0.0031	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	August		0.000093	0.0012	0.047	0.0021	0.0059	0.0026	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	September		0.000090	0.0011	0.046	0.0020	0.0054	0.0025	0.000046	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	October		0.000086	0.0011	0.044	0.0019	0.0055	0.0024	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	November		0.000086	0.0011	0.044	0.0019	0.0059	0.0024	0.000044	0.47	0.010	1.7	0.0045	0.000045	0.00017	0.0029
	December		0.000084	0.0010	0.043	0.0019	0.0062	0.0023	0.000044	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	January	2049	0.000080	0.00100	0.041	0.0018	0.0060	0.0022	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	February		0.000079	0.00098	0.040	0.0017	0.0063	0.0022	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	March		0.000076	0.00095	0.039	0.0017	0.0061	0.0021	0.000039	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	April		0.000073	0.00091	0.037	0.0016	0.0056	0.0020	0.000038	0.40	0.0089	1.4	0.0038	0.000038	0.00015	0.0025
	May		0.000080	0.0010	0.041	0.0018	0.0059	0.0022	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00016	0.0027
	June		0.000087	0.0011	0.044	0.0019	0.0060	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	July		0.000086	0.0011	0.044	0.0019	0.0052	0.0024	0.000044	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	August		0.000091	0.0011	0.046	0.0020	0.0053	0.0025	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00019	0.0031
	September		0.000087	0.0011	0.044	0.0019	0.0049	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	October		0.000078	0.00097	0.040	0.0017	0.0044	0.0022	0.000041	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	November		0.000071	0.00088	0.036	0.0016	0.0042	0.0020	0.000037	0.39	0.0086	1.4	0.0037	0.000037	0.00014	0.0024
	December		0.000071	0.00088	0.036	0.0016	0.0047	0.0020	0.000037	0.39	0.0086	1.4	0.0037	0.000037	0.00014	0.0024
	January	2050	0.000071	0.00088	0.036	0.0016	0.0051	0.0020	0.000037	0.39	0.0086	1.4	0.0037	0.000037	0.00014	0.0024
	February		0.000071	0.00088	0.036	0.0016	0.0055	0.0020	0.000037	0.39	0.0086	1.4	0.0037	0.000037	0.00014	0.0024
	March		0.000070	0.00087	0.036	0.0015	0.0057	0.0019	0.000036	0.39	0.0085	1.4	0.0036	0.000037	0.00014	0.0024
	April		0.000064	0.00080	0.033	0.0014	0.0046	0.0018	0.000033	0.35	0.0078	1.3	0.0033	0.000034	0.00013	0.0022
	May		0.000067	0.00084	0.034	0.0015	0.0047	0.0019	0.000035	0.37	0.0082	1.3	0.0035	0.000035	0.00014	0.0023
	June		0.000074	0.00092	0.037	0.0016	0.0048	0.0020	0.000038	0.40	0.0089	1.5	0.0038	0.000038	0.00015	0.0025
	July		0.00010	0.0013	0.053	0.0023	0.0070	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	August		0.00013	0.0016	0.064	0.0028	0.0084	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	September		0.00012	0.0015	0.061	0.0027	0.0080	0.0033	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00025	0.0041
	October		0.00012	0.0015	0.060	0.0026	0.0081	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000062	0.00024	0.0040
	November		0.00011	0.0014	0.057	0.0025	0.0081	0.0031	0.000058	0.62	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	December		0.00011	0.0014	0.056	0.0024	0.0085	0.0031	0.000057	0.61	0.013	2.2	0.0057	0.000058	0.00023	0.0038

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.00011	0.0014	0.056	0.0024	0.0090	0.0031	0.000057	0.61	0.013	2.2	0.0057	0.000058	0.00023	0.0038
	February		0.00011	0.0014	0.056	0.0024	0.0094	0.0031	0.000057	0.61	0.013	2.2	0.0057	0.000058	0.00023	0.0038
	March		0.00011	0.0013	0.054	0.0024	0.0092	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	April		0.000077	0.00096	0.039	0.0017	0.0053	0.0021	0.000040	0.42	0.0093	1.5	0.0040	0.000040	0.00016	0.0026
	May		0.000077	0.00097	0.039	0.0017	0.0050	0.0021	0.000040	0.43	0.0094	1.5	0.0040	0.000040	0.00016	0.0026
	June		0.000092	0.0012	0.047	0.0020	0.0060	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	July		0.000100	0.0012	0.051	0.0022	0.0062	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	August		0.000092	0.0011	0.047	0.0020	0.0054	0.0025	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	September		0.000092	0.0012	0.047	0.0020	0.0054	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	October		0.000089	0.0011	0.045	0.0020	0.0054	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	November		0.000089	0.0011	0.045	0.0020	0.0058	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	December		0.000086	0.0011	0.044	0.0019	0.0060	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	January	2052	0.000085	0.0011	0.043	0.0019	0.0064	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	February		0.000085	0.0011	0.043	0.0019	0.0068	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	March		0.000085	0.0011	0.043	0.0019	0.0071	0.0024	0.000044	0.47	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	April		0.000077	0.00096	0.039	0.0017	0.0058	0.0021	0.000040	0.42	0.0094	1.5	0.0040	0.000040	0.00016	0.0026
	May		0.000081	0.0010	0.041	0.0018	0.0056	0.0022	0.000042	0.45	0.0098	1.6	0.0042	0.000042	0.00017	0.0028
	June		0.000096	0.0012	0.049	0.0021	0.0065	0.0026	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00019	0.0033
	July		0.000099	0.0012	0.050	0.0022	0.0062	0.0027	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	August		0.00010	0.0013	0.052	0.0023	0.0062	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	September		0.00012	0.0015	0.060	0.0026	0.0075	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	October		0.00012	0.0015	0.062	0.0027	0.0082	0.0034	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	November		0.00012	0.0015	0.062	0.0027	0.0089	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	December		0.00012	0.0015	0.062	0.0027	0.0095	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
		MINIMUM	0.000064	0.00080	0.033	0.0014	0.0039	0.0018	0.000033	0.35	0.0078	1.3	0.0033	0.000034	0.00013	0.0022
		MAXIMUM	0.00029	0.0023	0.097	0.0055	0.016	0.010	0.00010	1.1	0.025	3.8	0.010	0.0029	0.00039	0.0062
		AVERAGE	0.00012	0.0014	0.058	0.0026	0.0087	0.0034	0.000060	0.63	0.014	2.3	0.0060	0.00017	0.00023	0.0039
	January	2053	0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	February		0.00012	0.0015	0.062	0.0027	0.010	0.0034	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	March		0.00012	0.0015	0.060	0.0026	0.010	0.0032	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	April		0.000093	0.0012	0.047	0.0021	0.0073	0.0026	0.000048	0.51	0.011	1.8	0.0048	0.000049	0.00019	0.0032
	May		0.000098	0.0012	0.050	0.0022	0.0073	0.0027	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	June		0.00013	0.0016	0.067	0.0029	0.0100	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	July		0.00016	0.0020	0.083	0.0036	0.012	0.0045	0.000084	0.90	0.020	3.2	0.0085	0.000085	0.00033	0.0056
	August		0.00016	0.0021	0.084	0.0036	0.012	0.0046	0.000085	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0056
	September		0.00012	0.0015	0.061	0.0026	0.0081	0.0033	0.000062	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	October		0.00011	0.0013	0.054	0.0023	0.0072	0.0029	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	November		0.00010	0.0013	0.051	0.0022	0.0071	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	December		0.00010	0.0013	0.051	0.0022	0.0077	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
Decommissioning	January	2054	0.00010	0.0013	0.051	0.0022	0.0081	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	February		0.00010	0.0013	0.051	0.0022	0.0085	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	March		0.000099	0.0012	0.051	0.0022	0.0086	0.0027	0.000051	0.55	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	April		0.000088	0.0011	0.045	0.0020	0.0073	0.0024	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	May		0.000087	0.0011	0.044	0.0019	0.0065	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	June		0.00012	0.0015	0.060	0.0026	0.0088	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	July		0.00014	0.0018	0.073	0.0032	0.010	0.0040	0.000075	0.79	0.018	2.9	0.0075	0.000075	0.00029	0.0049
	August		0.00013	0.0016	0.064	0.0028	0.0084	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	September		0.00013	0.0016	0.064	0.0028	0.0085	0.0035	0.000065	0.69	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	October		0.00013	0.0016	0.065	0.0028	0.0089	0.0035	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	November		0.00012	0.0015	0.061	0.0026	0.0086	0.0033	0.000062	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	December		0.00012	0.0015	0.060	0.0026	0.0091	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	January	2055	0.00012	0.0015	0.060	0.0026	0.0096	0.0033	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	February		0.00012	0.0015	0.060	0.0026	0.010	0.0032	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	March		0.00012	0.0015	0.060	0.0026	0.010	0.0032	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	April		0.000096	0.0012	0.049	0.0021	0.0078	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	May		0.000089	0.0011	0.045	0.0020	0.0066	0.0025	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	June		0.000094	0.0012	0.048	0.0021	0.0067	0.0026	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	July		0.000083	0.0010	0.042	0.0018	0.0049	0.0023	0.000043	0.46	0.010	1.7	0.0043	0.000043	0.00017	0.0028
	August		0.000096	0.0012	0.049	0.0021	0.0057	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	September		0.00010	0.0013	0.053	0.0023	0.0063	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	October		0.00010	0.0013	0.052	0.0022	0.0065	0.0028	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	November		0.000097	0.0012	0.050	0.0021	0.0066	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	December		0.000097	0.0012	0.049	0.0021	0.0072	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033

Table G-14: Scenario 13: Low Treatment Efficiency - West Surface Runoff Discl

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	**January**	**2056**	0.000097	0.0012	0.049	0.0021	0.0076	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	February		0.000097	0.0012	0.049	0.0021	0.0081	0.0027	0.000050	0.53	0.012	1.9	0.0050	0.000051	0.00020	0.0033
	March		0.000087	0.0011	0.044	0.0019	0.0069	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	April		0.000087	0.0011	0.044	0.0019	0.0068	0.0024	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	May		0.000099	0.0012	0.050	0.0022	0.0076	0.0027	0.000051	0.55	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	June		0.00012	0.0015	0.059	0.0026	0.0088	0.0032	0.000060	0.64	0.014	2.3	0.0060	0.000061	0.00024	0.0040
	July		0.00013	0.0016	0.064	0.0028	0.0088	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00025	0.0043
	August		0.00013	0.0016	0.064	0.0028	0.0085	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	September		0.00010	0.0012	0.051	0.0022	0.0063	0.0028	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	October		0.00010	0.0013	0.053	0.0023	0.0068	0.0029	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	November		0.00011	0.0013	0.055	0.0024	0.0076	0.0030	0.000055	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	December		0.00011	0.0013	0.055	0.0024	0.0082	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	January	**2057**	0.00011	0.0013	0.055	0.0024	0.0087	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	February		0.00011	0.0013	0.055	0.0024	0.0091	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	March		0.00011	0.0013	0.055	0.0024	0.0095	0.0030	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	April		0.000090	0.0011	0.046	0.0020	0.0073	0.0025	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	May		0.00011	0.0013	0.053	0.0023	0.0085	0.0029	0.000054	0.58	0.013	2.1	0.0055	0.000055	0.00021	0.0036
	June		0.00013	0.0016	0.067	0.0029	0.011	0.0036	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	July		0.00013	0.0016	0.064	0.0028	0.0093	0.0035	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	August		0.00012	0.0016	0.063	0.0028	0.0087	0.0034	0.000065	0.68	0.015	2.5	0.0065	0.000065	0.00025	0.0042
	September		0.00015	0.0018	0.074	0.0032	0.010	0.0040	0.000075	0.80	0.018	2.9	0.0076	0.000076	0.00030	0.0050
	October		0.00016	0.0020	0.082	0.0036	0.012	0.0044	0.000083	0.88	0.020	3.2	0.0083	0.000084	0.00033	0.0055
	November		0.00016	0.0020	0.083	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
	December		0.00016	0.0020	0.083	0.0036	0.013	0.0045	0.000084	0.89	0.020	3.2	0.0084	0.000085	0.00033	0.0055
		MINIMUM	0.000083	0.0010	0.042	0.0018	0.0049	0.0023	0.000043	0.46	0.010	1.7	0.0043	0.000043	0.00017	0.0028
		MAXIMUM	0.00016	0.0021	0.084	0.0036	0.013	0.0046	0.000085	0.91	0.020	3.3	0.0086	0.000086	0.00034	0.0056
		AVERAGE	0.00011	0.0014	0.058	0.0025	0.0085	0.0031	0.000059	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0039

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	**January**	**2025**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2026**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2027**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2028**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	**January**	**2029**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2031	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2032	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2033	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2034	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2036	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2037	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2038	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2039	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2041	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2042	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2043	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2044	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2046	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2047	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2048	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2049	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2050	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2052**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Decommissioning	**January**	**2053**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2054**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2055**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2057**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Reclamation	**January**	**2058**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0067	0.025	0.000076	0.0000064	0.12	0.19	0.000032	0.00013	0.000026	0.0040	0.0000064	0.0013	0.034	0.011	0.00000057
	April		0.023	0.085	0.00026	0.000021	0.51	0.66	0.00011	0.00042	0.000089	0.016	0.000023	0.0048	0.16	0.039	0.0000020
	May		0.036	0.14	0.00041	0.000034	0.62	1.0	0.00017	0.00068	0.00014	0.021	0.000035	0.0070	0.18	0.062	0.0000031
	June		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.049	0.0000083	0.000033	0.0000066	0.0010	0.0000017	0.00033	0.0089	0.0030	0.00000015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2059**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000033	0.00013	0.000027	0.0041	0.0000067	0.0013	0.035	0.012	0.00000059
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00074	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000033
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	**2060**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	April		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000013	0.0021	0.0000033	0.00067	0.018	0.0059	0.0000003
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.023	0.087	0.00026	0.000022	0.39	0.65	0.00011	0.00043	0.000088	0.014	0.000022	0.0044	0.12	0.039	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.0087	0.033	0.000099	0.0000082	0.15	0.25	0.000042	0.00016	0.000033	0.0052	0.0000083	0.0017	0.044	0.015	0.00000074
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	November		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	February		0.0037	0.014	0.000042	0.0000035	0.064	0.11	0.000018	0.000070	0.000014	0.0022	0.0000036	0.00072	0.019	0.0063	0.00000032
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.016	0.060	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.0094	0.000015	0.0031	0.081	0.027	0.0000014
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000080	0.00032	0.000064	0.0100	0.000016	0.0032	0.086	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.74	0.00012	0.00049	0.000099	0.015	0.000025	0.0050	0.13	0.044	0.0000022
	July		0.021	0.080	0.00024	0.000020	0.36	0.60	0.00010	0.00040	0.000081	0.013	0.000020	0.0041	0.11	0.036	0.0000018
	August		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.015	0.057	0.00017	0.000014	0.26	0.43	0.000072	0.00029	0.000058	0.0090	0.000015	0.0029	0.077	0.026	0.0000013
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000094	0.17	0.28	0.000048	0.00019	0.000038	0.0059	0.0000096	0.0019	0.051	0.017	0.00000085
	April		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	May		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00024	0.00095	0.00019	0.030	0.000048	0.0097	0.26	0.086	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	November		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	February		0.015	0.056	0.00017	0.000014	0.26	0.42	0.000071	0.00028	0.000057	0.0088	0.000014	0.0029	0.076	0.025	0.0000013
	March		0.022	0.083	0.00025	0.000021	0.37	0.62	0.00010	0.00041	0.000083	0.013	0.000021	0.0042	0.11	0.037	0.0000019

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.86	0.00014	0.00057	0.00012	0.018	0.000029	0.0058	0.15	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	August	**2066**	0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.69	0.00012	0.00046	0.000093	0.014	0.000023	0.0047	0.12	0.041	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reclamation	**February**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.028	0.11	0.00032	0.000026	0.48	0.79	0.00013	0.00053	0.00011	0.016	0.000027	0.0054	0.14	0.047	0.0000024
	May		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	June		0.033	0.12	0.00037	0.000031	0.57	0.94	0.00016	0.00062	0.00013	0.020	0.000032	0.0064	0.17	0.056	0.0000028
	July	**2067**	0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.028	0.000045	0.0091	0.24	0.080	0.0000040
	September		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	November		0.0048	0.018	0.000054	0.0000045	0.082	0.14	0.000023	0.000090	0.000018	0.0028	0.0000046	0.00092	0.024	0.0081	0.00000041
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.001684	0.006358	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
		MAXIMUM	0.05220	0.19710	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
		AVERAGE	0.02747	0.10371	0.00031	0.000026	0.47	0.78	0.00013	0.00052	0.00010	0.016	0.000026	0.0053	0.14	0.047	0.0000023

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Construction	January	2025	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2026	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2027	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2028	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	January	2029	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2031	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2032	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2033	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2034	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2036	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2037	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2038	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2039	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2041	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2042	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2043	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2044	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2046	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2047	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2048	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2049	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2050	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2052	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Decommissioning	January	2053	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2054	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2055	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2057	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.0043	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000013	0.00017	0.0059	0.00022	0.00032	0.00033	0.0000064	0.060	0.0013	0.25	0.00064	0.0000065	0.000026	0.00045
	April		0.000044	0.00055	0.023	0.0010	0.0012	0.0012	0.000023	0.25	0.0055	0.88	0.0023	0.000023	0.000091	0.0015
	May		0.000069	0.00089	0.032	0.0012	0.0017	0.0018	0.000035	0.32	0.0072	1.3	0.0035	0.000035	0.00014	0.0024
	June		0.000089	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.7	0.0045	0.000045	0.00018	0.0031
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	September		0.000056	0.00073	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0059	1.1	0.0028	0.000028	0.00011	0.0020
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	November		0.0000033	0.000043	0.0015	0.000058	0.000084	0.000084	0.0000017	0.016	0.00034	0.065	0.00017	0.0000017	0.0000066	0.00012
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000013	0.00017	0.0061	0.00023	0.00034	0.00034	0.0000067	0.062	0.0014	0.26	0.00067	0.0000067	0.000027	0.00046
	May		0.000075	0.00096	0.034	0.0013	0.0019	0.0019	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	April		0.000040	0.00051	0.018	0.00069	0.0010	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000080	0.0014
	May		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000075	0.00097	0.035	0.0013	0.0019	0.0019	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	August		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	September		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	November		0.0000066	0.000085	0.0031	0.00012	0.00017	0.00017	0.0000033	0.031	0.00069	0.13	0.00033	0.0000033	0.000013	0.00023
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000044	0.00056	0.020	0.00076	0.0011	0.0011	0.000022	0.20	0.0045	0.86	0.0022	0.000022	0.000088	0.0015
	June		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	July		0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000067	0.00087	0.031	0.0012	0.0017	0.0017	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00013	0.0023
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.00025	0.0000050	0.047	0.0010	0.19	0.00050	0.0000050	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.00041	0.0000081	0.075	0.0017	0.31	0.00081	0.0000081	0.000032	0.00056
	April		0.000017	0.00021	0.0076	0.00029	0.00042	0.00042	0.0000083	0.078	0.0017	0.32	0.00083	0.0000083	0.000033	0.00058
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.0020	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	November		0.000030	0.00038	0.014	0.00052	0.00076	0.00076	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000060	0.0010
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	February		0.0000071	0.000091	0.0033	0.00012	0.00018	0.00018	0.0000036	0.033	0.00074	0.14	0.00036	0.0000036	0.000014	0.00025
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.00041	0.0000081	0.075	0.0017	0.31	0.00081	0.0000081	0.000032	0.00056
	April		0.000030	0.00039	0.014	0.00053	0.00077	0.00077	0.000015	0.14	0.0031	0.59	0.0015	0.000015	0.000061	0.0011
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	June		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000074	0.00096	0.034	0.0013	0.0019	0.0019	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.0018	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	April		0.000030	0.00038	0.014	0.00052	0.00076	0.00076	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000060	0.0010
	May		0.000032	0.00041	0.015	0.00056	0.00081	0.00082	0.000016	0.15	0.0033	0.63	0.0016	0.000016	0.000064	0.0011
	June		0.000050	0.00064	0.023	0.00086	0.0013	0.0013	0.000025	0.23	0.0052	0.97	0.0025	0.000025	0.000100	0.0017
	July		0.000040	0.00052	0.019	0.00070	0.0010	0.0010	0.000020	0.19	0.0042	0.79	0.0020	0.000020	0.000081	0.0014
	August		0.000077	0.00099	0.036	0.0013	0.0019	0.0020	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0025
	October		0.000029	0.00037	0.013	0.00050	0.00073	0.00073	0.000015	0.14	0.0030	0.56	0.0015	0.000015	0.000058	0.0010
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.0088	0.00033	0.00048	0.00048	0.0000096	0.089	0.0020	0.37	0.00096	0.0000096	0.000038	0.00066
	April		0.000056	0.00073	0.026	0.00098	0.0014	0.0014	0.000028	0.26	0.0059	1.1	0.0028	0.000028	0.00011	0.0020
	May		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000083	0.0011	0.038	0.0014	0.0021	0.0021	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	August		0.000096	0.0012	0.044	0.0017	0.0024	0.0024	0.000048	0.45	0.0100	1.9	0.0048	0.000048	0.00019	0.0033
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.0019	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0025
	October		0.000064	0.00083	0.030	0.0011	0.0016	0.0016	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	November		0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	January	2066	0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	February		0.000028	0.00037	0.013	0.00049	0.00072	0.00072	0.000014	0.13	0.0029	0.55	0.0014	0.000014	0.000057	0.00099
	March		0.000042	0.00054	0.019	0.00072	0.0011	0.0011	0.000021	0.20	0.0043	0.81	0.0021	0.000021	0.000084	0.0014

Table G-15: Scenario 13: Low Treatment Efficiency - East Freshwater Diversion

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	April	2066	0.000060	0.00077	0.028	0.0010	0.0015	0.0015	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000058	0.00074	0.027	0.0010	0.0015	0.0015	0.000029	0.27	0.0060	1.1	0.0029	0.000029	0.00012	0.0020
	June		0.000040	0.00051	0.018	0.00069	0.0010	0.0010	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000080	0.0014
	July		0.000045	0.00058	0.021	0.00078	0.0011	0.0011	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	August		0.000051	0.00066	0.024	0.00089	0.0013	0.0013	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	September		0.000046	0.00060	0.021	0.00081	0.0012	0.0012	0.000023	0.22	0.0048	0.91	0.0023	0.000023	0.000093	0.0016
	October		0.000022	0.00029	0.010	0.00039	0.00057	0.00057	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.00025	0.0000050	0.047	0.0010	0.19	0.00050	0.0000050	0.000020	0.00035
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	January	2067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.00016	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	April		0.000053	0.00068	0.024	0.00092	0.0013	0.0013	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018
	May		0.000054	0.00070	0.025	0.00095	0.0014	0.0014	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	June		0.000063	0.00081	0.029	0.0011	0.0016	0.0016	0.000032	0.29	0.0065	1.2	0.0032	0.000032	0.00013	0.0022
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.0022	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000090	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.8	0.0045	0.000045	0.00018	0.0031
	September		0.000089	0.0012	0.041	0.0016	0.0023	0.0023	0.000045	0.42	0.0093	1.7	0.0045	0.000045	0.00018	0.0031
	October		0.000076	0.00098	0.035	0.0013	0.0019	0.0019	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0027
	November		0.0000091	0.00012	0.0042	0.00016	0.00023	0.00023	0.0000046	0.043	0.00095	0.18	0.00046	0.0000046	0.000018	0.00032
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000041	0.0015	0.000056	0.000081	0.000082	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
		MAXIMUM	0.000099	0.0013	0.046	0.0017	0.0025	0.0025	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.000052	0.00067	0.024	0.00091	0.0013	0.0013	0.000026	0.25	0.0054	1.0	0.0026	0.000026	0.00010	0.0018

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0041	0.023	0.000097	0.0000051	3.5	0.57	0.00020	0.000055	0.00012	0.085	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0083	0.037	0.00014	0.0000088	3.0	0.61	0.00018	0.00014	0.00012	0.072	0.000043	0.011	1.0	0.026	0.0000016
	May		0.014	0.058	0.00019	0.000014	2.6	0.71	0.00019	0.00025	0.00013	0.064	0.000042	0.011	0.88	0.033	0.0000019
	June		0.021	0.086	0.00028	0.000021	2.9	0.95	0.00023	0.00039	0.00016	0.074	0.000053	0.013	1.0	0.047	0.0000026
	July		0.032	0.13	0.00040	0.000031	3.1	1.3	0.00029	0.00059	0.00020	0.080	0.000063	0.015	1.0	0.066	0.0000035
	August		0.042	0.16	0.00051	0.000040	3.3	1.5	0.00033	0.00077	0.00024	0.086	0.000072	0.017	1.1	0.081	0.0000043
	September		0.043	0.17	0.00052	0.000041	2.9	1.5	0.00032	0.00080	0.00023	0.076	0.000068	0.016	0.96	0.082	0.0000043
	October		0.042	0.16	0.00051	0.000041	2.5	1.4	0.00029	0.00079	0.00022	0.068	0.000063	0.014	0.84	0.079	0.0000042
	November		0.040	0.15	0.00048	0.000038	2.2	1.3	0.00027	0.00074	0.00020	0.060	0.000057	0.013	0.74	0.074	0.0000039
	December		0.039	0.15	0.00047	0.000038	2.2	1.3	0.00027	0.00073	0.00020	0.059	0.000056	0.013	0.72	0.073	0.0000038
	January	2026	0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	February		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.059	0.000056	0.013	0.71	0.073	0.0000038
	March		0.039	0.15	0.00047	0.000038	2.1	1.3	0.00026	0.00073	0.00020	0.058	0.000056	0.012	0.71	0.073	0.0000038
	April		0.037	0.14	0.00044	0.000035	1.8	1.2	0.00024	0.00069	0.00018	0.051	0.000051	0.011	0.61	0.068	0.0000035
	May		0.051	0.20	0.00060	0.000049	2.5	1.7	0.00033	0.00095	0.00025	0.069	0.000069	0.015	0.83	0.094	0.0000049
	June		0.055	0.21	0.00064	**0.000052**	2.6	1.8	0.00035	0.0010	0.00026	0.072	0.000073	0.016	0.86	0.10	0.0000052
	July		0.062	0.24	0.00073	**0.000059**	2.9	2.0	0.00039	0.0012	0.00029	0.080	0.000082	0.018	0.95	0.11	0.0000058
	August		0.054	0.21	0.00064	**0.000052**	2.5	1.7	0.00034	0.0010	0.00026	0.069	0.000071	0.016	0.81	0.099	0.0000051
	September		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.065	0.000067	0.015	0.76	0.093	0.0000048
	October		0.050	0.19	0.00059	0.000048	2.3	1.6	0.00031	0.00094	0.00023	0.063	0.000065	0.014	0.74	0.091	0.0000047
	November		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	December		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	January	2027	0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00096	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	February		0.051	0.20	0.00060	0.000049	2.3	1.6	0.00032	0.00095	0.00024	0.064	0.000067	0.015	0.75	0.093	0.0000048
	March		0.047	0.18	0.00055	0.000044	2.1	1.5	0.00029	0.00087	0.00022	0.058	0.000060	0.013	0.68	0.085	0.0000044
	April		0.038	0.15	0.00045	0.000037	1.7	1.2	0.00024	0.00072	0.00018	0.048	0.000050	0.011	0.56	0.070	0.0000036
	May		0.041	0.16	0.00048	0.000039	1.8	1.3	0.00025	0.00077	0.00019	0.051	0.000053	0.012	0.59	0.075	0.0000038
	June		0.049	0.19	0.00057	0.000046	2.1	1.6	0.00030	0.00091	0.00023	0.060	0.000063	0.014	0.70	0.088	0.0000045
	July		0.049	0.19	0.00057	0.000047	2.1	1.6	0.00030	0.00092	0.00023	0.060	0.000063	0.014	0.70	0.089	0.0000046
	August		0.056	0.21	0.00066	**0.000053**	2.4	1.8	0.00034	0.0010	0.00026	0.069	0.000072	0.016	0.80	0.10	0.0000052
	September		0.068	0.26	0.00080	**0.000065**	2.9	2.2	0.00042	0.0013	0.00031	0.083	0.000087	0.019	0.96	0.12	0.0000063
	October		0.071	0.27	0.00083	**0.000067**	3.1	2.3	0.00043	0.0013	0.00033	0.086	0.000091	0.020	1.0	0.13	0.0000066
	November		0.062	0.24	0.00072	**0.000059**	2.7	2.0	0.00038	0.0011	0.00028	0.075	0.000079	0.017	0.88	0.11	0.0000057
	December		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	January	2028	0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	February		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	March		0.061	0.23	0.00071	**0.000058**	2.6	1.9	0.00037	0.0011	0.00028	0.074	0.000078	0.017	0.86	0.11	0.0000057
	April		0.054	0.21	0.00080	**0.000058**	2.5	2.6	0.00037	0.0042	0.0070	0.10	0.000069	0.016	0.85	0.100	0.0000085
	May		0.047	0.18	0.00078	**0.000054**	2.1	2.7	0.00034	0.0052	0.0093	0.11	0.000058	0.013	0.71	0.087	0.0000090
	June		0.057	0.22	0.00092	**0.000064**	2.4	3.1	0.00039	0.0058	0.010	0.12	0.000069	0.016	0.82	0.10	0.000010
	July		0.065	0.25	0.00100	**0.000071**	2.5	3.3	0.00043	0.0057	0.0098	0.12	0.000077	0.017	0.85	0.12	0.000011
	August		0.067	0.25	0.00098	**0.000071**	2.4	3.1	0.00042	0.0051	0.0084	0.11	0.000077	0.017	0.80	0.12	0.000010
	September		0.071	0.27	0.0010	**0.000074**	2.4	3.2	0.00044	0.0050	0.0080	0.11	0.000080	0.018	0.81	0.13	0.000010
	October		0.078	0.30	0.0011	**0.000082**	2.7	3.4	0.00048	0.0053	0.0084	0.12	0.000088	0.019	0.88	0.14	0.000011
	November		0.078	0.30	0.0011	**0.000082**	2.6	3.4	0.00048	0.0052	0.0083	0.12	0.000088	0.019	0.87	0.14	0.000011
	December		0.078	0.30	0.0011	**0.000082**	2.6	3.4	0.00048	0.0052	0.0083	0.12	0.000088	0.019	0.87	0.14	0.000011
		MINIMUM	0.0038	0.022	0.000095	0.0000049	1.7	0.57	0.00018	0.000050	0.00012	0.048	0.000042	0.011	0.56	0.021	0.0000014
		MAXIMUM	0.078	0.30	0.0011	**0.000082**	3.6	3.4	0.00048	0.0058	0.010	0.12	0.000091	0.020	1.2	0.14	0.000011
		AVERAGE	0.048	0.18	0.00061	0.000047	2.5	1.8	0.00032	0.0016	0.0018	0.077	0.000067	0.015	0.84	0.089	0.0000054
Operations	January	2029	0.078	0.30	0.0011	**0.000082**	2.6	3.4	0.00048	0.0052	0.0083	0.12	0.000088	0.019	0.87	0.14	0.000011
	February		0.078	0.30	0.0011	**0.000082**	2.6	3.4	0.00048	0.0052	0.0083	0.12	0.000088	0.019	0.87	0.14	0.000011
	March		0.077	0.29	0.0011	**0.000080**	2.6	3.3	0.00047	0.0051	0.0080	0.11	0.000086	0.019	0.85	0.14	0.000011
	April		0.060	0.23	0.00081	**0.000061**	1.9	2.5	0.00035	0.0035	0.0054	0.082	0.000066	0.014	0.62	0.11	0.0000079
	May		0.058	0.22	0.00078	**0.000060**	1.8	2.3	0.00034	0.0032	0.0047	0.077	0.000064	0.014	0.59	0.10	0.0000075
	June		0.062	0.23	0.00081	**0.000062**	1.8	2.4	0.00035	0.0031	0.0044	0.076	0.000067	0.014	0.60	0.11	0.0000076
	July		0.076	0.29	0.00099	**0.000076**	2.2	2.9	0.00043	0.0036	0.0048	0.089	0.000082	0.017	0.71	0.13	0.0000090
	August		0.086	0.33	0.0011	**0.000086**	2.4	3.2	0.00048	0.0037	0.0048	0.096	0.000093	0.020	0.78	0.15	0.0000099
	September		0.081	0.31	0.0010	**0.000080**	2.2	2.9	0.00045	0.0033	0.0040	0.086	0.000086	0.018	0.71	0.14	0.0000090
	October		0.082	0.31	0.0010	**0.000081**	2.2	2.9	0.00045	0.0032	0.0039	0.086	0.000088	0.018	0.71	0.14	0.0000091
	November		0.080	0.30	0.00100	**0.000079**	2.1	2.8	0.00044	0.0031	0.0036	0.083	0.000085	0.018	0.69	0.14	0.0000087
	December		0.080	0.30	0.00100	**0.000078**	2.1	2.8	0.00044	0.0031	0.0036	0.082	0.000085	0.018	0.68	0.14	0.0000087

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.080	0.30	0.00100	**0.000078**	2.1	2.8	0.00044	0.0031	0.0036	0.082	0.000085	0.018	0.68	0.14	0.0000087
	February		0.078	0.30	0.00098	**0.000077**	2.1	2.7	0.00043	0.0030	0.0035	0.081	0.000083	0.017	0.67	0.14	0.0000085
	March		0.074	0.28	0.00092	**0.000073**	2.0	2.6	0.00040	0.0028	0.0033	0.076	0.000078	0.016	0.63	0.13	0.0000080
	April		0.063	0.24	0.00078	**0.000062**	1.6	2.2	0.00034	0.0022	0.0024	0.062	0.000067	0.014	0.52	0.11	0.0000066
	May		0.068	0.26	0.00083	**0.000066**	1.7	2.3	0.00036	0.0023	0.0024	0.065	0.000071	0.015	0.55	0.12	0.0000070
	June		0.063	0.24	0.00076	**0.000061**	1.6	2.1	0.00033	0.0019	0.0018	0.057	0.000065	0.014	0.49	0.11	0.0000063
	July		0.059	0.22	0.00070	**0.000057**	1.4	1.9	0.00031	0.0017	0.0014	0.051	0.000061	0.013	0.45	0.10	0.0000058
	August		0.064	0.24	0.00076	**0.000061**	1.5	2.0	0.00033	0.0017	0.0013	0.053	0.000066	0.014	0.48	0.11	0.0000061
	September		0.058	0.22	0.00069	**0.000056**	1.4	1.8	0.00030	0.0015	0.00099	0.047	0.000060	0.012	0.43	0.10	0.0000055
	October		0.058	0.22	0.00068	**0.000055**	1.3	1.8	0.00030	0.0014	0.00090	0.046	0.000059	0.012	0.42	0.100	0.0000054
	November		0.053	0.20	0.00063	**0.000051**	1.2	1.6	0.00027	0.0013	0.00079	0.042	0.000055	0.011	0.39	0.092	0.0000049
	December		0.053	0.20	0.00062	0.000051	1.2	1.6	0.00027	0.0013	0.00078	0.042	0.000055	0.011	0.38	0.092	0.0000049
	January	2031	0.052	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0012	0.00076	0.041	0.000054	0.011	0.38	0.090	0.0000048
	February		0.052	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0012	0.00075	0.041	0.000053	0.011	0.38	0.090	0.0000048
	March		0.051	0.19	0.00060	0.000049	1.2	1.6	0.00026	0.0012	0.00073	0.040	0.000052	0.011	0.37	0.088	0.0000047
	April		0.042	0.16	0.00049	0.000040	0.97	1.3	0.00022	0.00097	0.00052	0.033	0.000044	0.0089	0.30	0.073	0.0000039
	May		0.044	0.17	0.00051	0.000042	1.00	1.3	0.00022	0.00096	0.00046	0.033	0.000045	0.0092	0.31	0.076	0.0000040
	June		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0012	0.00053	0.041	0.000056	0.011	0.38	0.094	0.0000049
	July		0.066	0.25	0.00076	**0.000063**	1.5	2.0	0.00034	0.0014	0.00058	0.049	0.000068	0.014	0.46	0.11	0.0000059
	August		0.076	0.29	0.00088	**0.000073**	1.7	2.3	0.00039	0.0016	0.00061	0.057	0.000078	0.016	0.53	0.13	0.0000068
	September		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0016	0.00057	0.056	0.000077	0.016	0.53	0.13	0.0000067
	October		0.071	0.27	0.00082	**0.000067**	1.6	2.1	0.00036	0.0014	0.00052	0.052	0.000073	0.015	0.49	0.12	0.0000063
	November		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0013	0.00047	0.048	0.000067	0.014	0.45	0.11	0.0000058
	December		0.065	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0013	0.00046	0.048	0.000067	0.014	0.45	0.11	0.0000058
	January	2032	0.064	0.24	0.00074	**0.000061**	1.4	1.9	0.00033	0.0013	0.00045	0.047	0.000066	0.013	0.44	0.11	0.0000057
	February		0.064	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0013	0.00045	0.047	0.000066	0.013	0.44	0.11	0.0000057
	March		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0011	0.00037	0.040	0.000056	0.011	0.38	0.095	0.0000048
	April		0.046	0.17	0.00053	0.000044	1.0	1.4	0.00023	0.00092	0.00029	0.034	0.000047	0.0095	0.32	0.080	0.0000041
	May		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00097	0.00029	0.036	0.000050	0.010	0.34	0.085	0.0000043
	June		0.060	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0012	0.00034	0.043	0.000061	0.012	0.41	0.10	0.0000053
	July		0.059	0.22	0.00068	**0.000056**	1.3	1.7	0.00030	0.0012	0.00032	0.043	0.000060	0.012	0.41	0.10	0.0000052
	August		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00032	0.0012	0.00032	0.045	0.000064	0.013	0.43	0.11	0.0000055
	September		0.070	0.27	0.00080	**0.000066**	1.6	2.1	0.00035	0.0014	0.00035	0.050	0.000072	0.015	0.48	0.12	0.0000061
	October		0.071	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00035	0.051	0.000073	0.015	0.49	0.12	0.0000062
	November		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00035	0.050	0.000071	0.014	0.48	0.12	0.0000061
	December		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00035	0.050	0.000071	0.014	0.48	0.12	0.0000061
	January	2033	0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00035	0.050	0.000071	0.014	0.48	0.12	0.0000061
	February		0.070	0.26	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00035	0.050	0.000071	0.014	0.48	0.12	0.0000061
	March		0.069	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00034	0.050	0.000071	0.014	0.47	0.12	0.0000061
	April		0.052	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.0010	0.00025	0.038	0.000053	0.011	0.36	0.090	0.0000046
	May		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0011	0.00025	0.039	0.000056	0.011	0.38	0.095	0.0000048
	June		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00028	0.045	0.000064	0.013	0.43	0.11	0.0000054
	July		0.076	0.29	0.00087	**0.000072**	1.7	2.2	0.00038	0.0015	0.00034	0.054	0.000078	0.016	0.52	0.13	0.0000066
	August		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0016	0.00036	0.058	0.000083	0.017	0.56	0.14	0.0000071
	September		0.083	0.31	0.00094	**0.000078**	1.8	2.4	0.00042	0.0016	0.00036	0.059	0.000084	0.017	0.56	0.14	0.0000072
	October		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0016	0.00035	0.058	0.000083	0.017	0.56	0.14	0.0000071
	November		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0014	0.00031	0.051	0.000073	0.015	0.49	0.12	0.0000062
	December		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00030	0.050	0.000072	0.015	0.48	0.12	0.0000062
	January	2034	0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00030	0.050	0.000072	0.014	0.48	0.12	0.0000062
	February		0.070	0.27	0.00080	**0.000067**	1.6	2.0	0.00035	0.0013	0.00030	0.050	0.000072	0.014	0.48	0.12	0.0000061
	March		0.066	0.25	0.00075	**0.000062**	1.5	1.9	0.00033	0.0012	0.00028	0.047	0.000067	0.013	0.45	0.11	0.0000057
	April		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00023	0.038	0.000055	0.011	0.37	0.093	0.0000047
	May		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00028	0.0010	0.00023	0.039	0.000056	0.011	0.37	0.094	0.0000048
	June		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	July		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	August		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	September		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00096	0.00020	0.036	0.000052	0.010	0.34	0.087	0.0000044
	October		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	November		0.054	0.20	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.038	0.000055	0.011	0.37	0.093	0.0000047
	December		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00021	0.036	0.000052	0.011	0.35	0.088	0.0000045
	January	2035	0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	February		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043
	March		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000050	0.010	0.34	0.085	0.0000043

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	May		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	June		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	July		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	August		0.064	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	September		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00034	0.0013	0.00027	0.047	0.000068	0.014	0.45	0.12	0.0000058
	October		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	November		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.045	0.000065	0.013	0.44	0.11	0.0000056
	December		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.045	0.000065	0.013	0.44	0.11	0.0000056
	January	2036	0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.045	0.000065	0.013	0.44	0.11	0.0000056
	February		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.045	0.000065	0.013	0.44	0.11	0.0000056
	March		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.42	0.11	0.0000053
	April		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.32	0.080	0.0000040
	May		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	June		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	July		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	August		0.086	0.33	0.00098	**0.000082**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000088	0.018	0.59	0.15	0.0000075
	September		0.092	0.35	0.0010	**0.000087**	2.0	2.7	0.00046	0.0017	0.00036	0.065	0.000093	0.019	0.62	0.16	0.0000080
	October		0.085	0.32	0.00097	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.061	0.000087	0.018	0.58	0.15	0.0000074
	November		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	December		0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	January	2037	0.081	0.31	0.00092	**0.000076**	1.8	2.3	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	February		0.076	0.29	0.00086	**0.000072**	1.7	2.2	0.00038	0.0014	0.00030	0.054	0.000077	0.015	0.51	0.13	0.0000066
	March		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	April		0.057	0.21	0.00065	**0.000054**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000058	0.012	0.38	0.098	0.0000049
	May		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	July		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	August		0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.49	0.13	0.0000063
	September		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	October		0.071	0.27	0.00081	**0.000067**	1.6	2.1	0.00036	0.0013	0.00028	0.050	0.000072	0.015	0.48	0.12	0.0000062
	November		0.070	0.27	0.00080	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.050	0.000071	0.014	0.48	0.12	0.0000061
	December		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	January	2038	0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	February		0.069	0.26	0.00078	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	March		0.058	0.22	0.00066	**0.000054**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.099	0.0000050
	April		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0097	0.32	0.081	0.0000041
	May		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	June		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	July		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	August		0.082	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000071
	September		0.080	0.30	0.00091	**0.000076**	1.8	2.3	0.00040	0.0015	0.00032	0.057	0.000082	0.016	0.54	0.14	0.0000070
	October		0.068	0.26	0.00078	**0.000065**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	November		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	December		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	January	2039	0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	February		0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	March		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.096	0.0000048
	April		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	May		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	June		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	July		0.081	0.31	0.00092	**0.000076**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	August		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	September		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	October		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.42	0.11	0.0000053
	November		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	December		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.097	0.0000049
	January	2040	0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.097	0.0000049
	February		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.011	0.38	0.097	0.0000049
	March		0.046	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.32	0.080	0.0000040
	April		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	May		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.073	0.0000037
	June		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	July		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	August		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	September	**2040**	0.069	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000071	0.014	0.47	0.12	0.0000060
	October		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	November		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	December		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	January		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	February		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	March		0.063	0.24	0.00072	**0.000060**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000055
	April		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00026	0.00096	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	May		0.055	0.21	0.00062	**0.000052**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.094	0.0000047
	June		0.069	0.26	0.00079	**0.000065**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000070	0.014	0.47	0.12	0.0000060
	July	**2041**	0.073	0.28	0.00083	**0.000069**	1.6	2.1	0.00037	0.0014	0.00029	0.052	0.000074	0.015	0.50	0.13	0.0000063
	August		0.050	0.19	0.00057	0.000047	1.1	1.5	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	September		0.047	0.18	0.00054	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	October		0.049	0.18	0.00056	0.000046	1.1	1.4	0.00024	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.084	0.0000042
	November		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	December		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	January		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	February		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	March		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	April		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0082	0.27	0.069	0.0000035
	May		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.074	0.0000037
	July	**2042**	0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	August		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	September		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000048	0.0097	0.32	0.080	0.0000040
	October		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0086	0.28	0.071	0.0000036
	November		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	December		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	January		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
Operations	**February**		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	March		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	April		0.037	0.14	0.00043	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.026	0.000038	0.0077	0.25	0.064	0.0000032
	May		0.039	0.15	0.00045	0.000037	0.86	1.1	0.00020	0.00074	0.00016	0.028	0.000040	0.0081	0.27	0.068	0.0000034
	June		0.041	0.16	0.00047	0.000039	0.91	1.2	0.00021	0.00078	0.00016	0.029	0.000042	0.0086	0.28	0.071	0.0000036
	July	**2043**	0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.079	0.0000040
	August		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	September		0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0084	0.27	0.069	0.0000035
	October		0.037	0.14	0.00042	0.000035	0.81	1.1	0.00018	0.00069	0.00015	0.026	0.000037	0.0076	0.25	0.063	0.0000032
	November		0.034	0.13	0.00039	0.000032	0.75	1.00	0.00017	0.00064	0.00014	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	December		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00014	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	January		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	February		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0070	0.23	0.059	0.0000030
	March		0.034	0.13	0.00039	0.000032	0.75	0.99	0.00017	0.00064	0.00013	0.024	0.000035	0.0070	0.23	0.058	0.0000029
	April		0.033	0.13	0.00038	0.000031	0.73	0.97	0.00017	0.00063	0.00013	0.024	0.000034	0.0069	0.23	0.057	0.0000029
	May		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	June		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	July	**2044**	0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00099	0.00021	0.037	0.000054	0.011	0.36	0.091	0.0000046
	August		0.070	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00028	0.049	0.000071	0.014	0.47	0.12	0.0000060
	September		0.083	0.31	0.00095	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.56	0.14	0.0000072
	October		0.085	0.32	0.00097	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000087	0.018	0.58	0.15	0.0000074
	November		0.087	0.33	0.00100	**0.000083**	1.9	2.5	0.00044	0.0016	0.00035	0.062	0.000089	0.018	0.59	0.15	0.0000076
	December		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.062	0.000088	0.018	0.59	0.15	0.0000075
	January		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.061	0.000088	0.018	0.59	0.15	0.0000075
	February		0.087	0.33	0.00099	**0.000082**	1.9	2.5	0.00044	0.0016	0.00034	0.061	0.000088	0.018	0.59	0.15	0.0000075
	March		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000082	0.017	0.55	0.14	0.0000070
	April		0.066	0.25	0.00075	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	May	**2045**	0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.068	0.26	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	July		0.072	0.27	0.00082	**0.000068**	1.6	2.1	0.00036	0.0014	0.00029	0.051	0.000073	0.015	0.49	0.12	0.0000062
	August		0.081	0.31	0.00093	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.058	0.000083	0.017	0.55	0.14	0.0000070
	September		0.088	0.33	0.0010	**0.000084**	1.9	2.6	0.00044	0.0017	0.00035	0.063	0.000090	0.018	0.60	0.15	0.0000077

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**October**	**2045**	0.088	0.33	0.0010	**0.000083**	1.9	2.6	0.00044	0.0017	0.00035	0.062	0.000089	0.018	0.60	0.15	0.0000076
	November		0.085	0.32	0.00097	**0.000081**	1.9	2.5	0.00043	0.0016	0.00034	0.060	0.000087	0.018	0.58	0.15	0.0000074
	December		0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000073
	January	**2046**	0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000083	0.017	0.55	0.14	0.0000070
	February		0.081	0.31	0.00092	**0.000077**	1.8	2.4	0.00041	0.0015	0.00032	0.057	0.000083	0.017	0.55	0.14	0.0000070
	March		0.074	0.28	0.00084	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.053	0.000075	0.015	0.50	0.13	0.0000064
	April		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	May		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	June		0.065	0.24	0.00074	**0.000061**	1.4	1.9	0.00032	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	July		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	August		0.060	0.23	0.00068	**0.000056**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.40	0.10	0.0000052
	September		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.38	0.095	0.0000048
	October		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	November		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0098	0.32	0.082	0.0000041
	December		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	January	**2047**	0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	February		0.047	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.033	0.000048	0.0097	0.32	0.081	0.0000041
	March		0.046	0.17	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0095	0.31	0.080	0.0000040
	April		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0086	0.29	0.072	0.0000036
	May		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.074	0.0000037
	June		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000046
	July		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	August		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	September		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	October		0.061	0.23	0.00070	**0.000058**	1.3	1.8	0.00031	0.0012	0.00024	0.043	0.000062	0.013	0.42	0.11	0.0000053
	November		0.060	0.23	0.00068	**0.000057**	1.3	1.7	0.00030	0.0011	0.00024	0.042	0.000061	0.012	0.41	0.10	0.0000052
	December		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	January	**2048**	0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	March		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.100	0.0000050
	April		0.054	0.21	0.00062	**0.000051**	1.2	1.6	0.00027	0.0010	0.00022	0.039	0.000055	0.011	0.37	0.094	0.0000047
	May		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	June		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000057
	July		0.059	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000060	0.012	0.40	0.10	0.0000051
	August		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00089	0.00019	0.034	0.000048	0.0098	0.32	0.082	0.0000041
	September		0.045	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000046	0.0094	0.31	0.078	0.0000039
	October		0.044	0.17	0.00050	0.000042	0.97	1.3	0.00022	0.00083	0.00017	0.031	0.000045	0.0091	0.30	0.076	0.0000038
	November		0.044	0.16	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000044	0.0090	0.30	0.075	0.0000038
	December		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.074	0.0000037
	January	**2049**	0.040	0.15	0.00046	0.000038	0.89	1.2	0.00020	0.00076	0.00016	0.029	0.000041	0.0083	0.27	0.070	0.0000035
	February		0.040	0.15	0.00045	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0082	0.27	0.069	0.0000035
	March		0.039	0.15	0.00044	0.000037	0.85	1.1	0.00019	0.00073	0.00015	0.027	0.000039	0.0080	0.26	0.067	0.0000034
	April		0.037	0.14	0.00043	0.000035	0.82	1.1	0.00019	0.00070	0.00015	0.026	0.000038	0.0077	0.25	0.064	0.0000032
	May		0.041	0.16	0.00047	0.000039	0.90	1.2	0.00021	0.00077	0.00016	0.029	0.000042	0.0085	0.28	0.071	0.0000036
	June		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.031	0.000045	0.0092	0.30	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.96	1.3	0.00022	0.00082	0.00017	0.031	0.000045	0.0091	0.30	0.075	0.0000038
	August		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0097	0.32	0.080	0.0000040
	September		0.044	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00083	0.00018	0.031	0.000045	0.0092	0.30	0.076	0.0000038
	October		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	November		0.036	0.14	0.00041	0.000034	0.80	1.1	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.25	0.063	0.0000032
	December		0.036	0.14	0.00041	0.000034	0.80	1.1	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.25	0.063	0.0000031
	January	**2050**	0.036	0.14	0.00041	0.000034	0.80	1.1	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.25	0.063	0.0000031
	February		0.036	0.14	0.00041	0.000034	0.80	1.1	0.00018	0.00068	0.00014	0.026	0.000037	0.0075	0.25	0.063	0.0000031
	March		0.036	0.14	0.00041	0.000034	0.79	1.0	0.00018	0.00068	0.00014	0.025	0.000037	0.0074	0.24	0.062	0.0000031
	April		0.033	0.12	0.00038	0.000031	0.73	0.96	0.00017	0.00062	0.00013	0.023	0.000034	0.0068	0.22	0.057	0.0000029
	May		0.034	0.13	0.00039	0.000032	0.76	1.00	0.00017	0.00065	0.00014	0.024	0.000035	0.0071	0.23	0.059	0.0000030
	June		0.038	0.14	0.00043	0.000036	0.83	1.1	0.00019	0.00071	0.00015	0.027	0.000038	0.0078	0.26	0.065	0.0000033
	July		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.36	0.093	0.0000047
	August		0.065	0.25	0.00074	**0.000061**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	September		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.42	0.11	0.0000054
	October		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	November		0.059	0.22	0.00067	**0.000056**	1.3	1.7	0.00030	0.0011	0.00023	0.042	0.000060	0.012	0.40	0.10	0.0000051
	December		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.10	0.0000050

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2051	0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.10	0.0000050
	February		0.058	0.22	0.00066	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.39	0.10	0.0000050
	March		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	April		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00075	0.00016	0.028	0.000041	0.0082	0.27	0.069	0.0000035
	May		0.041	0.15	0.00046	0.000038	0.90	1.2	0.00020	0.00077	0.00016	0.029	0.000041	0.0084	0.28	0.070	0.0000035
	June		0.048	0.18	0.00055	0.000046	1.1	1.4	0.00024	0.00091	0.00019	0.034	0.000049	0.0100	0.33	0.083	0.0000042
	July		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.037	0.000053	0.011	0.35	0.089	0.0000045
	August		0.048	0.18	0.00054	0.000045	1.0	1.4	0.00024	0.00090	0.00019	0.034	0.000048	0.0099	0.32	0.082	0.0000041
	September		0.048	0.18	0.00054	0.000045	1.1	1.4	0.00024	0.00090	0.00019	0.034	0.000049	0.0099	0.32	0.082	0.0000041
	October		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0097	0.32	0.080	0.0000040
	November		0.046	0.18	0.00053	0.000044	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	December		0.045	0.17	0.00051	0.000042	0.99	1.3	0.00022	0.00084	0.00018	0.032	0.000046	0.0093	0.30	0.077	0.0000039
	January	2052	0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	February		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	March		0.045	0.17	0.00051	0.000042	0.98	1.3	0.00022	0.00084	0.00018	0.032	0.000045	0.0092	0.30	0.077	0.0000039
	April		0.040	0.15	0.00046	0.000038	0.88	1.2	0.00020	0.00076	0.00016	0.028	0.000041	0.0083	0.27	0.069	0.0000035
	May		0.042	0.16	0.00048	0.000040	0.93	1.2	0.00021	0.00079	0.00017	0.030	0.000043	0.0087	0.29	0.072	0.0000036
	June		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00093	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	July		0.052	0.20	0.00060	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.090	0.0000045
	August		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	September		0.062	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	October		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000066	0.013	0.44	0.11	0.0000056
	November		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.44	0.11	0.0000056
	December		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000056
		MINIMUM	0.033	0.12	0.00038	0.000031	0.73	0.96	0.00017	0.00062	0.00013	0.023	0.000034	0.0068	0.22	0.057	0.0000029
		MAXIMUM	0.092	0.35	0.0011	**0.000087**	2.6	3.4	0.00048	0.0052	0.0083	0.12	0.000093	0.020	0.87	0.16	0.000011
		AVERAGE	0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00030	0.0012	0.00053	0.044	0.000060	0.012	0.41	0.10	0.0000052
Decommissioning	January	2053	0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	February		0.064	0.24	0.00073	**0.000060**	1.4	1.9	0.00032	0.0012	0.00025	0.045	0.000065	0.013	0.43	0.11	0.0000055
	March		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	April		0.050	0.19	0.00057	0.000047	1.1	1.4	0.00025	0.00094	0.00020	0.035	0.000051	0.010	0.34	0.086	0.0000043
	May		0.052	0.20	0.00059	0.000049	1.1	1.5	0.00026	0.00098	0.00021	0.037	0.000053	0.011	0.35	0.089	0.0000045
	June		0.068	0.26	0.00078	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000069	0.014	0.46	0.12	0.0000059
	July		0.084	0.32	0.00096	**0.000079**	1.8	2.4	0.00042	0.0016	0.00033	0.059	0.000085	0.017	0.57	0.14	0.0000073
	August		0.088	0.33	0.00100	**0.000083**	1.9	2.5	0.00044	0.0016	0.00035	0.062	0.000089	0.018	0.59	0.15	0.0000076
	September		0.063	0.24	0.00072	**0.000059**	1.4	1.8	0.00032	0.0012	0.00025	0.045	0.000064	0.013	0.43	0.11	0.0000054
	October		0.056	0.21	0.00064	**0.000053**	1.2	1.6	0.00028	0.0011	0.00022	0.040	0.000057	0.012	0.38	0.096	0.0000049
	November		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	December		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	January	2054	0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	February		0.054	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000055	0.011	0.37	0.093	0.0000047
	March		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	April		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00024	0.00088	0.00019	0.033	0.000048	0.0096	0.32	0.081	0.0000041
	May		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.032	0.000047	0.0094	0.31	0.079	0.0000040
	June		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00031	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	July		0.074	0.28	0.00084	**0.000070**	1.6	2.2	0.00037	0.0014	0.00029	0.052	0.000075	0.015	0.50	0.13	0.0000064
	August		0.067	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0013	0.00026	0.047	0.000068	0.014	0.45	0.11	0.0000058
	September		0.067	0.25	0.00077	**0.000063**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	October		0.067	0.25	0.00077	**0.000064**	1.5	2.0	0.00034	0.0013	0.00027	0.048	0.000068	0.014	0.46	0.12	0.0000058
	November		0.063	0.24	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000064	0.013	0.43	0.11	0.0000054
	December		0.062	0.23	0.00071	**0.000059**	1.4	1.8	0.00031	0.0012	0.00025	0.044	0.000063	0.013	0.42	0.11	0.0000054
	January	2055	0.062	0.23	0.00071	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000054
	February		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	March		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	April		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000052	0.010	0.34	0.087	0.0000044
	May		0.047	0.18	0.00053	0.000044	1.0	1.4	0.00023	0.00088	0.00018	0.033	0.000047	0.0096	0.32	0.080	0.0000040
	June		0.049	0.19	0.00056	0.000046	1.1	1.4	0.00025	0.00092	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	July		0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.073	0.0000037
	August		0.049	0.19	0.00056	0.000047	1.1	1.4	0.00025	0.00093	0.00019	0.035	0.000050	0.010	0.33	0.085	0.0000043
	September		0.053	0.20	0.00061	0.000050	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	October		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	November		0.051	0.19	0.00058	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	December		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	February		0.050	0.19	0.00057	0.000048	1.1	1.5	0.00025	0.00095	0.00020	0.036	0.000051	0.010	0.34	0.087	0.0000044
	March		0.045	0.17	0.00052	0.000043	1.00	1.3	0.00023	0.00085	0.00018	0.032	0.000046	0.0093	0.31	0.078	0.0000039
	April		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00086	0.00018	0.033	0.000047	0.0094	0.31	0.079	0.0000040
	May		0.053	0.20	0.00060	0.000050	1.2	1.5	0.00026	0.00099	0.00021	0.037	0.000053	0.011	0.36	0.090	0.0000046
	June		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000053
	July		0.065	0.25	0.00074	**0.000062**	1.4	1.9	0.00033	0.0012	0.00026	0.046	0.000066	0.013	0.44	0.11	0.0000056
	August		0.064	0.24	0.00073	**0.000061**	1.4	1.9	0.00032	0.0012	0.00025	0.046	0.000065	0.013	0.44	0.11	0.0000056
	September		0.051	0.19	0.00059	0.000049	1.1	1.5	0.00026	0.00097	0.00020	0.036	0.000052	0.011	0.35	0.088	0.0000044
	October		0.053	0.20	0.00061	0.000050	1.2	1.5	0.00027	0.00100	0.00021	0.038	0.000054	0.011	0.36	0.091	0.0000046
	November		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	December		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	January	**2057**	0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	February		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	March		0.055	0.21	0.00063	**0.000052**	1.2	1.6	0.00028	0.0010	0.00022	0.039	0.000056	0.011	0.37	0.095	0.0000048
	April		0.046	0.17	0.00052	0.000043	1.0	1.3	0.00023	0.00087	0.00018	0.033	0.000047	0.0094	0.31	0.079	0.0000040
	May		0.053	0.20	0.00061	0.000051	1.2	1.6	0.00027	0.0010	0.00021	0.038	0.000054	0.011	0.36	0.092	0.0000046
	June		0.066	0.25	0.00076	**0.000063**	1.5	1.9	0.00033	0.0012	0.00026	0.047	0.000067	0.014	0.45	0.11	0.0000057
	July		0.062	0.23	0.00070	**0.000058**	1.4	1.8	0.00031	0.0012	0.00024	0.044	0.000063	0.013	0.42	0.11	0.0000054
	August		0.061	0.23	0.00069	**0.000057**	1.3	1.8	0.00030	0.0011	0.00024	0.043	0.000062	0.012	0.41	0.10	0.0000053
	September		0.069	0.26	0.00079	**0.000066**	1.5	2.0	0.00035	0.0013	0.00027	0.049	0.000071	0.014	0.47	0.12	0.0000060
	October		0.077	0.29	0.00088	**0.000073**	1.7	2.2	0.00039	0.0014	0.00030	0.055	0.000078	0.016	0.52	0.13	0.0000067
	November		0.078	0.29	0.00089	**0.000074**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
	December		0.078	0.29	0.00089	**0.000073**	1.7	2.3	0.00039	0.0015	0.00031	0.055	0.000079	0.016	0.53	0.13	0.0000067
		MINIMUM	0.043	0.16	0.00049	0.000040	0.94	1.2	0.00021	0.00080	0.00017	0.030	0.000043	0.0088	0.29	0.073	0.0000037
		MAXIMUM	0.088	0.33	0.00100	**0.000083**	1.9	2.5	0.00044	0.0016	0.00035	0.062	0.000089	0.018	0.59	0.15	0.0000076
		AVERAGE	0.058	0.22	0.00067	**0.000055**	1.3	1.7	0.00029	0.0011	0.00023	0.041	0.000059	0.012	0.40	0.10	0.0000051
Reclamation	**January**	**2058**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2059**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2060**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2062	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2063	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2064	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2065	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	2066	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West Surface Runoff Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	**April**	**2066**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	January	**2067**	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	February		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	March		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	April		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	May		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	June		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	July		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	August		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	September		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	October		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	November		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
	December		0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MINIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		MAXIMUM	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045
		AVERAGE	0.053	0.20	0.00060	0.000050	0.85	1.5	0.00025	0.0010	0.00020	0.030	0.000050	0.010	0.25	0.090	0.0000045

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	January		0.000053	0.000073	0.090	0.0075	0.0043	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0056	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000079	0.089	0.0075	0.0066	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00081
	April		0.000053	0.00019	0.077	0.0062	0.0063	0.28	0.000043	1.2	0.025	1.4	0.0044	0.000046	0.00014	0.00099
	May		0.000057	0.00033	0.070	0.0054	0.0063	0.26	0.000042	1.0	0.022	1.4	0.0043	0.000045	0.00014	0.0013
	June		0.000075	0.00051	0.082	0.0061	0.0080	0.31	0.000053	1.2	0.026	1.8	0.0053	0.000055	0.00018	0.0018
	July	**2025**	0.000095	0.00078	0.091	0.0064	0.0093	0.35	0.000063	1.3	0.028	2.2	0.0063	0.000065	0.00022	0.0025
	August		0.00011	0.0010	0.100	0.0068	0.011	0.38	0.000072	1.4	0.030	2.5	0.0072	0.000074	0.00026	0.0032
	September		0.00011	0.0010	0.090	0.0059	0.010	0.35	0.000068	1.2	0.026	2.4	0.0068	0.000070	0.00025	0.0032
	October		0.00010	0.0010	0.081	0.0052	0.0094	0.32	0.000063	1.1	0.023	2.2	0.0063	0.000065	0.00023	0.0031
	November		0.000096	0.00097	0.073	0.0046	0.0089	0.29	0.000057	0.95	0.021	2.1	0.0058	0.000059	0.00021	0.0029
	December		0.000095	0.00096	0.072	0.0045	0.0093	0.28	0.000056	0.93	0.020	2.0	0.0057	0.000058	0.00021	0.0028
	January		0.000094	0.00096	0.071	0.0044	0.0097	0.28	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	February		0.000094	0.00096	0.071	0.0044	0.010	0.28	0.000056	0.92	0.020	2.0	0.0056	0.000058	0.00021	0.0028
	March		0.000094	0.00095	0.071	0.0044	0.011	0.28	0.000056	0.91	0.020	2.0	0.0056	0.000057	0.00021	0.0028
	April		0.000086	0.00090	0.062	0.0038	0.0085	0.25	0.000051	0.80	0.017	1.8	0.0051	0.000052	0.00019	0.0026
	May		0.00012	0.0012	0.085	0.0051	0.012	0.33	0.000069	1.1	0.024	2.5	0.0070	0.000071	0.00026	0.0036
	June		0.00013	0.0013	0.089	0.0053	0.011	0.35	0.000073	1.1	0.025	2.7	0.0074	0.000075	0.00027	0.0039
	July	**2026**	0.00014	0.0015	0.099	0.0059	0.012	0.39	0.000082	1.3	0.027	3.0	0.0082	0.000084	0.00031	0.0044
	August		0.00012	0.0013	0.086	0.0051	0.0096	0.34	0.000071	1.1	0.024	2.6	0.0072	0.000073	0.00027	0.0038
	September		0.00012	0.0012	0.080	0.0047	0.0088	0.32	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	October		0.00011	0.0012	0.079	0.0046	0.0089	0.31	0.000065	0.98	0.022	2.4	0.0066	0.000067	0.00025	0.0035
	November		0.00012	0.0012	0.080	0.0047	0.0097	0.32	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
Construction	**December**		0.00012	0.0012	0.080	0.0047	0.010	0.32	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	January		0.00012	0.0012	0.080	0.0047	0.011	0.32	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	February		0.00012	0.0012	0.080	0.0047	0.012	0.31	0.000067	1.0	0.022	2.4	0.0067	0.000068	0.00025	0.0036
	March		0.00011	0.0011	0.073	0.0042	0.010	0.29	0.000060	0.91	0.020	2.2	0.0061	0.000062	0.00023	0.0033
	April		0.000087	0.00093	0.059	0.0035	0.0076	0.23	0.000050	0.74	0.016	1.8	0.0050	0.000051	0.00019	0.0027
	May		0.000093	0.0010	0.064	0.0037	0.0077	0.25	0.000053	0.79	0.017	1.9	0.0053	0.000054	0.00020	0.0029
	June	**2027**	0.00011	0.0012	0.075	0.0043	0.0087	0.29	0.000063	0.93	0.020	2.3	0.0063	0.000064	0.00024	0.0034
	July		0.00011	0.0012	0.075	0.0044	0.0078	0.30	0.000063	0.94	0.021	2.3	0.0063	0.000064	0.00024	0.0034
	August		0.00013	0.0014	0.086	0.0050	0.0088	0.34	0.000072	1.1	0.023	2.6	0.0072	0.000074	0.00027	0.0039
	September		0.00015	0.0017	0.10	0.0060	0.011	0.41	0.000087	1.3	0.028	3.2	0.0088	0.000089	0.00033	0.0048
	October		0.00016	0.0017	0.11	0.0063	0.013	0.43	0.000091	1.3	0.030	3.3	0.0091	0.000093	0.00034	0.0050
	November		0.00014	0.0015	0.094	0.0055	0.011	0.37	0.000079	1.2	0.026	2.9	0.0079	0.000081	0.00030	0.0043
	December		0.00014	0.0015	0.093	0.0054	0.012	0.37	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	January		0.00014	0.0015	0.093	0.0054	0.013	0.37	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	February		0.00014	0.0015	0.093	0.0054	0.014	0.37	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	March		0.00014	0.0015	0.093	0.0054	0.014	0.37	0.000078	1.2	0.025	2.9	0.0078	0.000080	0.00029	0.0043
	April		0.00032	0.0027	0.081	0.0055	0.013	0.69	0.00017	1.0	0.024	3.9	0.0083	0.0026	0.00032	0.0052
	May		0.00037	0.0030	0.065	0.0048	0.0099	0.77	0.00019	0.81	0.020	3.9	0.0076	0.0035	0.00030	0.0052
	June		0.00041	0.0034	0.077	0.0054	0.012	0.86	0.00021	0.95	0.023	4.5	0.0088	0.0038	0.00035	0.0060
	July	**2028**	0.00042	0.0036	0.084	0.0057	0.013	0.87	0.00022	1.0	0.024	4.7	0.0095	0.0037	0.00037	0.0065
	August		0.00038	0.0033	0.083	0.0053	0.012	0.78	0.00020	0.99	0.024	4.5	0.0093	0.0032	0.00036	0.0063
	September		0.00037	0.0033	0.086	0.0053	0.013	0.77	0.00019	1.0	0.024	4.5	0.0095	0.0030	0.00037	0.0064
	October		0.00040	0.0036	0.094	0.0058	0.014	0.83	0.00021	1.1	0.026	4.9	0.010	0.0032	0.00041	0.0070
	November		0.00039	0.0036	0.094	0.0057	0.015	0.82	0.00020	1.1	0.026	4.9	0.010	0.0031	0.00041	0.0070
	December		0.00039	0.0036	0.094	0.0057	0.016	0.82	0.00020	1.1	0.026	4.9	0.010	0.0031	0.00041	0.0070
		MINIMUM	0.000053	0.000073	0.059	0.0035	0.0043	0.23	0.000042	0.74	0.016	1.4	0.0043	0.000045	0.00014	0.00080
		MAXIMUM	0.00042	0.0036	0.11	0.0075	0.016	0.87	0.00022	1.4	0.030	4.9	0.010	0.0038	0.00041	0.0070
		AVERAGE	0.00016	0.0015	0.083	0.0053	0.010	0.41	0.000089	1.1	0.024	2.7	0.0070	0.00066	0.00026	0.0037
	January		0.00039	0.0036	0.094	0.0057	0.016	0.82	0.00020	1.1	0.026	4.9	0.010	0.0031	0.00041	0.0070
	February		0.00039	0.0036	0.094	0.0057	0.017	0.82	0.00020	1.1	0.026	4.9	0.010	0.0031	0.00041	0.0070
	March		0.00038	0.0035	0.092	0.0056	0.017	0.79	0.00020	1.1	0.025	4.7	0.010	0.0030	0.00040	0.0068
	April		0.00027	0.0025	0.070	0.0041	0.012	0.56	0.00014	0.81	0.019	3.5	0.0076	0.0020	0.00030	0.0051
	May		0.00025	0.0024	0.067	0.0039	0.011	0.52	0.00013	0.78	0.018	3.3	0.0073	0.0018	0.00029	0.0049
Operations	**June**	**2029**	0.00025	0.0024	0.070	0.0039	0.011	0.51	0.00013	0.80	0.019	3.4	0.0075	0.0016	0.00030	0.0050
	July		0.00029	0.0028	0.085	0.0046	0.014	0.60	0.00015	0.97	0.022	4.0	0.0091	0.0018	0.00036	0.0061
	August		0.00031	0.0030	0.095	0.0051	0.015	0.64	0.00016	1.1	0.025	4.4	0.010	0.0018	0.00040	0.0068
	September		0.00027	0.0027	0.088	0.0046	0.013	0.56	0.00014	1.00	0.023	4.0	0.0094	0.0015	0.00037	0.0062
	October		0.00027	0.0028	0.089	0.0046	0.014	0.56	0.00014	1.0	0.023	4.0	0.0095	0.0014	0.00037	0.0063
	November		0.00026	0.0026	0.086	0.0045	0.014	0.54	0.00013	0.97	0.022	3.9	0.0091	0.0013	0.00036	0.0061
	December		0.00026	0.0026	0.086	0.0044	0.015	0.53	0.00013	0.97	0.022	3.9	0.0091	0.0013	0.00036	0.0061

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.00026	0.0026	0.086	0.0044	0.015	0.53	0.00013	0.97	0.022	3.9	0.0091	0.0013	0.00036	0.0061
	February		0.00025	0.0026	0.085	0.0043	0.015	0.52	0.00013	0.95	0.022	3.8	0.0089	0.0013	0.00035	0.0059
	March		0.00024	0.0024	0.080	0.0041	0.014	0.49	0.00012	0.89	0.020	3.6	0.0084	0.0012	0.00033	0.0056
	April		0.00019	0.0020	0.067	0.0034	0.011	0.40	0.000098	0.75	0.017	3.0	0.0071	0.00090	0.00028	0.0047
	May		0.00020	0.0021	0.072	0.0036	0.012	0.41	0.00010	0.80	0.018	3.1	0.0076	0.00088	0.00030	0.0050
	June		0.00017	0.0019	0.066	0.0032	0.010	0.36	0.000089	0.73	0.016	2.8	0.0069	0.00067	0.00027	0.0045
	July		0.00015	0.0017	0.061	0.0029	0.0086	0.32	0.000078	0.68	0.015	2.6	0.0064	0.00051	0.00025	0.0042
	August		0.00016	0.0018	0.066	0.0031	0.0089	0.33	0.000081	0.72	0.016	2.7	0.0068	0.00046	0.00027	0.0045
	September		0.00014	0.0016	0.060	0.0028	0.0079	0.29	0.000071	0.66	0.015	2.5	0.0062	0.00035	0.00024	0.0041
	October		0.00013	0.0016	0.059	0.0027	0.0079	0.28	0.000069	0.64	0.014	2.4	0.0061	0.00031	0.00024	0.0040
	November		0.00012	0.0014	0.055	0.0025	0.0077	0.26	0.000063	0.60	0.013	2.2	0.0056	0.00027	0.00022	0.0037
	December		0.00012	0.0014	0.054	0.0025	0.0081	0.25	0.000063	0.59	0.013	2.2	0.0056	0.00027	0.00022	0.0037
	January	2031	0.00012	0.0014	0.053	0.0024	0.0084	0.25	0.000062	0.58	0.013	2.2	0.0055	0.00026	0.00021	0.0036
	February		0.00012	0.0014	0.053	0.0024	0.0088	0.25	0.000061	0.58	0.013	2.2	0.0055	0.00026	0.00021	0.0036
	March		0.00012	0.0014	0.052	0.0024	0.0088	0.24	0.000060	0.57	0.013	2.1	0.0054	0.00025	0.00021	0.0035
	April		0.000094	0.0011	0.043	0.0019	0.0067	0.20	0.000049	0.47	0.010	1.7	0.0044	0.00018	0.00017	0.0029
	May		0.000095	0.0011	0.044	0.0020	0.0063	0.20	0.000049	0.48	0.011	1.8	0.0046	0.00015	0.00018	0.0030
	June		0.00012	0.0014	0.055	0.0025	0.0078	0.24	0.000060	0.60	0.013	2.2	0.0057	0.00018	0.00022	0.0037
	July		0.00014	0.0017	0.067	0.0030	0.0092	0.29	0.000072	0.72	0.016	2.7	0.0068	0.00019	0.00027	0.0045
	August		0.00016	0.0019	0.077	0.0034	0.010	0.33	0.000083	0.83	0.019	3.1	0.0079	0.00020	0.00031	0.0052
	September		0.00016	0.0019	0.076	0.0034	0.010	0.33	0.000081	0.83	0.018	3.0	0.0078	0.00018	0.00031	0.0051
	October		0.00015	0.0018	0.072	0.0032	0.010	0.31	0.000076	0.78	0.017	2.8	0.0073	0.00016	0.00029	0.0048
	November		0.00014	0.0016	0.066	0.0029	0.0098	0.28	0.000070	0.72	0.016	2.6	0.0068	0.00015	0.00027	0.0044
	December		0.00013	0.0016	0.066	0.0029	0.010	0.28	0.000070	0.71	0.016	2.6	0.0067	0.00014	0.00026	0.0044
	January	2032	0.00013	0.0016	0.065	0.0028	0.011	0.28	0.000069	0.70	0.016	2.6	0.0066	0.00014	0.00026	0.0043
	February		0.00013	0.0016	0.065	0.0028	0.011	0.28	0.000068	0.70	0.016	2.6	0.0066	0.00014	0.00026	0.0043
	March		0.00011	0.0014	0.055	0.0024	0.0091	0.23	0.000058	0.60	0.013	2.2	0.0056	0.00011	0.00022	0.0037
	April		0.000094	0.0012	0.046	0.0020	0.0071	0.20	0.000049	0.50	0.011	1.8	0.0047	0.000087	0.00019	0.0031
	May		0.000100	0.0012	0.049	0.0022	0.0074	0.21	0.000052	0.54	0.012	1.9	0.0051	0.000088	0.00020	0.0033
	June		0.00012	0.0015	0.060	0.0026	0.0088	0.25	0.000063	0.65	0.014	2.4	0.0061	0.00010	0.00024	0.0040
	July		0.00012	0.0015	0.059	0.0026	0.0083	0.25	0.000062	0.64	0.014	2.3	0.0061	0.000093	0.00024	0.0040
	August		0.00013	0.0015	0.063	0.0027	0.0085	0.26	0.000065	0.68	0.015	2.5	0.0064	0.000092	0.00025	0.0042
	September		0.00014	0.0017	0.070	0.0031	0.0098	0.29	0.000073	0.76	0.017	2.8	0.0072	0.00010	0.00028	0.0047
	October		0.00014	0.0018	0.071	0.0031	0.010	0.30	0.000074	0.77	0.017	2.8	0.0073	0.00010	0.00029	0.0048
	November		0.00014	0.0017	0.070	0.0031	0.011	0.29	0.000072	0.76	0.017	2.7	0.0071	0.000098	0.00028	0.0047
	December		0.00014	0.0017	0.070	0.0031	0.011	0.29	0.000072	0.76	0.017	2.7	0.0071	0.000098	0.00028	0.0047
	January	2033	0.00014	0.0017	0.070	0.0031	0.012	0.29	0.000072	0.76	0.017	2.7	0.0071	0.000098	0.00028	0.0047
	February		0.00014	0.0017	0.070	0.0031	0.012	0.29	0.000072	0.76	0.017	2.7	0.0071	0.000098	0.00028	0.0047
	March		0.00014	0.0017	0.070	0.0030	0.012	0.29	0.000072	0.75	0.017	2.7	0.0071	0.000097	0.00028	0.0047
	April		0.00010	0.0013	0.052	0.0023	0.0084	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000069	0.00021	0.0035
	May		0.00011	0.0014	0.055	0.0024	0.0083	0.23	0.000057	0.60	0.013	2.2	0.0056	0.000070	0.00022	0.0037
	June		0.00012	0.0015	0.063	0.0027	0.0092	0.26	0.000064	0.68	0.015	2.4	0.0064	0.000078	0.00025	0.0042
	July		0.00015	0.0019	0.076	0.0033	0.011	0.32	0.000078	0.82	0.018	3.0	0.0078	0.000093	0.00031	0.0051
	August		0.00016	0.0020	0.082	0.0035	0.012	0.34	0.000084	0.88	0.019	3.2	0.0083	0.000097	0.00033	0.0055
	September		0.00016	0.0020	0.083	0.0036	0.012	0.34	0.000085	0.89	0.020	3.2	0.0084	0.000097	0.00033	0.0055
	October		0.00016	0.0020	0.082	0.0036	0.012	0.34	0.000084	0.88	0.020	3.2	0.0084	0.000095	0.00033	0.0055
	November		0.00014	0.0018	0.071	0.0031	0.011	0.29	0.000073	0.77	0.017	2.8	0.0073	0.000082	0.00029	0.0048
	December		0.00014	0.0017	0.071	0.0031	0.011	0.29	0.000072	0.76	0.017	2.8	0.0072	0.000082	0.00028	0.0047
	January	2034	0.00014	0.0017	0.071	0.0031	0.012	0.29	0.000072	0.76	0.017	2.8	0.0072	0.000082	0.00028	0.0047
	February		0.00014	0.0017	0.070	0.0031	0.012	0.29	0.000072	0.76	0.017	2.8	0.0072	0.000081	0.00028	0.0047
	March		0.00013	0.0016	0.066	0.0029	0.011	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000076	0.00026	0.0044
	April		0.00011	0.0013	0.054	0.0024	0.0089	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000061	0.00022	0.0036
	May		0.00011	0.0013	0.055	0.0024	0.0087	0.23	0.000056	0.59	0.013	2.1	0.0056	0.000061	0.00022	0.0037
	June		0.000092	0.0011	0.047	0.0020	0.0063	0.19	0.000048	0.50	0.011	1.8	0.0048	0.000051	0.00019	0.0031
	July		0.000087	0.0011	0.044	0.0019	0.0052	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000047	0.00018	0.0030
	August		0.000098	0.0012	0.050	0.0022	0.0057	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000052	0.00020	0.0033
	September		0.000100	0.0012	0.051	0.0022	0.0059	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00020	0.0034
	October		0.00011	0.0013	0.055	0.0024	0.0069	0.23	0.000056	0.59	0.013	2.1	0.0056	0.000058	0.00022	0.0037
	November		0.00011	0.0013	0.054	0.0023	0.0073	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000057	0.00022	0.0036
	December		0.00010	0.0013	0.051	0.0022	0.0074	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000054	0.00021	0.0034
	January	2035	0.00010	0.0012	0.051	0.0022	0.0078	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00020	0.0034
	February		0.000098	0.0012	0.050	0.0022	0.0079	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000052	0.00020	0.0033
	March		0.000098	0.0012	0.050	0.0022	0.0082	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000052	0.00020	0.0033

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.000090	0.0011	0.046	0.0020	0.0074	0.19	0.000047	0.49	0.011	1.8	0.0047	0.000048	0.00018	0.0031
	May		0.000086	0.0011	0.044	0.0019	0.0064	0.18	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	June		0.000093	0.0012	0.047	0.0020	0.0064	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000049	0.00019	0.0032
	July		0.00010	0.0013	0.053	0.0023	0.0069	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	August	**2035**	0.00012	0.0016	0.064	0.0028	0.0083	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00025	0.0043
	September		0.00013	0.0016	0.067	0.0029	0.0089	0.28	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	October		0.00013	0.0016	0.065	0.0028	0.0090	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	November		0.00013	0.0016	0.064	0.0028	0.0094	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	December		0.00013	0.0016	0.064	0.0028	0.010	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	January		0.00013	0.0016	0.064	0.0028	0.011	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	February		0.00013	0.0016	0.064	0.0028	0.011	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	March		0.00012	0.0015	0.061	0.0027	0.011	0.25	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00025	0.0041
	April		0.000091	0.0011	0.046	0.0020	0.0071	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	May		0.000091	0.0011	0.047	0.0020	0.0068	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	June	**2036**	0.00011	0.0014	0.058	0.0025	0.0083	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	July		0.00013	0.0016	0.065	0.0028	0.0090	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	August		0.00017	0.0021	0.086	0.0037	0.012	0.35	0.000088	0.93	0.021	3.4	0.0088	0.000088	0.00035	0.0058
	September		0.00018	0.0022	0.092	0.0040	0.013	0.38	0.000093	0.99	0.022	3.6	0.0094	0.000094	0.00037	0.0061
	October		0.00017	0.0021	0.085	0.0037	0.013	0.35	0.000087	0.92	0.020	3.3	0.0087	0.000088	0.00034	0.0057
	November		0.00016	0.0020	0.081	0.0035	0.012	0.33	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	December		0.00016	0.0020	0.081	0.0035	0.013	0.33	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	January		0.00016	0.0020	0.081	0.0035	0.014	0.33	0.000082	0.87	0.019	3.1	0.0082	0.000083	0.00032	0.0054
	February		0.00015	0.0019	0.076	0.0033	0.013	0.31	0.000077	0.82	0.018	3.0	0.0077	0.000078	0.00030	0.0051
	March		0.00014	0.0018	0.073	0.0032	0.013	0.30	0.000074	0.79	0.017	2.9	0.0075	0.000075	0.00029	0.0049
	April		0.00011	0.0014	0.057	0.0025	0.0090	0.23	0.000058	0.61	0.014	2.2	0.0058	0.000058	0.00023	0.0038
	May		0.00013	0.0016	0.065	0.0028	0.010	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June	**2037**	0.00012	0.0015	0.062	0.0027	0.0092	0.26	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	July		0.00011	0.0014	0.058	0.0025	0.0079	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	August		0.00014	0.0018	0.073	0.0032	0.0099	0.30	0.000074	0.79	0.017	2.8	0.0074	0.000075	0.00029	0.0049
	September		0.00014	0.0017	0.069	0.0030	0.0093	0.28	0.000070	0.75	0.016	2.7	0.0070	0.000071	0.00028	0.0046
	October		0.00014	0.0017	0.071	0.0031	0.010	0.29	0.000072	0.77	0.017	2.8	0.0072	0.000073	0.00028	0.0048
Operations	**November**		0.00014	0.0017	0.070	0.0030	0.011	0.29	0.000071	0.76	0.017	2.7	0.0071	0.000072	0.00028	0.0047
	December		0.00014	0.0017	0.069	0.0030	0.011	0.28	0.000070	0.75	0.017	2.7	0.0070	0.000071	0.00028	0.0046
	January		0.00014	0.0017	0.069	0.0030	0.011	0.28	0.000070	0.75	0.017	2.7	0.0070	0.000071	0.00028	0.0046
	February		0.00013	0.0017	0.069	0.0030	0.012	0.28	0.000070	0.74	0.016	2.7	0.0070	0.000070	0.00028	0.0046
	March		0.00011	0.0014	0.058	0.0025	0.0095	0.24	0.000059	0.62	0.014	2.2	0.0059	0.000059	0.00023	0.0039
	April		0.000093	0.0012	0.047	0.0021	0.0072	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	May		0.00010	0.0013	0.051	0.0022	0.0077	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00021	0.0034
	June	**2038**	0.00012	0.0015	0.060	0.0026	0.0089	0.25	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	July		0.00014	0.0017	0.069	0.0030	0.0100	0.28	0.000070	0.75	0.016	2.7	0.0070	0.000071	0.00028	0.0046
	August		0.00016	0.0020	0.082	0.0035	0.012	0.34	0.000083	0.88	0.019	3.2	0.0083	0.000084	0.00033	0.0055
	September		0.00016	0.0020	0.080	0.0035	0.012	0.33	0.000082	0.87	0.019	3.1	0.0082	0.000082	0.00032	0.0054
	October		0.00013	0.0017	0.068	0.0030	0.0098	0.28	0.000069	0.74	0.016	2.7	0.0070	0.000070	0.00027	0.0046
	November		0.00013	0.0016	0.065	0.0028	0.0098	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	December		0.00013	0.0016	0.065	0.0028	0.010	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	January		0.00013	0.0016	0.065	0.0028	0.011	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	February		0.00011	0.0014	0.058	0.0025	0.0096	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	March		0.00011	0.0014	0.056	0.0024	0.0093	0.23	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	April		0.00011	0.0014	0.056	0.0024	0.0094	0.23	0.000057	0.61	0.013	2.2	0.0057	0.000058	0.00023	0.0038
	May		0.00013	0.0016	0.064	0.0028	0.010	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000065	0.00026	0.0043
	June	**2039**	0.00016	0.0020	0.081	0.0035	0.013	0.33	0.000082	0.87	0.019	3.2	0.0083	0.000083	0.00032	0.0054
	July		0.00016	0.0020	0.081	0.0035	0.013	0.33	0.000082	0.87	0.019	3.2	0.0082	0.000083	0.00032	0.0054
	August		0.00012	0.0015	0.063	0.0027	0.0089	0.26	0.000064	0.68	0.015	2.5	0.0064	0.000065	0.00025	0.0042
	September		0.00013	0.0016	0.065	0.0028	0.0091	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	October		0.00012	0.0015	0.061	0.0027	0.0087	0.25	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00024	0.0041
	November		0.00011	0.0014	0.056	0.0024	0.0083	0.23	0.000057	0.61	0.013	2.2	0.0057	0.000057	0.00022	0.0038
	December		0.00011	0.0014	0.056	0.0024	0.0088	0.23	0.000057	0.61	0.013	2.2	0.0057	0.000057	0.00022	0.0038
	January		0.00011	0.0014	0.056	0.0024	0.0092	0.23	0.000057	0.61	0.013	2.2	0.0057	0.000057	0.00022	0.0038
	February		0.00011	0.0014	0.056	0.0024	0.0096	0.23	0.000057	0.61	0.013	2.2	0.0057	0.000057	0.00022	0.0038
	March		0.000091	0.0011	0.046	0.0020	0.0074	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	April	**2040**	0.000080	0.00100	0.041	0.0018	0.0060	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	May		0.000084	0.0010	0.043	0.0018	0.0060	0.17	0.000043	0.46	0.010	1.7	0.0043	0.000044	0.00017	0.0029
	June		0.000090	0.0011	0.046	0.0020	0.0060	0.19	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	July		0.000092	0.0011	0.047	0.0020	0.0056	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	August		0.00013	0.0016	0.066	0.0028	0.0083	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	September	**2040**	0.00014	0.0017	0.069	0.0030	0.0092	0.28	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046
	October		0.00013	0.0016	0.065	0.0028	0.0087	0.27	0.000066	0.70	0.016	2.5	0.0067	0.000067	0.00026	0.0044
	November		0.00013	0.0016	0.066	0.0029	0.0094	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	December		0.00013	0.0016	0.066	0.0029	0.010	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	January		0.00013	0.0016	0.066	0.0029	0.011	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	February		0.00013	0.0016	0.066	0.0029	0.011	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	March		0.00012	0.0015	0.063	0.0027	0.011	0.26	0.000064	0.68	0.015	2.5	0.0064	0.000065	0.00025	0.0042
	April		0.00010	0.0013	0.051	0.0022	0.0082	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00021	0.0034
	May		0.00011	0.0013	0.055	0.0024	0.0083	0.22	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	June		0.00014	0.0017	0.069	0.0030	0.010	0.28	0.000070	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046
	July	**2041**	0.00014	0.0018	0.073	0.0032	0.011	0.30	0.000074	0.79	0.017	2.9	0.0075	0.000075	0.00029	0.0049
	August		0.000098	0.0012	0.050	0.0022	0.0062	0.21	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0033
	September		0.000092	0.0012	0.047	0.0020	0.0056	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	October		0.000096	0.0012	0.049	0.0021	0.0061	0.20	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	November		0.000093	0.0012	0.047	0.0020	0.0063	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	December		0.000093	0.0012	0.047	0.0020	0.0069	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	January		0.000093	0.0012	0.047	0.0020	0.0073	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	February		0.000093	0.0012	0.047	0.0020	0.0077	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	March		0.000090	0.0011	0.046	0.0020	0.0077	0.19	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	April		0.000078	0.00098	0.040	0.0017	0.0061	0.16	0.000041	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000081	0.0010	0.041	0.0018	0.0061	0.17	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00017	0.0028
	June		0.000084	0.0010	0.043	0.0019	0.0057	0.18	0.000043	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	July	**2042**	0.000088	0.0011	0.045	0.0019	0.0054	0.18	0.000045	0.48	0.011	1.7	0.0046	0.000046	0.00018	0.0030
	August		0.000089	0.0011	0.045	0.0020	0.0052	0.19	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	September		0.000092	0.0011	0.047	0.0020	0.0053	0.19	0.000048	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	October		0.000081	0.0010	0.041	0.0018	0.0047	0.17	0.000042	0.45	0.0099	1.6	0.0042	0.000042	0.00017	0.0028
	November		0.000080	0.00100	0.041	0.0018	0.0051	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	December		0.000080	0.00100	0.041	0.0018	0.0056	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	January		0.000080	0.00100	0.041	0.0018	0.0061	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
Operations	**February**		0.000080	0.00100	0.041	0.0018	0.0064	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	March		0.000080	0.00100	0.041	0.0018	0.0067	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	April		0.000073	0.00091	0.037	0.0016	0.0058	0.15	0.000038	0.40	0.0089	1.5	0.0038	0.000038	0.00015	0.0025
	May		0.000077	0.00096	0.039	0.0017	0.0055	0.16	0.000040	0.42	0.0094	1.5	0.0040	0.000040	0.00016	0.0026
	June		0.000081	0.0010	0.041	0.0018	0.0053	0.17	0.000042	0.45	0.0099	1.6	0.0042	0.000042	0.00017	0.0028
	July	**2043**	0.000090	0.0011	0.046	0.0020	0.0056	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	August		0.000087	0.0011	0.044	0.0019	0.0049	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0029
	September		0.000079	0.00099	0.040	0.0017	0.0043	0.17	0.000041	0.44	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	October		0.000072	0.00090	0.037	0.0016	0.0039	0.15	0.000037	0.40	0.0088	1.4	0.0037	0.000038	0.00015	0.0025
	November		0.000067	0.00084	0.034	0.0015	0.0039	0.14	0.000035	0.37	0.0082	1.3	0.0035	0.000035	0.00014	0.0023
	December		0.000067	0.00084	0.034	0.0015	0.0044	0.14	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	January		0.000067	0.00083	0.034	0.0015	0.0048	0.14	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	February		0.000067	0.00083	0.034	0.0015	0.0051	0.14	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	March		0.000067	0.00083	0.034	0.0015	0.0053	0.14	0.000035	0.37	0.0081	1.3	0.0035	0.000035	0.00014	0.0023
	April		0.000065	0.00082	0.033	0.0014	0.0047	0.14	0.000034	0.36	0.0079	1.3	0.0034	0.000034	0.00013	0.0022
	May		0.000079	0.00098	0.040	0.0017	0.0054	0.16	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	June		0.000098	0.0012	0.050	0.0022	0.0067	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	July	**2044**	0.00010	0.0013	0.053	0.0023	0.0067	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0035
	August		0.00014	0.0017	0.070	0.0030	0.0090	0.29	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0047
	September		0.00016	0.0020	0.083	0.0036	0.011	0.34	0.000085	0.90	0.020	3.2	0.0085	0.000085	0.00033	0.0056
	October		0.00017	0.0021	0.085	0.0037	0.012	0.35	0.000087	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	November		0.00017	0.0021	0.087	0.0038	0.013	0.36	0.000089	0.94	0.021	3.4	0.0089	0.000089	0.00035	0.0058
	December		0.00017	0.0021	0.087	0.0038	0.014	0.36	0.000088	0.94	0.021	3.4	0.0088	0.000089	0.00035	0.0058
	January		0.00017	0.0021	0.087	0.0038	0.014	0.36	0.000088	0.93	0.021	3.4	0.0088	0.000089	0.00035	0.0058
	February		0.00017	0.0021	0.087	0.0038	0.015	0.36	0.000088	0.93	0.021	3.4	0.0088	0.000089	0.00035	0.0058
	March		0.00016	0.0020	0.081	0.0035	0.014	0.33	0.000082	0.87	0.019	3.2	0.0083	0.000083	0.00032	0.0054
	April		0.00013	0.0016	0.066	0.0029	0.011	0.27	0.000067	0.71	0.016	2.6	0.0067	0.000067	0.00026	0.0044
	May	**2045**	0.00013	0.0016	0.065	0.0028	0.010	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	June		0.00013	0.0017	0.068	0.0029	0.010	0.28	0.000069	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	July		0.00014	0.0018	0.072	0.0031	0.011	0.30	0.000073	0.78	0.017	2.8	0.0073	0.000074	0.00029	0.0048
	August		0.00016	0.0020	0.081	0.0035	0.012	0.33	0.000083	0.88	0.019	3.2	0.0083	0.000083	0.00032	0.0054
	September		0.00017	0.0022	0.088	0.0038	0.013	0.36	0.000090	0.95	0.021	3.5	0.0090	0.000091	0.00035	0.0059

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	October		0.00017	0.0022	0.088	0.0038	0.013	0.36	0.000089	0.95	0.021	3.4	0.0090	0.000090	0.00035	0.0059
	November	**2045**	0.00017	0.0021	0.085	0.0037	0.013	0.35	0.000087	0.92	0.020	3.3	0.0087	0.000087	0.00034	0.0057
	December		0.00016	0.0021	0.084	0.0036	0.014	0.34	0.000085	0.90	0.020	3.3	0.0085	0.000086	0.00034	0.0056
	January		0.00016	0.0020	0.081	0.0035	0.014	0.33	0.000083	0.87	0.019	3.2	0.0083	0.000083	0.00032	0.0054
	February		0.00016	0.0020	0.081	0.0035	0.014	0.33	0.000083	0.87	0.019	3.2	0.0083	0.000083	0.00032	0.0054
	March		0.00015	0.0018	0.074	0.0032	0.013	0.30	0.000075	0.80	0.018	2.9	0.0075	0.000076	0.00030	0.0050
	April		0.00013	0.0016	0.065	0.0028	0.011	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	May		0.00013	0.0016	0.065	0.0028	0.011	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	June		0.00013	0.0016	0.065	0.0028	0.010	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	July	**2046**	0.00012	0.0015	0.062	0.0027	0.0091	0.26	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	August		0.00012	0.0015	0.060	0.0026	0.0081	0.24	0.000061	0.64	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	September		0.00011	0.0014	0.055	0.0024	0.0073	0.23	0.000056	0.60	0.013	2.2	0.0056	0.000057	0.00022	0.0037
	October		0.000099	0.0012	0.050	0.0022	0.0066	0.21	0.000051	0.54	0.012	2.0	0.0051	0.000051	0.00020	0.0034
	November		0.000094	0.0012	0.048	0.0021	0.0065	0.20	0.000049	0.51	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	December		0.000093	0.0012	0.047	0.0020	0.0069	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	January		0.000093	0.0012	0.047	0.0020	0.0074	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	February		0.000093	0.0012	0.047	0.0020	0.0077	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0032
	March		0.000091	0.0011	0.046	0.0020	0.0077	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	April		0.000083	0.0010	0.042	0.0018	0.0067	0.17	0.000043	0.45	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	May		0.000084	0.0010	0.043	0.0019	0.0063	0.18	0.000043	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	June		0.00010	0.0013	0.053	0.0023	0.0075	0.22	0.000053	0.57	0.013	2.0	0.0054	0.000054	0.00021	0.0035
	July	**2047**	0.00011	0.0013	0.054	0.0024	0.0071	0.22	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
	August		0.00011	0.0013	0.054	0.0023	0.0066	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	September		0.00011	0.0014	0.058	0.0025	0.0073	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	October		0.00012	0.0015	0.061	0.0027	0.0081	0.25	0.000062	0.66	0.015	2.4	0.0062	0.000063	0.00025	0.0041
	November		0.00012	0.0015	0.060	0.0026	0.0084	0.25	0.000061	0.65	0.014	2.3	0.0061	0.000061	0.00024	0.0040
	December		0.00012	0.0014	0.059	0.0026	0.0088	0.24	0.000060	0.64	0.014	2.3	0.0060	0.000060	0.00024	0.0040
	January		0.00011	0.0014	0.058	0.0025	0.0092	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000060	0.00023	0.0039
	February		0.00011	0.0014	0.058	0.0025	0.0096	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	March		0.00011	0.0014	0.058	0.0025	0.0099	0.24	0.000059	0.62	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	April		0.00011	0.0013	0.054	0.0024	0.0093	0.22	0.000055	0.59	0.013	2.1	0.0055	0.000056	0.00022	0.0036
Operations	**May**		0.00011	0.0013	0.054	0.0023	0.0089	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	June		0.00013	0.0016	0.065	0.0028	0.011	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	July	**2048**	0.00012	0.0014	0.058	0.0025	0.0083	0.24	0.000060	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
	August		0.000093	0.0012	0.047	0.0021	0.0059	0.20	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	September		0.000089	0.0011	0.045	0.0020	0.0054	0.19	0.000046	0.49	0.011	1.8	0.0046	0.000047	0.00018	0.0030
	October		0.000086	0.0011	0.044	0.0019	0.0054	0.18	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	November		0.000086	0.0011	0.044	0.0019	0.0059	0.18	0.000044	0.47	0.010	1.7	0.0044	0.000045	0.00017	0.0029
	December		0.000084	0.0010	0.043	0.0019	0.0062	0.18	0.000043	0.46	0.010	1.7	0.0044	0.000044	0.00017	0.0029
	January		0.000079	0.00099	0.040	0.0018	0.0060	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000041	0.00016	0.0027
	February		0.000078	0.00098	0.040	0.0017	0.0062	0.16	0.000041	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	March		0.000076	0.00095	0.039	0.0017	0.0061	0.16	0.000039	0.42	0.0092	1.5	0.0039	0.000040	0.00015	0.0026
	April		0.000073	0.00091	0.037	0.0016	0.0057	0.15	0.000038	0.40	0.0089	1.5	0.0038	0.000038	0.00015	0.0025
	May		0.000081	0.0010	0.041	0.0018	0.0060	0.17	0.000042	0.44	0.0098	1.6	0.0042	0.000042	0.00016	0.0027
	June		0.000087	0.0011	0.044	0.0019	0.0060	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	July	**2049**	0.000086	0.0011	0.044	0.0019	0.0053	0.18	0.000045	0.47	0.010	1.7	0.0045	0.000045	0.00018	0.0029
	August		0.000092	0.0011	0.047	0.0020	0.0053	0.19	0.000047	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	September		0.000087	0.0011	0.044	0.0019	0.0049	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000045	0.00018	0.0030
	October		0.000079	0.00098	0.040	0.0017	0.0045	0.16	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	November		0.000071	0.00089	0.036	0.0016	0.0043	0.15	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	December		0.000071	0.00089	0.036	0.0016	0.0047	0.15	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	January		0.000071	0.00089	0.036	0.0016	0.0052	0.15	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	February		0.000071	0.00089	0.036	0.0016	0.0055	0.15	0.000037	0.39	0.0087	1.4	0.0037	0.000037	0.00015	0.0024
	March		0.000071	0.00088	0.036	0.0016	0.0057	0.15	0.000037	0.39	0.0086	1.4	0.0037	0.000037	0.00014	0.0024
	April		0.000065	0.00081	0.033	0.0014	0.0046	0.14	0.000034	0.36	0.0079	1.3	0.0034	0.000034	0.00013	0.0022
	May		0.000068	0.00084	0.034	0.0015	0.0048	0.14	0.000035	0.37	0.0082	1.3	0.0035	0.000035	0.00014	0.0023
	June		0.000074	0.00092	0.038	0.0016	0.0048	0.15	0.000038	0.41	0.0090	1.5	0.0038	0.000038	0.00015	0.0025
	July	**2050**	0.00011	0.0013	0.054	0.0023	0.0071	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	August		0.00013	0.0016	0.065	0.0028	0.0085	0.27	0.000066	0.70	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	September		0.00012	0.0015	0.062	0.0027	0.0082	0.26	0.000064	0.67	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	October		0.00012	0.0015	0.062	0.0027	0.0084	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0042
	November		0.00012	0.0014	0.059	0.0026	0.0084	0.24	0.000060	0.64	0.014	2.3	0.0060	0.000060	0.00024	0.0040
	December		0.00011	0.0014	0.058	0.0025	0.0088	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	**January**	**2051**	0.00011	0.0014	0.058	0.0025	0.0093	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	February		0.00011	0.0014	0.058	0.0025	0.0098	0.24	0.000059	0.63	0.014	2.3	0.0059	0.000059	0.00023	0.0039
	March		0.00011	0.0013	0.055	0.0024	0.0094	0.23	0.000056	0.59	0.013	2.2	0.0056	0.000056	0.00022	0.0037
	April		0.000079	0.00098	0.040	0.0017	0.0055	0.16	0.000041	0.43	0.0095	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000080	0.00100	0.041	0.0018	0.0053	0.17	0.000041	0.44	0.0097	1.6	0.0041	0.000042	0.00016	0.0027
	June		0.000095	0.0012	0.048	0.0021	0.0062	0.20	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	July		0.00010	0.0013	0.052	0.0022	0.0064	0.21	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	August		0.000093	0.0012	0.048	0.0021	0.0055	0.20	0.000048	0.51	0.011	1.9	0.0048	0.000049	0.00019	0.0032
	September		0.000094	0.0012	0.048	0.0021	0.0056	0.20	0.000049	0.52	0.011	1.9	0.0049	0.000049	0.00019	0.0032
	October		0.000092	0.0011	0.047	0.0020	0.0057	0.19	0.000047	0.50	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	November		0.000091	0.0011	0.046	0.0020	0.0060	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	December		0.000088	0.0011	0.045	0.0019	0.0062	0.18	0.000046	0.48	0.011	1.7	0.0046	0.000046	0.00018	0.0030
	January	**2052**	0.000088	0.0011	0.045	0.0019	0.0067	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	February		0.000088	0.0011	0.045	0.0019	0.0071	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	March		0.000087	0.0011	0.044	0.0019	0.0074	0.18	0.000045	0.48	0.011	1.7	0.0045	0.000046	0.00018	0.0030
	April		0.000079	0.00098	0.040	0.0017	0.0060	0.16	0.000041	0.43	0.0096	1.6	0.0041	0.000041	0.00016	0.0027
	May		0.000083	0.0010	0.042	0.0018	0.0058	0.17	0.000043	0.45	0.010	1.6	0.0043	0.000043	0.00017	0.0028
	June		0.000098	0.0012	0.050	0.0022	0.0067	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	July		0.00010	0.0013	0.052	0.0023	0.0066	0.21	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	August		0.00011	0.0013	0.054	0.0023	0.0066	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	September		0.00012	0.0015	0.062	0.0027	0.0079	0.26	0.000063	0.67	0.015	2.4	0.0063	0.000064	0.00025	0.0042
	October		0.00013	0.0016	0.064	0.0028	0.0086	0.26	0.000066	0.69	0.015	2.5	0.0066	0.000066	0.00026	0.0043
	November		0.00013	0.0016	0.064	0.0028	0.0092	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	December		0.00013	0.0016	0.064	0.0028	0.0098	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
		MINIMUM	0.000065	0.00081	0.033	0.0014	0.0039	0.14	0.000034	0.36	0.0079	1.3	0.0034	0.000034	0.00013	0.0022
		MAXIMUM	0.00039	0.0036	0.095	0.0057	0.017	0.82	0.00020	1.1	0.026	4.9	0.010	0.0031	0.00041	0.0070
		AVERAGE	0.00012	0.0015	0.059	0.0026	0.0088	0.26	0.000064	0.64	0.014	2.3	0.0060	0.00017	0.00024	0.0040
Decommissioning	**January**	**2053**	0.00013	0.0016	0.064	0.0028	0.010	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	February		0.00013	0.0016	0.064	0.0028	0.011	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	March		0.00012	0.0015	0.062	0.0027	0.011	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	April		0.000098	0.0012	0.050	0.0022	0.0078	0.20	0.000051	0.54	0.012	1.9	0.0051	0.000051	0.00020	0.0033
	May		0.00010	0.0013	0.052	0.0023	0.0077	0.21	0.000053	0.56	0.012	2.0	0.0053	0.000053	0.00021	0.0035
	June		0.00013	0.0017	0.068	0.0030	0.010	0.28	0.000069	0.73	0.016	2.7	0.0069	0.000070	0.00027	0.0046
	July		0.00016	0.0021	0.084	0.0036	0.012	0.34	0.000085	0.90	0.020	3.3	0.0085	0.000086	0.00034	0.0056
	August		0.00017	0.0021	0.088	0.0038	0.013	0.36	0.000089	0.95	0.021	3.4	0.0089	0.000090	0.00035	0.0059
	September		0.00012	0.0015	0.063	0.0027	0.0085	0.26	0.000064	0.68	0.015	2.5	0.0064	0.000064	0.00025	0.0042
	October		0.00011	0.0014	0.056	0.0024	0.0075	0.23	0.000057	0.60	0.013	2.2	0.0057	0.000057	0.00022	0.0037
	November		0.00011	0.0013	0.054	0.0023	0.0076	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	December		0.00011	0.0013	0.054	0.0023	0.0081	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	January	**2054**	0.00011	0.0013	0.054	0.0023	0.0086	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	February		0.00011	0.0013	0.054	0.0023	0.0090	0.22	0.000055	0.58	0.013	2.1	0.0055	0.000055	0.00022	0.0036
	March		0.00010	0.0013	0.053	0.0023	0.0091	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	April		0.000092	0.0011	0.047	0.0020	0.0076	0.19	0.000048	0.51	0.011	1.8	0.0048	0.000048	0.00019	0.0031
	May		0.000090	0.0011	0.046	0.0020	0.0067	0.19	0.000047	0.49	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	June		0.00012	0.0015	0.061	0.0026	0.0089	0.25	0.000062	0.66	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	July		0.00015	0.0018	0.074	0.0032	0.011	0.30	0.000075	0.80	0.018	2.9	0.0075	0.000076	0.00030	0.0050
	August		0.00013	0.0016	0.067	0.0029	0.0089	0.27	0.000068	0.72	0.016	2.6	0.0068	0.000068	0.00027	0.0045
	September		0.00013	0.0016	0.067	0.0029	0.0090	0.28	0.000068	0.72	0.016	2.6	0.0068	0.000069	0.00027	0.0045
	October		0.00013	0.0016	0.067	0.0029	0.0093	0.28	0.000068	0.73	0.016	2.6	0.0069	0.000069	0.00027	0.0045
	November		0.00012	0.0015	0.063	0.0027	0.0090	0.26	0.000064	0.68	0.015	2.4	0.0064	0.000064	0.00025	0.0042
	December		0.00012	0.0015	0.062	0.0027	0.0095	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	January	**2055**	0.00012	0.0015	0.062	0.0027	0.0100	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	February		0.00012	0.0015	0.062	0.0027	0.010	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	March		0.00012	0.0015	0.062	0.0027	0.011	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	April		0.000100	0.0012	0.051	0.0022	0.0081	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	May		0.000092	0.0011	0.047	0.0020	0.0069	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000048	0.00019	0.0031
	June		0.000096	0.0012	0.049	0.0021	0.0069	0.20	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	July		0.000084	0.0010	0.043	0.0019	0.0050	0.18	0.000043	0.46	0.010	1.7	0.0043	0.000044	0.00017	0.0029
	August		0.000097	0.0012	0.049	0.0021	0.0058	0.20	0.000050	0.53	0.012	1.9	0.0050	0.000050	0.00020	0.0033
	September		0.00010	0.0013	0.053	0.0023	0.0064	0.22	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	October		0.00010	0.0013	0.053	0.0023	0.0067	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	November		0.000099	0.0012	0.051	0.0022	0.0068	0.21	0.000051	0.55	0.012	2.0	0.0052	0.000052	0.00020	0.0034
	December		0.000099	0.0012	0.050	0.0022	0.0073	0.21	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	**January**	**2056**	0.000099	0.0012	0.050	0.0022	0.0078	0.21	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	February		0.000099	0.0012	0.050	0.0022	0.0082	0.21	0.000051	0.54	0.012	2.0	0.0051	0.000052	0.00020	0.0034
	March		0.000089	0.0011	0.045	0.0020	0.0071	0.19	0.000046	0.49	0.011	1.8	0.0046	0.000046	0.00018	0.0030
	April		0.000090	0.0011	0.046	0.0020	0.0071	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	May		0.00010	0.0013	0.052	0.0023	0.0081	0.22	0.000053	0.57	0.013	2.0	0.0054	0.000054	0.00021	0.0035
	June		0.00012	0.0015	0.062	0.0027	0.0093	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	July		0.00013	0.0016	0.065	0.0028	0.0091	0.27	0.000066	0.70	0.016	2.5	0.0066	0.000067	0.00026	0.0044
	August		0.00013	0.0016	0.064	0.0028	0.0086	0.26	0.000065	0.69	0.015	2.5	0.0065	0.000066	0.00026	0.0043
	September		0.00010	0.0013	0.051	0.0022	0.0064	0.21	0.000052	0.55	0.012	2.0	0.0052	0.000053	0.00021	0.0034
	October		0.00010	0.0013	0.053	0.0023	0.0069	0.22	0.000054	0.57	0.013	2.1	0.0054	0.000054	0.00021	0.0036
	November		0.00011	0.0013	0.055	0.0024	0.0077	0.23	0.000056	0.59	0.013	2.1	0.0056	0.000056	0.00022	0.0037
	December		0.00011	0.0014	0.055	0.0024	0.0083	0.23	0.000056	0.60	0.013	2.2	0.0056	0.000056	0.00022	0.0037
	January	**2057**	0.00011	0.0014	0.055	0.0024	0.0088	0.23	0.000056	0.60	0.013	2.2	0.0056	0.000056	0.00022	0.0037
	February		0.00011	0.0014	0.055	0.0024	0.0092	0.23	0.000056	0.60	0.013	2.2	0.0056	0.000056	0.00022	0.0037
	March		0.00011	0.0014	0.055	0.0024	0.0096	0.23	0.000056	0.60	0.013	2.2	0.0056	0.000056	0.00022	0.0037
	April		0.000090	0.0011	0.046	0.0020	0.0073	0.19	0.000047	0.50	0.011	1.8	0.0047	0.000047	0.00018	0.0031
	May		0.00011	0.0013	0.053	0.0023	0.0084	0.22	0.000054	0.58	0.013	2.1	0.0054	0.000055	0.00021	0.0036
	June		0.00013	0.0016	0.066	0.0029	0.011	0.27	0.000067	0.71	0.016	2.6	0.0068	0.000068	0.00027	0.0044
	July		0.00012	0.0015	0.062	0.0027	0.0089	0.25	0.000063	0.67	0.015	2.4	0.0063	0.000063	0.00025	0.0041
	August		0.00012	0.0015	0.061	0.0026	0.0081	0.25	0.000062	0.65	0.014	2.4	0.0062	0.000062	0.00024	0.0041
	September		0.00014	0.0017	0.069	0.0030	0.0095	0.29	0.000071	0.75	0.017	2.7	0.0071	0.000071	0.00028	0.0046
	October		0.00015	0.0019	0.077	0.0033	0.011	0.32	0.000078	0.83	0.018	3.0	0.0078	0.000079	0.00031	0.0052
	November		0.00015	0.0019	0.078	0.0034	0.012	0.32	0.000079	0.84	0.019	3.0	0.0079	0.000080	0.00031	0.0052
	December		0.00015	0.0019	0.078	0.0034	0.012	0.32	0.000079	0.84	0.019	3.0	0.0079	0.000079	0.00031	0.0052
		MINIMUM	0.000084	0.0010	0.043	0.0019	0.0050	0.18	0.000043	0.46	0.010	1.7	0.0043	0.000044	0.00017	0.0029
		MAXIMUM	0.00017	0.0021	0.088	0.0038	0.013	0.36	0.000089	0.95	0.021	3.4	0.0089	0.000090	0.00035	0.0059
		AVERAGE	0.00011	0.0014	0.058	0.0025	0.0087	0.24	0.000059	0.63	0.014	2.3	0.0060	0.000060	0.00023	0.0039
Reclamation	**January**	**2058**	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	**2059**	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	**2060**	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2062	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2063	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2064	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2065	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January	2066	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	February		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Table G-16: Scenario 14: Alternative Waste Rock Storage Area Scenario - West S

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August	**2066**	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	January		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
Reclamation	**February**		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	March		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	April		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	May		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	June		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	July	**2067**	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	September		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	October		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	November		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
	December		0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MINIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		MAXIMUM	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.00010	0.0013	0.045	0.0016	0.0025	0.19	0.000050	0.45	0.0100	1.9	0.0050	0.000050	0.00020	0.0035

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	June		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	July		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	October		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2026	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000031	1.7	0.000012	0.00000016	1.6	0.49	0.0000016	0.00000054	0.0000012	0.00069	0.00000038	0.29	0.58	0.00019	0.0000023
	May		0.0000049	4.2	0.000014	0.00000014	3.1	0.81	0.00000026	0.00000027	0.0000004	0.00010	5.6E-08	0.35	1.1	0.000061	0.0000033
	June		0.0000013	3.1	0.000028	0.00000028	2.3	0.94	6.8E-08	0.00000032	0.00000053	0.000019	1.0E-08	0.69	0.86	0.000043	0.0000050
	July		0.00000098	3.6	0.000054	0.00000056	2.7	1.5	4.6E-08	0.00000057	0.0000010	0.0000034	1.7E-09	1.4	1.1	0.000061	0.0000091
	August		0.00000085	2.2	0.000058	0.00000061	1.6	1.5	3.7E-08	0.00000057	0.0000011	0.00000088	4.5E-10	1.5	0.74	0.000054	0.0000093
	September		0.00000075	2.2	0.000038	0.00000039	1.5	1.1	2.8E-08	0.00000046	0.00000069	0.0000008	4.0E-10	0.93	0.63	0.000047	0.0000065
	October		0.00000086	3.9	0.000033	0.00000034	2.5	1.2	3.3E-08	0.0000005	0.0000006	0.0000013	5.9E-10	0.80	0.96	0.000057	0.0000063
	November		0.0000004	5.4	0.000011	0.00000012	3.2	0.80	2.5E-08	0.00000021	0.00000021	0.0000016	6.0E-10	0.28	1.1	0.000037	0.0000031
	December		0.00000025	5.9	0.0000045	4.3E-08	3.5	0.65	2.3E-08	0.00000011	8.1E-08	0.0000017	6.1E-10	0.11	1.2	0.000030	0.0000020
	January	2027	0.00000031	6.6	0.0000097	9.8E-08	3.2	0.72	2.3E-08	0.00000015	0.00000018	0.0000016	5.7E-10	0.24	1.1	0.000032	0.0000027
	February		0.00000039	5.6	0.000017	0.00000018	2.4	0.76	2.3E-08	0.00000022	0.00000032	0.0000012	4.6E-10	0.43	0.87	0.000032	0.0000036
	March		0.00000054	6.6	0.000029	0.0000003	3.2	1.1	3.3E-08	0.00000032	0.00000054	0.0000016	6.3E-10	0.73	1.2	0.000045	0.0000056
	April		0.00000058	3.6	0.000033	0.00000034	1.9	1.0	2.7E-08	0.00000036	0.00000061	0.00000096	4.2E-10	0.81	0.75	0.000040	0.0000057
	May		0.00000087	3.8	0.000039	0.0000004	2.2	1.3	3.3E-08	0.00000052	0.00000071	0.0000011	5.3E-10	0.95	0.86	0.000056	0.0000070
	June		0.00000075	4.8	0.000040	0.00000041	2.5	1.3	3.5E-08	0.00000046	0.00000073	0.0000013	5.6E-10	0.98	0.99	0.000052	0.0000071
	July		0.0000009	4.0	0.000068	0.00000071	2.2	1.7	4.5E-08	0.00000062	0.0000013	0.0000011	5.4E-10	1.7	0.98	0.000060	0.000011
	August		0.00000094	3.2	0.000041	0.00000043	1.9	1.3	3.3E-08	0.00000056	0.00000076	0.00000099	5.0E-10	1.0	0.77	0.000058	0.0000074
	September		0.00000065	5.5	0.000021	0.00000021	2.4	0.95	2.6E-08	0.00000036	0.00000038	0.0000012	5.2E-10	0.51	0.88	0.000045	0.0000044
	October		0.00000051	3.8	0.000026	0.00000027	2.2	0.91	2.6E-08	0.00000031	0.00000048	0.0000011	4.5E-10	0.65	0.82	0.000037	0.0000048
	November		0.00000054	4.3	0.000025	0.00000026	2.2	0.93	2.6E-08	0.00000032	0.00000047	0.0000011	4.7E-10	0.63	0.85	0.000039	0.0000048
	December		0.00000047	6.9	0.000018	0.00000019	2.9	0.89	2.7E-08	0.00000026	0.00000033	0.0000015	5.7E-10	0.44	1.1	0.000039	0.0000040
	January	2028	0.000011	6.8	0.0000018	2.8E-08	2.2	0.38	0.00000057	0.00000018	0.00000038	0.00024	0.00000013	0.047	0.75	0.000073	0.0000011
	February		0.00000012	10	0.00000063	3.7E-09	3.5	0.57	1.5E-08	4.3E-08	1.0E-08	0.0000013	4.4E-10	0.021	1.2	0.000019	0.0000014
	March		0.00000012	9.7	0.00000052	2.5E-09	3.5	0.57	1.5E-08	4.1E-08	8.0E-09	0.0000013	4.3E-10	0.014	1.2	0.000019	0.0000014
	April		0.0000048	8.5	0.000031	0.00000024	5.7	10	0.00000031	0.000037	0.0000065	0.00011	5.7E-08	0.48	2.3	0.000074	0.000040
	May		0.0000011	4.4	0.000061	0.0000003	12	40	0.00000023	0.00014	0.000023	0.000044	7.1E-09	0.41	5.3	0.00012	0.00015
	June		0.00000051	6.4	0.000056	0.00000028	12	37	0.00000018	0.00012	0.000021	0.000029	6.0E-10	0.39	4.9	0.00011	0.00014
	July		0.000069	2.9	0.000034	0.00000026	6.7	22	0.0000036	0.000070	0.000014	0.0016	0.00000084	0.28	2.9	0.00043	0.000084
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		3.8E-08	1.3	0.0000054	2.4E-08	2.2	7.4	1.8E-08	0.000013	0.0000021	0.0000030	6.0E-11	0.063	0.96	0.000011	0.000028
	October		0.0000002	9.0	0.000025	0.00000012	11	32	8.5E-08	0.000055	0.0000091	0.000013	4.1E-10	0.31	4.5	0.000052	0.00012
	November		0.00000021	8.1	0.000023	0.00000011	7.6	19	8.4E-08	0.000053	0.0000087	0.000013	4.7E-10	0.16	3.1	0.000053	0.000073
	December		0.00000014	11	0.0000021	9.7E-09	4.6	3.5	2.2E-08	0.0000038	0.00000063	0.0000022	4.9E-10	0.035	1.7	0.000024	0.000012
		MINIMUM	3.8E-08	1.3	0.00000052	2.5E-09	1.5	0.38	1.5E-08	4.1E-08	8.0E-09	0.0000008	6.0E-11	0.014	0.58	0.000011	0.0000011
		MAXIMUM	0.000069	11	0.000068	0.00000071	12	40	0.0000036	0.00014	0.000023	0.0016	0.00000084	1.7	5.3	0.00043	0.00015
		AVERAGE	0.0000042	5.3	0.000027	0.00000024	3.8	6.0	0.00000024	0.000016	0.0000030	0.000089	4.7E-08	0.55	1.5	0.000065	0.000024
Operations	January	2029	0.098	6.0	0.034	0.0000062	428	51	0.00031	0.0033	0.0032	0.021	0.000061	0.14	61	0.012	0.000011
	February		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000010
	March		0.11	5.2	0.037	0.0000068	456	66	0.00034	0.0036	0.0035	0.023	0.000067	0.21	74	0.013	0.000031
	April		0.069	3.7	0.024	0.0000046	359	67	0.00022	0.0024	0.0023	0.015	0.000043	0.49	50	0.0083	0.00012
	May		0.091	4.9	0.031	0.0000059	456	85	0.00028	0.0032	0.0030	0.020	0.000057	0.36	68	0.011	0.00013
	June		0.095	4.7	0.033	0.0000062	457	86	0.00030	0.0033	0.0031	0.021	0.000059	0.43	70	0.011	0.00013
	July		0.10	4.9	0.035	0.0000065	458	84	0.00031	0.0035	0.0033	0.022	0.000063	0.43	72	0.012	0.00011
	August		0.096	4.7	0.033	0.0000062	457	87	0.00030	0.0033	0.0031	0.021	0.000060	0.46	69	0.011	0.00014
	September		0.091	4.5	0.031	0.0000060	456	86	0.00028	0.0032	0.0030	0.020	0.000057	0.47	67	0.011	0.00014
	October		0.11	5.2	0.037	0.0000069	456	83	0.00034	0.0037	0.0035	0.023	0.000067	0.33	78	0.013	0.000089
	November		0.11	5.2	0.037	0.0000068	456	68	0.00034	0.0036	0.0035	0.023	0.000067	0.22	76	0.013	0.000035
	December		0.11	5.2	0.037	0.0000067	456	61	0.00034	0.0036	0.0035	0.023	0.000067	0.16	74	0.013	0.000010

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.11	4.8	0.039	0.0000071	454	56	0.00035	0.0038	0.0037	0.025	0.000071	0.16	65	0.014	0.000017
	February		0.11	4.7	0.039	0.0000072	454	56	0.00036	0.0039	0.0037	0.025	0.000071	0.20	63	0.014	0.000028
	March		0.11	4.8	0.039	0.0000073	456	61	0.00036	0.0039	0.0037	0.025	0.000072	0.21	65	0.014	0.000044
	April		0.097	4.0	0.033	0.0000063	455	72	0.00030	0.0034	0.0032	0.021	0.000061	0.41	55	0.012	0.00012
	May		0.10	4.2	0.035	0.0000066	457	73	0.00032	0.0035	0.0033	0.022	0.000064	0.41	60	0.012	0.00011
	June		0.095	4.0	0.033	0.0000063	457	76	0.00030	0.0033	0.0031	0.021	0.000060	0.46	56	0.011	0.00014
	July		0.065	2.8	0.023	0.0000043	332	59	0.00020	0.0023	0.0021	0.014	0.000041	0.44	40	0.0078	0.00012
	August		0.051	2.4	0.018	0.0000034	255	47	0.00016	0.0018	0.0017	0.011	0.000032	0.26	34	0.0061	0.000084
	September		0.043	2.1	0.015	0.0000028	222	40	0.00013	0.0015	0.0014	0.0094	0.000027	0.16	30	0.0052	0.000068
	October		0.095	4.1	0.033	0.0000062	456	75	0.00030	0.0033	0.0031	0.021	0.000059	0.39	59	0.011	0.00012
	November		0.11	4.7	0.039	0.0000072	457	68	0.00035	0.0039	0.0037	0.025	0.000071	0.18	67	0.014	0.000064
	December		0.11	4.7	0.039	0.0000072	454	56	0.00036	0.0039	0.0037	0.025	0.000072	0.17	64	0.014	0.000023
	January	2031	0.12	4.4	0.040	0.0000074	455	53	0.00037	0.0040	0.0038	0.026	0.000073	0.16	61	0.014	0.000023
	February		0.12	4.4	0.040	0.0000074	457	52	0.00037	0.0040	0.0038	0.026	0.000073	0.14	62	0.014	0.000015
	March		0.12	4.3	0.040	0.0000074	456	55	0.00036	0.0040	0.0038	0.025	0.000073	0.19	59	0.014	0.000037
	April		0.099	3.4	0.034	0.0000065	457	66	0.00031	0.0034	0.0032	0.022	0.000062	0.46	51	0.012	0.00011
	May		0.10	3.6	0.036	0.0000067	458	65	0.00033	0.0036	0.0034	0.023	0.000065	0.29	52	0.012	0.00010
	June		0.11	3.7	0.036	0.0000068	458	67	0.00033	0.0036	0.0034	0.023	0.000066	0.33	54	0.013	0.00010
	July		0.11	3.7	0.037	0.0000069	457	66	0.00033	0.0037	0.0035	0.023	0.000067	0.35	53	0.013	0.00011
	August		0.10	3.7	0.036	0.0000068	458	67	0.00033	0.0036	0.0034	0.023	0.000065	0.35	52	0.012	0.00011
	September		0.11	3.6	0.036	0.0000068	460	69	0.00033	0.0036	0.0034	0.023	0.000066	0.37	54	0.013	0.00012
	October		0.11	3.8	0.038	0.0000071	458	63	0.00035	0.0038	0.0036	0.024	0.000069	0.30	56	0.013	0.000084
	November		0.12	4.3	0.041	0.0000075	456	56	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000033
	December		0.12	4.4	0.041	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000021
	January	2032	0.12	4.9	0.040	0.0000074	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000020
	February		0.12	4.9	0.040	0.0000074	456	52	0.00036	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000017
	March		0.11	4.1	0.038	0.0000071	456	62	0.00035	0.0038	0.0036	0.024	0.000069	0.32	52	0.013	0.000089
	April		0.10	3.8	0.036	0.0000068	456	66	0.00032	0.0036	0.0034	0.023	0.000065	0.41	49	0.012	0.00012
	May		0.11	4.1	0.038	0.0000071	458	63	0.00035	0.0038	0.0036	0.024	0.000069	0.28	52	0.013	0.000098
	June		0.11	4.2	0.039	0.0000073	456	61	0.00036	0.0039	0.0037	0.025	0.000071	0.31	54	0.014	0.000081
	July		0.099	3.6	0.034	0.0000065	458	69	0.00031	0.0035	0.0032	0.022	0.000062	0.47	49	0.012	0.00013
	August		0.10	3.9	0.036	0.0000067	458	67	0.00032	0.0036	0.0034	0.023	0.000065	0.32	51	0.012	0.00012
	September		0.12	4.3	0.040	0.0000075	457	62	0.00036	0.0040	0.0038	0.026	0.000073	0.25	55	0.014	0.000084
	October		0.12	4.3	0.040	0.0000075	456	60	0.00037	0.0040	0.0038	0.026	0.000073	0.26	56	0.014	0.000068
	November		0.12	4.7	0.041	0.0000076	456	55	0.00037	0.0040	0.0039	0.026	0.000074	0.18	61	0.014	0.000036
	December		0.12	5.0	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000017
	January	2033	0.12	4.6	0.040	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000018
	February		0.12	4.5	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000018
	March		0.12	4.4	0.041	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000024
	April		0.10	3.4	0.035	0.0000067	456	69	0.00032	0.0035	0.0033	0.022	0.000063	0.60	50	0.012	0.00013
	May		0.10	3.4	0.035	0.0000066	457	67	0.00032	0.0035	0.0033	0.022	0.000063	0.26	50	0.012	0.00012
	June		0.11	3.7	0.038	0.0000072	460	67	0.00035	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.00011
	July		0.11	3.7	0.039	0.0000073	459	63	0.00035	0.0039	0.0037	0.025	0.000071	0.30	54	0.014	0.000092
	August		0.11	3.6	0.037	0.0000069	458	66	0.00033	0.0037	0.0035	0.023	0.000067	0.36	51	0.013	0.00011
	September		0.11	3.6	0.038	0.0000071	458	64	0.00034	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.000097
	October		0.11	3.8	0.039	0.0000073	455	61	0.00036	0.0039	0.0037	0.025	0.000071	0.29	54	0.014	0.000084
	November		0.11	3.9	0.039	0.0000073	456	60	0.00036	0.0039	0.0037	0.025	0.000071	0.25	56	0.014	0.000070
	December		0.12	4.4	0.041	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000020
	January	2034	0.12	4.5	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000018
	February		0.12	4.5	0.040	0.0000075	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000025
	March		0.12	4.1	0.041	0.0000076	456	57	0.00037	0.0041	0.0039	0.026	0.000075	0.22	58	0.014	0.000052
	April		0.10	3.6	0.036	0.0000068	458	64	0.00033	0.0036	0.0034	0.023	0.000065	0.42	51	0.012	0.00011
	May		0.11	3.9	0.040	0.0000074	459	62	0.00036	0.0039	0.0037	0.025	0.000072	0.21	54	0.014	0.000085
	June		0.099	3.3	0.034	0.0000066	456	73	0.00031	0.0035	0.0032	0.022	0.000062	0.71	49	0.012	0.00015
	July		0.095	3.1	0.033	0.0000064	456	76	0.00030	0.0034	0.0031	0.021	0.000060	0.54	47	0.011	0.00017
	August		0.100	3.3	0.034	0.0000066	456	76	0.00031	0.0035	0.0033	0.022	0.000062	0.38	48	0.012	0.00017
	September		0.10	3.4	0.035	0.0000066	460	72	0.00032	0.0035	0.0033	0.022	0.000063	0.38	49	0.012	0.00015
	October		0.11	3.8	0.039	0.0000072	458	65	0.00035	0.0039	0.0037	0.025	0.000070	0.20	54	0.013	0.000097
	November		0.12	4.1	0.041	0.0000077	456	58	0.00038	0.0041	0.0039	0.026	0.000075	0.20	60	0.014	0.000050
	December		0.12	4.2	0.041	0.0000076	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.21	59	0.014	0.000047
	January	2035	0.12	4.5	0.040	0.0000074	457	53	0.00037	0.0040	0.0038	0.026	0.000073	0.15	63	0.014	0.000020
	February		0.12	4.2	0.041	0.0000076	456	55	0.00037	0.0041	0.0039	0.026	0.000075	0.18	60	0.014	0.000037
	March		0.12	4.5	0.040	0.0000074	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000019

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	April	2035	0.11	3.8	0.038	0.0000072	456	60	0.00035	0.0038	0.0036	0.024	0.000069	0.36	53	0.013	0.000083
	May		0.10	3.4	0.036	0.0000068	457	66	0.00032	0.0036	0.0034	0.023	0.000065	0.41	50	0.012	0.00012
	June		0.10	3.4	0.036	0.0000068	459	66	0.00032	0.0036	0.0034	0.023	0.000065	0.34	50	0.012	0.00012
	July		0.10	3.4	0.036	0.0000068	458	67	0.00033	0.0036	0.0034	0.023	0.000065	0.36	50	0.012	0.00012
	August		0.11	3.5	0.037	0.0000070	460	68	0.00034	0.0037	0.0035	0.024	0.000067	0.34	51	0.013	0.00012
	September		0.11	3.6	0.037	0.0000070	461	66	0.00034	0.0037	0.0035	0.024	0.000068	0.33	52	0.013	0.00011
	October		0.12	3.8	0.040	0.0000075	456	61	0.00036	0.0040	0.0038	0.026	0.000073	0.26	55	0.014	0.000076
	November		0.12	4.3	0.041	0.0000075	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000027
	December		0.12	4.4	0.040	0.0000074	456	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	January	2036	0.12	4.5	0.040	0.0000074	457	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	February		0.12	4.5	0.040	0.0000074	457	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	March		0.12	4.2	0.041	0.0000076	457	56	0.00037	0.0041	0.0039	0.026	0.000075	0.20	59	0.014	0.000046
	April		0.10	3.4	0.035	0.0000067	456	71	0.00032	0.0035	0.0033	0.022	0.000063	0.54	49	0.012	0.00014
	May		0.11	3.6	0.036	0.0000068	457	64	0.00033	0.0036	0.0034	0.023	0.000066	0.26	51	0.013	0.00011
	June		0.11	3.6	0.037	0.0000070	460	67	0.00033	0.0037	0.0035	0.023	0.000067	0.34	53	0.013	0.00011
	July		0.10	3.5	0.036	0.0000068	457	67	0.00033	0.0036	0.0034	0.023	0.000065	0.35	51	0.013	0.00012
	August		0.12	4.0	0.041	0.0000076	458	60	0.00037	0.0040	0.0038	0.026	0.000074	0.26	57	0.014	0.000067
	September		0.11	3.8	0.039	0.0000073	458	63	0.00035	0.0039	0.0037	0.025	0.000071	0.30	54	0.013	0.000092
	October		0.11	3.9	0.039	0.0000074	458	62	0.00036	0.0039	0.0037	0.025	0.000071	0.29	55	0.014	0.000081
	November		0.12	4.3	0.041	0.0000076	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.17	62	0.014	0.000034
	December		0.12	4.5	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	January	2037	0.12	4.3	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000019
	February		0.12	3.9	0.040	0.0000075	456	57	0.00036	0.0040	0.0038	0.026	0.000073	0.22	58	0.014	0.000053
	March		0.12	4.1	0.040	0.0000074	458	56	0.00036	0.0039	0.0038	0.025	0.000073	0.20	59	0.014	0.000044
	April		0.10	3.2	0.035	0.0000066	455	69	0.00031	0.0035	0.0033	0.022	0.000063	0.46	49	0.012	0.00013
	May		0.12	3.7	0.040	0.0000074	457	61	0.00036	0.0040	0.0038	0.025	0.000072	0.23	54	0.014	0.000083
	June		0.10	3.2	0.035	0.0000066	456	69	0.00031	0.0035	0.0033	0.022	0.000063	0.49	50	0.012	0.00013
	July		0.100	3.1	0.034	0.0000066	459	72	0.00031	0.0035	0.0033	0.022	0.000062	0.50	48	0.012	0.00015
	August		0.10	3.3	0.036	0.0000068	461	67	0.00033	0.0036	0.0034	0.023	0.000065	0.29	51	0.012	0.00012
	September		0.10	3.3	0.036	0.0000067	457	65	0.00032	0.0036	0.0034	0.023	0.000065	0.35	49	0.012	0.00012
	October		0.12	3.8	0.040	0.0000075	457	62	0.00037	0.0040	0.0038	0.026	0.000073	0.21	58	0.014	0.000072
	November		0.12	4.1	0.041	0.0000075	456	55	0.00037	0.0040	0.0039	0.026	0.000074	0.17	60	0.014	0.000035
	December		0.12	4.2	0.040	0.0000074	455	53	0.00037	0.0039	0.0038	0.026	0.000073	0.14	62	0.014	0.000020
	January	2038	0.12	4.3	0.040	0.0000074	457	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000021
	February		0.12	4.3	0.040	0.0000074	456	53	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000022
	March		0.11	3.5	0.037	0.0000070	456	64	0.00034	0.0037	0.0035	0.024	0.000068	0.33	51	0.013	0.00010
	April		0.10	3.2	0.035	0.0000067	457	66	0.00032	0.0035	0.0033	0.022	0.000064	0.42	48	0.012	0.00012
	May		0.11	3.5	0.038	0.0000071	455	64	0.00034	0.0038	0.0036	0.024	0.000069	0.27	53	0.013	0.000099
	June		0.11	3.6	0.039	0.0000073	458	62	0.00035	0.0039	0.0037	0.025	0.000071	0.32	55	0.013	0.000085
	July		0.11	3.4	0.037	0.0000069	458	66	0.00033	0.0037	0.0035	0.023	0.000066	0.34	51	0.013	0.00012
	August		0.11	3.6	0.039	0.0000073	461	64	0.00035	0.0039	0.0037	0.025	0.000070	0.31	53	0.013	0.000099
	September		0.10	3.3	0.036	0.0000068	455	68	0.00033	0.0036	0.0034	0.023	0.000065	0.42	53	0.012	0.00012
	October		0.11	3.4	0.037	0.0000070	458	66	0.00034	0.0037	0.0035	0.024	0.000067	0.29	52	0.013	0.00011
	November		0.12	3.9	0.041	0.0000076	456	58	0.00037	0.0040	0.0039	0.026	0.000074	0.19	60	0.014	0.000049
	December		0.12	4.3	0.041	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000024
	January	2039	0.12	4.3	0.040	0.0000075	456	53	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000023
	February		0.11	3.7	0.039	0.0000074	458	61	0.00036	0.0039	0.0037	0.025	0.000071	0.26	55	0.014	0.000080
	March		0.12	3.9	0.041	0.0000076	457	58	0.00037	0.0040	0.0039	0.026	0.000074	0.22	58	0.014	0.000058
	April		0.12	3.8	0.040	0.0000075	458	59	0.00036	0.0040	0.0038	0.025	0.000073	0.25	56	0.014	0.000068
	May		0.12	3.8	0.041	0.0000076	457	59	0.00037	0.0040	0.0038	0.026	0.000074	0.25	57	0.014	0.000068
	June		0.12	3.8	0.040	0.0000075	456	59	0.00036	0.0040	0.0038	0.025	0.000073	0.29	58	0.014	0.000067
	July		0.10	3.2	0.035	0.0000067	460	68	0.00032	0.0036	0.0034	0.022	0.000064	0.39	49	0.012	0.00013
	August		0.096	3.0	0.033	0.0000064	456	74	0.00030	0.0034	0.0032	0.021	0.000060	0.53	47	0.012	0.00016
	September		0.11	3.4	0.037	0.0000069	457	65	0.00033	0.0037	0.0035	0.023	0.000066	0.28	51	0.013	0.00011
	October		0.11	3.5	0.038	0.0000072	458	66	0.00035	0.0038	0.0036	0.024	0.000069	0.30	52	0.013	0.00011
	November		0.12	3.8	0.040	0.0000074	457	59	0.00036	0.0039	0.0037	0.025	0.000072	0.22	59	0.014	0.000062
	December		0.12	4.3	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000025
	January	2040	0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000025
	February		0.12	4.5	0.040	0.0000075	457	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	March		0.11	3.7	0.037	0.0000071	457	66	0.00034	0.0037	0.0035	0.024	0.000068	0.42	52	0.013	0.00012
	April		0.10	3.5	0.035	0.0000067	457	66	0.00032	0.0036	0.0034	0.023	0.000064	0.35	51	0.012	0.00012
	May		0.11	3.6	0.037	0.0000070	456	68	0.00033	0.0037	0.0035	0.023	0.000067	0.36	52	0.013	0.00012
	June		0.10	3.4	0.035	0.0000067	456	68	0.00032	0.0035	0.0033	0.022	0.000063	0.44	50	0.012	0.00013

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.100	3.3	0.034	0.0000066	457	73	0.00031	0.0035	0.0033	0.022	0.000062	0.44	48	0.012	0.00015
	August		0.12	3.9	0.040	0.0000075	459	64	0.00036	0.0040	0.0038	0.025	0.000072	0.21	55	0.014	0.000096
	September		0.11	3.9	0.039	0.0000074	457	63	0.00036	0.0039	0.0037	0.025	0.000072	0.28	55	0.014	0.000088
	October		0.11	3.8	0.039	0.0000073	458	64	0.00035	0.0039	0.0037	0.025	0.000070	0.30	54	0.013	0.000097
	November		0.12	4.4	0.041	0.0000076	456	55	0.00037	0.0040	0.0039	0.026	0.000074	0.16	62	0.014	0.000035
	December		0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000026
	January	2041	0.12	4.6	0.040	0.0000075	458	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000027
	February		0.12	4.6	0.040	0.0000075	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000027
	March		0.12	4.3	0.040	0.0000075	456	57	0.00036	0.0040	0.0038	0.025	0.000073	0.24	59	0.014	0.000054
	April		0.11	3.6	0.037	0.0000070	459	68	0.00033	0.0037	0.0035	0.023	0.000066	0.46	52	0.013	0.00012
	May		0.11	3.6	0.037	0.0000070	457	66	0.00033	0.0037	0.0035	0.023	0.000067	0.20	53	0.013	0.00011
	June		0.11	3.9	0.039	0.0000074	455	62	0.00036	0.0039	0.0037	0.025	0.000071	0.31	55	0.014	0.000087
	July		0.11	3.5	0.036	0.0000070	458	69	0.00033	0.0036	0.0034	0.023	0.000066	0.44	52	0.013	0.00013
	August		0.096	3.2	0.033	0.0000066	455	78	0.00030	0.0034	0.0031	0.021	0.000060	0.81	48	0.012	0.00018
	September		0.098	3.2	0.034	0.0000065	457	76	0.00031	0.0034	0.0032	0.021	0.000061	0.28	48	0.012	0.00017
	October		0.11	3.5	0.037	0.0000070	460	68	0.00033	0.0037	0.0035	0.023	0.000066	0.27	50	0.013	0.00013
	November		0.12	4.0	0.041	0.0000076	457	63	0.00037	0.0040	0.0038	0.026	0.000074	0.16	58	0.014	0.000082
	December		0.12	4.5	0.041	0.0000076	457	55	0.00037	0.0040	0.0039	0.026	0.000074	0.14	63	0.014	0.000030
	January	2042	0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000028
	February		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000028
	March		0.12	4.3	0.041	0.0000076	456	57	0.00037	0.0040	0.0038	0.026	0.000074	0.20	59	0.014	0.000052
	April		0.11	3.7	0.037	0.0000071	456	65	0.00033	0.0037	0.0035	0.023	0.000067	0.44	52	0.013	0.00011
	May		0.11	3.9	0.039	0.0000074	458	64	0.00035	0.0039	0.0037	0.025	0.000071	0.21	54	0.014	0.000099
	June		0.098	3.3	0.034	0.0000066	456	70	0.00030	0.0034	0.0032	0.021	0.000061	0.56	49	0.012	0.00014
	July		0.099	3.3	0.034	0.0000066	457	74	0.00031	0.0035	0.0033	0.022	0.000062	0.42	48	0.012	0.00016
	August		0.097	3.2	0.034	0.0000065	459	76	0.00030	0.0034	0.0032	0.021	0.000061	0.48	48	0.012	0.00017
	September		0.10	3.4	0.035	0.0000067	456	70	0.00031	0.0035	0.0033	0.022	0.000063	0.43	50	0.012	0.00014
	October		0.10	3.4	0.035	0.0000068	459	72	0.00032	0.0036	0.0033	0.022	0.000064	0.34	49	0.012	0.00015
	November		0.12	4.0	0.040	0.0000075	458	62	0.00036	0.0040	0.0038	0.025	0.000073	0.15	59	0.014	0.000074
	December		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	January	2043	0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.5	0.040	0.0000075	457	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	April		0.11	3.8	0.038	0.0000072	456	65	0.00034	0.0038	0.0036	0.024	0.000068	0.48	54	0.013	0.00010
	May		0.10	3.5	0.036	0.0000068	457	67	0.00033	0.0036	0.0034	0.023	0.000065	0.26	49	0.012	0.00013
	June		0.10	3.4	0.035	0.0000067	455	70	0.00031	0.0035	0.0033	0.022	0.000063	0.45	49	0.012	0.00014
	July		0.10	3.5	0.035	0.0000069	456	71	0.00032	0.0036	0.0034	0.022	0.000064	0.48	50	0.012	0.00014
	August		0.094	3.1	0.032	0.0000063	442	76	0.00029	0.0033	0.0031	0.021	0.000059	0.49	47	0.011	0.00017
	September		0.098	3.2	0.034	0.0000066	457	75	0.00031	0.0034	0.0032	0.021	0.000061	0.51	49	0.012	0.00016
	October		0.10	3.4	0.035	0.0000067	459	72	0.00031	0.0035	0.0033	0.022	0.000063	0.33	49	0.012	0.00015
	November		0.11	3.8	0.039	0.0000073	459	65	0.00035	0.0039	0.0037	0.025	0.000070	0.23	53	0.013	0.00011
	December		0.12	4.2	0.041	0.0000078	456	59	0.00037	0.0041	0.0039	0.026	0.000075	0.17	61	0.014	0.000054
	January	2044	0.12	4.5	0.041	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000030
	February		0.12	4.5	0.040	0.0000075	456	54	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.4	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.17	61	0.014	0.000036
	April		0.11	3.5	0.037	0.0000070	458	66	0.00033	0.0037	0.0035	0.023	0.000066	0.36	50	0.013	0.00012
	May		0.11	3.6	0.038	0.0000072	458	65	0.00034	0.0038	0.0036	0.024	0.000069	0.31	53	0.013	0.00011
	June		0.11	3.8	0.039	0.0000075	459	63	0.00036	0.0039	0.0037	0.025	0.000071	0.30	55	0.014	0.000091
	July		0.10	3.4	0.035	0.0000068	459	72	0.00032	0.0036	0.0033	0.022	0.000064	0.47	50	0.012	0.00015
	August		0.11	3.8	0.039	0.0000075	459	66	0.00036	0.0039	0.0037	0.025	0.000071	0.28	53	0.014	0.00011
	September		0.12	3.8	0.040	0.0000075	456	65	0.00036	0.0040	0.0038	0.025	0.000072	0.30	54	0.014	0.000100
	October		0.12	4.0	0.041	0.0000077	458	61	0.00037	0.0040	0.0039	0.026	0.000074	0.24	58	0.014	0.000072
	November		0.12	4.3	0.041	0.0000077	457	56	0.00037	0.0040	0.0039	0.026	0.000075	0.17	62	0.014	0.000041
	December		0.12	4.4	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.15	62	0.014	0.000032
	January	2045	0.12	4.5	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.11	4.2	0.039	0.0000074	456	57	0.00036	0.0039	0.0037	0.025	0.000071	0.30	59	0.014	0.000054
	April		0.11	3.6	0.037	0.0000071	457	67	0.00034	0.0037	0.0035	0.024	0.000067	0.28	50	0.013	0.00012
	May		0.11	3.5	0.036	0.0000070	458	67	0.00033	0.0037	0.0034	0.023	0.000066	0.35	51	0.013	0.00012
	June		0.10	3.5	0.036	0.0000069	458	68	0.00033	0.0036	0.0034	0.023	0.000066	0.38	51	0.013	0.00012
	July		0.10	3.4	0.035	0.0000068	458	68	0.00032	0.0036	0.0033	0.022	0.000064	0.37	50	0.012	0.00013
	August		0.11	3.7	0.038	0.0000073	459	66	0.00035	0.0038	0.0036	0.024	0.000070	0.32	53	0.013	0.00011
	September		0.11	3.7	0.038	0.0000072	457	65	0.00034	0.0038	0.0036	0.024	0.000069	0.32	53	0.013	0.00011

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.12	3.8	0.040	0.0000076	456	62	0.00036	0.0040	0.0038	0.025	0.000072	0.26	56	0.014	0.000083
	November		0.12	4.1	0.041	0.0000078	456	58	0.00038	0.0041	0.0039	0.026	0.000075	0.19	60	0.014	0.000051
	December		0.12	4.4	0.040	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000073	0.15	62	0.014	0.000033
	January	2046	0.12	4.3	0.041	0.0000077	457	56	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000043
	February		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	March		0.12	4.0	0.040	0.0000075	457	60	0.00036	0.0040	0.0038	0.025	0.000072	0.27	56	0.014	0.000075
	April		0.11	3.8	0.039	0.0000074	458	62	0.00035	0.0039	0.0037	0.025	0.000071	0.26	54	0.014	0.000094
	May		0.11	3.6	0.037	0.0000071	456	64	0.00034	0.0037	0.0035	0.024	0.000068	0.33	53	0.013	0.00010
	June		0.11	3.6	0.037	0.0000071	455	66	0.00034	0.0037	0.0035	0.023	0.000067	0.39	52	0.013	0.00012
	July		0.10	3.4	0.036	0.0000069	458	70	0.00032	0.0036	0.0034	0.023	0.000065	0.43	49	0.012	0.00014
	August		0.099	3.3	0.034	0.0000066	457	73	0.00031	0.0035	0.0032	0.022	0.000062	0.46	49	0.012	0.00015
	September		0.10	3.4	0.035	0.0000068	458	70	0.00032	0.0036	0.0033	0.022	0.000064	0.39	49	0.012	0.00014
	October		0.10	3.4	0.035	0.0000068	458	66	0.00032	0.0035	0.0033	0.022	0.000064	0.33	50	0.012	0.00012
	November		0.12	3.9	0.040	0.0000075	457	64	0.00036	0.0040	0.0038	0.025	0.000072	0.20	56	0.014	0.000092
	December		0.12	4.3	0.041	0.0000077	456	57	0.00037	0.0040	0.0039	0.026	0.000074	0.16	62	0.014	0.000041
	January	2047	0.12	4.5	0.040	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000029
	February		0.12	4.5	0.041	0.0000076	457	54	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000029
	March		0.12	4.3	0.041	0.0000077	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.17	60	0.014	0.000044
	April		0.11	3.6	0.037	0.0000071	456	63	0.00034	0.0037	0.0035	0.024	0.000067	0.38	51	0.013	0.00010
	May		0.11	3.5	0.036	0.0000070	460	67	0.00033	0.0037	0.0035	0.023	0.000066	0.33	51	0.013	0.00012
	June		0.11	3.7	0.039	0.0000074	456	63	0.00035	0.0039	0.0037	0.025	0.000071	0.30	54	0.014	0.000095
	July		0.099	3.3	0.034	0.0000067	455	70	0.00031	0.0035	0.0033	0.022	0.000062	0.49	48	0.012	0.00015
	August		0.096	3.2	0.033	0.0000065	441	72	0.00030	0.0034	0.0032	0.021	0.000060	0.45	47	0.012	0.00015
	September		0.10	3.5	0.036	0.0000069	456	66	0.00033	0.0036	0.0034	0.023	0.000065	0.33	50	0.013	0.00012
	October		0.11	3.7	0.038	0.0000072	458	66	0.00034	0.0038	0.0036	0.024	0.000069	0.25	55	0.013	0.00011
	November		0.12	4.2	0.041	0.0000077	457	57	0.00037	0.0040	0.0039	0.026	0.000075	0.19	60	0.014	0.000051
	December		0.12	4.4	0.040	0.0000076	456	54	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000031
	January	2048	0.12	4.4	0.041	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000074	0.16	62	0.014	0.000038
	February		0.12	4.5	0.041	0.0000076	457	55	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000033
	March		0.12	4.5	0.040	0.0000075	456	54	0.00037	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000031
	April		0.11	4.0	0.039	0.0000074	459	60	0.00035	0.0039	0.0037	0.025	0.000071	0.29	56	0.014	0.000079
	May		0.12	4.0	0.041	0.0000077	458	62	0.00037	0.0041	0.0039	0.026	0.000074	0.23	57	0.014	0.000081
	June		0.11	3.8	0.039	0.0000075	457	63	0.00036	0.0039	0.0037	0.025	0.000072	0.29	55	0.014	0.000092
	July		0.098	3.2	0.034	0.0000067	456	73	0.00031	0.0034	0.0032	0.022	0.000062	0.67	48	0.012	0.00015
	August		0.096	3.2	0.033	0.0000065	453	79	0.00030	0.0034	0.0032	0.021	0.000060	0.49	48	0.012	0.00018
	September		0.096	3.1	0.033	0.0000064	451	76	0.00030	0.0034	0.0031	0.021	0.000060	0.40	47	0.011	0.00017
	October		0.11	3.6	0.037	0.0000071	460	68	0.00034	0.0037	0.0035	0.024	0.000068	0.23	52	0.013	0.00012
	November		0.12	4.1	0.041	0.0000078	456	62	0.00038	0.0041	0.0039	0.026	0.000075	0.15	60	0.014	0.000074
	December		0.12	4.3	0.041	0.0000077	456	56	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000046
	January	2049	0.12	4.0	0.040	0.0000075	456	60	0.00036	0.0039	0.0038	0.025	0.000072	0.24	57	0.014	0.000076
	February		0.12	4.4	0.041	0.0000077	458	56	0.00037	0.0040	0.0039	0.026	0.000074	0.14	64	0.014	0.000037
	March		0.11	4.2	0.039	0.0000074	456	57	0.00035	0.0038	0.0037	0.025	0.000070	0.26	58	0.013	0.000060
	April		0.11	3.8	0.039	0.0000074	457	63	0.00036	0.0039	0.0037	0.025	0.000071	0.21	55	0.014	0.000092
	May		0.11	3.6	0.038	0.0000072	455	65	0.00034	0.0038	0.0036	0.024	0.000068	0.34	53	0.013	0.00011
	June		0.10	3.4	0.035	0.0000068	459	69	0.00032	0.0035	0.0033	0.022	0.000064	0.39	50	0.012	0.00013
	July		0.094	3.1	0.032	0.0000063	449	74	0.00029	0.0033	0.0031	0.021	0.000059	0.54	48	0.011	0.00016
	August		0.10	3.3	0.035	0.0000067	456	74	0.00031	0.0035	0.0033	0.022	0.000063	0.43	48	0.012	0.00016
	September		0.099	3.2	0.034	0.0000067	456	74	0.00031	0.0035	0.0032	0.022	0.000062	0.49	49	0.012	0.00016
	October		0.10	3.3	0.035	0.0000067	456	72	0.00031	0.0035	0.0033	0.022	0.000063	0.37	50	0.012	0.00015
	November		0.11	3.7	0.039	0.0000073	458	65	0.00035	0.0039	0.0037	0.025	0.000070	0.21	53	0.013	0.00011
	December		0.12	4.3	0.041	0.0000077	457	58	0.00037	0.0040	0.0039	0.026	0.000074	0.14	63	0.014	0.000047
	January	2050	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000036
	February		0.12	4.3	0.040	0.0000076	456	55	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000036
	March		0.12	4.1	0.041	0.0000077	457	57	0.00037	0.0040	0.0039	0.026	0.000074	0.17	61	0.014	0.000049
	April		0.10	3.3	0.036	0.0000069	458	66	0.00032	0.0036	0.0034	0.023	0.000065	0.40	49	0.012	0.00013
	May		0.11	3.6	0.039	0.0000074	456	65	0.00035	0.0039	0.0037	0.025	0.000070	0.26	54	0.013	0.00011
	June		0.11	3.3	0.036	0.0000070	456	68	0.00033	0.0036	0.0034	0.023	0.000066	0.38	51	0.013	0.00013
	July		0.11	3.7	0.039	0.0000075	457	63	0.00036	0.0039	0.0037	0.025	0.000071	0.27	57	0.014	0.000088
	August		0.12	3.7	0.040	0.0000076	459	65	0.00036	0.0040	0.0038	0.026	0.000073	0.29	56	0.014	0.00010
	September		0.10	3.3	0.036	0.0000069	456	67	0.00032	0.0036	0.0034	0.023	0.000065	0.39	50	0.012	0.00013
	October		0.12	3.7	0.040	0.0000076	459	64	0.00036	0.0040	0.0038	0.026	0.000073	0.23	57	0.014	0.000093
	November		0.12	3.9	0.041	0.0000078	456	59	0.00038	0.0041	0.0039	0.026	0.000075	0.21	58	0.014	0.000067
	December		0.12	4.2	0.041	0.0000076	456	56	0.00037	0.0040	0.0038	0.026	0.000074	0.14	63	0.014	0.000039

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2051	0.12	4.3	0.040	0.0000076	456	55	0.00037	0.0040	0.0038	0.026	0.000073	0.14	63	0.014	0.000038
	February		0.12	4.3	0.040	0.0000076	456	55	0.00036	0.0039	0.0038	0.026	0.000073	0.14	63	0.014	0.000039
	March		0.12	3.9	0.040	0.0000076	457	59	0.00037	0.0040	0.0038	0.026	0.000073	0.21	59	0.014	0.000068
	April		0.091	2.9	0.031	0.0000062	410	65	0.00029	0.0032	0.0030	0.020	0.000057	0.68	45	0.011	0.00014
	May		0.038	1.4	0.013	0.0000026	184	32	0.00012	0.0013	0.0013	0.0084	0.000024	0.14	22	0.0046	0.000068
	June		0.10	3.5	0.036	0.0000068	461	71	0.00032	0.0036	0.0034	0.023	0.000064	0.34	52	0.012	0.00014
	July		0.100	3.2	0.034	0.0000067	457	70	0.00031	0.0035	0.0033	0.022	0.000062	0.45	49	0.012	0.00015
	August		0.021	0.65	0.0071	0.0000014	98	17	0.000064	0.00072	0.00067	0.0045	0.000013	0.097	10	0.0025	0.000040
	September		0.10	3.5	0.035	0.0000067	456	76	0.00032	0.0035	0.0033	0.022	0.000063	0.38	54	0.012	0.00015
	October		0.11	3.5	0.037	0.0000072	459	66	0.00034	0.0037	0.0035	0.024	0.000068	0.28	52	0.013	0.00012
	November		0.12	3.7	0.040	0.0000076	455	64	0.00036	0.0040	0.0038	0.025	0.000072	0.23	56	0.014	0.000097
	December		0.12	4.1	0.041	0.0000077	456	57	0.00037	0.0040	0.0039	0.026	0.000074	0.17	62	0.014	0.000050
	January	2052	0.073	5.5	0.025	0.0000048	459	47	0.00023	0.0025	0.0024	0.016	0.000045	0.12	53	0.0087	0.000035
	February		0.062	5.5	0.021	0.0000041	454	46	0.00019	0.0021	0.0020	0.013	0.000039	0.12	53	0.0074	0.000034
	March		0.061	5.4	0.021	0.0000040	454	47	0.00019	0.0021	0.0020	0.013	0.000038	0.13	53	0.0072	0.000036
	April		0.041	3.5	0.014	0.0000030	455	64	0.00013	0.0015	0.0014	0.0091	0.000026	0.41	47	0.0050	0.00012
	May		0.044	3.8	0.015	0.0000032	457	62	0.00014	0.0016	0.0015	0.0097	0.000028	0.36	46	0.0054	0.00012
	June		0.046	3.9	0.016	0.0000032	455	63	0.00014	0.0016	0.0015	0.010	0.000029	0.28	48	0.0055	0.00012
	July		0.038	3.3	0.013	0.0000028	456	68	0.00012	0.0014	0.0013	0.0083	0.000024	0.50	46	0.0046	0.00015
	August		0.039	3.3	0.013	0.0000028	458	69	0.00012	0.0014	0.0013	0.0085	0.000024	0.37	48	0.0047	0.00014
	September		0.048	4.1	0.017	0.0000034	460	62	0.00015	0.0017	0.0016	0.011	0.000030	0.24	48	0.0058	0.00011
	October		0.054	4.7	0.019	0.0000037	455	56	0.00017	0.0019	0.0018	0.012	0.000034	0.22	49	0.0065	0.000085
	November		0.061	5.4	0.021	0.0000041	454	48	0.00019	0.0021	0.0020	0.013	0.000038	0.13	53	0.0073	0.000040
	December		0.060	5.3	0.021	0.0000040	454	48	0.00019	0.0020	0.0020	0.013	0.000038	0.13	54	0.0072	0.000036
		MINIMUM	0.021	0.65	0.0071	0.0000014	98	17	0.000064	0.00072	0.00067	0.0045	0.000013	0.097	10	0.0025	0.000010
		MAXIMUM	0.12	6.0	0.041	0.0000078	461	87	0.00038	0.0041	0.0039	0.026	0.000075	0.81	78	0.014	0.00018
		AVERAGE	0.11	3.9	0.037	0.0000069	452	62	0.00033	0.0037	0.0035	0.023	0.000067	0.28	56	0.013	0.000085
Decommissioning	January	2053	0.0034	5.2	0.0012	0.00000041	439	73	0.000011	0.00012	0.00011	0.00077	0.0000022	0.19	85	0.00045	0.000032
	February		0.0000063	4.9	0.000020	0.00000015	438	74	5.1E-08	0.0000046	0.00000048	0.000021	1.3E-08	0.19	88	0.000041	0.000025
	March		0.00010	4.8	0.000062	0.00000021	422	75	0.00000037	0.000023	0.0000062	0.000044	7.2E-08	0.29	85	0.000062	0.000040
	April		0.000041	4.8	0.000084	0.00000039	287	84	0.00000033	0.00014	0.000023	0.000050	3.1E-08	0.52	60	0.00012	0.00016
	May		0.000014	4.7	0.000061	0.0000003	308	81	0.0000002	0.00011	0.000018	0.000039	1.4E-08	0.36	64	0.00011	0.00013
	June		0.0000062	4.6	0.000050	0.00000028	361	83	0.00000015	0.000085	0.000014	0.000035	1.1E-08	0.33	74	0.000089	0.00011
	July		0.000014	4.5	0.000063	0.00000033	327	83	0.0000002	0.00011	0.000018	0.000040	1.5E-08	0.43	68	0.00010	0.00013
	August		0.000069	4.4	0.000088	0.0000004	329	83	0.00000037	0.00011	0.000019	0.000051	4.9E-08	0.60	68	0.00011	0.00013
	September		0.0041	3.8	0.0015	0.00000062	239	73	0.000013	0.00027	0.00016	0.00094	0.0000026	0.49	48	0.00060	0.00016
	October		0.0000046	4.6	0.000056	0.00000029	303	84	0.00000017	0.00011	0.000018	0.000037	8.1E-09	0.36	63	0.00010	0.00015
	November		0.0000054	4.2	0.000044	0.00000024	363	81	0.00000014	0.000074	0.000012	0.000032	1.0E-08	0.26	74	0.000082	0.00010
	December		0.0000063	4.1	0.000020	0.00000015	439	75	5.1E-08	0.0000052	0.00000057	0.000021	1.3E-08	0.19	88	0.000042	0.000026
	January	2054	0.0000047	4.0	0.000017	0.00000013	442	74	4.1E-08	0.0000039	0.00000039	0.000019	1.2E-08	0.19	89	0.000040	0.000020
	February		0.0000042	3.9	0.000016	0.00000012	442	74	3.8E-08	0.0000036	0.00000036	0.000019	1.2E-08	0.19	89	0.000040	0.000018
	March		0.0000041	3.9	0.000022	0.00000015	419	75	6.0E-08	0.000022	0.0000034	0.000022	1.1E-08	0.23	85	0.000050	0.000037
	April		0.0000037	3.7	0.000051	0.00000031	347	79	0.00000014	0.000085	0.000014	0.000033	9.1E-09	0.48	71	0.000089	0.00010
	May		0.0000031	3.7	0.000061	0.00000032	302	83	0.00000018	0.00012	0.000020	0.000039	8.0E-09	0.42	63	0.00011	0.00014
	June		0.0000036	3.6	0.000048	0.00000026	342	81	0.00000015	0.000090	0.000015	0.000034	9.1E-09	0.34	70	0.000091	0.00011
	July		0.0000035	3.5	0.000056	0.0000003	326	82	0.00000017	0.00010	0.000017	0.000036	8.7E-09	0.42	67	0.00010	0.00012
	August		0.000058	3.3	0.000092	0.00000041	257	80	0.00000038	0.00014	0.000025	0.000053	4.1E-08	0.63	54	0.00012	0.00016
	September		0.0000036	3.6	0.000056	0.00000029	308	85	0.00000017	0.00011	0.000018	0.000036	7.7E-09	0.40	64	0.00010	0.00015
	October		0.0000035	3.2	0.000052	0.00000027	335	83	0.00000016	0.00010	0.000017	0.000036	9.0E-09	0.33	69	0.000099	0.00012
	November		0.0000037	3.2	0.000037	0.00000021	372	78	0.00000011	0.000059	0.0000095	0.000028	9.9E-09	0.31	76	0.000073	0.000079
	December		0.0000042	3.1	0.000016	0.00000012	440	74	3.8E-08	0.0000038	0.00000039	0.000019	1.2E-08	0.19	89	0.000040	0.000019
	January	2055	0.0000040	3.0	0.000014	0.0000001	437	74	3.7E-08	0.0000052	0.00000065	0.000019	1.1E-08	0.19	88	0.000040	0.000018
	February		0.0000039	2.9	0.000013	9.4E-08	440	74	3.4E-08	0.0000037	0.00000041	0.000018	1.1E-08	0.19	89	0.000039	0.000016
	March		0.0000039	2.8	0.000013	9.4E-08	439	73	3.4E-08	0.0000032	0.00000033	0.000018	1.1E-08	0.19	88	0.000039	0.000015
	April		0.0000036	2.8	0.000035	0.00000017	364	78	0.00000011	0.000068	0.000011	0.000029	9.4E-09	0.22	74	0.000078	0.000081
	May		0.0000038	2.7	0.000038	0.00000017	354	81	0.00000013	0.000081	0.000013	0.000032	9.2E-09	0.19	73	0.000085	0.000098
	June		0.0000034	2.6	0.000041	0.00000018	364	84	0.00000014	0.000086	0.000014	0.000033	9.3E-09	0.20	75	0.000087	0.00010
	July		0.0000035	2.5	0.000046	0.0000002	319	81	0.00000016	0.00010	0.000017	0.000035	8.4E-09	0.19	66	0.00010	0.00012
	August		0.0000040	2.4	0.000049	0.00000021	332	85	0.00000017	0.00011	0.000018	0.000038	8.8E-09	0.18	69	0.00010	0.00013
	September		0.0000035	2.4	0.000042	0.00000019	362	85	0.00000015	0.000092	0.000015	0.000035	9.4E-09	0.19	74	0.000091	0.00011
	October		0.0000035	2.3	0.000041	0.00000018	371	85	0.00000014	0.000087	0.000014	0.000034	9.7E-09	0.19	76	0.000087	0.00011
	November		0.0000037	2.2	0.000022	0.00000012	407	76	6.9E-08	0.000032	0.0000050	0.000023	1.1E-08	0.19	82	0.000055	0.000048
	December		0.0000039	2.1	0.000013	9.5E-08	441	74	3.4E-08	0.0000038	0.00000042	0.000018	1.2E-08	0.19	89	0.000039	0.000016

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treated Effluent Discharge

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	**January**	**2056**	0.0000028	2.0	0.000011	7.4E-08	438	73	2.9E-08	0.0000027	0.00000024	0.000018	1.1E-08	0.19	88	0.000038	0.000012
	February		0.0000025	1.9	0.000011	6.8E-08	440	73	2.8E-08	0.0000030	0.00000031	0.000018	1.1E-08	0.19	89	0.000037	0.000012
	March		0.0000030	1.8	0.000030	0.00000013	381	79	0.0000001	0.000061	0.0000098	0.000028	9.6E-09	0.19	78	0.000071	0.000072
	April		0.0000025	1.8	0.000026	0.00000012	395	79	8.9E-08	0.000051	0.0000082	0.000026	9.9E-09	0.19	80	0.000065	0.000064
	May		0.0000027	1.7	0.000024	0.00000011	407	78	8.0E-08	0.000043	0.0000069	0.000025	1.0E-08	0.19	82	0.000062	0.000053
	June		0.0000029	1.6	0.000026	0.00000012	401	80	8.9E-08	0.000050	0.0000081	0.000026	1.0E-08	0.19	81	0.000065	0.000063
	July		0.0000024	1.5	0.000037	0.00000016	362	81	0.00000013	0.000082	0.000013	0.000032	8.9E-09	0.19	74	0.000085	0.000094
	August		0.0000032	1.4	0.000039	0.00000016	349	81	0.00000014	0.000088	0.000014	0.000033	9.0E-09	0.19	72	0.000088	0.00010
	September		0.0000023	1.3	0.000046	0.00000019	336	85	0.00000016	0.00011	0.000018	0.000037	8.4E-09	0.18	69	0.00010	0.00013
	October		0.0000022	1.2	0.000041	0.00000017	373	87	0.00000014	0.000094	0.000015	0.000035	9.2E-09	0.19	77	0.000089	0.00011
	November		0.0000024	1.1	0.000020	9.9E-08	421	78	6.4E-08	0.000031	0.0000049	0.000023	1.0E-08	0.19	85	0.000053	0.000044
	December		0.0000025	1.1	0.000010	6.8E-08	440	73	2.8E-08	0.0000028	0.00000027	0.000018	1.1E-08	0.19	88	0.000037	0.000012
	January	**2057**	0.00000078	0.97	0.0000061	3.5E-08	442	73	1.7E-08	0.0000011	7.5E-08	0.000016	1.0E-08	0.20	89	0.000035	0.0000048
	February		0.0000003	0.89	0.0000048	2.5E-08	438	72	1.4E-08	0.00000067	3.6E-08	0.000015	9.9E-09	0.19	88	0.000035	0.0000027
	March		0.00000033	0.81	0.0000049	2.5E-08	439	72	1.4E-08	0.00000069	3.8E-08	0.000015	9.9E-09	0.19	88	0.000035	0.0000027
	April		0.0000012	0.76	0.000029	0.00000011	388	82	0.00000011	0.000071	0.000012	0.000029	9.1E-09	0.20	79	0.000074	0.000077
	May		0.00000039	0.66	0.000023	8.8E-08	405	81	8.2E-08	0.000054	0.0000088	0.000026	9.1E-09	0.19	82	0.000064	0.000063
	June		0.00000044	0.57	0.000014	5.8E-08	427	77	4.9E-08	0.000028	0.0000045	0.000021	9.6E-09	0.20	86	0.000050	0.000031
	July		0.0000010	0.50	0.000036	0.00000013	379	86	0.00000013	0.000091	0.000015	0.000033	8.6E-09	0.20	78	0.000086	0.00010
	August		0.00000089	0.41	0.000040	0.00000015	369	88	0.00000014	0.00010	0.000017	0.000035	8.5E-09	0.19	76	0.000091	0.00011
	September		0.00000034	0.31	0.000037	0.00000014	386	88	0.00000013	0.000094	0.000015	0.000034	8.7E-09	0.19	79	0.000087	0.00010
	October		0.0000003	0.23	0.000020	7.6E-08	413	80	6.9E-08	0.000043	0.0000071	0.000024	9.4E-09	0.19	84	0.000059	0.000051
	November		0.00000029	0.14	0.0000091	4.0E-08	430	74	3.0E-08	0.000013	0.0000021	0.000018	9.8E-09	0.19	87	0.000042	0.000017
	December		0.0000032	0.088	0.0000068	3.0E-08	437	72	2.6E-08	0.0000033	0.00000055	0.000016	1.2E-08	0.20	88	0.000037	0.0000056
		MINIMUM	0.00000029	0.088	0.0000048	2.5E-08	239	72	1.4E-08	0.00000067	3.6E-08	0.000015	7.7E-09	0.18	48	0.000035	0.0000027
		MAXIMUM	0.0041	5.2	0.0015	0.00000062	442	88	0.000013	0.00027	0.00016	0.00094	0.0000026	0.63	89	0.00060	0.00016
		AVERAGE	0.00013	2.5	0.000078	0.00000018	382	79	0.00000051	0.000063	0.000014	0.000057	9.1E-08	0.26	78	0.000087	0.000074

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	**Month**	**Year**	**mg/L**	**mg/L**	**mg/L as N**	**mg/L**	**Bq/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	May		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	June	**2025**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	July		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	October		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0046	0.00000068	2.0	0.0056	0.32	0.00025	0.0000011	3.2	0.016	2.5	0.0037	0.000063	0.0000012	0.0000075
	May		0.0053	0.00000024	4.9	0.0093	0.37	0.00025	0.00000097	4.2	0.029	3.4	0.0061	0.000073	0.00000019	0.0000027
	June		0.011	0.00000023	3.6	**0.010**	0.75	0.00050	0.0000015	7.1	0.025	5.3	0.0067	0.00015	5.4E-08	0.0000023
	July	**2026**	0.022	0.00000038	4.2	**0.017**	1.5	0.00099	0.0000027	13	0.033	9.8	0.011	0.00030	4.1E-08	0.0000038
	August		0.024	0.00000037	2.5	**0.016**	1.6	0.0011	0.0000028	14	0.026	10	0.0098	0.00032	3.7E-08	0.0000036
	September		0.015	0.00000032	2.5	**0.011**	1.0	0.00068	0.0000019	9.2	0.021	6.8	0.0072	0.00021	2.6E-08	0.0000028
	October		0.013	0.00000036	4.5	**0.012**	0.87	0.00058	0.0000017	8.4	0.028	6.4	0.0081	0.00018	2.7E-08	0.0000030
	November		0.0043	0.00000016	6.3	0.0090	0.29	0.00020	0.00000081	3.7	0.029	3.1	0.0059	0.000059	1.7E-08	0.0000017
Construction	**December**		0.0015	9.1E-08	6.9	0.0081	0.11	0.000075	0.00000051	2.2	0.030	2.1	0.0052	0.000021	1.4E-08	0.0000013
	January		0.0037	0.00000012	7.8	0.0086	0.25	0.00017	0.00000073	3.3	0.029	2.8	0.0055	0.000050	1.6E-08	0.0000015
	February		0.0069	0.00000016	6.5	0.0086	0.45	0.00031	0.0000010	4.9	0.024	3.8	0.0055	0.000094	1.7E-08	0.0000017
	March		0.012	0.00000022	7.8	**0.013**	0.77	0.00053	0.0000016	7.9	0.033	6.0	0.0081	0.00016	2.7E-08	0.0000025
	April		0.013	0.00000025	4.2	**0.011**	0.88	0.00059	0.0000017	8.3	0.023	6.1	0.0069	0.00018	2.4E-08	0.0000024
	May		0.015	0.00000037	4.4	**0.013**	1.0	0.00069	0.0000020	9.6	0.026	7.2	0.0083	0.00021	2.9E-08	0.0000032
	June	**2027**	0.016	0.00000032	5.6	**0.014**	1.1	0.00071	0.0000021	10	0.030	7.5	0.0087	0.00022	3.0E-08	0.0000031
	July		0.028	0.00000039	4.5	**0.019**	1.9	0.0012	0.0000033	17	0.033	12	0.012	0.00038	4.3E-08	0.0000042
	August		0.016	0.0000004	3.6	**0.012**	1.1	0.00074	0.0000021	10	0.025	7.6	0.0084	0.00022	3.0E-08	0.0000033
	September		0.0081	0.00000027	6.4	0.0092	0.55	0.00037	0.0000012	5.6	0.024	4.4	0.0063	0.00011	2.0E-08	0.0000023
	October		0.010	0.00000021	4.4	0.0100	0.70	0.00047	0.0000014	6.8	0.024	5.1	0.0064	0.00014	2.2E-08	0.0000021
	November		0.010	0.00000022	5.0	0.0100	0.68	0.00046	0.0000014	6.7	0.024	5.0	0.0064	0.00014	2.2E-08	0.0000022
	December		0.0071	0.00000019	8.1	0.0099	0.47	0.00032	0.0000011	5.2	0.028	4.1	0.0064	0.000096	2.0E-08	0.0000020
	January		0.00049	0.00000024	8.0	0.0049	0.045	0.000037	0.00000035	1.2	0.019	1.1	0.0031	0.0000069	0.00000043	0.0000028
	February		0.000044	4.0E-08	12	0.0075	0.013	0.0000067	0.00000025	1.4	0.030	1.5	0.0048	0.0000008	8.9E-09	0.00000073
	March		0.0000016	3.9E-08	11	0.0074	0.0049	0.0000048	0.00000025	1.4	0.030	1.4	0.0047	0.00000022	8.8E-09	0.00000072
	April		0.0071	0.000011	10	**0.020**	0.51	0.00040	0.0000082	5.7	0.050	18	0.021	0.00023	0.00000024	0.000020
	May		0.0047	0.000040	5.2	**0.045**	0.42	0.00049	0.000028	4.9	0.097	62	0.064	0.00059	0.00000022	0.000068
	June	**2028**	0.0049	0.000035	7.4	**0.042**	0.40	0.00047	0.000025	4.7	0.092	57	0.059	0.00053	0.00000018	0.000061
	July		0.0033	0.000021	3.4	**0.025**	0.29	0.00037	0.000015	3.2	0.053	34	0.035	0.00031	0.0000028	0.000048
	August		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	September		0.00032	0.0000036	1.5	0.0081	0.063	0.000041	0.0000026	0.77	0.018	11	0.012	0.000053	1.8E-08	0.0000063
	October		0.0020	0.000016	11	**0.037**	0.31	0.00021	0.000011	4.1	0.085	49	0.052	0.00023	8.0E-08	0.000027
	November		0.0015	0.000015	9.5	**0.024**	0.16	0.00018	0.000011	2.6	0.061	30	0.032	0.00022	7.8E-08	0.000026
	December		0.000088	0.0000011	13	**0.011**	0.026	0.000017	0.0000010	1.7	0.038	5.9	0.0095	0.000015	1.5E-08	0.0000026
		MINIMUM	0.0000016	3.9E-08	1.5	0.0049	0.0049	0.0000048	0.00000025	0.77	0.016	1.1	0.0031	0.00000022	8.8E-09	0.00000072
		MAXIMUM	0.028	0.000040	13	**0.045**	1.9	0.0012	0.000028	17	0.097	62	0.064	0.00059	0.0000028	0.000068
		AVERAGE	0.0085	0.0000046	6.2	**0.015**	0.59	0.00042	0.0000043	6.0	0.035	12	0.014	0.00017	0.00000019	0.000010
	January		0.0037	0.0086	7.0	**0.017**	0.14	0.11	0.00049	831	0.30	**2722**	0.83	0.011	0.0017	0.0015
	February		0.0040	0.0094	6.2	**0.018**	0.16	0.13	0.00054	885	0.35	**2900**	1.0	0.012	0.0018	0.0016
	March		0.0047	0.0094	6.1	**0.023**	0.21	0.13	0.00054	885	0.36	**2900**	1.0	0.012	0.0018	0.0016
	April		0.0073	0.0061	4.4	**0.041**	0.50	0.081	0.00036	697	0.28	**2285**	0.68	0.0082	0.0012	0.0011
	May		0.0054	0.0080	5.7	**0.046**	0.36	0.11	0.00048	886	0.37	**2902**	0.93	0.011	0.0015	0.0014
	June		0.0070	0.0083	5.5	**0.048**	0.44	0.11	0.00050	887	0.38	**2907**	0.95	0.011	0.0016	0.0015
Operations	**July**	**2029**	0.0074	0.0088	5.8	**0.043**	0.44	0.12	0.00052	888	0.38	**2910**	0.99	0.012	0.0017	0.0016
	August		0.0073	0.0084	5.5	**0.049**	0.46	0.11	0.00050	887	0.38	**2906**	0.94	0.011	0.0016	0.0015
	September		0.0074	0.0080	5.3	**0.049**	0.48	0.11	0.00048	885	0.37	**2901**	0.91	0.011	0.0015	0.0014
	October		0.0061	0.0094	6.1	**0.038**	0.33	0.13	0.00055	885	0.40	**2900**	1.1	0.013	0.0018	0.0017
	November		0.0048	0.0094	6.1	**0.024**	0.22	0.13	0.00054	885	0.37	**2900**	1.0	0.013	0.0018	0.0016
	December		0.0040	0.0094	6.2	**0.018**	0.16	0.13	0.00054	885	0.35	**2900**	1.0	0.012	0.0018	0.0016

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.0044	0.0099	5.6	**0.019**	0.15	0.13	0.00057	880	0.32	**2884**	0.89	0.012	0.0019	0.0017
	February		0.0053	0.0100	5.6	**0.021**	0.20	0.13	0.00058	881	0.31	**2888**	0.85	0.011	0.0019	0.0017
	March		0.0052	0.010	5.6	**0.025**	0.21	0.13	0.00058	884	0.33	**2898**	0.88	0.012	0.0019	0.0018
	April		0.0074	0.0085	4.7	**0.043**	0.42	0.11	0.00051	884	0.31	**2896**	0.75	0.010	0.0016	0.0015
	May		0.0075	0.0089	5.0	**0.041**	0.41	0.11	0.00053	886	0.33	**2904**	0.81	0.011	0.0017	0.0016
	June		0.0080	0.0084	4.6	**0.047**	0.47	0.11	0.00050	886	0.32	**2904**	0.76	0.010	0.0016	0.0015
	July		0.0070	0.0057	3.3	**0.039**	0.46	0.073	0.00035	644	0.24	**2109**	0.55	0.0070	0.0011	0.0010
	August		0.0041	0.0045	2.9	**0.028**	0.27	0.057	0.00027	496	0.19	**1624**	0.46	0.0053	0.00087	0.00081
	September		0.0023	0.0038	2.5	**0.023**	0.16	0.048	0.00022	430	0.17	**1409**	0.41	0.0045	0.00073	0.00068
	October		0.0068	0.0083	4.7	**0.044**	0.39	0.11	0.00050	885	0.33	**2901**	0.80	0.010	0.0016	0.0015
	November		0.0045	0.0099	5.5	**0.029**	0.17	0.13	0.00058	887	0.34	**2906**	0.91	0.012	0.0019	0.0017
	December		0.0047	0.010	5.6	**0.020**	0.16	0.13	0.00058	881	0.32	**2886**	0.87	0.012	0.0019	0.0017
	January	2031	0.0048	0.010	5.2	**0.019**	0.16	0.13	0.00059	882	0.31	**2891**	0.83	0.011	0.0020	0.0018
	February		0.0045	0.010	5.2	**0.017**	0.13	0.13	0.00059	886	0.31	**2904**	0.84	0.011	0.0020	0.0018
	March		0.0053	0.010	5.1	**0.022**	0.19	0.13	0.00059	886	0.30	**2903**	0.80	0.011	0.0020	0.0018
	April		0.0084	0.0087	4.0	**0.041**	0.47	0.11	0.00051	887	0.29	**2906**	0.69	0.0097	0.0017	0.0015
	May		0.0060	0.0091	4.2	**0.037**	0.29	0.11	0.00054	889	0.29	**2914**	0.71	0.0100	0.0018	0.0016
	June		0.0068	0.0092	4.3	**0.038**	0.34	0.11	0.00055	888	0.30	**2911**	0.73	0.010	0.0018	0.0016
	July		0.0071	0.0094	4.3	**0.038**	0.35	0.12	0.00055	886	0.30	**2904**	0.71	0.010	0.0018	0.0017
	August		0.0069	0.0092	4.3	**0.040**	0.36	0.11	0.00054	889	0.30	**2912**	0.71	0.010	0.0018	0.0016
	September		0.0072	0.0092	4.3	**0.041**	0.37	0.11	0.00055	893	0.30	**2928**	0.73	0.010	0.0018	0.0016
	October		0.0065	0.0097	4.5	**0.033**	0.30	0.12	0.00057	888	0.30	**2910**	0.75	0.011	0.0019	0.0017
	November		0.0047	0.010	5.1	**0.021**	0.16	0.13	0.00060	885	0.31	**2901**	0.84	0.012	0.0020	0.0018
	December		0.0048	0.010	5.2	**0.019**	0.15	0.13	0.00060	888	0.31	**2909**	0.84	0.011	0.0020	0.0018
	January	2032	0.0047	0.010	5.7	**0.018**	0.14	0.13	0.00059	886	0.31	**2902**	0.84	0.011	0.0020	0.0018
	February		0.0046	0.010	5.8	**0.017**	0.13	0.13	0.00059	885	0.31	**2899**	0.84	0.011	0.0020	0.0018
	March		0.0069	0.0097	4.9	**0.034**	0.32	0.12	0.00057	886	0.29	**2903**	0.71	0.010	0.0019	0.0017
	April		0.0079	0.0091	4.5	**0.041**	0.42	0.11	0.00054	886	0.28	**2902**	0.66	0.0097	0.0017	0.0016
	May		0.0063	0.0097	4.8	**0.036**	0.28	0.12	0.00057	888	0.29	**2911**	0.71	0.010	0.0019	0.0017
	June		0.0068	0.0100	5.0	**0.032**	0.31	0.12	0.00058	884	0.30	**2898**	0.73	0.011	0.0019	0.0018
	July		0.0086	0.0087	4.3	**0.045**	0.48	0.11	0.00052	890	0.29	**2916**	0.66	0.0095	0.0017	0.0016
	August		0.0066	0.0091	4.5	**0.040**	0.32	0.11	0.00054	889	0.29	**2914**	0.69	0.0098	0.0017	0.0016
	September		0.0061	0.010	5.1	**0.033**	0.25	0.13	0.00060	887	0.30	**2906**	0.74	0.011	0.0020	0.0018
	October		0.0062	0.010	5.1	**0.029**	0.26	0.13	0.00060	886	0.30	**2903**	0.76	0.011	0.0020	0.0018
	November		0.0051	0.010	5.5	**0.021**	0.17	0.13	0.00060	886	0.31	**2903**	0.82	0.011	0.0020	0.0018
	December		0.0046	0.010	5.9	**0.017**	0.13	0.13	0.00059	887	0.31	**2907**	0.85	0.011	0.0020	0.0018
	January	2033	0.0047	0.010	5.4	**0.017**	0.13	0.13	0.00059	888	0.31	**2909**	0.85	0.011	0.0020	0.0018
	February		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	887	0.31	**2907**	0.85	0.011	0.0020	0.0018
	March		0.0049	0.010	5.2	**0.018**	0.15	0.13	0.00060	887	0.31	**2905**	0.84	0.011	0.0020	0.0018
	April		0.011	0.0089	4.0	**0.045**	0.62	0.11	0.00053	885	0.29	**2900**	0.67	0.0097	0.0017	0.0016
	May		0.0057	0.0089	3.9	**0.041**	0.25	0.11	0.00053	886	0.29	**2904**	0.67	0.0096	0.0017	0.0016
	June		0.0069	0.0097	4.3	**0.039**	0.32	0.12	0.00058	894	0.30	**2928**	0.71	0.010	0.0019	0.0017
	July		0.0068	0.0100	4.4	**0.034**	0.30	0.12	0.00059	890	0.30	**2916**	0.72	0.011	0.0019	0.0018
	August		0.0073	0.0094	4.2	**0.040**	0.36	0.11	0.00056	889	0.29	**2912**	0.69	0.0100	0.0018	0.0017
	September		0.0068	0.0096	4.3	**0.036**	0.32	0.12	0.00057	888	0.29	**2910**	0.71	0.010	0.0019	0.0017
	October		0.0067	0.0100	4.5	**0.032**	0.29	0.12	0.00058	883	0.29	**2892**	0.72	0.011	0.0019	0.0018
	November		0.0059	0.010	4.5	**0.029**	0.24	0.12	0.00058	885	0.30	**2901**	0.76	0.011	0.0019	0.0018
	December		0.0047	0.010	5.3	**0.018**	0.14	0.13	0.00060	887	0.31	**2906**	0.85	0.011	0.0020	0.0018
	January	2034	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0050	0.010	5.3	**0.019**	0.15	0.13	0.00059	886	0.31	**2904**	0.83	0.011	0.0020	0.0018
	March		0.0058	0.010	4.9	**0.025**	0.22	0.13	0.00061	886	0.30	**2903**	0.79	0.011	0.0020	0.0018
	April		0.0083	0.0092	4.2	**0.038**	0.43	0.11	0.00054	889	0.29	**2912**	0.68	0.0098	0.0018	0.0016
	May		0.0055	0.010	4.5	**0.032**	0.20	0.12	0.00059	890	0.30	**2917**	0.73	0.011	0.0019	0.0018
	June		0.012	0.0087	3.8	**0.050**	0.75	0.11	0.00052	885	0.30	**2899**	0.66	0.0096	0.0017	0.0016
	July		0.0095	0.0084	3.6	**0.053**	0.55	0.10	0.00051	884	0.29	**2897**	0.63	0.0092	0.0016	0.0015
	August		0.0074	0.0088	3.8	**0.051**	0.38	0.11	0.00053	885	0.29	**2902**	0.64	0.0094	0.0017	0.0016
	September		0.0073	0.0089	3.9	**0.047**	0.38	0.11	0.00053	894	0.29	**2928**	0.66	0.0096	0.0017	0.0016
	October		0.0053	0.0099	4.5	**0.035**	0.19	0.12	0.00058	890	0.30	**2915**	0.73	0.011	0.0019	0.0017
	November		0.0055	0.011	4.9	**0.025**	0.19	0.13	0.00061	886	0.31	**2903**	0.81	0.011	0.0020	0.0018
	December		0.0057	0.010	5.0	**0.024**	0.20	0.13	0.00060	886	0.30	**2902**	0.79	0.011	0.0020	0.0018
	January	2035	0.0048	0.010	5.3	**0.018**	0.14	0.13	0.00059	887	0.31	**2907**	0.85	0.011	0.0020	0.0018
	February		0.0053	0.010	5.0	**0.021**	0.18	0.13	0.00061	885	0.31	**2902**	0.81	0.011	0.0020	0.0018
	March		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.011	0.0020	0.0018

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.0077	0.0097	4.4	**0.032**	0.36	0.12	0.00057	884	0.29	**2898**	0.71	0.010	0.0019	0.0017
	May		0.0081	0.0091	4.0	**0.040**	0.42	0.11	0.00054	886	0.29	**2904**	0.67	0.0097	0.0017	0.0016
	June		0.0070	0.0091	4.0	**0.040**	0.34	0.11	0.00054	891	0.29	**2918**	0.67	0.0097	0.0017	0.0016
	July		0.0072	0.0091	4.0	**0.041**	0.36	0.11	0.00054	889	0.29	**2914**	0.67	0.0097	0.0018	0.0016
	August		0.0071	0.0095	4.2	**0.041**	0.35	0.12	0.00056	893	0.30	**2927**	0.69	0.010	0.0018	0.0017
	September		0.0069	0.0095	4.2	**0.039**	0.33	0.12	0.00056	896	0.30	**2935**	0.70	0.010	0.0018	0.0017
	October		0.0063	0.010	4.5	**0.030**	0.26	0.13	0.00060	885	0.30	**2898**	0.75	0.011	0.0020	0.0018
	November		0.0049	0.010	5.1	**0.019**	0.15	0.13	0.00060	884	0.31	**2898**	0.84	0.012	0.0020	0.0018
	December		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.31	**2899**	0.85	0.011	0.0020	0.0018
	January	2036	0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2904**	0.85	0.012	0.0020	0.0018
	February		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.012	0.0020	0.0018
	March		0.0057	0.010	5.0	**0.023**	0.20	0.13	0.00061	887	0.30	**2907**	0.79	0.011	0.0020	0.0018
	April		0.0098	0.0089	3.9	**0.047**	0.56	0.11	0.00053	886	0.29	**2902**	0.66	0.0096	0.0017	0.0016
	May		0.0058	0.0093	4.2	**0.037**	0.26	0.11	0.00055	887	0.29	**2908**	0.68	0.0099	0.0018	0.0016
	June		0.0072	0.0094	4.2	**0.039**	0.35	0.12	0.00056	892	0.30	**2924**	0.71	0.010	0.0018	0.0017
	July		0.0071	0.0092	4.1	**0.040**	0.35	0.11	0.00055	887	0.29	**2906**	0.69	0.0099	0.0018	0.0016
	August		0.0064	0.010	4.7	**0.029**	0.26	0.13	0.00060	889	0.30	**2913**	0.77	0.011	0.0020	0.0018
	September		0.0068	0.0099	4.4	**0.034**	0.30	0.12	0.00058	888	0.30	**2911**	0.72	0.011	0.0019	0.0017
	October		0.0066	0.010	4.5	**0.032**	0.29	0.12	0.00059	889	0.30	**2912**	0.75	0.011	0.0019	0.0018
	November		0.0050	0.010	5.1	**0.021**	0.16	0.13	0.00060	886	0.31	**2903**	0.83	0.011	0.0020	0.0018
	December		0.0047	0.010	5.3	**0.017**	0.13	0.13	0.00059	884	0.31	**2898**	0.85	0.011	0.0020	0.0018
	January	2037	0.0047	0.010	5.1	**0.017**	0.13	0.13	0.00059	886	0.31	**2902**	0.85	0.011	0.0020	0.0018
	February		0.0057	0.010	4.6	**0.025**	0.21	0.13	0.00059	885	0.30	**2901**	0.78	0.011	0.0020	0.0018
	March		0.0055	0.010	4.8	**0.023**	0.19	0.13	0.00059	889	0.31	**2912**	0.80	0.011	0.0020	0.0018
	April		0.0086	0.0088	3.7	**0.044**	0.47	0.11	0.00053	884	0.29	**2896**	0.67	0.0096	0.0017	0.0016
	May		0.0059	0.010	4.3	**0.032**	0.22	0.12	0.00059	887	0.30	**2906**	0.73	0.011	0.0019	0.0018
	June		0.0090	0.0088	3.7	**0.043**	0.50	0.11	0.00053	886	0.29	**2903**	0.68	0.0097	0.0017	0.0016
	July		0.0091	0.0087	3.6	**0.048**	0.51	0.11	0.00053	891	0.29	**2920**	0.65	0.0095	0.0017	0.0016
	August		0.0063	0.0091	3.9	**0.040**	0.28	0.11	0.00054	894	0.29	**2929**	0.69	0.0099	0.0018	0.0016
	September		0.0071	0.0091	3.9	**0.040**	0.35	0.11	0.00054	886	0.29	**2904**	0.66	0.0096	0.0017	0.0016
	October		0.0056	0.010	4.5	**0.030**	0.20	0.13	0.00060	888	0.31	**2910**	0.78	0.011	0.0020	0.0018
	November		0.0053	0.010	4.8	**0.021**	0.17	0.13	0.00060	884	0.31	**2897**	0.82	0.011	0.0020	0.0018
	December		0.0047	0.010	5.0	**0.017**	0.14	0.13	0.00059	884	0.31	**2896**	0.84	0.011	0.0020	0.0018
	January	2038	0.0047	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.31	**2903**	0.85	0.011	0.0020	0.0018
	February		0.0047	0.010	5.0	**0.017**	0.14	0.13	0.00059	886	0.32	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0072	0.0095	4.1	**0.036**	0.34	0.12	0.00056	885	0.29	**2901**	0.69	0.010	0.0018	0.0017
	April		0.0081	0.0089	3.7	**0.041**	0.42	0.11	0.00053	886	0.28	**2905**	0.65	0.0096	0.0017	0.0016
	May		0.0063	0.0097	4.1	**0.035**	0.27	0.12	0.00057	884	0.30	**2896**	0.72	0.010	0.0019	0.0017
	June		0.0071	0.0099	4.2	**0.032**	0.32	0.12	0.00058	890	0.30	**2915**	0.75	0.011	0.0019	0.0017
	July		0.0071	0.0093	4.0	**0.039**	0.35	0.11	0.00055	889	0.29	**2911**	0.69	0.0100	0.0018	0.0017
	August		0.0068	0.0099	4.2	**0.036**	0.31	0.12	0.00058	894	0.30	**2930**	0.72	0.010	0.0019	0.0017
	September		0.0082	0.0092	3.9	**0.040**	0.43	0.11	0.00054	883	0.30	**2893**	0.71	0.010	0.0018	0.0016
	October		0.0063	0.0094	4.0	**0.038**	0.29	0.12	0.00056	889	0.30	**2912**	0.70	0.010	0.0018	0.0017
	November		0.0053	0.010	4.6	**0.023**	0.18	0.13	0.00060	885	0.31	**2900**	0.82	0.011	0.0020	0.0018
	December		0.0048	0.010	5.0	**0.018**	0.14	0.13	0.00060	888	0.32	**2909**	0.85	0.011	0.0020	0.0018
	January	2039	0.0048	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.32	**2902**	0.85	0.011	0.0020	0.0018
	February		0.0064	0.0100	4.4	**0.030**	0.26	0.12	0.00059	889	0.30	**2914**	0.75	0.011	0.0019	0.0018
	March		0.0059	0.010	4.6	**0.025**	0.22	0.13	0.00061	886	0.31	**2905**	0.79	0.011	0.0020	0.0018
	April		0.0063	0.010	4.5	**0.028**	0.24	0.13	0.00059	890	0.30	**2915**	0.76	0.011	0.0020	0.0018
	May		0.0063	0.010	4.5	**0.028**	0.25	0.13	0.00060	887	0.30	**2907**	0.76	0.011	0.0020	0.0018
	June		0.0070	0.010	4.4	**0.028**	0.29	0.13	0.00059	885	0.31	**2899**	0.78	0.011	0.0020	0.0018
	July		0.0077	0.0090	3.8	**0.042**	0.39	0.11	0.00054	893	0.29	**2925**	0.67	0.0097	0.0017	0.0016
	August		0.0096	0.0085	3.5	**0.051**	0.55	0.10	0.00051	884	0.29	**2897**	0.64	0.0093	0.0016	0.0015
	September		0.0063	0.0093	4.0	**0.037**	0.28	0.11	0.00055	886	0.29	**2904**	0.69	0.0099	0.0018	0.0017
	October		0.0068	0.0097	4.1	**0.038**	0.30	0.12	0.00058	888	0.30	**2911**	0.71	0.010	0.0019	0.0017
	November		0.0057	0.010	4.5	**0.026**	0.21	0.13	0.00059	886	0.31	**2904**	0.79	0.011	0.0019	0.0018
	December		0.0048	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.32	**2902**	0.85	0.011	0.0020	0.0018
	January	2040	0.0049	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2903**	0.85	0.011	0.0020	0.0018
	February		0.0050	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2903**	0.85	0.012	0.0020	0.0018
	March		0.0086	0.0095	4.4	**0.039**	0.43	0.12	0.00056	887	0.30	**2908**	0.70	0.010	0.0018	0.0017
	April		0.0073	0.0090	4.1	**0.039**	0.35	0.11	0.00054	887	0.29	**2906**	0.68	0.0098	0.0017	0.0016
	May		0.0076	0.0094	4.2	**0.040**	0.36	0.11	0.00056	884	0.30	**2897**	0.70	0.010	0.0018	0.0017
	June		0.0086	0.0089	4.0	**0.042**	0.45	0.11	0.00053	885	0.29	**2899**	0.67	0.0096	0.0017	0.0016

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.0083	0.0088	3.9	**0.048**	0.44	0.11	0.00053	887	0.29	**2905**	0.65	0.0095	0.0017	0.0016
	August		0.0058	0.010	4.6	**0.033**	0.20	0.12	0.00060	890	0.31	**2917**	0.74	0.011	0.0020	0.0018
	September		0.0067	0.010	4.6	**0.032**	0.28	0.12	0.00059	886	0.31	**2905**	0.75	0.011	0.0019	0.0018
	October		0.0069	0.0099	4.5	**0.034**	0.30	0.12	0.00058	888	0.30	**2910**	0.73	0.010	0.0019	0.0017
	November		0.0052	0.010	5.1	**0.019**	0.15	0.13	0.00060	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	December		0.0050	0.010	5.4	**0.017**	0.13	0.13	0.00059	886	0.32	**2905**	0.85	0.011	0.0020	0.0018
	January	2041	0.0051	0.010	5.4	**0.017**	0.13	0.13	0.00060	888	0.32	**2910**	0.85	0.011	0.0020	0.0018
	February		0.0051	0.010	5.4	**0.017**	0.13	0.13	0.00059	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	March		0.0065	0.010	5.1	**0.024**	0.24	0.13	0.00059	885	0.31	**2899**	0.79	0.011	0.0020	0.0018
	April		0.0091	0.0093	4.2	**0.041**	0.47	0.11	0.00056	891	0.30	**2919**	0.70	0.010	0.0018	0.0017
	May		0.0054	0.0094	4.2	**0.036**	0.19	0.12	0.00056	887	0.30	**2906**	0.71	0.010	0.0018	0.0017
	June		0.0073	0.0100	4.5	**0.031**	0.31	0.12	0.00059	884	0.30	**2897**	0.74	0.011	0.0019	0.0018
	July		0.0088	0.0092	4.1	**0.042**	0.45	0.11	0.00055	889	0.30	**2913**	0.69	0.010	0.0018	0.0016
	August		0.013	0.0085	3.7	**0.055**	0.85	0.10	0.00051	882	0.30	**2891**	0.65	0.0094	0.0016	0.0015
	September		0.0061	0.0086	3.8	**0.050**	0.27	0.10	0.00052	886	0.30	**2904**	0.64	0.0093	0.0017	0.0016
	October		0.0064	0.0093	4.2	**0.041**	0.27	0.11	0.00056	892	0.30	**2924**	0.68	0.0099	0.0018	0.0017
	November		0.0052	0.010	4.7	**0.029**	0.15	0.13	0.00061	887	0.31	**2907**	0.78	0.011	0.0020	0.0018
	December		0.0051	0.010	5.3	**0.018**	0.14	0.13	0.00060	887	0.32	**2908**	0.86	0.011	0.0020	0.0018
	January	2042	0.0051	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0051	0.010	5.3	**0.017**	0.13	0.13	0.00059	886	0.32	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0060	0.010	5.1	**0.023**	0.19	0.13	0.00060	885	0.31	**2900**	0.79	0.011	0.0020	0.0018
	April		0.0090	0.0094	4.3	**0.037**	0.45	0.11	0.00056	886	0.30	**2902**	0.70	0.010	0.0018	0.0017
	May		0.0059	0.0099	4.5	**0.033**	0.21	0.12	0.00058	890	0.30	**2915**	0.73	0.010	0.0019	0.0018
	June		0.010	0.0086	3.8	**0.045**	0.58	0.11	0.00052	884	0.30	**2898**	0.66	0.0095	0.0016	0.0015
	July		0.0082	0.0087	3.9	**0.048**	0.42	0.11	0.00053	888	0.30	**2908**	0.65	0.0095	0.0017	0.0016
	August		0.0089	0.0086	3.8	**0.051**	0.49	0.10	0.00052	890	0.30	**2918**	0.65	0.0094	0.0016	0.0015
	September		0.0086	0.0088	4.0	**0.043**	0.44	0.11	0.00053	884	0.30	**2897**	0.68	0.0097	0.0017	0.0016
	October		0.0070	0.0090	4.0	**0.046**	0.34	0.11	0.00054	892	0.30	**2922**	0.66	0.0096	0.0017	0.0016
	November		0.0051	0.010	4.7	**0.027**	0.14	0.13	0.00060	888	0.32	**2911**	0.79	0.011	0.0020	0.0018
	December		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2901**	0.85	0.011	0.0020	0.0018
	January	2043	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2900**	0.84	0.011	0.0020	0.0018
	February		0.0052	0.010	5.4	**0.017**	0.13	0.13	0.00059	886	0.32	**2902**	0.85	0.012	0.0020	0.0018
	March		0.0052	0.010	5.4	**0.017**	0.13	0.13	0.00059	886	0.32	**2904**	0.85	0.012	0.0020	0.0018
	April		0.0098	0.0096	4.4	**0.036**	0.50	0.12	0.00057	885	0.31	**2901**	0.73	0.010	0.0018	0.0017
	May		0.0061	0.0091	4.1	**0.040**	0.25	0.11	0.00055	887	0.29	**2906**	0.66	0.0097	0.0018	0.0016
	June		0.0088	0.0088	4.0	**0.044**	0.46	0.11	0.00053	883	0.29	**2894**	0.66	0.0096	0.0017	0.0016
	July		0.0093	0.0090	4.1	**0.045**	0.49	0.11	0.00054	885	0.30	**2899**	0.68	0.0097	0.0017	0.0016
	August		0.0089	0.0082	3.6	**0.052**	0.50	0.10	0.00050	859	0.30	**2814**	0.63	0.0091	0.0016	0.0015
	September		0.0094	0.0086	3.8	**0.050**	0.52	0.11	0.00052	887	0.30	**2908**	0.66	0.0095	0.0017	0.0016
	October		0.0071	0.0088	3.9	**0.045**	0.33	0.11	0.00053	890	0.30	**2917**	0.66	0.0096	0.0017	0.0016
	November		0.0061	0.0099	4.4	**0.035**	0.23	0.12	0.00058	890	0.30	**2916**	0.72	0.010	0.0019	0.0017
	December		0.0056	0.010	5.0	**0.023**	0.16	0.13	0.00061	886	0.32	**2902**	0.82	0.011	0.0020	0.0018
	January	2044	0.0052	0.010	5.3	**0.017**	0.14	0.13	0.00060	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2899**	0.84	0.011	0.0020	0.0018
	March		0.0057	0.010	5.2	**0.019**	0.17	0.13	0.00059	885	0.32	**2901**	0.83	0.011	0.0020	0.0018
	April		0.0078	0.0093	4.1	**0.039**	0.37	0.11	0.00056	888	0.29	**2910**	0.67	0.0098	0.0018	0.0017
	May		0.0073	0.0096	4.3	**0.035**	0.31	0.12	0.00057	889	0.30	**2913**	0.71	0.010	0.0019	0.0017
	June		0.0072	0.0100	4.5	**0.032**	0.30	0.12	0.00059	891	0.31	**2919**	0.74	0.011	0.0019	0.0018
	July		0.0091	0.0089	3.9	**0.046**	0.48	0.11	0.00054	890	0.30	**2916**	0.67	0.0097	0.0017	0.0016
	August		0.0068	0.0100	4.4	**0.036**	0.27	0.12	0.00059	890	0.30	**2916**	0.72	0.011	0.0019	0.0018
	September		0.0072	0.010	4.5	**0.034**	0.30	0.12	0.00060	886	0.31	**2903**	0.73	0.011	0.0019	0.0018
	October		0.0065	0.010	4.7	**0.028**	0.24	0.13	0.00061	889	0.31	**2913**	0.78	0.011	0.0020	0.0018
	November		0.0056	0.010	5.1	**0.020**	0.16	0.13	0.00061	887	0.32	**2907**	0.84	0.011	0.0020	0.0018
	December		0.0053	0.010	5.2	**0.018**	0.14	0.13	0.00060	887	0.32	**2905**	0.84	0.011	0.0020	0.0018
	January	2045	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	887	0.32	**2906**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00060	886	0.32	**2904**	0.85	0.011	0.0020	0.0018
	March		0.0076	0.0100	4.9	**0.024**	0.30	0.12	0.00058	886	0.31	**2902**	0.79	0.011	0.0019	0.0017
	April		0.0065	0.0094	4.2	**0.039**	0.28	0.11	0.00056	888	0.29	**2909**	0.68	0.0099	0.0018	0.0017
	May		0.0076	0.0093	4.1	**0.040**	0.36	0.11	0.00055	888	0.30	**2911**	0.68	0.0098	0.0018	0.0016
	June		0.0080	0.0092	4.1	**0.040**	0.38	0.11	0.00055	888	0.30	**2911**	0.69	0.0099	0.0018	0.0016
	July		0.0077	0.0090	4.0	**0.041**	0.38	0.11	0.00054	889	0.29	**2913**	0.67	0.0097	0.0017	0.0016
	August		0.0074	0.0098	4.3	**0.037**	0.32	0.12	0.00058	890	0.30	**2916**	0.71	0.010	0.0019	0.0017
	September		0.0073	0.0096	4.3	**0.036**	0.32	0.12	0.00057	886	0.30	**2904**	0.71	0.010	0.0019	0.0017

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.0068	0.010	4.5	**0.030**	0.26	0.12	0.00060	886	0.31	**2902**	0.75	0.011	0.0020	0.0018
	November		0.0059	0.011	4.9	**0.022**	0.19	0.13	0.00061	886	0.32	**2903**	0.81	0.011	0.0020	0.0018
	December		0.0054	0.010	5.2	**0.018**	0.14	0.13	0.00060	886	0.32	**2904**	0.84	0.011	0.0020	0.0018
	January	2046	0.0056	0.010	5.1	**0.020**	0.17	0.13	0.00061	887	0.32	**2905**	0.82	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	884	0.32	**2898**	0.84	0.011	0.0020	0.0018
	March		0.0071	0.010	4.7	**0.028**	0.27	0.12	0.00059	887	0.30	**2906**	0.75	0.011	0.0019	0.0018
	April		0.0065	0.0099	4.5	**0.032**	0.25	0.12	0.00059	888	0.30	**2911**	0.72	0.010	0.0019	0.0018
	May		0.0075	0.0095	4.3	**0.035**	0.34	0.12	0.00057	886	0.30	**2902**	0.71	0.010	0.0018	0.0017
	June		0.0083	0.0094	4.2	**0.038**	0.40	0.12	0.00056	883	0.30	**2894**	0.70	0.010	0.0018	0.0017
	July		0.0086	0.0091	4.0	**0.044**	0.44	0.11	0.00054	889	0.29	**2914**	0.65	0.0097	0.0017	0.0016
	August		0.0089	0.0087	3.9	**0.047**	0.47	0.11	0.00053	886	0.30	**2904**	0.66	0.0095	0.0017	0.0016
	September		0.0079	0.0090	4.0	**0.043**	0.39	0.11	0.00054	889	0.30	**2913**	0.66	0.0096	0.0017	0.0016
	October		0.0072	0.0090	4.0	**0.039**	0.33	0.11	0.00054	888	0.29	**2910**	0.68	0.0097	0.0017	0.0016
	November		0.0057	0.010	4.6	**0.032**	0.19	0.12	0.00060	887	0.31	**2906**	0.76	0.011	0.0019	0.0018
	December		0.0055	0.010	5.1	**0.020**	0.16	0.13	0.00061	886	0.32	**2902**	0.84	0.011	0.0020	0.0018
	January	2047	0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	887	0.32	**2905**	0.85	0.011	0.0020	0.0018
	February		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00060	888	0.32	**2909**	0.85	0.011	0.0020	0.0018
	March		0.0057	0.010	5.1	**0.021**	0.17	0.13	0.00060	884	0.31	**2897**	0.81	0.011	0.0020	0.0018
	April		0.0083	0.0094	4.3	**0.036**	0.39	0.11	0.00056	886	0.29	**2903**	0.69	0.0100	0.0018	0.0017
	May		0.0073	0.0093	4.1	**0.039**	0.33	0.11	0.00055	893	0.30	**2926**	0.68	0.0099	0.0018	0.0017
	June		0.0072	0.0099	4.4	**0.033**	0.30	0.12	0.00059	885	0.30	**2901**	0.73	0.011	0.0019	0.0018
	July		0.0093	0.0087	3.8	**0.046**	0.50	0.11	0.00053	884	0.29	**2897**	0.65	0.0094	0.0017	0.0016
	August		0.0086	0.0085	3.7	**0.047**	0.46	0.10	0.00051	855	0.29	**2802**	0.64	0.0092	0.0016	0.0015
	September		0.0072	0.0092	4.1	**0.039**	0.33	0.11	0.00055	884	0.29	**2897**	0.67	0.0098	0.0018	0.0016
	October		0.0062	0.0097	4.4	**0.036**	0.24	0.12	0.00057	888	0.31	**2910**	0.74	0.010	0.0019	0.0017
	November		0.0059	0.010	5.0	**0.022**	0.18	0.13	0.00061	886	0.32	**2905**	0.81	0.011	0.0020	0.0018
	December		0.0052	0.010	5.2	**0.017**	0.14	0.13	0.00059	884	0.32	**2897**	0.84	0.011	0.0020	0.0018
	January	2048	0.0055	0.010	5.2	**0.019**	0.15	0.13	0.00060	885	0.32	**2901**	0.83	0.011	0.0020	0.0018
	February		0.0053	0.010	5.3	**0.018**	0.14	0.13	0.00060	887	0.32	**2907**	0.84	0.011	0.0020	0.0018
	March		0.0052	0.010	5.3	**0.017**	0.13	0.13	0.00059	885	0.32	**2899**	0.84	0.011	0.0020	0.0018
	April		0.0073	0.0099	4.8	**0.029**	0.29	0.12	0.00058	891	0.31	**2919**	0.75	0.011	0.0019	0.0018
	May		0.0063	0.010	4.7	**0.029**	0.22	0.13	0.00061	889	0.31	**2915**	0.76	0.011	0.0020	0.0018
	June		0.0072	0.010	4.5	**0.032**	0.29	0.12	0.00059	887	0.31	**2907**	0.74	0.011	0.0019	0.0018
	July		0.012	0.0087	3.8	**0.049**	0.70	0.11	0.00052	885	0.30	**2901**	0.65	0.0095	0.0017	0.0016
	August		0.0090	0.0085	3.7	**0.053**	0.50	0.10	0.00052	879	0.30	**2881**	0.65	0.0093	0.0016	0.0015
	September		0.0078	0.0084	3.6	**0.050**	0.40	0.10	0.00051	876	0.30	**2870**	0.64	0.0092	0.0016	0.0015
	October		0.0060	0.0095	4.2	**0.038**	0.23	0.12	0.00057	892	0.30	**2924**	0.69	0.010	0.0018	0.0017
	November		0.0054	0.011	4.8	**0.027**	0.14	0.13	0.00062	885	0.32	**2901**	0.80	0.011	0.0020	0.0018
	December		0.0058	0.010	5.0	**0.021**	0.17	0.13	0.00060	885	0.32	**2899**	0.82	0.011	0.0020	0.0018
	January	2049	0.0066	0.010	4.7	**0.028**	0.24	0.12	0.00059	885	0.31	**2900**	0.76	0.011	0.0019	0.0018
	February		0.0054	0.010	5.2	**0.018**	0.14	0.13	0.00060	888	0.33	**2911**	0.86	0.011	0.0020	0.0018
	March		0.0070	0.0099	4.9	**0.024**	0.27	0.12	0.00058	884	0.31	**2898**	0.78	0.011	0.0019	0.0017
	April		0.0060	0.010	4.5	**0.031**	0.21	0.12	0.00059	886	0.31	**2905**	0.74	0.011	0.0019	0.0018
	May		0.0078	0.0096	4.3	**0.035**	0.35	0.12	0.00057	883	0.30	**2895**	0.71	0.010	0.0018	0.0017
	June		0.0081	0.0089	4.0	**0.042**	0.40	0.11	0.00054	891	0.30	**2920**	0.68	0.0097	0.0017	0.0016
	July		0.0098	0.0082	3.6	**0.050**	0.55	0.10	0.00050	871	0.30	**2854**	0.65	0.0092	0.0016	0.0015
	August		0.0086	0.0088	3.8	**0.048**	0.44	0.11	0.00053	886	0.30	**2902**	0.65	0.0095	0.0017	0.0016
	September		0.0094	0.0087	3.8	**0.048**	0.50	0.11	0.00053	885	0.30	**2900**	0.67	0.0096	0.0017	0.0016
	October		0.0076	0.0088	3.9	**0.045**	0.37	0.11	0.00053	885	0.30	**2900**	0.67	0.0096	0.0017	0.0016
	November		0.0059	0.0098	4.4	**0.035**	0.21	0.12	0.00058	889	0.30	**2912**	0.71	0.010	0.0019	0.0017
	December		0.0054	0.010	5.1	**0.020**	0.14	0.13	0.00060	887	0.33	**2908**	0.85	0.012	0.0020	0.0018
	January	2050	0.0053	0.010	5.1	**0.017**	0.13	0.13	0.00060	885	0.33	**2901**	0.85	0.011	0.0020	0.0018
	February		0.0053	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.33	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0058	0.010	4.9	**0.020**	0.17	0.13	0.00061	888	0.32	**2908**	0.82	0.011	0.0020	0.0018
	April		0.0085	0.0091	3.9	**0.039**	0.41	0.11	0.00055	889	0.29	**2913**	0.66	0.0097	0.0018	0.0016
	May		0.0067	0.0099	4.2	**0.034**	0.26	0.12	0.00058	885	0.31	**2902**	0.72	0.010	0.0019	0.0017
	June		0.0080	0.0092	3.9	**0.040**	0.38	0.11	0.00055	885	0.30	**2901**	0.68	0.0099	0.0018	0.0016
	July		0.0070	0.0100	4.4	**0.030**	0.27	0.12	0.00059	887	0.31	**2906**	0.76	0.011	0.0019	0.0018
	August		0.0072	0.010	4.4	**0.033**	0.29	0.13	0.00060	891	0.31	**2920**	0.75	0.011	0.0020	0.0018
	September		0.0082	0.0091	3.8	**0.040**	0.39	0.11	0.00054	885	0.30	**2900**	0.68	0.0098	0.0017	0.0016
	October		0.0064	0.010	4.3	**0.031**	0.23	0.13	0.00060	890	0.32	**2918**	0.76	0.011	0.0020	0.0018
	November		0.0064	0.011	4.6	**0.025**	0.21	0.13	0.00062	885	0.32	**2899**	0.79	0.011	0.0020	0.0018
	December		0.0054	0.010	5.0	**0.018**	0.14	0.13	0.00060	886	0.33	**2902**	0.84	0.011	0.0020	0.0018

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.0054	0.010	5.0	**0.017**	0.13	0.13	0.00060	886	0.33	**2902**	0.85	0.011	0.0020	0.0018
	February		0.0054	0.010	5.0	**0.017**	0.13	0.13	0.00059	886	0.33	**2902**	0.85	0.011	0.0020	0.0018
	March		0.0063	0.010	4.6	**0.024**	0.20	0.13	0.00060	887	0.32	**2906**	0.79	0.011	0.0020	0.0018
	April		0.012	0.0080	3.4	**0.043**	0.71	0.098	0.00048	795	0.28	**2607**	0.60	0.0087	0.0015	0.0014
	May		0.0029	0.0034	1.6	**0.020**	0.14	0.041	0.00020	357	0.13	**1171**	0.29	0.0037	0.00065	0.00061
	June		0.0072	0.0090	4.1	**0.041**	0.35	0.11	0.00054	894	0.31	**2930**	0.70	0.0096	0.0017	0.0016
	July		0.0090	0.0088	3.7	**0.044**	0.47	0.11	0.00053	888	0.30	**2909**	0.66	0.0095	0.0017	0.0016
	August		0.0018	0.0018	0.76	**0.012**	0.099	0.022	0.00011	191	0.067	626	0.14	0.0020	0.00035	0.00033
	September		0.0073	0.0089	4.1	**0.045**	0.38	0.11	0.00053	886	0.33	**2903**	0.73	0.0095	0.0017	0.0016
	October		0.0068	0.0095	4.1	**0.037**	0.28	0.12	0.00057	891	0.30	**2920**	0.69	0.010	0.0018	0.0017
	November		0.0065	0.010	4.3	**0.031**	0.23	0.12	0.00060	882	0.32	**2891**	0.76	0.011	0.0019	0.0018
	December		0.0057	0.010	4.8	**0.020**	0.16	0.13	0.00060	885	0.33	**2901**	0.84	0.011	0.0020	0.0018
	January	2052	0.0036	0.0063	6.5	**0.016**	0.11	0.086	0.00037	890	0.28	**2916**	0.71	0.0085	0.0012	0.0011
	February		0.0032	0.0054	6.5	**0.016**	0.11	0.076	0.00032	880	0.28	**2885**	0.70	0.0080	0.0010	0.00095
	March		0.0033	0.0053	6.3	**0.017**	0.12	0.075	0.00031	881	0.28	**2886**	0.71	0.0080	0.0010	0.00094
	April		0.0064	0.0036	4.2	**0.038**	0.42	0.056	0.00023	884	0.29	**2896**	0.64	0.0068	0.00070	0.00069
	May		0.0058	0.0039	4.5	**0.038**	0.36	0.058	0.00025	887	0.28	**2905**	0.61	0.0067	0.00075	0.00073
	June		0.0046	0.0040	4.6	**0.036**	0.28	0.060	0.00025	884	0.29	**2897**	0.65	0.0070	0.00077	0.00075
	July		0.0075	0.0034	3.8	**0.044**	0.51	0.052	0.00022	885	0.29	**2899**	0.61	0.0065	0.00064	0.00064
	August		0.0056	0.0034	3.9	**0.042**	0.37	0.054	0.00022	888	0.29	**2911**	0.64	0.0067	0.00065	0.00065
	September		0.0042	0.0042	4.9	**0.035**	0.23	0.062	0.00026	893	0.29	**2926**	0.64	0.0071	0.00081	0.00078
	October		0.0043	0.0048	5.5	**0.028**	0.22	0.068	0.00029	884	0.28	**2896**	0.66	0.0074	0.00092	0.00086
	November		0.0034	0.0054	6.4	**0.018**	0.13	0.076	0.00032	882	0.28	**2890**	0.70	0.0080	0.0010	0.00095
	December		0.0032	0.0053	6.3	**0.016**	0.12	0.075	0.00031	882	0.29	**2889**	0.72	0.0080	0.0010	0.00093
		MINIMUM	0.0018	0.0018	0.76	**0.012**	0.099	0.022	0.00011	191	0.067	626	0.14	0.0020	0.00035	0.00033
		MAXIMUM	0.013	0.011	7.0	**0.055**	0.85	0.13	0.00062	896	0.40	**2935**	1.1	0.013	0.0020	0.0018
		AVERAGE	0.0065	0.0093	4.6	**0.031**	0.28	0.12	0.00055	877	0.30	**2874**	0.75	0.010	0.0018	0.0017
Decommissioning	January	2053	0.00091	0.00030	6.2	**0.019**	0.18	0.041	0.000025	256	0.41	312	1.2	0.0091	0.000058	0.000091
	February		0.00060	0.0000033	5.8	**0.019**	0.19	0.039	0.0000060	183	0.42	7.6	1.2	0.0094	0.00000012	0.000040
	March		0.0022	0.000016	5.7	**0.023**	0.29	0.038	0.0000095	179	0.41	24	1.2	0.0091	0.0000018	0.000047
	April		0.0054	0.000043	5.6	**0.050**	0.53	0.025	0.000030	121	0.34	68	0.82	0.0064	0.00000088	0.000089
	May		0.0032	0.000033	5.5	**0.043**	0.37	0.027	0.000025	128	0.35	52	0.87	0.0068	0.00000037	0.000078
	June		0.0027	0.000026	5.5	**0.039**	0.33	0.032	0.000021	150	0.39	41	1.0	0.0079	0.00000022	0.000071
	July		0.0041	0.000032	5.3	**0.044**	0.43	0.029	0.000025	136	0.37	51	0.92	0.0072	0.00000038	0.000078
	August		0.0069	0.000037	5.2	**0.044**	0.63	0.029	0.000025	140	0.37	54	0.93	0.0073	0.0000013	0.000079
	September		0.0054	0.00040	4.4	**0.047**	0.50	0.023	0.000049	147	0.28	257	0.64	0.0052	0.000070	0.00014
	October		0.0027	0.000032	5.4	**0.047**	0.36	0.025	0.000025	127	0.35	65	0.86	0.0063	0.00000022	0.000076
	November		0.0015	0.000023	5.0	**0.036**	0.25	0.032	0.000019	150	0.39	38	1.0	0.0080	0.00000019	0.000066
	December		0.00060	0.0000034	4.8	**0.019**	0.19	0.040	0.0000061	183	0.42	7.9	1.2	0.0095	0.00000012	0.000040
	January	2054	0.00050	0.0000029	4.7	**0.019**	0.19	0.040	0.0000049	184	0.42	5.9	1.2	0.0095	9.9E-08	0.000038
	February		0.00047	0.0000027	4.6	**0.019**	0.19	0.040	0.0000045	185	0.42	5.4	1.2	0.0095	9.2E-08	0.000038
	March		0.00100	0.0000078	4.6	**0.023**	0.22	0.038	0.0000079	175	0.41	13	1.2	0.0090	0.00000011	0.000044
	April		0.0048	0.000025	4.4	**0.038**	0.49	0.031	0.000020	146	0.37	39	0.97	0.0076	0.00000018	0.000069
	May		0.0039	0.000035	4.4	**0.047**	0.42	0.026	0.000027	125	0.35	56	0.86	0.0067	0.00000022	0.000082
	June		0.0028	0.000027	4.2	**0.039**	0.34	0.031	0.000021	142	0.37	42	0.96	0.0076	0.00000019	0.000071
	July		0.0039	0.000031	4.1	**0.043**	0.43	0.029	0.000024	136	0.36	49	0.92	0.0073	0.00000021	0.000077
	August		0.0071	0.000045	3.8	**0.051**	0.65	0.022	0.000030	109	0.31	66	0.74	0.0058	0.0000012	0.000087
	September		0.0032	0.000033	4.2	**0.048**	0.40	0.026	0.000025	128	0.36	58	0.87	0.0065	0.00000021	0.000077
	October		0.0026	0.000030	3.8	**0.043**	0.33	0.030	0.000023	139	0.37	47	0.94	0.0075	0.0000002	0.000076
	November		0.0021	0.000018	3.8	**0.033**	0.31	0.033	0.000015	155	0.38	30	1.0	0.0081	0.00000015	0.000058
	December		0.00047	0.0000028	3.6	**0.019**	0.19	0.040	0.0000046	184	0.42	5.6	1.2	0.0095	9.2E-08	0.000038
	January	2055	0.00039	0.0000031	3.5	**0.020**	0.19	0.039	0.0000042	183	0.42	5.7	1.2	0.0094	7.8E-08	0.000038
	February		0.00035	0.0000027	3.4	**0.019**	0.19	0.040	0.0000037	184	0.42	5.0	1.2	0.0095	7.2E-08	0.000037
	March		0.00035	0.0000025	3.3	**0.019**	0.19	0.040	0.0000036	183	0.42	4.8	1.2	0.0095	7.1E-08	0.000037
	April		0.00076	0.000021	3.3	**0.033**	0.21	0.032	0.000016	151	0.38	31	1.0	0.0079	0.00000014	0.000061
	May		0.00041	0.000024	3.2	**0.037**	0.18	0.031	0.000018	146	0.37	38	0.99	0.0077	0.00000016	0.000067
	June		0.00057	0.000026	3.1	**0.038**	0.19	0.032	0.000019	150	0.39	40	1.0	0.0079	0.00000017	0.000070
	July		0.00051	0.000031	3.0	**0.041**	0.17	0.028	0.000023	131	0.35	47	0.90	0.0070	0.00000019	0.000075
	August		0.00039	0.000033	2.9	**0.044**	0.17	0.029	0.000024	136	0.37	51	0.93	0.0073	0.0000002	0.000080
	September		0.00037	0.000028	2.8	**0.040**	0.17	0.032	0.000021	149	0.39	43	1.0	0.0079	0.00000017	0.000073
	October		0.00036	0.000026	2.7	**0.039**	0.18	0.032	0.000020	153	0.39	40	1.0	0.0080	0.00000017	0.000071
	November		0.00035	0.000011	2.6	**0.026**	0.18	0.037	0.0000090	169	0.40	18	1.1	0.0088	0.0000001	0.000048
	December		0.00035	0.0000027	2.5	**0.019**	0.19	0.040	0.0000037	184	0.42	5.2	1.2	0.0095	7.2E-08	0.000037

Table G-17: Scenario 14: Alternative Waste Rock Storage Area Scenario - Treat

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	**January**	**2056**	0.00027	0.0000021	2.4	**0.019**	0.19	0.040	0.0000029	183	0.41	3.8	1.2	0.0094	5.7E-08	0.000036
	February		0.00025	0.0000022	2.3	**0.019**	0.19	0.040	0.0000028	184	0.42	3.8	1.2	0.0095	5.4E-08	0.000036
	March		0.00031	0.000018	2.2	**0.032**	0.18	0.034	0.000014	158	0.39	27	1.1	0.0082	0.00000013	0.000058
	April		0.00028	0.000016	2.1	**0.030**	0.18	0.035	0.000012	164	0.40	24	1.1	0.0086	0.00000011	0.000055
	May		0.00029	0.000013	2.0	**0.028**	0.18	0.036	0.000010	169	0.40	20	1.1	0.0088	0.00000011	0.000052
	June		0.00028	0.000015	1.9	**0.031**	0.18	0.035	0.000012	166	0.40	24	1.1	0.0086	0.00000012	0.000055
	July		0.00030	0.000024	1.8	**0.037**	0.17	0.032	0.000018	149	0.38	36	1.0	0.0079	0.00000015	0.000067
	August		0.00033	0.000026	1.7	**0.038**	0.17	0.030	0.000019	144	0.37	40	0.98	0.0075	0.00000017	0.000069
	September		0.00027	0.000032	1.6	**0.043**	0.17	0.029	0.000023	138	0.37	48	0.95	0.0074	0.00000018	0.000078
	October		0.00024	0.000028	1.5	**0.041**	0.17	0.033	0.000020	153	0.40	42	1.0	0.0082	0.00000017	0.000074
	November		0.00024	0.000010	1.4	**0.027**	0.18	0.038	0.0000082	175	0.41	16	1.2	0.0091	8.8E-08	0.000048
	December		0.00025	0.0000021	1.3	**0.019**	0.19	0.040	0.0000028	184	0.41	3.6	1.2	0.0095	5.4E-08	0.000036
	January	**2057**	0.00011	0.0000014	1.2	**0.019**	0.19	0.040	0.0000011	185	0.41	1.7	1.2	0.0095	2.5E-08	0.000034
	February		0.000072	0.0000011	1.1	**0.019**	0.19	0.040	0.00000063	183	0.41	1.1	1.2	0.0095	1.7E-08	0.000033
	March		0.000072	0.0000012	0.99	**0.019**	0.19	0.040	0.00000063	183	0.41	1.1	1.2	0.0095	1.7E-08	0.000033
	April		0.00015	0.000021	0.92	**0.035**	0.18	0.034	0.000014	161	0.39	30	1.1	0.0084	0.00000012	0.000062
	May		0.000076	0.000016	0.81	**0.032**	0.18	0.036	0.000011	168	0.40	25	1.1	0.0088	8.8E-08	0.000055
	June		0.000087	0.0000088	0.70	**0.025**	0.19	0.038	0.0000059	178	0.41	12	1.2	0.0092	5.2E-08	0.000045
	July		0.00015	0.000027	0.61	**0.040**	0.18	0.033	0.000018	156	0.40	39	1.1	0.0082	0.00000014	0.000071
	August		0.00011	0.000030	0.50	**0.043**	0.18	0.033	0.000020	152	0.39	44	1.0	0.0081	0.00000015	0.000075
	September		0.000089	0.000028	0.40	**0.041**	0.18	0.034	0.000019	159	0.40	40	1.1	0.0085	0.00000014	0.000073
	October		0.000077	0.000013	0.30	**0.030**	0.18	0.037	0.0000090	172	0.41	20	1.1	0.0090	7.1E-08	0.000051
	November		0.000075	0.0000047	0.20	**0.022**	0.19	0.039	0.0000031	179	0.41	6.6	1.2	0.0093	3.3E-08	0.000038
	December		0.00011	0.0000021	0.14	**0.020**	0.19	0.040	0.0000012	183	0.41	2.3	1.2	0.0094	6.7E-08	0.000034
		MINIMUM	0.000072	0.0000011	0.14	**0.019**	0.17	0.022	0.00000063	109	0.28	1.1	0.64	0.0052	1.7E-08	0.000033
		MAXIMUM	0.0071	0.00040	6.2	**0.051**	0.65	0.041	0.000049	256	0.42	312	1.2	0.0095	0.000070	0.00014
		AVERAGE	0.0013	0.000029	3.0	**0.032**	0.25	0.034	0.000015	161	0.39	37	1.1	0.0083	0.0000023	0.000060

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Construction	January	2025	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2026	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2027	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2028	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	January	2029	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	January	2030	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2031	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2032	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2033	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2034	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
	Proposed Environmental Release Target		0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
	April	2035	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2036	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2037	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Operations	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2038	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2039	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	July	2040	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2041	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2042	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2043	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2044	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	October	2045	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2046	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2047	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2048	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2049	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2050	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	**Month**	**Year**	**mg/L**	**mg/L as N**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**mg/L**	**Bq/L**	**mg/L**	**mg/L**	**mg/L**
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Operations	**January**	**2051**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2052**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Decommissioning	**January**	**2053**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2054**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	**2055**	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Decommissioning	January	2056	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	January	2057	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	February		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	March		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	April		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	May		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	June		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	July		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	August		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	September		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	October		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	November		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
	December		0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MINIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		MAXIMUM	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
		AVERAGE	0.0038	0.022	0.000095	0.0000049	3.6	0.57	0.00020	0.000050	0.00012	0.086	0.000047	0.013	1.2	0.021	0.0000014
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0067	0.025	0.000076	0.0000064	0.12	0.19	0.000032	0.00013	0.000026	0.0040	0.0000064	0.0013	0.034	0.011	0.00000057
	April		0.022	0.085	0.00026	0.000021	0.51	0.65	0.00011	0.00042	0.000089	0.016	0.000023	0.0048	0.16	0.039	0.0000019
	May		0.035	0.13	0.00040	0.000033	0.60	1.00	0.00017	0.00066	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	June		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0017	0.0066	0.000020	0.0000016	0.030	0.049	0.0000083	0.000033	0.0000066	0.0010	0.0000017	0.00033	0.0089	0.0030	0.00000015
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.0070	0.026	0.000079	0.0000066	0.12	0.20	0.000033	0.00013	0.000027	0.0041	0.0000067	0.0013	0.035	0.012	0.00000059
	May		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00074	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000033
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	April		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	May		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	June		0.044	0.16	0.00049	0.000041	0.75	1.2	0.00021	0.00082	0.00017	0.026	0.000042	0.0084	0.22	0.074	0.0000037
	July		0.040	0.15	0.00045	0.000037	0.68	1.1	0.00019	0.00075	0.00015	0.023	0.000038	0.0076	0.20	0.067	0.0000034
	August		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	September		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	October		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	November		0.0035	0.013	0.000039	0.0000033	0.060	0.099	0.000017	0.000066	0.000013	0.0021	0.0000033	0.00067	0.018	0.0059	0.0000003
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	January	2061	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	April		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.023	0.087	0.00026	0.000022	0.39	0.65	0.00011	0.00043	0.000088	0.014	0.000022	0.0044	0.12	0.039	0.0000020
	June		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	July		0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
	August		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.035	0.13	0.00040	0.000033	0.61	1.0	0.00017	0.00067	0.00013	0.021	0.000034	0.0068	0.18	0.060	0.0000030
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.0087	0.033	0.000099	0.0000082	0.15	0.25	0.000042	0.00016	0.000033	0.0052	0.0000083	0.0017	0.044	0.015	0.00000074
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.042	0.16	0.00048	0.000040	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0081	0.21	0.072	0.0000036
	August		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	September		0.042	0.16	0.00047	0.000039	0.72	1.2	0.00020	0.00079	0.00016	0.025	0.000040	0.0080	0.21	0.071	0.0000036
	October		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	November		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	February		0.0037	0.014	0.000042	0.0000035	0.064	0.11	0.000018	0.000070	0.000014	0.0022	0.0000036	0.00072	0.019	0.0063	0.00000032
	March		0.0084	0.032	0.000095	0.0000079	0.14	0.24	0.000040	0.00016	0.000032	0.0050	0.0000081	0.0016	0.043	0.014	0.00000072
	April		0.016	0.060	0.00018	0.000015	0.27	0.45	0.000076	0.00030	0.000061	0.0094	0.000015	0.0031	0.081	0.027	0.0000014
	May		0.039	0.15	0.00044	0.000037	0.66	1.1	0.00018	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	June		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00075	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.039	0.15	0.00044	0.000037	0.67	1.1	0.00019	0.00073	0.00015	0.023	0.000037	0.0075	0.20	0.066	0.0000033
	September		0.037	0.14	0.00041	0.000034	0.63	1.0	0.00017	0.00069	0.00014	0.022	0.000035	0.0070	0.19	0.062	0.0000031
	October		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.016	0.059	0.00018	0.000015	0.27	0.45	0.000075	0.00030	0.000060	0.0093	0.000015	0.0030	0.080	0.027	0.0000013
	May		0.017	0.064	0.00019	0.000016	0.29	0.48	0.000080	0.00032	0.000064	0.0100	0.000016	0.0032	0.086	0.029	0.0000014
	June		0.026	0.099	0.00030	0.000025	0.45	0.74	0.00012	0.00049	0.000099	0.015	0.000025	0.0050	0.13	0.044	0.0000022
	July		0.021	0.080	0.00024	0.000020	0.36	0.60	0.00010	0.00040	0.000081	0.013	0.000020	0.0041	0.11	0.036	0.0000018
	August		0.040	0.15	0.00046	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000039	0.0078	0.21	0.069	0.0000034
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.015	0.057	0.00017	0.000014	0.26	0.43	0.000072	0.00029	0.000058	0.0090	0.000015	0.0029	0.077	0.026	0.0000013
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.010	0.038	0.00011	0.0000094	0.17	0.28	0.000048	0.00019	0.000038	0.0059	0.0000096	0.0019	0.051	0.017	0.00000085
	April		0.030	0.11	0.00034	0.000028	0.51	0.84	0.00014	0.00056	0.00011	0.018	0.000028	0.0057	0.15	0.050	0.0000025
	May		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	June		0.045	0.17	0.00051	0.000043	0.77	1.3	0.00022	0.00085	0.00017	0.027	0.000043	0.0087	0.23	0.077	0.0000039
	July		0.044	0.17	0.00050	0.000041	0.75	1.2	0.00021	0.00083	0.00017	0.026	0.000042	0.0084	0.22	0.075	0.0000037
	August		0.051	0.19	0.00057	0.000048	0.87	1.4	0.00024	0.00095	0.00019	0.030	0.000048	0.0097	0.26	0.086	0.0000043
	September		0.038	0.14	0.00043	0.000036	0.66	1.1	0.00018	0.00072	0.00015	0.023	0.000037	0.0074	0.20	0.065	0.0000033
	October		0.034	0.13	0.00038	0.000032	0.58	0.96	0.00016	0.00064	0.00013	0.020	0.000032	0.0065	0.17	0.057	0.0000029
	November		0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	December		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	January	2066	0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	February		0.015	0.056	0.00017	0.000014	0.26	0.42	0.000071	0.00028	0.000057	0.0088	0.000014	0.0029	0.076	0.025	0.0000013
	March		0.022	0.083	0.00025	0.000021	0.37	0.62	0.00010	0.00041	0.000083	0.013	0.000021	0.0042	0.11	0.037	0.0000019

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East Freshwater Diversion

			Aluminum	Ammonia (Total)	Arsenic	Cadmium	Calcium	Chloride	Chromium	Cobalt	Copper	Iron	Lead	Lead-210	Magnesium	Manganese	Mercury
Time Period	Month	Year	mg/L	mg/L as N	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.62	16	0.043	0.000051	-	640	0.0045	0.034	0.016	0.30	0.0080	194	-	0.21	0.00019
Reclamation	**April**	**2066**	0.031	0.12	0.00036	0.000030	0.54	0.89	0.00015	0.00059	0.00012	0.019	0.000030	0.0060	0.16	0.053	0.0000027
	May		0.030	0.11	0.00034	0.000029	0.52	0.86	0.00014	0.00057	0.00012	0.018	0.000029	0.0058	0.15	0.052	0.0000026
	June		0.021	0.079	0.00024	0.000020	0.36	0.59	0.000100	0.00039	0.000080	0.012	0.000020	0.0040	0.11	0.036	0.0000018
	July		0.024	0.089	0.00027	0.000022	0.40	0.67	0.00011	0.00044	0.000090	0.014	0.000023	0.0045	0.12	0.040	0.0000020
	August		0.027	0.10	0.00031	0.000025	0.46	0.77	0.00013	0.00051	0.00010	0.016	0.000026	0.0052	0.14	0.046	0.0000023
	September		0.024	0.092	0.00028	0.000023	0.42	0.69	0.00012	0.00046	0.000093	0.014	0.000023	0.0047	0.12	0.041	0.0000021
	October		0.012	0.045	0.00013	0.000011	0.20	0.34	0.000056	0.00022	0.000045	0.0070	0.000011	0.0023	0.060	0.020	0.0000010
	November		0.0052	0.020	0.000059	0.0000049	0.089	0.15	0.000025	0.000098	0.000020	0.0031	0.0000050	0.0010	0.027	0.0089	0.00000044
	December		0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
	January	**2067**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0034	0.013	0.000038	0.0000032	0.058	0.096	0.000016	0.000064	0.000013	0.0020	0.0000032	0.00065	0.017	0.0057	0.00000029
	April		0.028	0.11	0.00032	0.000026	0.48	0.79	0.00013	0.00053	0.00011	0.016	0.000027	0.0054	0.14	0.047	0.0000024
	May		0.029	0.11	0.00032	0.000027	0.49	0.81	0.00014	0.00054	0.00011	0.017	0.000027	0.0055	0.15	0.049	0.0000024
	June		0.033	0.12	0.00037	0.000031	0.57	0.94	0.00016	0.00062	0.00013	0.020	0.000032	0.0064	0.17	0.056	0.0000028
	July		0.045	0.17	0.00052	0.000043	0.78	1.3	0.00022	0.00086	0.00017	0.027	0.000044	0.0088	0.23	0.077	0.0000039
	August		0.047	0.18	0.00053	0.000044	0.81	1.3	0.00023	0.00089	0.00018	0.028	0.000045	0.0091	0.24	0.080	0.0000040
	September		0.047	0.18	0.00053	0.000044	0.80	1.3	0.00022	0.00089	0.00018	0.028	0.000045	0.0090	0.24	0.080	0.0000040
	October		0.040	0.15	0.00045	0.000038	0.69	1.1	0.00019	0.00076	0.00015	0.024	0.000038	0.0077	0.20	0.068	0.0000034
	November		0.0048	0.018	0.000054	0.0000045	0.082	0.14	0.000023	0.000090	0.000018	0.0028	0.0000046	0.00092	0.024	0.0081	0.00000041
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0017	0.0064	0.000019	0.0000016	0.029	0.048	0.0000080	0.000032	0.0000064	0.00100	0.0000016	0.00032	0.0086	0.0029	0.00000014
		MAXIMUM	0.052	0.20	0.00059	0.000049	0.89	1.5	0.00025	0.00098	0.00020	0.031	0.000050	0.010	0.27	0.089	0.0000044
		AVERAGE	0.027	0.10	0.00031	0.000026	0.47	0.78	0.00013	0.00052	0.00010	0.016	0.000026	0.0053	0.14	0.047	0.0000023

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	January	2025	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2026	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Construction	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2027	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2028	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2029	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Operations	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2030	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2031	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2032	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2033	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2034	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	April	2035	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2036	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2037	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2038	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2039	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	July	2040	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2041	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2042	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2043	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2044	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	October	2045	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2046	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2047	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2048	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2049	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2050	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Operations	January	2051	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2052	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Decommissioning	January	2053	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2054	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2055	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Decommissioning	January	2056	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	January	2057	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	February		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	March		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	April		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	May		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	June		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	July		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	August		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	September		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	October		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	November		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
	December		0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MINIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		MAXIMUM	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
		AVERAGE	0.000053	0.000073	0.090	0.0075	0.0036	0.33	0.000047	1.4	0.030	1.5	0.0048	0.000051	0.00015	0.00080
Reclamation	January	2058	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000013	0.00017	0.0059	0.00022	0.00032	0.025	0.0000064	0.060	0.0013	0.25	0.00064	0.0000065	0.000026	0.00045
	April		0.000044	0.00055	0.023	0.0010	0.0012	0.094	0.000023	0.25	0.0055	0.88	0.0023	0.000023	0.000090	0.0015
	May		0.000067	0.00086	0.031	0.0012	0.0017	0.13	0.000034	0.31	0.0069	1.3	0.0034	0.000034	0.00013	0.0023
	June		0.000089	0.0012	0.041	0.0016	0.0023	0.17	0.000045	0.42	0.0093	1.7	0.0045	0.000045	0.00018	0.0031
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.16	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	September		0.000056	0.00073	0.026	0.00098	0.0014	0.11	0.000028	0.26	0.0059	1.1	0.0028	0.000028	0.00011	0.0020
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.10	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	November		0.0000033	0.000043	0.0015	0.000058	0.000084	0.0064	0.0000017	0.016	0.00034	0.065	0.00017	0.0000017	0.0000066	0.00012
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	April		0.000013	0.00017	0.0061	0.00023	0.00034	0.026	0.0000067	0.062	0.0014	0.26	0.00067	0.0000067	0.000027	0.00046
	May		0.000075	0.00096	0.034	0.0013	0.0019	0.14	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.16	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000074	0.00095	0.034	0.0013	0.0019	0.14	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.12	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.13	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000080	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2060	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000032	0.000041	0.0015	0.000056	0.000081	0.0062	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	April		0.000040	0.00051	0.018	0.00069	0.0010	0.077	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000080	0.0014
	May		0.000064	0.00083	0.030	0.0011	0.0016	0.12	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	June		0.000083	0.0011	0.038	0.0014	0.0021	0.16	0.000042	0.39	0.0086	1.6	0.0042	0.000042	0.00017	0.0029
	July		0.000075	0.00097	0.035	0.0013	0.0019	0.15	0.000038	0.35	0.0078	1.5	0.0038	0.000038	0.00015	0.0026
	August		0.000080	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	September		0.000076	0.00098	0.035	0.0013	0.0019	0.15	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	October		0.000054	0.00070	0.025	0.00095	0.0014	0.10	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	November		0.0000066	0.000085	0.0031	0.00012	0.00017	0.013	0.0000033	0.031	0.00069	0.13	0.00033	0.0000033	0.000013	0.00023
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.0062	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
Reclamation	January	2061	0.0000032	0.000041	0.0015	0.000056	0.000081	0.0062	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000022	0.00029	0.010	0.00039	0.00057	0.043	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.11	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000044	0.00056	0.020	0.00076	0.0011	0.084	0.000022	0.20	0.0045	0.86	0.0022	0.000022	0.000088	0.0015
	June		0.000079	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	July		0.000099	0.0013	0.046	0.0017	0.0025	0.19	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
	August		0.000083	0.0011	0.038	0.0014	0.0021	0.16	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000067	0.00087	0.031	0.0012	0.0017	0.13	0.000034	0.32	0.0070	1.3	0.0034	0.000034	0.00013	0.0023
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.019	0.0000050	0.047	0.0010	0.19	0.00050	0.0000050	0.000020	0.00035
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.031	0.0000081	0.075	0.0017	0.31	0.00081	0.0000081	0.000032	0.00056
	April		0.000017	0.00021	0.0076	0.00029	0.00042	0.032	0.0000083	0.078	0.0017	0.32	0.00083	0.0000083	0.000033	0.00058
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.14	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.17	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000080	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.38	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	August		0.000064	0.00083	0.030	0.0011	0.0016	0.12	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	September		0.000079	0.0010	0.037	0.0014	0.0020	0.15	0.000040	0.37	0.0083	1.6	0.0040	0.000040	0.00016	0.0028
	October		0.000045	0.00058	0.021	0.00078	0.0011	0.086	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	November		0.000030	0.00038	0.014	0.00052	0.00076	0.057	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000060	0.0010
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2063	0.0000064	0.000083	0.0030	0.00011	0.00016	0.012	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	February		0.0000071	0.000091	0.0033	0.00012	0.00018	0.014	0.0000036	0.033	0.00074	0.14	0.00036	0.0000036	0.000014	0.00025
	March		0.000016	0.00021	0.0074	0.00028	0.00041	0.031	0.0000081	0.075	0.0017	0.31	0.00081	0.0000081	0.000032	0.00056
	April		0.000030	0.00039	0.014	0.00053	0.00077	0.058	0.000015	0.14	0.0031	0.59	0.0015	0.000015	0.000061	0.0011
	May		0.000074	0.00095	0.034	0.0013	0.0019	0.14	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	June		0.000076	0.00098	0.035	0.0013	0.0019	0.15	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0026
	July		0.000086	0.0011	0.040	0.0015	0.0022	0.17	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000074	0.00096	0.034	0.0013	0.0019	0.14	0.000037	0.35	0.0077	1.4	0.0037	0.000037	0.00015	0.0026
	September		0.000069	0.00090	0.032	0.0012	0.0018	0.13	0.000035	0.33	0.0072	1.4	0.0035	0.000035	0.00014	0.0024
	October		0.000051	0.00066	0.024	0.00089	0.0013	0.099	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.012	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	April		0.000030	0.00038	0.014	0.00052	0.00076	0.057	0.000015	0.14	0.0031	0.58	0.0015	0.000015	0.000060	0.0010
	May		0.000032	0.00041	0.015	0.00056	0.00081	0.062	0.000016	0.15	0.0033	0.63	0.0016	0.000016	0.000064	0.0011
	June		0.000050	0.00064	0.023	0.00086	0.0013	0.096	0.000025	0.23	0.0052	0.97	0.0025	0.000025	0.000100	0.0017
	July		0.000040	0.00052	0.019	0.00070	0.0010	0.078	0.000020	0.19	0.0042	0.79	0.0020	0.000020	0.000081	0.0014
	August		0.000077	0.00099	0.036	0.0013	0.0019	0.15	0.000039	0.36	0.0080	1.5	0.0039	0.000039	0.00015	0.0027
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.14	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0025
	October		0.000029	0.00037	0.013	0.00050	0.00073	0.056	0.000015	0.14	0.0030	0.56	0.0015	0.000015	0.000058	0.0010
	November		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	January	2065	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	February		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.000019	0.00025	0.0088	0.00033	0.00048	0.037	0.0000096	0.089	0.0020	0.37	0.00096	0.0000096	0.000038	0.00066
	April		0.000056	0.00073	0.026	0.00098	0.0014	0.11	0.000028	0.26	0.0059	1.1	0.0028	0.000028	0.00011	0.0020
	May		0.000051	0.00066	0.024	0.00089	0.0013	0.099	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	June		0.000086	0.0011	0.040	0.0015	0.0022	0.17	0.000043	0.40	0.0089	1.7	0.0043	0.000043	0.00017	0.0030
	July		0.000083	0.0011	0.038	0.0014	0.0021	0.16	0.000042	0.39	0.0087	1.6	0.0042	0.000042	0.00017	0.0029
	August		0.000096	0.0012	0.044	0.0017	0.0024	0.19	0.000048	0.45	0.0100	1.9	0.0048	0.000048	0.00019	0.0033
	September		0.000073	0.00094	0.034	0.0013	0.0018	0.14	0.000037	0.34	0.0076	1.4	0.0037	0.000037	0.00015	0.0025
	October		0.000064	0.00083	0.030	0.0011	0.0016	0.12	0.000032	0.30	0.0067	1.3	0.0032	0.000032	0.00013	0.0022
	November		0.000060	0.00077	0.028	0.0010	0.0015	0.11	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	December		0.000045	0.00058	0.021	0.00078	0.0011	0.086	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	January	2066	0.000045	0.00058	0.021	0.00078	0.0011	0.086	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	February		0.000028	0.00037	0.013	0.00049	0.00072	0.055	0.000014	0.13	0.0029	0.55	0.0014	0.000014	0.000057	0.00099
	March		0.000042	0.00054	0.019	0.00072	0.0011	0.080	0.000021	0.20	0.0043	0.81	0.0021	0.000021	0.000084	0.0014

Table G-18: Scenario 14: Alternative Waste Rock Storage Area Scenario - East

			Molybdenum	Nickel	Nitrate	Phosphorous	Polonium-210	Radium-226	Selenium	Sodium	Strontium	Sulphate	Throium-230	Uranium	Vanadium	Zinc
Time Period	Month	Year	mg/L	mg/L	mg/L as N	mg/L	Bq/L	Bq/L	mg/L	mg/L	mg/L	mg/L	Bq/L	mg/L	mg/L	mg/L
Proposed Environmental Release Target			0.64	0.22	25	0.010	119	0.88	0.0080	-	-	1116	837	0.030	0.052	0.037
	April		0.000060	0.00077	0.028	0.0010	0.0015	0.11	0.000030	0.28	0.0062	1.2	0.0030	0.000030	0.00012	0.0021
	May		0.000058	0.00074	0.027	0.0010	0.0015	0.11	0.000029	0.27	0.0060	1.1	0.0029	0.000029	0.00012	0.0020
	June		0.000040	0.00051	0.018	0.00069	0.0010	0.077	0.000020	0.19	0.0041	0.78	0.0020	0.000020	0.000080	0.0014
	July		0.000045	0.00058	0.021	0.00078	0.0011	0.086	0.000023	0.21	0.0047	0.88	0.0023	0.000023	0.000090	0.0016
	August	**2066**	0.000051	0.00066	0.024	0.00089	0.0013	0.099	0.000026	0.24	0.0053	1.0	0.0026	0.000026	0.00010	0.0018
	September		0.000046	0.00060	0.021	0.00081	0.0012	0.089	0.000023	0.22	0.0048	0.91	0.0023	0.000023	0.000093	0.0016
	October		0.000022	0.00029	0.010	0.00039	0.00057	0.043	0.000011	0.11	0.0023	0.44	0.0011	0.000011	0.000045	0.00078
	November		0.0000099	0.00013	0.0046	0.00017	0.00025	0.019	0.0000050	0.047	0.0010	0.19	0.00050	0.0000050	0.000020	0.00035
	December		0.0000032	0.000041	0.0015	0.000056	0.000081	0.0062	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
	January		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Reclamation	**February**		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	March		0.0000064	0.000083	0.0030	0.00011	0.00016	0.012	0.0000032	0.030	0.00067	0.13	0.00032	0.0000032	0.000013	0.00022
	April		0.000053	0.00068	0.024	0.00092	0.0013	0.10	0.000027	0.25	0.0055	1.0	0.0027	0.000027	0.00011	0.0018
	May		0.000054	0.00070	0.025	0.00095	0.0014	0.10	0.000027	0.26	0.0057	1.1	0.0027	0.000027	0.00011	0.0019
	June		0.000063	0.00081	0.029	0.0011	0.0016	0.12	0.000032	0.29	0.0065	1.2	0.0032	0.000032	0.00013	0.0022
	July	**2067**	0.000086	0.0011	0.040	0.0015	0.0022	0.17	0.000044	0.41	0.0090	1.7	0.0044	0.000044	0.00017	0.0030
	August		0.000090	0.0012	0.041	0.0016	0.0023	0.17	0.000045	0.42	0.0093	1.8	0.0045	0.000045	0.00018	0.0031
	September		0.000089	0.0012	0.041	0.0016	0.0023	0.17	0.000045	0.42	0.0093	1.7	0.0045	0.000045	0.00018	0.0031
	October		0.000076	0.00098	0.035	0.0013	0.0019	0.15	0.000038	0.36	0.0079	1.5	0.0038	0.000038	0.00015	0.0027
	November		0.0000091	0.00012	0.0042	0.00016	0.00023	0.018	0.0000046	0.043	0.00095	0.18	0.00046	0.0000046	0.000018	0.00032
	December		NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
		MINIMUM	0.0000032	0.000041	0.0015	0.000056	0.000081	0.0062	0.0000016	0.015	0.00033	0.063	0.00016	0.0000016	0.0000064	0.00011
		MAXIMUM	0.000099	0.0013	0.046	0.0017	0.0025	0.19	0.000050	0.47	0.010	1.9	0.0050	0.000050	0.00020	0.0035
		AVERAGE	0.000052	0.00067	0.024	0.00091	0.0013	0.10	0.000026	0.25	0.0054	1.0	0.0026	0.000026	0.00010	0.0018

Notes:
Bold values represent values greater than the proposed environmental release target.
Non-applicable values represent periods of time when there is no discharge.

APPENDIX H

Environmental Release Target Development

TECHNICAL MEMORANDUM

DATE April 2024 **Project No.** 22522691-3106-5

TO Luke Moger
NexGen Energy Ltd.

CC Frank Halliday (NexGen), Jerry Vandenberg (VWS), Marci Mehl (WSP), Jean-Marc Crew (WSP)

FROM Gerard Van Arkel **EMAIL Gerard_VanArkel@wsp.com**

DEVELOPMENT OF ROOK I PROJECT PRELIMINARY PROPOSED ENVIRONMENTAL RELEASE TARGETS

1.0 INTRODUCTION

NexGen Energy Ltd. (NexGen) has retained WSP Canada Inc. (WSP; formerly Golder Associates Ltd. [Golder]) to assess the potential effects of the Rook I Project (Project) on surface water quality in downstream lakes and rivers. This assessment is in support of the Environmental Impact Statement for the Project.

These potential effects were assessed using the GoldSim™ Version 12.1 simulation software and the CORMIX model system to develop a surface water quality model to predict water quality concentrations at selected waterbodies in the Clearwater River Upper Reach watershed (GoldSim Technology Group LLC [GoldSim] 2018; Doneker and Jirka 2007). The preliminary Proposed Environmental Release Targets (PERTs) have been developed to support these predictions and determine the safe allowable effluent concentrations.

1.1 Objectives

The primary objective for the preliminary PERT assessment is to identify effluent parameters that may be of concern during mine operations and assess the suitability of the proposed level of treatment. The PERT results are intended to provide conservative and preliminary estimates to aid in the development of discharge limits for the site-wide water balance and water quality model. The PERTs developed in this report are considered preliminary only and are subject to review based on additional data. These draft objectives are not intended to be used for permitting.

The final discharge limits are subject to the federal and provincial effluent regulations for mining, as well as licensed release limits and Approvals to Operate. The required federal and provincial regulations include but are not limited to the following:

- Metal and Diamond Mining Effluent Regulations – SOR-2002-222
- Saskatchewan Mineral Industry Environmental Protection Regulations (1996)
- REGDOC-2.9.2, Environmental Protection: Controlling Releases to the Environment – DRAFT

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1.2 Project Overview

The proposed Project is located next to Patterson Lake near the headwaters of the Clearwater River system. The Clearwater River is a large watershed within the Athabasca River Basin and is approximately 30,800 km^2 at its confluence with the Athabasca River at the town of Fort McMurray in northeast Alberta (CHRS 2018).

Patterson Lake is located along the Clearwater River near its headwaters in north-western Saskatchewan. The drainage area contributing to the Clearwater River where it drains into Patterson Lake North Arm is 121 km^2. Patterson Lake can be divided into the North Arm and South Arm oriented approximately southwest to northeast. The Patterson Lake North Arm can be further separated into the Patterson Lake North Arm – West Basin and Patterson Lake North Arm – East Basin, separated by a narrow and shallow sand sill with spit formations forming on either side (Golder 2019).

The Patterson Lake North Arm – West Basin is the deepest of the three basins with a minimum bed elevation of 446 metres above mean sea level (masl), corresponding to a maximum depth of roughly 53 m. The deepest point in the Patterson Lake North Arm – East Basin is 475 masl, corresponding to a maximum depth of roughly 24 m. The deepest point in the Patterson Lake South Arm is 449 masl, corresponding to a maximum depth of roughly 50 m. Patterson Lake has an average water surface elevation of approximately 499 masl, a total water volume of 536 million cubic metres (Mm^3), and a surface area of 38 km^2 (Golder 2019).

The Project would include the construction and operation of a uranium mine and milling facility. Effluent from the facilities would be treated by the Effluent Treatment Plant (ETP). The ETP would treat process plant effluent, underground mine water, and site runoff from potentially contaminated areas. As discussed in the *Conceptual Diffuser Design Report for the Rook I Project*, the effluent would be discharged using a diffuser into North Arm of Patterson Lake – West Basin (Figure 1 in Attachment A) (Golder 2019).

2.0 EXISTING CONDITIONS DATA

2.1 Hydrology

The flow data utilized for the PERT model is the output from existing conditions draft Regional Hydrology Model of the Project by WSP, developed in GoldSim™ Version 12.1 (GoldSim 2018), draft model dated March 2021. The model simulated flows for a 40-year timeframe (1979 to 2019) using historical data, site meteorological data, and climate forcing data derived from the ERA-Interim database by the European Centre for Medium-Range Weather Forecasts (ECMWF, 2021). This data set has been described in detail in the *Regional Hydrological Characterization Baseline Report for the Rook I Project* (Golder 2021c). For further information regarding the development of the GoldSim hydrological model of the Project, please see the *NexGen Rook I: Hydrological Modelling Assumptions and Inputs* (Golder 2021b).

The main inflow to Patterson Lake is situated in Patterson Lake North Arm – East Basin. The flow through the lake passes into the North Arm – West Basin, and exits Patterson Lake South Arm via Patterson Creek. The water quality model was simulated in Patterson Lake North Arm – West Basin, as the proposed effluent outfall location is in the eastern portion of this basin. The inflows to the Patterson Lake North Arm – West Basin would include Patterson Lake North Arm – East Basin inflow, rainfall runoff, snowmelt runoff, subsurface baseflow, groundwater, and the ETP discharge. Subsurface baseflow is the portion of rainfall that infiltrates into the ground and flows laterally in shallow soil layers. Subsurface baseflow typically flows slower than runoff, but faster than

groundwater. The ETP discharge flow rate was determined by taking the total expected discharge volume per year of 3,331,000 m^3 and dividing it by the number of days in a year (Wood Canada Ltd 2019).

The modelled outflows from Patterson Lake North Arm – West Basin include the lake flow from Patterson Lake North Arm – West Basin into Patterson Lake South Arm and evaporation. The monthly average inflows and outflows from the model are summarized in Table 2.

Table 1: Estimated Patterson Lake North Arm – West Basin Monthly Average Flows (m^3/month)

Month	Inflow from North Arm – East Basin	Rainfall Runoff	Snowmelt Runoff	Subsurface Baseflow	Groundwater	Outflow to South Arm	ETP Discharge
January	2,376,000	4,000	38,000	462,000	19,000	3,008,000	283,000
February	2,006,000	4,000	58,000	380,000	17,000	2,620,000	256,000
March	2,208,000	37,000	294,000	404,000	19,000	2,933,000	283,000
April	3,067,000	210,000	1,074,000	551,000	18,000	3,794,000	274,000
May	4,306,000	498,000	192,000	729,000	19,000	5,092,000	283,000
June	3,642,000	947,000	0	628,000	18,000	4,433,000	274,000
July	3,125,000	1,182,000	0	579,000	19,000	3,893,000	283,000
August	2,624,000	942,000	0	527,000	19,000	3,296,000	283,000
September	2,390,000	701,000	52,000	500,000	18,000	2,990,000	274,000
October	2,666,000	338,000	257,000	546,000	19,000	3,245,000	283,000
November	2,562,000	39,000	81,000	518,000	18,000	3,055,000	274,000
December	2,524,000	3,000	25,000	518,000	19,000	3,079,000	283,000
Annual	33,495,000	4,906,000	2,071,000	6,342,000	221,000	41,438,000	3,331,000

ETP = effluent treatment plant.

The monthly average volumes of the Patterson Lake North Arm – West Basin are provided in Table 2. The volumes were determined using volume-elevation-area relationships developed for each Patterson Lake basin combined with the previously discussed existing conditions draft GoldSim model results (Golder 2021).

Table 2: Estimated Patterson Lake North Arm - West Basin Monthly Average Volume (m^3)

Month	Volume
January	233,502,000
February	233,346,000
March	233,374,000
April	234,499,000
May	234,684,000
June	234,150,000
July	233,542,000
August	233,035,000
September	232,948,000

Month	Volume
October	233,269,000
November	233,432,000
December	233,442,000

2.2 Water Quality

To characterize the water quality of the inflows presented in the previous section, data from the baseline study were used. A total of 13 field surveys were carried out between November 2015 to September 2020. Two of these surveys were carried out by PGL Environmental, and the remaining 11 were conducted by CanNorth (Canada North Environmental Services Limited Partnership) (Golder 2021a). At the time when these calculations were developed, the water quality September 2020 survey data for Patterson Lake was not available. Therefore, the data analysed in the PERT includes 12 surveys (November 2015 – July 2020).

From the data gathered in these surveys, the 95th percentile of each constituent of potential concern (COPC) was calculated for use in this model as a conservative estimate of the receiving environment. The list of COPCs used for this iteration of the PERT analysis is from February 2021. Each of the inflows have been characterized using the 95th percentile data (Table 3). Rainfall is considered as “clean” and has been assumed to contain a concentration of zero for all water quality parameters. Both the subsurface baseflow and groundwater flows were assumed to match the water quality of Patterson Lake North Arm – West Basin’s baseline conditions. Water quality parameters for snowmelt were taken as half of the concentration assumed for both baseflow and groundwater, as it is assumed that the snow will have higher concentrations of constituents than rainfall, but less than groundwater and subsurface baseflow. Table 3 summarizes the water quality parameters of each inflow.

Table 3: 95th Percentile Water Quality Data for Model Inflows (November 2015 – July 2020)

Parameter	Units	Patterson Lake North Arm – East Basin	Rainfall Runoff	Snowmelt Runoff	Subsurface Baseflow	Groundwater
Hardness	mg/L as $CaCO_3$	13	0	7.5	15	15
TDS (Calculated)	mg/L	47	0	24	47	47
TSS	mg/L	3.3	0	1.2	2.4	2.4
Ammonia (Un-ionized)	mg/L	0.00088[(a)]	0	0.00069	0.00014	0.00014
Ammonia as nitrogen	mg/L	0.079	0	0.030	0.061	0.061
Chloride	mg/L	0.52	0	0.30	0.60	0.60
Nitrate (as N)	mg/L	0.051	0	0.017	0.033	0.033
Total Phosphorus	mg/L	0.010	0	0.0050	0.010	0.010
Sulphate	mg/L	1.35	0	0.81	1.6	1.6
Total Aluminium	µg/L	5.9	0	0.98	2.0	2.0
Total Arsenic	µg/L	0.11	0	0.051	0.10	0.10
Total Cadmium	µg/L	0.010	0	0.0095	0.019	0.019
Calcium	µg/L	3,424	0	1,950	3,900	3,900

Parameter	Units	Patterson Lake North Arm – East Basin	Rainfall Runoff	Snowmelt Runoff	Subsurface Baseflow	Groundwater
Total Chromium	µg/L	0.50	0	0.25	0.50	0.50
Total Cobalt	µg/L	0.10	0	0.050	0.10	0.10
Total Copper	µg/L	0.23	0	0.12	0.23	0.23
Total Iron	µg/L	592	0	96	191	191
Total Lead	µg/L	0.10	0	0.050	0.10	0.10
Total Magnesium	µg/L	1,130	0	700	1,400	1,400
Total Manganese	µg/L	133	0	15	29	29
Total Mercury	µg/L	0.0045	0	0.0018	0.0032	0.0032
Total Molybdenum	µg/L	0.10	0	0.050	0.10	0.10
Total Nickel	µg/L	0.14	0	0.070	0.14	0.14
Total Selenium	µg/L	0.10	0	0.050	0.10	0.10
Total Sodium	µg/L	1,410	0	750	1,500	1,500
Total Uranium	µg/L	0.10	0	0.050	0.10	0.10
Total Vanadium	µg/L	0.10	0	0.050	0.10	0.10
Total Zinc	µg/L	2.1	0	0.89	1.8	1.8
Lead-210	Bq/L	0.031	0	0.015	0.031	0.031
Polonium-210	Bq/L	0.0064	0	0.0032	0.0064	0.0064
Radium-226	Bq/L	0.010	0	0.0046	0.0091	0.0091
Thorium-230	Bq/L	0.010	0	0.0050	0.010	0.010

(a) Unionized ammonia concentrations in Patterson Lake are variable and dependent on pH and temperature. The values presented corresponds to a pH measurement in Patterson Lake North Arm – East Basin (95th percentile) of 7.55 and temperature of 17ºC.

3.0 APPLICABLE WATER QUALITY THRESHOLDS

The PERTs were developed using the chronic (long-term) thresholds based on the Canadian Environmental Quality Guidelines for the Protection of Aquatic Life (CCME 2019, 2020) and Saskatchewan's provincial objectives (WSA 2015). Where no guidelines or objectives were available from CCME or Saskatchewan, provincial objectives from British Columbia (British Columbia Ministry of Environment and Climate Change Strategy 2023), and Ontario (Ontario Ministry of the Environment and Energy 1994) were used. The chronic thresholds for the radionuclides were provided by EcoMetrix (2021), as neither CCME nor provincial guidelines are available.

Acute (short-term) thresholds were applied to the end-of-pipe (i.e., measurable at the final discharge point) and were based on the Canadian Environmental Quality Guidelines for the Protection of Aquatic Life (CCME 2019, 2020), the BC Water Quality Guidelines (BC MECCS 2023), and the Maximum Authorized Monthly Mean Concentrations of Prescribed Deleterious Substances for new mines (Table 1 of Schedule 4) in the Metal and Diamond Mining Effluent Regulations (MDMER).

Additionally, calcium and magnesium were included in the modelling for threshold development, despite not being screened in as COPCs. These constituents were added for the calculation of the sulphate, cadmium, copper, lead, manganese, and nickel hardness-dependent thresholds. Ambient hardness reduces the potential bioavailability of certain water quality constituents by aquatic life; in these cases, the ambient hardness is called an exposure and toxicity modifying factor. This relationship means that the toxicity of the COPC is reduced in the presence of the ions that make up hardness (i.e., primarily calcium and magnesium). The result is that higher concentrations of COPCs with hardness-dependent guidelines can be present in the water without potentially affecting aquatic life.

Table 4, Table 5, and Table 6 provide a summary of the CCME guidelines, MDMER maximum authorized monthly mean concentrations, provincial water quality objectives, and the selected chronic (long-term) and acute (short-term) thresholds for parameters with applicable values.

Table 4: Long-Term (Chronic) CCME Guidelines, Saskatchewan Provincial Objectives, and Selected Limiting Criteria

Parameter	Unit	CCME: Long Term (Chronic)[a]		Provincial Objectives (Chronic)[b]		Selected Threshold (Chronic)
General Parameters						
Total Suspended Solids	mg/L	Background + 5[c]		N/A		Background + 5
Anions and Nutrients						
Ammonia (Un-ionized) (NH_3 as N)	mg/L	0.0156				
Ammonia (Total as N)	mg/L	Function of un-ionized ammonia, pH, and temperature[d]				
Chloride	mg/L	120		N/A		120
Nitrate (NO_3 as N)	mg/L	3.0		N/A		3.0
Total Phosphorus	mg/L	Ultra-oligotrophic <0.004 mg/L Oligotrophic: 0.004 - 0.01 mg/L Mesotrophic: 0.01 - 0.02 mg/L Meso-eutrophic: 0.02 - 0.035 mg/L Eutrophic: 0.035 - 0.1 mg/L Hyper-eutrophic: >0.1 mg/L		N/A		0.011
Sulphate	mg/L	N/A		<30 mg/L as $CaCO_3$ 31 - 75 mg/L as $CaCO_3$ 76 - 180 mg/L as $CaCO_3$ 181- 250 mg/L as $CaCO_3$ >250 mg/L as $CaCO_3$	128 mg/L 218 mg/L 309 mg/L 429 mg/L Site-specific	128[e][f]
Total Metals (unless otherwise noted, all metals are reported as total)						
Total Aluminum	µg/L	<6.5 pH ≥ 6.5 pH	5 µg/L 100 µg/L	4.5 - 5.5 pH 5.5 - 6.5 pH 6.5 - 9.0 pH	15 µg/L Background+10% 75 µg/L	75[g][h]
Total Arsenic	µg/L	5		5		5
Total Cadmium	µg/L	<17 mg/L as $CaCO_3$ 17 - 280 mg/L as $CaCO_3$ >280 mg/L as $CaCO_3$	0.04 µg/L $10^{\{0.83(\log(\text{hardness}))-2.46\}}$ 0.37 µg/L	<48.5 mg/L as $CaCO_3$ 48.5 - 97 mg/L as $CaCO_3$ 97 - 194 mg/L as $CaCO_3$ >194 mg/L as $CaCO_3$	0.017 µg/L 0.032 µg/L 0.058 µg/L 0.10 µg/L	0.017[f]
Total Chromium	µg/L	Chromium, hexavalent: 1 µg/L Chromium, trivalent: 8.9 µg/L		Chromium, hexavalent: 1 µg/L		1
Total Cobalt	µg/L	N/A		4[e]		4[e]
Total Copper	µg/L	<82 mg/L as $CaCO_3$ 82 - 180 mg/L as $CaCO_3$ >180 mg/L as $CaCO_3$	2 µg/L $0.2*e^{\{0.8545[\ln(\text{hardness})]-1.465\}}$ 4 µg/L	<120 mg/L as $CaCO_3$ 120 - 180 mg/L as $CaCO_3$ >180 mg/L as $CaCO_3$	2 µg/L 3 µg/L 4 µg/L	2[f]
Total Iron	µg/L	300				300

Table 4: Long-Term (Chronic) CCME Guidelines, Saskatchewan Provincial Objectives, and Selected Limiting Criteria

Parameter	Unit	CCME: Long Term (Chronic)[a]		Provincial Objectives (Chronic)[b]		Selected Threshold (Chronic)
Total Lead	µg/L	≤60 mg/L as $CaCO_3$ 60 - 180 mg/L as $CaCO_3$ >180 mg/L as $CaCO_3$	1 µg/L $0.2*e^{\{1.273[\ln(\text{hardness})]-4.705\}}$ 7 µg/L	≤60 mg/L as $CaCO_3$ 60 - 120 mg/L as $CaCO_3$ 120 - 180 mg/L $CaCO_3$ >180 mg/L as $CaCO_3$	1 µg/L 2 µg/L 4 µg/L 7 µg/L	1[f]
Total Manganese	µg/L	Calculated using the CCME calculator for manganese in Appendix B of CCME (2019) based on hardness and pH		N/A		230[f][h]
Total Mercury	µg/L	0.026		0.026		0.026
Total Molybdenum	µg/L	73		7,600[e]		73
Total Nickel	µg/L	≤60 mg/L as $CaCO_3$ 60 - 180 mg/L as $CaCO_3$ >180 mg/L as $CaCO_3$	25 µg/L $0.2*e^{\{0.76[\ln(\text{hardness})]+1.06\}}$ 150 µg/L	≤60 mg/L as $CaCO_3$ 60 - 120 mg/L as $CaCO_3$ 120 - 180 mg/L as $CaCO_3$ >180 mg/L as $CaCO_3$	25 µg/L 65 µg/L 110 µg/L 150 µg/L	25[f]
Total Selenium	µg/L	1		1		1
Total Uranium	µg/L	15		15		15
Total Vanadium	µg/L	N/A		6[g]		6[g]
Total Zinc	µg/L	7		30		7
Radionuclides						
Lead-210	Bq/L	N/A		N/A		22[i]
Polonium-210	Bq/L	N/A		N/A		13.5[i]
Radium-226	Bq/L	N/A		N/A		0.11[i]
Thorium-230	Bq/L	N/A		N/A		95[i]

Note:
a) Canadian Environmental Quality Guidelines (CCME 2020).
b) Saskatchewan Water Security Agency Water Quality Guidelines (WSA 2015).
c) Long-term exposure or inputs lasting between 24 hours to 30 days.
d) Total ammonia based on un-ionized ammonia guideline that is adjusted for ambient pH and water temperature as provided in Table 6..
e) British Columbia Approved Water Quality Guidelines: Aquatic Life, Wildlife & Agriculture (BC MECCS 2023).
f) Based on hardness in the study area that is consistently 21 mg/L as $CaCO_3$ or less under baseline conditions and varies with time through Operations.
g) Ontario Provincial Water Quality Objectives (1994); an interim PWQO.
h) Based on the average pH range across Patterson Lake.
i) Provided by EcoMetrix (2021).
N/A = indicates no guideline or criteria specified; N = nitrogen; °C = degrees Celsius; µg/L = micrograms per litre; < = less than; > = greater than; ≤ = less than or equal to; $CaCO_3$ = calcium carbonate; Bq/L = becquerels per litre.

Table 5: Short-Term (Acute) CCME Guidelines, MDMER Maximum Authorized Monthly Mean Concentrations, and Selected Limiting Criteria

Parameter	Unit	CCME: Short Term (Acute)[a]	MDMER Maximum Authorized Concentrations[b]	Selected Threshold (Acute)
General Parameters				
Total Suspended Solids	mg/L	Background + 25[c]	15	15
Anions and Nutrients				
Ammonia (Un-ionized) (NH_3 as N)	mg/L	N/A	0.5	0.5
Ammonia (Total as N)	mg/L	Function of un-ionized ammonia, pH, and temperature[d]		
Chloride	mg/L	640	N/A	640
Nitrate (NO_3 as N)	mg/L	124	N/A	124
Total Phosphorus	mg/L	N/A	N/A	N/A
Sulphate	mg/L	N/A	N/A	N/A
Total Metals				
Total Aluminum	µg/L	N/A	N/A	N/A
Total Arsenic	µg/L	N/A	100	100
Total Cadmium	µg/L	<5.3 mg/L as $CaCO_3$: 0.00011 mg/L ≤5.3 - 360 mg/L as $CaCO_3$: $10^{(1.016[\log(\text{hardness})]-1.71)}$ >360 mg/L as $CaCO_3$: 0.0077 mg/L	N/A	0.43[e]
Total Chromium	µg/L	N/A	N/A	N/A
Total Cobalt	µg/L	110[f]	N/A	110
Total Copper	µg/L	N/A	100	100
Total Iron	µg/L	N/A	N/A	N/A
Total Lead	µg/L	N/A	80	80
Total Manganese	µg/L	$e^{\{0.878(\ln(\text{hardness}))+4.76\}}$	N/A	1,971[e]
Total Mercury	µg/L	N/A	N/A	N/A
Total Molybdenum	µg/L	N/A	N/A	N/A
Total Nickel	µg/L	N/A	250	250
Total Selenium	µg/L	N/A	N/A	N/A
Total Uranium	µg/L	33	N/A	33
Total Vanadium	µg/L	N/A	N/A	N/A
Total Zinc	µg/L	37	400	37

Table 5: Short-Term (Acute) CCME Guidelines, MDMER Maximum Authorized Monthly Mean Concentrations, and Selected Limiting Criteria

Parameter	Unit	CCME: Short Term (Acute)[a]	MDMER Maximum Authorized Concentrations[b]	Selected Threshold (Acute)
Radionuclides				
Lead-210	Bq/L	N/A	N/A	N/A
Polonium-210	Bq/L	N/A	N/A	N/A
Radium-226	Bq/L	N/A	0.37	0.37
Thorium-230	Bq/L	N/A	N/A	N/A

Note:
a) Canadian Environmental Quality Guidelines (CCME 2020).
b) Column 2, Table 1, Schedule 4, Metal and Diamond Mining Effluent Regulations (SOR/2002-222).
c) Long-term exposure or inputs lasting between 24 hours to 30 days.
d) Total ammonia based on un-ionized ammonia guideline that is adjusted for ambient pH and water temperature as laid out in Metal and Diamond Mining Effluent Regulations (SOR/2002-222) Division 2, Section 12(4).
e) Based on hardness in the study area that is consistently 21 mg/L as $CaCO_3$ or less under baseline conditions and varies with time through Operations; note the hardness concentration for the acute protection of aquatic life guideline for manganese has a lower bound cap of 25 mg/L as $CaCO_3$.
f) British Columbia Ministry of Environment and Climate Change Strategy (2023).

N/A = indicates no guideline or criteria specified; N = nitrogen; °C = degrees Celsius; µg/L = micrograms per litre; < = less than; > = greater than; ≤ = less than or equal to; $CaCO_3$ = calcium carbonate; Bq/L = becquerels per litre.

Table 6: CCME Water Quality Chronic (Long-Term) Objectives for Total Ammonia for the Protection of Aquatic Life (in mg/L NH_3 as N)

Temperature (°C)	pH							
	6.0	**6.5**	**7.0**	**7.5**	**8.0**	**8.5**	**9.0**	**9.5**
0	231	73.0	23.1	7.32	2.33	0.749	0.250	0.042
5	153	48.3	15.3	4.84	1.54	0.502	0.172	0.034
10	102	32.4	10.3	3.26	1.04	0.343	0.121	0.029
15	69.7	22.0	6.98	2.22	0.715	0.239	0.089	0.026
20	48.0	15.2	4.82	1.54	0.499	0.171	0.067	0.024
25	33.5	10.6	3.37	1.08	0.354	0.125	0.053	0.022
30	23.7	7.50	2.39	0.767	0.256	0.094	0.043	0.021

mg/L = milligrams per litre; NH_3-N = ammonia measured as nitrogen; °C = degrees Celsius.

4.0 EFFLUENT QUALITY OBJECTIVES ASSESSMENT

The model for the PERT assessment is a mass balance centering on Patterson Lake North Arm – West Basin, utilizing the inflows and associated water quality concentrations as depicted in Figure 1. The inflows and outflows to Patterson Lake North Arm – West Basin are explicitly considered, whereas the flows to the additional two basins, Patterson Lake North Arm – East Basin and Patterson Lake South Arm, are not directly considered. The flows into Patterson Lake North Arm – East Basin are assumed to be all accounted for in its outflow term to Patterson Lake North Arm – West Basin.

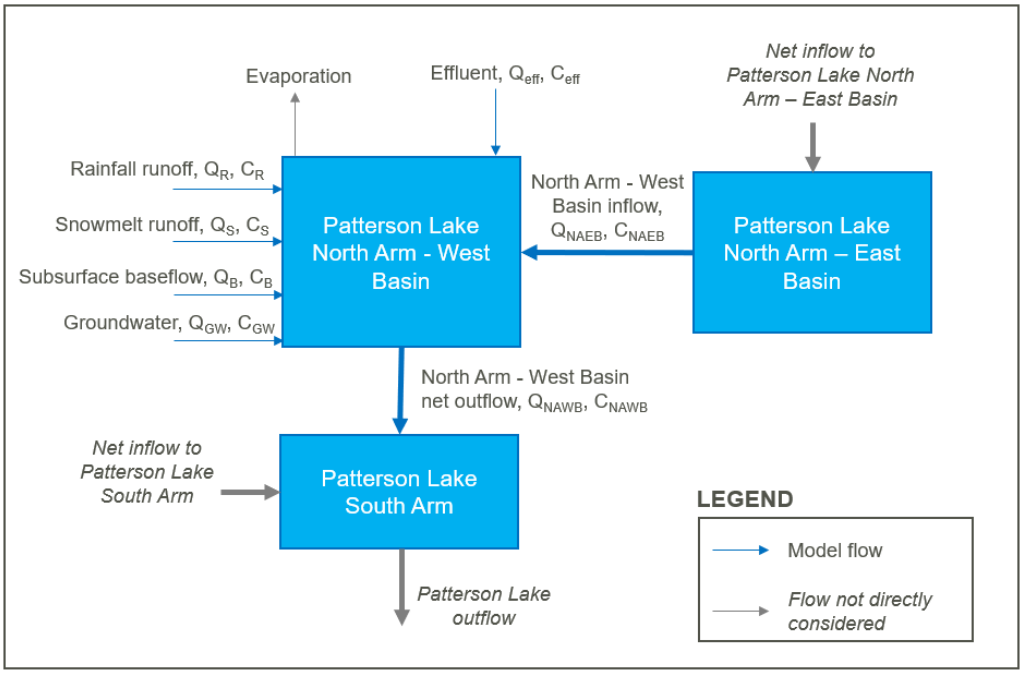

Figure 1: Patterson Lake North Arm – West Basin Flow Diagram

Each of the inflows to Patterson Lake North Arm – West Basin are assigned water quality concentrations based on the background water quality values from Table 3. The flow sources and associated water quality sources are provided in Table 7.

Table 7: Model Flows and Associated Water Quality Sources

Flow	Water Quality Source
North Arm – West basin inflow, Q_{NAEB}	Patterson Lake North Arm – East Basin Background, C_{NAEB}
Subsurface baseflow, Q_B	Patterson Lake North Arm – West Basin Background, C_B
Rainfall runoff, Q_R	Assumed clean, 0 mg/L, C_R
Snowmelt runoff, Q_S	50% of Patterson Lake North Arm – West Basin Background, C_S
Groundwater, Q_{GW}	Patterson Lake North Arm – West Basin Background, C_{GW}
ETP Discharge, Q_{eff}	Computed, C_{eff}
North Arm – West basin outflow, Q_{NAWB}	Computed, C_{NAWB}

4.1 Mixing Zone

A mixing zone is a transitional area within a waterbody in which treated effluent is gradually mixed with ambient water. In general, the outer edge of the mixing zone would not exceed applicable water quality objectives/thresholds. The size of the mixing zone is influenced by the difference in water quality between the treated effluent and the receiving water body and the receiving waterbody size and volume.

The Saskatchewan Water Security Agency has published a set of mixing zone guidelines, and the guidelines prescribed for larger surface water bodies have been utilized (WSA 2015). The relevant guidelines to this Project have been described in the *Conceptual Diffuser Design Report for the Rook I Project* (Golder 2019).

The final selected mixing zone around the effluent diffuser outfall was selected to have a 100 m radius. Dilution modelling was performed using the CORMIX model system (Doneker and Jirka 2007), which was developed at Cornell University and endorsed by the U.S. Environmental Protection Agency. This modelling was performed under a range of treated effluent and ambient conditions to determine the minimum amount of dilution that could be provided at the selected outfall location in Patterson Lake North Arm – West Basin. This minimum dilution factor was determined to be 28 (Golder 2019).

4.2 Method

The PERT model was created in Excel 2013 as a mass balance in Patterson Lake through time. The concentrations in the Patterson Lake North Arm – West Basin were modelled for a period of 34 years (from year 2021 to 2055) using a monthly timestep.

The flows per month as well as the volume in Patterson Lake North Arm – West Basin are consistent for every year, using the values presented in Section 2.1 in Table 1 and Table 2. The concentrations of the water quality source terms (Patterson Lake North Arm – East Basin, rainfall, snowmelt, and baseflow) were held constant at the 95th percentile of the baseline data, provided in Table 3. The initial concentration for each constituent in the Patterson Lake North Arm – West Basin is also the 95th percentile of baseline data. After the initial conditions, the concentrations in the Patterson Lake North Arm – West Basin were computed with each time step.

The concentration in Patterson Lake North Arm – West Basin was predicted using the following equation at each time step:

[Eq. 1]

$$C_{NAWB} = \frac{Q_{NAEB}C_{NAEB} + Q_R C_R + Q_S C_S + Q_B C_B + Q_{GW}C_{GW} + Q_{eff}C_{eff} + V_{NAWB,t-1}C_{NAWB,t-1} - Q_{NAWB.t-1}C_{NAWB,t-1}}{V_{NAWB}}$$

Where:
- Q_{NAEB} Average monthly flow from Patterson Lake North Arm – East Basin into the North Arm – West Basin, as per Table 1 (m^3/month)
- Q_R Average monthly rainfall runoff into Patterson Lake North Arm – West Basin, as per Table 1 (m^3/month)
- Q_S Average monthly seepage flow into Patterson Lake North Arm – West Basin, as per Table 1 (m^3/month)
- Q_B Average monthly subsurface baseflow into Patterson Lake North Arm – West Basin, as per Table 1 (m^3/month)

Q_{GW}	Average monthly groundwater flow into Patterson Lake North Arm – West Basin, as per Table 1 (m^3/month)
Q_{eff}	Average monthly discharge from the ETP flow into Patterson Lake North Arm – West Basin, as per Table 1 (m^3/month)
$Q_{NAWB,t-1}$	Average monthly outflow from Patterson Lake North Arm – West Basin into the South Arm during the previous timestep, as per Table 1 (m^3/month)
C_{NAWB}	Concentration in Patterson Lake North Arm – West Basin, calculated (mg/L)
C_{NAEB}	Concentration in Patterson Lake North Arm – East Basin, as per Table 3 (mg/L)
C_R	Concentration in the rainfall runoff, as per Table 3 (mg/L)
C_S	Concentration in the rainfall runoff, as per Table 3 (mg/L)
C_B	Concentration in the subsurface baseflow, as per Table 3 (mg/L)
C_{GW}	Concentration in the groundwater, as per Table 3 (mg/L)
C_{eff}	Concentration in the groundwater, as per Table 3 (mg/L)
$C_{NAWB,t-1}$	Concentration in Patterson Lake North Arm – West Basin during the previous timestep, calculated (mg/L)
V_{NAWB}	Volume of Patterson Lake North Arm – West Basin, as per Table 2 (m^3)
$V_{NAWB,t-1}$	Volume of Patterson Lake North Arm – West Basin during the previous timestep, as per Table 2 (m^3)

Once the concentration within Patterson Lake North Arm – West Basin is determined, the concentration at the edge of the mixing zone can be predicted using the following equation:

$$C_{MZ} = \frac{Q_{eff}C_{eff} + Q_{NAWB}C_{NAWB}}{Q_{eff} + Q_{NAWB}} \quad \text{[Eq. 2]}$$

Where:

Q_{NAWB}	Average monthly outflow from Patterson Lake North Arm – West Basin into the South Arm, as per Table 1 (m^3/month)
C_{MZ}	Concentration at the edge of the mixing zone (mg/L)

This equation may be rearranged to the following:

$$C_{MZ} = \frac{C_{eff}}{D} + C_{NAWB} - \frac{C_{NAWB}}{D} \quad \text{[Eq. 3]}$$

Where D represents dilution factor, as per the following equation:

$$D = \frac{Q_{NAWB} - Q_{eff}}{Q_{eff}} \quad \text{[Eq. 4]}$$

The dilution factor was previously determined to be 28, as provided in Section 4.1.

The applicable water quality thresholds, documented in Section 3.0, need to be met at the edge of the mixing zone. Therefore, the concentrations at the edge of the mixing zone calculated would be equal to the water quality threshold concentration. To determine what the maximum concentration the effluent can be to reach these target concentrations, the above equations were iteratively used until the predicted concentration at the edge of the mixing zone was equal to the threshold concentration. The concentrations of the COPCs in Patterson Lake North Arm – West Basin are expected to increase over time due to the ETP discharging during mine operations. The concentrations in the basin are expected to eventually reach steady state. Therefore, the above equation and the allowable effluent concentrations were calculated using the Patterson Lake North Arm – West Basin concentrations in at the end of the modelling period. This corresponds to the 100th percentile of the concentrations reached in the Patterson Lake North Arm – West Basin in the last 5 years of the model (2050 to 2055).

5.0 ASSUMPTIONS

The key assumptions utilized in the development of the PERT model are as follows:

- The CCME guidelines for chromium are based on specific chromium valences (i.e., hexavalent and trivalent chromium), with no guideline for total chromium. Therefore, the guideline for hexavalent chromium was used as it is the most stringent. It is important to note that this threshold will be compared to total chromium data measurements and may incorrectly identify exceedances.
- The concentrations of the COPCs for Patterson Lake North Arm – East Basin, groundwater, snowmelt runoff, and subsurface baseflow will remain constant and will not be affected by Project activities. In addition, these concentrations are assumed to remain the same for every month (i.e., seasonal fluctuations are not considered).

6.0 RESULTS

The estimated allowable ETP discharge concentrations that result in water quality at the edge of the mixing zone that meets the selected water quality thresholds are presented in Table 4. Where acute (short-term) thresholds exist, the acute objective is compared against the PERTs calculated using the chronic threshold, and the minimum of these two values is used as the final calculated PERT limit. The preliminary results from the PERTs model are presented in Table 8.

Table 8: Preliminary Effluent Discharge Concentration Limits Calculation Results

Parameter List	Units	Chronic Threshold	Acute Threshold	Concentration in North Arm - East Basin	Concentration in North Arm - West Basin	Calculated Effluent Concentration	Final PERT
Total Suspended Solids	mg/L	8.3	15	3.3	6.9	45.9	15
Ammonia (un-ionized) as N	mg/L	0.0156	0.5	0.00088[(a)]	0.021[(a)]	0.0156	0.17
Ammonia Total as N	mg/L	--	--	0.079	1.3	15.5	15.5
Chloride	mg/L	120	640	0.051	85	1,053	640
Nitrate (as N)	mg/L	2.9	124	0.010	2.1	25	25
Total Phosphorus	mg/L	0.011	--	0.010	0.011	0.010	0.010

Table 8: Preliminary Effluent Discharge Concentration Limits Calculation Results

Parameter List	Units	Chronic Threshold	Acute Threshold	Concentration in North Arm - East Basin	Concentration in North Arm - West Basin	Calculated Effluent Concentration	Final PERT
Sulphate	mg/L	128	--	1.3	91	1,116	1,116
Total Aluminium	µg/L	75	--	5.9	55	620	620
Total Arsenic	µg/L	5	100	0.11	3.6	43	43
Total Cadmium	µg/L	0.017	0.43	0.010	0.016	0.051	0.051
Total Chromium	µg/L	1.0	--	0.50	0.87	4.5	4.5
Total Cobalt	µg/L	4	110	0.10	2.9	34	34
Total Copper	µg/L	2	100	0.23	1.5	16	16
Total Iron	µg/L	300	--	592	380	No capacity	No capacity
Total Lead	µg/L	1.0	80	0.10	0.74	8.0	8.0
Total Manganese	µg/L	230	1,971	130	200	1,000	1,000
Total Mercury	µg/L	0.026	--	0.0045	0.020	0.19	0.19
Total Molybdenum	µg/L	73	--	0.10	52	640	640
Total Nickel	µg/L	25	250	0.14	18	220	220
Total Selenium	µg/L	1	--	0.10	0. 74	8.0	8.0
Total Strontium	µg/L	--	--	31	230	2,400	2,400
Total Uranium	µg/L	15	33	0.10	11	131	33
Total Vanadium	µg/L	6.0	--	0.10	4.3	52	52
Total Zinc	µg/L	7.0	37	2.1	5.6	44	37
Lead-210	Bq/L	22	--	0.031	16	194	194
Polonium-210	Bq/L	13.5	--	0.0064	9.6	119	119
Radium-226	Bq/L	0.11	0.37	0.010	0.081	0.88	0.37
Thorium-230	Bq/L	95	--	0.010	68	837	837

(a) Unionized ammonia concentrations in Patterson Lake are variable and dependent on pH and temperature. The values presented corresponds to pH measurements in Patterson Lake North Arm – West Basin and Patterson Lake North Arm – East Basin (95th percentiles) of 7.55 and 7.70, respectively, and temperature of 17 and 17.9ºC, respectively.

7.0 CONCLUSION AND RECOMMENDATIONS

Based on the analysis and information presented in this memorandum, the following conclusions and recommendations are provided:

- The preliminary PERTs are intended to provide conservative estimates to aid in the identification of COPCs that may need further investigation, as well as help inform the final discharge limits. The PERTs presented are subject to review based on additional data, and not intended for permitting. It is recommended that PERTs be updated as Effluent Release Targets during licensing as part of the REGDOC-2.9.2 process.
- It is recommended to update the water quality input data to include the results from ongoing water quality baseline surveys.

8.0 CLOSURE

We trust that the analysis and results presented herein satisfy your needs at this time. If you have any questions regarding the content of this technical memorandum, please contact the undersigned.

WSP Canada Inc.

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Senior Water Resources Specialist

John Faithful, BSc (Hons), PBiol
Technical Director - Surface Water, Fellow

SS/GVA/JF/sp

Attachments: Attachment A - Proposed Treated Effluent Discharge Diffuser Location

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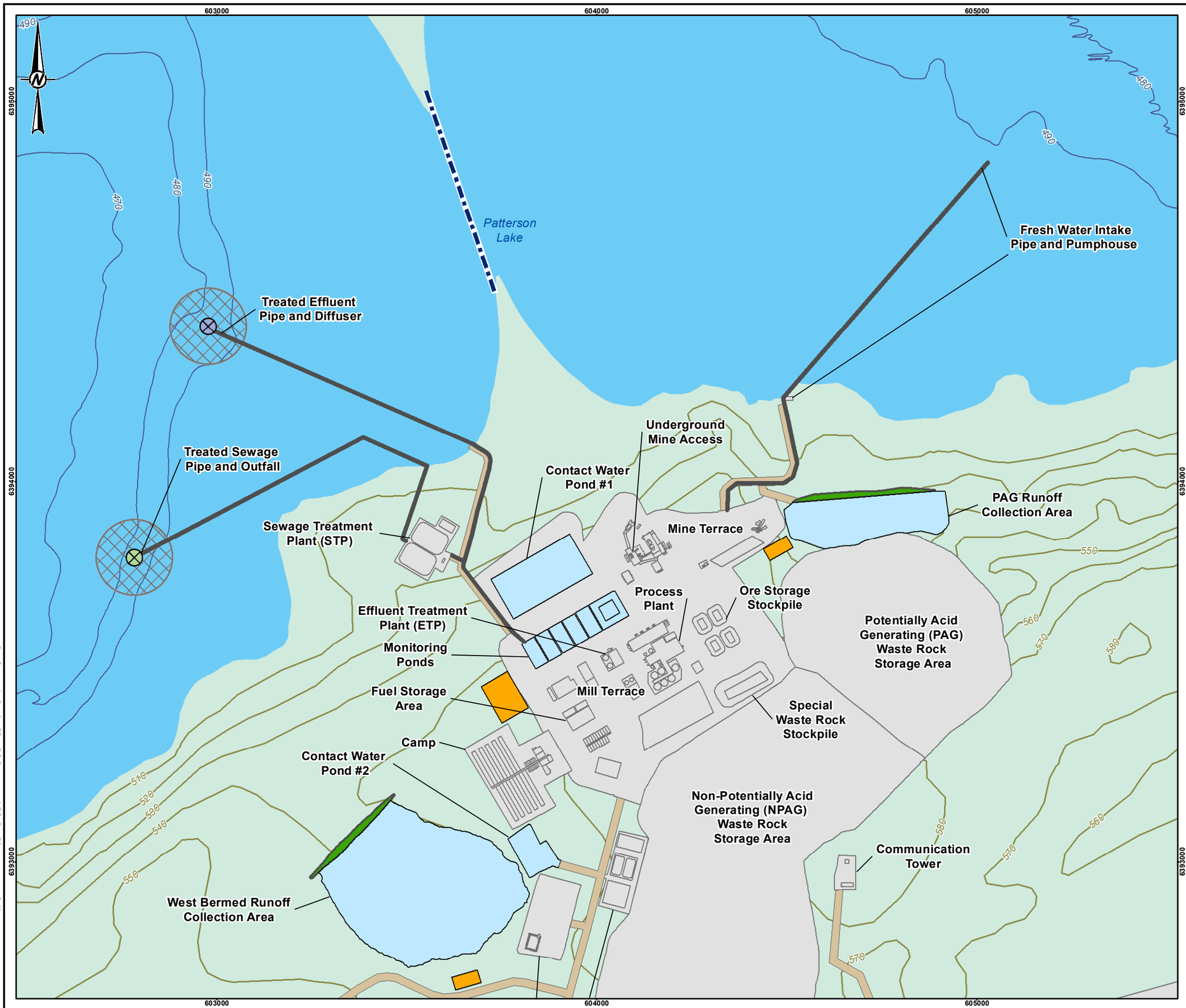
ATTACHMENT A

Proposed Treated Effluent Discharge Diffuser Location



LEGEND

- BATHYMETRY CONTOUR ELEVATION (10 m INTERVAL)
- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- CONTACT WATER CONTAINMENT BERM
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND
- EFFLUENT TREATED PIPE DIFFUSER
- SEWAGE TREATED PIPE OUTFALL
- LAKE BASIN DIVISION
- PROPOSED REGULATED MIXING ZONE

0 0.3 0.6

1:10,000 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
3. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

MINE HYDRAULIC INFRASTRUCTURE AND ASSOCIATED MIXING ZONE

CONS

wsp

PROJECT		20144150	PHASE	3314 - 6
DESIGN	GVA	2020-03-13	SCALE AS SHOWN	REV. 0
GIS	NO	2023-10-25		
CHECK	GVA	2023-10-25	**FIGURE 1**	
REVIEW	JF	2023-10-25		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI B

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wsp.com

Rook I Project

Environmental Impact Statement

TSD XIX: Conceptual Diffuser Design Report

28 March 2022 Reference No. 20144150

NexGen Energy Ltd.

USE OF CONCEPTUAL DIFFUSER DESIGN REPORT REVISION 0 AS TECHNICAL SUPPORT DOCUMENT FOR THE ROOK I PROJECT DRAFT ENVIRONMENTAL IMPACT STATEMENT

1.0 INTRODUCTION

Golder Associates Ltd. (Golder) has provided ongoing support to NexGen Energy Ltd. (NexGen) related to the preparation of an Environmental Impact Statement (EIS) for the Rook I Project (Project). The EIS submission is expected to include technical support documents (TSD) that are intended to provide context for the effects assessments presented within the Draft EIS. The purpose of this cover letter is to provide context for use of the Conceptual Diffuser Design Report Revision 0, completed in fall 2019 as a TSD for the EIS, and confirm that the Conceptual Diffuser Design Report Revision 0 remains suitable considering additional knowledge accumulated since fall 2019.

2.0 BACKGROUND

In fall 2019, NexGen engaged Golder to prepare a conceptual design for a treated mine effluent diffuser at the Project. The conceptual design was completed in two phases using best information available at that time and culminated in a Conceptual Diffuser Design Report (TSD XIX), which was completed, finalized, and signed/sealed in December 2019. The Conceptual Diffuser Design Report documented the design basis and criteria, modelling of diffuser dilution performance, hydraulic analysis, and conceptual design information for the proposed diffuser.

In 2021, as part of the surface water quality component of the Environmental Assessment, Golder completed updated modelling to confirm the performance of the conceptual treated effluent diffuser configuration. The re-modelling of diffuser performance included updated design parameters for thermal stratification and lake current based on additional lake temperature and current data collected since 2018, as well as updated effluent information generated from the site-wide water balance and water quality model tool developed in support of the Project (TSD XVIII, Site-Wide Water Balance and Water Quality Modelling Report).

3.0 SUMMARY OF COMPARISON

The conceptual diffuser was designed to improve mixing of discharged treated effluent with water in the receiving environment. The evaluation of mixing performance was based on dilution factors at specific distances from the diffuser, particularly at the edge of the regulated mixing zone (RMZ).

Detailed mixing and dilution modelling was conducted in support of the Conceptual Diffuser Design using the CORMIX model system, which is commonly used to analyze and model jets and plumes for effluent discharges to waterbodies. The conceptual treated effluent diffuser was designed to target a minimum required dilution factor of 10:1 at the edge of the proposed RMZ to achieve acceptable concentrations for constituents of potential concern (i.e., meet surface water quality targets provided in EIS Section 10, Surface Water Quality and Sediment Quality)

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based on the input data available at that time. A total of 33 scenarios were simulated in CORMIX to represent diffuser performance under a range of conditions in the ambient environment. The predicted dilution factors ranged from 28:1 to 50:1, with an average of 40:1.

Effects of the Project on near field water quality are summarized in EIS Section 10. The Near Field Water Quality Model, developed as part of the EIS, evaluated the performance of the effluent treatment plant (ETP) diffuser and is summarized in EIS Appendix 10A, Surface Water Quality Modelling Report. Detailed mixing and dilution modelling conducted for the Near Field Water Quality Model also used the CORMIX model system, and where possible, was consistent with the modelling completed for the Conceptual Diffuser Design Report. In addition to considering the new data collected, the modelling completed for the effects assessment also accounted for accumulation of mass in Patterson Lake North Arm – West Basin over time as a result of the Project. The modelling considered two snapshots to present the lower and upper bound range of constituents of potential concern to be expected in the near field: one at the beginning of Operations representing the lowest annual average concentration during Operations and one near the end of Operations (2048) representing the highest annual average concentration during Operations. A total of 35 scenarios were used to evaluate ETP diffuser performance representing a range of current speeds, stratification depths, lake water temperature, and effluent temperatures. For the ETP diffuser, the dilution factor at the edge of the RMZ ranged form 23:1 to 35:1, with an average of 30:1. A sensitivity analysis was also completed to assess the robustness of the diffuser designs in terms of the dilution provided. The sensitivity analysis included variations in treated effluent flow rates for the ETP and total dissolved solids concentration in the ETP effluent.

The analysis completed as part of EIS Section 10 confirms that the predicted diffuser performance (based on current information) exceeds the design objectives and performance requirements established in the Conceptual Diffuser Design Report Revision 0. The predicted concentrations of constituents of potential concern were consistently less than water quality targets for aquatic and terrestrial life at the edge of the proposed RMZ, including for the reasonable upper bound sensitivity, even though the predicted dilution factors were lower in the Near Field Water Quality Model than in the conceptual diffuser design. Dilution factors are conservative because the effects assessment is driven largely by far-field accumulation at closure, not by near-field mixing when the ETP discharge will be active.

4.0 CONCLUSION

The Near Field Water Quality Model completed for surface water quality effects assessment confirms that, based on current assumptions, the conceptual diffuser design is expected to achieve acceptable mixing performance that is consistent with the design objectives. It is Golder's opinion that the conceptual diffuser design is appropriate for the current stage of Project development with a level of detail that is appropriate for an EIS and inclusion as a technical support document to the EIS.

Current revisions to the conceptual diffuser design are not recommended at this time considering the present stage of Project development. The following activities would advance prior to refining the diffuser design to limit the number of design iterations required prior to construction:

- regulatory buy-in of water quality targets, thresholds, and size of the RMZ;
- public review of the Environmental Assessment;
- FEED (Front End Engineering Design) level engineering for upstream infrastructure associated with the diffuser; and

- preliminary constructability review for diffuser and associated upstream infrastructure.

Further, baseline data collection is ongoing and additional data can be integrated into the later stages of design.

The diffuser design will be refined in detailed design and included in a submission to the Canadian Nuclear Safety Commission as per REGDOC-2.9.2 (CNSC 2021). The conceptual design will form the basis for detailed design, which will be completed such that dilution remains adequality protective of the environment.

5.0 CLOSURE

Golder trusts that the information presented in this letter and the attached Conceptual Diffuser Design Report for the Project. Should you have any questions or require clarification on any matter, please do not hesitate to contact the undersigned. We appreciate the opportunity to continue to support the Project.

Sincerely

Golder Associates Ltd.

Ross Phillips, M.Sc., P.Eng.
Water Resources Engineer

Gerard Van Arkel, M.Sc.
Principal, Water Resources Specialist

RWP/GVA/DH/rd

Distribution: One electronic copy to Luke Moger, NexGen Energy Ltd.

Attachments: TSD XIX: Conceptual Diffuser Design Report

6.0 REFERENCES

CNSC (Canadian Nuclear Safety Commission). 2021. REGDOC-2.9.2, Environmental Principles, Controlling Releases to the Environment, Version 1.2. March 2021. Available at http://nuclearsafety.gc.ca/eng/pdfs/REGDOCS/REGDOC-2-9-2-Environmental-Principles-Controlling-Releases-to-the-environment-eng.pdf

Attachment

TSD XIX: Conceptual Diffuser Design Report

REPORT

Conceptual Diffuser Design

NexGen Rook I Project

Submitted to:

Jeremy Veszi
NexGen Energy Ltd.

Submitted by:

Golder Associates Ltd.
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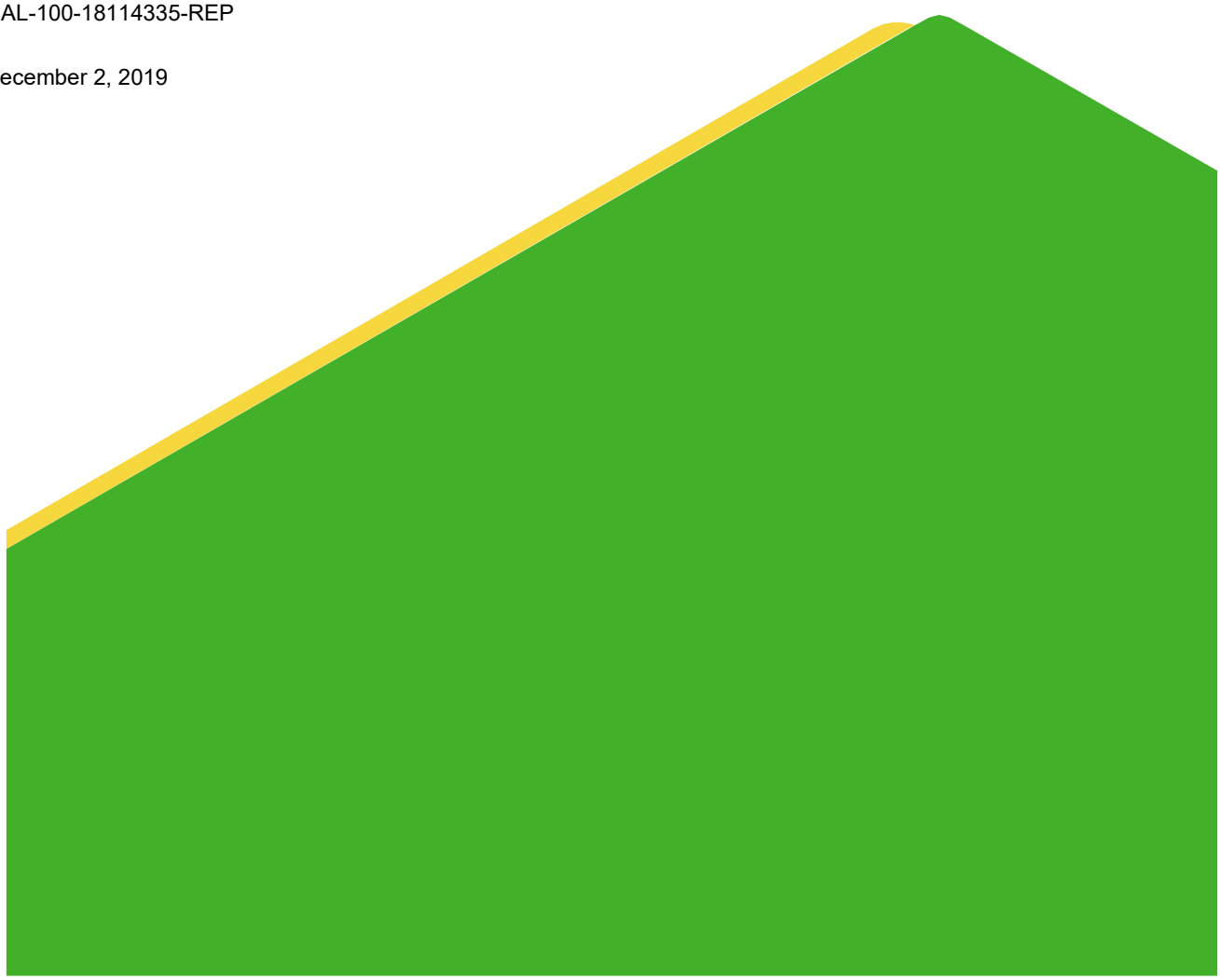
GAL-100-18114335-REP

December 2, 2019



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This document will be reviewed and updated periodically. Revision to the document will be tracked in the Record of Issue and communicated to applicable staff.

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1.0 INTRODUCTION

NexGen Energy Ltd. (NexGen) retained Golder Associates Ltd. (Golder) to prepare a conceptual design for a treated mine effluent diffuser at the proposed Rook I Project (the Project). The proposed receiving waterbody is Patterson Lake. The scope of the conceptual diffuser design was broken up into two phases.

Phase 1 consisted of the tasks to compare options for the location of the diffuser and to select a preferred location. The basis, methods and results of the Phase 1 work are summarized in a memorandum included in Appendix A.

Phase 2 work consisted of the following tasks to prepare the conceptual design of the diffuser:

- Reviewed past ice conditions based on historic monitoring data for the site. Ice thickness and typical dates of freeze-up and break-up were estimated based on historic observations made during winter water quality sampling programs and observations related to historic drilling activities.
- Collected samples of the substrate materials near the preferred location and analysed them to characterize the material types and particle size distribution.
- Conducted a hydraulic analysis of the outfall system from the outlet of the effluent treatment plant to the diffuser to calculate the hydraulic heads required at the effluent treatment plant to operate the proposed diffuser at the selected location and for a range of operating discharges or conditions.
- Prepared conceptual design drawings to present and communicate the recommended diffuser configuration.

This report documents the design basis and criteria, modelling of diffuser dilution performance, hydraulic analysis, and conceptual design information of the proposed diffuser.

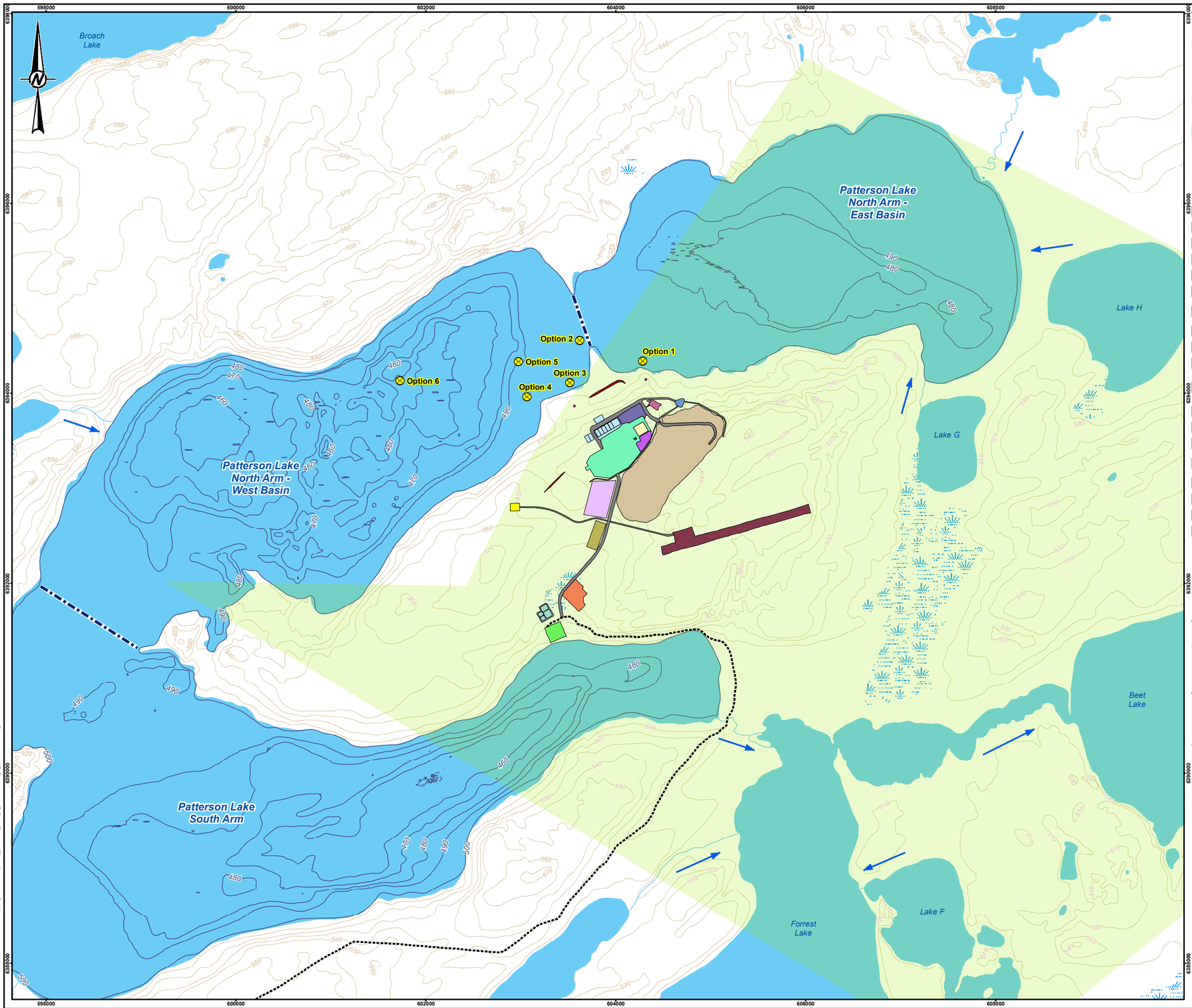
2.0 EVALUATION OF DIFFUSER LOCATION OPTIONS

Six candidate locations were identified and evaluated. All locations considered are in the North Arm of Patterson Lake near the proposed location of the effluent treatment plant and associated treated effluent monitoring ponds. The options included near shore locations in the North Arm – West Basin and North Arm – East Basin, as well as an off-shore (deep water) option, and an optimum depth option (Figure 1).

Option 5 located in the North Arm – West Basin at an optimal depth of around 10 m was ranked first among the location options evaluated. Option 5 is the selected option, which is at a location that is estimated to have favourable ambient currents in carrying discharged treated effluent away from the diffuser.

A conceptual pipeline alignment connecting the diffuser to the location of the treated effluent monitoring ponds would intersect a section of shoreline referred to as HS4 (CanNorth 2019) that consists of 95% sand and 5% organics. This shoreline section was noted by CanNorth (2019) to be not suitable spawning habitat for all large-bodied fish included in the assessment. This section was identified to have marginally suitable habitat for one fish species, yellow perch.

The results of the option evaluation are documented in the memorandum in Appendix A.



LEGEND

- BATHYMETRY CONTOUR ELEVATION (METRES)
- ELEVATION CONTOUR (10m INTERVAL)
- FLOW DIRECTION
- LAKE BASIN DIVISION
- WATERCOURSE
- WATERBODY
- WETLAND
- NEXGEN MINERAL LEASE
- DIFFUSER LOCATION OPTION

PROJECT FEATURES

- EXISTING ACCESS ROAD
- AIRSTRIP
- CLEAN WASTE ROCK
- CONSTRUCTION CAMP
- CONTINGENCY RETENTION BERM
- EXHAUST SHAFT
- EXPLOSIVE STORAGE
- DOMESTIC WASTE WATER TREATMENT FACILITY
- MILL OPERATIONS AREA
- ORE PAD
- PERMANENT CAMP
- POTENTIAL DOMESTIC/INDUSTRIAL WASTE MANAGEMENT AREA
- POTENTIAL SOLAR FACILITIES
- POTENTIAL WASTE INCINERATOR
- POTENTIAL WIND TURBINE
- PRODUCTION SHAFT AND ASSOCIATED INFRASTRUCTURE
- ROAD
- SPECIAL WASTE ROCK PAD
- STORAGE/MONITORING POND
- STORMWATER RUNOFF POND

0 1,000 2,000

1:40,000 METRES

NOTE(S)

1. WATER SURFACE ELEVATION ESTIMATED TO BE 498.79 MASL ASSOCIATED WITH MEAN ANNUAL FLOOD.
2. LAKE VOLUME ON JUNE 6-8, 1981:
- SOUTH ARM BASIN = 236,049,630 M^3
- NORTH ARM - WEST BASIN = 234,880,210 M^3
- NORTH ARM - EAST BASIN = 65,405,551 M^3

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

CLIENT

NexGen Energy Ltd.

PROJECT

ROOK I PROJECT

TITLE

PRELIMINARY DIFFUSER LOCATION OPTIONS

CONSULTANT

GOLDER

YYYY-MM-DD	2019-11-28
DESIGNED	RP
PREPARED	LMS
REVIEWED	RWP
APPROVED	DL

PROJECT NO.	PHASE	REV.	FIGURE
18114335	6000	0	1

3.0 BACKGROUND INFORMATION

3.1 Watershed Setting

Patterson Lake is located along the Clearwater River near its headwaters in north-western Saskatchewan. The drainage area contributing to the Clearwater River where it drains into the North Arm – East Basin of Patterson Lake is 121 square kilometres (km^2). The cumulative watershed area increases to 264 km^2 where the Clearwater River outflows at the southeast corner of Patterson Lake.

3.2 Baseline Monitoring

Various environmental baseline monitoring activities have been ongoing on Patterson Lake since 2018. The aquatic baseline conditions in Patterson Lake were characterized by CanNorth (2019). Several studies were completed by Golder to characterize the hydrological conditions of Patterson Lake, including a summary of 2018 Hydrometric Monitoring Program (Golder 2019a), a baseline geomorphological characterization (Golder 2019b), and a regional meteorological and hydrological characterization (Golder 2019c).

Throughout the winter of 2018, NexGen measured ice thickness at the location of pumps located in the North Arm of Patterson Lake, which were operated and maintained in support of the geological exploration drilling programs. Ice thickness was also measured at the water supply locations along an access road from shore to the pumping locations in weekly intervals.

3.3 Patterson Lake Physical Characteristics

Patterson Lake can be divided into the North Arm and South Arm oriented approximately southwest to northeast as shown in Figure 2. The North Arm can be further separated into the West Basin and East Basin separated by a narrow and shallow sand sill with spit formations forming on either side (Golder 2019c).

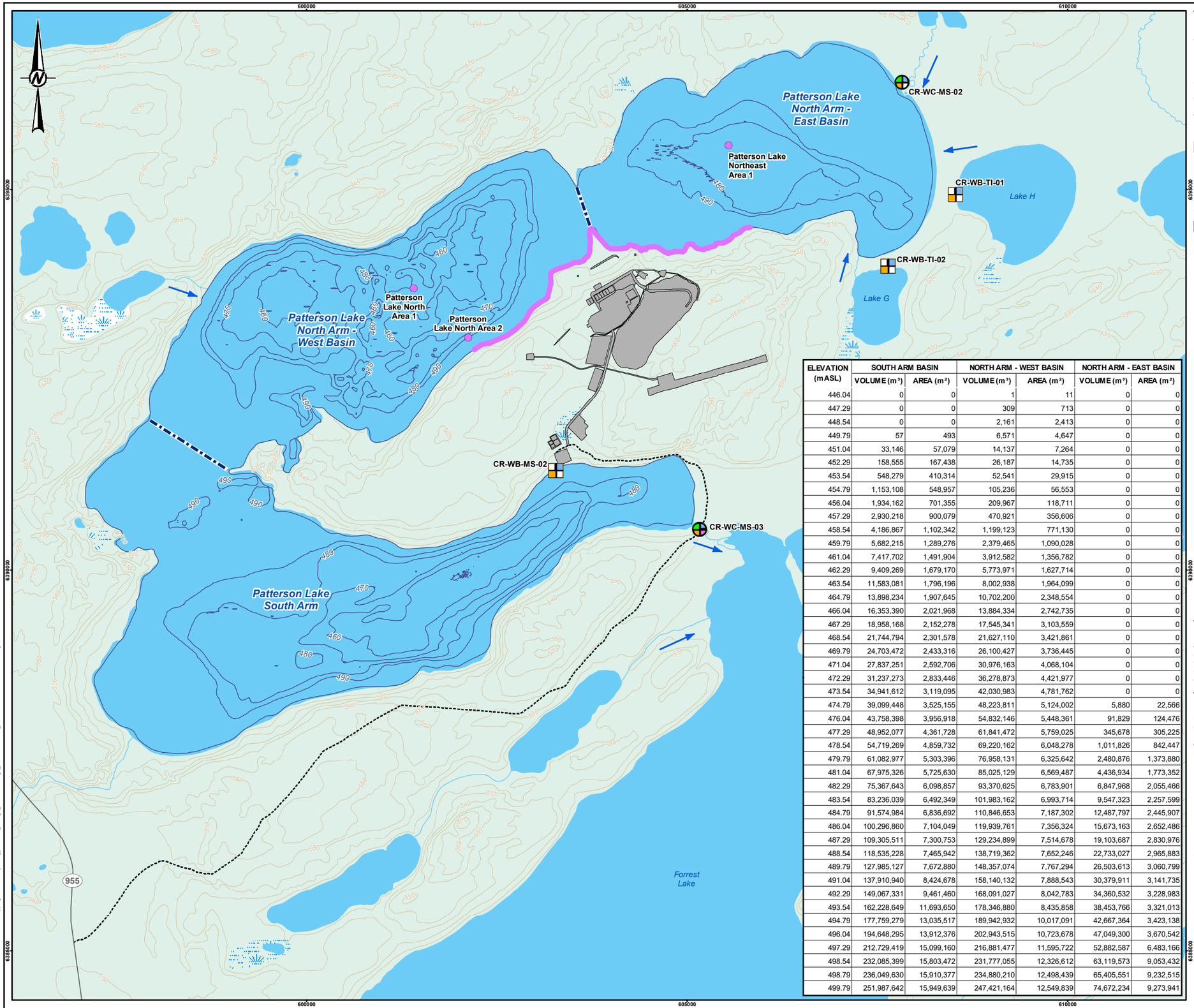
The North Arm – West Basin is the deepest of the three basins with a minimum bed elevation of 446 metres above mean sea level (masl), corresponding to a maximum depth of roughly 53 m. The deepest point in the North Arm – East Basin is 474.79 masl, corresponding to a maximum depth of roughly 24.0 m. The deepest point in the South Arm is 449.29 masl, corresponding to a maximum depth of roughly 49.5 m.

Patterson Lake has an average water surface elevation of approximately 498.8 masl, a total water volume of 536 million cubic metres (Mm^3), and a surface area of 38 km^2. The physical characteristics of Patterson Lake's three basins are summarized in Table 1.

Table 1: Summary of Patterson Lake Basin Physical Characteristics

Basin	Maximum Depth (m)	Volume (Mm^3)	Surface Area (km^2)
North Arm - East Basin	24.0	65.4	9.23
North Arm - West Basin	52.7	235	12.5
South Arm	49.5	236	15.9

km^2 = square kilometres, m = metre, Mm^3 = millions of cubic metres.



ELEVATION (mASL)	SOUTH ARM BASIN		NORTH ARM - WEST BASIN		NORTH ARM - EAST BASIN	
	VOLUME (m³)	AREA (m²)	VOLUME (m³)	AREA (m²)	VOLUME (m³)	AREA (m²)
446.04	0	0	1	11	0	0
447.29	0	0	309	713	0	0
448.54	0	0	2,161	2,413	0	0
449.79	57	493	6,571	4,647	0	0
451.04	33,146	57,079	14,137	7,264	0	0
452.29	158,555	167,438	26,187	14,735	0	0
453.54	548,279	410,314	52,541	29,915	0	0
454.79	1,153,108	548,957	105,236	56,553	0	0
456.04	1,934,162	701,355	209,967	118,711	0	0
457.29	2,930,218	900,079	470,921	356,606	0	0
458.54	4,186,867	1,102,342	1,199,123	771,130	0	0
459.79	5,682,215	1,289,276	2,379,465	1,090,028	0	0
461.04	7,417,702	1,491,904	3,912,582	1,356,782	0	0
462.29	9,409,269	1,679,170	5,773,971	1,627,714	0	0
463.54	11,583,081	1,796,196	8,002,938	1,964,099	0	0
464.79	13,898,234	1,907,645	10,702,200	2,348,554	0	0
466.04	16,353,390	2,021,968	13,884,334	2,742,735	0	0
467.29	18,958,168	2,152,278	17,545,341	3,103,559	0	0
468.54	21,744,794	2,301,578	21,627,110	3,421,861	0	0
469.79	24,703,472	2,433,316	26,100,427	3,736,445	0	0
471.04	27,837,251	2,592,706	30,976,163	4,068,104	0	0
472.29	31,237,273	2,833,446	36,278,873	4,421,977	0	0
473.54	34,941,612	3,119,095	42,030,983	4,781,762	0	0
474.79	39,099,448	3,525,155	48,223,811	5,124,002	5,880	22,566
476.04	43,758,398	3,956,918	54,832,146	5,448,361	91,829	124,476
477.29	48,952,077	4,361,728	61,841,472	5,759,025	345,678	305,225
478.54	54,719,269	4,859,732	69,220,162	6,048,278	1,011,826	842,447
479.79	61,082,977	5,303,396	76,958,131	6,325,642	2,480,876	1,373,880
481.04	67,975,326	5,725,630	85,025,129	6,569,487	4,436,934	1,773,352
482.29	75,367,643	6,098,857	93,370,625	6,783,901	6,847,968	2,055,466
483.54	83,236,039	6,492,349	101,983,162	6,993,714	9,547,323	2,257,599
484.79	91,574,984	6,836,692	110,846,653	7,187,302	12,487,797	2,445,907
486.04	100,296,860	7,104,049	119,939,761	7,356,324	15,673,163	2,652,486
487.29	109,305,511	7,300,753	129,234,899	7,514,678	19,103,687	2,830,976
488.54	118,535,228	7,465,942	138,719,362	7,652,246	22,733,027	2,965,883
489.79	127,985,127	7,672,880	148,357,074	7,767,294	26,503,613	3,060,799
491.04	137,910,940	8,424,678	158,140,132	7,888,543	30,379,911	3,141,735
492.29	149,067,331	9,461,460	168,091,027	8,042,783	34,360,532	3,228,983
493.54	162,228,649	11,693,650	178,346,880	8,435,858	38,453,766	3,321,013
494.79	177,759,279	13,035,517	189,942,932	10,017,091	42,667,364	3,423,138
496.04	194,648,295	13,912,376	202,943,515	10,723,678	47,049,300	3,670,542
497.29	212,729,419	15,099,160	216,881,477	11,595,722	52,882,587	6,483,166
498.54	232,085,399	15,803,472	231,777,055	12,326,612	63,119,573	9,053,432
498.79	236,049,630	15,910,377	234,880,210	12,498,439	65,405,551	9,232,515
499.79	251,987,642	15,949,639	247,421,164	12,549,839	74,672,234	9,273,941

LEGEND

- BATHYMETRY CONTOUR ELEVATION (METRES)
- ELEVATION CONTOUR (10m INTERVAL)
- FLOW DIRECTION
- LAKE BASIN DIVISION
- SECONDARY HIGHWAY
- WATERCOURSE
- WATERBODY
- WETLAND
- WOODED AREA

PROJECT FEATURES

- EXISTING ACCESS ROAD
- PROPOSED FOOTPRINT
- AQUATIC BASELINE MONITORING POINT (CANNORTH 2019)
- AQUATIC BASELINE DETAILED STUDY AREA USED BY CANNORTH (2019)

WATERBODY HYDROMETRIC STATIONS

- DISCHARGE
- SURVEYED BENCHMARK (GEODETIC DATUM)
- TOTAL SUSPENDED SOLIDS AND BEDLOAD
- WATER SURFACE ELEVATION

WATERCOURSE HYDROMETRIC STATIONS

- DISCHARGE
- SURVEYED BENCHMARK (GEODETIC DATUM)
- TOTAL SUSPENDED SOLIDS AND BEDLOAD
- WATER SURFACE ELEVATION

0 1,000 2,000

1:50,000 METRES

NOTE(S)

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CLIENT

NexGen Energy Ltd.

PROJECT

ROOK I PROJECT

TITLE

PATTERSON LAKE – PHYSICAL CHARACTERISTICS AND BASELINE MONITORING ACTIVITIES

CONSULTANT

GOLDER

YYYY-MM-DD	2019-11-28
DESIGNED	RP
PREPARED	LMS
REVIEWED	RWP
APPROVED	DL

PROJECT NO.	PHASE	REV.	FIGURE
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4.0 DIFFUSER DESIGN CONSIDERATIONS

4.1 Mixing Zone Guidelines

A mixing zone is a transitional area within a waterbody in which a treated effluent discharge is gradually mixed with the ambient water. Saskatchewan Water Security Agency (WSA 2015) published a set of effluent mixing zone guidelines to prescribe the general characteristics that a mixing zone should have in larger surface water bodies such as Patterson Lake. These guidelines, which are the most applicable regulatory guidance, state that at the outer edge of the mixing zone, the water quality should not be appreciably different from the water quality prior to the discharge of the effluent. The size of the mixing zone will be influenced by the difference in water quality between the treated effluent and the receiving water body, and the water volume of the receiving waterbody.

The applicable general objectives for effluent discharges are summarized in Table 2 and the applicable guidelines for effluent mixing zones are noted in Table 3.

Table 2: Applicable General Objectives for Effluent Discharges (WSA 2015)

ID	Description
1	Effluent should be free from substances in concentrations or combinations which are acutely toxic or may be harmful to human, animal or aquatic life.
2	Effluent should be free from substances that will settle to form putrescent or otherwise objectionable sludge deposits, or that will adversely affect aquatic life or waterfowl.
3	Effluent should be free from debris, oil, grease, scum or other materials in amounts sufficient to be noticeable in the receiving water.
4	Effluent should be free from colour, turbidity or odour-producing materials that would adversely affect aquatic life or waterfowl, significantly alter the natural colour of the receiving water, or directly or through interaction among themselves or with chemicals used in water treatment, result in undesirable taste or odour in treated water.
5	Effluent should be free from nutrients in concentrations that create nuisance growths of aquatic weeds or algae or that results in an unacceptable degree of eutrophication of the receiving water.
6	Effluent discharged to surface waters should not utilize more than 30 percent of the assimilation capacity of the receiving waterbody when discharged via means of a diffused outfall, or more than 10 percent when discharged via a point source outfall. These design objectives should be utilized during the planning stages of projects involving effluent discharges. For purposes of determining available assimilation capacity of a receiving waterbody, a flow rate equal to or less than the average seven-day low flow which occurs once in ten years (e.g., 7Q10), at the outfall area, generally should be used.

Table 3: Applicable Guidelines for Effluent Mixing Zones (WSA 2015)

ID	Description
1	The mixing zone should be as small as practicable and should not be of such size or shape as to cause or contribute to the impairment of existing or likely water uses.
2	In lakes and other surface impoundments, surface water quality objectives applicable to that waterbody must be achieved at all points beyond a radius of 100 metres from the effluent outfall. The volume of limited use zones in lakes should not exceed 10 percent of that part of the receiving waters available for mixing.
3	The mixing zone should be designed to allow an adequate zone of passage for the movement or drift of all stages of aquatic life; specific portions of a cross-section of flow or volume may be arbitrarily allocated for this purpose.
4	The mixing zones should not interfere with fish spawning and nursery areas.
5	The mixing zones should not cause an irreversible organism response or attract fish or other organisms and thereby increase their exposure period within the zone.
6	The 96 hr LC50 toxicity criteria, for indigenous fish species and other important aquatic species should not be exceeded at any point in the mixing zones.
7	The mixing zones should not result in contamination of natural sediments so as to cause or contribute to excursions of the water quality objectives outside the mixing zone;

The following mixing zone guidelines do not apply to the proposed effluent mixing zone:

- The mixing zone will not be in close proximity or overlap with other mixing zones or effluent plumes.
- The mixing zone will not intersect domestic water supply intakes, bathing areas, or other sensitive designated use areas.

4.2 Local Meteorological Conditions

Meteorological conditions of interest to the diffuser design include ambient air temperature, wind speed, and wind direction.

A long-term record of monthly air temperature (2 m from the surface) was developed by Golder (2019c) based on global re-analysis data for the period 1979 to 2017, which is summarized in Table 4. The annual average air temperature is estimated to be -0.43 °C with the coldest month, January, having an average temperature of -19.5°C and the warmest month, July, having an average temperature of 16.9°C.

Baseline meteorology monitoring data (wind data) available from the Project Meteorological Station was summarized by Golder (2019b), from November 2015 until October 2018 with a data gap between July 15 and October 20, 2016. The analysis was conducted using the wind data for the open water season, defined as the period from May to October of each year of record. Figure 3 presents the directions and the wind classes frequency distribution measured during the period when the climate data are available.

The analysis indicated that the recorded prevailing winds are from south, and southeast, followed by winds from the west-northwest and northwest sectors (Figure 3). The calm frequency, defined as wind with less than 0.5 m/s, is 2.5% of the time and the least frequent wind direction is the east-northeast sector. The mean values for wind speed show that the strongest winds tend to be from the west-northwest (>10 m/s), followed by winds from northwest, north-northwest, and south. The prevailing wind direction is from the south, west, and northwest. An upper bound wind speed of 235 km/hr was carried forward to represent relatively common windy conditions. A lower bound wind speed of 10 km/hr was carried forward to represent routine conditions.

Table 4: Monthly and Annual Air Temperature Statistics for the Project

Air Temperature (°C)							
Month	**Minimum**	**25th Percentile**	**Median**	**75th Percentile**	**Maximum**	**Mean**	**Standard Deviation**
January	-40.3	-27.2	-18.8	-12.4	4.83	-19.5	9.48
February	-38.9	-22.9	-16.1	-9.60	4.49	-16.4	8.86
March	-32.5	-15.3	-8.33	-2.61	8.06	-9.36	8.42
April	-23.12	-3.11	1.21	4.62	20.7	0.36	6.56
May	-10.0	4.89	8.26	12.4	24.6	8.45	5.43
June	1.76	11.8	14.6	17.0	25.6	14.4	3.85
July	7.38	14.8	16.7	19.2	25.9	16.9	3.15
August	3.27	12.3	15.4	17.9	26.4	15.1	4.00
September	-2.98	5.94	9.20	12.3	22.3	9.14	4.44
October	-19.9	-1.37	1.59	4.89	17.5	1.56	5.10
November	-35.2	-13.7	-7.74	-3.09	6.36	-8.88	7.22
December	-42.9	-23.6	-15.8	-9.73	3.61	-17.0	9.32
Annual Average	**-19.5**	**-4.78**	**0.01**	**4.24**	**15.9**	**-0.43**	**6.32**

°C = degrees Celsius; Source: Data presented is based on European Re-analysis Interim (ERAI) data for the Project published by the European Centre for Medium-Range Weather Forecasts (ECMWF 2019) compiled by Golder (2019c).

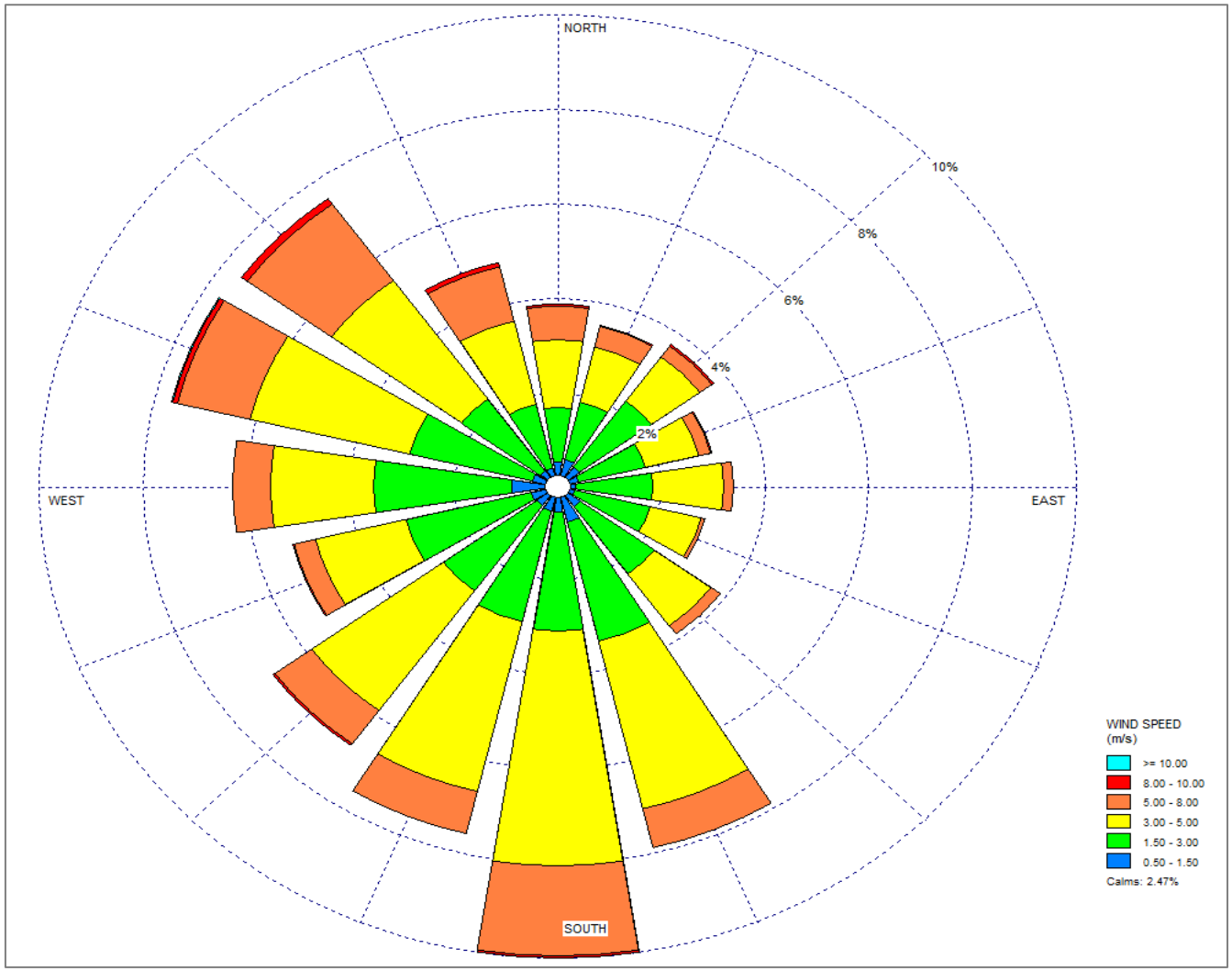


Figure 3: NexGen Rook I Weather Station, Windrose Open Water Season, 2015 to 2018

4.3 Patterson Lake Conditions

4.3.1 General

Several characteristics of the receiving waterbody (i.e. Patterson Lake) combine to affect the movement and spread of a plume and the performance of a diffuser. These characteristics include water depth, lake currents that affect mixing of the plume with ambient water, and water temperature and chemistry (total dissolved solids) that affect the ambient water density. The following sections describe the characteristics of Patterson Lake that were considered for developing the diffuser design.

4.3.2 Lake Bathymetry

The North Arm of Patterson Lake is divided into the West Basin and East Basin separated by a narrow and shallow sand sill with spit formations forming on either side. The selected site option is located in the North Arm – West Basin of Patterson Lake with the diffuser located approximately 750 m west of the narrows at a depth of 10 m.

Patterson Lake bathymetry data was collected by NexGen between June 15, 2016 and September 15, 2016 using a Trimble R10 global positioning system (GPS) with boat mounted echosounder. The local bathymetry is shown in Figure 2. To the east and south east of the selected diffuser location, the water depth is shallow and the bed slope is gradual. To the west and south west of the selected diffuser location, the bed slope is steep and drops off rapidly with depths increasing to approximately 40 m.

4.3.3 Lake Water Level

Patterson Lake water surface elevation (WSE) fluctuates throughout the year with a WSE of 498.79 masl, being representative of the normal water level. The surveyed WSE was 498.599 masl on August 8, 2018 and 498.510 masl on September 29, 2018 (see Figure 3). Both of these elevations were relative to the geodetic benchmarks established on the shore of Patterson Lake near the NexGen exploration camp.

Based on the results of preliminary hydraulic modelling completed using HEC-RAS for the Patterson Lake outlet channel (Clearwater River below Patterson Lake), the lake elevation would have an approximate range of 498.1 m (during droughts approaching zero outflow conditions) to 499.3 m (100-year flood level). The typical annual range of lake levels would be 498.5 masl to 499.0 masl.

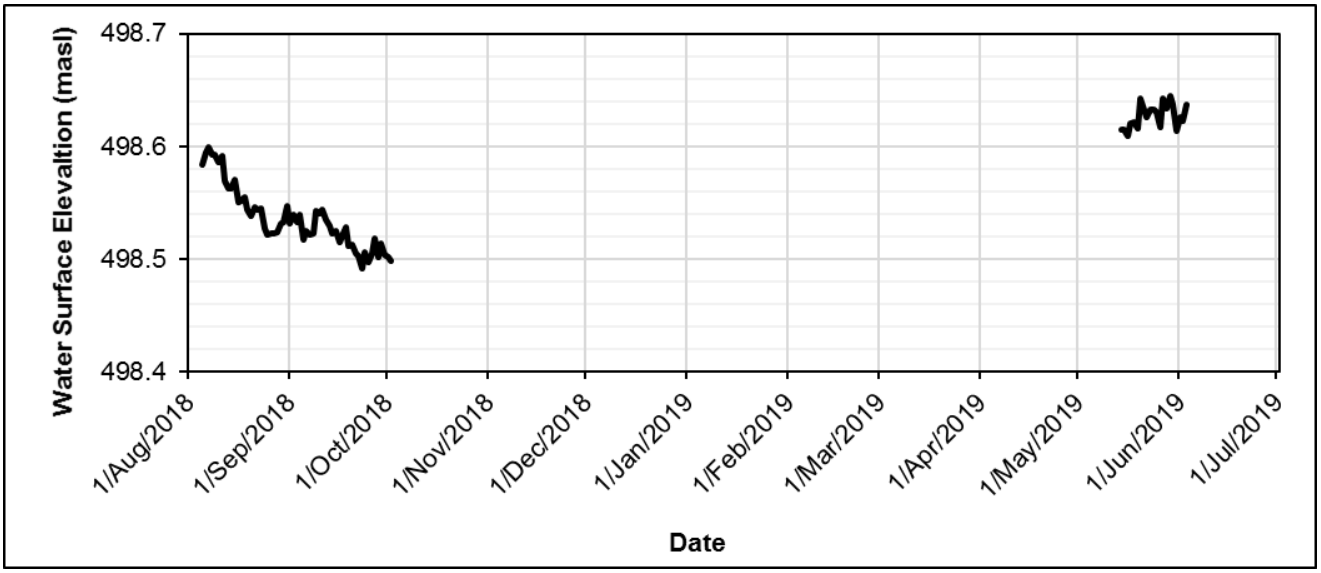


Figure 4: Observed Daily Patterson Lake Water Surface Elevation (Golder 2019)

4.3.4 Lake Water Temperature

Lake water temperature observations were made concurrently with lake water level measurements at CR-WB-MS-002 in 2018 and 2019 (Figure 1).The range of water temperature observed at CR-WB-MS-002 for the period from 2018-2019 are presented in Figure 5. The water temperature was measured using a Solinst Levellogger installed beneath 0.5 m to 1.0 m of water surface. The continuous water temperature measurements are confined to the open-water period. The peak water temperature occurred in early August 2018 at 20°C with minimum observed temperatures of 5°C measured in May 2019 shortly after the lake periphery became ice free.

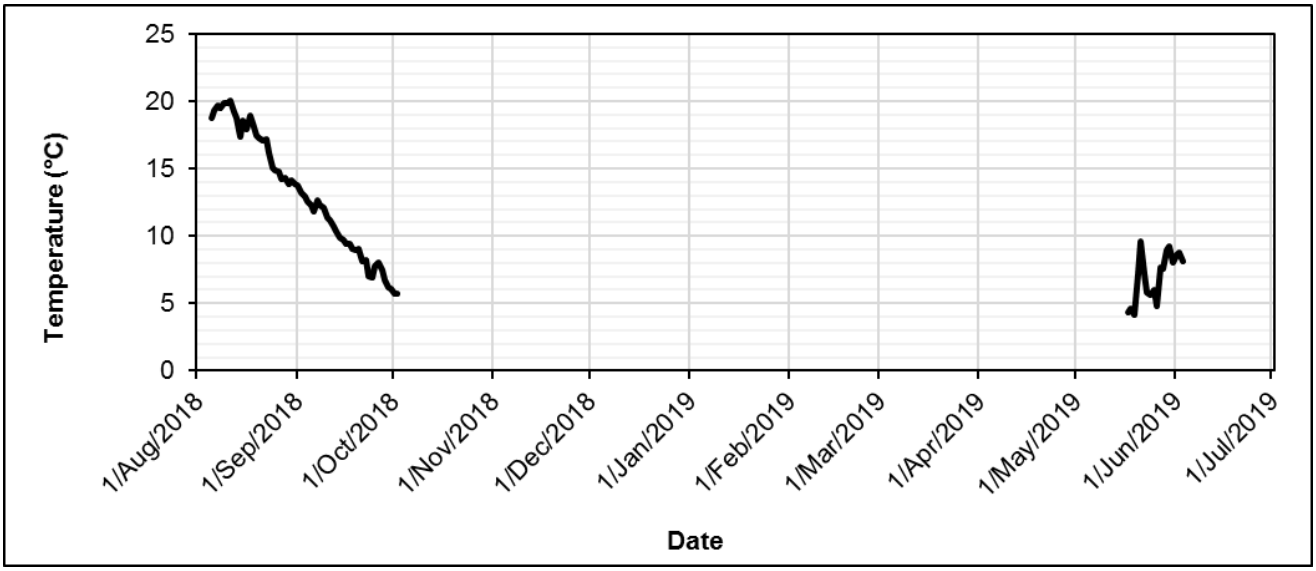


Figure 5: Observed Patterson Lake Water Temperature at a Depth of Approximately 0.5 m in 2018-2019 (Golder 2019)

The temperature profiles collected by CanNorth (2019) at Patterson Lake North Area 1 on August 2, 2018 and September 29, 2018 are shown in Figure 6. A series of additional temperature profiles (Figure 7) were observed by CanNorth on July 30, 2019 at depths of 3.9 m, 8.1 m, and 14.7 m in the vicinity of the selected diffuser location.

Figures 6 and 7 both show water temperature stratification at a depth of approximately 9 m from the water surface. The maximum stratification depth allowable in CORMIX is 60% of the total water depth, which is 6 m below the water surface when the total depth is 10 m. Three stratification depths (i.e. 4, 5 and 6 m) were simulated to test the sensitivity of diffuser performance. It was assumed that if a plume can penetrate the stratification interface at a depth of 6 m below water surface, it can also penetrate the stratification interface at depths greater than 6 m.

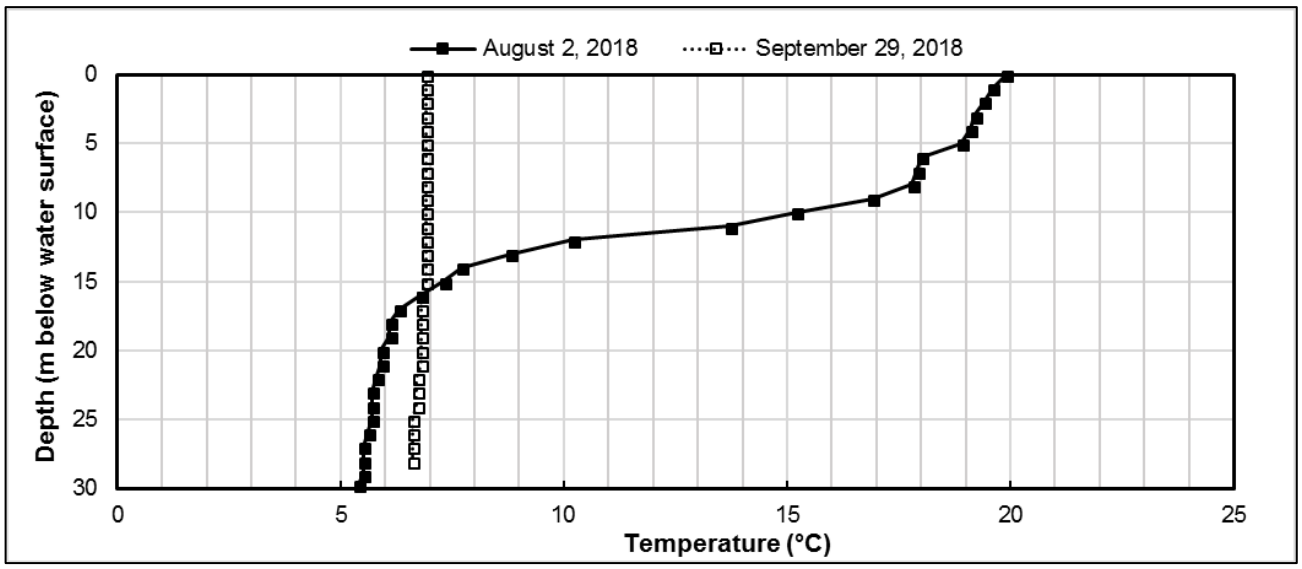


Figure 6: Temperature Profile Observed at Patterson Lake North Area 1 during 2018 by CanNorth (2019)

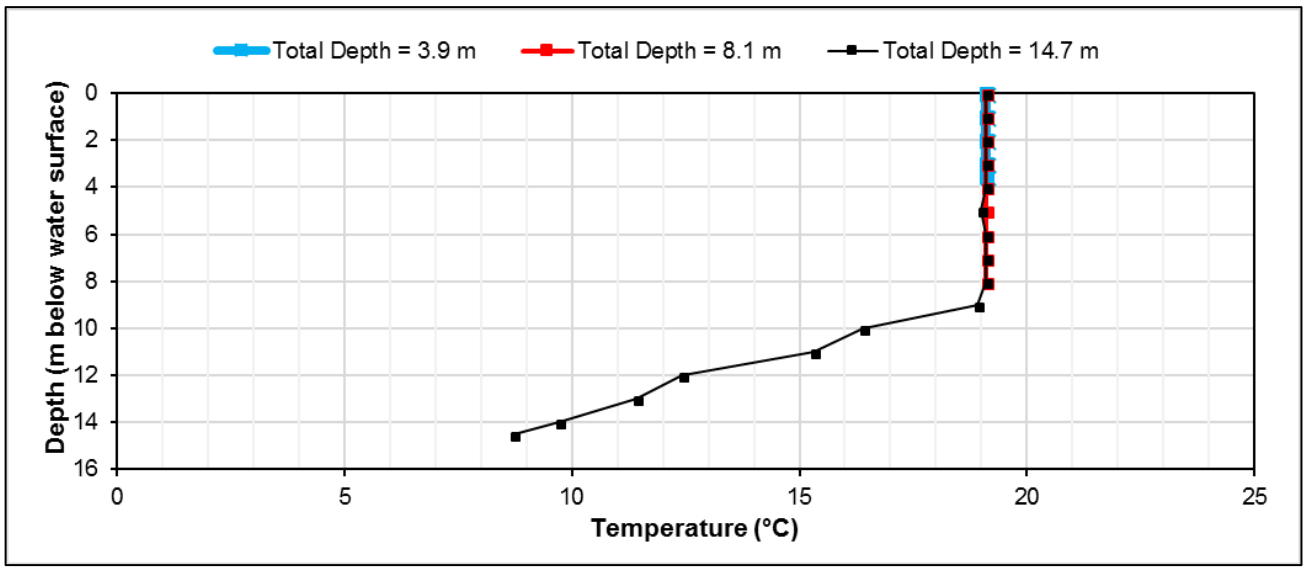


Figure 7: Temperature Profile Observed along the Proposed Pipeline Alignment at Depths of 3.9 m, 8.1 m and 14.7 m on July 30, 2019 by CanNorth (2019)

4.3.5 Bed Substrate

A bed substrate sample was collected near the selected diffuser location on May 16, 2019. The bed was found to be uniform and comprised of medium to fine grained sand. Characteristic particle sizes are summarized in Table 5. The full grain size distributions analysed for each of the samples are included in Appendix B.

The critical shear stress for disturbing the bed substrate materials was calculated using Yalin's curve (Yalin 1977) based on the median particle diameter of 0.294 millimetres (mm) and water temperature of 5°C. The critical shear velocity was calculated to be 0.015 metres per second (m/s) corresponding to a critical shear stress of 0.213 newtons per square metre (N/m²).

Table 5: Characteristic Particle Sizes of Bed Substrate Samples Collected near the Selected Diffuser Location

Waterbody	Date	Easting (m)	Northing (m)	Depth (m)	D_{15} (mm)	D_{50} (mm)	D_{85} (mm)
Patterson Lake	May 16, 2019	60280	6394011	8	0.185	0.294	0.398

m = metres; mm = millimetres

4.3.6 Lake Currents

Detailed information on lake current was not available at the time of this study. For this reason, current was estimated using 2% of the characteristic wind speeds on the lake. The average lake current is typically in the range of 1 to 3% of average wind speed (Heaps and Jones 1987) and an average value of 2% was used to estimate the lake current speed based on the wind speed.

Under ice-cover conditions, the lake current is estimated to be very small. Because the CORMIX model requires a non-zero ambient current value, calm conditions were represented by having a very small current speed of 0.001 m/s.

For the open-water season, a relatively low lake current speed equal to 0.055 m/s corresponds to persistent wind speed of 10 km/hr, and a relatively high lake current speed equal to 0.140 m/s corresponds to persistent wind speed of 25 km/hr. A calm condition during the open-water season was also assessed as a worst case.

Based on the configuration of Patterson Lake, the current direction is estimated to be predominantly from east to west at the selected diffuser location.

4.3.7 Lake Water Quality

Baseline lake ambient specific conductivity was measured by CanNorth (2019) at Patterson Lake North Area 1 on August 2, 2018 and September 29, 2018. Observations of specific conductivity in micro-Siemens per centimetre (µS/Cm) were converted to total dissolved solids (TDS) in milligrams per litre (mg/L) using a coefficient of 0.64 as recommended for natural waters by Maidment (1994).

TDS at Patterson Lake North Area 1 was observed to be approximately 24 mg/L and consistent over the range of depths observed in the profile on both dates. Golder collected a vertical water quality profile near the selected diffuser location on March 25, 2019 and the observed TDS concentration of 31 mg/L was consistent through the water column (Golder 2019d).

4.3.8 Lake Ice Thickness

Ice thickness on the lake was measured weekly during the winter of 2018-2019. The ice thickness measurements coincided with lake water pumping for mineral exploration drilling. The ice thickness was measured at ten pumping locations and at intervals along the access road to the pumping locations in the Patterson Lake North Arm near the selected diffuser location (NexGen 2019). The maximum ice thickness was approximately one metre and was observed during the first two weeks of March.

4.3.9 Duration of Lake Ice Cover

The duration of ice cover on Patterson Lake was estimated by reviewing the historic Sentinel-2 L1C and Landsat 8 satellite images available via the SentinelHub Playground Application (SentinelHub 2019). The satellite images are available from 2013 to 2019 on a near daily frequency contingent on cloud coverage.

The formation of continuous ice cover was variable from year to year with the onset of ice cover typically beginning in early November and with Patterson Lake being fully ice covered by the third week in November. Ice typically formed first on the North Arm – East Basin with full coverage of the North Arm – West Basin and South Arm following roughly one to two weeks later.

The North Arm – East Basin is typically the first area to become ice free in the last week of April or first week of May with the North Arm – West Basin and South Arm becoming fully ice free by the end of May. There is uncertainty in the exact date of break up due to the availability of satellite images. The summary in Table 6 should be considered accurate to within one week of the actual date of ice formation or break up. A conservative period of ice coverage based on historic observations between 2013 and 2019 would be from November 1 to June 1 or roughly seven months of the year. A typical sequence of Landsat 8 satellite images showing ice formation in fall 2014 and break up in 2015 is presented in Figure 8.

Table 6: Summary of Patterson Lake Ice Cover Formation and Breakup Dates based on Sentinel-2 L1C and LandSat 8 Satellite images

Year	Patterson Lake Ice Cover Formation		Patterson Lake Ice Cover Break Up	
	Start Date	End Date	Start Date	End Date
2013	05-Nov-2013	21-Nov-2013	20-May-2013	29-May-2013
2014	08-Nov-2014	24-Nov-2014	16-May-2014	01-Jun-2014
2015	20-Nov-2015	27-Nov-2015	26-Apr-2015	19-May-2015
2016	20-Nov-2016	08-Dec-2016	28-Apr-2016	28-May-2016
2017	07-Nov-2017	20-Nov-2017	08-May-2017	24-May-2017
2018	27-Oct-2018	08-Nov-2018	04-May-2018	19-May-2018
2019	No Data	No Data	07-May-2019	24-May-2019

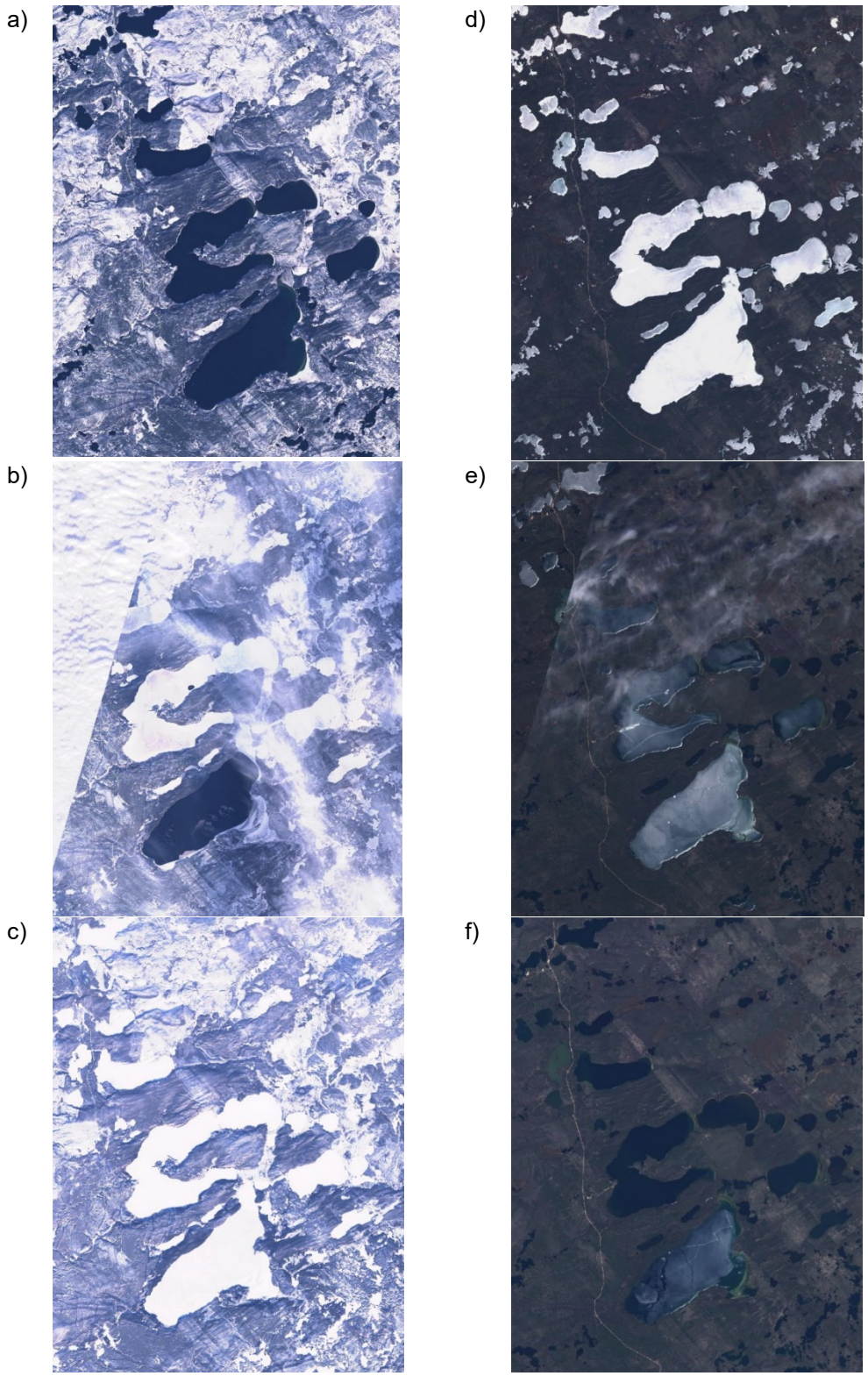


Figure 8: Typical Sequence of Landsat 8 Satellite Images showing ice formation in fall 2014 in the left column with a) November 8, 2014, b) November 17, 2014, and c) November 24, 2014 alongside Ice Break up in 2015 from top to bottom on d) April 26, 2015, e) May 12, 2015, and f) May 19, 2015

4.4 Aquatic Habitat

The proposed diffuser location is in the North Arm – West Basin of Patterson Lake. It is sited in a location that is estimated to have favourable ambient currents in carrying discharged treated effluent away from the diffuser. A conceptual pipeline alignment connecting the diffuser to the location of the treated effluent monitoring ponds would intersect a section of shoreline shown on Figure 9. This section of shoreline, referred to as HS4 (CanNorth 2019) has the following characteristics:

- The riparian zone is forested to the bank with vegetation consisting of trees and shrubs. The bank slope is gradual with slope less than 15°.
- Littoral bed substrate consists of 95% sand and 5% organics.
- All sources of cover including large woody debris, aquatic vegetation, rock, overhanging vegetation, undercut, surface turbulence were noted to be absent.
- Bottom slope was gradual with a slope less than 15° and the depth at 5 m from shore was noted to be 0.2 m.
- HS4 was noted to be not suitable spawning habitat for all large bodied fish included in the assessment except for yellow perch for which it would only be marginally suitable.

Figure 9: Patterson Lake Shoreline at the Proposed Location of the Diffuser Pipeline Entering the Lake (May 16, 2019)

4.5 Mine Site Infrastructure

The proposed layout of the effluent treatment plant and associated ponds are located in the northwest corner of the proposed mine site footprint (Figure 10). The effluent treatment plant will remove elements of concern to produce water that is suitable for release to the environment. The effluent treatment plant will treat mill effluent, underground mine water, and site runoff from potentially contaminated areas.

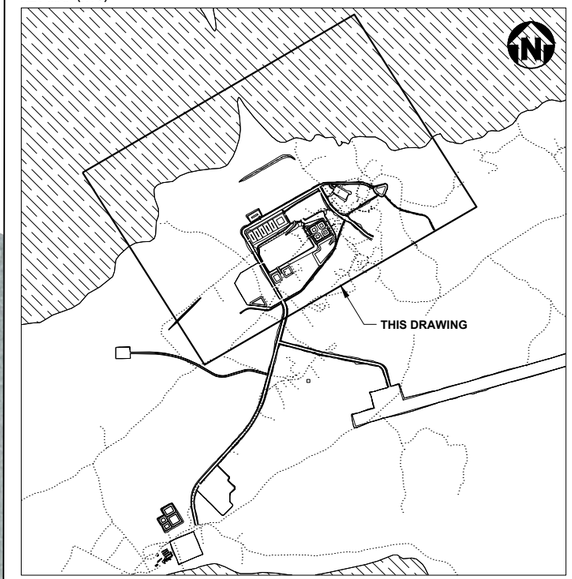
A total of six process ponds are proposed to accompany the effluent treatment plant. From west to east, there are four monitoring ponds, one contingency pond, and one feed settling pond. Treated effluent from the effluent treatment plant will be stored in the monitoring ponds until acceptable water quality has been confirmed for release to the environment.

The nominal rate of treated effluent discharge will be 262 cubic metres per hour (m^3/hr) (NexGen 2019c). However, the discharge from the monitoring ponds to Patterson Lake will be operated in batch mode. Pond emptying will have a six-hour target emptying time and the design discharge rate from the ponds to the lake is 833 m^3/hr (Boehm personal communication 2019a).

The top of the pond berm is 534.50 masl which accounts for 1.0 m above the operational high-water level of 533.50 masl. The bottom of these ponds and minimum operational water level is 528.50 masl and, as a result, the operating range is 5 m from 528.50 masl to 533.50 masl.

The proposed alignment of the pipeline on land has been constrained within the Project mineral lease boundary shown in Figure 1.

KEY MAP (NTS)



LEGEND

MONITORING / SETTLING PONDS

NOTE(S)

1. ALL UNITS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

REFERENCE(S)

1. BASE MAP TAKEN FROM NEXGEN DRAWING, FILENAME '2100-DD10-SKT-00002_08Aug2019.dwg.
2. EXISTING GROUND LIDAR PROVIDED BY NEXGEN, FILENAME 2018 Rook1 Lidar_2m Grid.tif.
3. ALL COORDINATES REFERENCE NAD83 UTM ZONE 12.

NOT FOR CONSTRUCTION

0 125 250
1:7,500 METRES

CLIENT NexGen Energy Ltd.

CONSULTANT GOLDER

YYYY-MM-DD	2019-11-29
DESIGNED	SW
PREPARED	CV
REVIEWED	RWP
APPROVED	DL

PROJECT
ROOK I DIFFUSER DESIGN

TITLE
SITE PLAN

PROJECT NO.	CONTROL	REV.	FIGURE
18114335	6000/6010	0	10

4.6 Treated Effluent Quality

Operational data is not available for the proposed treated effluent plant (NexGen 2019a). However, NexGen (2019a) recommended using analytical results of the synthetic treated effluent created from the pilot tests supported by the historical data from the effluent source terms of Rabbit Lake mill (from 2010 to 2015). The source terms for treated effluent quality were provided by NexGen (2019a) and are summarized in Table 7.

The treated effluent temperature provided by NexGen was 8.5°C (Table 7). To be conservative under winter conditions, a temperature of 4°C was used as a lower bound for the treated effluent temperature as this would be the temperature at which water density is the highest.

Table 7: Treated Effluent Source Term Data of Rook I (NexGen 2019a)

Constituents	Unit	Treated Effluent Source Terms
Metals		
Arsenic	µg/L	16.00
Cadmium	mg/L	0.0004
Chromium	mg/L	0.002
Cobalt	mg/L	0.002
Copper	mg/L	0.003
Iron	mg/L	0.070
Lead	mg/L	0.0004
Manganese	mg/L	0.140
Molybdenum	mg/L	0.400
Nickel	mg/L	0.020
Selenium	mg/L	0.007
Uranium	µg/L	73.0
Vanadium	mg/L	0.0002
Zinc	mg/L	0.004
Radionuclides		
Lead-210	Bq/L	0.080
Polonium-210	Bq/L	0.025
Radium-226	Bq/L	0.060
Thorium-230	Bq/L	0.020
General Water Chemistry and Physical Properties		
Ammonia-N (Total)	mg/L	2.50
Ammonia-N (Un-ionize)	mg/L	0.020
Nitrate as N	mg/L	5.00
pH (Lab)	pH Unit	7.0
TSS	mg/L	2
TDS	mg/L	14,300
Conductivity	µS/cm	3,200
Temperature[5]	°C	8.5

µg/L = micrograms per litre, mg/L = milligrams per litre, Bq/L = Becquerels per litre, µS/cm = micro-Siemens per cm, °C = degrees Celsius.

4.7 Dilution Requirement

The required minimum dilution factor at the edge of the 100 m mixing zone was calculated for the parameters which effluent concentrations have guidelines. To be conservative in the absence of modelled lake-wide concentrations at the time of this study, the 95th percentile of the measured background concentrations were used. A conservative approach was taken in this instance since the concentrations of some parameters may increase during operation. The criterion or guideline for each parameter was set as the most stringent guideline for the protection of aquatic life (freshwater) from either the Canadian Council of Ministers of the Environment (CCME) long term guidelines or the WSA objectives.

Based on the analysis, the most restrictive parameter is selenium that requires a minimum dilution factor of 7.7 (Table 8). A sensitivity analysis was conducted whereby background concentrations were increased by up to 40% to assess the sensitivity of the dilution factor to background concentrations and to better understand steady-state conditions once treated effluent has fully mixed with Patterson Lake during operation. In all instances, the minimum dilution factor did not exceed 8. To be conservative, a minimum dilution factor of 10 was selected for designing the diffuser.

Table 8: Calculated Dilution Factors at the Edge of the 100 m Mixing Zone

Parameter	Units	Effluent Concentration	Background (95th Percentile)	Criteria or Guideline[a]	Required Dilution Factor
Ammonia (Total) as N	(µg/L)	2,500	58	5,548[b]	0.4
Ammonia (Unionized) as N	(µg/L)	20	0.11	19	1.1
Chloride	(µg/L)	N/A	600	120	N/A
Nitrate as N	(µg/L)	5,000	53.5	3,000	1.7
Phosphorus	(µg/L)	N/A	50	10	N/A
Sulphate	(µg/L)	N/A	1890	N/A	N/A
Arsenic	(µg/L)	16	0.143	5	3.3
Cadmium	(µg/L)	N/A	0.01	0.017[c]	N/A
Cobalt	(µg/L)	2	0.1	N/A	N/A
Copper	(µg/L)	3	0.5	2	1.7
Lead	(µg/L)	0.4	0.1	1	0.3
Magnesium	(µg/L)	N/A	1,469	N/A	N/A
Mercury	(µg/L)	N/A	0.004	0.026	N/A
Molybdenum	(µg/L)	400	0.1	73	5.5
Nickel	(µg/L)	20	0.5	25	0.8
Selenium	**(µg/L)**	**7**	**0.1**	**1**	**7.7**
Sodium	(µg/L)	N/A	1,500	N/A	N/A
Uranium	(µg/L)	79	0.1	15	5.3
Zinc	(µg/L)	4	2.72	7	0.3
Pb-210	(Bq/L)	0.08	0.037	N/A	N/A
Po-210	(Bq/L)	0.025	0.019	N/A	N/A
Ra-226	(Bq/L)	0.06	0.01	N/A	N/A
Th-230	(Bq/L)	0.02	0.01	N/A	N/A

µg/L = micrograms per litre; Bq/L = Becquerels per litre

Notes:

a. Unless otherwise noted, criteria and guidelines from CCME freshwater long term objectives (CCME 2003)

b. Criteria based on summer conditions for unionized ammonia

c. Saskatchewan WSA Surface Water Quality Objectives (WSA 2015)

4.8 Parameter Values

The selected parameter values for analyzing the diffuser dilution performance and for supporting the diffuser design are presented in Table 9.

Table 9: Selected Parameter Values

Criterion	Units	Value	Reference/Section Number
Monitoring Pond Volume	m^3	5,000	Wood 2019
Monitoring Pond Emptying Time	hrs	6	Boehm pers. Comm. 2019b
Diffuser Discharge Rate	m^3/hr	833	Boehm pers. Comm. 2019a
Treated Effluent Temperature (Design Temperature)	°C	8.5	NexGen 2019a, Section 4.6
Treated Effluent Temperature in Winter (Lower Bound)	°C	4.0	Section 4.6
Treated Effluent Temperature in Summer (Upper Bound)	°C	20.0	Section 4.6
Treated Effluent TDS Concentration	mg/L	14,300	NexGen 2019a
Lake Water Temperature Range	°C	5 to 20	Golder (2019a); Section 4.2.
Lake Current Speed – Ice Cover	m/s	0.001	Section 4.3.5
Lake Current Speed – Open Water (Lower Bound)	m/s	0.055	Section 4.3.5
Lake Current Speed – Open Water (Upper Bound)	m/s	0.140	Section 4.3.5
Lake Current Speed – Open Water (Worst Case – Calm Condition)	m/s	0.001	Section 4.3.5
Lake Water Temperature Vertical Distribution – Ice Cover	°C	0 °C under the ice, 4 °C at lake bottom, linear distribution in between	Section 4.3.2
Lake Water Temperature Vertical Distribution – Open Water	°C	Stratified conditions: 20°C in top layer and 6°C in bottom layer. The depth of stratification interface was simulated as 4m, 5m, and 6m.	Section 4.3.2
Lake TDS Concentration – Ice Cover	mg/L	31 and 300	31 is from Golder 2019b; Section 4.3.6; 300 is a conservative upper bound
Lake TDS Concentration – Open Water	mg/L	24	CanNorth 2019; Section 4.3.6
Lake Ice Thickness	m	1.0	NexGen 2019b; Section 4.2.9

hrs = hours, m = metres, mg/L = milligrams per litre, m^3 = cubic metres, m^3/hr = cubic metres per hour

4.9 Diffuser Design Basis

Diffusers are typically designed to achieve maximum dilution over a relatively short distance for the design discharge and to achieve targeted dilution performance at the boundary of regulatory mixing zone. Golder designed the diffuser to achieve a minimum dilution factor of 10 at the edge of the 100 m mixing zone over a range of conditions that the diffuser will be operating under.

This design approach was adopted for satisfying the general objectives for treated effluent discharges and Guidelines for Effluent Mixing Zones as laid out by WSA (2015), which are noted in Section 4.6. In addition to satisfying the regulatory and performance requirements, the diffuser design should facilitate ease of construction, installation and maintenance.

5.0 PROPOSED DESIGN

5.1 Design Summary

The proposed design for the treated effluent outfall consists of a pipeline and a diffuser as shown in the drawings in Appendix C. The treated effluent will be conveyed by a proposed high density polyethylene (HDPE) pipeline with inside diameter of 0.33 m (i.e. 16 inch DR11, 200 psi, see specification by J-M Manufacturing Company) and an outside diameter of 0.40 m. The pipeline has a length of 770 m from the monitoring ponds to the shoreline. The elevation drop along the pipeline alignment will be approximately 29.71 m from an assumed minimum operating pond water level of 537 masl in the monitoring ponds to 498.79 masl at the shoreline. The pipeline will continue approximately 750 m from the shoreline into Patterson Lake and discharge through a diffuser at the selected location with a water depth of approximately 10 m.

The conceptual configuration of the diffuser is summarized as follows:

- The diffuser will consist of the 16 inch pipe and one vertical nozzle which has an inside diameter of 0.194 m.
- The top elevation of the 10 inch vertical nozzle will be one metre above the lakebed and 0.65 m above the 16 inch feed pipe.

5.2 Dilution Performance Analysis

5.2.1 Dilution Modelling

Detailed mixing and dilution modelling was conducted using the CORMIX model system (Doneker and Jirka 2007) to optimize the design and assess the dilution performance of the diffuser under a range of treated effluent and ambient conditions. The CORMIX model was developed at Cornell University and has been endorsed by the U.S. Environmental Protection Agency (USEPA). The CORMIX model system uses a physically-based, reliable and empirical approach by assembling all available data and resulting formulas for analysing and modelling jets and plumes.

Ambient conditions in Patterson Lake vary throughout the year. The purpose of defining the ambient conditions for simulation is to simplify representation of the variable lake ambient current and water temperature conditions in Patterson Lake and to provide the model inputs for steady-state simulation of the resulting jets or plumes from the diffuser discharge.

Three typical lake ambient conditions in Patterson Lake were defined for the modelling analysis as follows:

- Ice-cover conditions for the seven month period (November to late May) when the lake is ice-covered;

- Open-water conditions during spring with no stratification; and
- Open-water conditions during summer with stratification;

5.2.2 Ice-Cover Conditions

Table 10 presents the inputs and outputs the CORMIX modelling under ice-cover conditions. Four scenarios composed of two treated effluent temperatures (8.5°C and 4.0°C) and two ambient TDS concentrations (31 mg/L and 300 mg/L) were modelled.

The modelling results of the ice-cover scenarios show the following:

- The dilution factor at the edge of 100 m mixing zone is not sensitive to the treated effluent temperature and ambient TDS concentration.
- At approximately 30 m from the diffuser, the dilution factor would attain a value of 38 which is much greater than the required minimum dilution factor of 10.
- The maximum flow velocity near the water surface is up to 1.1 m/s. This means the ice above the diffuser will be subjected to impingement from a vertical jet with noticeable velocity.

Table 10: Inputs and Outputs of CORMIX Model Runs for the Ice-cover Scenario

Category	Description	Symbol	Units	Scenario			
				1	2	3	4
Treated Effluent	Flow rate	Q	(m^3/h)	833			
			m^3/s	0.231[a]			
	TDS concentration	C_{01}	(mg/L)	14,300			
	Temperature	T_0	(°C)	8.5	4.0	8.5	4.0
	Density	ρ	(kg/m^3)	1011.04	1011.38	1011.04	1011.38
Ambient	Lake current speed	u_a	(m/s)	0.001			
	Lake water depth	H	(m)	10[a]			
	Ice thickness	Hi	(m)	1			
	Lake water temperature under ice	T_{as}	(°C)	0			
	Lake water temperature near bottom	T_{ab}	(°C)	4			
	Lake TDS concentration	C_{ad}	(mg/L)	31		300	
	Lake water density under ice	ρ_{a01}	(kg/m^3)	999.89[a]		1000.11[a]	
	Lake water density near bottom	ρ_{a02}	(kg/m^3)	1000.02[a]		1000.24[a]	
Discharge	Diffuser height above lakebed	h	(m)	1[a]			
	Number of nozzles	N	-	1[a]			
	Single nozzle discharge	q	(m^3/s)	0.231[a]			
	Nozzle inside diameter	d	(inch)	7.63 [10-inch DR 7.3(318 psi)]			
			(m)	0.1938[a]			
	Nozzle cross sectional area	a	(m^2)	0.0295			
	Nozzle exit flow velocity	V_0	(m/s)	7.84			

Table 10: Inputs and Outputs of CORMIX Model Runs for the Ice-cover Scenario

Category	Description	Symbol	Units	Scenario			
				1	2	3	4
Dilution Performance	Size of unstable recirculation region	x	(m)	30	29	30	29
	Bulk dilution factor at a distance of 100 m from the diffuser	S		38	38	38	38
	Maximum flow velocity at water surface	Vs	(m/s)	1.1[b]	1.1[b]	1.1[b]	1.1[b]

°C = degrees Celsius, kg/m^3 = kilograms per cubic metre, m = metre, m/s = metres per second, m^2 = square metre, mg/L = milligrams per litre
Note a: Inputs to the CORMIX model.
Note b: Based on the modelling results by assuming water depth of 50 m so that the flow velocity at the lake surface can be estimated.

5.2.3 Open-Water with No Stratification

Table 11 presents the inputs and outputs of the CORMIX model runs for the open-water scenarios with no vertical variation of the ambient conditions. A total of six scenarios composed of two different effluent temperatures (8.5°C and 20°C) and three ambient current speeds (0.001 m/s, 0.055 m/s and 0.14 m/s) were modelled.

For each of the six scenarios, four model runs were conducted for four different ambient temperatures (5°C, 10°C, 15°C and 20°C). A total of 24 model runs were conducted. The modelling results for the ice-cover conditions indicate that the diffuser dilution performance is not sensitive to the ambient TDS concentration. Therefore only one ambient TDS concentration of 24 mg/L was used as input in the 24 model runs.

The modelling results for the open-water conditions with no stratification show the following:

- At the edge of the 100 m mixing zone, the dilution factor will be at least 28 which is much higher than the required minimum dilution factor of 10.
- The maximum flow velocity at the lake water surface is up to 1.0 m/s. This may result in a small (approximately 0.05 m) local water level rise.
- The lowest dilution factor and the lowest flow velocity at the lake surface will occur for the case with an ambient current speed of 0.14 m/s. This is because the relatively high current speed has dual effects (i.e., it will accelerate mixing but will also reduce the time available for mixing before the resulting plume reaches the edge of the 100 m mixing zone).

5.2.4 Open-Water with Vertical Stratification

Table 12 presents the inputs and outputs of the CORMIX model runs for the open-water scenarios with vertical variation of the ambient conditions. A total of three scenarios composed of three ambient current speeds (0.001 m/s, 0.055 m/s and 0.14 m/s) were modelled.

For each of the three scenarios, three model runs were conducted for three different stratification interface depths from the lake water surface (4 m, 5 m, and 6 m). For a total water depth of 10 m, the maximum stratification interface depth allowable in CORMIX is 6 m which is 60% of the total lake water depth. For stratification interface depth greater than 6 m, the dilution performance is expected to be better than that for stratification depth of 6 m.

The modelling results for the open-water conditions with stratification show the following:

- At the edge of the 100 m mixing zone, the dilution factor will be at least 28 which is much higher than the required minimum dilution factor of 10.
- For the lake conditions with stratification interface depth of 6 m or greater, the dilution factor will be at least 46.

The maximum flow velocity near the lake water surface cannot be estimated using CORMIX. However, the maximum flow velocity near the lake water surface is not expected to be greater than those for the open-water conditions with no stratification.

Table 11: Inputs and outputs of CORMIX Model Runs for the Open-Water Conditions with No Vertical Stratification

Category	Description	Symbol	Units	Scenario					
				1	2	3	4	5	6
Treated Effluent	Flow rate	Q	(m^3/d)	833					
			m^3/s	0.231[a]					
	TDS concentration	C_{01}	(mg/L)	14,300					
	Temperature	T_0	(°C)	8.5			20.0		
	Density	□	(kg/m^3)	1011.04[a]			1009.07[a]		
Ambient	Lake current speed	u_a	(m/s)	0.001[a]	0.055[a]	0.140[a]	0.001[a]	0.055[a]	0.140[a]
	Lake water depth	H	m	10[a]					
	Lake TDS concentration	C_{ad}	(mg/L)	24					
	Lake water temperature	T_a	(°C)	5 / 10 / 15 / 20					
	Lake water density	ρ_a	(kg/m^3)	1000.01[a] / 999.75[a] / 999.15[a] / 998.25[a]					
Diffuser	Diffuser height above lakebed	h	(m)	1[a]					
	Number of nozzles	N		1[a]					
	Single nozzle discharge	q	(m^3/s)	0.231[a]					
	Nozzle inside diameter	d	(inch)	7.63 [10-inch DR 7.3(318 psi)]					
			(m)	0.1938[a]					
	Nozzle cross sectional area	a	(m^2)	0.0295					
	Nozzle exit flow velocity	V_0	(m/s)	7.84					
Dilution Performance	Dilution factor at a distance of 100 m away from the diffuser	S		45/46/46/47	45/46/46/48	28/28/28/50	43/43/44/45	42/43/44/45	28/28/28/28
	Maximum flow velocity at water surface	V_s	(m/s)	0.99[b]/0.98/[b] 0.97[b]/0.96[b]	0.96[b]/0.95[b]/ 0.95[b]/0.94[b]	0.78[b]/0.78[b]/ 0.77[b]/0.76[b]	1.0[b]/1.0[b]/ 0.99[b]/0.99b	0.97[b]/0.97[b]/ 0.97[b]/0.96[b]	0.80[b]/0.80[b]/ 0.79[b]/0.78[b]

°C = degrees Celsius, kg/m3 = kilogram per cubic metre, m = metre, m3/d = cubic metres per day, m3/s = cubic metres per second, mg/L = milligrams per litre.

Note a: Inputs to the CORMIX model.

Note b: Based on the modelling results by assuming water depth of 50 m so that the flow velocity at the lake surface can be estimated.

Table 12: Inputs and outputs of CORMIX Model Runs for the Open-Water Conditions with Vertical Stratification

Category	Description	Symbol	Units	Scenario		
				1	2	3
Effluent	Flow rate	Q	m^3/d	833		
			m^3/s	0.231[a]		
	TDS concentration	C_{01}	mg/L	14,300		
	Temperature	T_0	°C	8.5		
	Density	ρ	kg/m^3	1011.04[a]		
Ambient	Lake current speed	u_a	m/s	0.001[a]	0.055[a]	0.140[a]
	Lake water depth	H	m	10[a]		
	Lake TDS concentration	C_{ad}	mg/L	24		
	Lake surface water temperature	T_{as}	°C	20[b]		
	Lakebed water temperature	T_{ab}	°C	6[b]		
	Lake surface water density	ρ_{as}	kg/m^3	998.25[a]		
	Lakebed water density	ρ_{ab}	kg/m^3	999.99[a]		
	Stratification interface depth from water surface	H_s	m	4 / 5 / 6[a,c]		
Diffuser	Diffuser height	h	M	1[a]		
	Number of nozzles	N		1[a]		
	Single nozzle discharge	q	m^3/s	0.231[a]		
	Nozzle inside diameter	d	Inch	7.63 [10 inch DR 7.3(318 psi)]		
			m	0.1938[a]		
	Nozzle cross sectional area	a	m^2	0.0295		
	Nozzle exit flow velocity	V_0	m/s	7.84		
Dilution Performance	Dilution factor	S		46/46/46 [d]	46/47/47 [e]	28/28/49 [f]

Note a: Inputs to CORMIX model.
Note b: Based on water temperatures measured on August 2, 2018.
Note c: For 10 m depth, the allowable maximum stratification interface depth in CORMIX is 6 m.
Note d: Dilution factor at the edge of unstable recirculation zone which is 28 m from the diffuser.
Note e: Dilution factor at a distance of 100 m from the diffuser.

5.2.5 Control of Resuspension and Entrainment of Lakebed Sediments

The diffuser should be designed to control the flow velocities near the lakebed that will be induced by the resulting jets from the diffuser. The flow velocities near the lakebed needs to be controlled to a low level so that the lakebed sediments will not be entrained into the lake water. The main feature of the diffuser design in controlling the flow velocities near the lakebed and reducing the resulting shear stresses on the lakebed is to have the elevation of the diffuser nozzle opening at one meter above the lakebed.

Critical shear stress parameter is typically used to assess if sediment particles can be resuspended by flowing water. In this study, the critical shear stress was calculated based on the water temperature of 5°C using Yalin's curve (Yalin 1977). Based on the available data, the lakebed at the diffuser is expected to have sediments comprised of medium to fine grained sands with a range of particle sizes (D_{15} = 0.185 mm, D_{50} = 0.294 mm, and D_{85} = 0.398 mm).

The critical shear stress values corresponding to D_{15}, D_{50}, and D_{85} were calculated to be 0.19 Pascals (Pa), 0.21 Pa, and 0.24 Pa, respectively. The entrainment velocity from the diffuser jet, V_e was calculated using the following equation (Rajaratnam 1976):

$$V_e = 0.0277 U_m \quad [1]$$

where U_m is jet centreline velocity. For the design exit flow velocity of 7.84 m/s from the nozzle (U_m = 7.84 m/s), the jet entrainment velocity V_e was calculated to be 0.217 m/s.

It was estimated that the flow velocity distribution between the nozzle exit and the lakebed can be approximated by the following log-law distribution (Chow 1959):

$$\frac{u}{u_*} = 5.75 \log\left(\frac{y}{k_s}\right) + 8.5 \quad [2]$$

where u is horizontal velocity at depth y, u_* is shear velocity, and k_s is Nikuradse roughness height. $u = V_e$ when y = nozzle height of 1.0 m. The average flow velocity V between the nozzle exit and the lakebed can be expressed as:

$$V/u_* = 5.75 \log\left(\frac{y}{k_s}\right) + 6.25 \quad [3]$$

Based on the following Chezy's equation (Chow 1959):

$$V = C\sqrt{yi} \quad [4]$$

where C is Chezy's coefficient and i is the energy slope, Equation 4 can be reformulated as follows:

$$V/u_* = C/\sqrt{g} \quad [5]$$

Chezy's coefficient C was estimated based on Manning's roughness n using the following equation:

$$C = y^{1/6}/n \quad [6]$$

Combining Equations 3, 5 and 6 resulted in the following relation among n, y and K_s:

$$K_s = 12.22y/\exp\left(\frac{0.128y^{\frac{1}{6}}}{n}\right) \quad [7]$$

The manning's roughness n for the lakebed was estimated to be 0.02. For y = 1 m, application of Equation 7 results in K_s = 0.0205 m, and the inputs to Equation 2 result in the following:

$$\frac{0.217}{u_*} = 5.75 \log\left(\frac{1}{0.0205}\right) + 8.5 \quad [8]'$$

Using the above equation, u_* value was calculated to be 0.012 m/s. The corresponding shear stress τ was calculated as follows:

$$\tau = 1000 * u_*^2 = 1000*0.0119^2 = 0.14 \text{ Pa} \quad [9]$$

The shear stress value of 0.14 Pa is less than the critical shear stresses of the three particle sizes mentioned above. Therefore, it is rational to conclude that the diffuser operation will not cause disturbance and entrainment of the lakebed sediments.

5.2.6 Evaluation of Outfall System Head Loss

The total head loss of the outfall system (outfall pipeline plus the diffuser) was evaluated to provide a basis for selecting a minimum pipe diameter so that the available head can still be used to operate the outfall system by gravity. Table 13 presents the inputs and outputs of the outfall system head loss calculation. The system available head is 29.7 m, estimated based on the difference between the pond and lake water surface elevations.

The results shown in Table 13 show that a 16-inch dimeter HDPE pipe (type DR11, 200 psi, see specification from the J-M Manufacturing Company) will result in a total system head loss of 25.2 m, which is less than the available head of 29.7 m. However, the smaller 14-inch pipes would result in the system head losses greater than the available head to operate the system. This confirms that the selected pipe type and size are appropriate for the design.

Table 13: Inputs and Outputs of the Outfall System Head Loss Calculation

Variable	Symbol	Unit	Value		
Inputs for the Main Outfall Pipe					
Pipe length	L	m	1300		
Pipe type			DR 11 (200 psi)	DR 11 (200 psi)	DR 13.5 (160 psi)
Pipe diameter	D	inch	16	14	14
Pipe inside diameter	D_i	m	0.328	0.287	0.300
Discharge	Q	m^3/s	0.231		
Hazen-Williams factor	C		150		
Pipe entrance head loss coefficient	C_{en}		0.5		
Inputs for the Diffuser Nozzle					
Port diameter	D_p	inch	10		
Port inside diameter	D_{pi}	m	0.194		
Port length	l_r	m	0.6	0.65	0.65
Port Hazon-Willian coefficient	C		150		
Head Loss in the Main Outfall Pipe					
Pipe flow velocity	V_p	m/s	2.74	3.58	3.28
Pipe friction head loss	H_{fp}	m	19.83	38.09	30.85
Pipe entrance head loss	H_{en}	m	0.19	0.33	0.27
Pipe total head loss	H_p	m	20.03	38.41	31.12
Head Loss in the Diffuser					
Port flow velocity	V_r	m	7.84		
Port exit head loss	h_{rv}	m	3.14		
Riser entrance head loss coefficient	x_{en}	m	0.60	0.69	0.66
Port entrance head loss	h_{ren}	m	1.89	2.17	2.06
Friction head loss in port	H_{fr}	m	0.119	0.129	0.129
Diffuser total head loss	H_d	m	5.15	5.44	5.33
Total Head Loss in the Outfall System					
System head loss	H_s	m	25.18	43.85	36.45

m = metre; m/s = metres per second; m3/s = cubic metres per second.

5.3 Quantity Estimates

An estimate of the material quantities of the outfall system, including the diffuser, was made based on the selected conceptual design. The estimated quantities are summarized in Table 14.

Table 14: Conceptual Material Quantity Estimate

Material	Properties	Unit	Value
Pipeline – on Land	HDPE Solid Pipe 16 inch diameter, DR 11, 200 psi	m	770
Pipeline – in Lake	HDPE Solid Pipe 16 inch diameter, DR 11, 200 psi	m	753
Diffuser Nozzle	HDPE Solid Pipe 10 inch diameter, DR 7.3, 318 psi	m	0.65

DR = dimension ratio, HDPE = high-density polyethylene, m = metre, psi = pounds per square inch

6.0 CONCLUSIONS AND RECOMMENDATIONS

The conceptual design of the outfall system, including the diffuser, for conveying and discharging the treated effluent from the monitoring ponds to Patterson Lake, consists of a 16 inch HDPE pipeline with a total length of 1,523 m (770 m to the shoreline and 753 m from the shoreline to the diffuser) and a diffuser having one 10 inch vertical nozzle with its opening at a height of 1.0 m above the lakebed.

The conceptual design of the outfall system, including the diffuser, was developed based on the results of the diffuser dilution performance modelling and hydraulic analyses. The results show that the available hydraulic head will be sufficient to operate the system by gravity only, the diffuser operation have higher dilution than the minimum requirement established for the edge of the 100 m mixing zone (dilution factor will be greater than 10), and the induced currents around the diffuser will not cause resuspension and entrainment of the lake bed sediments.

The diffuser operation will increase the flow velocity at the lake water surface, delay ice freeze-up, reduce ice thickness if ice cover is formed, and advance ice break-up, all within a small area around the diffuser.

6.1 Recommendations

The available information in this study is sufficient to support the conceptual design of the diffuser. It is recommended that the design basis and criteria be reviewed and updated if necessary, and the design parameter values be confirmed, refined or updated during Detailed Design phase of the Project.

Signage noting the safety hazards around the diffuser (e.g., high flow velocity and thin ice) should be installed and maintained during diffuser operation.

7.0 CLOSURE

This report was prepared and reviewed by the undersigned.

Golder Associates Ltd.

Prepared By:

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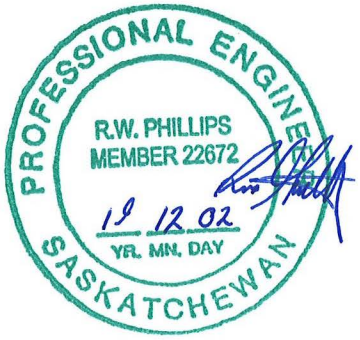

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APPENDIX A

Diffuser Location Option Evaluation

TECHNICAL MEMORANDUM

DATE December 2, 2019 **Reference No.** GAL-042-18114335-TM_Rev1

TO Jeremy Veszi, NexGen Energy Ltd.

CC Sheri Stark, Susan Mathieu, Gerard Van Arkel, Golder

FROM Ross Phillips and Dejiang Long, Golder **EMAIL** ross_phillips@golder.com

CONCEPTUAL DIFFUSER DESIGN: SUMMARY OF PHASE I – DIFFUSER LOCATION SCREENING – REV1

1.0 INTRODUCTION

Golder Associates Ltd. (Golder) has been commissioned by NexGen Energy Ltd. (NexGen) to prepare a conceptual design of a diffuser for discharge of treated effluent from the proposed NexGen Rook I Project (the Project). The proposed receiving waterbody is the North Arm of Patterson Lake. The scope of the conceptual diffuser design has been broken up into two phases: Phase 1 and Phase 2. Phase 1 consists of the tasks necessary to compare options for the location of the diffuser and select a preferred location to carry forward for further analysis. Phase 2 will consist of the tasks required to prepare the conceptual design of the diffuser.

More specifically, Phase 1 consists of the following tasks:

- Review the available information including Patterson Lake bathymetry and the proposed effluent treatment plant design including its location, operational mode, and range of treated effluent discharges.
- Identify three potential outfall locations within Patterson Lake and summarize their advantages and disadvantages.
- Compare and evaluate the potential outfall locations. The evaluation is supported by a high-level mixing analysis, which focuses on generation of some preliminary dilution performance values to support the option evaluation.
- Recommend a preferred outfall location to NexGen for review and approval.

This memorandum documents the basis, method and results of the Phase 1 work. The relevant background information that provides context for location screening is included in this memorandum.

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2.0 BACKGROUND INFORMATION

2.1 Watershed Setting

Patterson Lake is located along the Clearwater River near its headwaters in northwestern Saskatchewan. The drainage area contributing to the Clearwater River where it drains into the North Arm – East Basin of Patterson Lake is 121 square kilometres (km^2). The cumulative watershed area increases to 264 km^2 where the Clearwater River outflows at the southeast corner of Patterson Lake.

2.2 Baseline Monitoring

Various environmental baseline monitoring activities have been ongoing on Patterson Lake since 2018. The aquatic baseline conditions in Patterson Lake were characterized by CanNorth (2019). Several studies were completed by Golder to characterize the hydrological conditions of Patterson Lake, including a summary of 2018 Hydrometric Monitoring Program (Golder 2019a), a baseline geomorphological characterization (2019b), and a regional meteorological and hydrological characterization (Golder 2019c).

Throughout the winter of 2018, NexGen measured ice thickness at the location of pumps located in the North Arm of Patterson Lake, which were operated and maintained in support of the geological exploration drilling programs. Ice thickness was also measured in weekly intervals at the water supply locations along an access road from shore to the pumping locations.

2.3 Patterson Lake Physical Characterization

Patterson Lake can be divided into the North Arm and South Arm oriented approximately southwest to northeast as shown in Figure 1. The North Arm can be further separated into the West Basin and East Basin separated by a narrow and shallow sand sill with spit formations forming on either side (Golder 2019c).

Patterson Lake surface water elevation fluctuates throughout the year with a water surface elevation of 498.8metres above mean sea level (masl), which is representative of the normal water level. The surveyed water surface elevation was 498.6 masl on August 8, 2018 and 498.5 masl on September 29, 2018. Both of these elevations were relative to the geodetic benchmarks established on the shore of Patterson Lake near the camp. Based on the results of preliminary hydraulic modelling completed using HEC-RAS for the Patterson Lake outlet channel (Clearwater River below Patterson Lake), the lake elevation would have an approximate range of 498.1 m (during droughts approaching zero outflow conditions) to 499.3 m (100-year flood level). The typical annual range of lake levels would be 498.5 to 499.0 masl.

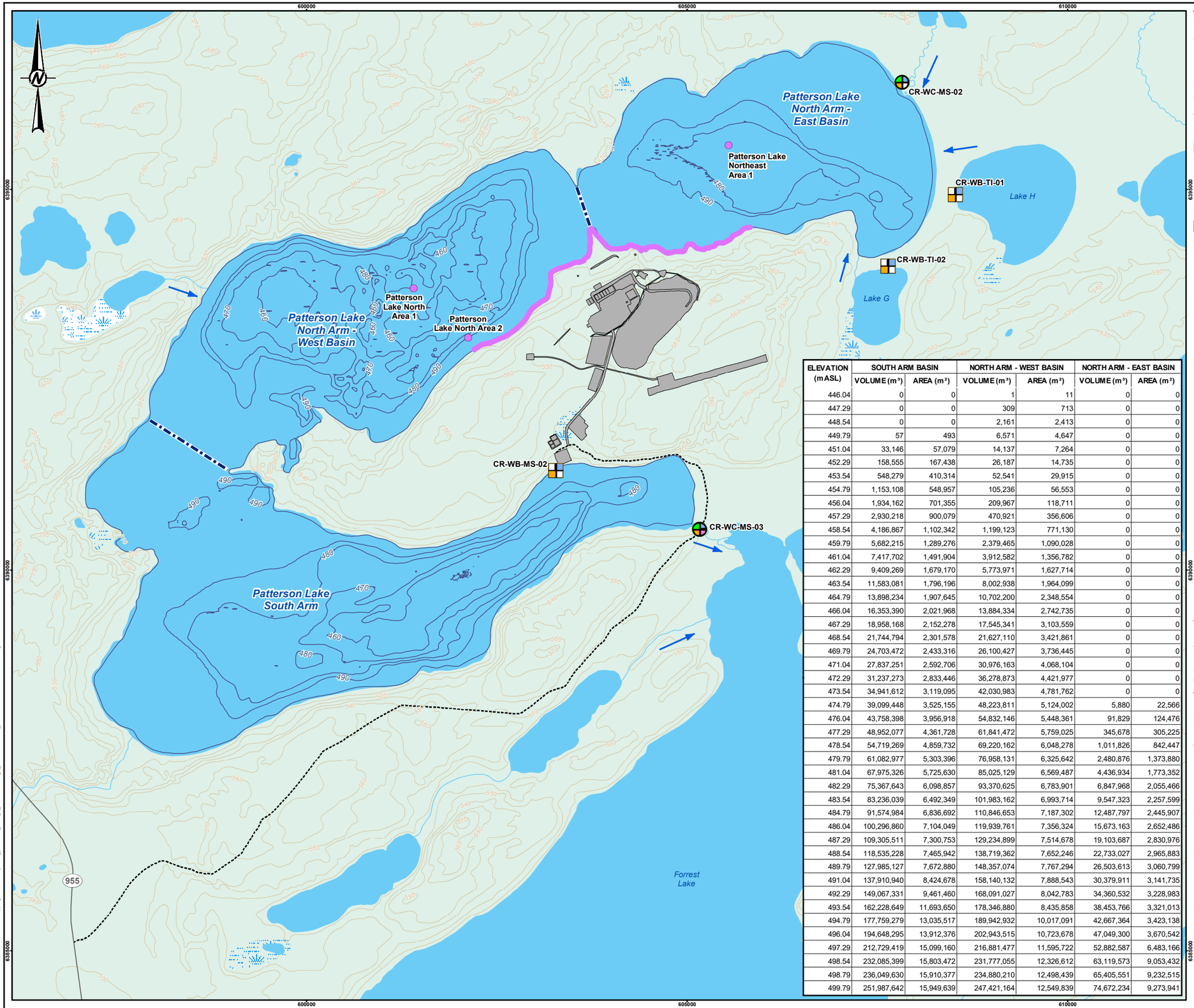
The North Arm – West Basin is the deepest of the three basins with a minimum bed elevation of 446.04 masl or a maximum depth of roughly 52.7 m. The deepest point in the North Arm – East Basin is 474.79 masl, corresponding to a maximum depth of roughly 24.0 m. The deepest point in the South Arm is 449.29, corresponding to a maximum depth of roughly 49.5 m.

Under normal conditions, Patterson Lake has a water surface elevation of 498.79 masl, a total water volume of 536 million cubic metres (Mm^3), and a surface area of 38 km^2. The physical characteristics of Patterson Lake's three basins are summarized in Table 1.

Table 1: Summary of Patterson Lake Basin Physical Characteristics

Basin	Maximum Depth (m)	Volume (Mm^3)	Surface Area (km^2)
North Arm - East Basin	24.0	65.4	9.23
North Arm - West Basin	52.7	235	12.5
South Arm	49.5	236	15.9

km^2 = square kilometres, m = metre, Mm^3 = millions of cubic metres.



ELEVATION (mASL)	SOUTH ARM BASIN		NORTH ARM - WEST BASIN		NORTH ARM - EAST BASIN	
	VOLUME (m³)	AREA (m²)	VOLUME (m³)	AREA (m²)	VOLUME (m³)	AREA (m²)
446.04	0	0	1	11	0	0
447.29	0	0	309	713	0	0
448.54	0	0	2,161	2,413	0	0
449.79	57	493	6,571	4,647	0	0
451.04	33,146	57,079	14,137	7,264	0	0
452.29	158,555	167,438	26,187	14,735	0	0
453.54	548,279	410,314	52,541	29,915	0	0
454.79	1,153,108	548,957	105,236	56,553	0	0
456.04	1,934,162	701,355	209,967	118,711	0	0
457.29	2,930,218	900,079	470,921	356,606	0	0
458.54	4,186,867	1,102,342	1,199,123	771,130	0	0
459.79	5,682,215	1,289,276	2,379,465	1,090,028	0	0
461.04	7,417,702	1,491,904	3,912,582	1,356,782	0	0
462.29	9,409,269	1,679,170	5,773,971	1,627,714	0	0
463.54	11,583,081	1,796,196	8,002,938	1,964,099	0	0
464.79	13,898,234	1,907,645	10,702,200	2,348,554	0	0
466.04	16,353,390	2,021,968	13,884,334	2,742,735	0	0
467.29	18,958,168	2,152,278	17,545,341	3,103,559	0	0
468.54	21,744,794	2,301,578	21,627,110	3,421,861	0	0
469.79	24,703,472	2,433,316	26,100,427	3,736,445	0	0
471.04	27,837,251	2,592,706	30,976,163	4,068,104	0	0
472.29	31,237,273	2,833,446	36,278,873	4,421,977	0	0
473.54	34,941,612	3,119,095	42,030,983	4,781,762	0	0
474.79	39,099,448	3,525,155	48,223,811	5,124,002	5,880	22,566
476.04	43,758,398	3,956,918	54,832,146	5,448,361	91,829	124,476
477.29	48,952,077	4,361,728	61,841,472	5,759,025	345,678	305,225
478.54	54,719,269	4,859,732	69,220,162	6,048,278	1,011,826	842,447
479.79	61,082,977	5,303,396	76,958,131	6,325,642	2,480,876	1,373,880
481.04	67,975,326	5,725,630	85,025,129	6,569,487	4,436,934	1,773,352
482.29	75,367,643	6,098,857	93,370,625	6,783,901	6,847,968	2,055,466
483.54	83,236,039	6,492,349	101,983,162	6,993,714	9,547,323	2,257,599
484.79	91,574,984	6,836,692	110,846,653	7,187,302	12,487,797	2,445,907
486.04	100,296,860	7,104,049	119,939,761	7,356,324	15,673,163	2,652,486
487.29	109,305,511	7,300,753	129,234,899	7,514,678	19,103,687	2,830,976
488.54	118,535,228	7,465,942	138,719,362	7,652,246	22,733,027	2,965,883
489.79	127,985,127	7,672,880	148,357,074	7,767,294	26,503,613	3,060,799
491.04	137,910,940	8,424,678	158,140,132	7,888,543	30,379,911	3,141,735
492.29	149,067,331	9,461,460	168,091,027	8,042,783	34,360,532	3,228,983
493.54	162,228,649	11,693,650	178,346,880	8,435,858	38,453,766	3,321,013
494.79	177,759,279	13,035,517	189,942,932	10,017,091	42,667,364	3,423,138
496.04	194,648,295	13,912,376	202,943,515	10,723,678	47,049,300	3,670,542
497.29	212,729,419	15,099,160	216,881,477	11,595,722	52,882,587	6,483,166
498.54	232,085,399	15,803,472	231,777,055	12,326,612	63,119,573	9,053,432
498.79	236,049,630	15,910,377	234,880,210	12,498,439	65,405,551	9,232,515
499.79	251,987,642	15,949,639	247,421,164	12,549,839	74,672,234	9,273,941

LEGEND

- BATHYMETRY CONTOUR ELEVATION (METRES)
- ELEVATION CONTOUR (10m INTERVAL)
- FLOW DIRECTION
- LAKE BASIN DIVISION
- SECONDARY HIGHWAY
- WATERCOURSE
- WATERBODY
- WETLAND
- WOODED AREA

PROJECT FEATURES

- EXISTING ACCESS ROAD
- PROPOSED FOOTPRINT
- AQUATIC BASELINE MONITORING POINT (CANNORTH 2019)
- AQUATIC BASELINE DETAILED STUDY AREA USED BY CANNORTH (2019)

WATERBODY HYDROMETRIC STATIONS

- DISCHARGE
- SURVEYED BENCHMARK (GEODETIC DATUM)
- TOTAL SUSPENDED SOLIDS AND BEDLOAD
- WATER SURFACE ELEVATION

WATERCOURSE HYDROMETRIC STATIONS

- DISCHARGE
- SURVEYED BENCHMARK (GEODETIC DATUM)
- TOTAL SUSPENDED SOLIDS AND BEDLOAD
- WATER SURFACE ELEVATION

0 1,000 2,000

1:50,000 METRES

NOTE(S)

1. WATER SURFACE ELEVATION ESTIMATED TO BE 498.79 MASL ASSOCIATED WITH MEAN ANNUAL FLOOD.
2. LAKE VOLUME ON JUNE 6-8, 1981:
- SOUTH ARM BASIN = 236,049,630 M^3
- NORTH ARM - WEST BASIN = 234,880,210 M^3
- NORTH ARM - EAST BASIN = 65,405,551 M^3

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

CLIENT

NexGen Energy Ltd.

PROJECT

ROOK I PROJECT

TITLE

PATTERSON LAKE – PHYSICAL CHARACTERISTICS AND BASELINE MONITORING ACTIVITIES

CONSULTANT

GOLDER

YYYY-MM-DD	2019-11-28
DESIGNED	RP
PREPARED	LMS
REVIEWED	RWP
APPROVED	DL

PROJECT NO.	PHASE	REV.	FIGURE
18114335	6000	0	1

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2.4 Baseline Aquatic Habitat Characterization

CanNorth (2019) documented the aquatic environment near the proposed treated effluent discharge location in Patterson Lake, including the lake morphometry, water and sediment quality, plankton and benthic invertebrate communities, aquatic macrophyte chemistry, water chemistry, and fish spawning, habitat and community.

Although fine sand and coarse sand accounted for most of the sediment on the lake bed (with 0 cm to 2 cm thickness), there was some variability (CanNorth 2019). As shown in Figure 2, an elevated silt concentration was noted in the deep Patterson Lake North Area 1. Patterson Lake North Area 2, located near shore south west of the various diffuser options, was noted to be predominantly coarse and fine sand in the first five centimetres of the bed substrate, as shown in Figure 2.

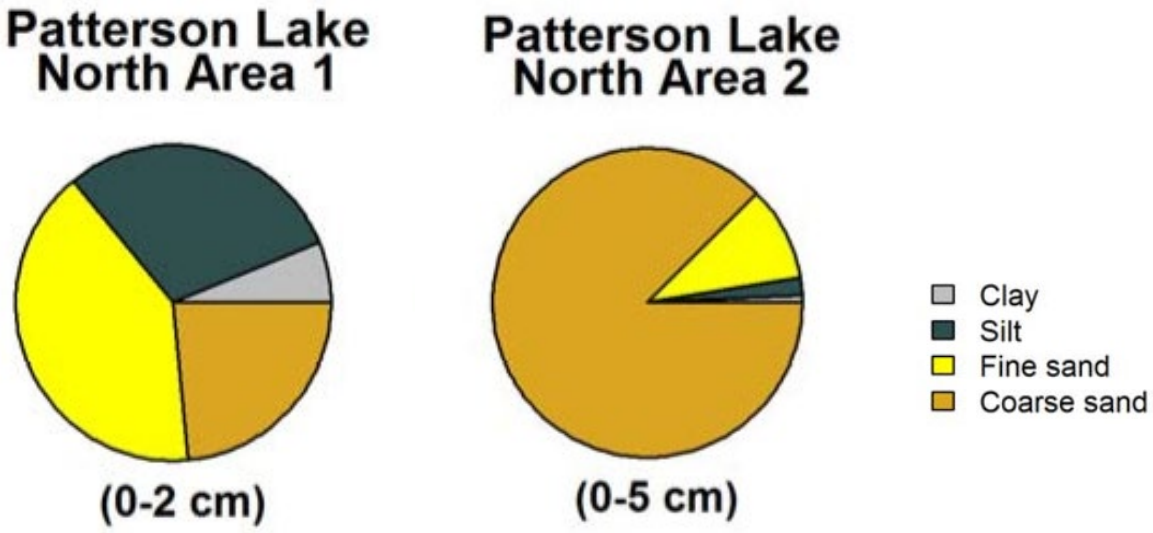


Figure 2: Particle Size Contents of the Sediment Collected by CanNorth (2019) near the Various Diffuser Options

CanNorth (2019) also completed spring and fall spawning surveys and documented specific locations used by large-bodied fish for spawning. All of Patterson Lake was included in the spawning surveys with special attention paid to the detailed study area (Figure 1). Fish habitat mapping was also completed in the Patterson Lake detailed study area to record the quantity and quality of potential spawning habitat for large-bodied fish species known to occur there. The focus of the fish habitat mapping was in the littoral zone.

2.5 Proposed Water Treatment Plant Configuration

The treated water will be stored in a series of six holding ponds. The proposed layout of the effluent treatment plant and process ponds shown on Figure 3 in the northwest corner of the proposed mine footprint. A total of six process ponds are proposed. From west to east there are four monitoring ponds, one contingency pond, and one feed settling pond (see Figure 3). There are also two additional contingency ponds located to the west of the monitoring ponds but these are not discussed in detail here. The feed settling pond will be sized to have 16,000 m^3 with 1 m of freeboard. The pond will be operated such that a capacity of 1,100 m^3 will be available to store runoff generated from the area surrounding the production shaft and in the pipe containment corridor. Each monitoring pond and the contingency pond are sized to have 5,000 cubic metres (m^3) while maintaining 1 m freeboard to accommodate the PMP event. The discharge from the monitoring ponds to the lake will be operated in batch mode. Emptying an individual monitoring pond will have a six-hour target emptying time and the design discharge rate from the ponds to the lake is 833 cubic metres per hour (m^3/h) (Boehm pers. Comm 2019a).

The existing ground surface elevation at the location of the monitoring ponds is 537 masl) though specific operating water levels are not known at this time.

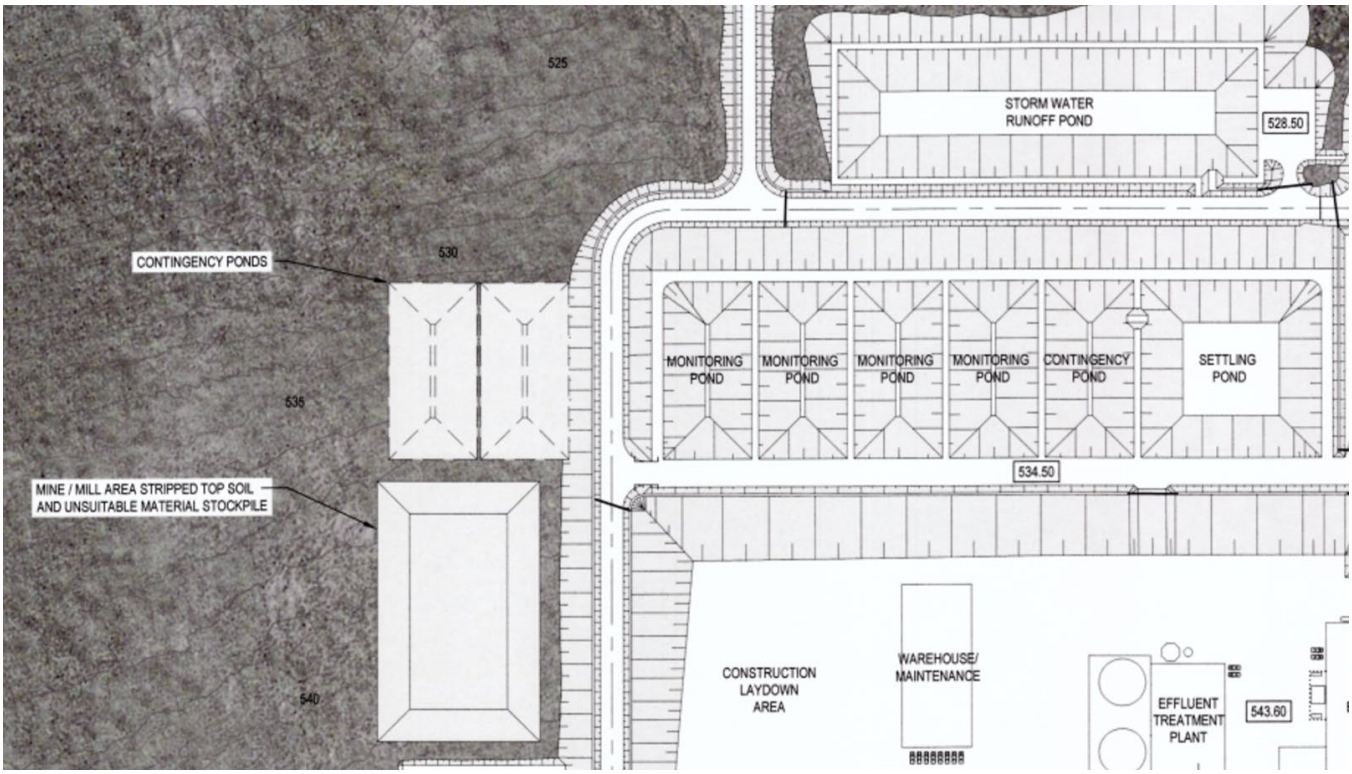


Figure 3: Process Ponds Layout (Wood 2019)

2.6 High-Level Mixing Analysis

A high-level mixing analysis was conducted to differentiate the mixing performance at various locations in Patterson Lake and to identify a preliminary depth for siting the diffuser. The high-level mixing analysis was conducted using CORMIX (Doneker and Jirka 2007) for winter operation when there is minimum ambient current and based on the following parameters:

- Ice cover of one metre thick which is consistent with the maximum annual ice development observed on Patterson Lake in late-February 2019;
- Diffuser discharge of 833 cubic metres per hour (m^3/h) (Boehm pers. Comm. 2019b); and
- Effluent with total dissolved solids (TDS) in the range of 2,500 milligrams per litre (mg/L) and 25,000 mg/L (Boehm pers. Comm. 2019a).

Based on the modelling results the optimal depth range is estimated to be between 5 m and 15 m. These high-level modelling results are preliminary and will be finalized during detailed modelling in Phase 2.

3.0 IDENTIFICATION AND EVALUATION OF LOCATION OPTIONS

3.1 Location Options

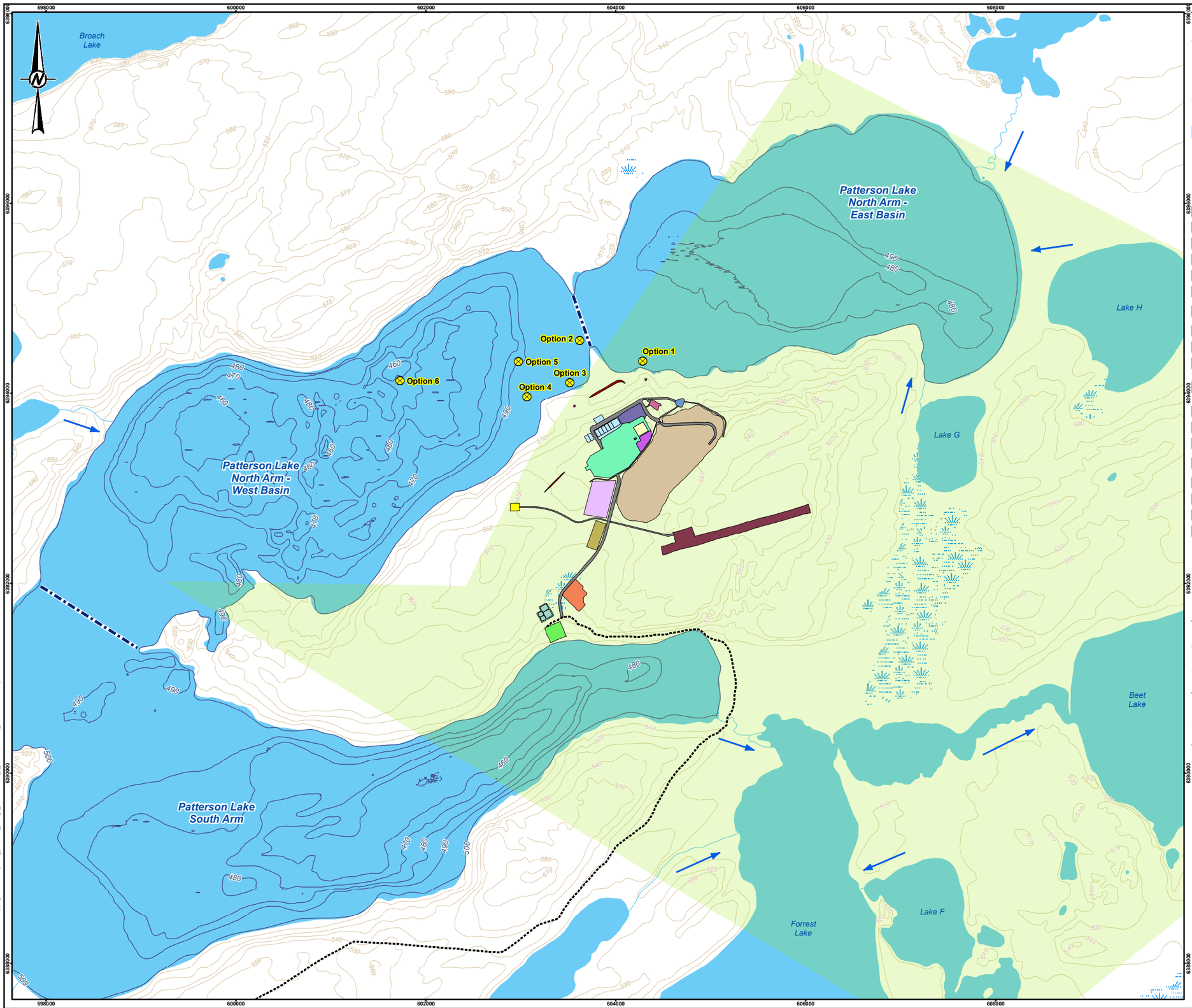
Six candidate locations were identified and evaluated. All locations considered are in the North Arm of Patterson Lake near the proposed location of the effluent treatment plant and associated process ponds. The options included near shore locations in the North Arm – West Basin and North Arm – East Basin, as well as an off shore (deep water), and optimum depth option. The locations of options in Patterson Lake and relation to the project footprint are shown in Figure 4.

Table 2 includes a description of each option and key physical characteristics of each option including the approximate coordinates, depth, and straight-line distance from an assumed upstream end of a pipeline from the process ponds that is common to all options. A pipeline to the diffuser would consist of a portion of the alignment on land and a portion of the alignment under water. For this preliminary exercise, the portion of the alignment that is on land was constrained to the extent of the mineral lease shown on Figure 4. The portion of the alignment underwater is the shortest straight line form the shore to the diffuser location.

Table 2: Summary Description of Location Options

Location	Description	Easting (m)[a]	Northing (m)[a]	Distance from Effluent Pond (m)	Water Depth[b] (m)
Option 1	North Arm, East Basin, Near Shore	604284	6394340	893	1.05
Option 2	North Arm, Narrow, Near Shore	603620	6394555	959	0.79
Option 3	North Arm, West Basin, Near Shore	603517	6394113	566	0.85
Option 4	North Arm, West Basin, Near Shore, Close to Effluent Pond	603064	6393964	790	2.39
Option 5	North Arm, West Basin, Optimal Depth	603641	6393614	1,300	10.0
Option 6	North West Basin, Maximum Depth	601635	6394182	2,220	46.4

Notes:
a) All coordinates are in UTM 12V NAD83.
b) Estimated based on water surface elevation of 498.79 metres above mean sea level (masl).



LEGEND

- BATHYMETRY CONTOUR ELEVATION (METRES)
- ELEVATION CONTOUR (10m INTERVAL)
- FLOW DIRECTION
- LAKE BASIN DIVISION
- WATERCOURSE
- WATERBODY
- WETLAND
- NEXGEN MINERAL LEASE
- DIFFUSER LOCATION OPTION

PROJECT FEATURES

- EXISTING ACCESS ROAD
- AIRSTRIP
- CLEAN WASTE ROCK
- CONSTRUCTION CAMP
- CONTINGENCY RETENTION BERM
- EXHAUST SHAFT
- EXPLOSIVE STORAGE
- DOMESTIC WASTE WATER TREATMENT FACILITY
- MILL OPERATIONS AREA
- ORE PAD
- PERMANENT CAMP
- POTENTIAL DOMESTIC/INDUSTRIAL WASTE MANAGEMENT AREA
- POTENTIAL SOLAR FACILITIES
- POTENTIAL WASTE INCINERATOR
- POTENTIAL WIND TURBINE
- PRODUCTION SHAFT AND ASSOCIATED INFRASTRUCTURE
- ROAD
- SPECIAL WASTE ROCK PAD
- STORAGE/MONITORING POND
- STORMWATER RUNOFF POND

0 1,000 2,000

1:40,000 METRES

NOTE(S)

1. WATER SURFACE ELEVATION ESTIMATED TO BE 498.79 MASL ASSOCIATED WITH MEAN ANNUAL FLOOD.
2. LAKE VOLUME ON JUNE 6-8, 1981:
- SOUTH ARM BASIN = 236,049,630 M^3
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REFERENCE(S)

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2. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

CLIENT

NexGen Energy Ltd.

PROJECT

ROOK I PROJECT

TITLE

PRELIMINARY DIFFUSER LOCATION OPTIONS

CONSULTANT

GOLDER

YYYY-MM-DD	2019-11-28
DESIGNED	RP
PREPARED	LMS
REVIEWED	RWP
APPROVED	DL

PROJECT NO.	PHASE	REV.	FIGURE
18114335	6000	0	4

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3.2 Evaluation Criteria

The criteria used in the option evaluation are summarized in Table 3. The criteria were developed in consultation with NexGen to ensure company objectives were considered as part of this process. This table includes a brief description of how each criterion was used in the evaluation. The weight assigned to each of these criteria is presented in Table 5.

Table 3: Description of Evaluation Criteria

Criteria			Application in the Evaluation
Category	Description	Weight	
Technical Factors	Adequate Water Depth	10%	The optimal depth for the diffuser is estimated to be within the range of 5 m to 15 m. The depth of each option was based on bathymetry data for Patterson Lake provided by NexGen. Bathymetry contours are shown in Figure 1 and Figure 4 and the depth at each location point is included in Table 2.
	Favourable Ambient Currents	10%	A preliminary review of lake geomorphology and wind data were used to estimate general directions of lake current relevant to near-field and far-field mixing.
	Ease of Construction	5%	Shorter pipeline length and shallower water are estimated to make construction easier.
Costs	Distance from the Effluent Pond	25%	The main differentiator in the total costs is the length of the pipeline associated with distance from effluent pond. The distance from the effluent point is noted in Table 2.
Environmental Effects	Potential Effects on Lake Water Quality	13%	Evaluated at a high level based on physical conditions and probable water quality outcomes.
	Potential Effects on Aquatic Habitat	12%	Evaluated at a high level based on a review of the baseline aquatic habitat conditions detailed by CanNorth (2019). The results of the fish habitat assessment are noted in Table 4.
Regulators and Indigenous Communities	Effects on Traditional Land Use	10%	Evaluated based on the possible changes to ice cover thickness and surface flow velocity. The less change, the better.
	Mixing Zone	15%	The smaller the estimated mixing zone, the better.

3.3 Option Rating and Ranking

The adopted rating scheme is relative with a rating of 10 for the best option and 1 for the worst option, rated based on individual criteria. The other options between the best and worst are rated on a scale between 1 and 10.

Fish habitat was noted to be quite variable in the North Arm of Patterson Lake (CanNorth 2019). Table 4 provides a summary of the findings of the habitat assessment completed by CanNorth (2019) as they pertain to the location options. The Habitat Section listed for each of the location options is the section of shoreline, according to the shoreline classification completed as part of the habitat assessment completed by CanNorth (2019), that would be intersected by a straight line connecting the location option with the process ponds.

Although the various options are situated in relative proximity, the habitat sections they would intersect with at the shoreline have variable suitability for spawning large bodied fish. Option 4 and Option 6 intersect the littoral zone in Habitat Section 7 (HS7), which has relatively high value as fish habitat and suitability for spawning. Options 1 and 3 would likely interact with littoral habitat that is moderately suitable for spawning walleye and lake whitefish

and marginally suitable for spawning white sucker and long nose sucker. Conversely, Option 2 would intersect the littoral zone in habitat sections that have low suitability for spawning being only marginal spawning habitat. Option 2 would be marginal habitat for walleye and lake whitefish and not-suitable for all other large bodied fish included in the assessment. Option 5 would be marginal habitat for yellow perch and not-suitable for all other large bodied fish included in the assessment.

The results of the location option rating and weighted score are summarized in Table 5. The scores for Options 1, 2, 3, and 4 are comparable and lower than the other two options. Each of these four options has a small distance from the proposed effluent treatment plant and is sited in shallow water (<1 m). The shallow water areas would make construction relatively easy, but these options are rated low based on the other criteria. Small water depth is not favourable for mixing because of the unfavourable local and ambient conditions, and the resulting ratings in terms of environmental effects and regulatory and indigenous communities criteria would presumably be low. Options 1, 3 and 4 would interact with littoral fish habitat that is suitable for spawning by several large bodied fish that should be avoided.

Option 6 would be the furthest from the monitoring ponds and would be sited in deep (46.4 m) water. These characteristics would likely make construction difficult. The score for Option 6 is much lower than that for Option 5.

Option 5 located in the North Arm – West Basin at an optimal depth of around 10 m has the first rank. It is sited in a location that is estimated to have favourable ambient currents in carrying discharged treated effluent away from the diffuser. A conceptual pipeline alignment connecting it to the location of the monitoring ponds would intersect a section of shoreline referred to by CanNorth (2019) as HS8 which consists of 95% sand and 0% organic and was noted to be not suitable spawning habitat for all large bodied fish included in the assessment except for yellow perch for which it would only be marginally suitable.

Table 4: Summary of Habitat Assessment Results for the Location Options (CanNorth 2019)

Option	Habitat Section #	Upland Zone Upland Conditions				Riparian Zone				Littoral Zone																Spawning Suitability Index							
										Substrate (%)								Cover						Aquatic Vegetation				Bottom Slope							
		Land Use	Forest Conditions	Canopy	Slope	Vegetation Category	Vegetation Type	Bank Slope	Bank Stability	Silt / Clay	Sand	Gravel	Cobble	Boulder	Bedrock	Organic	Rock Cleanliness	Large Woody Debris	Aquatic Vegetation	Rock	Overhanging Vegetation	Undercut	Surface Turbulence	Emergent	Floating	Submergent	Moss/Algae	Slope	Depth 5 m from shore	Northern Pike	Walleye	Lake Whitefish	Lake Trout	Yellow Perch	Arctic Grayling	White Sucker	Longnose Sucker
1	33	FOR	M	M	G	FB	S,T	M	S	0	20	40	30	10	0	0	S	A	A	S	S	A	A	A	A	S	S	D	0.4	0	2	2	0	1	NR	1	1
2	5	FOR	M	C	G	FB	S,T	G	S	0	95	0	5	0	0	0	C	A	A	A	S	A	A	A	A	A	A	G	0.2	0	1	1	0	0	NR	0	0
3	6	FOR	M	C	G	FB	S,T	G	S	0	60	20	10	10	0	0	C	A	A	S	A	A	A	A	A	A	A	G	0.4	0	2	2	0	0	NR	1	1
4	7	FOR	M	C	G	W	S,T	M	S	0	0	30	40	30	0	0	C	A	A	S	A	A	A	A	A	A	A	G	0.9	0	3	3	2	0	NR	1	1
5	4	FOR	M	M	G	FB	S,T	G	S	0	95	0	0	0	0	5	-	A	A	A	A	A	A	A	A	A	A	G	0.2	0	0	0	0	1	NR	0	0
6	7	FOR	M	C	G	W	S,T	M	S	0	0	30	40	30	0	0	C	A	A	S	A	A	A	A	A	A	A	G	0.9	0	3	3	2	0	NR	1	1

Habitat Section # is the habitat section number used by CanNorth (2019). **Land Use** is the upland zone land use with **FOR** = Forest, **WL** = Wetland; **IND** = Industrial, **N** = None; **Forest Condition** is the condition of the upland forest with **M** = Mature, **B** = Burnt, **R** = Regenerating, and **N** = None; **Canopy** is a summary classification of the predominant tree type in the forest canopy with **C** = Coniferous Trees, **D** = Deciduous Trees, **M** = Mixed, **N** = None. Upland zone **Slope** is a summary of the slope near the shoreline with **S** = Steep with slope greater than 45º, **M** = moderate with slope between 15º and 45º, **G** = gradual with slope less than 15º; The Vegetation Category is a summary classification of the category of vegetation in the riparian zone with **FB** = Forest to Bank, **GB** = Grass to Bank, **T** = Transition, **W** = Wetland; **Vegetation Type** is a summary classification of the type of vegetation in the riparian zone with **T** = Tree, **S** = Shrub, and **G** = Grass / Sedge; **Bank Slope** summarizes the slope of the bank with **S** = Steep with slope greater than 45º**, M** = moderate with slope between 15º and 45º, **G** = gradual with slope less than 15º ; **Bank Stability** describes how stable the bank is with **S** = Stable, **SU** = Slightly unstable, **MU** = Moderately unstable with < 50% of banks in the unit are stable, and **HU** = Highly unstable with massive bank slumping observed; **Water Depth =** the depth in metres 5 m from the shore**; Substrate (%) = Relative abundance of each substrate category; Cover is evaluated according to the relative abundance of each cover type with A =** Absent**, S =** Sparse distribution <30%, **M =** Moderate distribution 30% to 70%**, and D =** Dense distribution > 70%**; Aquatic vegetation** is evaluated according to the relative abundance of each aquatic vegetation type with **A =** Absent, **S =** Sparse distribution <30%, **M** = Moderate distribution 30% to 70%, **and D =** Dense distribution > 70%**; Bottom Slope** is evaluated according to the slope of the bed near the shoreline with **S** = Steep with slope greater than 45º**, M** = moderate with slope between 15º and 45º, **G** = gradual with slope less than 15º; **Water Depth =** the depth in metres 5 m from the shore**; Spawning Suitability Index =** Index rating based on known spawning habitat characteristics from literature for individual species that range from a value of **0 =** Not Suitable**, 1 =** Marginal**, 2 =** Moderate**, 3 =** Most suitable.

Table 5: Multicriteria Screening for Preferred Diffuser Location

Criteria		Weight	1	2	3	4	5	6
			North Arm, East Basin, Near Shore	North Arm, Narrow, Near Shore	North Arm, West Basin, Near Shore	North Arm, West Basin, Near Shore, Close to Effluent Pond	North Arm, West Basin, Optimal Depth	North Arm, West Basin, Maximum Depth
Technical Factors	Adequate Water Depth	10%	1	1	1	1	10	5
	Favourable Ambient Conditions	10%	1	2	1	3	10	6
	Ease of Construction	5%	8	7	9	10	3	1
Costs	Distance from the Effluent Pond	25%	8	7	9	10	7	1
Environmental Effects	Effects on Lake Water Quality	13%	1	2	1	3	10	8
	Effects on Aquatic Habitat	12%	2	8	1	1	10	6
Regulators and Other Stakeholders	Effects on Traditional Land Use	10%	2	1	2	2	9	10
	Mixing Zone	15%	1	2	1	2	10	8
Weighted Score			3.3	4.0	3.5	4.4	8.8	5.4
Rank			**5**	**6**	**4**	**3**	**1**	**2**

% = percent.

4.0 CONCLUSION AND RECOMMENDATION

Option 5 was ranked first among the six locations. Option 5 has an overall evaluation score of 8.8 out of 10 whereas the second best option scores 5.4 out of 10; Therefore, Option 5 was selected as the preferred location for siting the diffuser.

Option 5 will be carried forward to Phase 2 work for preparing the conceptual design of the diffuser. The exact location of the diffuser and its design configuration will be determined in Phase 2 based on detailed CORMIX modelling. However, it should be noted that there is still opportunity for input from Indigenous communities on the final diffuser location during the Environmental Assessment process.

5.0 CLOSURE

This memorandum was prepared and reviewed by the undersigned.

Prepared by:

Ross Phillips, M.Sc., P.Eng.
Water Resources Engineer

Reviewed by:

Dejiang Long, Ph.D., P.Eng. (Alberta)
Principal, Senior Water Resources Engineer

RP/DL/JB/al/jlb

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APPENDIX B

Laboratory Analysis

GOLDER

GRAIN SIZE ANALYSIS

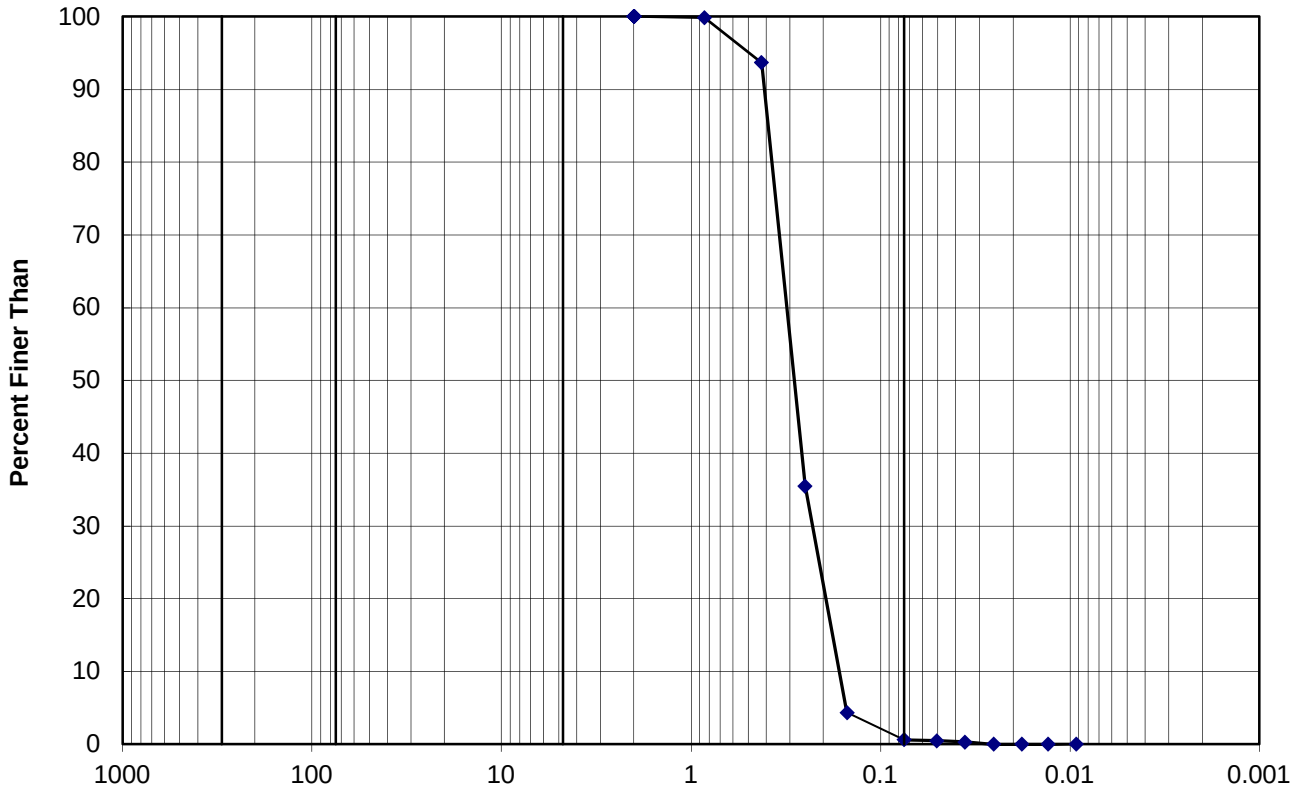
(Mechanical & Hydrometer)

Project #: 19114981
Short Title: NexGen / RookI 2019 Baseline Programs / SK
Tested by: S.H.

Phase: 4200 / 4202
Date: June 10, 2019

Sample #: Bed substrate diffuser location
Source: 8.0m deep
Date Sample Received: May 28, 2019

Graphical Analysis



BOULDERS	COBBLES	GRAVEL		SAND			SILT / CLAY
		Coarse	Fine	Coarse	Medium	Fine	

Grain Size Analysis Results:

Opening (mm)	Percent Passing (%)
51	100
38	100
25	100
19	100
9.5	100
4.75	100
2.0	100
0.850	100
0.425	94
0.250	35
0.150	4.4
0.075	0.6
0.050	0.5
0.036	0.3
0.025	0.0
0.018	0.0
0.013	0.0
0.009	0.0
0.007	0.0
0.004	0.0
0.003	0.0
0.002	0.0
0.001	0.0

Comments:

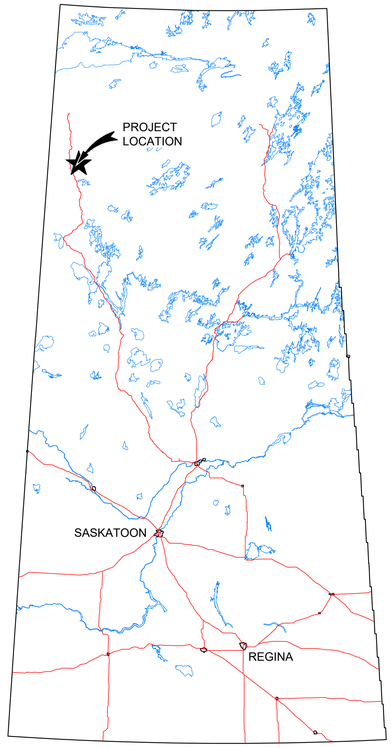
1721 8th Street E.,
Saskatoon, Saskatchewan S7N 0T4

Reviewed by:

APPENDIX C

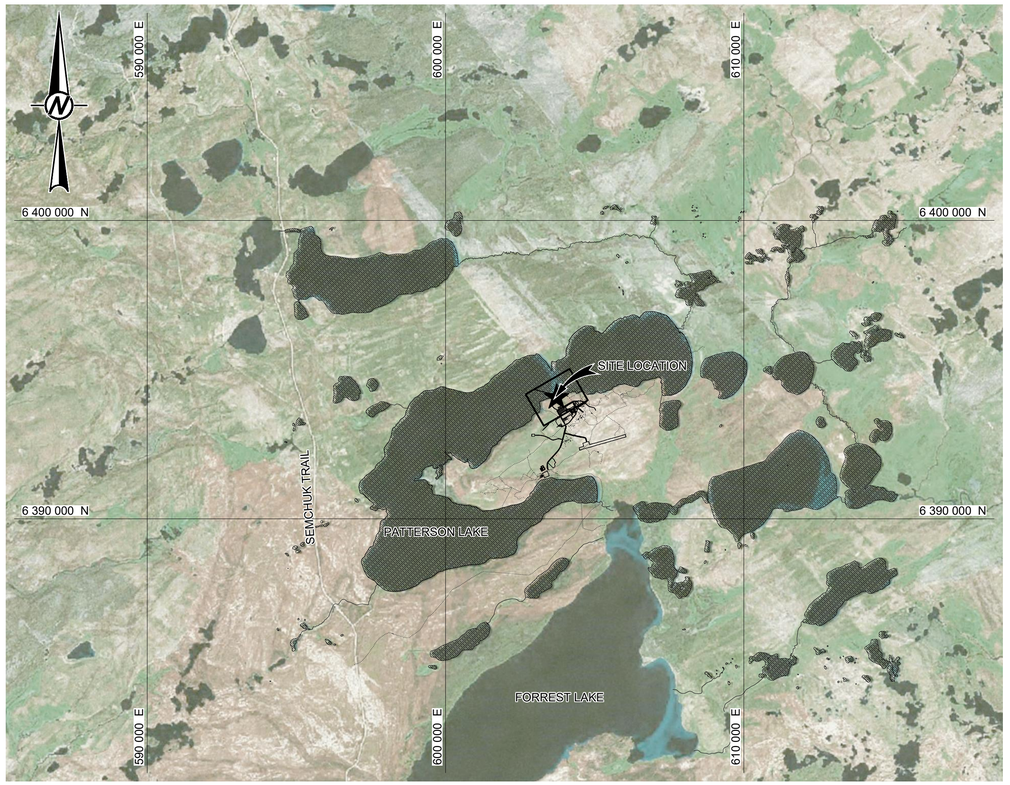
Conceptual Design Drawings

NEXGEN ENERGY LTD.
ROOK I DIFFUSER CONCEPTUAL DESIGN



SASKATCHEWAN

SITE VICINITY
SCALE: NTS



SITE LOCATION
SCALE: 1 : 100,000

DRAWING LIST		
DRAWING NUMBER	DRAWING TITLE	REV.
G-001	TITLE PAGE INCLUDING DRAWING LIST	A
G-002	LEGEND	A
C-001	SITE PLAN AND PROFILE OF THE PIPELINE ALIGNMENT	A
C-002	DETAILS AND CROSS SECTIONS	A

NOT FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2019-11-29	ISSUED FOR REVIEW	SW	CV	RWP	DL

SEAL

CLIENT
NexGen Energy Ltd.

CONSULTANT
GOLDER

SASKATOON OFFICE
1721 8th STREET EAST
SASKATCHEWAN
CANADA
(306) 665-7989
www.golder.com

PROJECT
ROOK I DIFFUSER CONCEPTUAL DESIGN

TITLE
TITLE PAGE INCLUDING DRAWING LIST

PROJECT NO.	CONTROL	REV.		DRAWING
18114335	6000/6010	A	1 of 4	G-001

SAMPLING / MONITORING

- BOREHOLE LOCATION
- BOREHOLE LOCATION (BY OTHERS)
- BOREHOLE LOCATION (PROPOSED)
- MONITORING WELL LOCATION
- MONITORING WELL LOCATION (BY OTHERS)
- MONITORING WELL LOCATION (PROPOSED)
- PIEZOMETER LOCATION
- PIEZOMETER LOCATION (BY OTHERS)
- PIEZOMETER LOCATION (PROPOSED)
- TEST PIT LOCATION
- TEST PIT LOCATION (BY OTHERS)
- TEST PIT LOCATION (PROPOSED)
- SOIL SAMPLE
- HAND AUGER
- INCLINOMETER LOCATION (EXISTING)
- INCLINOMETER LOCATION (PROPOSED)
- CPT LOCATION (EXISTING)
- CPT LOCATION (PROPOSED)
- WATER WELL DRY
- WATER WELL - ELOG
- WATER WELL FIELD VERIFIED
- WATER WELL PRODUCING
- INJECTION WELL

SURVEY SYMBOLS

- BENCHMARK
- CONTROL POINT
- FOUND IRON PIN (FIP)
- DESIGN GRADE

GENERAL FEATURES & SYMBOLS

- CULVERT LOCATION
- LIGHT STANDARD
- MANHOLE
- CATCH BASIN
- FIRE HYDRANT
- SIGN
- POWERPOLE
- BREAKLINE
- DEPOSITION LOCATION
- FLOW DIRECTION
- GRADE INDICATOR
- SLOPE DIRECTION
- WATER SURFACE
- SLOPE LABEL (1V 2H)
- PROJECT LOCATION STAR

LINETYPES - UTILITIES

ABANDONED / EXISTING

- FIBER OPTIC LINE
- NATURAL GAS LINE
- NON POTABLE WATER LINE
- OVERHEAD POWERLINES
- POTABLE WATER
- POWERLINE
- SANITARY LINE
- STORM DRAIN
- TELEPHONE LINE
- TRANSMISSION LINE (T)
- UNDERGROUND LINE
- WASTE WATER
- WATER LINE (W)

LINETYPES - PLAN FEATURES

EXISTING / NEW

- FENCE LINE (X)
- DITCH
- SILT FENCE
- STRAW BALE
- SWALE
- GUARDRAIL
- TREELINE
- CENTERLINE (ALIGNMENT)
- DESIGN LINES
- MAJOR CONTOUR (930)
- MINOR CONTOUR (931)
- PERFORATED PIPING
- PIPELINE
- SOLID PIPING
- PROPERTY LINE
- RAIL LINE
- TMA BOUNDARY
- WORKING LIMITS

LINETYPES - SECTIONS / DETAILS / PROFILES

- EXISTING GROUND
- NATURAL / ORIGINAL GROUND
- FINISHED GRADE
- HATCH BOUNDARY
- HDPE LINER
- LINER OTHER
- NON-WOVEN GEOTEXTILE
- PROJECTED EMBANKMENT
- STRIPPED GROUND
- SUBGRADE / SUBCUT
- TOPSOIL
- WOVEN GEOTEXTILE
- GROUNDWATER
- SOLID PIPING
- PERFORATED PIPING

HATCH PATTERNS

- ASPHALT
- CONCRETE
- FILL
- TRAFFIC GRAVEL
- GRANULAR BASE COURSE
- GRANULAR SUBBASE COURSE
- GRANULAR FILL
- RIPRAP - CLASS A
- RIPRAP - CLASS B
- RIPRAP - CLASS I
- RIPRAP - CLASS II
- SAND FILL
- TOPSOIL
- PEAT
- CLAY
- GABION
- TAILINGS
- OVERBURDEN
- BEDROCK

GENERAL LABELS

- MATCH LINE
- DETAIL BUBBLE
- ALIGNMENT STATION LABEL (2+500)
- DETAIL CALLOUT (1 / 203)
- SECTION CALLOUT (A / 203)
- SECTION TITLE (SCALE 1:100, VERT. SCALE 1:50, A / 203 CROSS SECTION A-A)
- DETAIL TITLE (SCALE 1:100, 1 / 203 DETAIL)
- VIEW TITLE (PROFILE, SCALE 1:1000)
- REV CLOUD & CALLOUT (1)
- ELEVATION LABEL (ELEV. 501.00m)
- BOREHOLE IDENTIFIER (LT-11-06)
- CPT IDENTIFIER (CPT-LT-11-30)
- CPT Q_t CURVE (MPa)
- CONDUCTIVITY CURVE (mS/m)

NOT FOR CONSTRUCTION

REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2019-11-29	ISSUED FOR REVIEW	SW	CV	RWP	DL

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CLIENT: NexGen Energy Ltd.

CONSULTANT: GOLDER

SASKATOON OFFICE
1721 8th STREET EAST
SASKATCHEWAN
CANADA
(306) 665-7989
www.golder.com

PROJECT: ROOK I DIFFUSER CONCEPTUAL DESIGN

TITLE: **LEGEND**

PROJECT NO.	CONTROL	REV.		DRAWING
18114335	6000/6010	A	2 of 4	G-002

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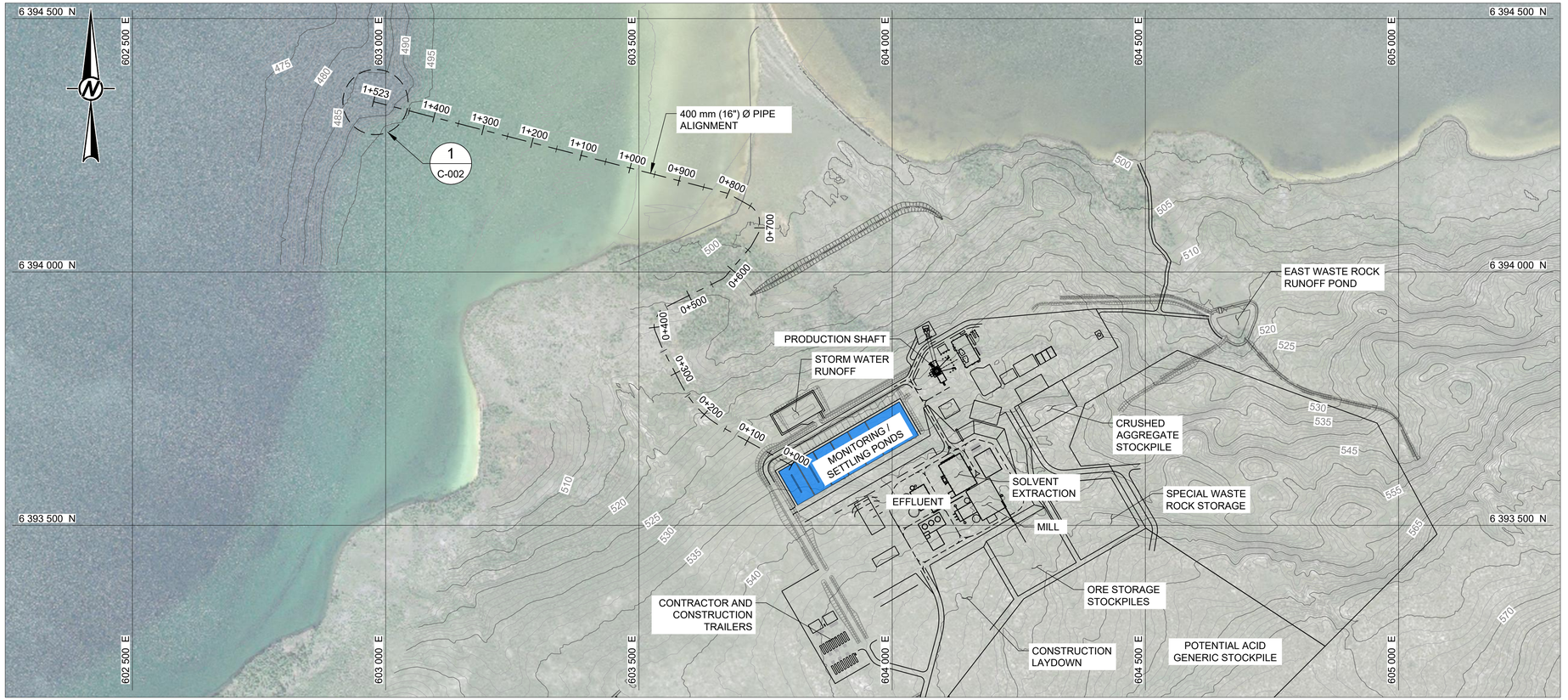
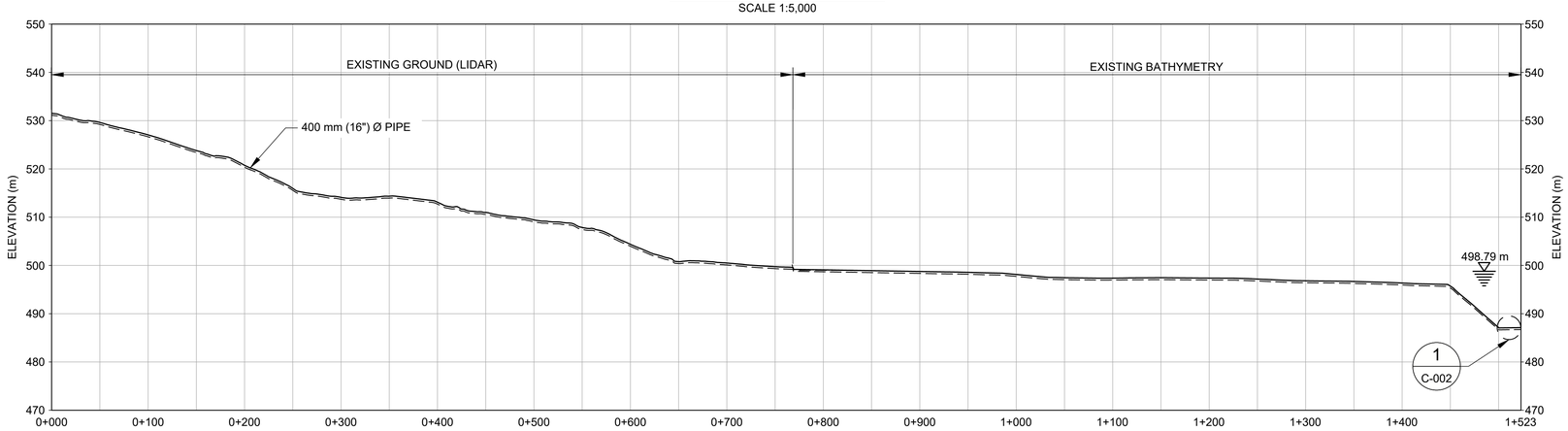


DIFFUSER PIPELINE PLAN

SCALE 1:5,000



PROFILE - PROPOSED DIFFUSER PIPELINE

SCALE 1:3,000
VERT. SCALE 1:600

LEGEND

- EXISTING GROUND CONTOURS (1m INTERVALS)
- MONITORING / SETTLING PONDS
- 400 mm (16") Ø PIPE ALIGNMENT

NOTE(S)

1. ALL UNITS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

REFERENCE(S)

1. BASE MAP TAKEN FROM NEXGEN DRAWING, FILENAME '2100-DD10-SKT-00002_08Aug2019.dwg.
2. EXISTING GROUND LIDAR PROVIDED BY NEXGEN, FILENAME 2018 Rook1 Lidar_2m Grid.tif.
3. ALL COORDINATES REFERENCE NAD83 UTM ZONE 12.
4. IMAGE FROM © 2019 MICROSOFT CORPORATION © 2019 DIGITALGLOBE © CNES (2019) DISTRIBUTION AIRBUS DS.

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0 200 400
1:5,000 METRES

0 100 200
1:3,000 METRES

0 20 40
1:600 METRES

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A	2019-11-29	ISSUED FOR REVIEW	SW	CV	RWP	DL

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PROJECT
ROOK I DIFFUSER CONCEPTUAL DESIGN

TITLE
SITE PLAN AND PROFILE OF THE PIPELINE ALIGNMENT

PROJECT NO.	CONTROL	REV.		DRAWING
18114335	6000/6010	A	3 of 4	C-001

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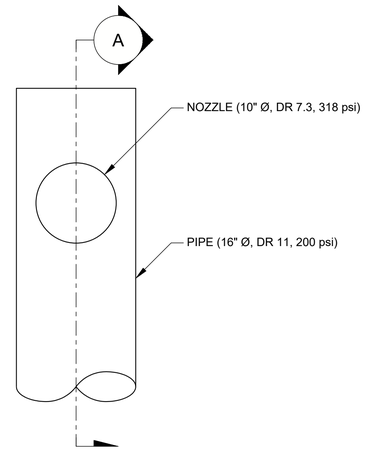
NOTE(S)

1. ALL UNITS ARE IN METRES UNLESS SPECIFIED OTHERWISE.



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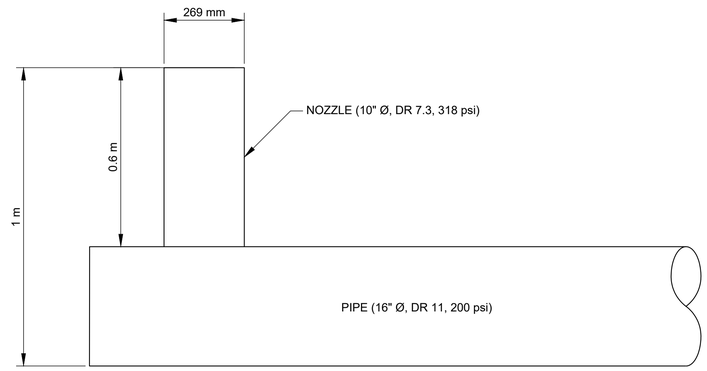

NTS A DIFFUSER SECTION

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REV.	YYYY-MM-DD	DESCRIPTION	DESIGNED	PREPARED	REVIEWED	APPROVED
A	2019-11-29	ISSUED FOR REVIEW	SW	CV	RWP	DL

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PROJECT
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TITLE
DETAILS AND CROSS SECTIONS

PROJECT NO.	CONTROL	REV.		DRAWING
18114335	6000/6010	A	4 of 4	C-002

Rook I Project

Environmental Impact Statement

TSD XX: Downstream Use and Impact Study for Proposed Treated Sewage Discharge Report

GOLDER
MEMBER OF WSP

DOWNSTREAM USE AND IMPACT STUDY FOR PROPOSED TREATED SEWAGE DISCHARGE TECHNICAL SUPPORT DOCUMENT FOR THE ROOK I PROJECT

Prepared for:

NexGen Energy Ltd.

Prepared by:

Golder Associates Ltd.

March 2022

Abbreviations and Units of Measure

Abbreviation	Definition
$CBOD_5$	5-Day Carbonaceous Biological Oxygen Demand
DUIS	Downstream Use and Impact Study
EDO	effluent discharge objective (Saskatchewan Water Security Agency defined term)
EIS	Environmental Impact Statement
EQO	Environmental Quality Objective
ETP	effluent treatment plant
Hwy	highway
MDL	Method detection limit
NexGen	NexGen Energy Ltd.
pH	potential of hydrogen; measure of the acidity or alkalinity of a solution on a scale of 0 to 14
Project	Rook I Project
RMZ	regulated mixing zone
STP	sewage treatment plant
TDS	total dissolved solids
TP	total phosphorus
TSS	total suspended solids
WSA	Saskatchewan Water Security Agency

Unit	Definition
°	degree
°C	degree Celsius
%	percent
cfu/100 mL	colony-forming unit per 100 millilitres
cm	centimetre
L/s	litres per second
m	metre
m/s	metres per second
m^3	cubic metre
m^3/d	cubic metres per day
m^3/s	cubic metres per second
mg/L	milligrams per litre
mg/L as N	milligrams per litre as nitrogen

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1 INTRODUCTION

NexGen Energy Ltd. (NexGen) is proposing to develop a new uranium mining and milling operation in northwestern Saskatchewan, called the Rook I Project (Project). The Project would be located approximately 40 km east of the Saskatchewan-Alberta border, 130 km north of the town of La Loche, and 640 km northwest of the city of Saskatoon (Figure 1-1). The Project would reside within Treaty 8 territory and the Métis Homeland. At a regional scale, the Project would be situated within the southern Athabasca Basin adjacent to Patterson Lake, along the upper Clearwater River system. Patterson Lake is at the interface of the Boreal Shield and Boreal Plain ecozones. Access to the Project would be from an existing road off Highway 955 (Figure 1-2), with on-site worker accommodation serviced by fly-in/fly-out access.

The Project would include the following key facilities to support the extraction and processing of uranium from the Arrow deposit for transportation off site (Figure 1-3):

- underground mine development;
- process plant buildings, including uranium concentrate packaging facilities;
- paste tailings distribution system;
- underground tailings management facility;
- potentially acid generating waste rock storage area;
- non-potentially acid generating waste rock storage area;
- special waste rock[1] and ore storage stockpiles;
- surface and underground water management infrastructure, including water management ponds, effluent treatment plant (ETP), and sewage treatment plant (STP);
- conventional waste management facilities and fuel storage facilities;
- ancillary infrastructure, including maintenance shop, warehouse, administration building, and camp;
- airstrip and associated infrastructure; and
- access road to Project and site roads.

This technical support document outlines the completion of the Downstream Use and Impact Study (DUIS) for the treated effluent discharge from the proposed STP for the camp and mine facilities associated with the Project. The STP would discharge to the Patterson Lake North Arm – West Basin approximately 500 m to the southwest of the proposed ETP diffuser location. It is expected that the STP would operate during Construction, Operations, and Decommissioning and Reclamation (i.e., Closure) of the Project, which is approximately 43 years.

The DUIS is a permitting requirement by the Saskatchewan Water Security Agency (WSA) for any waste water system that discharges to a fish-bearing waterbody (WSA 2012). The purpose of a DUIS is to determine the maximum allowable effluent concentrations based on the existing conditions in the Patterson Lake South Arm,

[1] Special waste rock is mine rock that is mineralized with insufficient grade to be considered ore (i.e., greater than 0.03% of triuranium octoxide [U_3O_8] and less than 0.26% U_3O_8). All special waste would be temporarily stored in the special waste rock stockpile.

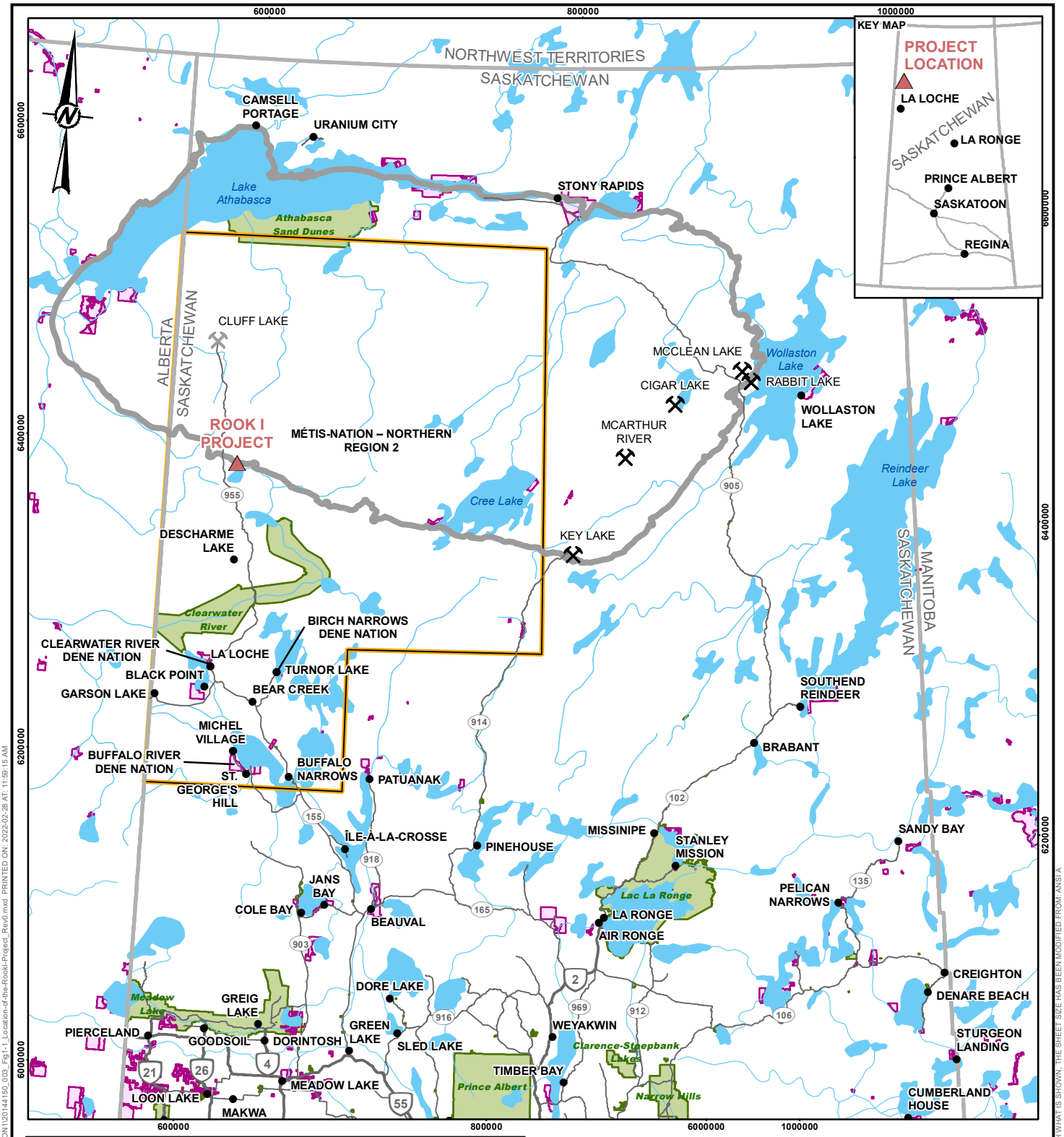
a conceptual treated sewage outfall design, and protection of the downstream environment and its users (including fresh water use by the Project). The DUIS results are then used as design criteria for the proposed STP. While this technical support document specifically mentions the proposed sewage treatment technology currently being designed for the camp, the analysis was completed independent of the selected treatment technology.

This document is specifically written to follow the requirements and terminology outlined in the DUIS guidance. In some cases, the DUIS terminology differs from those used in the Environmental Impact Statement (EIS). Specific differences in terminology include;

- In the DUIS guidance, Environmental Quality Objectives (EQOs) refer to the water quality targets not to be exceeded at the edge of the regulated mixing zone (RMZ). In the EIS, the water quality thresholds are the equivalent term.
- In the DUIS guidance, Effluent Discharge Objectives (EDO) refer to the proposed maximum allowable concentrations in the effluent. In the EIS, effluent release targets are the equivalent term.

This assessment considers the existing water quality of Patterson Lake and the predicted water quality of Patterson Lake at the end of Operations as the ETP is predicted to change the water quality in the Patterson Lake over the 43-year lifespan of the Project (EIS Section 10, Surface Water Quality and Sediment Quality).

This assessment uses an RMZ as a basis for estimating the maximum allowable effluent concentrations for the STP. An RMZ is an area where the water quality is permitted to exceed applicable chronic water quality criteria. For consistency with the surface water quality effects assessment of the EIS (Section 10), this assessment is proposing a maximum extent of 100 m for the RMZ and is consistent with WSA recommendations (WSA 2012). If water quality effects associated with the treated sewage outfall are contained within the proposed mixing zone, measurable effects to water quality are not expected to occur in other areas of Patterson Lake.



LEGEND

- POPULATED PLACE
- URANIUM MINING FACILITY (ACTIVE)
- URANIUM MINING FACILITY (DECOMMISSIONED)
- PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN BOUNDARY
- INDIAN RESERVE
- PROVINCIAL PARKS
- WATERBODY
- PROJECT LOCATION
- MÉTIS NATION-SASKATCHEWAN NORTHERN REGION 2

0 100 200
1:3,500,000 KILOMETRES

REFERENCE(S)

1. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
2. PARKS OBTAINED FROM IHS MARKIT CANADA ULC.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT: NexGen Energy Ltd. — ROOK I PROJECT

TITLE: LOCATION OF THE ROOK I PROJECT

CONSULTANT: GOLDER, MEMBER OF WSP

PROJECT	20144150		PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

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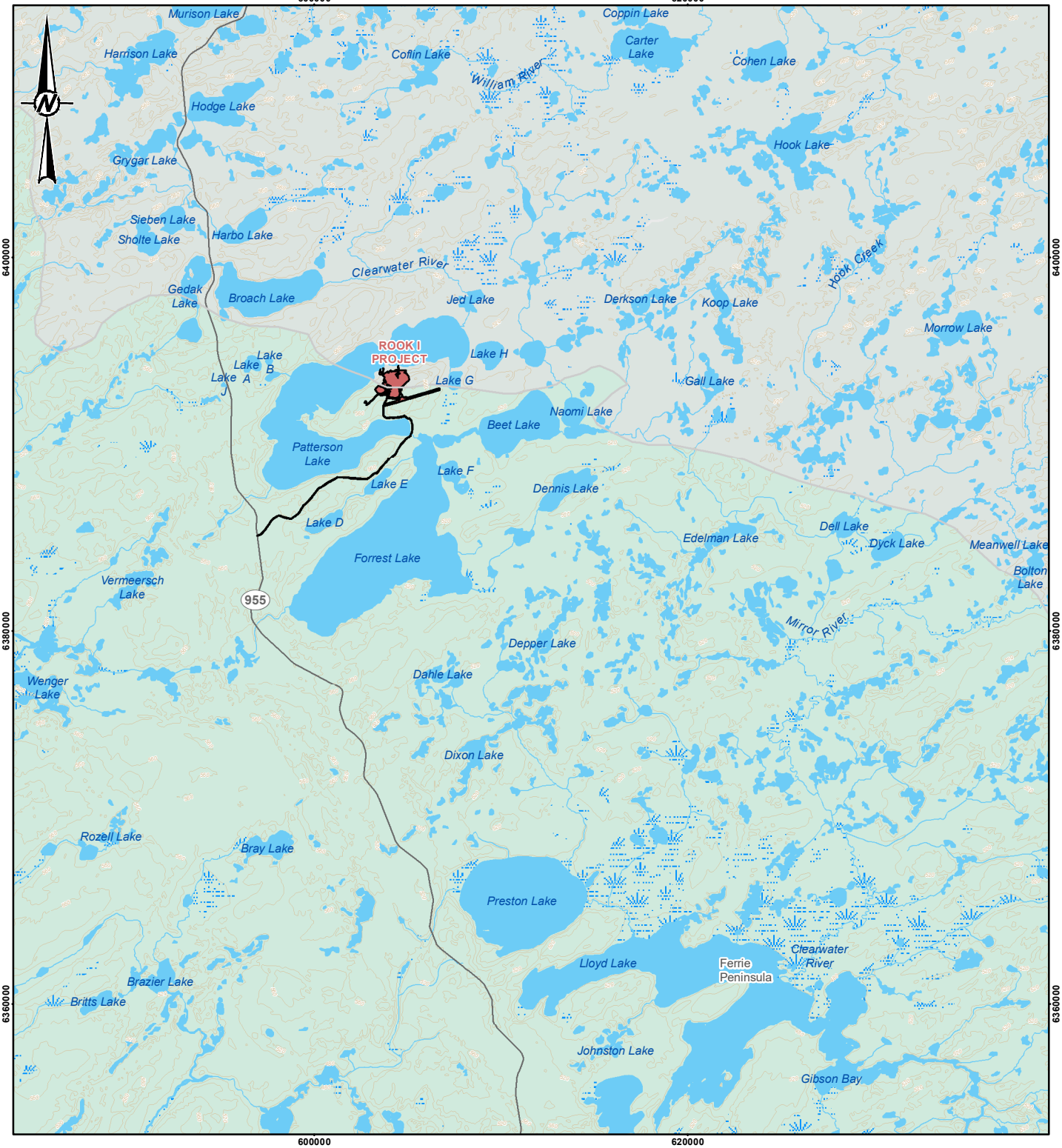

LEGEND

- ELEVATION CONTOUR (20 m INTERVAL)
- SECONDARY HIGHWAY
- WATERCOURSE
- ATHABASCA BASIN
- WATERBODY
- WETLAND
- WOODED AREA
- PROPOSED PROJECT FOOTPRINT

0 5 10
1:300,000 KILOMETRES

REFERENCE(S)
1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021.
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT
NexGen Energy Ltd.

ROOK I PROJECT

TITLE

REGIONAL AREA OF THE ROOK I PROJECT

CONSULTANT
GOLDER
MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JMC	2022-02-28	SCALE AS SHOWN	REV. 0
GIS	NO	2022-02-28		
CHECK	JMC	2022-02-28		
REVIEW	MM	2022-02-28		

FIGURE 1-2

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603000 604000 605000 606000 607000

6394000 6393000 6392000 6391000

Patterson Lake

Treated Effluent Pipe and Diffuser

Fresh Water Intake Pipe and Pumphouse

Underground Mine Access

Contact Water Pond #1

Treated Sewage Pipe and Outfall

Sewage Treatment Plant (STP)

Mine Terrace

PAG Runoff Collection Area

Process Plant

Ore Storage Stockpile

Effluent Treatment Plant (ETP)

Monitoring Ponds

Potentially Acid Generating (PAG) Waste Rock Storage Area

Fuel Storage Area

Mill Terrace

Special Waste Rock Stockpile

Camp

Contact Water Pond #2

Non-Potentially Acid Generating (NPAG) Waste Rock Storage Area

Communication Tower

West Bermed Runoff Collection Area

Omni-Directional Approach Lighting (ODAL) Corridor

Domestic/Industrial Waste Management Area

Airstrip

Explosives Magazine Storage

Batch Plant Sand and Aggregate Storage Area

Omni-Directional Approach Lighting (ODAL) Corridor

Gatehouse

Patterson Lake

530 540 550 560 570 580 590

LEGEND

- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WETLAND
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND

0 0.5 1

1:15,500 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

LAYOUT OF INFRASTRUCTURE AND FACILITIES FOR THE ROOK I PROJECT

CONSULTANT

GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE	3314 - 6
DESIGN	JV	2020-03-13	SCALE AS SHOWN	REV. 0
GIS	NO	2022-03-18		
CHECK	JMC	2022-03-18	**FIGURE 1-3**	
REVIEW	MM	2022-03-18		

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

25mm 0

PATH: I:\CLIENTS\NexGen\20144150\Mapping\Products\General\EIS_FIGURES_SECTION1\20144150_011_Fig1-3_Layout-of-Infrastructure-and-Facilities_Rook_I_Project_Rev0.mxd PRINTED ON: 2022-03-19 AT: 10:46:38 AM

1.1 Description of Treatment System

The STP would be located to the northwest of the mine facilities. The location of the STP is shown in Figure 2-1, along with the locations of the treated sewage outfall, ETP diffuser, and the Project fresh water intake.

Sewage would be treated through a combined use of aerated cells, chemical addition (i.e., alum), and ultraviolet disinfection. The aerated cells would aerate the incoming sewage to reduce biological oxygen demand. Settling and biological action would reduce total suspended solids (TSS) and pathogen concentrations to levels that could be further treated by alum addition and ultraviolet disinfection. Alum addition would also be required to achieve phosphorus limits. The proposed STP would discharge continuously (i.e., year-round) to Patterson Lake at an average rate of 165 m^3/d (1.9 L/s).

Conceptual Treated Sewage Outfall Design

The proposed outfall for the treated sewage effluent would be located in Patterson Lake, approximately 300 m from the shoreline and at a depth of approximately 4 m (total water depth of 4.5 m). The total depth of water (during ice-free conditions) at the outfall should be at least 4.5 m to provide sufficient water depth during ice-covered periods.

Effluent would be conveyed to the treated sewage outfall through a lake bed pipe. The outfall would be positioned 0.5 m above the lake bed to reduce the potential for sediment resuspension resulting from the operation of the STP. A single 2.9 cm (1.25 inches) port would be oriented 45° above the horizontal and in an offshore direction perpendicular to the shoreline. At the design flow of 1.9 L/s, the exit velocity would be approximately 3 m/s.

2 BACKGROUND CONDITIONS

2.1 Description of Discharge Area

The proposed treated sewage outfall would be located in the Patterson Lake North Arm – West Basin (Figure 2-1). The North Arm – West Basin is approximately 7 km long and 2 km wide with a maximum depth of approximately 50 m. The lake bed in this area is primarily coarse sand with some silt and fine sand (Annex V.1, Aquatic Environment Baseline Report).

Water levels in Patterson Lake ranged from 498.545 metres above sea level to 498.645 metres above sea level between 4 August and 2 October 2018. The average water level over that period was 498.589 metres above sea level (EIS Section 10, Appendix 10A, Surface Water Quality Modelling Report).

The overall direction of flow of water in Patterson Lake is from the North Arm – East Basin through the North Arm – West Basin into the South Arm toward the outlet to the Clearwater River. Currents in the vicinity of the proposed treated sewage outfall vary in direction and speed due to varying wind conditions over the entire lake, as described in Section 2.1.1, Currents.

The total volume of the Patterson Lake North Arm – West Basin has been estimated to be 230 million cubic metres and represents approximately 40% of the total volume of Patterson Lake. The average retention time of the Patterson Lake South Arm is estimated to be 7.3 years based on an annual average outflow of approximately 1 m^3/s (EIS Appendix 9B, Hydraulic and Sediment Transport Modelling Summary Report).

603000 604000 605000

6395000 6394000 6393000

Patterson Lake

Treated Effluent Pipe and Diffuser

Fresh Water Intake Pipe and Pumphouse

Treated Sewage Pipe and Outfall

Underground Mine Access

Contact Water Pond #1

Sewage Treatment Plant (STP)

Mine Terrace

PAG Runoff Collection Area

Process Plant

Ore Storage Stockpile

Effluent Treatment Plant (ETP)

Monitoring Ponds

Potentially Acid Generating (PAG) Waste Rock Storage Area

Fuel Storage Area

Mill Terrace

Special Waste Rock Stockpile

Camp

Contact Water Pond #2

Non-Potentially Acid Generating (NPAG) Waste Rock Storage Area

Communication Tower

West Bermed Runoff Collection Area

490 480 470 550 560 570 580 510 520 530 540

LEGEND

- BATHYMETRY CONTOUR ELEVATION (10 m INTERVAL)
- ELEVATION CONTOUR (10 m INTERVAL)
- WATERBODY
- WOODED AREA
- INTAKE OR DISCHARGE PIPE
- ACCESS ROAD
- CONTACT WATER CONTAINMENT BERM
- OMNI-DIRECTIONAL APPROACH LIGHTING (ODAL) CORRIDOR
- PROJECT INFRASTRUCTURE
- SITE ROAD
- TOPSOIL STORAGE AREA
- WATER MANAGEMENT POND
- EFFLUENT TREATED PIPE DIFFUSER
- SEWAGE TREATED PIPE OUTFALL
- LAKE BASIN DIVISION
- PROPOSED REGULATED MIXING ZONE

0 0.3 0.6

1:10,000 KILOMETRES

REFERENCE(S)

1. PROJECT FEATURES OBTAINED FROM NEXGEN, APRIL 6, 2021 AND UPDATED JUNE 8, 2021 .
2. BASE DATA OBTAINED FROM GEOGRATIS, © DEPARTMENT OF NATURAL RESOURCES CANADA. ALL RIGHTS RESERVED.
3. BATHYMETRY CONTOURS DERIVED FROM DATA COLLECTED BY NEXGEN, 2016.

PROJECTION: UTM ZONE 12 DATUM: NAD 83

PROJECT

NexGen Energy Ltd.

ROOK I PROJECT

TITLE

MINE HYDRAULIC INFRASTRUCTURE AND ASSOCIATED MIXING ZONE

CONSULTANT

GOLDER MEMBER OF WSP

PROJECT		20144150	PHASE		3314 - 6
DESIGN	GVA	2020-03-13	SCALE AS SHOWN		REV. 0
GIS	NO	2022-03-02			
CHECK	GVA	2022-03-02			
REVIEW	JF	2022-03-02			

FIGURE 2-1

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

0 25mm

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2.1.1 Currents

Information on lake currents in Patterson Lake is required to predict the mixing of the effluent near the outfall. Current speed and direction were measured near the proposed STP outfall location from 9 July to 23 September 2020 using an acoustic doppler current profiler (Annex IV.4, Patterson Lake Currents Assessment Report). While the acoustic doppler current profiler provided current data at 1 m intervals, the data collected at mid-depth (i.e., 5 m) were used as the typical current speed at the outfall location. A complete analysis of the current speeds and directions can be found in Annex IV.4.

The current speed scenarios used in this assessment and in the EIS are summarized in the following points and provided in Table 2.1-1:

- High current speeds were represented by the 95th percentile of the measured current speeds (0.079 m/s) and were assumed to only occur during open-water conditions.
- Typical current speeds were represented by the average measured current speed (0.042 m/s) and were assumed to only occur during open-water conditions.
- Calm conditions were assumed to have a current speed of 0.001 m/s, which is the lowest value that can be entered in CORMIX (the near-field mixing model used for this assessment). Calm conditions were assumed to occur in both open-water and ice-covered conditions.

Table 2.1-1: Assumed Current Speeds and Direction Near the Sewage Treatment Plant Outfall

Current Speed Scenario	Speed (m/s)	Lake Conditions
High current speeds	95th percentile mid-depth = 0.079	Open-water
Typical current speeds	Average mid-depth = 0.042	Open-water
Calm conditions	0.001	Open-water and ice-covered

2.1.2 Water Temperature and pH

The surface water temperature in Patterson Lake varies between 0°C and 20°C. Seasonal water column profiles in Patterson Lake suggest that thermal stratification occurs in the lake between late spring and early fall, with the lake exhibiting bi-annual (i.e., spring and fall) turnover events (EIS Section 10). Depending on the time of year, the thermocline depth varies between 4 m to 18 m. As the water depth at the STP outfall is 4 m, stratified conditions were not modelled for the STP outfall.

Water temperatures in Patterson Lake were collected at 20-minute intervals at the inlet and outlet between 7 August 2018 and 23 September 2020 as part of a hydrological baseline field program (Annex IV.2, Hydrometric Monitoring Characterization Report). The monthly average and 75th percentile water temperatures are summarized in Table 2.1-2. Table 2.1-2 also includes the average 75th percentile water temperature that was used to conservatively estimate the fraction of ammonia that is un-ionized.

Table 2.1-2: Assumed Current Speeds and Direction Near the Sewage Treatment Plant Outfall

Month	Season	Monthly Average Water Temperature		Monthly 75th Percentile Water Temperature		Seasonal pH		
		Inlet (ºC)	Outlet (ºC)	Inlet (ºC)	Outlet (ºC)	Average (ºC)	Average	75th Percentile
Jan	Winter	-0.2	0.1	-0.2	0.2	0.0	6.8	7.0
Feb		-0.1	0.1	-0.1	0.2	0.0		
Mar	Spring	0.4	0.3	0.7	0.4	0.6	6.5	7.1
Apr		2.6	2.1	3.9	3.4	3.7		
May		7.8	5.9	12.0	7.9	10.0		
Jun	Summer	14.8	11.0	17.4	13.6	15.5	6.7	7.5
July		18.3	17.4	20.1	18.6	19.4		
Aug		16.2	16.4	17.3	17.8	17.5		
Sep	Fall	10.8	10.5	13.1	12.9	13.0	6.9	7.3
Oct		2.7	3.2	3.1	3.4	3.2		
Nov		0.4	0.3	0.5	0.3	0.4		
Dec	Winter	-0.1	0.2	0.0	0.3	0.1	6.8	7.0

2.1.3 Ice Thickness

While measured ice thicknesses in Patterson Lake ranged from 0.62 m to 0.80 m (Annex V.1), an ice thickness of 1 m was used to represent ice-covered periods. As a result, the total water depth at the outfall was reduced by 1 m during ice-covered periods. Ice thicknesses are rarely known with certainty, and this assumption is conservative because it assumes a shallower water depth under ice compared to measured conditions which leads to lower predicted dilution.

2.1.4 Patterson Lake Water Quality

The background water quality was based on 19 samples collected in the Patterson Lake North Arm – West Basin between 10 November 2015 and 24 September 2020 (EIS Appendix 10A, Attachment 10A-1, Background Surface Water Quality Characterization) and is summarized in Table 2.1-3. For purposes of this assessment, the presentation of results for the water quality is limited to nutrients, suspended solids, 5-day Carbonaceous Biological Oxygen Demand ($CBOD_5$), and coliforms as these are typically associated with discharge quality from sewage treatment systems. Under baseline conditions, it is noted that most of the samples for these constituents (e.g., ranging from 60% to 90% depending on parameter) were reported as less than the method detection limit (MDL).

Patterson Lake is considered to be oligotrophic, which is characterized by low concentrations of nutrients and low rates of primary productivity (EIS Section 10.2.8.3.3, Productivity Status Thresholds).

The following points outline the selected background concentrations (including rationale) used as the basis for assessment:

- The reported concentrations of total phosphorus (TP) were consistently below the MDL of 0.01 mg/L. The TP concentration was conservatively assumed to be equal to the MDL (i.e., 0.010 mg/L).
- Total ammonia concentrations were frequently (61% of the samples) reported as less than 0.01 mg/L as nitrogen (mg/L as N) and occasionally (28% of the samples) reported as 0.02 mg/L as N. Two samples (11%) had reported values higher than 0.02 mg/L as N. A total ammonia concentration of 0.02 mg/L as N was assumed to be approximately equal to the 75th percentile of the measured concentrations.
- Un-ionized ammonia concentrations were estimated based on field-measured total ammonia, pH, and water temperature. The un-ionized ammonia concentrations ranged from 0.0000028 to 0.00034 mg/L as nitrogen (mg/L as N), with a 75th percentile of 0.000044 mg/L as N.
- Nitrate concentrations were generally below the MDL of 0.01 mg/L with only 2 of 15 (13%) samples reporting values above the MDL. A nitrate concentration of 0.01 mg/L as N was assumed to be approximately equal to the 75th percentile of the measured concentrations.
- Patterson Lake has high water clarity as TSS concentrations ranged from less than 1 mg/L to 6 mg/L, with 84% of the samples being reported as less than the MDL. The reported MDL ranged from 1 mg/L to 6 mg/L. A TSS concentration of 2 mg/L was assumed to be approximately equal to the 75th percentile of the measured concentrations.
- Water quality results were not available for $CBOD_5$ or coliforms. However, given the low nutrient levels, low suspended solids, high water clarity, and extremely limited development in the area, it expected that the existing concentrations of $CBOD_5$ and coliforms are low. For this assessment, concentrations of 1 mg/L and 1 colony-forming unit per 100 millilitres (cfu/100 mL) for $CBOD_5$ and total coliforms, respectively, were assumed to be representative of background conditions. These were assumed in the absence of site-specific data.
- Total dissolved solids (TDS) in Patterson Lake North Arm – West Basin was estimated to be approximately 24 mg/L using the available average specific conductivity measurements. Specific conductivity measurements were converted to TDS (in mg/L) using a calculated TDS/specific conductivity coefficient of 0.64 as recommended for natural waters by Maidment (1994), which lies within the range of the TDS-/-specific conductivity coefficients between 0.55 and 0.7 recommended by the American Public Health Association (APHA 2012).
- The seasonal 75th percentile of pH ranges from 7.0 to 7.5 as shown in Table 2.1-2. Monthly values could not be estimated as the water quality sampling was completed on a quarterly basis. As such, seasonal values were assumed and assigned to months as follows:
  - winter: December, January, and February;
  - spring: March, April, and May;
  - summer: June, July, and August; and
  - fall: September, October, and November.

The STP discharge is not expected to measurably affect the lake-wide water quality in Patterson Lake as the design discharge rate of the STP (i.e., 0.019 m^3/s) is small in comparison to the average annual outflow of Patterson Lake, which is approximately 1 m^3/s (EIS Appendix 9A). Similarly, the maximum annual discharge volume of approximately 0.060. million cubic metres would be negligible compared to the total volume of Patterson Lake North Arm – West Basin of 230 Mm^3.

Surface water quality modelling for the EIS, Section 10, predicts that the concentrations of total ammonia, nitrate, and TP would increase as a result of the discharge of effluent from the STP and ETP. The maximum monthly averages predicted for these constituents are provided in Table 2.1-3. For the remaining constituents (i.e., $CBOD_5$, TDS, TSS, and total coliforms), the STP discharge concentrations are expected to be small or negligible. As such, the lake-wide concentrations of $CBOD_5$, TDS, TSS, and total coliforms at the end of the proposed Project (i.e., at the end of Operations) are assumed to be the same as at the beginning of the Project (i.e., pre-Construction).

Table 2.1-3 also includes values for the expected effluent quality and the EQOs which are discussed in further detail in Sections 2.4 and 3.1 respectively.

Table 2.1-3: Summary of Background (Ambient) Water Quality, Lake Water Quality at End of Operations, and Expected Effluent Quality

Parameter	Measured Ambient Water Quality (Start of Operation)		Predicted Water Quality at End of Operations[c]	Expected Effluent Quality[d]	EQO[e]
	Measured[a]	Assumed[b]			
$CBOD_5$ (mg/L)	n/a	1	1[f]	<25	none[g]
TDS (mg/L)	<1 to 6	2	2[f]	<25	5 mg/L above background
Total ammonia (mg/L as N)	<0.01 to 0.02	0.02	0.35	45 mg/L	Based on unionized ammonia
Un-ionized ammonia as (mg/L as N)	0.0000028 to 0.00034	calculated[h]	calculated[h]	calculated[h]	0.0156
Total nitrate as (mg/L as N)	<0.01 to 0.07	0.01	0.33	n/a[i]	3
Total phosphorus (mg/L)	<0.010	0.010	0.009	1.2	<4 ultra-oligotrophic lakes 4 to 10 oligotrophic lakes 10 to 20 mesotrophic
Total coliforms (cfu/100 mL)	n/a	1	1[f]	2,000 to 200,000	100
TDS (mg/L)	24[j]	24	24	n/a	none

a) For samples collected in Patterson Lake North Arm – West Basin.
b) Values assumed for DUIS at start of Operations.
c) Predicted maximum monthly concentrations predicted in EIS (EIS Appendix 10A, Section 10A6.4.1.3 Patterson Lake) for total ammonia, nitrate, and TP during Project Operations.
d) Expected effluent quality provided by Stantec (Stantec 2021).
e) Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME 1999).
f) Values carried over from start of Operations. Concentrations of $CBOD_5$, TSS, and total coliforms in Patterson Lake were not modelled in the EIS (EIS Appendix 10A) and are not expected to change as a result of the Project.
g) No applicable water quality criteria or guidelines for $CBOD_5$ – discharge criteria are related to dissolved oxygen consumption in receiving water.
h) Un-ionized ammonia concentration estimated based on total ammonia, average pH, and average water temperature.
i) Numeric value not provided.
j) TDS (in mg/L) calculated from specific conductivity using a TDS/specific conductivity coefficient of 0.64 as recommended for natural waters by Maidment (1994).

EQO = Environmental Quality Objective; < = less than; cfu/100 mL = colony-forming unit per 100 millilitres; n/a = analysis not available; $CBOD_5$ = 5-Day Carbonaceous Biological Oxygen Demand; DUIS = Downstream Use and Impact Study; TSS = total suspended solids; EIS = Environmental Impact Statement; TDS = total dissolved solids; TP = total phosphorus.

2.2 Aquatic Habitat

Fish species captured during baseline sampling in Patterson Lake in 2018 and 2019 included Arctic grayling (*Thymallus arcticus*), lake trout (*Salvelinus namaycush*), lake whitefish (*Coregonus clupeaformis*), cisco (*Coregonus artedi*), burbot (*Lota lota*), walleye (*Sander vitreus*), northern pike (*Esox lucius*), yellow perch (*Perca flavescens*), white sucker (*Catostomus commersonii*), longnose sucker (*Catostomus catostomus*), johnny darter (*Etheostoma nigrum*), spottail shiner (*Notropis hudsonius*), trout-perch (*Percopsis omiscomaycus*), lake chub (*Couesius plumbeus*), ninespine stickleback (*Pungitius pungitius*), and slimy sculpin (*Cottus cognatus*). Focused fish and fish habitat sampling was conducted in Patterson Lake near the proposed Project camp area, approximately 100 m east of the proposed outfall location. The most abundant species found near the camp area were trout-perch, spottail shiner, and yellow perch (Annex V.1).

A fish habitat assessment of the Patterson Lake shoreline near the Project camp area (i.e., in the vicinity of the ETP and STP outfall locations) was conducted in June 2018 (Annex V.1) and focused on the shoreline, littoral, and riparian zone habitats. The riparian zone comprised shrubs and trees over stable, gentle to moderate slopes. The dominant substrate in the littoral zone consisted of sand in approximately half of the habitat sections. Other habitat sections featured a combination of rocky substrates (i.e., gravel, cobble, and boulder) or a mixture of sand and gravel, cobble, and boulder. Rocky substrates were generally covered in a thin layer of silt.

Cover for fish in the vicinity of the ETP diffuser and STP outfall locations was generally present in sparse quantities. Sparse amounts of large woody debris were found in some sections, while moderate to dense amounts of rock cover and sparse overhanging vegetation occurred in approximately half of the habitat sections. While the littoral zone generally featured gentle slopes, some areas had steeper slopes. Most littoral areas were between 0.2 m and 0.5 m deep at a distance of 5 m from shore.

The spawning habitat in the vicinity of the ETP and STP outfall locations can be summarized as:

- Lacking high-quality northern pike spawning habitat. Sand and rocky substrate and sparse amounts of emergent vegetation provided marginal spawning habitat for northern pike in some areas.
- Moderately to highly suitable for spawning by yellow perch in some areas, while other areas were rated as marginally suitable.
- Moderately to highly suitable spawning habitat for walleye, lake whitefish, lake trout, and two sucker species in approximately half of the area due to a combination of rocky substrates.

2.3 Identified Downstream Users

Patterson Lake is used for recreational fishing and back country travel to trapping, hunting, and fishing areas.

There are no existing or proposed fresh water intakes in Patterson Lake downstream of the treated sewage outfall location. The proposed fresh water intake for the Project is expected to be located upstream in Patterson Lake North Arm – East Basin (i.e., 3 km to the east of the proposed treated sewage outfall) as shown in Figure 2-1. There is a potential for a water intake to be proposed by the Fission Patterson Lake Project, but none has been proposed at the time of this study.

2.4 Expected Effluent Quality

A preliminary design of the STP has been completed by Stantec; preliminary estimates of the expected effluent quality are available. The expected effluent quality provided by Stantec (2021) is presented in Table 2.1-3 for all constituents except nitrate, temperature, and TDS.

A nitrate concentration of 2 mg/L was conservatively assumed, which is approximately double the reported nitrate concentration in aerated lagoons located in cooler climates (USEPA 2011).

For this study, the TDS in the effluent was estimated from the measured conductivity at a similar facility in Cold Lake (AECOM 2011). Specific conductivity measurements were converted to TDS (in mg/L) using a calculated TDS/specific conductivity coefficient of 0.64 as recommended for natural waters by Maidment (1994), which lies within the range of the TDS / specific conductivity coefficients between 0.55 and 0.7 recommended by the American Public Health Association (APHA 2012).

For consistency with the conceptual diffuser design study for the ETP diffuser (TSD XIX, Conceptual Diffuser Design Report), three effluent temperatures were considered in the modelling as described in Section 3.2.2, Required Effluent Dilution:

- 4°C, represented a lower bound for effluent water temperature as this would be the temperature at which water density is the highest;
- 8.5°C, represented an average effluent temperature based on measured average at Rabbit Lake (NexGen 2019); and
- 20°C, represented the maximum effluent water temperature expected based on:
  - Recorded water temperatures during July and August in small lakes near the Project (Lakes D, G, H, and J) that ranged from 19°C to 23°C, with an average of 21ºC (Annex V.1).
  - Reported effluent water temperatures at the Rabbit Lake Mine in 2015 and 2018 (Cameco 2019) that ranged from 10°C to 18°C, with an average of 16°C.

It is expected that the STP would use ultraviolet disinfection to reduce the total coliforms concentration in the effluent. As such, residual chlorine is not considered in this study.

3 DEVELOPMENT OF EFFLUENT DISCHARGE OBJECTIVES

The EDOs represent the maximum allowable effluent concentrations that are estimated such that the water quality at the edge of the RMZ do not exceed the selected EQOs under a variety of conditions.

3.1 Environmental Water Quality Objectives

The EQOs for receiving water quality used in this study are provided in Table 2.1-3 and are based on the Canadian Council of Ministers of the Environment guidelines (CCME 1999) with the following comments and exceptions:

- Because there is no guideline for $CBOD_5$, a criterion of 5 mg/L was selected to limit the potential for oxygen depletion in Patterson Lake at the edge of the RMZ to 5 mg/L of oxygen over a 5-day period.

- Seasonal guidelines for total ammonia were based on the CCME criteria for un-ionized ammonia (i.e., 0.0156 mg/L as N), monthly water temperatures, and seasonal pH for Patterson Lake (Table 2.1-2).
- As phosphorus is a nutrient and contributes to the growth of algae and macrophytes, the TP guideline is intended to be applied as a lake-wide value over the growing season. Short term (e.g., a week or less) exceedances within the mixing zone are not expected to result in any changes to the overall trophic level of Patterson Lake provided there are no measurable increased to the lake-wide TP concentration. As there are no Saskatchewan provincial objectives for TP, the Ontario provincial water quality objective for TP is an interim objective, being an average TP concentration of 0.02 mg/L for the ice-free period to avoid nuisance concentrations of algae in the waterbodies (MOEE 1994).

In addition to the EQOs for the receiving water, which apply at the edge of the RMZ and beyond, the following limits on the end-of-pipe effluent concentration (*The Waterworks and Sewage Works Regulations*) were used in this study:

- a maximum $CBOD_5$ concentration of 25 mg/L;
- a maximum TSS concentration of 25 mg/L; and
- a maximum un-ionized ammonia concentration of 1.24 mg/L at 15°C.

3.2 Mixing Zone Allocation

3.2.1 Proposed Mixing Zone Allocation

Based on the WSA (2015) guidelines, the RMZ was chosen as a 100 m radius from the centre of both the ETP diffuser and STP outfall locations as shown in Figure 2-1. The ETP diffuser and STP outfall would be 500 m apart; therefore, the closest distance between the RMZs for the two outfalls is 300 m. Thus, the two mixing zones do not intersect.

Additionally, neither the STP outfall nor the ETP diffuser are expected to affect the fresh water intake for the Project as this intake pipe is located upstream of both discharge locations in the North Arm – East Basin.

Based on the modelling in the previous subsection, the minimum predicted dilution factor in Table 3.2-2 (210:1) will be used to conservatively estimate the EDOs (Section 3.3.1, Estimated Maximum Effluent Discharge Objectives).

3.2.2 Required Effluent Dilution

The effluent dilutions required at the end of mixing zone to meet EQOs are provided in Table 3.2-1 for each parameter. These dilution factors are based solely on concentrations, are independent of the size of the mixing zone, and are used to identify the most restrictive parameter and aid in the development of the conceptual design for the outfall. The dilution factor is a measure of the amount the effluent is mixed with ambient water as follows:

$$S = \frac{Q_E + Q_A}{Q_E}$$ Equation 1

Where: S dilution factor
Q_E effluent flow rate (L/s)
Q_A ambient (background) flow rate (L/s)

The required dilution factor (S) was found by combining a simple mass balance (equation 2) with equation 1 and then solving for the required dilution (equation 3):

$$(Q_E + Q_A)C_T = Q_E C_E + Q_A C_A \quad \text{Equation 2}$$

$$S = \frac{C_E - C_A}{C_T - C_A} \quad \text{Equation 3}$$

Where: C_T selected water quality threshold (mg/L)
C_E effluent concentration (mg/L)
C_A ambient (background) concentration (mg/L)

As shown in Table 3.2-1, the required dilution is not required for total nitrate as the assumed effluent concentration is below the water quality objective of 3 mg/L as N. Table 3.2-1 also shows that total coliforms would likely require the highest dilution of all constituents (i.e., 2,000:1) to meet EQOs when the highest effluent concentration (i.e., 200,000 cfu/100 mL) is assumed. However, if effluent disinfection (i.e., using ultraviolet treatment before release) is implemented, then the effluent concentration of total coliforms can be expected to be less than the lowest effluent concentration (2,000 cfu/100 mL) and the required dilution for total coliforms is predicted to be 20:1 or less. Under this assumption, the highest predicted dilution required would be for TP (120:1). However, since most (i.e., greater than 90%) of the water quality samples collected in Patterson Lake reported TP concentrations as less than the method MDL of 0.01 mg/L the required dilution for TP was estimated using an assumed background concentration of 0.010 mg/L (i.e., equal to the MDL). As a result, the actual required dilution factor for TP is likely lower than the estimated value of 120:1. Additional water quality data with a lower MDL are required to better quantify the existing TP concentration and eliminate this uncertainty.

The subsequent analysis in this report assumes that effluent disinfection is implemented, and that TP is the limiting water quality parameter.

Table 3.2-1: Required Dilution at End of Mixing Zone to Meet Water Quality Objectives

Parameter	Month	Units	EQO[a]	Patterson Lake[a]	Expected Effluent[b]	Required Dilution[c]
$CBOD_5$	All	mg/L	5.0	1.0	25	6.0:1
TSS	All	mg/L	7.0	2.0	25	4.6:1
Un-ionized ammonia[d]	Jan	mg/L as N	0.0156	0.000016	0.036	2.3:1
	Feb			0.000016	0.036	2.3:1
	Mar			0.000022	0.049	3.1:1
	Apr			0.000028	0.063	4.1:1
	May			0.000047	0.105	6.7:1
	Jun			0.000184	0.413	27:1
	Jul			0.000245	0.550	36:1
	Aug			0.000214	0.480	31:1
	Sep			0.000093	0.210	14:1
	Oct			0.000043	0.097	6.2:1
	Nov			0.000034	0.076	4.9:1
	Dec			0.000016	0.036	2.3:1
Total nitrate	All	mg/L as N	3.0	0.020	2[e]	Not required[f]
Total phosphorus	All	mg/L	0.020	0.010	1.2	120:1
Total coliforms	All	cfu/100 mL	100	1	2,000[g]	20:1
Total coliforms	All	cfu/100 mL	100	1	200,000[g]	2,000:1

a) Table 2.1-3 and Section 3.1, Environmental Water Quality Objectives, for details.
b) Expected effluent quality provided by Stantec (2021).
c) Required dilution values rounded off to two significant figures.
d) Un-ionized ammonia concentrations estimated from total ammonia concentrations in Patterson Lake (0.02 mg/L) and effluent (45 mg/L) using monthly ambient water temperatures and seasonal pH from Table 2.1-2.
e) As nitrate concentration in the effluent is expected to be low (Stantec 2021), a concentration of 2 mg/L was assumed, which is approximately double the reported nitrate concentration in aerated lagoons located in cooler climates (USEPA 2011).
f) Expected effluent concentration is below water quality objective.
g) Range of expected coliform concentration provided by Stantec (2021).

EQO = Environmental Quality Objective; cfu/100 mL = colony-forming unit per 100 millilitres; $CBOD_5$ = 5-Day Carbonaceous Biological Oxygen Demand; TSS = total suspended solids.

3.2.3 Treated Sewage Outfall Mixing Potential

The mixing and dispersion of the effluent near the treated sewage outfall were predicted for 26 scenarios using CORMIX (Version 11.0GTS). The scenarios represented combinations of assumed current speeds, effluent temperatures, ambient temperatures, and ice conditions; scenarios are summarized with their predicted dilution factors at the edge of the RMZ (i.e., 100 m) in Table 3.2-2. In all seasons except winter (i.e., December, January, and February), the water depth was assumed to be 4 m. In winter, the assumed water depth was decreased to 3 m to reflect conservative ice thickness assumptions.

Table 3.2-2: Summary of CORMIX Model Simulations for the Sewage Treatment Plant Outfall

Conditions	Scenario	Effluent Temperature (°C)	Ambient Conditions		Estimated Dilution[a] at Edge of RMZ (100 m)
			Current Speed (m/s)	Lake Water Temperature (°C)	
Ice-covered	STP-1	8.5	0.001	0	350
	STP-2	4.0			350
Open-water	STP-3	20	0.001	5	410
	STP-4			10	400
	STP-5			15	360
	STP-6			20	400
	STP-7		0.042	5	210
	STP-8			10	220
	STP-9			15	220
	STP-10			20	590
	STP-11		0.079	5	650
	STP-12			10	670
	STP-13			15	740
	STP-14			20	1,800
	STP-15	8.5	0.001	5	280
	STP-16			10	400
	STP-17			15	400
	STP-18			20	370
	STP-19		0.042	5	340
	STP-20			10	700
	STP-21			15	300
	STP-22			20	300
	STP-23		0.079	5	1,500
	STP-24			10	1,600
	STP-25			15	1,200
	STP-26			20	870

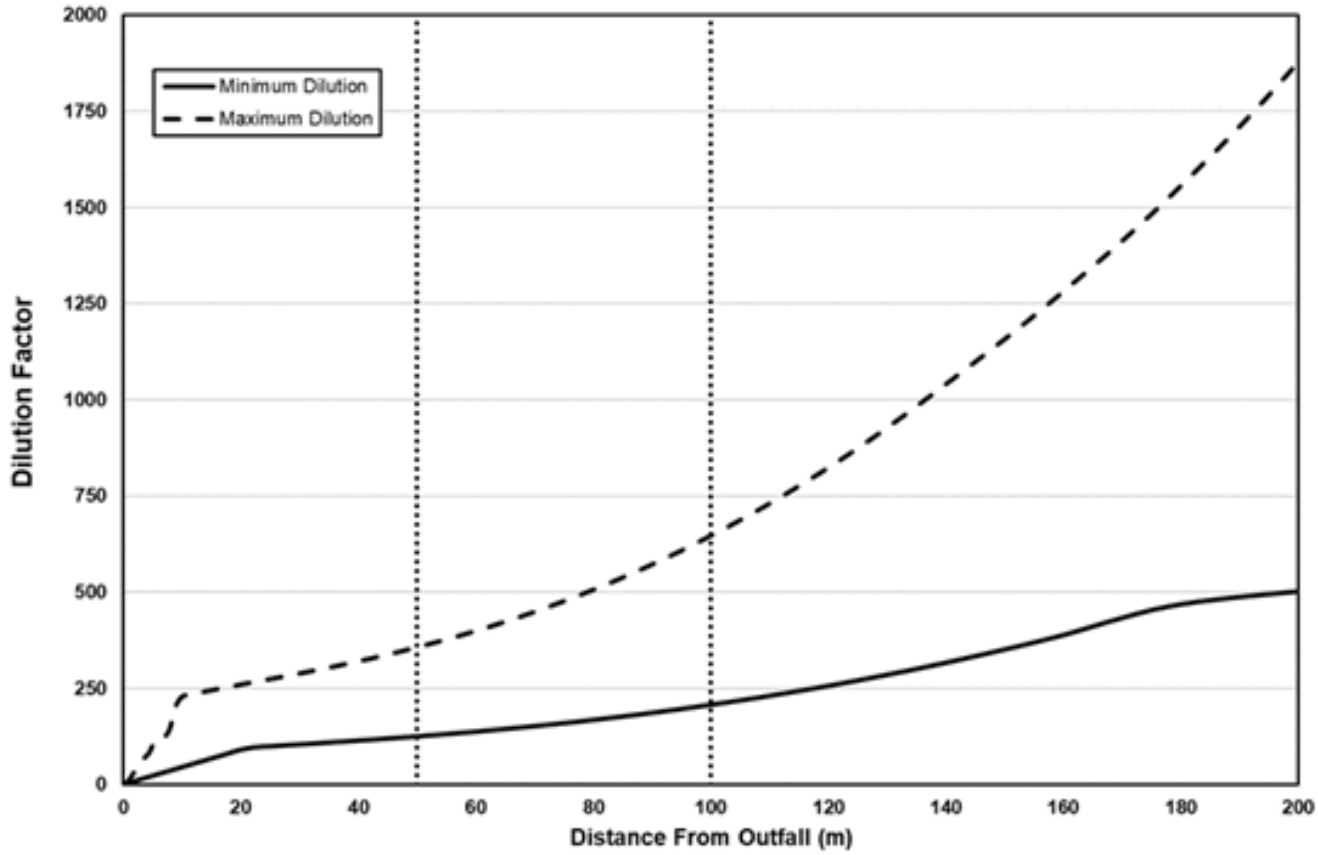
a) Distances measured from centre of outfall.
RMZ = regulated mixing zone; STP = sewage treatment plant.

The predicted effluent dilution factors at the edge of the RMZ (i.e., 100 m) ranged from 210:1 to over 1,800:1 with an average of 518:1. The minimum and maximum dilution factors with distance from the outfall are provided in Figure 3-1. Based on the results, the following conclusions were drawn:

- While rapid initial mixing is expected to occur in the immediate area of the outfall (e.g., predicted dilution factors at a distance of 25 m ranged from 100:1 to 275:1), the predicted dilution factor continues to increase with distance from the outfall.

- The lowest predicted dilution factor at the edge of the RMZ occurs when the density difference between the effluent and lake water is the greatest.
- At the edge of the RMZ, the dilution factor is predicted to increase with an increase in ambient current speed.
- During ice-covered periods, the predicted dilution factor at the edge of the RMZ is similar to open-water periods.
- The estimated dilution factor at the edge of the RMZ is greater than the required dilution factor for TP (120:1) for all the conditions modelled and parameters.
- As the critical dilution factor (i.e., the highest required dilution) is based on measured TP concentrations in Patterson Lake that are consistently reported as less than the MDL (0.01 mg/L), additional water quality sampling utilizing a lower MDL (i.e., 0.001 mg/L or less) is required to confirm the minimum required dilution factor at the edge of the RMZ prior to permitting and construction of the STP outfall.

Figure 3-1: Minimum and Maximum Dilution Factors with Distance from the Sewage Treatment Plant Outfall



3.3 Effluent Discharge Objectives

3.3.1 Estimated Maximum Effluent Discharge Objectives

The maximum allowable effluent discharge concentrations were estimated using a dilution factor (210:1) such that water quality objectives are consistently met at the edge of the RMZ (100 m) for all the constituents, conditions, and months. The maximum allowable EDOs represent the maximum allowable effluent concentrations that the receiving environment can accept and are estimated independent of any end-of-pipe restrictions that may be applicable. The results of this analysis are discussed in the following points and are presented in Table 3.3-1:

- Except for total coliforms, the estimated maximum allowable effluent concentrations for all constituents are orders of magnitude higher than their corresponding concentrations for the expected treated effluent.
- The maximum allowable effluent concentration for total coliforms is approximately 21,000 cfu/100 mL, which is within the range provided by Stantec and is likely to be met with disinfection.

3.3.2 Determination of Final Proposed Effluent Discharge Objectives

The WSA has specific end-of-pipe effluent criteria for $CBOD_5$, TSS, and un-ionized ammonia that cannot be exceeded regardless of the effluent concentrations that can be accommodated by a mixing zone. The determination of the final proposed EDOs for these three constituents was based on the minimum value of either the maximum allowable effluent concentration or the applicable WSA requirement (Government of Saskatchewan 2015) as shown in Table 3.3-1. In all cases, the WSA requirement was lower than the respective estimated maximum allowable effluent concentration.

As effluent objectives for ammonia are typically expressed as total ammonia, the monthly un-ionized ammonia objectives were converted to total ammonia as shown in Table 3.3-2. The final proposed EDO for total ammonia (i.e., 100 mg/L) will be based on the minimum monthly concentration of 102 mg/L (i.e., July).

The maximum allowable EDO for nitrate of 210 mg/L is two orders of magnitude higher than the assumed effluent quality of 2 mg/L. The proposed EQO for nitrate is rounded off to 200 mg/L.

The proposed EDO for TP was rounded off to 2.1 mg/L which is higher than the estimated effluent concentration of 1.2 mg/L. Lake-wide water quality completed for the EIS (EIS Appendix 10A) that an STP discharge using an effluent TP concentration of 1.2 mg/ is not expected to change the trophic status of Patterson Lake even when the contribution of the ETP discharge is included.

As the maximum allowable effluent concentration for total coliforms is approximately 21,000 cfu/100 mL, which is within the range provided by Stantec and is likely to be met with disinfection. The proposed EDO for total coliforms is rounded off to 20,000 cfu/100 mL.

Table 3.3-1: Estimated Maximum Allowable Effluent Concentrations and Proposed Effluent Discharge Objectives

Constituents	Month	Units	Criteria or Guideline[a]	Patterson Lake[a]	Expected Effluent[b]	Estimated Maximum Allowable Effluent Concentration	WSA Effluent Limits[c]	Proposed EDO[d]
$CBOD_5$	All	mg/L	5.0	1.0	25	841	25	25
TSS	All	mg/L	7.0	2.0	25	1,052	25	25
Un-ionized ammonia[e]	Jan	mg/L as N	0.0156	0.000016	0.036	3.27	1.24	1.24
	Feb			0.000016	0.036	3.27		
	Mar			0.000022	0.049	3.27		
	Apr			0.000028	0.063	3.27		
	May			0.000047	0.0105	3.26		
	Jun			0.000184	0.413	3.23		
	Jul			0.000245	0.550	3.22		
	Aug			0.000214	0.480	3.23		
	Sep			0.000093	0.210	3.25		
	Oct			0.000043	0.097	3.26		
	Nov			0.000034	0.076	3.27		
	Dec			0.000016	0.036	3.27		
Total nitrate	All	mg/L as N	3.0	0.020	2[f]	212.0	not specified[g]	200
Total phosphorus	All	mg/L	0.020	0.010	1.2	2.11	not specified[g]	2.1
Total coliforms	All	cfu/100 mL	100	1	2,000 to 200,000[h]	20,791	not specified[g]	20,000

a) Table 2.1-3 and Section 3.1 for details.
b) Expected effluent quality provided by Stantec (2021).
c) As specified in *The Waterworks and Sewage Works Regulations*.
d) Minimum value of either maximum allowable concentration or those specified in *The Waterworks and Sewage Works Regulations*.
e) Un-ionized ammonia concentrations estimated from total ammonia concentrations in Patterson Lake (0.02 mg/L) and effluent (45 mg/L) using monthly ambient water temperatures and seasonal pH from Table 2.1-2.
f) As nitrate concentration in the effluent is expected to be low (Stantec 2021), a concentration of 2 mg/L was assumed, which is approximately double the reported nitrate concentration in aerated lagoons located in cooler climates (USEPA 2011).
g) Effluent limits for total nitrate, TP, and total coliforms not specified by WSA.
h) Range of expected coliform concentration provided by Stantec (2021).

EDO = effluent discharge objective; cfu/100 mL = colony-forming unit per 100 millilitres; WSA = Saskatchewan Water Security Agency; $CBOD_5$ = 5-Day Carbonaceous Biological Oxygen Demand; TSS = total suspended solids; TP = total phosphorus.

Table 3.3-2: Proposed Effluent Discharge Objectives for Total Ammonia

Month	Assumed Water Temperature (ºC)[a]	Assumed pH[b]	Fraction Un-ionized Ammonia©	Proposed EDO	
				Un-ionized Ammonia (mg/L as N)	Total Ammonia (mg/L as N)
Jan	0.0	7.0	0.08%	1.24	1,557
Feb	0.0		0.08%		1,557
Mar	0.6	7.1	0.11%		1,151
Apr	3.7		0.14%		890
May	10.0		0.23%		537
Jun	15.5	7.5	0.92%		136
Jul	19.4		1.22%		102
Aug	17.5		1.07%		117
Sep	13.0	7.3	0.47%		268
Oct	3.2		0.21%		582
Nov	0.4		0.17%		736
Dec	0.1	7.0	0.08%		1,544

a) Average of 75th percentile water temperatures measured and the inlet and outlet of Patterson Lake.
b) Seasonal 75th percentile of pH measured in Patterson Lake.
c) Fraction of total ammonia that is un-ionized, estimated using equations provided by CCME (1999).
EDO = effluent discharge objective.

3.3.3 Monitoring and Follow-Up

Additional baseline data are planned to be gathered for phosphorus using lower MDLs that will allow for more precise EQO for phosphorus. As the limiting nutrient, TP concentrations are typically managed on a mass-loading, lake-wide basis rather than as a mixing zone parameter. Total phosphorus concentrations in Patterson Lake have been assessed for potential effects on trophic status as part of the EIS (EIS Section 11, Fish and Fish Habitat), which concluded that, even under the conservative assumption of baseline concentrations of 0.010 mg/L, total concentrations would reach 0.009 mg/L and not affect trophic status or fish in Patterson Lake. Additional data are also being collected for coliforms and $CBOD_5$ to confirm that the low values assumed in this study are representative of baseline conditions.

In addition to the ongoing baseline data collection, discharge and receiving environment conditions would be monitored as per licensed conditions if the STP becomes operational to confirm that EQOs are met and that the receiving environment is protected.

4 SUMMARY AND PROPOSED EFFLUENT LIMITS

The proposed STP would discharge to an undeveloped portion of Patterson Lake that has water quality typical of oligotrophic lakes in northern Saskatchewan (e.g., low nutrients, high water clarity). While the existing water quality in Patterson Lake provides adequate capacity to receive effluent from the proposed STP, these existing conditions also require that suitable EDOs be developed to prevent the degradation of the water quality and maintain the protection of aquatic habitat. The analysis suggests that TP is the water quality parameter that would require the greatest dispersion to meet the EQO, and that this required dispersion will be met under a range of plausible conditions. The proposed mixing zone of 100 m is not expected to interact with the ETP mixing zone or the proposed fresh water intake for the Project located in Patterson Lake North Arm – East Basin. As

such, the proposed treated sewage discharge is not expected to have any adverse effects on the Project's fresh water supply or on the aquatic life in Patterson Lake.

Based on the analysis presented in this memorandum, the final proposed EDOs are provided in Table 4-1.

Table 4-1: Final Proposed Effluent Discharge Objectives

Parameter	Proposed EDO
$CBOD_5$ (mg/L)	25
TSS (mg/L)	25
Total ammonia (mg/L as N)	100
Un-ionized ammonia (mg/L as N)	1.24
Total nitrate (mg/L as N)	200
Total phosphorus (mg/L)	2.1
Total coliforms (cfu/100 mL)	20,000

cfu/100 mL = colony-forming unit per 100 millilitres; $CBOD_5$ = 5-Day Carbonaceous Biological Oxygen Demand; TSS = total suspended solids; EDO = effluent discharge objective.

CLOSING

Golder is pleased to submit this report to NexGen in support of the environmental assessment for the Rook I Project. For details on the limitations and use of information presented in this report, please refer to the Study Limitations section following this page. If you have any questions or require additional details related to this study, please contact the undersigned.

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GVA/JF/rd

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Rook I Project

Environmental Impact Statement

TSD XXII: Climate Adaptation Framework

CLIMATE ADAPTATION FRAMEWORK TECHNICAL SUPPORT DOCUMENT FOR THE ROOK I PROJECT

Prepared for:

NexGen Energy Ltd.

Prepared by:

WSP Canada Inc.

March 2024

Abbreviations and Units of Measure

Abbreviation	Definition
EIS	Environmental Impact Statement
IMS	Integrated Management System
MAC	Mining Association of Canada
MAA	multiple accounts analysis
NexGen	NexGen Energy Ltd.
Project	Rook I Project

Unit	Definition
%	percent

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1.0 INTRODUCTION

Climate change has the potential to change future precipitation and temperature regimes and has been identified for consideration in assessment and planning of Construction, Operation, and Decommissioning and Reclamation (i.e., Closure) of the NexGen Energy Ltd. (NexGen) Rook I Project (Project). As part of the Environmental Impact Statement (EIS), a detailed climate dataset has been developed to support the analysis of potential climate-infrastructure interactions and to support the assessment of climate-related effects over the lifespan of the Project. In addition to supporting the EIS, this framework supports the decision-making process to build climate resilience (i.e., the ability to continue activities during all Project phases in the face of projected climate change).

A climate adaptation strategy forms the basis of a plan developed to document ongoing monitoring and continual improvement related to climate change, as well as to outline the decision-making process for when action needs to be taken to increase climate resilience. A climate adaptation framework is the approach used to develop the climate adaptation strategy. This technical support document provides a proposed framework that could be used to develop a climate adaptation strategy for the Project outside of the Environmental Assessment (EA) process. This report also provides guidance on how existing systems and processes for the Project, along with work completed as part of the EIS, could be mapped to support the proposed framework. This mapping could be used as a basis for developing a climate adaptation strategy for the Project to support future climate risk assessments or to provide operational and financial decision-making support. The climate adaptation framework could be used by NexGen to develop a climate adaptation strategy to document a climate-focused continual improvement process, including outcomes of future climate risk assessments, identification and implementation of adaptive measures (i.e., actions taken to improve climate resilience), and performance of implemented adaptation measures through monitoring and surveillance programs.

This technical support document is organized to first provide an understanding of existing processes and systems developed for the Project and relevant climate-related EIS work (Section 2.0, Supporting Project Information). Following this supporting information, the report summarizes a climate adaptation framework (Section 3.0, Proposed Climate Adaptation Framework) based on recent guidance from the Mining Association of Canada (MAC 2021). The supporting information is then mapped to the proposed framework to show how existing information from the Project could be used to develop a climate adaptation strategy (Section 4.0, Mapping to the Proposed Climate Adaptation Framework). Potential next steps to develop a climate adaptation strategy are discussed (Section 5.0, Developing a Climate Adaptation Strategy), further demonstrating how the framework could be applied to the Project. Finally, a glossary of terms used throughout the report is provided (Section 6.0, Glossary).

2.0 SUPPORTING PROJECT INFORMATION

The proposed climate adaptation framework relies on an understanding of the current and future climate and potential climate interactions, as well as an understanding of risk management systems and continual improvement processes. The work completed under the EIS relevant to a climate adaptation framework is summarized first, followed by summaries of the Integrated Management System (IMS), which governs both continual improvement processes and risk management systems.

2.1 Relevant Environmental Impact Statement Sections

Environmental Impact Statement (EIS) Appendix 22A, Climate Change Dataset Summary Report, describes the current climate conditions and future projected climate for the general region of the Project. The dataset provides a description of the current climate conditions using the most representative local observation data and a description of the future climatic conditions using publicly available climate projections in terms of percentiles of results generated by a model ensemble. The dataset focuses on mean temperature and precipitation, along with information on extreme weather events. Understanding the current climate and the future climate trends is important when evaluating the Project design parameters and potential climate-infrastructure interactions.

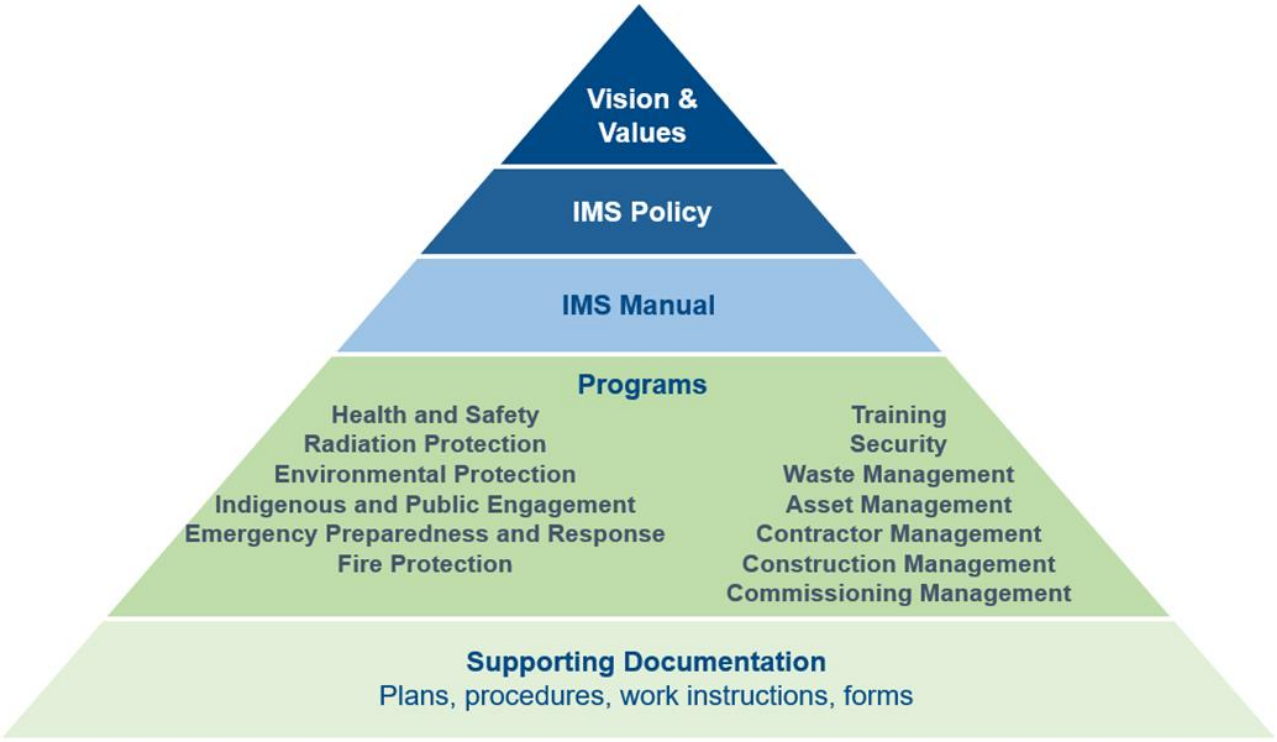
Environmental Impact Statement (EIS) Appendix 22B, Climate–Infrastructure Interactions, identifies the climate-infrastructure interactions, the resilience and mitigation actions, and the required monitoring and surveillance commitments to support the resilience actions. The climate-infrastructure interactions have been identified for the surface and underground infrastructure for temperature, precipitation, and extreme events, which is the first step in a risk assessment. The interactions provide a high-level summary on areas of risk. To address the uncertainty of the identified interactions, a detailed climate risk assessment could be conducted for high priority areas. Appendix 22B summarizes a range of mitigation measures that have been identified in the feasibility study (NexGen 2021) for the Project. Although the mitigation measures have the potential to reduce climate risks, the measures need to be monitored for their performance through an ongoing monitoring and surveillance process. Additional mitigation measures identified through the EA process would also have to be added to EIS Appendix 22B for monitoring and evaluation of their performance to reduce climate change effects. Appendix 22B could be used as a supporting document for implementation of this climate adaptation framework.

Environmental Impact Statement (EIS) Section 22, Assessment of Effects of the Environment on the Project, included a high-level risk assessment of present and future environmental risks such as extreme temperatures, extreme precipitation, and related natural hazards on the Project. The analyses were qualitative, considering likelihood and consequence of each hazard to estimate a level of risk. Climate-related risks considered the future projections in Appendix 22A and infrastructure interactions in Appendix 22B as outlined above.

2.2 Integrated Management System

NexGen has established the IMS which is subject to the IMS Policy and the IMS Manual. The policy and the manual provide the foundation for NexGen's approach to risk management and continual improvement. The IMS is summarized in Figure 2-1.

Figure 2-1: Rook I Project Integrated Management System Framework



IMS = Integrated Management System.

NexGen is developing an IMS Policy to support the health, safety, well-being, environment, and Indigenous and community processes of the organization. NexGen is committed to health, safety, and well-being of the employees through a serios of actions such as identifying, managing, and eliminating hazards, managing hazards to confirm exposure is low as achievable, and establishing a strong safety culture which is periodically assessed and continually improved. NexGen, through the IMS Policy is committed to recognizing and valuing the importance of protecting and preserving the environment through the lifecycle of the Project and future generations by a series of actions including:

- exercising responsible stewardship of air, land, and water resources;
- keeping all releases and adverse impacts low and respecting the principle of pollution prevention;
- designing and operating for closure and responsibly managing tailings and waste facilities;
- minimizing waste generation;
- managing energy use and reducing greenhouse gas emissions; and
- monitoring and assessing against indicators and targets based on sound science.

NexGen is also committed to acknowledging and valuing community interests and aspirations of those impacted by the Project through fostering trusting relationships that facilitate collaborations.

As a part of the IMS Policy, NexGen is developing the IMS Manual, which will set continual improvement as a general process for the Project. NexGen's continual improvement will be an ongoing process to improve the suitability, adequacy, and effectiveness of the IMS and its underlying programs and plans. Management and workers will be expected to continually seek out improvement opportunities for the IMS and Project processes; this effort typically would involve program monitoring, auditing, management review, and maintaining awareness of changes in the business environment, and may also include benchmarking the Project performance against other similar projects and facilities. Continual improvement opportunities would be identified, documented, and evaluated and this process will be described in the IMS procedure Continual Improvement. The IMS Manual will identify that the Project would follow a Plan-Do-Check-Act cycle to identify, control, monitor, and continually improve the Project processes. The continual improvement process at the Project is described in Table 2-1.

Table 2-1: Plan-Do-Check-Act Cycle for the Rook I Project

Step	Description
Plan	As a part of the continual improvement process, identify and document hazards, and assess the risks using a risk matrix appropriate for the assessment based on the likelihood and severity of the occurrence. Document risks in the risk registers and implement controls where required.
Do	Apply controls to address the identified hazards and risks to lower the risks to an acceptable level. Document, track, and periodically review controls for their effectiveness.
Check	Conduct ongoing performance monitoring and periodical analysis.
Act	Perform corrective actions as appropriate and continually improve the management system.

2.3 Risk Management Process

NexGen describes a risk management process as part of its IMS Manual to identify hazards to people, environment, systems, facilities, and equipment. NexGen's risk management process starts with hazard identification to consider what, how, and why things could go wrong. This step is followed by a risk assessment using a risk matrix appropriate for the type of assessment and rated based on likelihood and consequence. Hazards with higher risk rankings would require additional mitigation measures to reduce the risk to an acceptable level. The IMS risk assessment would be documented in the Project risk register, which would be updated periodically and used for decision making and the identification of improvement opportunities.

Based on the ongoing identification of risks through the IMS risk assessment process, controls would be implemented as appropriate to reduce the risks. NexGen has developed a hierarchical system to identify the control that should be implemented to reduce a risk. Controls would be documented, tracked, and periodically monitored for their performance. To support the IMS risk management process, NexGen has systems to implement work control, design control, and supply chain control. NexGen also has systems for monitoring and measuring controls, as well as auditing and inspecting the implemented controls. Any events deemed sufficiently serious in nature would go through the corrective action process. Corrective actions would be planned, implemented, verified, and reviewed for their effectiveness based on the level of risk.

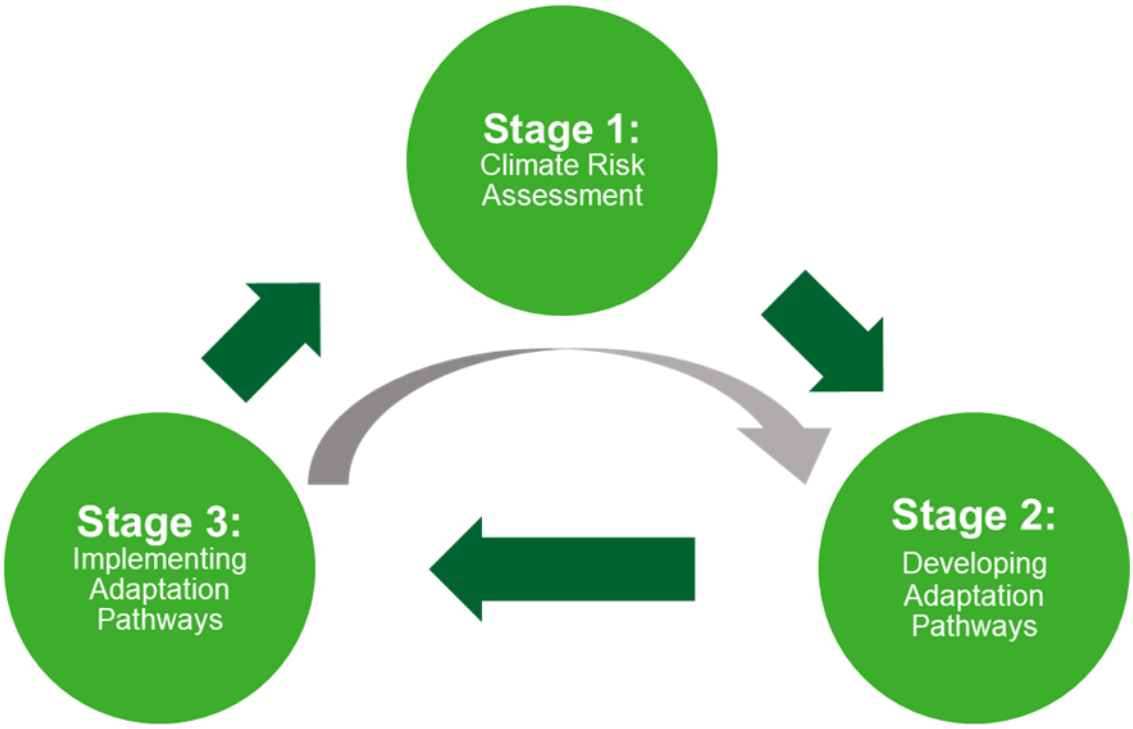
3.0 PROPOSED CLIMATE ADAPTATION FRAMEWORK

This subsection summarizes the *Guide on Climate Change Adaptation for the Mining Sector* (MAC 2021) that could be used to integrate climate risks and opportunities in its operations. The MAC guidance provides a stepwise approach that NexGen could apply to consider and incorporate climate change adaptation considerations into decision making to increase the resiliency of the Project. The document could help identify an approach to reduce potential climate change effects, take advantage of climate change opportunities, and reduce the need to implement costly adaptation measures (i.e., actions taken to manage risks or opportunities associated with climate change) later in the project's lifecycle.

The MAC guidance provides a three-stage framework that involves the following: climate risk assessment; developing adaptation pathways; and implementing adaptation pathways to incorporate climate change in decision making. The MAC (2021) defines adaptation pathways as the different options to implement identified adaptation measures (i.e., actions taken to manage risks or opportunities associated with climate change) to address climate risks or opportunities. As there are multiple ways adaptation measures could be implemented; multiple pathways could be developed to address the same risk or opportunity. This three-stage process could be used to understand current and future climate trends in areas of operations, identify key site and organizational (i.e., corporate) level aspects that could be vulnerable to a changing climate, assess risks, identify adaptation measures, and implement adaptation pathways. The outcomes of this climate risk assessment process could be integrated into a site- or company-wide risk management program or organizational governance policy or strategy.

Section 3.1, Climate Risk Assessment (Stage 1), Section 3.2, Developing Adaptation Pathways (Stage 2), and Section 3.3, Implementing Adaptation Pathways (Stage 3) provide a summary of how projects could incorporate climate change into decision making through an iterative process. In an iterative process, the vulnerabilities (i.e., the extent to which infrastructure or activities are susceptible to, or unable to cope with, climate change) are reconsidered, risks are re-assessed, and adaptation measures are re-evaluated based on performance (Figure 3-1).

Figure 3-1: Three Stages of Climate Resiliency



This three-step climate risk assessment is an iterative process, where each stage of the cycle requires successive re-evaluation. Re-evaluation is based on the findings derived from the monitoring and surveillance of the adaptation pathways and on whether prescribed triggers/thresholds are met. For example, the need for re-assessment will arise if there are updates to future climate projections and/or changes to the infrastructure or operations of project components. The risk assessment is not static and needs to be updated to address the uncertainties of a changing climate or changes to:

- climate science;
- engineering codes and standards or legal requirements that may alter vulnerabilities or risks;
- project operations, including infrastructure;
- policies, plans, and business strategies;
- project assets;
- life cycle phases of a project;
- future plans of a project (e.g., closure planning); and
- the environment surrounding the project (i.e., outside of the project boundary).

In addition to the MAC guidance, additional resources considering the climate resilience of buildings and infrastructure (Cannon et al. 2020), the application of future rainfall intensity-duration-frequency information (CSA Group 2019) and assessing climate change resilience (Government of Canada 2022) would be considered, where appropriate, as part of the proposed adaptation framework.

3.1 Climate Risk Assessment (Stage 1)

Climate risk assessment involves identifying and incorporating current and future climate trends and developing and implementing a vulnerability identification into a risk evaluation framework.

3.1.1 Developing Climate Change Datasets

A thorough understanding of historical and current climate conditions is essential to all aspects of climate risk assessments and adaptation planning (i.e., process of adjustment to reduce the impacts of climate change, or to take advantage of the opportunities arising out of climate change), including inputs from future climate change projections. This stage of the process may include but is not limited to:

- compiling and analyzing datasets provided for observed climate conditions for the site;
- establishing baseline climate conditions based on the observed climate data;
- developing projected future climate conditions for the site using accepted modelling tools and approaches; and
- identifying and characterizing inherent uncertainties in historical and future climate conditions.

Considering that dataset development is an iterative process, one area of continual improvement is recognizing and fulfilling the need to update the climate data that support the risk assessment. Updated climate change projections should be incorporated in the process at regular intervals as triggers for adaptation planning.

3.1.2 Developing a Climate Change Risk Assessment Framework

Climate change risk assessment is a systematic process used to identify, assess, and prioritize climate change risks. The assessment provides a foundation to support the development, selection, and implementation of adaptation pathways that would then be carried forward for further assessment in the climate change risk assessment process (e.g., development of triggers and thresholds where required). A systematic process is required to address all project operations and must be based on accurate and up-to-date climate data relevant to a project's infrastructure and operations. The risk assessment outcomes are derived in such a way that they could be used to facilitate the development, implementation, and re-evaluation of adaptation pathways. The risk assessment process should be iterative, considering the uncertainties associated with climate change, and should be reviewed regularly (e.g., annually, when there are changes to operations or business, when model updates are released) to validate that the assessment is up to date. The results of the review could help identify a required update to the risk assessment.

Risk assessments require input from a multi-disciplinary team, including representatives from project operations, environment, community and government relations, water management, tailings management, procurement, and mine and mill management. These representatives could be internal or external to an organization, depending on the expertise available. The climate change risk assessment involves the steps outlined in Table 3-1.

Table 3-1: Climate Change Risk Assessment Steps

Step	Actions Involved
Risk assessment scope	Identify: ▪ objectives; ▪ knowns and unknowns; ▪ boundaries for assessment; ▪ existing risk management programs; ▪ required human and financial resources; ▪ stakeholders; and ▪ how the risk assessment could be integrated into overall decision-making process.
Information gathering	Identify existing information such as: ▪ current climate data and future projections for the area; ▪ existing risk assessment practices; ▪ Indigenous and Local Knowledge; ▪ climate adaptation measures taken by third parties (e.g., stakeholders, insurers); ▪ list of project equipment and operations; ▪ current infrastructure design and closure plans; and ▪ operational data for equipment and infrastructure.
Identifying vulnerabilities and opportunities	Identify: ▪ Direct and indirect effects of climate change on project operations; ▪ Associated vulnerabilities for on-site and off-site components; ▪ Relationships between direct and indirect effects of climate change on mining operations; and ▪ Opportunities due to climate change (e.g., longer growing season could potentially enhance reclamation activities).
Defining risk ranking system	▪ Identify timeframes for likelihood and consequences. ▪ Describe a risk-ranking system. ▪ Provide a risk matrix to display risk ratings for each vulnerability.
Assessing risks	▪ Assign a consequence and likelihood score to each vulnerability using the risk-ranking system for current and projected future climate conditions. ▪ Rank and prioritize risks based on analysis.

The outcomes of the risk assessment process would be documented and reported and would be communicated with internal and external stakeholders. Community of Interest groups would include local communities and First Nations and Métis Groups (collectively referred to as Indigenous Groups). Reporting should be completed in a common and simple language to support communication with senior management, regulators, and stakeholders.

3.2 Developing Adaptation Pathways (Stage 2)

Developing adaptation pathways involves identifying and documenting possible actions to reduce climate-related risk. The key components include identifying adaptation options, identifying triggers and thresholds, and developing adaptation pathways.

3.2.1 Identifying Adaptation Measures

Adaptation measures refer to any implemented actions that reduce the risk of critical project infrastructure to climate change. Adaptation measures usually include, but are not limited to, physical actions (e.g., the construction of a piece of infrastructure), though adaptation measures could also include strategic action (e.g., changes to business practices) and operational action (e.g., design considerations, location, and operation

of a project infrastructure component). The objective of this stage is not to select which adaptation measures need to be implemented, but instead to develop a list of potential measures that could be implemented. Determining the most suitable adaptation measures is dependant on the outcomes of the risk assessment from Stage 1 (i.e., the climate risk assessment). The adaptation measures selected to minimize any identified climate-related risks should take advantage of identified opportunities posed by climate change and optimize future performance by reducing future risks.

The adaptation options (i.e., available adaptation measures) should be selected by a multi-disciplinary team that includes personnel involved in the risk assessment (Stage 1) and personnel responsible for different aspects of Project and organizational (i.e., corporate) operations. Due to the iterative nature of the climate resilience process, every time a climate risk assessment (Stage 1) is updated, the identified adaptation measures need to be re-evaluated based on the outcomes of the updated risk assessment.

3.2.2 Identifying Triggers and Thresholds

Developing pre-defined triggers and thresholds is key for developing adaptation pathways that facilitate effective decision making to determine when to implement the pathways. Thresholds or tipping points describe the climate conditions for a specific climate variable (e.g., mean annual precipitation) beyond which further changes in climate would result in the existing risk management or adaptation measures no longer being able to meet performance objectives and potentially failing (e.g., the maximum capacity of a spillway) (Buurman and Babovic 2017). A trigger describes a point before the threshold is reached at which a climate hazard/event deviates from current climatic conditions and creates an early warning sign that a threshold is approaching.

As a trigger could be used as an early warning of crossing a threshold, it is important to establish a trigger for each pathway. The identified early warnings should provide sufficient time to allow implementation of the selected adaptation measures and manage the identified risks before thresholds are reached. Specific adaptation measures to be implemented could prevent the threshold being reached. For example, consider a water crossing that is designed for a flood event of a specific magnitude with a return period of 1:1,000 years. If a flood event of the same magnitude has a shorter return period under future conditions, then the risk could be re-evaluated. If the risk is unacceptable, an adaptation measure is necessary. A reassessment of intensity is necessary on a regular basis to monitor the change in risk.

3.2.3 Developing Adaptation Pathways

Adaptation pathway processes could be used to evaluate, develop, and potentially implement adaptation actions, and should be used to evaluate which actions need to be taken in the short term, and which actions are best deferred to the longer term. The MAC (2021) guide defines adaptation pathways as the different options to implement identified adaptation measures to address risks or opportunities. Since there are multiple ways adaptation measures could be implemented, multiple pathways could be developed to address the same risk or opportunity. The development of adaptation pathways should consider the projected future climate conditions, outcomes of climate risk assessment (Stage 1), identified opportunities, status of existing implemented adaptation measures, and identified potential adaptation measures to be integrated into decision-making processes. The adaptation pathways approach is a “planning approach addressing the uncertainty and challenges of climate change decision-making. It enables consideration of multiple possible futures and allows analysis/exploration of the robustness and flexibility of various options across those multiple futures” (MAC 2021).

Adaptation pathways also consider what additional adaptation may be required at some point in the future if trigger levels are met.

Identified adaptation pathways could include:

- "no action required" pathway (where climate risk could be considered acceptable under current and future climatic conditions);
- "wait" pathway (where additional information is gathered before making a decision);
- "defer with pre-defined triggers for action" pathway (where risk is acceptable in short-term, but will require action in future); or
- "implementing action" pathway (where adaptation measure needs to be implemented in short-term).

A decision-making process could be implemented to identify the adaptation pathway. There are a range of decision analysis tools that could be used to rank and prioritize the adaptation pathways for implementation. The use of decision-making processes involves assumptions and biases, and to test the sensitivity of outcomes of the decision-analysis, a sensitivity analyses could be conducted using tools such as multiple accounts analysis (MAA).

No matter which adaptation pathway is selected, monitoring and surveillance should be integrated into the maintenance program as part of a continual improvement process. Furthermore, adaptation pathways should be developed by qualified professionals who have sufficient practical experience in internal risk assessment processes, along with input from multi-disciplinary stakeholders (e.g., climate scientists, Engineer of Record, design engineer). The approach to develop adaptation pathways is outlined in Table 3-2.

Table 3-2: Adaptation Pathways Approach Steps

Step	Actions involved
Objective and scope	▪ Identify the objective and scope. ▪ Identify the acceptable level of risk. ▪ Identify team and team member responsibilities to develop adaptation pathways. ▪ Define measurable performance objectives for the adaptation pathways.
Adaptation measures	▪ Identify physical/strategic/operational adaptation measures. ▪ Describe the identified adaptation measures. ▪ Identify how the adaptation measures would be implemented.
Potential adaptation measures classification and screening	▪ Classify adaptation measures into no/low regrets adaptation, flexible adaptation, win-win adaptation, or critical adaptation[(a)]. ▪ Pre-screen the identified adaptation measures based on the performance objectives to eliminate measures that do not meet the objectives or are not feasible.
Adaptation pathways	▪ Identify adaptation pathways for identified adaptation measures, which could include no action required, wait, defer with pre-defined triggers for action, and/or implement action. ▪ Schedule the implementation of identified adaptation measures. ▪ Identify actions that need to be taken in short-term and those that could be deferred to long-term. ▪ Document the identified potential adaptation pathways for effective communication.
Climate thresholds and triggers	▪ Establish the threshold when the climate risk is unacceptable. ▪ Establish triggers based on design parameters with the intent that the there is adequate time to take action (i.e., implement adaptation measures) to modify design/construction before a threshold is reached. ▪ Where a number of different triggers are defined prior to reaching the threshold, identify multiple levels of triggers that could be used.

Table 3-2: Adaptation Pathways Approach Steps

Step	Actions involved
Decision analysis and sensitivity analysis	▪ Apply decision-making processes such as MAA. ▪ Conduct a sensitivity analysis to test outcomes of decision-analysis against the biases and assumptions involved.
Preferred adaptation pathway selection	▪ Select the preferred adaptation pathway for implementation; use decision-making tool if required. ▪ Document timelines for implementing preferred adaptation pathways. ▪ Identify issues that may affect implementation of a selected adaptation pathway.

a) Classifications are defined in Section 6.0, Glossary.
MAA = multiple accounts analysis.

The outcomes of this process, including the adaptation pathway selected, should be documented and reported. The results should be communicated to the appropriate internal and external stakeholders using common and simple terms.

3.3 Implementing Adaptation Pathways (Stage 3)

This stage includes designing the adaptation pathways that were selected in Stage 2, implementing monitoring and surveillance systems, and developing adaptation management plans. All three steps are needed to implement the adaptation pathways. This stage of the process supports the iterative and continual improvement approach to incorporating climate change adaptation into decision making.

3.3.1 Designing the Adaptation Pathways

Once adaptation pathways have been selected (Stage 2), the adaptation pathway and the associated adaptation measures should be designed to effectively manage risks and opportunities. This step includes defining and documenting any modification actions for infrastructure, documenting any new short-term and long-term construction, defining and documenting maintenance and surveillance practices, and/or revising closure plans.

3.3.2 Implementing Surveillance Systems

Surveillance is a key step of the design and implementation of adaptation pathways. Surveillance is used to confirm that new climate data and performance of implemented adaptation measures are reviewed and integrated into new plans as part of an iterative process. Surveillance involves monitoring and collecting qualitative and quantitative observations and data of activities and infrastructure. Surveillance includes the documentation, analysis, and communication of monitoring results that will help to inform decision making and verify whether performance objectives and risk management objectives are being met (adapted from MAC 2019a).

Implementation of surveillance systems involves assessment of current climate conditions in comparison to future projections, effectiveness of existing risk management practices and implemented adaptation measures, performance against defined thresholds and triggers. It also includes surveillance of vulnerabilities where risk was identified to be acceptable, regardless of the pathway selected. Given that it is an iterative process, results from monitoring and surveillance should be used to inform any updates to the risk assessment, adaptation pathways framework/decision analysis, or adaptation management plans, to support the continual improvement process.

3.3.3 Implementing Climate Adaptation Management Plans

A climate adaptation management plan is key to implementing adaptation pathways, as it could improve the effectiveness of the adaptation pathways approach by providing a governance and decision-making framework. In this case, adaptive management will be a process that involves planning, implementation, and modification of strategies to address the uncertainties of climate change. Adaptive management is an iterative process that could inform updates to adaptation measures in response to observations of effects and changes to the system and other variables through monitoring and surveillance (ISO 2019). As a part of the continual improvement process, existing project conditions, future plans, current and evolving climate conditions, and findings from monitoring and surveillance activities should be re-evaluated annually. This re-evaluation will help identify deficiencies, establish completeness and confirm objectives have been met. Adaptive management plans support record keeping, presenting users a tool with which they could review preceding versions to track the development of identified adaptation pathways (e.g., where thresholds were reached, and pathways were assigned and/or modified).

Table 3-3 provides an overview of the Plan-Do-Check-Act process as defined by MAC (2021). The Plan-Doc-Check-Act process defined by MAC (2021) is consistent with the process defined by NexGen under the IMS Manual. Table 3-4 provides steps for implementing adaptation pathways.

Table 3-3: Plan-Do-Check-Act Adaptive Management Process

Step	Description
Plan	Establish objectives for adaptive management, synthesize existing knowledge, and develop processes and plans to implement adaptation pathways. This step relies on the results of vulnerability and risk assessment and selection of adaptation pathways.
Do	Implement adaptation pathways involving adaptation measures, along with implementation of monitoring and surveillance, which were developed as a part of adaptive management process.
Check	Monitor and evaluate the outcomes of the implementation to assess the performance of adaptation measures. Step involves periodic review to identify any changes that have occurred that could affect the implemented adaptation measures (e.g., changes to project operations, climatic conditions).
Act	Adjust the plan based on the results of the Check step. Step involves an iterative approach to review implemented pathways and making updates to improve the efficiency of measures.

Source: MAC 2021.

Table 3-4: Implementation of Adaptation Pathways Steps

Step	Actions Involved
Design and implementation of adaptation pathways	Depending on type of adaptation pathway selected, actions could include: ▪ preparing and documenting detailed designs for modifications to existing infrastructure; ▪ preparing and documenting detailed designs for construction of new infrastructure; ▪ defining, documenting, and implementing changes to existing/new operating, maintenance, and surveillance practices; and ▪ revising closure plans.
Establish a monitoring and surveillance program	Confirm there is ongoing assessment of: ▪ current climate conditions; ▪ effectiveness of existing risk management practices and adaptation measures; ▪ performance against defined thresholds and triggers; and ▪ surveillance of vulnerabilities regardless of pathway selected.

Table 3-4: Implementation of Adaptation Pathways Steps

Step	Actions Involved
Develop and implement adaptation management process	▪ Develop and implement a climate adaptation management process through the Plan-Do-Check-Act process (Table 3-3). ▪ Outline a review schedule to confirm ongoing collection of data for continual improvement.

Continued engagement is required throughout the implementation process for the adaptation measures as well as during the monitoring and surveillance of the adaptation measures once they are implemented. The schedule and outcomes of the monitoring and surveillance program should be shared with stakeholders and regulatory agencies.

4.0 MAPPING TO THE PROPOSED CLIMATE ADAPTATION FRAMEWORK

Using the proposed climate adaptation framework as a guide, the Project information provided in Section 2.0, Supporting Project Information, is mapped out in this subsection to help identify what portions of the process are complete at the time of writing and which portions will need to be further developed. The mapping applies the three-stage process described in Section 3.0 using Project-specific information.

As the Project progresses past the time of writing, this information would need to be revisited to implement a climate adaptation framework. This mapping to the climate adaptation framework could be used as a guide to demonstrate how climate change considerations could be applied to the operations and management of the Project.

4.1 Climate Risk Assessment

As summarized in Section 2.1, Relevant Environmental Impact Statement Sections, to support the ongoing climate strategy development and the ongoing risk assessments, a climate change dataset has been developed for current and future climate conditions (EIS Appendix 22A). Based on the available climate dataset, the climate-infrastructure interactions have been identified in EIS Appendix 22B. The interactions provide a high-level overview of the vulnerabilities associated with different climate variables. The Project has considered climate change by identifying the Project's vulnerabilities over the Project lifespan, including Construction, Operations, and Closure, and by identifying mitigation measures to reduce the effects of weather events on the Project activities. These mitigation measures would be incorporated in the final Project design and activities, increasing the resiliency of the Project to climatic hazards.

During Operations, to identify ongoing potential climate effects, the initial assessment could be refined to conduct an in-depth qualitative or quantitative climate change risk assessment. This process could be conducted by using NexGen's risk ranking system (Section 2.3, Risk Management Process). Based on likelihood and consequence, risk could be categorized under the current and projected future climatic conditions. As a part of the continual improvement process, NexGen could inform the ongoing development of the Project by the updates to the climate projections to represent the most current synthesis of information on climate change. By using this approach, NexGen could identify how the risk may change over time based on climate projections (e.g., greater likelihood or greater consequence) and document whether Project infrastructure is resilient, particularly during Closure.

Considering all critical infrastructure and a range of climate variables, a risk analysis could be conducted for the current and future conditions. A series of workshops with the subject matter experts from NexGen could be conducted to identify areas of high risk. Results from the risk analysis could be documented in NexGen's risk registers and updated periodically based on updates to climate science, Project infrastructure, and design updates. The documented climate risks from the risk register could be ranked and prioritized to inform NexGen's decision making and determine whether additional action is required, in alignment with NexGen's continual improvement process.

4.2 Developing Adaptation Pathways

Following the identification of risks and opportunities, the potential adaptation measures for the short-, medium-, and long-term would need to be identified and documented, along with documentation of the potential pathways between them to increase climate resiliency. NexGen could identify a range of triggers and thresholds for different infrastructure. Defining triggers and thresholds could help in development of adaptation pathways, in which implementation of adaptation measures could be deferred (Section 3.2.2, Identifying Triggers and Thresholds). NexGen could define thresholds using the climate change dataset described in EIS Appendix 22A. Defining the thresholds and triggers using site-specific climate data could help NexGen meet performance objectives for infrastructure and allow adequate time to implement any identified adaptation measures.

NexGen could monitor changing climate trends to identify whether the adaptation measures would have to be altered to reduce future risks. By identifying additional climate risks and adaptation measures, a decision-making process could be established to prioritize the potential adaptation measures that would have to be implemented for areas of high risks.

NexGen could use an MAA approach to rank and prioritize multiple adaptation options. As noted in EIS Section 4, Project Alternatives, NexGen has applied MAA for various Project alternatives. Prioritization is based on qualitative analysis that includes identifying the feasibility, co-benefits, resources required, ease of implementation, and the cost-effectiveness (MAC 2021). For example, costs associated with vulnerabilities of dealing with a major rainfall event, or localized flooding in low- and high-risk areas, could be qualitatively identified. The costs and benefits associated with implementation of adaptation measures (e.g., infrastructure required for managing high-intensity rainfall events) could be identified.

4.3 Implementing Adaptation Pathways

To effectively implement the developed adaptation pathways, there would need to be decision-making support and monitoring and surveillance plans in place, which could be implemented by NexGen over the course of the Project as part of the continual improvement process. To set up a decision-making process, NexGen would have to set up internal accountability, roles, and responsibilities for implementation of adaptation pathways and for making decisions related to climate change adaptation. This process would document the relevant person who would identify how to obtain the necessary information to update the implementation of adaptation pathways. NexGen could develop a training plan that would verify personnel are aware of their roles and responsibilities related to climate change and understand the changes that need to be implemented with adaptation measures.

For the decision-making process, a list of performance indicators would have to be identified and developed. These indicators could help measure and assess the performance for specific adaptation measures. The adaptation pathways could then be integrated into existing policies, procedures, and schedules for the Project. The monitoring and surveillance for climate change would be based on identifying the performance of the

implemented adaptation pathways, opportunities for continual improvement, and changes to the observed and projected climate conditions. The monitoring and surveillance plans for climate change could include monitoring for compliance with the adaptation measures, monitoring for risk management and contingencies, and monitoring the extent to which the projected climate change effects have occurred. The developed and implemented adaptation measures could be monitored by NexGen, along with the planned review cycle to incorporate the gathered information.

NexGen could implement its existing Plan-Do-Check-Act cycle from the IMS, which is consistent with the approach used in the MAC guidance (MAC 2021) for conducting monitoring and surveillance. Projected climate events that are deemed sufficiently serious in nature could be managed through the corrective action process. Corrective actions could be planned, implemented, verified, and reviewed for their effectiveness based on the level of risk. These steps align with NexGen's continual improvement process.

5.0 DEVELOPING A CLIMATE ADAPTATION STRATEGY

The proposed climate adaptation framework is meant to be used as a guide to incorporate climate change into the continual improvement process for the Project. At this planning stage, the Project has considered climate change by identifying the vulnerabilities over the Project lifespan, including during Construction, Operations, and Closure, and by identifying the mitigation measures to reduce the effects of weather events on Project activities and infrastructure. These mitigation measures would be considered in the detailed design for the Project.

The climate adaptation framework could be used by NexGen to develop a climate adaptation strategy as part of a continual improvement process according to the following steps:

- An in-depth quantitative climate change risk assessment could be conducted by using a risk ranking system for the Project's lifecycle.
- A range of triggers and thresholds for critical and high-risk infrastructure could be developed that could help in identification of adaptation pathways and the timing of implementing the adaptation pathways.
- A decision-making process could be established to prioritize the potential adaptation measures that would have to be implemented for areas of high risks.
- Internal accountability, roles, and responsibilities for implementation of adaptation pathways and for making decisions related to climate change adaptation could be documented.
- A list of performance indicators that could help measure and assess the performance for specific adaptation measures could be documented.
- Monitoring and surveillance plans including monitoring for risk management and contingencies could be developed and implemented.

6.0 GLOSSARY

Term	Definition
Acceptable risk	The level of risk deemed acceptable to an owner, considering legal requirements, internal policy, business factors, and societal acceptance.
Adaptive management	The iterative process of planning, implementing, monitoring, and modifying strategies that address the uncertainty of a changing climate. The process adjusts approaches in response to changes in the system that occur from feedback effects and other variables (ISO 2019).
Adaptation measures	Actions taken to manage risks or opportunities associated with climate change. Adaptation measures may include actions to either prevent or reduce the likelihood of the occurrence of an adverse effect due to climate change, or to reduce or mitigate the consequences of an adverse effect due to climate change. These measures may be implemented on a site-specific basis or at the corporate level.
Adaptation pathways	The different options to implement identified adaptation measures to address risks or opportunities. As there are multiple ways adaptation measures that can be implemented, multiple pathways can be developed to address the same risk or opportunity (MAC 2021).
Adaptation planning	A process of adjustment to reduce the impacts of climate change, or to take advantage of the opportunities arising from climate change.
Climate change	A change in the mean and/or variability of climate that persists for an extended period, typically for decades or longer (IPCC 2013).
Climate change adaptation	The process of adjusting to the current and projected climate and its effects (ISO 2019).
Climate data	Measurements of weather/climate variables (i.e., minimum and maximum temperature, total precipitation) collected at varying durations (i.e., hourly, daily, annually) used to help identify trends in climate (Roy et al. 2017).
Critical adaptation	Adaptation measures that need to be implemented irrespective of the associated costs (e.g., there could be potential loss of life if these actions are not implemented; MAC 2021).
Consequence	The outcome of an event or through cascading and cumulative effects, affecting the owner's objectives (ISO 2018). It can have a positive or negative, direct or indirect, effect on objectives and can be expressed qualitatively or quantitatively. Consequence is commonly described as the severity of the event and is used to calculate/define risk: Risk = Consequence × Likelihood.
Flexible adaptation	Adaptation measures that provide an iterative approach to manage uncertainty. For example, building a dyke with broader foundation base so that a higher dyke can be built on existing one in future if required (MAC 2021).
Likelihood	The chance of something happening, commonly described as the probably or frequency of occurrence.

Term	Definition
Low regrets adaptation	Adaptation measures have relatively lower costs and the measures will increase the adaptive capacity to cope with the future climate risks (MAC 2021).
MAA	It is a tool used to support decision-making and has a two-step process. First step includes developing a list of accounts and sub-accounts that describe the alternatives and its potential impacts. Second step includes ranking, scaling, and weighing the indicator values in the sub-accounts (MAC 2019a).
No regrets adaptation	Adaptation measures are justified under current climate conditions and would provide benefits irrespective of how climate changes (MAC 2021).
Risk	Risk represents the inability of infrastructure/facility/communities/environment to withstand negative effects or benefit from any positive effects of changes in climate. Risk is a function of the magnitude of the changes in the climate, the sensitivity of an entity to those changes, and the adaptive capacity. The potential severity or consequence of the effect and its probability or likelihood of occurrence are both considered when evaluating risk (MAC 2021). Risk = Consequence × Likelihood.
Risk criteria	The factors used to categorize risk. Risk criteria include consequence and likelihood and may include confidence and other risk modifiers.
Surveillance	Includes the inspection and monitoring (i.e., collection of qualitative and quantitative observations and data) of activities and infrastructure. Surveillance also includes the timely documentation, analysis, and communication of surveillance results to inform decision making and verify whether performance objectives and risk management objectives, including critical controls, are being met (adapted from MAC 2019b).
Threshold	Thresholds or tipping points describe the climate conditions for a specific climate variable (e.g., mean annual precipitation) beyond which further changes in climate would result in the existing risk management or adaptation measures no longer being able to meet performance objectives and potentially failing (e.g., the maximum capacity of a spillway; Buurman and Babovic 2017).
Trigger	Describes a smaller deviation from current conditions for the climate variable associated with a threshold. Triggers are established to provide the owner an early warning of the approach of a threshold, with adequate time to implement adaptation measures and manage risk before the threshold is reached. This approach enables implementation to be proactive and strategic, rather than reactive and ad hoc (Buurman and Babovic 2017).
Vulnerability	The extent to which infrastructure or activities are susceptible to, or unable to cope with climate change.
Win-win adaptation	Adaptation measures not only help to reduce climate risks but also have other associated benefits (MAC 2021).

MAA = multiple accounts analysis.

CLOSING

WSP is pleased to submit this report to NexGen in support of the environmental assessment for the Rook I Project. For details on the limitations and use of information presented in this report, please refer to the Study Limitations section following this page. If you have any questions or require additional details related to this study, please contact the undersigned.

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STUDY LIMITATIONS

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