Revised Annual Report for MV2020L2-0002, Class B

Water Management Area Northwest Territories 01

April 2023

Submitted by:

New Discovery Mines Ltd.

D.R.Webb

Contents

Revisions

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response

Introduction

MV2020L2-0002 allows for the use Water and dispose of Waste for the mining and milling associated with the mineral exploration at the Mon Gold Mine, as described in the complete application and the additional information submitted during the regulatory process, including the following:

a. Withdrawal and use of Water from Discovery Lake;
b. Milling facilities and infrastructure;
c. Construction, use, and maintenance of the Sewage Treatment Plant;
d. Construction, use, and maintenance of the Dry Stack Tailings Facility;
e. Construction, use, and maintenance of an all-weather road to the Dry Stack Tailings Facility;
f. Additional trailer to existing camp; and
g. Fuel storage.

and requires additional compliance conditions. This report is prepared according to the Mackenzie Valley Land and Water Board's March 2012 Document Submission Standards.

Activities on the property in 2022 was restricted to 14 mandays collecting SNP samples, securing site and equipment, and prospecting off site.

Summary of Project Activities

The site was checked and secured, and SNP stations were visited and sampled as per the MV2020L2-0002. Limited water use was secured by handheld 20 litre containers. Domestic waste waters were deposited in a temporary sump and an outhouse was used for the two-man crew. No water was discharged from the mine and no mining activities were conducted.

An exceedance of the license requirements was identified and is specified in Section List of all Non-Compliance Conditions page 34.

Underground workings were established to 17 m below historic stopes in 2021 with a previously undocumented stope identified at this elevation. The void is 11 m high leaving an estimated 6 m crown pillar, and an estimated 1,100 tonnes of vein material had been extracted by previous operators. An examination of the workings identified ice build up from frost on the walls and from minor ingress of water near the portal.

Updated Project Schedule

A watchman is on site during winter access season to minimize thefts from the property. A court action against two individuals for a theft on the property was settled with payment received in 2023.

It is planned to commence mobilization of personnel to the property in late spring or early summer each year to commence continue mining operations. This will extend the existing 130 m North Ramp by an additional 100 m +/- to the south. Safety stations will be installed and scram drifts will be driven into the

A-Zone vein where stopes will be developed. 1.5m x 1.5 m raises will be driven into the vein at appropriate locations to be determined from the scram drifts.

The waste rock will continue to be assessed as per the Waste Rock Management and Geochemical Characterization Plan and used as approved.

Mineralized vein material will be assessed and separately stockpiled in preparation for processing.

Operations will take approximately 250 days after which the operations will be shutdown in preparation for the 2024 winter road resupply season.

In 2024 it is expected that a nominal 100 tpd mill will be mobilized to the property together with supplies to process the material extracted in 2023 as well as support for ongoing operations. The mill would not be operational until the summer of 2024.

Mining and milling will continue until there is no further economically viable material to mine and process. This may exceed 20 years. Reclamation will be continual as possible, and ultimately in the last year and the next for final reclamation and abandonment as approved in the Reclamation and Abandonment Plan.

Water Usage

A total water usage in 2022 of 500.9 m^3 was recorded as shown on the table below.

Table 1. Table of water usage in cubic metres in 2022.

Date	Water in Camp	Water in Mine	Other Water	comment	Total Water Used	Cumulative
Dec-21	0	0	0	inactive	0	0
Jan-22	0	0	80	Ice road	80	80
Feb-22	0	0	420	Ice road	420	500
Mar-22	0	0	0	inactive	0	500
April-22	0	0	0	Inactive	0	500
May-22	0	0	0	Inactive	0	500
Jun-22	0	0	0	Inactive	0	500
July-22	0	0	0	Inactive	0	500
Aug-22	0	0	0	inactive	0	500
Sept-22	0.6*	0	0	Exploration crew	0.6	500.6
Oct-22	0.3	0	0	Survey crew	0.3	500.9
Nov-22	0	0	0	inactive	0	500.9
Dec-22	0	0	0	inactive	0	500.9

Note: All water used in camp and in the mine came from Discovery Lake. The 500 m3 of water used in other (winter road construction) came from Discovery Lake (45 m3), Sito Lake (90 m3), Quayta Lake (375 m3), Bluefish Lake (105 m3) and Prosperous Lake (55 m3).

Over 99.8% of the water use (500 m^3) was for winter road construction. No water was used in mining and 0.9 m^3 was used for domestic purposes.

Field Verification of Water Depths

Water was withdrawn from six different sites from five lakes (Prosperous, Bluefish, Quayta, Sito, and Discovery Lakes). Water depths during under ice withdrawals were measured using 3 m probes, and from shorter probes during ice-free conditions. Under ice measurements all exceeded 3 m. Only Discovery Lake was used for water during ice-free conditions and the fixed source was at the shore line at >1.5 m depths.

Calibration and Status of Installed Meters.

There were no installed meters in 2021 as all water withdrawal was batched in 10 m^3 tanks for ice road construction, and 0.02 m^3 water jugs were used for all ice-free withdrawals.

Engagement Activities

Since the issuance of this license, the following engagements have occurred:

Initially, this was to follow-up on suggestions from the Yellowknife's concerning a potential Heritage Study and its design, execution and results, later discussions were dominated by project updates, and lastly consultations focused on expansion of the project area to explicitly include the Mineral Claims. The last consultations focused on extension of the Land Use Permit.

Table 2. Community consultation summary.

Date	Community	Contact	Issues Raised by Affected Party	Recommendation by affected party	Solution	Discussion
June 1, 2020	Yk	communications@yellowknife.ca	None	None	None	Introduce renewal
June 17, 2020	YK	Brooklyn, EA to Mayor	None	None	None	Left message
June 17, 2020	YK	Brooklyn	None	None	None	Discuss project history, confirm email addresses
June 17, 2020	YK	Brooklyn	None	None	None	re-introduce project, cc to SWF for letter confirming receipt of ash.
January 4, 2021	Tlicho	Zaby Nevitt	None	None	None	Reach out for updates
June 7, 2021	Tlicho	Violet Camsell-Blondin	None	None	None	Reach out for updates
June 7, 2021	YKDFN	Sarah Gilllis	None	None	None	Suggest meeting
June 7, 2021	YKDFN	Sarah Gilllis	None	None	None	Suggest meeting
July 13, 2021	YKDFN	Sarah Gilllis	None	None	None	Maybe meet on the 15th.
July 14, 2021	YKDFN	Sarah Gillis	None	None	None	Reach out. In town for discussions
August 14, 2021	YKDFN	Femi Baiyewun	Contact	None		Left message
August 15, 2021	YKDFN	Sarah Gillis	None	None	None	Reach out, check on Femi
September 29, 2021	YKDFN	Femi Baiyewun and AB	Status of application	None	reply	
September 30, 2021	YKDFN	Femi Baiyewun	Update	None	reply	Left message
October 2, 2021	YKDFN	Femi Baiyewun	Update	None	reply	no notes

November 5, 2021	YKDFN	Femi Baiyewun and AB	Update	None	reply	please reply
November 5, 2021	YKDFN	Femi Baiyewun and AB	Update	None	reply	Update plans to revise
November 5, 2021	YKDFN	Femi Baiyewun and AB	Update	None	reply	What schedule?
November 5, 2021	YKDFN	Femi Baiyewun and AB	Update	None	reply	Schedule provided.
December 3, 2021	Tlicho	Violet Camsell-Blondin	Update	None	reply	CRP provided, amend fuel 120 to 150 and then 200
December 3, 2021	YK	Paula and Admin	Update	None	reply	Amend fuel 120 to 150 and then 200
December 3, 2021	YK	Sheila Bassi-Kellett and Admin	Congratulations	None	reply	Amend fuel 120 to 150 and then 200
December 3, 2021	YKDFN	Femi Baiyewun and AB	Update	None	reply	CRP provided, amend fuel 120 to 150 and then 200
December 7, 2021	NWTMN	Tim Heron	Update	None	reply	Amend fuel 120 to 150 and then 200
January 4, 2022	YKDFN	Femi Baiyewun	Soil Permeability	None	reply	Call to discuss
January 5, 2022	NSMA	Jessica Hurtubise	Update	None	reply	Amend fuel 120 to 150 and then 200
January 7, 2022	NSMA	Noah Johnson phone 613 804-2668	Introduction	None	reply	Introduce NDM, Mon, DRW.
January 13, 2022	NSMA	Noah Johnson	Comments on AOA	None	reply	Was NSMA involved in AOA
January 13, 2022	NSMA	Noah Johnson	AOA	None	reply	No NSMA, but happy to share results
January 17, 2022	NSMA	Noah Johnson	AOA	None	reply	Did we follow up on an AIA.
January 17, 2022	NSMA	Noah Johnson	AOA	None	reply	No we did not do an AIA. Update on near term plans.
January 17, 2022	NSMA	Noah Johnson	AOA	None	reply	Has there been any folllow up on AOA
January 17, 2022	NSMA	Noah Johnson	AOA	None	reply	No follow up as nothing of significance was found. We operate in small footprint of disturbed ground except for DST facility
January 18, 2022	NSMA	Noah Johnson	AOA	None	reply	Can we call to discuss?
January 18, 2022	NSMA	Noah Johnson	AOA	None	reply	Let's set it up
January 20, 2022	NSMA	Noah Johnson	AOA	None	reply	Speak on 26th
January 20, 2022	NSMA	Noah Johnson	AOA	None	reply	Confirmed for the 26th. Set time for 12:15
January 26, 2022	NSMA	Noah Johnson		None	reply	General discussion, introductions
February 2, 2022	YKDFN	Johanne Black		None	reply	No Trespassing Sign
February 2, 2022	YKDFN	Johanne Black		None	reply	No Trespassing Sign. Femi gone, Ryan Miller, Kieron Testart
February 3, 2022	YKDFN	Ryan Miller	Signage translation	None	reply	Confirm translation is correct
February 3, 2022	YKDFN	Ryan Miller	Signage	None	reply	Confirm from Minesite

February 3, 2022	YKDFN	Ryan Miller	Signage	None	reply	Keep in touch
February 4, 2022	YKDFN	Ryan Miller	Signage	None	reply	Capital Signs mock up
February 4, 2022	YKDFN	Ryan Miller	Signage	None	reply	Confirming costs for member translation
February 11, 2022	YKDFN	Ryan Miller	Signage	Who translated	reply	Will confirm
February 11, 2022	YKDFN	Ryan Miller	Signage	Who translated	reply	Translation completed
February 11, 2022	YKDFN	Ryan Miller	Signage	Who translated	reply	Translation by whom.
February 11, 2022	YKDFN	Ryan Miller	Signage	Who translated	reply	Will confirm
February 11, 2022	YKDFN	Ryan Miller	Signage	Language	reply	Confirmed Denis Drygeese translated.
May 3, 2022	NSMA	email from	Noah Johnson	Visit this summer		Any schedule
May 4, 2022	NSMA	email to	Noah Johnson	Visit this summer		Still on, will keep appraised
May 10, 2022	Tlicho	email to Violet Camsell-Blondin	VC-B	Update	None	
May 10, 2022	YKDFN	email to	RM	Update offer		
June 16, 2022	NSMA	email to	Noah Johnson	Visit this summer		Trip update
June 16, 2022	NSMA	email from	Noah Johnson	Visit this summer		Thanks, busy until July.
June 21, 2022	YKDFN	email to	RM	Update offer		As recommended by the MVLWB
July 18, 2022	YKDFN	Call to Ryan 604 873-8951	RM	Discuss issues		As recommended by the MVLWB
July 18, 2022	YKDFN	Call from Ryan	RM	Discuss issues		Set for July 20 4 pm
July 20, 2022	YKDFN	Call from Ryan	RM	Discuss Signage		Set follow-up for August 9
August 9, 2022	YKDFN	Call from Ryan	RM	Discuss Signage		Postponed until August 11, 1 pm
August 11, 2022	YKDFN	Call from Ryan	RM	Discuss Signage		Postponed until later
September 1, 2022	YKDFN	Email from Ryan	RM	Trip to Yk		Inform of schedule
September 1, 2022	YKDFN	Email to Ryan	RM	Trip to Yk		Trip Planned
September 1, 2022	YKDFN	Email from Ryan	RM	Trip to Yk		Schedule this week and next by phone or zoom
September 6, 2022	YKDFN	Email to Ryan	RM	News R.		Could be material
September 6, 2022	NSMA	Email to Noah Johnson	NJ	News R.		Could be material
September 7, 2022	YKDFN	Email to Ryan	RM	Trip to Yk		Inform of schedule
September 7, 2022	NSMA	Email from Noah Johnson	NJ, MW, JH	Trip to Yk		Can we meet
September 7, 2022	NSMA	Email to Noah Johnson	NJ, MW, JH	Trip to Yk		Schedule provided

Traditional Knowledge

Discussions with the Yellowknife Dene First Nation on language for signage was undertaken in early 2022.

Construction activities

No activities that would require LUP or Water Licenses occurred in 2022.

Major Maintenance Activities

There were no major maintenance activities in 2022.

Activities under Waste Management Plan

Updates and Revisions to Waste Management Plan

The Waste Management Plan was updated to incorporate:

13	January 2021	Changes listed in Conformity Table
14	February 2021	Addressed February 01 comments from the ORS completed by the MVLWB, letter dated February 12, 2021 including review comments table.

Monthly and Annual Quantities of Sewage

The camp waste water treatment facilities were not used in 2022.

Monthly and Annual Quantities of c

There was no observed run off noted on the mine site, however a total of 75.9 mm of rain was recorded in 2022 and so this amount draining from the mine site (occupies 154,000 m^2) would result in natural run off of 2,624 m^3 of water naturally.

Table 3. Total precipitation reported at Yellowknife Airport, in mm.

Month	**Precipitation**
January	6.6
February	1.2
March	4.2
April	0.2
May	14.2
June	2.8
July	7.8
August	8.5
September	2
October	10
November	6.2
December	12.2
Total 2022	**75.9**

Water used in the mine totalled nil.

Monthly and Annual Quantities of Sewage Solids or Sludge

The sewage system was not activated in 2022.

Monthly Elevations of the Dry Stack Tailings Facility

There were no tailings produced nor stored on site in 2022.

Map showing location of Sumps

See attached Map 1, showing the location of a constructed sump at SNP-08, and natural sumps at SNP-03, 09, 09a, 10, 21. No other sumps exist at this time. Map 2 shows similar information on a geological base.

Activities conducted in accordance of the Waste Rock Management and Geochemical Characterization and Monitoring Plan

Summary of Approved Updates and Changes

No updates or changes were completed or were needed in 2022.

Comparison of Annual Quantities Produced vs Predicted

No mining was completed in 2022

Summary of Rock Type, Geochemical Classification and Location

No mining was completed in 2022

Details of Waste Rock and Ore Stockpiles

No mining was completed in 2022.

Summary of interpretation of Results

Additional equipment and supplies were mobilized on a winter road constructed in 2022. No mining was completed in 2022.

Summary and Interpretation from Seepage Monitoring

Location of Seepage

Water naturally ponds at SNP-03, SNP-09 and SNP-10 and elsewhere on the property. Additional seepage is noted at SNP-09a which is proposed for an additional monitoring station. The site is underlain by permanently frozen ground, and water does not seep through this, rather it travels over top on surface or in the unconsolidated fill. Ponds and natural sumps are where the surface and/or near surface water can be sampled.

Comparison to reference location

Samples from SNP-01 are used to monitor discharge from the bioreactor, site for all discharge of grey and black water from domestic uses. All samples were located as referenced.

Samples from SNP-03 and 03a are used to monitor drainage from the Dry Stack Tailings (DST) facility. The DST has not been installed but sample locations are as referenced.

Samples collected at SNP-09 and SNP-10, as well as at SNP-12 are used to monitor drainage from Waste Piles, Future Ore piles, and the site in general.

Analysis of Major Trends since Project Inception

The mining activities have started in 2021 and did not occur in 2022. Trends for a single year is presented to compare against baseline values, however the following observations can be made.

Water usage remains very low with most of it used in winter road construction. Annual allowance would be 36,500 m3.

Since inception, there has been no drainage at most SNP locations, only limited mining has commenced and no ore has been mined. A minor amount of waste has been placed and is used for road construction and laydown area preparation. Drainage from these materials have met all EQC parameters during operations but had one exceedance in 2022. Drainage monitored at SNP-03 as a baseline in advance of a Dry Stack Tailings Facility being constructed has shown:

a) pH remains <7 in all instances
b) All tested N constituents increased in late summer
c) Alkalinity is variable, ranges <10 to >40
d) TSS is variable, exceeding EQC in late summer.
e) Sulphate increases substantially in late summer
f) Ammonia increases rapidly, exceeding EQC in late summer
g) Conductivity increases rapidly in late summer
h) TDS increases rapidly in late summer
i) Dissolved hardness increases rapidly in late summer
j) Al, Co, Cu, Fe, Mn, Zn, is highly variable, Zn exceeding EQC

The DST site was not used in 2022 and will not be used in 2023.

Summary of Recommendations for Future Surface Monitoring

No changes are recommended at this time.

Summary of Investigations into Field Test Cells

No field tests were conducted in 2021.

Summary of Water Quality Monitoring

Water license MV2020L2-0002 requires the following sampling frequencies.

SNP	Location	Sampling Frequency	2021 Sampling	2022 Sampling
SNP-1	Sewage	Prior to discharge	1	Not in service
SNP-2	DST	Monthly	not present	not present
SNP-3a	DST	Monthly	2	No water
SNP-3b	DST	Monthly		No water
SNP-4	DST	Biannual	not present	not present
SNP-5	Well	Monthly	not present	not present
SNP-6a	Well	Monthly	not present	not present
SNP-6b	Well	Monthly	not present	not present
SNP-7	UG	Daily	not used	not used
SNP-8	Mine	Daily	not used	not used
SNP-9	Waste rock	Biannual	1	1
SNP-9a	Waste rock	Biannual		not present

SNP-9b	Waste rock	Biannual		not present
SNP-9c	Waste rock	Biannual		not present
SNP-10	Ore	Biannual	1	1
SNP-11	Discovery L	Daily	Batch sampled	Not used
SNP-12	Discovery L	Monthly	1	1
SNP-12a	Discovery L	Monthly	1	Road
SNP-13	Prosperous	Daily	road	Road
SNP-14	Sito	Daily	road	Road
SNP-15	Bluefish	Daily	road	Road
SNP-16	Quayta	Daily	road	Road
SNP-17	Lake A	Daily	no drilling	no drilling
SNP-18	Lake B	Daily	no drilling	no drilling
SNP-19	Lake C	Daily	no drilling	no drilling
SNP-20	Lake D	Daily	no drilling	no drilling
SNP-21	Waste rock	Biannual	not present	
SNP-22	Explosives	Biannual	not present	

No mining activities were conducted in 2022 but one sample campaign was conducted in September. Most sites did not have water present. Analyses were received from Bureau Veritas Job #C275293 in November 2022.

All sampled stations reported parameters within ECQ or CCME guidelines for the protection of aquatic life except for two exceedances this year, both for zinc from SNP-09 (1,900 ug/L) and SNP-10 (1,210 ug/L) (limit 500 long term, 1,000 grab). Both sumps had very low water levels, not more than 10 cm deep and covering an area of 5 m^2 each. These sites will be resampled before mining activities recommence on site. It is believed that the very low water and lack of water use on site allowed zinc to concentrate in these water samples. In the past SNP-03 which is still installed and sampled as a baseline sample now until the DST is constructed has historically had exceedances of TSS, ammonia and zinc from natural sources. There was no water present at SNP 3a or 3b this year.

A spill report was filed, and follow-up discussions with Environmental Enforcement Officers for ECCC by email and phone have determined that this is classified as an inconsequential spill and no follow-up is needed.

Bureau Veritas ID		BDA023		BDA024	
Sampling Date		2022-09-26 18:15		2022-09-26 18:30	
COC Number		C#667899-02-01		C#667899-02-01	
	UNITS	**SNP 09**	**QC Batch**	**SNP 10**	**RDL**
Parameter					
Radium 226	Bq/l	<0.010	A804427	<0.010	0.010
Calculated Parameters					
Filter and HNO3 Preservation	N/A	LAB	A753411	LAB	
Dissolved Hardness (CaCO3)	mg/L	255	A741712	708	0.50

Total Hardness (CaCO3)	mg/L	246	A741666	730	0.50
Nitrate (N)	mg/L	0.83	A743739	12	0.25
Nitrate (NO3)	mg/L	3.7	A743737	53	1.1
Nitrite (NO2)	mg/L	<0.033	A743737	0.50	0.033
Total Total Kjeldahl Nitrogen (Calc)	mg/L	1.73	A743082	0.55	0.25
Demand Parameters					
Biochemical Oxygen Demand (inhib.)	mg/L	<2.6 (1)	A743206	<2.0 (1)	2.0
Field Parameters					
Field pH	pH	7.35	ONSITE	7.00	N/A
Field Temperature (Fd)	deg. C	11	ONSITE	11	N/A
Misc. Inorganics					
Free Cyanide (CN)	ug/L	3.9 (2)	A745570	3.6 (2)	2.0
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00125	A749510	0.00121	0.00050
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.00087	A749511	0.00076	0.00050
pH	pH	6.48	A752949	7.02	N/A
Reactive Silica	mg/L	4.0	A751189	15	0.25
Alkalinity (Total as CaCO3)	mg/L	89.0	A752944	258	0.50
Total Organic Carbon (C)	mg/L	20	A754265	16	0.20
Alkalinity (PP as CaCO3)	mg/L	<0.50	A752944	<0.50	0.50
Bicarbonate (HCO3)	mg/L	109	A752944	314	0.50
Carbonate (CO3)	mg/L	<0.50	A752944	<0.50	0.50
Hydroxide (OH)	mg/L	<0.50	A752944	<0.50	0.50
Total Suspended Solids	mg/L	83 (3)	A745162	8.0	0.99
Anions					
Dissolved Fluoride (F)	mg/L	0.098	A752371	0.10	0.050
Chloride (Cl)	mg/L	1.3	A744619	3.3	0.50
Sulphate (SO4)	mg/L	200	A744619	440	2.5
Nutrients					
Total Ammonia (N)	mg/L	0.25	A755566	0.10	0.015
Orthophosphate (P)	mg/L	<0.0030	A745257	<0.0030	0.0030
Total Inorganic Phosphorus (P)	mg/L	0.0163	A760964	0.0046	0.0020
Nitrite (N)	mg/L	<0.010	A746712	0.15	0.010
Nitrate plus Nitrite (N)	mg/L	0.83	A746712	12	0.25
Total Nitrogen (N)	mg/L	2.6 (4)	A755768		
Physical Properties					
Conductivity	uS/cm	532	A752950	1280	1.0
Physical Properties					
Turbidity	NTU	20	A748099	6.6	0.10
Total Dissolved Solids	mg/L	353 (3)	A744030	1030 (3)	5.0

Bureau Veritas ID		BDA025		
Sampling Date		2022-09-26 18:45		

COC Number		C#667899-02-01		
	UNITS	**SNP 12**	**RDL**	**QC Batch**
Parameter				
Radium 226	Bq/l			
Calculated Parameters				
Filter and HNO3 Preservation	N/A	LAB		A753411
Dissolved Hardness (CaCO3)	mg/L	49.4	0.50	A743704
Total Hardness (CaCO3)	mg/L	48.3	0.50	A743728
Nitrate (N)	mg/L			
Nitrate (NO3)	mg/L			
Nitrite (NO2)	mg/L			
Total Total Kjeldahl Nitrogen (Calc)	mg/L			
Demand Parameters				
Biochemical Oxygen Demand (inhib.)	mg/L			
Field Parameters				
Field pH	pH	7.15	N/A	ONSITE
Field Temperature (Fd)	deg. C	13.6	N/A	ONSITE
Misc. Inorganics				
Free Cyanide (CN)	ug/L			
Strong Acid Dissoc. Cyanide (CN)	mg/L			
Weak Acid Dissoc. Cyanide (CN)	mg/L			
pH	pH	6.58	N/A	A749460
Reactive Silica	mg/L			
Alkalinity (Total as CaCO3)	mg/L			
Total Organic Carbon (C)	mg/L			
Alkalinity (PP as CaCO3)	mg/L			
Bicarbonate (HCO3)	mg/L			
Carbonate (CO3)	mg/L			
Hydroxide (OH)	mg/L			
Total Suspended Solids	mg/L			
Anions				
Dissolved Fluoride (F)	mg/L			
Chloride (Cl)	mg/L			
Sulphate (SO4)	mg/L			
Nutrients				
Total Ammonia (N)	mg/L	0.016	0.015	A755564
Orthophosphate (P)	mg/L			
Total Inorganic Phosphorus (P)	mg/L			
Nitrite (N)	mg/L			
Nitrate plus Nitrite (N)	mg/L			
Total Nitrogen (N)	mg/L			
Physical Properties				

Conductivity	uS/cm	113	1.0	A749458
Physical Properties				
Turbidity	NTU			
Total Dissolved Solids	mg/L			

N/A = Not Applicable

(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.

Table 4. Results for mercury by cold vapour, September 2022.

Bureau Veritas ID		AJK923	AJK924
Sampling Date		2021-10-26 10:00	2021-10-26 10:20
COC Number		643673-02-01	643673-02-01
	UNITS	**SNP-03**	**SNP-10**
Elements			
Dissolved Mercury (Hg)	ug/L	<0.0019	0.0028
Total Mercury (Hg)	ug/L	<0.0019	<0.0019

RDL = Reportable Detection Limit

Bureau Veritas ID		BDA023	BDA024	BDA025		
Sampling Date		2022-09-26 18:15	2022-09-26 18:30	2022-09-26 18:45		
COC Number		C#667899-02-01	C#667899-02-01	C#667899-02-01		
	UNITS	**SNP 09**	**SNP 10**	**SNP 12**	**RDL**	**QC Batch**
Elements						
Dissolved Mercury (Hg)	ug/L	0.0021	<0.0019	<0.0019	0.0019	A743760
Total Mercury (Hg)	ug/L	<0.0019	<0.0019	<0.0019	0.0019	A754460

Bureau Veritas ID		BDA023			BDA024	
Sampling Date		2022-09-26 18:15			2022-09-26 18:30	
COC Number		C#667899-02-01			C#667899-02-01	
	UNITS	**SNP 09**	**RDL**	**QC Batch**	**SNP 10**	**QC Batch**
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	9.78	0.50	A751944	4.90	A751944
Dissolved Antimony (Sb)	ug/L	0.462	0.020	A751944	1.08	A751944
Dissolved Arsenic (As)	ug/L	5.10	0.020	A751944	3.90	A751944
Dissolved Barium (Ba)	ug/L	31.5	0.020	A751944	52.0	A751944
Dissolved Beryllium (Be)	ug/L	0.017	0.010	A751944	<0.010	A751944
Dissolved Bismuth (Bi)	ug/L	<0.0050	0.0050	A751944	<0.0050	A751944
Dissolved Boron (B)	ug/L	24	10	A751944	39	A751944

Dissolved Cadmium (Cd)	ug/L	0.409	0.0050	A751944	1.23	A751944
Dissolved Chromium (Cr)	ug/L	0.36	0.10	A751944	0.37	A751944
Dissolved Cobalt (Co)	ug/L	11.3	0.0050	A751944	5.69	A751944
Dissolved Copper (Cu)	ug/L	2.89	0.050	A751944	3.12	A751944
Dissolved Iron (Fe)	ug/L	112	1.0	A751944	39.9	A751944
Dissolved Lead (Pb)	ug/L	0.0083	0.0050	A751944	0.0530	A751944
Dissolved Lithium (Li)	ug/L	17.6	0.50	A751944	20.9	A751944
Dissolved Manganese (Mn)	ug/L	251	0.050	A751944	249	A751944
Dissolved Molybdenum (Mo)	ug/L	0.826	0.050	A751944	1.02	A751944
Dissolved Nickel (Ni)	ug/L	258	0.020	A751944	121	A751944
Dissolved Phosphorus (P)	ug/L	9.8	2.0	A751944	8.9	A751944
Dissolved Selenium (Se)	ug/L	0.100	0.040	A751944	0.308	A751944
Dissolved Silicon (Si)	ug/L	1800	50	A751944	7050	A751944
Dissolved Silver (Ag)	ug/L	<0.0050	0.0050	A751944	<0.0050	A751944
Dissolved Strontium (Sr)	ug/L	121	0.050	A751944	389	A751944
Dissolved Thallium (Tl)	ug/L	0.0083	0.0020	A751944	0.0162	A751944
Dissolved Tin (Sn)	ug/L	<0.20	0.20	A751944	<0.20	A751944
Dissolved Titanium (Ti)	ug/L	<0.50	0.50	A751944	<0.50	A751944
Dissolved Uranium (U)	ug/L	0.309	0.0020	A751944	3.43	A751944
Dissolved Vanadium (V)	ug/L	<0.20	0.20	A751944	<0.20	A751944
Dissolved Zinc (Zn)	ug/L	1590	0.10	A751944	1140	A751944
Dissolved Zirconium (Zr)	ug/L	0.26	0.10	A751944	0.28	A751944
Dissolved Calcium (Ca)	mg/L	56.4	0.050	A741715	177	A741715
Dissolved Magnesium (Mg)	mg/L	27.8	0.050	A741715	64.9	A741715
Dissolved Potassium (K)	mg/L	6.28	0.050	A741715	12.4	A741715
Dissolved Sodium (Na)	mg/L	6.78	0.050	A741715	14.9	A741715
Dissolved Sulphur (S)	mg/L	65.2	3.0	A741715	154	A741715
Total Metals by ICPMS						
Total Aluminum (Al)	ug/L	71.7	3.0	A754951	13.2	A753141
Total Antimony (Sb)	ug/L	0.472	0.020	A754951	1.10	A753141
Total Arsenic (As)	ug/L	35.0	0.020	A754951	19.0	A753141
Total Barium (Ba)	ug/L	32.4	0.050	A754951	53.8	A753141
Total Beryllium (Be)	ug/L	0.019	0.010	A754951	<0.010	A753141
Total Bismuth (Bi)	ug/L	<0.010	0.010	A754951	0.0095	A753141
Total Boron (B)	ug/L	23	10	A754951	45	A753141
Total Cadmium (Cd)	ug/L	1.35	0.0050	A754951	1.38	A753141
Total Chromium (Cr)	ug/L	0.57	0.10	A754951	0.56	A753141
Total Cobalt (Co)	ug/L	16.6	0.010	A754951	6.16	A753141
Total Copper (Cu)	ug/L	5.61	0.10	A754951	4.17	A753141
Total Iron (Fe)	ug/L	4760	5.0	A754951	1360	A753141
Total Lead (Pb)	ug/L	0.209	0.020	A754951	1.47	A753141
Total Lithium (Li)	ug/L	18.4	0.50	A754951	24.3	A753141
Total Manganese (Mn)	ug/L	309	0.10	A754951	253	A753141

Total Molybdenum (Mo)	ug/L	0.925	0.050	A754951	1.06	A753141
Total Nickel (Ni)	ug/L	272	0.10	A754951	122	A753141
Total Phosphorus (P)	ug/L	55.4	5.0	A754951	12.5	A753141
Total Selenium (Se)	ug/L	0.133	0.040	A754951	0.318	A753141
Total Silicon (Si)	ug/L	1810	50	A754951	7140	A753141
Total Silver (Ag)	ug/L	<0.010	0.010	A754951	0.0125	A753141
Total Strontium (Sr)	ug/L	121	0.050	A754951	412	A753141
Total Thallium (Tl)	ug/L	0.0105	0.0020	A754951	0.0174	A753141
Total Tin (Sn)	ug/L	<0.20	0.20	A754951	<0.20	A753141
Total Titanium (Ti)	ug/L	<2.0	2.0	A754951	0.53	A753141
Total Uranium (U)	ug/L	0.413	0.0050	A754951	3.61	A753141
Total Vanadium (V)	ug/L	0.94	0.20	A754951	0.24	A753141
Total Zinc (Zn)	ug/L	1900	1.0	A754951	1210	A753141
Total Zirconium (Zr)	ug/L	0.26	0.10	A754951	0.37	A753141
Total Calcium (Ca)	mg/L	53.7	0.25	A741940	181	A741940
Total Magnesium (Mg)	mg/L	27.1	0.25	A741940	67.8	A741940
Total Potassium (K)	mg/L	5.95	0.25	A741940	12.5	A741940
Total Sodium (Na)	mg/L	6.59	0.25	A741940	15.2	A741940
Total Sulphur (S)	mg/L	64.9	3.0	A741940	160	A741940

Bureau Veritas ID		BDA025		
Sampling Date		2022-09-26 18:45		
COC Number		C#667899-02-01		
	UNITS	**SNP 12**	**RDL**	**QC Batch**
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	68.2	0.50	A751944
Dissolved Antimony (Sb)	ug/L	0.442	0.020	A751944
Dissolved Arsenic (As)	ug/L	1.22	0.020	A751944
Dissolved Barium (Ba)	ug/L	8.38	0.020	A751944
Dissolved Beryllium (Be)	ug/L	<0.010	0.010	A751944
Dissolved Bismuth (Bi)	ug/L	<0.0050	0.0050	A751944
Dissolved Boron (B)	ug/L	10	10	A751944
Dissolved Cadmium (Cd)	ug/L	0.0242	0.0050	A751944
Dissolved Chromium (Cr)	ug/L	0.49	0.10	A751944
Dissolved Cobalt (Co)	ug/L	0.112	0.0050	A751944
Dissolved Copper (Cu)	ug/L	1.48	0.050	A751944
Dissolved Iron (Fe)	ug/L	108	1.0	A751944
Dissolved Lead (Pb)	ug/L	0.409	0.0050	A751944
Dissolved Lithium (Li)	ug/L	2.59	0.50	A751944
Dissolved Manganese (Mn)	ug/L	18.7	0.050	A751944
Dissolved Molybdenum (Mo)	ug/L	0.647	0.050	A751944

Dissolved Nickel (Ni)	ug/L	1.70	0.020	A751944
Dissolved Phosphorus (P)	ug/L	24.7	2.0	A751944
Dissolved Selenium (Se)	ug/L	<0.040	0.040	A751944
Dissolved Silicon (Si)	ug/L	360	50	A751944
Dissolved Silver (Ag)	ug/L	<0.0050	0.0050	A751944
Dissolved Strontium (Sr)	ug/L	34.3	0.050	A751944
Dissolved Thallium (Tl)	ug/L	0.0026	0.0020	A751944
Dissolved Tin (Sn)	ug/L	<0.20	0.20	A751944
Dissolved Titanium (Ti)	ug/L	3.44	0.50	A751944
Dissolved Uranium (U)	ug/L	0.101	0.0020	A751944
Dissolved Vanadium (V)	ug/L	<0.20	0.20	A751944
Dissolved Zinc (Zn)	ug/L	4.90	0.10	A751944
Dissolved Zirconium (Zr)	ug/L	<0.10	0.10	A751944
Dissolved Calcium (Ca)	mg/L	12.0	0.050	A743705
Dissolved Magnesium (Mg)	mg/L	4.73	0.050	A743705
Dissolved Potassium (K)	mg/L	2.18	0.050	A743705
Dissolved Sodium (Na)	mg/L	3.05	0.050	A743705
Dissolved Sulphur (S)	mg/L	<3.0	3.0	A743705
Total Metals by ICPMS				
Total Aluminum (Al)	ug/L	68.5	0.50	A753141
Total Antimony (Sb)	ug/L	0.433	0.020	A753141
Total Arsenic (As)	ug/L	1.12	0.020	A753141
Total Barium (Ba)	ug/L	8.03	0.020	A753141
Total Beryllium (Be)	ug/L	<0.010	0.010	A753141
Total Bismuth (Bi)	ug/L	<0.0050	0.0050	A753141
Total Boron (B)	ug/L	10	10	A753141
Total Cadmium (Cd)	ug/L	0.0212	0.0050	A753141
Total Chromium (Cr)	ug/L	0.56	0.10	A753141
Total Cobalt (Co)	ug/L	0.109	0.0050	A753141
Total Copper (Cu)	ug/L	1.43	0.050	A753141
Total Iron (Fe)	ug/L	112	1.0	A753141
Total Lead (Pb)	ug/L	0.419	0.0050	A753141
Total Lithium (Li)	ug/L	2.43	0.50	A753141
Total Manganese (Mn)	ug/L	18.4	0.050	A753141
Total Molybdenum (Mo)	ug/L	0.720	0.050	A753141
Total Nickel (Ni)	ug/L	1.67	0.020	A753141
Total Phosphorus (P)	ug/L	22.8	2.0	A753141
Total Selenium (Se)	ug/L	<0.040	0.040	A753141
Total Silicon (Si)	ug/L	326	50	A753141
Total Silver (Ag)	ug/L	<0.0050	0.0050	A753141
Total Strontium (Sr)	ug/L	33.3	0.050	A753141
Total Thallium (Tl)	ug/L	0.0029	0.0020	A753141
Total Tin (Sn)	ug/L	<0.20	0.20	A753141

Total Titanium (Ti)	ug/L	3.21	0.50	A753141
Total Uranium (U)	ug/L	0.103	0.0020	A753141
Total Vanadium (V)	ug/L	0.25	0.20	A753141
Total Zinc (Zn)	ug/L	5.61	0.10	A753141
Total Zirconium (Zr)	ug/L	<0.10	0.10	A753141
Total Calcium (Ca)	mg/L	11.9	0.050	A743729
Total Magnesium (Mg)	mg/L	4.52	0.050	A743729
Total Potassium (K)	mg/L	2.09	0.050	A743729
Total Sodium (Na)	mg/L	2.93	0.050	A743729
Total Sulphur (S)	mg/L	<3.0	3.0	A743729

Action Level Exceedances

SNP-09 and SNP-10 was sampled in September preliminary reports were received in November showing elevated levels of zinc of 1.9 and 1.2 mg/L respectively, exceeding the EQC values of 1 mg/L. .

Action taken in Action Level Exceedances

Water and Land Use Inspectors and the Spill Line were immediately notified at 11:02 am on October 17 2022 of exceedances zinc in two water samples in SNP-09 and SNP-10. No input or drainage was observed from these sumps at the time of collection. No mining activities and no water use at site over the preceding eleven months had lead to be no or very little water in any sumps receiving waters related to mining activities.

The Spill Line confirmed that all notifications required have been made and no further activity was required. Subsequent discussions on December 14, 2022 with Meg McCluskie, Water Resource Officer and Olivia Smith, Enforcement Officer with Environmental Enforcement Directorate confirmed “It appears that this was an isolated occurrence that has a very low likelihood of reoccurrence.” And that “there was no violation of the FA.”

Summary of Activities in accordance with the Approved GWWM Program

Summary of Approved Updates or Changes

The Groundwater and water Monitoring Plan was submitted in March 2021. The last revision was submitted August 4, 2022 and has not been approved.

Monthly and Annual Quantities of Recycled Water

No water was used or recycled in 2022

Monthly and Annual Quantities of Water from Each Approved Source.

Water was drawn from the following sites in 2022:

Table 5. Monthly and annual water withdrawal in cubic metres (m^3).

Location	Discovery Lake	Sito Lake	Quayta Lake	Bluefish Lake	Prosperous Lake
January 2022	0	0	0	0	0
February 2022	0	0	0	0	80
March 2022	20	40	180	180	0

April 2022	0	0	0	0	0
May 2022	0	0	0	0	0
June 2022	0	0	0	0	0
July 2022	0	0	0	0	0
August 2022	0	0	0	0	0
September 2022	0.6	0	0	0	0
October 2022	0.3	0	0	0	0
November 2022	0	0	0	0	0
December 2022	0	0	0	0	0
Total	20.9	40	180	180	80

No other water was drawn from any other source.

Monthly and Annual Quantities of Water used for Dust Control.

No water was used for dust control in 2022.

Monthly and Annual Quantities of Sewage

Our bioreactor collects all greywater and sewage and treats it in a two-stage anaerobic digester feeding a single stage aerobic digester. All water into camp is discharged through this system. The bioreactor was not used in 2022.

Table 6. Monthly and annual sewage and greywater in camp

Date	Water in Camp (m^3)	Camp Discharge (m^3)	Estimated Sewage (50%) (m^3)
Jan-21	0	0	0
Feb-21	0	0	0
Mar-21	0	0	0
Apr-21	0	0	0
May-21	0	0	0
Jun-21	0	0	0
Jul-21	0	0	0
Aug-21	0	0	0
Sep-21	0	0	0
Oct-21	0	0	0
Nov-21	0	0	0
Dec-21	0	0	0
Total	0	0	0

Note: The bioreactor collects all discharge from camp, including greywater from the kitchen, laundry and showers as well as the sewage from the toilets. The four toilets consume 20 liters per flush and with an eight-man camp usage, produce on average 300 liters of waste. The kitchen produces 80 liters of water per day and the showers

average 300 liters per day with laundry contributing only 70 liters per week. The total usage of < 1,000 liters per day balances well with our input and natural fluctuations in consumption.

Monthly and Annual Quantities of Run-off from DSTF

No dry stack tailings exist on the property.

Monthly and Annual Quantities of Run-off from Waste Rock and Ore

Rainfall as measured in Yellowknife contributed the following water to the waste rock storage in 2021. As shown on the Design and Construction Management Plan, waste rock storage occupies 16,370 m^3 and this figure is used to convert rainfall to volumes on waste piles and ore piles. There are currently no ore piles.

Table 7. Monthly and annual quantities of run-off from waste and ore stockpiles.

Month	Rainfall mm	On waste pile m^3	Added from mine m^3
Jan-22	1.5	24.5	0
Feb-22	1.5	24.5	0
Mar-22	1.5	24.5	0
Apr-22	0.2	3.2	0
May-22	28.0	453	0
Jun-22	6.2	102	0
Jul-22	33.4	547	0
Aug-22	31.1	509	0
Sep-22	3.1	51	0
Oct-22	25.3	414	0
Nov-22	26.4	433	0
Dec-22	12.2	200	0
Total	**170.4**	**2785.7**	**0**

Virtually all of the rainfall in this area of Yellowknife evaporates and that which falls on the waste piles is no different. All of that which works its way through the waste piles is gathered at the natural SNP sites where it is sampled as per the Surveillance Network Program. There has not yet been an active discharge from any sump.

Monthly and Annual Quantities of Discharge of Minewater

There was no minewater or mine rock discharge in 2022

Monthly and Annual Quantities of Other Discharge.

There was no other discharge from the property.

Monthly and Annual Measurements of Precipitation and Run-off

Yellowknife reported the following monthly precipitation in 2021 (https://yellowknife.weatherstats.ca/charts/precipitation-monthly.html):

Table 8. Monthly precipitation, 2022

Month	Precipitation
Jan-22	1.5
Feb-22	1.5
Mar-22	1.5
Apr-22	0.2
May-22	28.0
Jun-22	6.2
Jul-22	33.4
Aug-22	31.1
Sep-22	3.1
Oct-22	25.3
Nov-22	26.4
Dec-22	12.2

A similar volume of water is considered to have flowed into drainage systems on the property.

Comparison of Water and Wastewaters Quantities

No water was used nor discharged on the property in 2020. There was nearly 3,500 m^3 of rainfall onto the waste rock piles and 150 m^3 was added during mining operations for dust suppression. The total amount of water from mining to the waste pile is approximately 4% of the total. This equals the amount of water used in mining.

Updated Water Balance

Rainfall is the largest contributor of water into each subbasin and would generally match outflows from each subbasin. Waste rock will entrain water and retain that water in each area. In our project, this will only affect the Mine Basin which is part of the Discovery Basin.

Table 9. Water balance for each basin (see map in appendix).

Basin	**Area**	**Volume Rain**	**Waste Water**	**Outflow**	**Inflow**
Mine Basin	152,000	25,840	0.9	25,840	6022
Discovery Lake Basin	1,572,000	267,240	0.9	530,040	262,800
Sito Lake	2,500,000	425,000	0	489,233,000	488,808,000
Quayta Lake	9,770,000	1,660,900	0	979,276,900	977,616,000
Bluefish Lake	2,940,000	499,800	0	978,115,800	977,616,000
Prosperous Lake	40,000,000	6,800,000	0	984,416,000	977,616,000
Lake B	64,920	11,036.4	0	11,036	

Lake C	10,500	3,045	0	3,045	
Lake D	121,300	35,177	0	35,177	

Lake B, C, and D have not seen any activity in or around them.

Action Level Exceedances

No exceedances were noted in 2021 except as disclosed for SNP-01. SNP-03 is a baseline sample which represents the natural environment.

Action taken in Action Level Exceedances

NWT Spill Line, the Board and Inspectors were notified of the exceedance in SNP-01. The Spill Line confirmed the report, and the GNWT advised no actions are required.

Activities in Accordance with TMP

Summary of Approved Updates or Changes

A Tailings Management Plan was submitted in 2022 and rejected.

Monthly and Annual Quantities of Tailings Placed in DSTF

No tailings were placed in the DSTF in 2022.

Monthly Elevations of the Dry Stack Tailings Facility

There were no tailings produced nor stored on site in 2022.

Action Level Exceedances

None.

Action taken in Action Level Exceedances

None.

Summary of Hydrocarbon-Contaminated Soil Treatment Facility

Summary of Approved Updates or Changes

No updates or changes.

Monthly and Annual Quantities of Effluent Discharged

No effluent was discharged in 2022.

Summary of all Contaminated Materials Accepted

Soil Rock Snow Water

There were no contaminated materials placed in this site in 2022.

Sources of Materials

There were no contaminated materials placed in this site in 2022.

Volumes and Types of Materials from Each Source

There were no contaminated materials placed in this site in 2022.

Analytical Results from Each Material from Each Source

There were no contaminated materials placed in this site in 2022.

Summary of Treated Soil Removed from the Facility

Volume of Soil

There were no contaminated materials removed from this site in 2022.

Analytical Results

There were no contaminated materials removed from this site in 2022.

Location and Activity of Receiving Sites

There were no contaminated materials removed from this site in 2022.

Summary of Previous Year's Management of Contaminated Soil

There were no contaminated materials on site in the previous year.

Record of Inspections of HCSTF

There were no inspections as no site exists.

Summary of Activities related to Explosives Management Plan

Summary of Approved Updates or Changes

No changes were made in 2022

Monthly and Annual Quantities of Explosives Spent.

No explosives were used in 2022.

Table 10. Total explosives used by month.

Month	Amex (kg)	Stick (kg)
Dec-22	0	0
Nov-22	0	0
Oct-22	0	0
Sep-22	0	0
Aug-22	0	0
Jul-22	0	0
Jun-22	0	0
May-22	0	0
Apr-22	0	0
Mar-22	0	0
Feb-22	0	0
Jan-22	0	0
Total	**0**	**0**

Action Level Exceedances

No spills occurred, no samples were collected, no exceedances were noted in 2022 except as reported in Action Level Exceedances Pg.20.

Action taken in Action Level Exceedances

Reported, no actions taken nor recommended.

Summary and Results of Inspections

No inspections were reported in 2022.

Summary of Activities in Accordance with the Spill Contingency Plan

List of all unauthorised Discharges and Actions

No discharges occurred in 2022.

Spill Training Conducted.

No personnel were on the property in 2022 except for an owner representative to collect SNP-samples and review all sites for discharges.

Summary of Closure and Reclamation Activities

All waste material from domestic sources and operations have been removed from site. A first draft of the CRP was submitted in late 2021 and in consultation with GNWT it was revised and submitted in January 2022. It was rejected in April 2022 after revisions were submitted. Further submissions will occur.

Tabular Data collected under the SNP.

The following data is provided from collections under MV2020L2-0002

Table 11. Tabular data for SNP-01, Discharge from bioreactor.

Sampling Date		2021-08-18	
	Station	**SNP-01**	**ECQ**
Calculated Parameters	**UNITS**		
Dissolved Nitrate (N)	mg/L	<0.010	
Dissolved Nitrate (NO3)	mg/L	<0.044	
Dissolved Nitrite (NO2)	mg/L	<0.033	
Total Total Kjeldahl Nitrogen (Calc)	mg/L	69.8	
Dissolved Organic Phosphorus (P)	mg/L	2.07	
Demand Parameters			
Dissolved Biochemical Oxygen Demand	mg/L	<6.3	
Biochemical Oxygen Demand (inhib.)	mg/L	28	25
pH	pH	7.81	>6
Total Organic Carbon (C)	mg/L	27	
Total Suspended Solids	mg/L	25	
Microbiological Param.			
E.Coli DST	MPN/100mL	>2400	
Fecal Coliforms	MPN/100mL	>2400	1000
Total Coliforms DST	MPN/100mL	>2400	
Nutrients			

Total Ammonia (N)	mg/L	62	
Calculated unionized Ammonia	*mg/L*	*0.86*	*1.25*
Orthophosphate (P)	mg/L	6.5	
Dissolved Phosphorus (P)	mg/L	9.3	
Dissolved Inorganic Phosphorus (P)	mg/L	7.24	
Total Inorganic Phosphorus (P)	mg/L	7.59	
Dissolved Nitrite (N)	mg/L	<0.010	
Dissolved Nitrate plus Nitrite (N)	mg/L	<0.010	
Total Nitrogen (N)	mg/L	70 (1)	
Misc. Organics			
Total Oil and grease	mg/L	1.1	5.0
Physical Properties			
Conductivity	uS/cm	956	
Physical Properties			
Turbidity	NTU	14	

Table 12. Tabular data from SNP-03, drainage from DST facility (not built).

Sampling Date		2021-08-18	2021-10-26	2019-07-06	historic	historic	EQC
	Station	**SNP-03A**	**SNP-03**	**SNP-03**	**SNP-03**	**SNP-03**	
Calculated Parameters	**UNITS**						
Dissolved Nitrate (N)	mg/L	<0.050	28				
Dissolved Nitrate (NO3)	mg/L	<0.22	120				
Dissolved Nitrite (NO2)	mg/L	<0.033	1.6				
Total Total Kjeldahl Nitrogen (Calc)	mg/L	1.72	11.8				
Dissolved Organic Phosphorus (P)	mg/L	<0.015	0.0087				
Demand Parameters							
Dissolved Biochemical Oxygen Demand	mg/L		<2.0				
Biochemical Oxygen Demand (inhib.)	mg/L	<6.8					
Misc. Inorganics							
pH	pH	6.10	6.55				>6<9.5
Reactive Silica	mg/L	6.9 (1)	14				
Alkalinity (Total as CaCO3)	mg/L	9.74	46.9				
Total Organic Carbon (C)	mg/L	55 (2)	9.2				
Alkalinity (PP as CaCO3)	mg/L	<0.50	<0.50				
Bicarbonate (HCO3)	mg/L	11.9	57.2				
Carbonate (CO3)	mg/L	<0.50	<0.50				
Hydroxide (OH)	mg/L	<0.50	<0.50				
Total Suspended Solids	mg/L	75 (3)	30				15 (30)
Anions							
Dissolved Fluoride (F)	mg/L	0.070	<0.050				
Dissolved Chloride (Cl)	mg/L	3.2	1.4				
Dissolved Sulphate (SO4)	mg/L	<2.5 (4)	240				
Metals							
Dissolved Hex. Chromium (Cr 6+)	mg/L	<0.0050 (2)	0.0011				
Total Hex. Chromium (Cr 6+)	mg/L	<0.0050 (2)	<0.00099				
Nutrients							
Total Ammonia (N)	mg/L	0.024	7.3				5.9
Orthophosphate (P)	mg/L	<0.0030	0.0042				

Dissolved Phosphorus (P)	mg/L	0.044 (1)	0.014				
Dissolved Inorganic Phosphorus (P)	mg/L	0.037 (1)	0.0048				
Total Inorganic Phosphorus (P)	mg/L	0.096 (1)	0.0149				
Dissolved Nitrite (N)	mg/L	<0.010 (5)	0.48				
Dissolved Nitrate plus Nitrite (N)	mg/L	<0.050 (6)	28				
Total Nitrogen (N)	mg/L	1.7 (1)	40 (1)				
Physical Properties							
Conductivity	uS/cm	46.2	753				
Physical Properties							
Turbidity	NTU	27	7.4				
Total Dissolved Solids	mg/L	159	652				
Calculated Parameters							
Dissolved Hardness (CaCO3)	mg/L	28.1	390				
Elements							
Dissolved Mercury (Hg)	ug/L	0.0082					
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	753	32.5	127	906	7.6	
Dissolved Antimony (Sb)	ug/L	0.18	0.616	<0.50	<0.50	<0.50	
Dissolved Arsenic (As)	ug/L	4.27	5.20	11.1	4.18	1.04	500 (1,000)
Dissolved Barium (Ba)	ug/L	19.9	52.3	20.5	21.6	6.8	
Dissolved Beryllium (Be)	ug/L	0.068	<0.010	<0.10	<0.10	<0.10	
Dissolved Bismuth (Bi)	ug/L	<0.025	<0.0050	<1.0	<1.0	<1.0	
Dissolved Boron (B)	ug/L	<50	45	<50	<50	<50	
Dissolved Cadmium (Cd)	ug/L	<0.025	3.26	0.102	0.362	<0.010	
Dissolved Chromium (Cr)	ug/L	2.38	0.32	1.1	1.9	<1.0	
Dissolved Cobalt (Co)	ug/L	0.797	34.4	0.35	0.26	<0.20	
Dissolved Copper (Cu)	ug/L	5.79	4.13	33.2	7.28	0.79	300 (600)
Dissolved Iron (Fe)	ug/L	1270	156	584	603	10.2	
Dissolved Lead (Pb)	ug/L	1.59	0.109	0.85	0.23	<0.20	200 (400)
Dissolved Lithium (Li)	ug/L	5.8	28.0	<2.0	6.9	2.4	
Dissolved Manganese (Mn)	ug/L	31.2	352	20.4	5.4	<1.0	
Dissolved Molybdenum (Mo)	ug/L	<0.25	0.712	<1.0	<1.0	<1.0	
Dissolved Nickel (Ni)	ug/L	6.36	452	28.4	5.5	1.3	500 (1,000)
Dissolved Phosphorus (P)	ug/L	62	25.5				
Dissolved Selenium (Se)	ug/L	<0.20	0.117	0.17	0.12	<0.10	
Dissolved Silicon (Si)	ug/L	2910	5870	6540	5020	239	
Dissolved Silver (Ag)	ug/L	<0.025	0.0053	0.030	<0.020	<0.020	
Dissolved Strontium (Sr)	ug/L	25.3	188	107	23.3	34.4	
Dissolved Thallium (Tl)	ug/L	<0.010	0.0186	<0.010	<0.010	<0.010	
Dissolved Tin (Sn)	ug/L	<1.0	<0.20	<5.0	<5.0	<5.0	
Dissolved Titanium (Ti)	ug/L	13.0	0.99	<5.0	6.7	<5.0	
Dissolved Uranium (U)	ug/L	0.477	0.198	1.47	0.49	0.18	
Dissolved Vanadium (V)	ug/L	3.4	0.54	<5.0	<5.0	<5.0	
Dissolved Zinc (Zn)	ug/L	9.20	4240	15.3	5.5	<5.0	500 (1,000)
Dissolved Zirconium (Zr)	ug/L	3.74	0.12	1.52	4.29	0.13	
Dissolved Calcium (Ca)	mg/L	5.69	86.0	28.4	5.14	12.1	
Dissolved Magnesium (Mg)	mg/L	3.37	42.5	13.9	3.45	4.96	
Dissolved Potassium (K)	mg/L	1.18	8.77				
Dissolved Sodium (Na)	mg/L	1.49	12.4				
Dissolved Sulphur (S)	mg/L	<15	90.1				

Calculated Parameters							
Total Hardness (CaCO3)	mg/L	28.7	425				
Elements							
Total Mercury (Hg)	ug/L	0.0130					
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	1050	205				
Total Antimony (Sb)	ug/L	<0.10	0.785				
Total Arsenic (As)	ug/L	4.61	52.5				
Total Barium (Ba)	ug/L	23.7	65.6				
Total Beryllium (Be)	ug/L	0.078	0.030				
Total Bismuth (Bi)	ug/L	<0.025	0.030				
Total Boron (B)	ug/L	<50	51				
Total Cadmium (Cd)	ug/L	<0.025	7.88				
Total Chromium (Cr)	ug/L	2.39	0.77				
Total Cobalt (Co)	ug/L	1.17	56.3				
Total Copper (Cu)	ug/L	4.63	18.5				
Total Iron (Fe)	ug/L	996	2290				
Total Lead (Pb)	ug/L	0.261	1.25				
Total Lithium (Li)	ug/L	6.4	32.8				
Total Manganese (Mn)	ug/L	48.9	563				
Total Molybdenum (Mo)	ug/L	<0.25	0.949				
Total Nickel (Ni)	ug/L	7.37	550				
Total Phosphorus (P)	ug/L	52	141				
Total Selenium (Se)	ug/L	<0.20	0.172				
Total Silicon (Si)	ug/L	3900	5600				
Total Silver (Ag)	ug/L	<0.025	0.016				
Total Strontium (Sr)	ug/L	27.0	218				
Total Thallium (Tl)	ug/L	<0.010	0.0365				
Total Tin (Sn)	ug/L	<1.0	<0.20				
Total Titanium (Ti)	ug/L	12.8	5.8				
Total Uranium (U)	ug/L	0.457	0.460				
Total Vanadium (V)	ug/L	2.7	1.75				
Total Zinc (Zn)	ug/L	8.31	6050				
Total Zirconium (Zr)	ug/L	3.90	0.26				
Total Calcium (Ca)	mg/L	5.60	92.5				
Total Magnesium (Mg)	mg/L	3.58	47.1				
Total Potassium (K)	mg/L	1.05	9.28				
Total Sodium (Na)	mg/L	1.52	13.7				
Total Sulphur (S)	mg/L	<15	96.4				

Table 13. Tabular data from SNP-09, 10 from drainage from waste rock pile.

Sampling Date		**2021-08-18**	**2022-09-26**	**2021-10-26**	**2021-08-18**	
	Station	**SNP-09**	**SNP-09**	**SNP-10**	**SNP-10**	**EQC**
Radium 226			<0.010		<0.010	
Calculated Parameters	**UNITS**					
Dissolved Nitrate (N)	mg/L	<0.010	0.83	13	12	
Dissolved Nitrate (NO3)	mg/L	<0.044	3.7	59	53	
Dissolved Nitrite (NO2)	mg/L	<0.033	<0.033	1.8	0.50	

Total Total Kjeldahl Nitrogen (Calc)	mg/L	1.32	1.73	3.79	0.55	
Dissolved Organic Phosphorus (P)	mg/L	0.0181	<0.0030	0.0233	<0.0030	
Demand Parameters						
Dissolved Biochemical Oxygen Demand	mg/L	<2.6 (1)	<2.6 (1)	5.7	<2.0 (1)	
Misc. Inorganics						
pH	pH	7.00	7.35	7.14	7.00	>6.0<9.5
Reactive Silica	mg/L	11	4.0	17	15	
Alkalinity (Total as CaCO3)	mg/L	56.8	89.0	178	258	
Total Organic Carbon (C)	mg/L	18	20	17	16	
Alkalinity (PP as CaCO3)	mg/L	<0.50	<0.50	<0.50	<0.50	
Bicarbonate (HCO3)	mg/L	69.4	109	217	314	
Carbonate (CO3)	mg/L	<0.50	<0.50	<0.50	<0.50	
Hydroxide (OH)	mg/L	<0.50	<0.50	<0.50	<0.50	
Total Suspended Solids	mg/L	3.9	83.3	9.3	8.0	15 (30)
Anions						
Dissolved Fluoride (F)	mg/L	0.074	0.098	0.078	0.10	
Dissolved Chloride (Cl)	mg/L	1.5	1.3	2.8	3.3	
Dissolved Sulphate (SO4)	mg/L	310	200	440	440	
Metals						
Dissolved Hex. Chromium (Cr 6+)	mg/L	<0.00099		<0.00099		
Total Hex. Chromium (Cr 6+)	mg/L	<0.00099		<0.00099		
Microbiological Param.						
Nutrients						
Total Ammonia (N)	mg/L	0.019	0.25	2.6	0.10	5.9
Orthophosphate (P)	mg/L	<0.0030	<0.0030	0.0037	<0.0030	
Dissolved Phosphorus (P)	mg/L	0.037	0.0098	0.036	0.0046	
Dissolved Inorganic Phosphorus (P)	mg/L	0.0185	0.0098	0.0123	0.0046	
Total Inorganic Phosphorus (P)	mg/L	0.0450	0.0163	0.0107	0.15	
Dissolved Nitrite (N)	mg/L	<0.010	<0.033	0.55	12	
Dissolved Nitrate plus Nitrite (N)	mg/L	<0.010	0.83	14	0.0046	
Total Nitrogen (N)	mg/L	1.3 (1)	1.73	18 (1)		
Physical Properties						
Conductivity	uS/cm	717	532	1180	1280	
Physical Properties						
Turbidity	NTU	1.3	20	11	6.6	
Total Dissolved Solids	mg/L	550	353	920	1030 (3)	
Calculated Parameters						
Dissolved Hardness (CaCO3)	mg/L	332	255	579	708	
Elements						
Dissolved Mercury (Hg)	ug/L	<0.0019	0.0021	0.0028	<0.0019	
Dissolved Metals by ICPMS						
Dissolved Aluminum (Al)	ug/L	34.6	9.78	154	4.90	
Dissolved Antimony (Sb)	ug/L	0.299	0.462	0.781	1.08	

Dissolved Arsenic (As)	ug/L	4.24	5.10	25.2	3.90	
Dissolved Barium (Ba)	ug/L	33.3	31.5	55.5	52.0	
Dissolved Beryllium (Be)	ug/L	0.011	0.017	<0.010	<0.010	
Dissolved Bismuth (Bi)	ug/L	<0.0050	<0.0050	0.0475	<0.0050	
Dissolved Boron (B)	ug/L	16	24	35	39	
Dissolved Cadmium (Cd)	ug/L	0.947	0.409	0.982	1.23	
Dissolved Chromium (Cr)	ug/L	0.40	0.36	1.17	0.37	
Dissolved Cobalt (Co)	ug/L	3.61	11.3	28.7	5.69	
Dissolved Copper (Cu)	ug/L	4.09	2.89	4.67	3.12	
Dissolved Iron (Fe)	ug/L	406	112	2310	39.9	
Dissolved Lead (Pb)	ug/L	0.389	0.0083	11.7	0.0530	
Dissolved Lithium (Li)	ug/L	24.1	17.6	15.7	20.9	
Dissolved Manganese (Mn)	ug/L	114	251	2090	249	
Dissolved Molybdenum (Mo)	ug/L	0.157	0.826	1.65	1.02	
Dissolved Nickel (Ni)	ug/L	161	258	93.3	121	
Dissolved Phosphorus (P)	ug/L	17.7	9.8	37.4	8.9	
Dissolved Selenium (Se)	ug/L	0.091	0.100	0.294	0.308	
Dissolved Silicon (Si)	ug/L	4060	1800	7990	7050	
Dissolved Silver (Ag)	ug/L	<0.0050	<0.0050	0.0445	<0.0050	
Dissolved Strontium (Sr)	ug/L	150	121	354	389	
Dissolved Thallium (Tl)	ug/L	0.0037	0.0083	0.0135	0.0162	
Dissolved Tin (Sn)	ug/L	<0.20	<0.20	<0.20	<0.20	
Dissolved Titanium (Ti)	ug/L	0.73	<0.50	7.27	<0.50	
Dissolved Uranium (U)	ug/L	0.165	0.309	2.82	3.43	
Dissolved Vanadium (V)	ug/L	0.27	<0.20	1.13	<0.20	
Dissolved Zinc (Zn)	ug/L	947	1590	516	1140	
Dissolved Zirconium (Zr)	ug/L	0.18	0.26	0.35	0.28	
Dissolved Calcium (Ca)	mg/L	74.5	56.4	148	177	
Dissolved Magnesium (Mg)	mg/L	35.5	27.8	50.8	64.9	
Dissolved Potassium (K)	mg/L	4.03	6.28	11.8	12.4	
Dissolved Sodium (Na)	mg/L	4.27	6.78	13.0	14.9	
Dissolved Sulphur (S)	mg/L	73.0	65.2	133	154	
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	339		598	730	
Elements						
Total Mercury (Hg)	ug/L	<0.0019	<0.0019		<0.0019	
Total Metals by ICPMS						
Total Aluminum (Al)	ug/L	38.3	71.7	192	13.2	
Total Antimony (Sb)	ug/L	0.229	0.472	0.864	1.10	
Total Arsenic (As)	ug/L	6.18	35.0	31.9	19.0	500 (1,000)
Total Barium (Ba)	ug/L	33.4	32.4	64.8	53.8	
Total Beryllium (Be)	ug/L	0.012	0.019	<0.010	<0.010	
Total Bismuth (Bi)	ug/L	<0.0050	<0.010	0.068	0.0095	
Total Boron (B)	ug/L	16	23	44	45	
Total Cadmium (Cd)	ug/L	1.05	1.35	1.17	1.38	
Total Chromium (Cr)	ug/L	0.40	0.57	1.16	0.56	
Total Cobalt (Co)	ug/L	4.20	16.6	35.1	6.16	
Total Copper (Cu)	ug/L	4.34	5.61	5.38	4.17	300 (600)
Total Iron (Fe)	ug/L	610	4760	2790	1360	
Total Lead (Pb)	ug/L	0.110	0.209	18.0	1.47	200 (400)

Total Lithium (Li)	ug/L	26.1	18.4	17.6	24.3	
Total Manganese (Mn)	ug/L	118	309	2590	253	
Total Molybdenum (Mo)	ug/L	0.184	0.925	1.82	1.06	
Total Nickel (Ni)	ug/L	171	272	98.8	122	500 (1,000)
Total Phosphorus (P)	ug/L	28.0	55.4	33.0	12.5	
Total Selenium (Se)	ug/L	0.094	0.133	0.336	0.318	
Total Silicon (Si)	ug/L	4090	1810	7450	7140	
Total Silver (Ag)	ug/L	<0.0050	<0.010	0.043	0.0125	
Total Strontium (Sr)	ug/L	143	121	398	412	
Total Thallium (Tl)	ug/L	0.0056	0.0105	0.0142	0.0174	
Total Tin (Sn)	ug/L	<0.20	<0.20	<0.20	<0.20	
Total Titanium (Ti)	ug/L	1.26	<2.0	8.0	0.53	
Total Uranium (U)	ug/L	0.195	0.413	2.86	3.61	
Total Vanadium (V)	ug/L	0.38	0.94	0.85	0.24	
Total Zinc (Zn)	ug/L	1060	1900	568	1210	500 (1,000)
Total Zirconium (Zr)	ug/L	0.18	0.26	0.34	0.37	
Total Calcium (Ca)	mg/L	74.5	53.7	154	181	
Total Magnesium (Mg)	mg/L	37.1	27.1	51.7	67.8	
Total Potassium (K)	mg/L	4.00	5.95	11.7	12.5	
Total Sodium (Na)	mg/L	3.97	6.59	12.6	15.2	
Total Sulphur (S)	mg/L	80.0	64.9	132	160	

Sampling Date		**2021-08-18**	**2022-09-26**	**CCME**
	Station	**SNP-12**	**SNP-12**	
Misc. Inorganics				
pH	pH	7.45	7.15	>6.0<9.5
Metals				
Dissolved Hex. Chromium (Cr 6+)	mg/L	<0.00099		No data
Total Hex. Chromium (Cr 6+)	mg/L	<0.00099		No data
Nutrients				
Total Ammonia (N)	mg/L	0.025	0.016	Calculate 32.4
Physical Properties				
Conductivity	uS/cm	102	113	No data
Calculated Parameters				
Dissolved Hardness (CaCO3)	mg/L	42.6	49.4	Calculate
Elements				
Dissolved Mercury (Hg)	ug/L	<0.0019	<0.0019	0.026
Dissolved Metals by ICPMS				
Dissolved Aluminum (Al)	ug/L	22.3	68.2	100
Dissolved Antimony (Sb)	ug/L	0.111	0.442	No data
Dissolved Arsenic (As)	ug/L	1.05	1.22	5
Dissolved Barium (Ba)	ug/L	5.96	8.38	No data
Dissolved Beryllium (Be)	ug/L	<0.010	<0.010	
Dissolved Bismuth (Bi)	ug/L	<0.0050	<0.0050	
Dissolved Boron (B)	ug/L	11	10	1,500
Dissolved Cadmium (Cd)	ug/L	0.0091	0.0242	Calculate 0.88
Dissolved Chromium (Cr)	ug/L	0.18	0.49	No data
Dissolved Cobalt (Co)	ug/L	0.0834	0.112	No data
Dissolved Copper (Cu)	ug/L	1.90	1.48	Calculate
Dissolved Iron (Fe)	ug/L	136	108	300

Dissolved Lead (Pb)	ug/L	0.220	0.409	Calculate 2.0
Dissolved Lithium (Li)	ug/L	2.29	2.59	
Dissolved Manganese (Mn)	ug/L	20.5	18.7	Calculate 350
Dissolved Molybdenum (Mo)	ug/L	0.646	0.647	73
Dissolved Nickel (Ni)	ug/L	1.61	1.70	Calculate 25
Dissolved Phosphorus (P)	ug/L	10.7	24.7	No data
Dissolved Selenium (Se)	ug/L	<0.040	<0.040	1
Dissolved Silicon (Si)	ug/L	264	360	
Dissolved Silver (Ag)	ug/L	<0.0050	<0.0050	0.25
Dissolved Strontium (Sr)	ug/L	31.5	34.3	
Dissolved Thallium (Tl)	ug/L	<0.0020	0.0026	0.8
Dissolved Tin (Sn)	ug/L	<0.20	<0.20	No data
Dissolved Titanium (Ti)	ug/L	1.40	3.44	
Dissolved Uranium (U)	ug/L	0.107	0.101	15
Dissolved Vanadium (V)	ug/L	0.23	<0.20	No data
Dissolved Zinc (Zn)	ug/L	4.53	4.90	Calculate 1,300
Dissolved Zirconium (Zr)	ug/L	<0.10	<0.10	No data
Dissolved Calcium (Ca)	mg/L	10.7	12.0	No data
Dissolved Magnesium (Mg)	mg/L	3.85	4.73	
Dissolved Potassium (K)	mg/L	1.61	2.18	
Dissolved Sodium (Na)	mg/L	2.31	3.05	
Dissolved Sulphur (S)	mg/L	<3.0	<3.0	No data
Calculated Parameters				
Total Hardness (CaCO3)	mg/L	41.7	48.3	
Elements				
Total Mercury (Hg)	ug/L	<0.0019	<0.0019	LT 0.026
Total Metals by ICPMS				
Total Aluminum (Al)	ug/L	49.0	68.5	No data
Total Antimony (Sb)	ug/L	0.044	0.433	No data
Total Arsenic (As)	ug/L	0.885	1.12	No data, LT 5.0
Total Barium (Ba)	ug/L	5.29	8.03	No data
Total Beryllium (Be)	ug/L	<0.010	<0.010	No data
Total Bismuth (Bi)	ug/L	<0.0050	<0.0050	
Total Boron (B)	ug/L	<10	10	29,000
Total Cadmium (Cd)	ug/L	<0.0050	0.0212	Equation
Total Chromium (Cr)	ug/L	0.15	0.56	No data
Total Cobalt (Co)	ug/L	0.0807	0.109	No data, equation
Total Copper (Cu)	ug/L	0.892	1.43	No data, equation
Total Iron (Fe)	ug/L	129	112	No data, LT 300
Total Lead (Pb)	ug/L	0.0409	0.419	No data, equation
Total Lithium (Li)	ug/L	2.26	2.43	
Total Manganese (Mn)	ug/L	16.9	18.4	Equation, variable
Total Molybdenum (Mo)	ug/L	0.730	0.720	No data, LT 73.0
Total Nickel (Ni)	ug/L	1.27	1.67	No data, equation
Total Phosphorus (P)	ug/L	19.9	22.8	No data, Guidance
Total Selenium (Se)	ug/L	<0.040	<0.040	No data, LT 1.0
Total Silicon (Si)	ug/L	349	326	
Total Silver (Ag)	ug/L	<0.0050	<0.0050	None, LT 0.25
Total Strontium (Sr)	ug/L	26.9	33.3	
Total Thallium (Tl)	ug/L	<0.0020	0.0029	No data, LT 0.8
Total Tin (Sn)	ug/L	<0.20	<0.20	No data

Total Titanium (Ti)	ug/L	2.46	3.21	
Total Uranium (U)	ug/L	0.118	0.103	33.0, 15.0
Total Vanadium (V)	ug/L	0.34	0.25	
Total Zinc (Zn)	ug/L	1.53	5.61	
Total Zirconium (Zr)	ug/L	0.10	<0.10	
Total Calcium (Ca)	mg/L	10.5	11.9	
Total Magnesium (Mg)	mg/L	3.78	4.52	
Total Potassium (K)	mg/L	1.42	2.09	
Total Sodium (Na)	mg/L	1.84	2.93	
Total Sulphur (S)	mg/L	<3.0	<3.0	

List of all Non-Compliance Conditions

SNP-0 and SNP-10 exceeded total dissolved zinc.

Summary of Actions Taken to Address Concerns

SNP stations will be monitored carefully upon restart of activities.

Other Details Requested by the Board by November 30 of the Year Reported

Revised Water and Groundwater Management Plans, Waste Rock Management and Geochemical Characterization Plans, Tailings Management, Closure and Reclamation, and Tailings Management Plans have been submitted in 2022. The Waste Rock Management and Geochemical Characterization Plan was approved and all others have been rejected.

Appendixes

1	Map showing Infrastructure and SNP locations
2	Map showing geology and SNP locations
3	Map showing basins with water balance
4	Analytical results from water sampling at SNP stations.

Historical Underground Workings and Surface Infrastructure with SNP Stations
Mon Property, NWT Canada
New Discovery Mines Ltd.

-114.3375 ° -114.335 ° -114.3325 ° -114.33 ° -114.3275 ° -114.325 ° -114.3225 °

62.9025 °

62.9 °

62.8975 °

62.895 °

SNP-05
SNP-02
SNP-06a
SNP-03a
SNP-01
SNP-09d
SNP-22
SNP-09b
SNP-09C
SNP-12a
SNP-09
SNP-08
SNP-10
SNP-12
SNP-11
SNP-09a
SNP-21

Discovery Lake

SNP_Stations
Stream
Ore Storage
Explosive Storage
Bioreactor
Camp Trailers
Mill Site
Lakes
Contours 1m
Contours 10 m
Central Adit
South Decline
Roads
Cominco workings
Cominco Shaft
Waste Laydown
Shops
Historic Tailings

N

0 100
meters

WGS 84

Historical Underground Workings and Surface Infrastructure with SNP Stations on Geology basemap. Mon Property, NWT Canada New Discovery Mines Ltd.

-114.3375 ° -114.335 ° -114.3325 ° -114.33 ° -114.3275 ° -114.325 ° -114.3225 °

62.9025 °

62.9 °

62.8975 °

62.895 °

SNP-05
SNP-02
SNP-06a
SNP-03a
SNP-01
SNP-09d
SNP-22
SNP-09b
SNP-09C
SNP-12a
SNP-09
SNP-08
SNP-10
SNP-12
SNP-11
SNP-09a
SNP-21

Discovery Lake

N

0 100
meters

WGS 84

SNP_Stations
Stream
Ore Storage
Explosive Storage
Bioreactor
Camp Trailers
Mill Site
Lakes
Contours 1m
Contours 10 m
Central Adit
South Decline
Roads
Cominco workings
Cominco Shaft
Waste Laydown
Shops
Historic Tailings

Esker, Quaternary
Gabbro
Carbonate
Felsic Volcanic
Metasediment greenschist
Metasediment amphibolite
Mafic to Intermediate Volcanic
Granitoid
Mafic Volcanic
Ultramafic Igneous
Granitoid

635,000 mE
636,000 mE
637,000 mE
638,000 mE
6,978,500 mN
6,977,500 mN
6,976,500 mN
6,975,500 mN
6,974,500 mN

Yellowknife River
Nelson Lake
Discovery Lake

Basin	Area	Pipe	Volume Rain	Waste Water	Outflow	Inflow	Net
DST	93,500	0.17	15895	0	15895	0	0

Basin	Area	Pipe	Volume Rain	Waste Water	Outflow	Inflow	Net
Mine Basin	152000	0.17	25840	0.9	25840	6022.5	6022.5

Basin	Area	Pipe	Volume Rain	Waste Water	Outflow	Inflow	Net
Discovery Lake Basin	1572000	0.17	267240	0.9	718680	262800	-188640

Water Balance (in cubic meters) on Sub-Basins, Mon
Property 85J16 UTM NAD 83 Z.11 DRW March, 2023

N

0
555.5
meters

Your Project #: Mon Gold Project
Your C.O.C. #: C#667899-02-01

Attention: Dave Webb

New Discovery Mines Ltd.
1901 108W. Cordova St.
Vancouver, BC
Canada V6B 0G5

Report Date: 2022/11/21
Report #: R3266644
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C275293
Received: 2022/09/26, 15:20

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Low Level (1)	2	N/A	2022/10/12	AB SOP-00005	SM 23 2320 B m
Biochemical Oxygen Demand (Inhibited) (1)	2	2022/10/05	2022/10/10	AB SOP-00017	SM 23 5210B m
Low level chloride/sulphate by AC (1)	2	N/A	2022/10/05	AB SOP-00020	SM23-4500-Cl/SO4-E m
Cyanide (Free) (1)	2	2022/10/06	2022/10/06	CAL SOP-00266	EPA 9016d R0 m
Cyanide (total) (1)	2	N/A	2022/10/10	CAL SOP-00270	SM 23 4500-CN m
Cyanide WAD (weak acid dissociable) (1)	2	N/A	2022/10/10	CAL SOP-00270	SM 23 4500-CN m
Conductance - Low Level (1)	1	N/A	2022/10/08	AB SOP-00005	SM 23 2510 B m
Conductance - Low Level (1)	2	N/A	2022/10/12	AB SOP-00005	SM 23 2510 B m
Fluoride (1)	2	N/A	2022/10/12	AB SOP-00005	SM 23 4500-F C m
Hardness Total (calculated as CaCO3) (2, 4)	2	N/A	2022/10/13	BBY WI-00033	Auto Calc
Hardness Total (calculated as CaCO3) (2, 4)	1	N/A	2022/10/14	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (2)	3	N/A	2022/10/12	BBY WI-00033	Auto Calc
Mercury (Dissolved) by CV (1, 5)	3	2022/10/05	2022/10/05	AB SOP-00084	BCMOE BCLM Oct2013 m
Mercury (Total) by CV (1)	3	2022/10/14	2022/10/14	AB SOP-00084	BCMOE BCLM Oct2013 m
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (2)	3	N/A	2022/10/12	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (dissolved) (2, 5)	3	N/A	2022/10/12	BBY7SOP-00002	EPA 6020b R2 m
Elements by ICPMS Digested LL (total) (2)	1	2022/10/13	2022/10/14	BBY7SOP-00003 / BBY7SOP-00002	EPA 6020b R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	2	N/A	2022/10/13	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (total) (2)	1	N/A	2022/10/14	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (total) (2)	2	N/A	2022/10/13	BBY7SOP-00002	EPA 6020b R2 m
Ammonia-N (Total) (1)	2	N/A	2022/10/13	AB SOP-00007	SM 23 4500 NH3 A G m
Ammonia-N (Total) (1)	1	N/A	2022/10/14	AB SOP-00007	SM 23 4500 NH3 A G m
Nitrate and Nitrite (1)	2	N/A	2022/10/12		Auto Calc
NO2 (N); NO2 (N) + NO3 (N) in Water (1)	2	N/A	2022/10/07	AB SOP-00091	SM 23 4500 NO3m
Nitrate (as N) (1)	2	2022/10/04	2022/10/12		Auto Calc
Filter and HNO3 Preserve for Metals (2)	1	N/A	2022/10/11	BBY7 WI-00004	SM 23 3030B m
Filter and HNO3 Preserve for Metals (2)	2	N/A	2022/10/13	BBY7 WI-00004	SM 23 3030B m
pH @25°C (1, 6)	1	N/A	2022/10/08	AB SOP-00005	SM 23 4500-H+B m
pH @25°C (1, 6)	2	N/A	2022/10/12	AB SOP-00005	SM 23 4500-H+B m
pH (Field) (1)	3	N/A	2022/10/05	Field Test	Field Test
Orthophosphate by Konelab (1, 7)	2	N/A	2022/10/06	AB SOP-00025	SM 23 4500-P A,F m

Your Project #: Mon Gold Project
Your C.O.C. #: C#667899-02-01

Attention: Dave Webb

New Discovery Mines Ltd.
1901 108W. Cordova St.
Vancouver, BC
Canada V6B 0G5

Report Date: 2022/11/21
Report #: R3266644
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C275293
Received: 2022/09/26, 15:20

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Silica (Reactive) (1)	2	N/A	2022/10/11	AB SOP-00011	EPA 370.1 R1978 m
Total Dissolved Solids - Low Level (1)	1	2022/10/05	2022/10/05	AB SOP-00065	SM 23 2540 C m
Total Dissolved Solids - Low Level (1)	1	2022/10/14	2022/10/14	AB SOP-00065	SM 23 2540 C m
Temperature (Field) (1)	3	N/A	2022/10/05		
Total Kjeldahl Nitrogen (Total) (1)	2	N/A	2022/10/15	BBY WI-00033	Auto Calc
Nitrogen (Total) (1)	1	2022/10/14	2022/10/14	AB SOP-00093	SM 23 4500-N C m
Carbon (Total Organic) (1, 8)	2	N/A	2022/10/13	AB SOP-00087	MMCW 119 1996 m
Total Inorganic Phosphorus (1)	1	N/A	2022/10/16	AB SOP-00024	SM 23 4500-P A,B,F m
Total Inorganic Phosphorus (1)	1	N/A	2022/10/20	AB SOP-00024	SM 23 4500-P A,B,F m
Total Suspended Solids (NFR) (1)	2	2022/10/06	2022/10/06	AB SOP-00061	SM 23 2540 D m
Turbidity (1)	2	N/A	2022/10/07	CAL SOP-00081	SM 23 2130 B m
Radium Isotopes by Alpha Spectrometry (3, 9)	2	N/A	2022/11/18	BQL SOP-00006	Alpha Spectrometer

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Your Project #: Mon Gold Project
Your C.O.C. #: C#667899-02-01

Attention: Dave Webb

New Discovery Mines Ltd.
1901 108W. Cordova St.
Vancouver, BC
Canada V6B 0G5

Report Date: 2022/11/21
Report #: R3266644
Version: 2 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C275293

Received: 2022/09/26, 15:20

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

(1) This test was performed by Bureau Veritas Calgary, 4000 - 19 St. , Calgary, AB, T2E 6P8
(2) This test was performed by Bureau Veritas Vancouver, 4606 Canada Way , Burnaby, BC, V5G 1K5
(3) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Rd., Unit 4, Mississauga, Ontario, L5N 5L9
(4) "Total Hardness" was calculated from Total Ca and Mg concentrations and may be biased high (Hardness, or Dissolved Hardness, calculated from Dissolved Ca and Mg, should be used for compliance if available).
(5) Dissolved > Total Imbalance: When applicable, Dissolved and Total results were reviewed and data quality meets acceptable levels unless otherwise noted.
(6) The CCME method requires pH to be analysed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME holding time. Bureau Veritas endeavours to analyze samples as soon as possible after receipt.
(7) Orthophosphate > Total Phosphorus Imbalance: When applicable, Orthophosphate, Total Phosphorus and dissolved Phosphorus results were reviewed and data quality meets acceptable levels unless otherwise noted.
(8) TOC present in the sample should be considered as non-purgeable TOC.
(9) Radium-226 results have not been corrected for blanks.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Solutions, Western Canada Customer Experience Team
Email: customersolutionswest@bureauveritas.com
Phone# (780) 577-7100

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Scott Cantwell, General Manager responsible for Alberta Environmental laboratory operations.

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BDA023			BDA024		
Sampling Date		2022/09/26 18:15			2022/09/26 18:30		
COC Number		C#667899-02-01			C#667899-02-01		
	UNITS	SNP 09	RDL	QC Batch	SNP 10	RDL	QC Batch
Parameter							
Radium 226	Bq/l	<0.010	0.010	A804427	<0.010	0.010	A804427
Calculated Parameters							
Filter and HNO3 Preservation	N/A	LAB		A753411	LAB		A751939
Dissolved Hardness (CaCO3)	mg/L	255	0.50	A741712	708	0.50	A741712
Total Hardness (CaCO3)	mg/L	246	0.50	A741666	730	0.50	A741666
Nitrate (N)	mg/L	0.83	0.010	A743739	12	0.25	A743739
Nitrate (NO3)	mg/L	3.7	0.044	A743737	53	1.1	A743737
Nitrite (NO2)	mg/L	<0.033	0.033	A743737	0.50	0.033	A743737
Total Total Kjeldahl Nitrogen (Calc)	mg/L	1.73	0.10	A743082	0.55	0.25	A743082
Demand Parameters							
Biochemical Oxygen Demand (inhib.)	mg/L	<2.6 (1)	2.0	A743206	<2.0 (1)	2.0	A743206
Field Parameters							
Field pH	pH	7.35	N/A	ONSITE	7.00	N/A	ONSITE
Field Temperature (Fd)	deg. C	11	N/A	ONSITE	11	N/A	ONSITE
Misc. Inorganics							
Free Cyanide (CN)	ug/L	3.9 (2)	2.0	A745570	3.6 (2)	2.0	A745570
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.00125	0.00050	A749510	0.00121	0.00050	A749510
Weak Acid Dissoc. Cyanide (CN)	mg/L	0.00087	0.00050	A749511	0.00076	0.00050	A749511
pH	pH	6.48	N/A	A752949	7.02	N/A	A752949
Reactive Silica	mg/L	4.0	0.050	A751189	15	0.25	A751189
Alkalinity (Total as CaCO3)	mg/L	89.0	0.50	A752944	258	0.50	A752944
Total Organic Carbon (C)	mg/L	20	0.20	A754265	16	0.20	A754265
Alkalinity (PP as CaCO3)	mg/L	<0.50	0.50	A752944	<0.50	0.50	A752944
Bicarbonate (HCO3)	mg/L	109	0.50	A752944	314	0.50	A752944
Carbonate (CO3)	mg/L	<0.50	0.50	A752944	<0.50	0.50	A752944
Hydroxide (OH)	mg/L	<0.50	0.50	A752944	<0.50	0.50	A752944
Total Suspended Solids	mg/L	83 (3)	3.9	A745162	8.0	0.99	A745162

RDL = Reportable Detection Limit

N/A = Not Applicable

(1) Sample analyzed past hold time. Sample analysis is recommended within 48 hours of sampling.

(2) Interference checks not performed at the time of sampling. The lab cannot guarantee that interferences were not present at the time of sampling and that there is no low bias in results.
Results may have a high bias due to decomposition of hexacyanoferrate and some other metal-cyanide complexes to free cyanide.

(3) Detection limit raised based on sample volume used for analysis.

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BDA023			BDA024		
Sampling Date		2022/09/26 18:15			2022/09/26 18:30		
COC Number		C#667899-02-01			C#667899-02-01		
	UNITS	SNP 09	RDL	QC Batch	SNP 10	RDL	QC Batch
Anions							
Dissolved Fluoride (F)	mg/L	0.098	0.050	A752371	0.10	0.050	A752371
Chloride (Cl)	mg/L	1.3	0.50	A744619	3.3	0.50	A744619
Sulphate (SO4)	mg/L	200	2.5	A744619	440	2.5	A744619
Nutrients							
Total Ammonia (N)	mg/L	0.25	0.015	A755566	0.10	0.015	A755563
Orthophosphate (P)	mg/L	<0.0030	0.0030	A745257	<0.0030	0.0030	A745257
Total Inorganic Phosphorus (P)	mg/L	0.0163	0.0020	A760964	0.0046	0.0020	A755221
Nitrite (N)	mg/L	<0.010	0.010	A746712	0.15	0.010	A746712
Nitrate plus Nitrite (N)	mg/L	0.83	0.010	A746712	12	0.25	A746712
Total Nitrogen (N)	mg/L	2.6 (1)	0.10	A755768			
Physical Properties							
Conductivity	uS/cm	532	1.0	A752950	1280	1.0	A752950
Physical Properties							
Turbidity	NTU	20	0.10	A748099	6.6	0.10	A748099
Total Dissolved Solids	mg/L	353 (2)	2.2	A744030	1030 (2)	5.0	A755749

RDL = Reportable Detection Limit
(1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.
(2) Detection limit raised based on sample volume used for analysis.

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

RESULTS OF CHEMICAL ANALYSES OF WATER

Bureau Veritas ID		BDA025		
Sampling Date		2022/09/26 18:45		
COC Number		C#667899-02-01		
	UNITS	**SNP 12**	**RDL**	**QC Batch**
Calculated Parameters				
Filter and HNO3 Preservation	N/A	LAB		A753411
Dissolved Hardness (CaCO3)	mg/L	49.4	0.50	A743704
Total Hardness (CaCO3)	mg/L	48.3	0.50	A743728
Field Parameters				
Field pH	pH	7.15	N/A	ONSITE
Field Temperature (Fd)	deg. C	13.6	N/A	ONSITE
Misc. Inorganics				
pH	pH	6.58	N/A	A749460
Nutrients				
Total Ammonia (N)	mg/L	0.016	0.015	A755564
Physical Properties				
Conductivity	uS/cm	113	1.0	A749458

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

MERCURY BY COLD VAPOR (WATER)

Bureau Veritas ID		BDA023	BDA024	BDA025		
Sampling Date		2022/09/26 18:15	2022/09/26 18:30	2022/09/26 18:45		
COC Number		C#667899-02-01	C#667899-02-01	C#667899-02-01		
	UNITS	SNP 09	SNP 10	SNP 12	RDL	QC Batch
Elements						
Dissolved Mercury (Hg)	ug/L	0.0021	<0.0019	<0.0019	0.0019	A743760
Total Mercury (Hg)	ug/L	<0.0019	<0.0019	<0.0019	0.0019	A754460
RDL = Reportable Detection Limit						

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		BDA023			BDA024		BDA025		
Sampling Date		2022/09/26 18:15			2022/09/26 18:30		2022/09/26 18:45		
COC Number		C#667899-02-01			C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	RDL	QC Batch	SNP 10	QC Batch	SNP 12	RDL	QC Batch
Dissolved Metals by ICPMS									
Dissolved Aluminum (Al)	ug/L	9.78	0.50	A751944	4.90	A751944	68.2	0.50	A751944
Dissolved Antimony (Sb)	ug/L	0.462	0.020	A751944	1.08	A751944	0.442	0.020	A751944
Dissolved Arsenic (As)	ug/L	5.10	0.020	A751944	3.90	A751944	1.22	0.020	A751944
Dissolved Barium (Ba)	ug/L	31.5	0.020	A751944	52.0	A751944	8.38	0.020	A751944
Dissolved Beryllium (Be)	ug/L	0.017	0.010	A751944	<0.010	A751944	<0.010	0.010	A751944
Dissolved Bismuth (Bi)	ug/L	<0.0050	0.0050	A751944	<0.0050	A751944	<0.0050	0.0050	A751944
Dissolved Boron (B)	ug/L	24	10	A751944	39	A751944	10	10	A751944
Dissolved Cadmium (Cd)	ug/L	0.409	0.0050	A751944	1.23	A751944	0.0242	0.0050	A751944
Dissolved Chromium (Cr)	ug/L	0.36	0.10	A751944	0.37	A751944	0.49	0.10	A751944
Dissolved Cobalt (Co)	ug/L	11.3	0.0050	A751944	5.69	A751944	0.112	0.0050	A751944
Dissolved Copper (Cu)	ug/L	2.89	0.050	A751944	3.12	A751944	1.48	0.050	A751944
Dissolved Iron (Fe)	ug/L	112	1.0	A751944	39.9	A751944	108	1.0	A751944
Dissolved Lead (Pb)	ug/L	0.0083	0.0050	A751944	0.0530	A751944	0.409	0.0050	A751944
Dissolved Lithium (Li)	ug/L	17.6	0.50	A751944	20.9	A751944	2.59	0.50	A751944
Dissolved Manganese (Mn)	ug/L	251	0.050	A751944	249	A751944	18.7	0.050	A751944
Dissolved Molybdenum (Mo)	ug/L	0.826	0.050	A751944	1.02	A751944	0.647	0.050	A751944
Dissolved Nickel (Ni)	ug/L	258	0.020	A751944	121	A751944	1.70	0.020	A751944
Dissolved Phosphorus (P)	ug/L	9.8	2.0	A751944	8.9	A751944	24.7	2.0	A751944
Dissolved Selenium (Se)	ug/L	0.100	0.040	A751944	0.308	A751944	<0.040	0.040	A751944
Dissolved Silicon (Si)	ug/L	1800	50	A751944	7050	A751944	360	50	A751944
Dissolved Silver (Ag)	ug/L	<0.0050	0.0050	A751944	<0.0050	A751944	<0.0050	0.0050	A751944
Dissolved Strontium (Sr)	ug/L	121	0.050	A751944	389	A751944	34.3	0.050	A751944
Dissolved Thallium (Tl)	ug/L	0.0083	0.0020	A751944	0.0162	A751944	0.0026	0.0020	A751944
Dissolved Tin (Sn)	ug/L	<0.20	0.20	A751944	<0.20	A751944	<0.20	0.20	A751944
Dissolved Titanium (Ti)	ug/L	<0.50	0.50	A751944	<0.50	A751944	3.44	0.50	A751944
Dissolved Uranium (U)	ug/L	0.309	0.0020	A751944	3.43	A751944	0.101	0.0020	A751944
Dissolved Vanadium (V)	ug/L	<0.20	0.20	A751944	<0.20	A751944	<0.20	0.20	A751944
Dissolved Zinc (Zn)	ug/L	1590	0.10	A751944	1140	A751944	4.90	0.10	A751944
Dissolved Zirconium (Zr)	ug/L	0.26	0.10	A751944	0.28	A751944	<0.10	0.10	A751944
Dissolved Calcium (Ca)	mg/L	56.4	0.050	A741715	177	A741715	12.0	0.050	A743705
Dissolved Magnesium (Mg)	mg/L	27.8	0.050	A741715	64.9	A741715	4.73	0.050	A743705
Dissolved Potassium (K)	mg/L	6.28	0.050	A741715	12.4	A741715	2.18	0.050	A743705
Dissolved Sodium (Na)	mg/L	6.78	0.050	A741715	14.9	A741715	3.05	0.050	A743705

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		BDA023			BDA024		BDA025		
Sampling Date		2022/09/26 18:15			2022/09/26 18:30		2022/09/26 18:45		
COC Number		C#667899-02-01			C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	RDL	QC Batch	SNP 10	QC Batch	SNP 12	RDL	QC Batch
Dissolved Sulphur (S)	mg/L	65.2	3.0	A741715	154	A741715	<3.0	3.0	A743705
Total Metals by ICPMS									
Total Aluminum (Al)	ug/L	71.7	3.0	A754951	13.2	A753141	68.5	0.50	A753141
Total Antimony (Sb)	ug/L	0.472	0.020	A754951	1.10	A753141	0.433	0.020	A753141
Total Arsenic (As)	ug/L	35.0	0.020	A754951	19.0	A753141	1.12	0.020	A753141
Total Barium (Ba)	ug/L	32.4	0.050	A754951	53.8	A753141	8.03	0.020	A753141
Total Beryllium (Be)	ug/L	0.019	0.010	A754951	<0.010	A753141	<0.010	0.010	A753141
Total Bismuth (Bi)	ug/L	<0.010	0.010	A754951	0.0095	A753141	<0.0050	0.0050	A753141
Total Boron (B)	ug/L	23	10	A754951	45	A753141	10	10	A753141
Total Cadmium (Cd)	ug/L	1.35	0.0050	A754951	1.38	A753141	0.0212	0.0050	A753141
Total Chromium (Cr)	ug/L	0.57	0.10	A754951	0.56	A753141	0.56	0.10	A753141
Total Cobalt (Co)	ug/L	16.6	0.010	A754951	6.16	A753141	0.109	0.0050	A753141
Total Copper (Cu)	ug/L	5.61	0.10	A754951	4.17	A753141	1.43	0.050	A753141
Total Iron (Fe)	ug/L	4760	5.0	A754951	1360	A753141	112	1.0	A753141
Total Lead (Pb)	ug/L	0.209	0.020	A754951	1.47	A753141	0.419	0.0050	A753141
Total Lithium (Li)	ug/L	18.4	0.50	A754951	24.3	A753141	2.43	0.50	A753141
Total Manganese (Mn)	ug/L	309	0.10	A754951	253	A753141	18.4	0.050	A753141
Total Molybdenum (Mo)	ug/L	0.925	0.050	A754951	1.06	A753141	0.720	0.050	A753141
Total Nickel (Ni)	ug/L	272	0.10	A754951	122	A753141	1.67	0.020	A753141
Total Phosphorus (P)	ug/L	55.4	5.0	A754951	12.5	A753141	22.8	2.0	A753141
Total Selenium (Se)	ug/L	0.133	0.040	A754951	0.318	A753141	<0.040	0.040	A753141
Total Silicon (Si)	ug/L	1810	50	A754951	7140	A753141	326	50	A753141
Total Silver (Ag)	ug/L	<0.010	0.010	A754951	0.0125	A753141	<0.0050	0.0050	A753141
Total Strontium (Sr)	ug/L	121	0.050	A754951	412	A753141	33.3	0.050	A753141
Total Thallium (Tl)	ug/L	0.0105	0.0020	A754951	0.0174	A753141	0.0029	0.0020	A753141
Total Tin (Sn)	ug/L	<0.20	0.20	A754951	<0.20	A753141	<0.20	0.20	A753141
Total Titanium (Ti)	ug/L	<2.0	2.0	A754951	0.53	A753141	3.21	0.50	A753141
Total Uranium (U)	ug/L	0.413	0.0050	A754951	3.61	A753141	0.103	0.0020	A753141
Total Vanadium (V)	ug/L	0.94	0.20	A754951	0.24	A753141	0.25	0.20	A753141
Total Zinc (Zn)	ug/L	1900	1.0	A754951	1210	A753141	5.61	0.10	A753141
Total Zirconium (Zr)	ug/L	0.26	0.10	A754951	0.37	A753141	<0.10	0.10	A753141
Total Calcium (Ca)	mg/L	53.7	0.25	A741940	181	A741940	11.9	0.050	A743729
Total Magnesium (Mg)	mg/L	27.1	0.25	A741940	67.8	A741940	4.52	0.050	A743729
Total Potassium (K)	mg/L	5.95	0.25	A741940	12.5	A741940	2.09	0.050	A743729

RDL = Reportable Detection Limit

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		BDA023			BDA024		BDA025		
Sampling Date		2022/09/26 18:15			2022/09/26 18:30		2022/09/26 18:45		
COC Number		C#667899-02-01			C#667899-02-01		C#667899-02-01		
	UNITS	SNP 09	RDL	QC Batch	SNP 10	QC Batch	SNP 12	RDL	QC Batch
Total Sodium (Na)	mg/L	6.59	0.25	A741940	15.2	A741940	2.93	0.050	A743729
Total Sulphur (S)	mg/L	64.9	3.0	A741940	160	A741940	<3.0	3.0	A743729
RDL = Reportable Detection Limit									

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

GENERAL COMMENTS

Sample BDA023 [SNP 09] : Sample was analyzed past method specified hold time for Biochemical Oxygen Demand (Inhibited). Sample was analyzed past method specified hold time for Total Dissolved Solids - Low Level. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Orthophosphate by Konelab. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Turbidity. Sample was analyzed past method specified hold time for NO2 (N); NO2 (N) + NO3 (N) in Water. Sample was analyzed past method specified hold time for Alkalinity - Low Level. The sample for dissolved metals was filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling.

Sample BDA024 [SNP 10] : Sample was analyzed past method specified hold time for Biochemical Oxygen Demand (Inhibited). Sample was analyzed past method specified hold time for Total Dissolved Solids - Low Level. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. Sample was analyzed past method specified hold time for Orthophosphate by Konelab. Sample was analyzed past method specified hold time for Total Suspended Solids (NFR). Sample was analyzed past method specified hold time for Turbidity. Sample was analyzed past method specified hold time for NO2 (N); NO2 (N) + NO3 (N) in Water. The sample for dissolved metals was filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling. Sample was analyzed past method specified hold time for Alkalinity - Low Level.

Sample BDA025 [SNP 12] : The sample for dissolved metals was filtered and preserved at the lab. Values may not reflect concentrations at the time of sampling.

Results relate only to the items tested.

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A743206	JKR	Spiked Blank	Biochemical Oxygen Demand (inhib.)	2022/10/10		92	%	85 - 115
A743206	JKR	Method Blank	Biochemical Oxygen Demand (inhib.)	2022/10/10	<2.0		mg/L	
A743206	JKR	RPD	Biochemical Oxygen Demand (inhib.)	2022/10/10	0.66		%	20
A743760	JAB	Matrix Spike	Dissolved Mercury (Hg)	2022/10/05		105	%	80 - 120
A743760	JAB	Spiked Blank	Dissolved Mercury (Hg)	2022/10/05		99	%	80 - 120
A743760	JAB	Method Blank	Dissolved Mercury (Hg)	2022/10/05	<0.0019		ug/L	
A743760	JAB	RPD	Dissolved Mercury (Hg)	2022/10/05	NC		%	20
A744030	GOC	Matrix Spike	Total Dissolved Solids	2022/10/05		NC	%	80 - 120
A744030	GOC	Spiked Blank	Total Dissolved Solids	2022/10/05		88	%	80 - 120
A744030	GOC	Method Blank	Total Dissolved Solids	2022/10/05	<1.0		mg/L	
A744030	GOC	RPD	Total Dissolved Solids	2022/10/05	0.63		%	20
A744619	CTU	Matrix Spike	Chloride (Cl)	2022/10/05		100	%	80 - 120
			Sulphate (SO4)	2022/10/05		NC	%	80 - 120
A744619	CTU	Spiked Blank	Chloride (Cl)	2022/10/05		103	%	80 - 120
			Sulphate (SO4)	2022/10/05		103	%	80 - 120
A744619	CTU	Method Blank	Chloride (Cl)	2022/10/05	<0.50		mg/L	
			Sulphate (SO4)	2022/10/05	<0.50		mg/L	
A744619	CTU	RPD	Chloride (Cl)	2022/10/05	0.0068		%	20
			Sulphate (SO4)	2022/10/05	5.0		%	20
A745162	SKP	Matrix Spike	Total Suspended Solids	2022/10/06		92	%	80 - 120
A745162	SKP	Spiked Blank	Total Suspended Solids	2022/10/06		93	%	80 - 120
A745162	SKP	Method Blank	Total Suspended Solids	2022/10/06	<0.99		mg/L	
A745162	SKP	RPD	Total Suspended Solids	2022/10/06	NC		%	20
A745257	FM0	Matrix Spike	Orthophosphate (P)	2022/10/06		108	%	80 - 120
A745257	FM0	Spiked Blank	Orthophosphate (P)	2022/10/06		103	%	80 - 120
A745257	FM0	Method Blank	Orthophosphate (P)	2022/10/06	<0.0030		mg/L	
A745257	FM0	RPD	Orthophosphate (P)	2022/10/06	NC		%	20
A745570	AP1	Matrix Spike	Free Cyanide (CN)	2022/10/06		99	%	80 - 120
A745570	AP1	Spiked Blank	Free Cyanide (CN)	2022/10/06		93	%	80 - 120
A745570	AP1	Method Blank	Free Cyanide (CN)	2022/10/06	<2.0		ug/L	
A746712	ACR	Matrix Spike	Nitrite (N)	2022/10/07		100	%	80 - 120
			Nitrate plus Nitrite (N)	2022/10/07		129 (1)	%	80 - 120
A746712	ACR	Spiked Blank	Nitrite (N)	2022/10/07		104	%	80 - 120
			Nitrate plus Nitrite (N)	2022/10/07		100	%	80 - 120
A746712	ACR	Method Blank	Nitrite (N)	2022/10/12	<0.010		mg/L	
			Nitrate plus Nitrite (N)	2022/10/12	<0.010		mg/L	
A746712	ACR	RPD	Nitrite (N)	2022/10/12	0.36		%	20
			Nitrate plus Nitrite (N)	2022/10/12	14		%	20
A748099	KK9	Spiked Blank	Turbidity	2022/10/07		104	%	80 - 120
A748099	KK9	Method Blank	Turbidity	2022/10/07	<0.10		NTU	
A748099	KK9	RPD	Turbidity	2022/10/07	2.1		%	20
A749458	MEL	Spiked Blank	Conductivity	2022/10/08		102	%	90 - 110
A749458	MEL	Method Blank	Conductivity	2022/10/08	<1.0		uS/cm	
A749458	MEL	RPD	Conductivity	2022/10/08	NC		%	20
A749460	MEL	Spiked Blank	pH	2022/10/08		100	%	97 - 103
A749460	MEL	RPD	pH	2022/10/08	0.32		%	N/A
A749510	TMU	Matrix Spike	Strong Acid Dissoc. Cyanide (CN)	2022/10/10		81	%	80 - 120
A749510	TMU	Spiked Blank	Strong Acid Dissoc. Cyanide (CN)	2022/10/10		96	%	80 - 120
A749510	TMU	Method Blank	Strong Acid Dissoc. Cyanide (CN)	2022/10/10	<0.00050		mg/L	
A749510	TMU	RPD	Strong Acid Dissoc. Cyanide (CN)	2022/10/10	0.20		%	20
A749511	TMU	Matrix Spike	Weak Acid Dissoc. Cyanide (CN)	2022/10/10		102	%	80 - 120
A749511	TMU	Spiked Blank	Weak Acid Dissoc. Cyanide (CN)	2022/10/10		93	%	80 - 120
A749511	TMU	Method Blank	Weak Acid Dissoc. Cyanide (CN)	2022/10/10	<0.00050		mg/L	
A749511	TMU	RPD	Weak Acid Dissoc. Cyanide (CN)	2022/10/10	3.5		%	20
A751189	SKM	Matrix Spike	Reactive Silica	2022/10/11		NC	%	80 - 120

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A751189	SKM	Spiked Blank	Reactive Silica	2022/10/11		101	%	80 - 120
A751189	SKM	Method Blank	Reactive Silica	2022/10/11	<0.050		mg/L	
A751189	SKM	RPD	Reactive Silica	2022/10/11	0.53		%	20
A751944	AA1	Matrix Spike [BDA023-09]	Dissolved Aluminum (Al)	2022/10/12		93	%	80 - 120
			Dissolved Antimony (Sb)	2022/10/12		98	%	80 - 120
			Dissolved Arsenic (As)	2022/10/12		104	%	80 - 120
			Dissolved Barium (Ba)	2022/10/12		94	%	80 - 120
			Dissolved Beryllium (Be)	2022/10/12		92	%	80 - 120
			Dissolved Bismuth (Bi)	2022/10/12		91	%	80 - 120
			Dissolved Boron (B)	2022/10/12		91	%	80 - 120
			Dissolved Cadmium (Cd)	2022/10/12		96	%	80 - 120
			Dissolved Chromium (Cr)	2022/10/12		93	%	80 - 120
			Dissolved Cobalt (Co)	2022/10/12		98	%	80 - 120
			Dissolved Copper (Cu)	2022/10/12		90	%	80 - 120
			Dissolved Iron (Fe)	2022/10/12		98	%	80 - 120
			Dissolved Lead (Pb)	2022/10/12		95	%	80 - 120
			Dissolved Lithium (Li)	2022/10/12		82	%	80 - 120
			Dissolved Manganese (Mn)	2022/10/12		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/10/12		101	%	80 - 120
			Dissolved Nickel (Ni)	2022/10/12		NC	%	80 - 120
			Dissolved Phosphorus (P)	2022/10/12		100	%	80 - 120
			Dissolved Selenium (Se)	2022/10/12		102	%	80 - 120
			Dissolved Silicon (Si)	2022/10/12		103	%	80 - 120
			Dissolved Silver (Ag)	2022/10/12		95	%	80 - 120
			Dissolved Strontium (Sr)	2022/10/12		NC	%	80 - 120
			Dissolved Thallium (Tl)	2022/10/12		95	%	80 - 120
			Dissolved Tin (Sn)	2022/10/12		97	%	80 - 120
			Dissolved Titanium (Ti)	2022/10/12		98	%	80 - 120
			Dissolved Uranium (U)	2022/10/12		100	%	80 - 120
			Dissolved Vanadium (V)	2022/10/12		95	%	80 - 120
			Dissolved Zinc (Zn)	2022/10/12		NC	%	80 - 120
			Dissolved Zirconium (Zr)	2022/10/12		100	%	80 - 120
A751944	AA1	Spiked Blank	Dissolved Aluminum (Al)	2022/10/12		94	%	80 - 120
			Dissolved Antimony (Sb)	2022/10/12		101	%	80 - 120
			Dissolved Arsenic (As)	2022/10/12		104	%	80 - 120
			Dissolved Barium (Ba)	2022/10/12		99	%	80 - 120
			Dissolved Beryllium (Be)	2022/10/12		94	%	80 - 120
			Dissolved Bismuth (Bi)	2022/10/12		98	%	80 - 120
			Dissolved Boron (B)	2022/10/12		91	%	80 - 120
			Dissolved Cadmium (Cd)	2022/10/12		97	%	80 - 120
			Dissolved Chromium (Cr)	2022/10/12		96	%	80 - 120
			Dissolved Cobalt (Co)	2022/10/12		99	%	80 - 120
			Dissolved Copper (Cu)	2022/10/12		96	%	80 - 120
			Dissolved Iron (Fe)	2022/10/12		99	%	80 - 120
			Dissolved Lead (Pb)	2022/10/12		100	%	80 - 120
			Dissolved Lithium (Li)	2022/10/12		89	%	80 - 120
			Dissolved Manganese (Mn)	2022/10/12		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2022/10/12		98	%	80 - 120
			Dissolved Nickel (Ni)	2022/10/12		99	%	80 - 120
			Dissolved Phosphorus (P)	2022/10/12		94	%	80 - 120
			Dissolved Selenium (Se)	2022/10/12		101	%	80 - 120
			Dissolved Silicon (Si)	2022/10/12		102	%	80 - 120
			Dissolved Silver (Ag)	2022/10/12		98	%	80 - 120
			Dissolved Strontium (Sr)	2022/10/12		92	%	80 - 120
			Dissolved Thallium (Tl)	2022/10/12		100	%	80 - 120

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Tin (Sn)	2022/10/12		99	%	80 - 120
			Dissolved Titanium (Ti)	2022/10/12		99	%	80 - 120
			Dissolved Uranium (U)	2022/10/12		103	%	80 - 120
			Dissolved Vanadium (V)	2022/10/12		95	%	80 - 120
			Dissolved Zinc (Zn)	2022/10/12		102	%	80 - 120
			Dissolved Zirconium (Zr)	2022/10/12		98	%	80 - 120
A751944	AA1	Method Blank	Dissolved Aluminum (Al)	2022/10/12	0.55, RDL=0.50 (2)		ug/L	
			Dissolved Antimony (Sb)	2022/10/12	<0.020		ug/L	
			Dissolved Arsenic (As)	2022/10/12	<0.020		ug/L	
			Dissolved Barium (Ba)	2022/10/12	<0.020		ug/L	
			Dissolved Beryllium (Be)	2022/10/12	<0.010		ug/L	
			Dissolved Bismuth (Bi)	2022/10/12	<0.0050		ug/L	
			Dissolved Boron (B)	2022/10/12	<10		ug/L	
			Dissolved Cadmium (Cd)	2022/10/12	<0.0050		ug/L	
			Dissolved Chromium (Cr)	2022/10/12	<0.10		ug/L	
			Dissolved Cobalt (Co)	2022/10/12	<0.0050		ug/L	
			Dissolved Copper (Cu)	2022/10/12	<0.050		ug/L	
			Dissolved Iron (Fe)	2022/10/12	<1.0		ug/L	
			Dissolved Lead (Pb)	2022/10/12	<0.0050		ug/L	
			Dissolved Lithium (Li)	2022/10/12	<0.50		ug/L	
			Dissolved Manganese (Mn)	2022/10/12	<0.050		ug/L	
			Dissolved Molybdenum (Mo)	2022/10/12	<0.050		ug/L	
			Dissolved Nickel (Ni)	2022/10/12	<0.020		ug/L	
			Dissolved Phosphorus (P)	2022/10/12	<2.0		ug/L	
			Dissolved Selenium (Se)	2022/10/12	<0.040		ug/L	
			Dissolved Silicon (Si)	2022/10/12	<50		ug/L	
			Dissolved Silver (Ag)	2022/10/12	<0.0050		ug/L	
			Dissolved Strontium (Sr)	2022/10/12	<0.050		ug/L	
			Dissolved Thallium (Tl)	2022/10/12	<0.0020		ug/L	
			Dissolved Tin (Sn)	2022/10/12	<0.20		ug/L	
			Dissolved Titanium (Ti)	2022/10/12	<0.50		ug/L	
			Dissolved Uranium (U)	2022/10/12	0.0021, RDL=0.0020 (2)		ug/L	
			Dissolved Vanadium (V)	2022/10/12	<0.20		ug/L	
			Dissolved Zinc (Zn)	2022/10/12	<0.10		ug/L	
			Dissolved Zirconium (Zr)	2022/10/12	<0.10		ug/L	
A751944	AA1	RPD [BDA023-09]	Dissolved Aluminum (Al)	2022/10/12	0.74		%	20
			Dissolved Antimony (Sb)	2022/10/12	0.98		%	20
			Dissolved Arsenic (As)	2022/10/12	0.91		%	20
			Dissolved Barium (Ba)	2022/10/12	0.12		%	20
			Dissolved Beryllium (Be)	2022/10/12	NC		%	20
			Dissolved Bismuth (Bi)	2022/10/12	NC		%	20
			Dissolved Boron (B)	2022/10/12	0.99		%	20
			Dissolved Cadmium (Cd)	2022/10/12	0.88		%	20
			Dissolved Chromium (Cr)	2022/10/12	5.4		%	20
			Dissolved Cobalt (Co)	2022/10/12	0.25		%	20
			Dissolved Copper (Cu)	2022/10/12	0.59		%	20
			Dissolved Iron (Fe)	2022/10/12	2.5		%	20
			Dissolved Lead (Pb)	2022/10/12	8.1		%	20
			Dissolved Lithium (Li)	2022/10/12	3.0		%	20
			Dissolved Manganese (Mn)	2022/10/12	0.24		%	20
			Dissolved Molybdenum (Mo)	2022/10/12	3.2		%	20
			Dissolved Nickel (Ni)	2022/10/12	0.36		%	20
			Dissolved Phosphorus (P)	2022/10/12	4.4		%	20

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Dissolved Selenium (Se)	2022/10/12	1.1		%	20
			Dissolved Silicon (Si)	2022/10/12	2.2		%	20
			Dissolved Silver (Ag)	2022/10/12	NC		%	20
			Dissolved Strontium (Sr)	2022/10/12	0.12		%	20
			Dissolved Thallium (Tl)	2022/10/12	3.7		%	20
			Dissolved Tin (Sn)	2022/10/12	NC		%	20
			Dissolved Titanium (Ti)	2022/10/12	NC		%	20
			Dissolved Uranium (U)	2022/10/12	1.2		%	20
			Dissolved Vanadium (V)	2022/10/12	NC		%	20
			Dissolved Zinc (Zn)	2022/10/12	0.59		%	20
			Dissolved Zirconium (Zr)	2022/10/12	2.3		%	20
A752371	JLD	Matrix Spike	Dissolved Fluoride (F)	2022/10/12		95	%	80 - 120
A752371	JLD	Spiked Blank	Dissolved Fluoride (F)	2022/10/12		97	%	80 - 120
A752371	JLD	Method Blank	Dissolved Fluoride (F)	2022/10/12	<0.050		mg/L	
A752371	JLD	RPD	Dissolved Fluoride (F)	2022/10/12	3.2		%	20
A752944	JLD	Spiked Blank	Alkalinity (Total as CaCO3)	2022/10/12		99	%	80 - 120
A752944	JLD	Method Blank	Alkalinity (Total as CaCO3)	2022/10/12	<0.50		mg/L	
			Alkalinity (PP as CaCO3)	2022/10/12	<0.50		mg/L	
			Bicarbonate (HCO3)	2022/10/12	<0.50		mg/L	
			Carbonate (CO3)	2022/10/12	<0.50		mg/L	
			Hydroxide (OH)	2022/10/12	<0.50		mg/L	
A752944	JLD	RPD	Alkalinity (Total as CaCO3)	2022/10/12	1.2		%	20
			Alkalinity (PP as CaCO3)	2022/10/12	NC		%	20
			Bicarbonate (HCO3)	2022/10/12	1.2		%	20
			Carbonate (CO3)	2022/10/12	NC		%	20
			Hydroxide (OH)	2022/10/12	NC		%	20
A752949	JLD	Spiked Blank	pH	2022/10/12		99	%	97 - 103
A752949	JLD	RPD	pH	2022/10/12	0.90		%	N/A
A752950	JLD	Spiked Blank	Conductivity	2022/10/12		101	%	90 - 110
A752950	JLD	Method Blank	Conductivity	2022/10/12	<1.0		uS/cm	
A752950	JLD	RPD	Conductivity	2022/10/12	0.38		%	20
A753141	AA1	Matrix Spike	Total Aluminum (Al)	2022/10/13		99	%	80 - 120
			Total Antimony (Sb)	2022/10/13		100	%	80 - 120
			Total Arsenic (As)	2022/10/13		101	%	80 - 120
			Total Barium (Ba)	2022/10/13		98	%	80 - 120
			Total Beryllium (Be)	2022/10/13		98	%	80 - 120
			Total Bismuth (Bi)	2022/10/13		102	%	80 - 120
			Total Boron (B)	2022/10/13		110	%	80 - 120
			Total Cadmium (Cd)	2022/10/13		99	%	80 - 120
			Total Chromium (Cr)	2022/10/13		92	%	80 - 120
			Total Cobalt (Co)	2022/10/13		96	%	80 - 120
			Total Copper (Cu)	2022/10/13		92	%	80 - 120
			Total Iron (Fe)	2022/10/13		99	%	80 - 120
			Total Lead (Pb)	2022/10/13		103	%	80 - 120
			Total Lithium (Li)	2022/10/13		101	%	80 - 120
			Total Manganese (Mn)	2022/10/13		94	%	80 - 120
			Total Molybdenum (Mo)	2022/10/13		101	%	80 - 120
			Total Nickel (Ni)	2022/10/13		97	%	80 - 120
			Total Phosphorus (P)	2022/10/13		100	%	80 - 120
			Total Selenium (Se)	2022/10/13		99	%	80 - 120
			Total Silicon (Si)	2022/10/13		104	%	80 - 120
			Total Silver (Ag)	2022/10/13		97	%	80 - 120
			Total Strontium (Sr)	2022/10/13		96	%	80 - 120
			Total Thallium (Tl)	2022/10/13		103	%	80 - 120
			Total Tin (Sn)	2022/10/13		96	%	80 - 120

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Titanium (Ti)	2022/10/13		100	%	80 - 120
			Total Uranium (U)	2022/10/13		103	%	80 - 120
			Total Vanadium (V)	2022/10/13		94	%	80 - 120
			Total Zinc (Zn)	2022/10/13		102	%	80 - 120
			Total Zirconium (Zr)	2022/10/13		100	%	80 - 120
A753141	AA1	Spiked Blank	Total Aluminum (Al)	2022/10/13		100	%	80 - 120
			Total Antimony (Sb)	2022/10/13		98	%	80 - 120
			Total Arsenic (As)	2022/10/13		99	%	80 - 120
			Total Barium (Ba)	2022/10/13		98	%	80 - 120
			Total Beryllium (Be)	2022/10/13		98	%	80 - 120
			Total Bismuth (Bi)	2022/10/13		103	%	80 - 120
			Total Boron (B)	2022/10/13		108	%	80 - 120
			Total Cadmium (Cd)	2022/10/13		96	%	80 - 120
			Total Chromium (Cr)	2022/10/13		93	%	80 - 120
			Total Cobalt (Co)	2022/10/13		94	%	80 - 120
			Total Copper (Cu)	2022/10/13		92	%	80 - 120
			Total Iron (Fe)	2022/10/13		98	%	80 - 120
			Total Lead (Pb)	2022/10/13		102	%	80 - 120
			Total Lithium (Li)	2022/10/13		103	%	80 - 120
			Total Manganese (Mn)	2022/10/13		94	%	80 - 120
			Total Molybdenum (Mo)	2022/10/13		101	%	80 - 120
			Total Nickel (Ni)	2022/10/13		97	%	80 - 120
			Total Phosphorus (P)	2022/10/13		97	%	80 - 120
			Total Selenium (Se)	2022/10/13		96	%	80 - 120
			Total Silicon (Si)	2022/10/13		103	%	80 - 120
			Total Silver (Ag)	2022/10/13		97	%	80 - 120
			Total Strontium (Sr)	2022/10/13		96	%	80 - 120
			Total Thallium (Tl)	2022/10/13		103	%	80 - 120
			Total Tin (Sn)	2022/10/13		96	%	80 - 120
			Total Titanium (Ti)	2022/10/13		101	%	80 - 120
			Total Uranium (U)	2022/10/13		105	%	80 - 120
			Total Vanadium (V)	2022/10/13		95	%	80 - 120
			Total Zinc (Zn)	2022/10/13		99	%	80 - 120
			Total Zirconium (Zr)	2022/10/13		100	%	80 - 120
A753141	AA1	Method Blank	Total Aluminum (Al)	2022/10/13	<0.50		ug/L	
			Total Antimony (Sb)	2022/10/13	<0.020		ug/L	
			Total Arsenic (As)	2022/10/13	<0.020		ug/L	
			Total Barium (Ba)	2022/10/13	<0.020		ug/L	
			Total Beryllium (Be)	2022/10/13	<0.010		ug/L	
			Total Bismuth (Bi)	2022/10/13	<0.0050		ug/L	
			Total Boron (B)	2022/10/13	<10		ug/L	
			Total Cadmium (Cd)	2022/10/13	<0.0050		ug/L	
			Total Chromium (Cr)	2022/10/13	<0.10		ug/L	
			Total Cobalt (Co)	2022/10/13	<0.0050		ug/L	
			Total Copper (Cu)	2022/10/13	<0.050		ug/L	
			Total Iron (Fe)	2022/10/13	<1.0		ug/L	
			Total Lead (Pb)	2022/10/13	<0.0050		ug/L	
			Total Lithium (Li)	2022/10/13	<0.50		ug/L	
			Total Manganese (Mn)	2022/10/13	<0.050		ug/L	
			Total Molybdenum (Mo)	2022/10/13	<0.050		ug/L	
			Total Nickel (Ni)	2022/10/13	<0.020		ug/L	
			Total Phosphorus (P)	2022/10/13	<2.0		ug/L	
			Total Selenium (Se)	2022/10/13	<0.040		ug/L	
			Total Silicon (Si)	2022/10/13	<50		ug/L	
			Total Silver (Ag)	2022/10/13	<0.0050		ug/L	

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Strontium (Sr)	2022/10/13	<0.050		ug/L	
			Total Thallium (Tl)	2022/10/13	<0.0020		ug/L	
			Total Tin (Sn)	2022/10/13	<0.20		ug/L	
			Total Titanium (Ti)	2022/10/13	<0.50		ug/L	
			Total Uranium (U)	2022/10/13	<0.0020		ug/L	
			Total Vanadium (V)	2022/10/13	<0.20		ug/L	
			Total Zinc (Zn)	2022/10/13	<0.10		ug/L	
			Total Zirconium (Zr)	2022/10/13	<0.10		ug/L	
A753141	AA1	RPD	Total Aluminum (Al)	2022/10/13	NC		%	20
			Total Antimony (Sb)	2022/10/13	NC		%	20
			Total Arsenic (As)	2022/10/13	NC		%	20
			Total Barium (Ba)	2022/10/13	NC		%	20
			Total Beryllium (Be)	2022/10/13	NC		%	20
			Total Bismuth (Bi)	2022/10/13	NC		%	20
			Total Boron (B)	2022/10/13	NC		%	20
			Total Cadmium (Cd)	2022/10/13	NC		%	20
			Total Chromium (Cr)	2022/10/13	NC		%	20
			Total Cobalt (Co)	2022/10/13	NC		%	20
			Total Copper (Cu)	2022/10/13	NC		%	20
			Total Iron (Fe)	2022/10/13	NC		%	20
			Total Lead (Pb)	2022/10/13	NC		%	20
			Total Lithium (Li)	2022/10/13	NC		%	20
			Total Manganese (Mn)	2022/10/13	NC		%	20
			Total Molybdenum (Mo)	2022/10/13	NC		%	20
			Total Nickel (Ni)	2022/10/13	NC		%	20
			Total Phosphorus (P)	2022/10/13	NC		%	20
			Total Selenium (Se)	2022/10/13	NC		%	20
			Total Silicon (Si)	2022/10/13	NC		%	20
			Total Silver (Ag)	2022/10/13	NC		%	20
			Total Strontium (Sr)	2022/10/13	NC		%	20
			Total Thallium (Tl)	2022/10/13	NC		%	20
			Total Tin (Sn)	2022/10/13	NC		%	20
			Total Titanium (Ti)	2022/10/13	NC		%	20
			Total Uranium (U)	2022/10/13	NC		%	20
			Total Vanadium (V)	2022/10/13	NC		%	20
			Total Zinc (Zn)	2022/10/13	NC		%	20
			Total Zirconium (Zr)	2022/10/13	NC		%	20
A754265	MDO	Matrix Spike [BDA023-09]	Total Organic Carbon (C)	2022/10/13		NC	%	80 - 120
A754265	MDO	Spiked Blank	Total Organic Carbon (C)	2022/10/13		110	%	80 - 120
A754265	MDO	Method Blank	Total Organic Carbon (C)	2022/10/13	<0.20		mg/L	
A754265	MDO	RPD [BDA023-09]	Total Organic Carbon (C)	2022/10/13	4.0		%	20
A754460	JAB	Matrix Spike	Total Mercury (Hg)	2022/10/13		110	%	80 - 120
A754460	JAB	Spiked Blank	Total Mercury (Hg)	2022/10/13		104	%	80 - 120
A754460	JAB	Method Blank	Total Mercury (Hg)	2022/10/13	<0.0019		ug/L	
A754460	JAB	RPD	Total Mercury (Hg)	2022/10/13	6.3		%	20
A754951	AA1	Matrix Spike	Total Aluminum (Al)	2022/10/14		100	%	80 - 120
			Total Antimony (Sb)	2022/10/14		97	%	80 - 120
			Total Arsenic (As)	2022/10/14		102	%	80 - 120
			Total Barium (Ba)	2022/10/14		NC	%	80 - 120
			Total Beryllium (Be)	2022/10/14		99	%	80 - 120
			Total Bismuth (Bi)	2022/10/14		96	%	80 - 120
			Total Boron (B)	2022/10/14		97	%	80 - 120
			Total Cadmium (Cd)	2022/10/14		97	%	80 - 120
			Total Chromium (Cr)	2022/10/14		92	%	80 - 120
			Total Cobalt (Co)	2022/10/14		92	%	80 - 120

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Copper (Cu)	2022/10/14		91	%	80 - 120
			Total Iron (Fe)	2022/10/14		104	%	80 - 120
			Total Lead (Pb)	2022/10/14		98	%	80 - 120
			Total Lithium (Li)	2022/10/14		94	%	80 - 120
			Total Manganese (Mn)	2022/10/14		106	%	80 - 120
			Total Molybdenum (Mo)	2022/10/14		101	%	80 - 120
			Total Nickel (Ni)	2022/10/14		93	%	80 - 120
			Total Phosphorus (P)	2022/10/14		101	%	80 - 120
			Total Selenium (Se)	2022/10/14		100	%	80 - 120
			Total Silicon (Si)	2022/10/14		106	%	80 - 120
			Total Silver (Ag)	2022/10/14		96	%	80 - 120
			Total Strontium (Sr)	2022/10/14		NC	%	80 - 120
			Total Thallium (Tl)	2022/10/14		97	%	80 - 120
			Total Tin (Sn)	2022/10/14		96	%	80 - 120
			Total Titanium (Ti)	2022/10/14		102	%	80 - 120
			Total Uranium (U)	2022/10/14		101	%	80 - 120
			Total Vanadium (V)	2022/10/14		93	%	80 - 120
			Total Zinc (Zn)	2022/10/14		97	%	80 - 120
			Total Zirconium (Zr)	2022/10/14		101	%	80 - 120
A754951	AA1	Spiked Blank	Total Aluminum (Al)	2022/10/14		97	%	80 - 120
			Total Antimony (Sb)	2022/10/14		98	%	80 - 120
			Total Arsenic (As)	2022/10/14		101	%	80 - 120
			Total Barium (Ba)	2022/10/14		96	%	80 - 120
			Total Beryllium (Be)	2022/10/14		101	%	80 - 120
			Total Bismuth (Bi)	2022/10/14		97	%	80 - 120
			Total Boron (B)	2022/10/14		98	%	80 - 120
			Total Cadmium (Cd)	2022/10/14		96	%	80 - 120
			Total Chromium (Cr)	2022/10/14		94	%	80 - 120
			Total Cobalt (Co)	2022/10/14		95	%	80 - 120
			Total Copper (Cu)	2022/10/14		94	%	80 - 120
			Total Iron (Fe)	2022/10/14		98	%	80 - 120
			Total Lead (Pb)	2022/10/14		98	%	80 - 120
			Total Lithium (Li)	2022/10/14		94	%	80 - 120
			Total Manganese (Mn)	2022/10/14		98	%	80 - 120
			Total Molybdenum (Mo)	2022/10/14		98	%	80 - 120
			Total Nickel (Ni)	2022/10/14		97	%	80 - 120
			Total Phosphorus (P)	2022/10/14		98	%	80 - 120
			Total Selenium (Se)	2022/10/14		100	%	80 - 120
			Total Silicon (Si)	2022/10/14		103	%	80 - 120
			Total Silver (Ag)	2022/10/14		95	%	80 - 120
			Total Strontium (Sr)	2022/10/14		93	%	80 - 120
			Total Thallium (Tl)	2022/10/14		96	%	80 - 120
			Total Tin (Sn)	2022/10/14		96	%	80 - 120
			Total Titanium (Ti)	2022/10/14		100	%	80 - 120
			Total Uranium (U)	2022/10/14		101	%	80 - 120
			Total Vanadium (V)	2022/10/14		93	%	80 - 120
			Total Zinc (Zn)	2022/10/14		98	%	80 - 120
			Total Zirconium (Zr)	2022/10/14		97	%	80 - 120
A754951	AA1	Method Blank	Total Aluminum (Al)	2022/10/14	<3.0		ug/L	
			Total Antimony (Sb)	2022/10/14	<0.020		ug/L	
			Total Arsenic (As)	2022/10/14	<0.020		ug/L	
			Total Barium (Ba)	2022/10/14	<0.050		ug/L	
			Total Beryllium (Be)	2022/10/14	<0.010		ug/L	
			Total Bismuth (Bi)	2022/10/14	<0.010		ug/L	
			Total Boron (B)	2022/10/14	<10		ug/L	

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cadmium (Cd)	2022/10/14	<0.0050		ug/L	
			Total Chromium (Cr)	2022/10/14	<0.10		ug/L	
			Total Cobalt (Co)	2022/10/14	<0.010		ug/L	
			Total Copper (Cu)	2022/10/14	<0.10		ug/L	
			Total Iron (Fe)	2022/10/14	<5.0		ug/L	
			Total Lead (Pb)	2022/10/14	<0.020		ug/L	
			Total Lithium (Li)	2022/10/14	<0.50		ug/L	
			Total Manganese (Mn)	2022/10/14	<0.10		ug/L	
			Total Molybdenum (Mo)	2022/10/14	<0.050		ug/L	
			Total Nickel (Ni)	2022/10/14	<0.10		ug/L	
			Total Phosphorus (P)	2022/10/14	6.8, RDL=5.0 (2)		ug/L	
			Total Selenium (Se)	2022/10/14	<0.040		ug/L	
			Total Silicon (Si)	2022/10/14	<50		ug/L	
			Total Silver (Ag)	2022/10/14	<0.010		ug/L	
			Total Strontium (Sr)	2022/10/14	<0.050		ug/L	
			Total Thallium (Tl)	2022/10/14	<0.0020		ug/L	
			Total Tin (Sn)	2022/10/14	<0.20		ug/L	
			Total Titanium (Ti)	2022/10/14	<2.0		ug/L	
			Total Uranium (U)	2022/10/14	<0.0050		ug/L	
			Total Vanadium (V)	2022/10/14	<0.20		ug/L	
			Total Zinc (Zn)	2022/10/14	<1.0		ug/L	
			Total Zirconium (Zr)	2022/10/14	<0.10		ug/L	
A754951	AA1	RPD	Total Aluminum (Al)	2022/10/14	3.5		%	20
			Total Antimony (Sb)	2022/10/14	2.8		%	20
			Total Arsenic (As)	2022/10/14	2.0		%	20
			Total Barium (Ba)	2022/10/14	1.0		%	20
			Total Beryllium (Be)	2022/10/14	NC		%	20
			Total Bismuth (Bi)	2022/10/14	NC		%	20
			Total Boron (B)	2022/10/14	NC		%	20
			Total Cadmium (Cd)	2022/10/14	9.6		%	20
			Total Chromium (Cr)	2022/10/14	6.8		%	20
			Total Cobalt (Co)	2022/10/14	0.86		%	20
			Total Copper (Cu)	2022/10/14	0.78		%	20
			Total Iron (Fe)	2022/10/14	1.5		%	20
			Total Lead (Pb)	2022/10/14	2.2		%	20
			Total Lithium (Li)	2022/10/14	NC		%	20
			Total Manganese (Mn)	2022/10/14	1.3		%	20
			Total Molybdenum (Mo)	2022/10/14	0.084		%	20
			Total Nickel (Ni)	2022/10/14	7.4		%	20
			Total Phosphorus (P)	2022/10/14	3.5		%	20
			Total Selenium (Se)	2022/10/14	2.2		%	20
			Total Silicon (Si)	2022/10/14	0.18		%	20
			Total Silver (Ag)	2022/10/14	NC		%	20
			Total Strontium (Sr)	2022/10/14	0.52		%	20
			Total Thallium (Tl)	2022/10/14	NC		%	20
			Total Tin (Sn)	2022/10/14	NC		%	20
			Total Titanium (Ti)	2022/10/14	1.4		%	20
			Total Uranium (U)	2022/10/14	2.1		%	20
			Total Vanadium (V)	2022/10/14	0.18		%	20
			Total Zinc (Zn)	2022/10/14	1.4		%	20
			Total Zirconium (Zr)	2022/10/14	NC		%	20
A755221	MAP	Matrix Spike	Total Inorganic Phosphorus (P)	2022/10/16		115	%	80 - 120
A755221	MAP	QC Standard	Total Inorganic Phosphorus (P)	2022/10/16		96	%	80 - 120
A755221	MAP	Spiked Blank	Total Inorganic Phosphorus (P)	2022/10/16		97	%	80 - 120

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A755221	MAP	Method Blank	Total Inorganic Phosphorus (P)	2022/10/16	<0.0020		mg/L	
A755221	MAP	RPD	Total Inorganic Phosphorus (P)	2022/10/16	1.2		%	20
A755563	ACR	Matrix Spike	Total Ammonia (N)	2022/10/13		110	%	80 - 120
A755563	ACR	Spiked Blank	Total Ammonia (N)	2022/10/13		107	%	80 - 120
A755563	ACR	Method Blank	Total Ammonia (N)	2022/10/13	<0.015		mg/L	
A755563	ACR	RPD	Total Ammonia (N)	2022/10/13	NC		%	20
A755564	ACR	Matrix Spike	Total Ammonia (N)	2022/10/13		103	%	80 - 120
A755564	ACR	Spiked Blank	Total Ammonia (N)	2022/10/13		107	%	80 - 120
A755564	ACR	Method Blank	Total Ammonia (N)	2022/10/13	<0.015		mg/L	
A755564	ACR	RPD	Total Ammonia (N)	2022/10/13	NC		%	20
A755566	ACR	Matrix Spike	Total Ammonia (N)	2022/10/14		97	%	80 - 120
A755566	ACR	Spiked Blank	Total Ammonia (N)	2022/10/14		102	%	80 - 120
A755566	ACR	Method Blank	Total Ammonia (N)	2022/10/14	<0.015		mg/L	
A755566	ACR	RPD	Total Ammonia (N)	2022/10/14	4.7		%	20
A755749	GOC	Matrix Spike [BDA024-09]	Total Dissolved Solids	2022/10/14		NC	%	80 - 120
A755749	GOC	Spiked Blank	Total Dissolved Solids	2022/10/14		92	%	80 - 120
A755749	GOC	Method Blank	Total Dissolved Solids	2022/10/14	<1.0		mg/L	
A755749	GOC	RPD [BDA024-09]	Total Dissolved Solids	2022/10/14	0.58		%	20
A755768	MAP	Matrix Spike	Total Nitrogen (N)	2022/10/14		NC	%	80 - 120
A755768	MAP	QC Standard	Total Nitrogen (N)	2022/10/14		107	%	80 - 120
A755768	MAP	Spiked Blank	Total Nitrogen (N)	2022/10/14		110	%	80 - 120
A755768	MAP	Method Blank	Total Nitrogen (N)	2022/10/14	<0.020		mg/L	
A760964	MAP	Matrix Spike [BDA023-09]	Total Inorganic Phosphorus (P)	2022/10/20		107	%	80 - 120
A760964	MAP	QC Standard	Total Inorganic Phosphorus (P)	2022/10/20		89	%	80 - 120
A760964	MAP	Spiked Blank	Total Inorganic Phosphorus (P)	2022/10/20		104	%	80 - 120
A760964	MAP	Method Blank	Total Inorganic Phosphorus (P)	2022/10/20	<0.0020		mg/L	
A760964	MAP	RPD [BDA023-09]	Total Inorganic Phosphorus (P)	2022/10/20	5.9		%	20
A804427	éMO	Spiked Blank	Radium 226	2022/11/18		95	%	85 - 115
			Radium 226	2022/11/18		95	%	85 - 115
A804427	éMO	Method Blank	Radium 226	2022/11/18	<0.010		Bq/l	
			Radium 226	2022/11/18	<0.010		Bq/l	

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

QC Standard: A sample of known concentration prepared by an external agency under stringent conditions. Used as an independent check of method accuracy.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spike amount was too small to permit a reliable recovery calculation (matrix spike concentration was less than the native sample concentration)

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Method blank exceeds acceptance limits- 2X RDL acceptable for low level metals determination.

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

David Huang, M.Sc., P.Chem., QP, Scientific Services Manager

Steven Simpson, Lab Director

Maria Magdalena Florescu, Ph.D., P.Chem., QP, Inorganics Manager

Sandy Yuan, M.Sc., QP, Scientific Specialist

Bureau Veritas Proprietary Software
Logiciel Propriétaire de Bureau Veritas

Automated Statchk

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas Edmonton: 9331 - 48th Street T6B 2R4 Telephone (780)577-7100 Fax (780)450-4187

Bureau Veritas
4000 19st N.E, Calgary, Alberta Canada T2E 6P8 Tel:(403) 291-3077 Toll-free:800-563-6266 Fax:(403) 291-9468 www.bvna.com

Page of

Chain Of Custody Record

INVOICE TO:		Report Information		Project Information		Laboratory Use Only	
Company Name	#12976 New Discovery Mines Ltd.	Company Name	#44691 New Discovery Mines Ltd.	Quotation #	C10657	Bureau Veritas Job #	Bottle Order #:
Contact Name	Accounts Payable	Contact Name	Dave Webb	P.O. #		C275293	667899
Address	1909 108W. Cordova St. Vancouver BC V6B 0G5	Address	1901 108W. Cordova St. Vancouver BC V6B 0G5	Project #	Mon Gold Project	Chain Of Custody Record	Project Manager
Phone	(604) 818-1400 Fax:	Phone	(604) 818-1400 Fax:	Project Name		C#667899-02-01	Customer Solutions
Email	rozemary@drwgcl.com, dave@frwgcl.com	Email	dave@drwgcl.com	Site #			
				Sampled By			

Regulatory Criteria

Special Instructions

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

Samples must be kept cool (< 10°C) from time of sampling until delivery to Bureau Veritas

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	SNP-03a & 03b First Narrows and Culvert	SNP-09 Seepage from Waste rock pile(s)	SNP-10 Seepage from ore stockpile(s)	SNP-12 Discovery Lake	# of Bottles	Comments
1		SNP 09	26 SEPT 22	6:15	WATER				✓				pH ~~7.85~~ 7.95 T= ~~51°F~~ 11°C
2		SNP 10	26 SEPT 22	6:30	"					✓			pH ~~7.71~~ 7.00 T= 11°C
3		SNP 12	26 SEPT	6:45	"						✓		pH ~~6.95~~ 7.15 T= 13.6°C
4													
5													
6													
7													
8													
9													
10													

Analysis Requested

Turnaround Time (TAT) Required

Please provide advance notice for rush projects

Regular (Standard) TAT ☐

(will be applied if Rush TAT is not specified)

Standard TAT = 5-7 Working days for most tests.

Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission)

Date Required: _____ Time Required: _____ ☐

Rush Confirmation Number _____ *(call lab for #)*

Received in Yellowknife
By: J. Mercado
@ 15:20
SEP 26 2022
Ice Yes / Cs - No
Temp: 4 / 6 / 4

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted
D. Rivard	22/09/26		BE Sean Enz	2022/09/28	15:00	

Lab Use Only		
Time Sensitive ☐	Temperature (°C) on Receipt: 0 / 0.3 / 1.4	Custody Seal Intact on Cooler? ☑ Yes ☐ No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'S STANDARD TERMS AND CONDITIONS. SIGNING OF THIS CHAIN OF CUSTODY DOCUMENT IS ACKNOWLEDGMENT AND ACCEPTANCE OF OUR TERMS WHICH ARE AVAILABLE FOR VIEWING AT WWW.BVNA.COM/TERMS-AND-CONDITIONS.

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Bureau Veritas Yellow: Client

ICE : YES

Bureau Veritas Canada (2019) Inc.