Appendix 43

Whale Tail 2021 Groundwater Management Monitoring Report

SOLDER

TECHNICAL MEMORANDUM

DATE 28 March 2022

- TO Marie-Pier Marcil Agnico Eagle Mines Limited
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WHALE TAIL PIT PROJECT - 2021 GROUNDWATER MANAGEMENT MONITORING REPORT

Agnico Eagle Mines Limited – Meadowbank Complex (Agnico Eagle) received a Project Certificate No.008 from the Nunavut Impact Review Board for the development of the Whale Tail Pit Project, a satellite deposit located on the Amaruq Exploration Property. To comply with the Terms and Conditions No.15 and 16 included in the Project Certificate a Groundwater Monitoring Plan (GWMP) was developed that included commitments made with respect to submissions provided during the technical review of the FEIS (Agnico Eagle 2019). The 2021 groundwater monitoring program was also completed as a requirement of the Water License no. 2AM--WTP1830 issued by the Nunavut Water Board (NWB).

This memorandum provides a compilation and review of the site-specific data collection in 2021 and the review of 2021 groundwater monitoring data. The data collected and the relevant sections of the GWMP that are addressed by the data collection are as follows:

- Section 1 of the report summarizes the open pit and underground mine operations interacting with groundwater.
- Section 2 of this report provides site-specific data collected in 2021 including thermistor data (Section 3.1 of the GWMP), groundwater quantity data (Section 4.1 of the GWMP), groundwater quality data (Section 4.2 of the GWMP) and hydraulic head monitoring (Section 3.1 of the GWMP).
- Section 3 discusses the mine inflow monitoring data and presents a comparison of these data to model predictions (Section 5 of the GWMP).

1.0 WHALE TAIL PROJECT

The project consists of mining from the Whale Tail and IVR Pits and underground operations. Of these developments only Whale Tail Pit and the underground operations are expected to intercept saline groundwater over the permitted life of mine. The IVR pit is in permafrost and is not expected to interact with the deeper groundwater flow system until closure, when the formation of the pit lake will slowly degrade the permafrost underlying the open pit.

The mining of Whale Tail Pit required the dewatering of the North Basin of Whale Tail Lake (North Basin) and the construction of the Whale Tail Dike (WTD), which was completed by 15 May 2020. Prior to dewatering, mining occurred in the portions of the Whale Tail Pit that are above the North Basin. The eastern portion was referred to

as Quarry 1, and the western area as Whale Tail (Starter) Pit. During the dewatering period, Quarry 1, located in permafrost, was the established attenuation pond on site.

Starting in the spring of 2020, Quarry 1 and the Whale Tail (Starter) Pit merged to form the Whale Tail Pit. The Quarry 1 attenuation pond by replaced by the Whale Tail Attenuation Pond in June 2020, which is in the dewatered North Basin of Whale Tail Lake between the Dike and the South Basin of Whale Tail Pit. In May 2021, the IVR Attenuation Pond was also established to manage contact water. The Whale Tail Attenuation Pond continued to receive inflows from the Whale Tail Pit until October 2021, after which Whale Tail Pit inflows were directed to the IVR Attenuation Pond in November and December 2021. Throughout 2021, the Whale Tail Attenuation Pond continued to receive WTD seepage from the WTD seepage interception system, Camp Biodisk flows and surface water runoff. The Whale Tail Attenuation Pond also received water draining north of Whale Tail Pit that is pumped to the depression located upstream of Whale Tail Pit, downstream of Mammoth Dike (i.e., Mammoth Downstream (DS)) in May and June 2021.

In 2021, only Whale Tail Pit intercepted saline groundwater. IVR Pit and Whale Tail Underground are both located in permafrost and no interception of groundwater occurred.

2.0 MONITORING DATA COLLECTION

2.1 Westbay Well Sampling and Assessment of Groundwater Quality

In accordance with Section 3.1 of the GWMP, hydrostatic pressures were measured in November 2021 at Westbay Well AMQ16-626 to monitor hydraulic heads and changes in groundwater flow conditions. Port 1 was planned for sampling however the program was ended prematurely due to a large-scale power outage at Whale Tail camp on 13 November 2021. Following the pressure measurements, groundwater samples were collected to monitor the TDS and groundwater quality. A technical memorandum documenting this work, sampling results and historical monitoring from AMQ16-626 is included in Attachment A (Golder 2022a), and a summary of the results is presented below. The location of AMQ16-626 is illustrated on Figure 1.

Water samples were collected from Ports 2, 3, 4 and 6 of AMQ16-626 in November 2021 to assess groundwater quality. During drilling and installation of the well, the drilling fluid was tagged with fluorescein. During collection of the water samples, the fluorescein concentration was measured to estimate the proportion of the sample attributed to drilling fluid versus formation groundwater. Groundwater quality at each port sampled was estimated using a mass balance calculation on analytical results and initial drilling brine composition to remove the proportion of residual drill fluid from the collected samples.

Given AMQ16-626 had to be installed through permafrost, removal of groundwater for well development, purging and sampling must be carried out using a small volume sampler which substantially lengthens the time requirement for these activities for each port (months). The sampling program prioritizes key ports that optimized groundwater quality data collection, though each port is accessed for hydraulic pressure measurements. The rational for ports selected for sampling is provided below.

Ports 4 and 3 were targeted for sampling based on their port elevation relative to planned underground infrastructure and because these intervals had been previously developed in 2016 (i.e., drill water had been largely removed from the interval). These ports are used to assess groundwater quality for the Whale Tail Pit and underground. Field activities prioritized obtaining representative samples of groundwater quality from Ports 3 and 4.

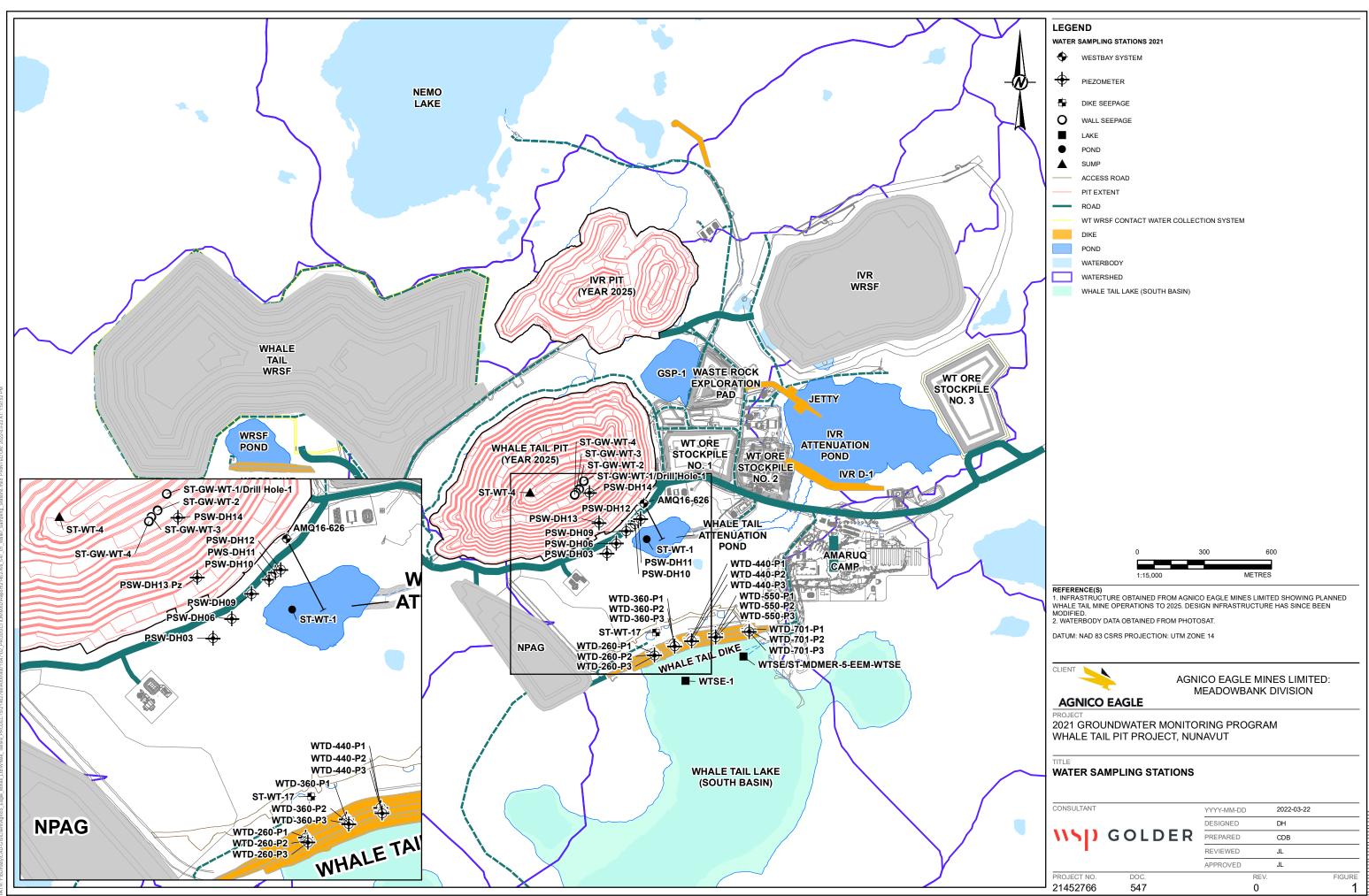
- Port 6 is interpreted to be located within the cryopeg zone (temperature below 0 degrees, but not frozen). In the cryopeg, groundwater has the potential to yield variable water quality even following periods of sufficient development because this zone is partially frozen, and salt concentrates in the liquid phase relative to ice. The liquid phase is likely preferentially conveyed to the sampling device. A groundwater sample was collected from Port 6 to compare against previous sampling results from this port.
- Port 2 was sampled although it is still insufficiently developed, to document if, and the degree to which, the aquifer is being naturally flushed of the drilling water over time.
- Port 5 was never intended for groundwater sampling and was installed for pressure measurements only.

The 2021 program estimated that groundwater quality at Ports 3 and 4 is similar to or slightly lower than the TDS estimated in 2016 (Golder 2016). The slightly lower TDS (within 1,417 to 2,328 mg/L) reported in Ports 3 and 4 in 2021 relative to 2016 (3,483 to 3,966 mg/L) may be related to the evolution of purging and natural flushing, which reduces the amount of residual drill fluid that may be affecting sample analysis (i.e., increases data reliability), and/or it may be related to migration of fresher (lower TDS) water induced by pit dewatering activities.

Port 6 pressure monitoring during purging and/or sampling indicate the formation pressure was reduced excessively because of multiple sampling events. This may have caused a small amount of Westbay casing fluid (dilute propylene glycol mixture) to mix with the Port 6 formation groundwater, resulting in a blend of both fluids being collected. Therefore, there is a degree of uncertainty in the quality of water recovered during the 2021 Port 6 monitoring program. Parameter concentrations in the Port 6 corrected formation groundwater are generally in the same order of magnitude but slightly higher than those concentrations previously reported at the port, with the exception of a few parameters.

At Port 2 continues to have a high proportion of residual drill fluid in the collected water, preventing an accurate estimation of formation groundwater quality. As discussed, the aquifer near this port is being natural flushed of the drilling water.

The assumptions for the conceptual model for the site are considered unchanged by 2021 groundwater quality monitoring at AMQ16-626.



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2.2 Thermal Monitoring Related to Groundwater Flow Interpretation

Thermal monitoring at the Site is documented in the Whale Tail Pit Project Thermal Monitoring Report 2021, dated March 2022 (Agnico Eagle 2022), which is included in Attachment B for reference. Attachment B also includes a subset of data from thermistor (TH) IVR long V651A TH, that was not included in the 2021 Thermal Report. The approximate locations of the thermistors are presented in Appendix A of Attachment B.

Historical thermistors AMQ17-1233 and AMQ17-1337 were located outside of the pit footprint and were intended to monitor permafrost conditions between Nemo Lake and Whale Tail Pit (verify the presence of permafrost and the restricted horizontal movement of groundwater below the active layer due to permafrost in the upper 450 to 520 m of bedrock). These thermistors are no longer functioning due to mining activity but were showing permafrost conditions until they stopped functioning in 2019. A new thermistor, IVR long V651A TH, was installed to the southeast of IVR Pit in 2019. While available data from this thermistor indicates the presence of permafrost (sub zero temperatures), the degree of oscillation in recorded temperatures at depth suggests the data is not fully reliable (significant oscillation in temperature is typically only observed near surface and in active layer). The thermistor and measurement methods should be reviewed in 2022 to determine if the data quality can be resolved.

Nine thermistors (PSW-DH2 TH, PSW-DH3 TH, PSW-DH6 TH, PSW-DH7 and PSW-DH-10 through PSW-DH14 TH) were installed in 2020 to monitor the talik zone near the south wall of the Whale Tail Pit. In August 2021 these thermistors were dismantled due to mining activity in the sector. While active, these thermistors were used to evaluate if during open pit mining and with the dewatering of the North Basin, the closed talik zone progressively freezes back. Through the year 2021 until their dismantling in August, it was possible to observe some freeze-back of the upper bedrock in thermistors PSW-DH2 TH, PSW-DH3 TH, PSW-DH7 TH and PSW-DH10 TH (refer to Appendix A of Attachment B), resulting in minor changes to the talik zone.

As part of the Whale Tail Dike Operation Maintenance and Surveillance manual, performance of the Whale Tail Dike (WTD) was monitored with thermistors located downstream and/or upstream (U/S) of the WTD (0+142, 0+190 U/S, 0+210, 0+260, 0+276 U/S, 0+310, 0+336 U/S, 0+360, 0+407, 0+520, 0+543, 0+550, 0+607, 0+675, 0+701, 0+710 U/S, 0+750, 0+772 U/S). Collected data indicate that limited freeze back is happening in deep bedrock. Continued permafrost degradation was noted at in the western and eastern abutments of the WTD in 2021 but Agnico Eagle reports this has not resulted in a seepage increase to date (Attachment B).

2.3 Hydraulic Head Monitoring and Definition of Horizontal and Vertical Groundwater Flow

Hydraulic head was estimated from pressure data recorded in 2021 from the Westbay Well AMQ16-626 (Attachment A) and from piezometers (refer to Figure 1) installed to monitor the south wall of the Whale Tail Pit and the performance of the WTD (Attachment C). The Whale Tail pit is located below the dewatered North Basin. The talik in the pit area is closed at depth but transitions to open talik towards the South Basin due to the increased width and depth of Whale Tail Lake towards the south. Due to the dewatering activities, some freeze back of the talik in the North Basin is possible as mining progresses, and some alteration in vertical hydraulic gradients will have occurred.

As documented by thermal monitoring (Section 2.2), permafrost underlies the land surrounding the lake, which restricts the lateral flow of groundwater to the talik and restricts the recharge of the sub-permafrost groundwater flow system by precipitation. Groundwater flow is controlled by surface water elevations in lakes with open talik;

water moves vertically through the open talik to the underlying sub-permafrost groundwater flow system. Local influences are observed due to dewatering of the North Basin and the Whale Tail Pit development.

For the Westbay Well AMQ16-626, freshwater hydraulic heads were derived from the formation pressures measured at each monitoring port installed along the well prior to development or sampling. The 2021 calculated freshwater hydraulic heads are lower than previous years, which reflects the dewatering of the North Basin and the mining of Whale Tail Pit. In the pre-development years (2018 and 2019), there was a downward hydraulic gradient observed between Ports 4 and 1 (0.008 m/m in 2018 and 0.006 m/m in 2019). The hydraulic gradients are calculated using the freshwater hydraulic heads and the distance between the sampling interval midpoints. The gradients have not been corrected for buoyancy effects, which will be low for the observed TDS concentrations. Buoyancy effects would act to increase the vertical downward gradient, and if included by alter calculated gradients by approximately 0.001 to 0.002.

After dewatering of the North Basin and with ongoing excavation of the Whale Tail Pit, there has been an overall lowering of freshwater heads by several metres, which has resulted in an upward hydraulic gradient between Ports 4 and 5 (i.e., towards the pit) and a slight downward to near neutral gradient between Ports 4 and 1 since 2020. The downward hydraulic gradient observed between Ports 4 and 1 measured 0.001 m/m in 2020 and 2021 and is lower than what was previously measured during the pre-development phase. The reduction in downward hydraulic gradient change is expected to result from pit dewatering activities and dewatering of the north basin.

As part of pit and WTD surveillance monitoring, hydraulic data is collected from a series of vibrating wire piezometers installed near the south wall of the Whale Tail Pit and upstream and downstream of the WTD. Water levels are also monitored in the Whale Tail Lake South Basin, Whale Tail Lake Attenuation Pond, located between the WTD and the Whale Tail Pit. The approximate locations of the piezometers are illustrated in Figure 1 and the collected data is presented in Attachment C. This data will support future model recalibration efforts if required for the Project and support the understanding of changes in groundwater flow conditions between the South Basin of Whale Tail Lake and Whale Tail Pit as mining progresses.

Hydraulic heads measured in piezometers near the south wall of Whale Tail Pit decreased in response to mining of the Whale Tail Pit. Temporal variations are observed in the data in response to multiple influences, including precipitation, blasting and variations in surface water levels in the Whale Tail Attenuation Pond (identified as WTN on plots in Attachment C). The correlation of hydraulic heads measurements to surface water levels in the pond is strongest near the pond and diminish closer to the pit as expected.

Near the Whale Tail Attenuation Pond, and between the pit and the pond, downward vertical hydraulic gradients were observed at DH11, DH12 and DH13. Close to the pit, DH14 reverts to an upward hydraulic gradient, which reflects the influence of pit depressurization on the groundwater flow system.

2.4 Whale Tail Pit Inflow Quantity and Quality

2.4.1 Whale Tail Pit Sump

In accordance with Section 4.1 of the GWMP, pit inflow quantity during the 2021 Whale Tail Pit operations was monitored by Agnico Eagle. Water that accumulates in the pit sump consists of groundwater inflow, surface water runoff and direct precipitation. Total monthly volumes of water pumped from the sump during the winter months (i.e., October to April) is assumed to predominantly represent groundwater inflow as freezing temperatures restricts surface water runoff and the influence of direct precipitation.

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The total and average daily volume of water pumped per month from the Whale Tail Pit sump in 2021 is presented in Table 1. Inflow to Whale Tail Pit is a mixture of surface water inputs (runoff and direct precipitation) and groundwater inflow. The groundwater inflow is a mixture of saline groundwater and subsurface seepage from the Whale Tail Attenuation Pond and South Basin of Whale Tail Lake. For 2021, flow measurements recorded in the winter months are considered the best estimate of groundwater inflows to the pit as surface water inflows should be minimal. The flow observed in the months of January, February, March, April, October, November and December ranged between 1,434 m³/day to 2,528 m³/day, with an average flow rate of 1,997 m³/day.

Operations	Month	Total Volume Pumped (m³)	Average Daily Volume (m³/day)		
	January	62,721	2,023		
	February	43,703	1,561		
	March	71,320	2,301		
	April	48,680	1,623		
	Мау	49,484	1,596		
Mining	June	126,825	4,228		
Mining	July	121,399	3,916		
	August	135,056	4,357		
	September	124,540	4,151		
	October	74,035	2,388		
	November	75,828	2,528		
	December	48,161	1,554		

Table 1: 2021 Monthl	/ Total Volumes of Water Pumped from Whale Tail Pit Sump

Note: m³ = cubic metres

2.4.2 Seepage Surveys

As part of the GWMP, pit seepage assessments are to be completed twice a year for the first two years and once a year starting in the third year and continuing until the end of operations. In the first two years of pit development, one of the seepage surveys is to be conducted in early summer, following snow melt and any thawing of ice in the pit walls, and then again in late August. In the following years of mining, one survey will be conducted in August of each year. The objective of the seepage surveys is to identify preferential groundwater flow pathways in the walls of the open pit, if present, and to determine their relative contribution to the groundwater inflow to the pit with respect to water quantity and quality.

Agnico Eagle notes that seepage has consistently been observed in the southeast wall in 2021 (herein referred to as south wall), and the seepage forms ice in the pit walls during the winter. The seepage is attributed to a highly weathered zone near surface as opposed to faults, which is consistent with the original conceptual model for the Whale Tail Project and the prediction of a seepage face in the south wall.

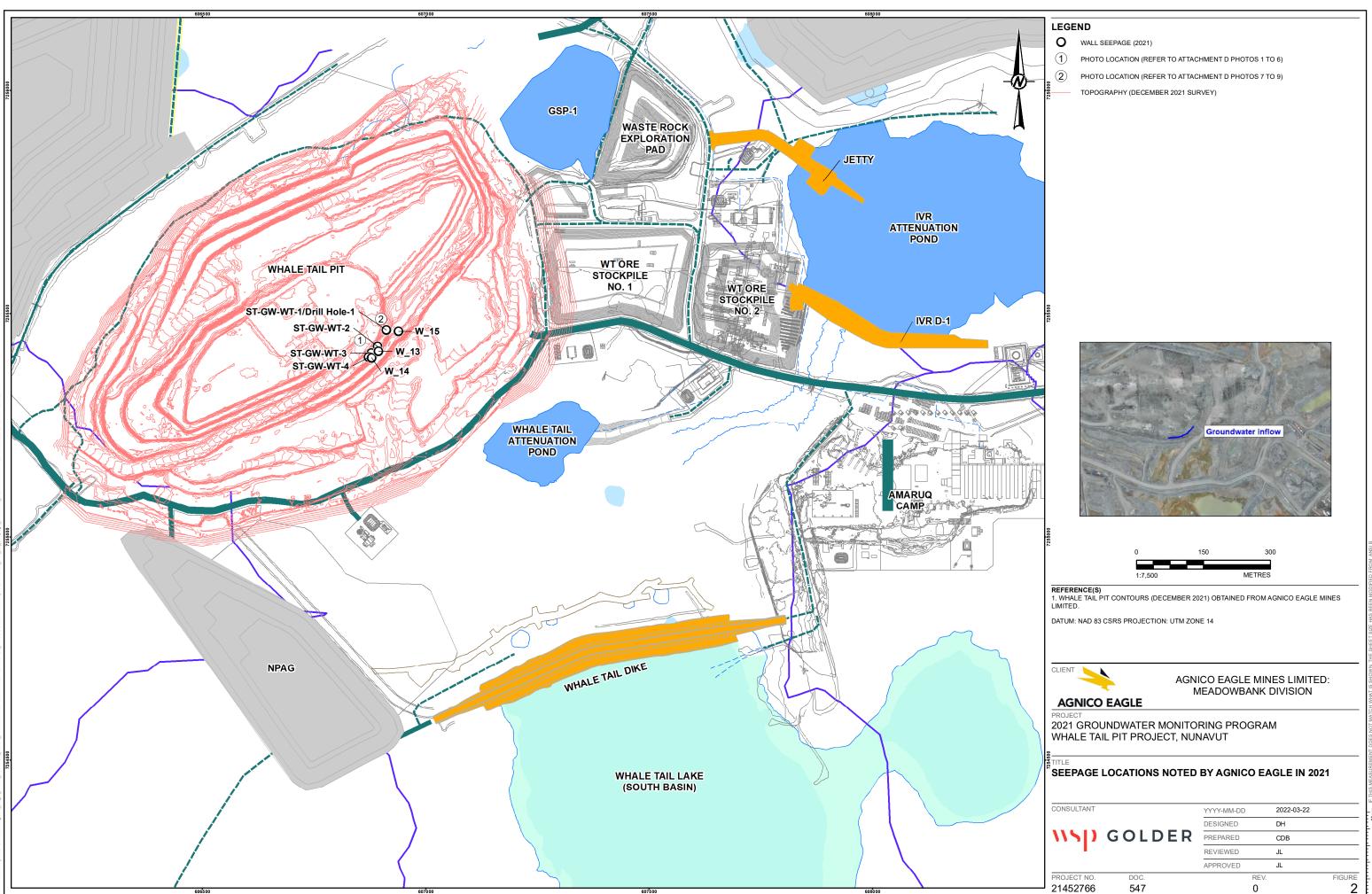
Attachment D presents photographs taken by Agnico Eagle of seepage locations in early 2021 (January to April) and in late 2021 (October and November) and Figure 2 shows the location of specific seeps noted by Agnico Eagle in the south wall. Seepage monitoring in 2021 was limited by mining operations (drill and blasting, mucking and/or scaling) or accessibility due to safety concerns (loose material requiring safety offset, indication of potential rockfall, etc.). To concentrate the seepage, a borehole was advanced near ST-GW-WT-1 on 21 October 2021 (referred to as Drill Hole-1) at an approximate inclination of 70 degrees and azimuth 180 degrees to length of about 53.6 metres. Following installation, seepage flow rates were recorded by Agnico Eagle for Drill Hole-1/ST-GW-WT-1 and were 39 cubic metres per hour (m³/hr) (936 m³/day) on 2 November 2021 and 45 m³/hr (1,080 m³/day) on 8 November 2021. This seepage is approximately half of the total average groundwater inflow to the pit, as estimated from the sump flow measurements recorded in the winter months (Section 2.4.1).

Seepage water quality analysis is discussed in Section 2.4.3.

2.4.3 Whale Tail Pit Inflow Quality

In accordance with Section 4.2 of the GWMP, Agnico Eagle collected water samples from the following locations in 2021.

- Whale Tail Pit sump station ST-WT-4. Water from the pit sump (ST-WT-4) reflects the combined influences of groundwater inflow, surface water runoff and precipitation, and pit construction (blasting). Of the sump samples, water quality measurements in the winter months (October to April) will be the most representative of groundwater as surface water inflows will be near their minimum. Some influences of blasting and mine excavation will be present.
- Whale Tail Pit seepage stations ST-GW-WT-1/Drill Hole-1, ST-GW-WT-2, ST-GW-WT-3 and ST-GW-WT-4. Water from pit wall seeps (ST-GW-WT-1 through ST-GW-WT-4) is a reflection of the groundwater inflow to the pit, which is a mixture of groundwater inflow from saline groundwater and subsurface seepage from the Whale Tail Attenuation Pond and South Basin of Whale Tail Lake. In comparison to the pit sump, the seeps are a better estimate of groundwater inflow quality as the direct surface water inputs to the pit do not influence the seep water quality.



Although not required under the GWMP, water quality samples are also collected from the Whale Tail Attenuation Pond (ST-WT-1), Whale Tail Dike Seepage (ST-WT-17) and from the South Basin of Whale Tail Lake (WTSE-1 and ST-MDMER-EEM-5-WTSE) and are discussed in this section for comparison to pit inflow data.

Water quality from the Whale Tail Pit sump (ST-WT-4) and Whale Tail Attenuation Pond (ST-WT-1) was monitored on a weekly to bi-weekly basis for Group 1 chemical parameters listed in Table 1 Schedule I of NWB Water License Number 2AM-WTP1830 and for additional parameters of interest including electrical conductivity, select major ions, select dissolved metals, ortho-phosphate and total phosphorus. ST-WT-4 samples were not analyzed for bicarbonate alkalinity, carbonate alkalinity, dissolved organic carbon, reactive silica, total kjeldahl nitrogen and total organic carbon, but it recommended they be included in 2022. These parameters are useful for assessing water quality and in particular, checking laboratory TDS. Field measured parameters including dissolved oxygen, electrical conductivity, pH, temperature, and turbidity were recorded during sampling. A summary of the TDS and chloride measured at the pit sump (ST-WT-4) and Whale Tail Attenuation Pond (ST-WT-1) is presented in Attachment E, along with data from the pit wall seepage samples and WTD seepage (described further below).

Pit wall seepage samples were collected from ST-GW-WT-1 approximately monthly in 2021 (except for January, March and December due to accessibility issues related to operations and/or safety concerns) and from ST-GW-WT-2, ST-GW-WT-3 and ST-GW-WT-4 in February (Table 2). Of note, the November sample for ST-GW-WT-1 is from the drain hole installed in that area in November (Drill Hole-1). Other than the seepage sample collected from Drain Hole-1 in November 2021 at ST-GW-WT-1, the seepage samples were collected from wall runoff directly below the observed discharge. No accessible open fracture could be located that was suitable for the insertion of a piece of low-density polyethylene tubing, which can be used to prevent the sample from contacting the atmosphere or exposed pit wall (which may contain residuals associated with blasting and loading from the exposed rock). The seepage sample collected from ST-GW-WT-1 on 2 November 2021 was collected directly from the discharge of Drill hole-1 (flow rate measured 39 m³/hr at the time of sample collection).

Pit wall seepage samples were submitted to Bureau Veritas Laboratories (BV) for laboratory analysis of parameters including the Group 1 chemical parameters listed in Table 1 Schedule I of the water license, with the exception of fluoride and thallium (May 2021 sample only) and for additional parameters of interest included in the GWMP (bicarbonate alkalinity, carbonate alkalinity, dissolved organic carbon, electrical conductivity, major ions, select total/dissolved metals, ortho-phosphate, reactive silica, total kjeldahl nitrogen, total phosphorus and total organic carbon). Analytical results for the ST-GW-WT-1 through ST-GW-WT-4 are included in Attachment E.

Water quality from the WTD seepage (ST-WT-17) was monitored on a weekly to monthly basis for the same parameter suite as the pit wall seepage samples. Station ST-WT-17 consists of water that accumulates in the collector ditch located at the toe of the WTD structure and the water can be partly diluted with surface runoff. The approximate location of ST-WT-17 is shown on Figure 1. A channel located downstream of the toe diverts the WTD seepage to the Whale Tail Attenuation Pond by gravity.

Station ID	UTM Zone	Easting (m)	Northing (m)	Sampling Date(s) ⁽¹⁾	Analytical Parameters ^(2,3)
ST-GW-WT-1	14W	606912	7255464	15-Feb-21 4-Apr-21 9-May-21 13-Jun-21 12-Jul-21 2-Aug-21 27-Sep-21 11-Oct-21 2-Nov-21	Group 1 chemical parameters listed in Table 1 Schedule I of NWB Water License Number 2AM- WTP1830 and additional parameters listed in GWMP (electrical conductivity, select
ST-GW-WT-2	14W	606892	7255427	15-Feb-21	major ions, select
ST-GW-WT-3	14W	606878	7255412	15-Feb-21	dissolved metals, ortho-phosphate
ST-GW-WT-4	14W	606872	7255403	15-Feb-21	and total phosphorus)

Table 2: Summary of 2021 Whale Tail Pit Wall Seepage Samples

Note: m = metres

⁽¹⁾ Pit wall seepage samples could not be collected in January, March and December 2021 due to accessibility issues related to operations and/or safety concerns.

⁽²⁾ Fluoride (Group 1 Water License parameter) was not analyzed in the pit wall seepage samples collected in 2021.

⁽³⁾ Thallium (total/dissolved) (Group 1 Water License parameter) was not analyzed in pit wall seepage sample ST-GW-WT-1 collected on 9 May 2021.

Figure E-1 and E-2 of Appendix E show the variation in TDS and chloride in the above monitoring stations throughout 2021. TDS measured in the pit sump was variable and ranged from approximately 160 mg/L to 640 mg/L. The variability reflects the temporal interactions of surface water runoff, pit wall runoff, blasting and groundwater inflow. The TDS in the pit wall sump is lowest in the winter when surface water runoff will be negligible. Conversely, chloride is lowest in the summer months when surface water runoff lowers the chloride in the collected sump water.

TDS in the Whale Tail Attenuation Pond follows a similar trend to the TDS in the pit sump, although concentrations are slightly lower. Lower still is the seepage water collected from the Whale Tail Dike Seepage and measurements in the South Basin of Whale Tail Lake. The elevated TDS may reflect groundwater inputs to the pit, as well as contributions from mine construction/blasting and pit wall runoff.

TDS measured in the pit wall seepage in 2021 ranged from approximately 135 to 265 mg/L, which is similar to the TDS measured in the pit sump during the winter months, when surface influences are low. TDS measured in the Whale Tail Attenuation Pond during the winter months ranged from approximately 90 to 230 mg/L, with the measured concentrations being slightly lower than the pit wall seepage. Chloride concentrations in the pit wall seepage samples were generally similar to or slightly lower than the pit sump samples. Whale Tail Attenuation Pond chloride concentrations were also lower than the chloride concentrations in the pit wall seepage.

3.0 MEASURED VERSUS PREDICTED GROUNDWATER INFLOW AND TDS QUALITY

3.1 Predicted Groundwater Inflow and TDS Groundwater Concentrations

Table 3 presents a summary of the predicted average annual groundwater inflow to the Whale Tail Pit during operations, as documented in the updated FEIS Environmental Assessment (EA) Scenario (Golder 2019). Water discharging to the pit is a mixture of saline groundwater and subsurface seepage from the Whale Tail Attenuation Pond South Basin of Whale Tail Lake. TDS values presented in Table 2 only account for TDS from saline formation groundwater. Contributions of TDS in the groundwater from Whale Tail Attenuation Pond seepage and seepage from the South Basin are assumed to be zero in the groundwater model and were accounted for in the Site-Wide Surface Water Balance Water Balance and Water Quality Models, along with the direct influences of surface water additions in the pit (runoff and precipitation). This means that predicted TDS values in Table 3 from the groundwater model will be lower than the TDS measured directly in the sumps and seepage wall samples, as these water quality samples include TDS loading from the Whale Tail Attenuation Pond and South Basin of Whale Tail Lake (which are not zero). The Whale Tail Attenuation Pond is somewhat of a feedback loop as flow from the pit is pumped to the pond, where it mixes with other water and a portion reinfiltrates and seeps back to the pit. The Water Balance and Water Quality Models account for this mixing.

		wi	nale Tail Modeled P	redictions – EA Scer	nario
Phase	Simulated Period Time	Groundwater Inflow (m³/day)	Groundwater Inflow TDS Concentration (mg/L) ¹	Portion of Inflow from Attenuation Pond (%)	Portion of Inflow from South Basin of Whale Tail Lake (%)
Lake Dewatering (Q1-Q3)	2019	1,330	80	NA	NA
	August – December 2019²	970	120	1%	<1%
	2020	1,170	50	64%	<1%
	2021	1,320	30	79%	3%
Mining	2022	1,360	20	81%	9%
	2023	1,360	20	82%	12%
	2024	1,350	10	82%	14%
	2025	1,350	10	82%	15%

Table 3: Predicted Groundwater Inflow and Groundwater Qual	ity During	Mining	of Whalo Tail Dit
Table 5: Predicted Groundwater Innow and Groundwater Quar	ity During	j winning o	

Notes:

NA = not applicable; TDS = total dissolved solids; m³/day = cubic metres per day; mg/L = milligrams per litre;% = percent;

¹ TDS concentrations do not account for loading from the South Basin of Whale Tail lake and Whale Tail Attenuation Pond (model assumes a TDS of 0 mg/L for these seepage sources). TDS from these sources to be accounted for in Site Wide Water Quality analysis.

²Mining prior to Q4 2019 was anticipated to be within permafrost and groundwater inflow was predicted to be negligible.

3.2 Comparison of Model Predicted Values to Measured Values

In accordance with the GWMP, measured groundwater inflow rates are to be compared to model predictions on an annual basis. If significant variations from model predictions are observed, the assumptions behind the data will be reviewed and the analysis updated if required. In addition, updates to the groundwater model will be made if operational changes occur as the open pit advances which could significantly alter groundwater inflow or groundwater quality (TDS).

Variations that would be considered significant and that would be trigger a review of the data include:

- Groundwater inflow quantity to the mine, based on rolling monthly average of inflow over six consecutive months, is 20% higher than predicted groundwater inflow. The six-month averaging period of observation is based on observed seasonal variations in inflow quantities in mines situated in continuous permafrost regions, where half the year there is virtually no surface water component of flow to the pit.
- Collected water samples that indicate that the TDS is more than 25% higher than the estimated water quality, based on a 6-month rolling average.
- Temperature profiles observed in the sentinel thermistors (AMQ17-1233 and AMQ17-337) located between Nemo Lake and Whale Tail Lake are showing sign of permafrost degradation below the active layer.
- Observed inflow quantity and quality is lower than expected would not be of concern and/or effect water management plans on-site. Model updates or analysis would therefore not be conducted if predicted inflow quantity and quality is higher than observed conditions.

Flow measurements recorded in the winter months (January, February, March, April, October, November and December) ranged from 1,434 m³/day to 2,528 m³/day, with an average inflow of 1,997 m³/day. As previously discussed, flow measurements during the winter months are the best estimate of groundwater inflow rates to the Whale Tail Pit since surface water inflows should be minimal. The inflow in the winter will reflect saline groundwater inflow and seepage from the Whale Tail Attenuation Pond and South Basin of Whale Tail Lake. Overall, inflow measurements are trending 50% higher than predicted for 2021. In consideration of this observation, the groundwater model should be reviewed and recalibrated to support future assessments of the site wide water balance model. It is suspected that the higher flow is originating from the near surface weathered zone.

The TDS measured in the south wall seepage samples ranged from approximately 135 to 265 mg/L, with an average concentration of 211 mg/L. The TDS measured in the pit sump samples ranged from 160 to 335 mg/L in the winter months, with an average concentration of 248 mg/L. In consideration that the groundwater model needs to be recalibrated, the previously predicted proportions of saline groundwater and seepage from the Whale Tail Attenuation Pond and South Basin are uncertain. This uncertainty makes it difficult to know if the TDS in the saline groundwater component (which is predicted by the groundwater model) is trending higher. Groundwater model recalibration efforts in 2022 should consider the observed TDS in each of these sources as part of the analysis, and this analysis may require integration with the surface water balance model as a feedback loop exists between the Whale Tail Attenuation Pond and the Whale Tail Pit (water is lost from the pond to the pit, which is then pumped back to the Whale Tail Attenuation Pond).

4.0 SUMMARY

The following presents a summary of the data contained in this document and how the data relate to relevant sections of the GWMP.

- Westbay Well AMQ16-626 was sampled in November 2021. Reliable samples were collected from Port 3 and 4 and the TDS estimated from these samples were similar to or slightly lower than historical sampling in 2016. The slightly lower TDS may be related to reduced residual drill fluid in the collected water (i.e., higher sample reliability) and/or migration of fresher (lower TDS water) past the reports as a result of dewatering activities in the Whale Tail Pit and North Basin. The assumptions for the conceptual model for the site are considered unchanged by 2021 groundwater quality monitoring at AMQ16-626.
- Pressure monitoring at AMQ16-626 and other piezometers indicate hydraulic heads have decreased because of dewatering activities. An upward gradient was present between Ports 4 and 5, whereas previously a downward hydraulic gradient was observed prior to development. A downward to near neutral hydraulic gradient is observed between Ports 4 and 1.
- Data from IVR long V651A TH January and December 2021 confirmed permafrost is present outside of the lake footprint in at least the upper 500 metres, which will restrict horizontal groundwater flow. Thermistors near the WTD and south wall of Whale Tail Pit indicate some freeze back has occurred since dewatering of the North Basin and onset of mining operations. Continued monitoring is required to confirm temperature trends and possible freeze back in the future. Some degradation of permafrost has been observed in the eastern and western abutments of the WTD however Agnico Eagle has not noted an increase in seepage in the WTD seepage collection system.
- The average 2021 inflow to the Whale Tail pit is estimated to be 1,997 m³/day, based on the winter sump inflow measurements in January, February, March, April, October, November, and December. These inflow rates are approximately 50% higher than the predicted values and indicate the groundwater model for the Project should be reviewed.
- The TDS measured in the south wall seepage samples ranged from approximately 135 to 265 mg/L, with an average concentration of 211 mg/L. The TDS measured in the pit sump samples ranged from 160 to 335 in the winter months, with an average concentration of 248 mg/L. In consideration that the groundwater model needs to be recalibrated it is uncertain what the relative proportions of attenuation water, lake water and saline groundwater are in this pit inflow and therefore if the TDS in saline groundwater is trending higher. Groundwater model recalibration efforts in 2022 should consider the observed TDS in each of these sources as part of the analysis, and this analysis may require integration with the surface water balance model as a feedback loop exists between the Whale Tail Attenuation Pond and the Whale Tail Pit (water is lost from the pond to the pit, which is then pumped back to the attenuation pond).
- In 2021, parameters requirements of the Water License were met for the pit sump and seepage wall samples, with the exception of fluoride and thallium (May 2021 sample only) in the seepage wall samples. Additional parameters of interest included in the GWMP (bicarbonate alkalinity, carbonate alkalinity, dissolved organic carbon, electrical conductivity, major ions, select total/dissolved metals, ortho-phosphate, reactive silica, total kjeldahl nitrogen, total phosphorus and total organic carbon) were not analyzed for in 2021. To support groundwater quality analysis, the parameter list should include all major ions and the full suite of dissolved metals. This allows TDS values measured by the lab to be checked through analytical calculations.

5.0 CLOSURE

We trust the above meets your needs, please contact the undersigned for any questions or concerns.

Golder Associates Ltd.

Original Stamped by

Original Signed by

Dale Holtze, M.Sc., P.Geo. (NT/NU) *Hydrogeologist* Jennifer Levenick, M.A.Sc., P.Eng. (NT/NU) Senior Principal Hydrogeologist

DH/JL/rd

https://golderassociates.sharepoint.com/sites/140929/project files/6 deliverables/whale tail/21452766-547-tm-wt gw monitoring rpt-rev0/21452766-547-tm-rev0-2021 wt gw monitoring.docx

Attachments:Attachment A – 2021 Westbay Well Sampling Technical Memorandum Attachment B – 2021 Thermal Monitoring Report Attachment C – 2021 Piezometric Monitoring Data Attachment D – 2021 Seepage Survey Photographs Attachment E – Supplemental 2021 Water Quality Data

6.0 **REFERENCES**

- Agnico Eagle (Agnico Eagle Mines Limited). 2019. Whale Tail Pit Project Groundwater Monitoring Plan. Version 3_NWB. May 2019.
- Agnico Eagle. 2020. Whale Tail Pit Thermal Monitoring Plan. Version 3. March 2020.
- Agnico Eagle. 2021. Whale Tail Pit 2020 Thermal Monitoring Report. February 2021.
- Golder (Golder Associates Ltd.). 2016. Westbay System Installation Summary Whale Tail Pit Project, Nunavut. Dated July 7, 2016 (Reference 1649355-003-TM-Rev0-4000).
- Golder. 2019. Updated Hydrogeological Assessment, Whale Tail Pit, Expansion Project. dated 6 May 2019. (Reference 18108905-291-TM-Rev0)
- Golder. 2022a. Whale Tail Project 2021 Groundwater Monitoring of AMQ16-626. Dated 22 March 2022 (Reference 20148777-546-TM-Rev0).

ATTACHMENT A

2021 Westbay Well Sampling Technical Memorandum

SOLDER

TECHNICAL MEMORANDUM

Project No. 21452766-546-TM-Rev0

DATE 22 March 2022

- TO Marie-Pier Marcil Agnico Eagle Mines Limited
- CC Eric Haley
- FROM Dale Holtze; Valérie Bertrand

EMAIL dholtze@golder.com; vbertrand@golder.com

WHALE TAIL PROJECT – 2021 GROUNDWATER MONITORING OF WESTBAY WELL AMQ16-626

1.0 INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Complex (Agnico Eagle) is developing the Whale Tail Project that was approved by the Nunavut Impact Review Board (NIRB). The property is a 408 square kilometre (km²) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of the Meadowbank Mine in the Kivalliq Region of Nunavut.

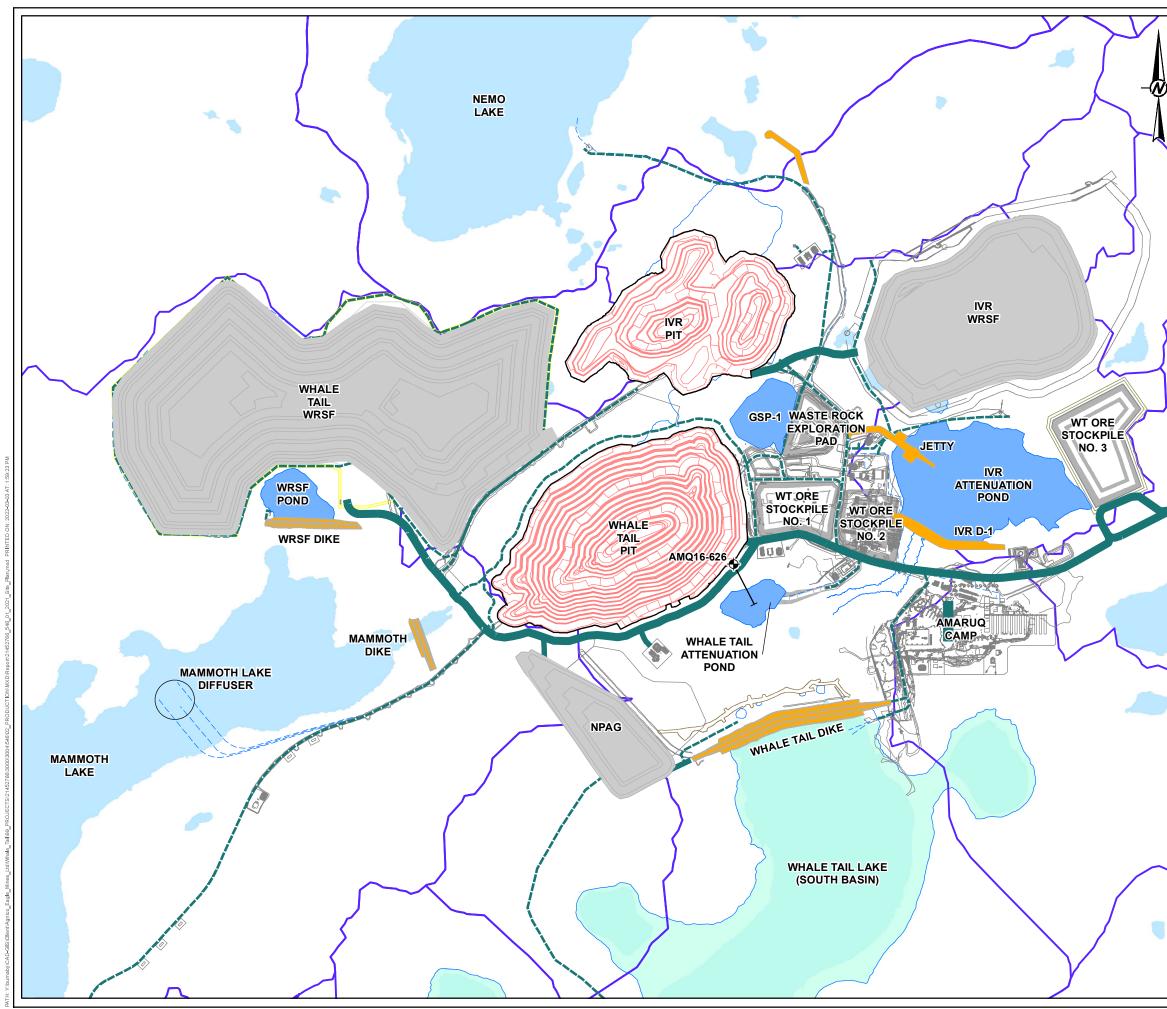
This report documents the 2021 groundwater monitoring event of Westbay Well AMQ16-626. This well is monitored as a compliance requirement of Water License no. 2AM-WTP1830 associated with Whale Tail Project Certificate No. 008.

2.0 BACKGROUND

A Westbay well was installed in borehole AMQ16-626 between March and April in 2016 as part of baseline characterization for the Whale Tail project. The well is located southeast of the now operational Whale Tail Pit and extends at depth below the constructed Whale Tail Attenuation Pond (refer to Figure 1). The Westbay well is used to collect groundwater samples at multiple depths below ground surface and to measure vertical hydraulic gradients.

The well was installed at an inclination of -69 degrees, an azimuth of 152.6 degrees and to a depth of 499 metres along the borehole (mah) through massive diorite throughout the borehole. A tagged 9% calcium chloride brine was used to displace the fresh water in the upper portion of the borehole to prevent freezing during the well installation. The Westbay System was designed to tap discrete zones of unfrozen bedrock and zones of higher hydraulic conductivity observed during drilling and well testing conducted prior to well installation. Six sampling ports (summarized in Table 1) were installed, of which 3 (ports 3, 4, and 6 ranging in depths from 258 m to 367 metres) are routinely monitored. Borehole drilling, packer test results along the borehole, well installation details, sampling methods, and the initial water quality results are documented in Golder (2016b). A schematic of the Westbay well instrument that was installed in borehole AMQ16-626 is included in Attachment A for reference.

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	Depth	Along Bo	rehole	Depth Be	elow Grou	Ind Surface	Elevation (masl)			
Sampling Interval	From	То	Length	From	То	Thickness	From	То	Thickness	
intorvar	(mah)	(mah)	(m)	(mbgs)	(mbgs)	(m)	(masl)	(masl)	(m)	
Port 6	276.0	287.4	11.4	257.7	268.3	10.6	-103.2	-113.9	10.6	
Port 5	298.9	310.3	11.4	279.0	289.7	10.6	-124.6	-135.2	10.6	
Port 4	349.3	359.1	9.8	326.1	335.2	9.1	-171.6	-180.8	9.1	
Port 3	381.3	392.7	11.4	356.0	366.6	10.6	-201.5	-212.5	10.6	
Port 2	440.8	452.2	11.4	411.5	422.2	10.6	-257.1	-267.1	10.6	
Port 1	488.1	499.0	10.9	455.7	465.9	10.2	-301.2	-311.4	10.2	

Table 1: Borehole AMQ16-626 Westbay System Zones

Notes:

Depth values were provided by Westbay Instruments Completion Report.

m = metres; mah = metres along the hole, relative to top of hole; mbgs = metres below ground surface; masl = metres above sea level.

Following installation and sampling of the well in 2016, the total dissolved solids (TDS) content in the Formation water was determined in 2016 to range between 3,198 mg/L and 4,042 mg/L based on groundwater samples collected at that time (Golder 2016a). Formation water in this report refers to the natural groundwater in the rock formation, as opposed to sampled water which is a mixture of drilling water and true groundwater.

Based on the interpreted groundwater quality in 2016, the groundwater quality was used to predict the salinity of groundwater near proposed mine developments, which was an input to hydrogeological and permafrost models (Golder 2018a) used to predict TDS in the groundwater inflow to proposed mine developments. Groundwater quality estimates were also an input to the Whale Tail pit lake hydrodynamic model (Golder 2018b). These models have been, and continue to be, utilised to assess potential effects of mining on site contact water quality during development, operations and closure and on pit lake water quality during closure and post-closure.

The results of the compendium of modelling studies indicated that chemical mass transfer from the pit to the pit lake would be very low largely because the volume of groundwater seepage into and out of the pit lake would be negligible, particularly compared to surface water exchanged annually during post-closure when flows between the flooded pit lake and downstream lakes are re-established. The combination of results suggested that the hydrogeological regime around the pit lake is not critical to pit lake water quality post-closure.

Supplemental predevelopment sampling was conducted at the well in 2018 and 2019 (Golder 2019a; 2019b). Data collected as of 2019 was overall consistent with the baseline characterization and modelling assumptions. Since 2019, development has occurred, and the 2020 monitoring event (Golder 2021) represented the first monitoring event during the operational mining phase. The 2020 hydraulic heads measured in the Westbay System had decreased from the pre-development phase and was attributed to the dewatering of the North Basin and active excavation of the Whale Tail Pit. The 2020 program estimated groundwater quality at Ports 3, 4 and 6 were found to be in the same range as estimated in the 2016 baseline characterization.

****SOLDER

3.0 GROUNDWATER MONITORING PROGRAM

3.1 Objectives

The objectives of the program are as follows:

- Measure the hydrostatic pressure profile at the Westbay well installed in borehole AMQ16-626 to evaluate the vertical hydraulic gradient / groundwater flow direction. This data is used to evaluate changes in groundwater flow conditions in each phase of mining (pre-development, operations and closure).
- Collect groundwater samples from sampling ports at AMQ16-626. Water quality analysis from these samples will add to the database of groundwater quality results that will be used to compare against water quality data from pre-development, operations and closure. Methodology

3.1.1 Hydraulic Head Measurements

Prior to purging and sampling, the pressure was recorded at each of the six sampling ports (Ports 1 to 6) on 2 November 2021 and then converted to freshwater hydraulic heads. The formation pressure was measured using the Mosdax sampler manufactured and supplied by Westbay Instruments (refer to Attachment B for instrument calibration record).

3.1.2 Groundwater Sampling

As part of the 2021 program, groundwater samples were collected from Ports 2, 3, 4 and 6. Port 5 was never intended for groundwater sampling and was installed for pressure measurements only. Port 1 was planned for sampling however the program was ended prematurely due to a large-scale power outage at Whale Tail camp on 13 November 2021.

As the upper part of the Westbay System is installed through permafrost, removal of groundwater for well development, purging and sampling must be carried out using a small volume sampler as opposed to the Westbay purge system. This substantially lengthens the time required to purge and sample at each port (months). Consequently, the sampling program prioritizes key ports that optimize groundwater quality data collection. The rational for ports selected for sampling is provided below.

- Ports 4 and 3 were targeted for sampling based on their port elevation relative to planned underground infrastructure and because these intervals had been previously developed in 2016 (i.e., drill water had been largely removed from the interval). These ports are used to assess groundwater quality for the Whale Tail Pit Project.
- Port 6 is interpreted to be located within the cryopeg zone (temperature below 0 degrees, but not frozen). In the cryopeg, groundwater has the potential to yield variable water quality even following periods of sufficient development because this zone is partially frozen, and salt concentrates in the liquid phase relative to ice. The liquid phase is likely preferentially conveyed to the sampling device. A groundwater sample was collected from Port 6 to compare against previous sampling results from this port.
- Ports 2 was sampled although the port is still insufficiently developed, to document if, and the degree to which, the aquifer is being naturally flushed of the drilling water over time. Port 1 is typically sampled for the same reason, though due to the power outage it was not sampled in 2021.

Groundwater sampling was preformed using the Westbay Mosdax sampler following a similar method as the previous monitoring events. The Mosdax sampler collects 1 Litre of groundwater at a time (per sampling instrument descent into the well, equivalent to one 'run'). Throughout the 2021 monitoring program, field chemical parameters (electrical conductivity, specific conductance, fluorescein content, pH, salinity, temperature and total dissolved solids) were measured in order to track the removal of the fluid introduced into the Formation by drilling, during development and sampling of groundwater. Fluorescein tracer was added to the 2016 drilling water to differentiate between the drilling fluid and the Formation water. It is assumed that drilling water is the only source of fluorescein introduced during the 2016 drilling activities of borehole AMQ16-626 such that it is a reliable tracer of introduced water into the Formation. Fluorescein content was measured using the AquaFluor handheld Fluorometer manufactured by Turner Designs. Temperature and pH and values were measured with a Hanna Combo tester (HI 98127). Electrical conductivity, specific conductance (temperature corrected electrical conductivity), salinity, temperature and total dissolved solids were measured using a YSI Pro 30 Conductivity Probe. A drilling water content of less than 10% original drill brine content (estimated using fluorescein content) is targeted to provide a workable estimate of Formation water quality. Water quality data from samples containing a higher residual drilling fluid content can be investigated but provides an imprecise estimation of Formation quality.

Collected groundwater samples from Ports 2, 3, 4 and 6 were analyzed for the parameters listed in Section 4.2 of the GWMP and in Schedule I Table 2 of the Whale Tail Water License, as follows:

- Hardness, pH, conductivity, salinity, total suspended solids (TSS), total dissolved solids (TDS) and turbidity
- Anions and nutrients, including alkalinity, ammonia, bicarbonate, bromide, carbonate, chloride, dissolved organic carbon (DOC), total kjeldahl nitrogen (TKN), total organic carbon (TOC), fluoride, nitrate, nitrite, ortho-phosphate, total phosphorus, reactive silica and sulphate.
- Metals (dissolved and total), including aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, copper, iron, lead, lithium, magnesium, manganese, mercury, molybdenum, nickel, potassium, selenium, sodium, strontium, thallium, tin, titanium, uranium, vanadium and zinc. Additional metals were also analyzed by the laboratory as part of the metals package, however they are not of interest to the project and will not be discussed herein out: bismuth, cesium, cobalt, silver, silicon, sulfur, rubidium, sulfur, tellurium, thorium, tungsten and zirconium.
- Total and free cyanide as well as Weak Acid Dissociable (WAD) cyanide.
- Radium 226.

Radium 226 is not included in the Whale Tail Water License; however, it was analyzed as it previously occurred at concentrations higher than the Canadian effluent guidelines at some sample ports during previous sampling events and is regulated under the Metal and Diamond Mining Effluent Regulations (MDMER). Radium 226 is a naturally occurring element in deep bedrock groundwater.

Groundwater samples were collected from each port at the end of purging and submitted for laboratory analysis, with duplicate samples collected and submitted for analysis at Ports 3 and 4. . To protect against data loss from key wells in event of bottle breakage or loss during shipping to the lab, a triplicate sample set was held on site for Ports 3 and 4.

At Port 2, fluorescein concentrations were increasing during purging, which indicates drill fluid content was also increasing in the collected water. To evaluate this variability a full sample set was collected a day prior to ending well purging and a second set was collected the last day of purging.

As part of the quality assurance / quality control a trip blank was collected for analysis of the full suite of parameters, except for total, free and WAD cyanide. A field blank was planned for collection but was not completed as result of the large-scale power outage prematurely ending the field program. The laboratory chemical and physical analyses were performed by Bureau Veritas Laboratories (BV) located in Mississauga, Ontario and/or at the other various BV locations. Certificates of analysis from BV are included in Attachment C.

3.2 Evaluation of Formation Water Quality

The accuracy of the calculation of Formation water quality and salinity is contingent on the quantity of residual drilling fluid present in the sampling interval, identified by fluorescein content (the lowest fluorescein content in the sample). Drilling fluids must be removed as much as possible by purging, and the lower the drill fluid content the more reliable the calculation of Formation water quality. The amount of drilling fluid present in the Formation is estimated from the difference between the concentration of fluorescein in the raw groundwater sample at each interval, and the fluorescein content of the drilling fluid used. In 2016 upon well installation, the sampling intervals were purged to remove as much of the drilling fluid as possible within the task schedule, prior to collecting a sample for chemical analysis. Subsequent purging is however required to further decrease the content of residual drilling fluid.

In 2021, the fluorescein and electrical conductivity of groundwater was monitored in the field during sampling and was compared to data from the end of purging activities in past years to assess whether the interval remained purged and that there is reasonable confidence in the accuracy of the groundwater salinity evaluated from the collected sample.

The following summarizes the calculations made to estimate true Formation water quality and TDS from field measurements of electrical conductivity and laboratory analytical results of raw groundwater samples in 2021 and drilling water fluid in 2016.

1) Estimation of the chemistry of the drilling fluid introduced in the Formation during the 2016 well borehole drilling and installation activities. The drilling fluid consisted of very low TDS lake water to which was added a concentrated brine. The range of composition of the drill fluid (the dilute brine) was estimated by comparing the initial and maximum conductivity values measured in samples from the Formation (for each Port 6, 4, 3 and 2 the electrical conductivity of water varied between sampling ports) against the conductivity of the concentrated brine¹. This Dilute Brine Factor was used to calculate composition of the drilling fluid introduced into the sampling interval during the 2016 drilling and well installation activities as per equation (1) below.

(1) Dilute Brine Factor_{Port i} =
$$\frac{Field Conductivity_{Port i}}{Brine Conductivity_{calculated}}$$

¹ Brine conductivity was estimated from the calculated TDS of the drilling brine fluid using a conversion factor of 0.75 which is appropriate for brine solutions (Rusydi, 2017). Brine TDS was calculated to be 130,500 mg/L based on constituent concentrations (refer to Table D-1). Laboratory-reported TDS (36,946 mg/L) and conductivity (55.42 mS/cm) were not reliable as they exceeded instrument calibration.



This calculation assumes an insignificant proportion of Formation water is present immediately after drilling, which is a fair assumption given that a high volume of drilling fluid was lost to the Formation (Golder, 2016a).

- 2) The drilling brine composition for each parameter was calculated from the product of the dilution brine factors and the chemistry of the drilling brine fluid for each port per equation (2).
 - (2) Dilute $Brine_{Port i} = Laboratory Result_{Brine} \times Dilution Brine Factor_{Port i}$
- 3) Calculation of the proportion of drill brine remaining in the Formation upon sampling. This was calculated based on the amount of residual fluorescein measured upon sample collection at each port in 2021 compared to the initial fluorescein content of the drilling fluid measured in 2016 (i.e. 512.7 ppb).
- 4) **Removal of the drilling fluid chemistry from the raw groundwater sample analysis.** The concentration of constituents from the drilling fluid are removed from the reported analytical results for each chemical constituent per the below equation (3).

(3) Groundwater Quality_{corrected} = $\frac{Laboratory Result - Proportion of Drill Brine \times Dilute Brine Chemistry}{Proportion of Formation Water}$

The estimated chemistry of the drilling brine, proportion of residual drilling brine and Formation water for each sampling port are summarized in Table D-1 of Attachment D. The calculated Formation water quality for Ports 3, 4 and 6 are summarized in Table D-2. The original drill brine fluid was not analyzed for the complete suite of parameters listed in Schedule I Table 2 of the Water License such as ammonia, DOC, TKN, orthophosphate, total phosphorus, reactive silica TOC and turbidity. The calculated Formation water quality assumed concentrations of these parameters to be negligible (zero).

4.0 **RESULTS AND DISCUSSION**

4.1 Hydraulic Head Profile and Groundwater Flow Direction Below Whale Tail Lake

The Whale Tail Pit is located within the North Basin of Whale Tail Lake. The talik in the area of the pit is believed to be closed at depth but to transition to an open talik towards the South Basin based on the increased width and depth of the lake towards the south. The water table below both basins is equivalent to the lake surface elevation.

Permafrost underlies the land surrounding the lake, which restricts the lateral flow of groundwater to the talik and restricts the recharge of the sub-permafrost groundwater flow system by precipitation. Regionally groundwater flow is controlled by surface water elevations in lakes with open talik; water moves vertically through the open talik to the underlying sub-permafrost groundwater flow system. Conceptually lakes with open taliks in continuous permafrost regions are equivalent to large monitoring wells. Locally, groundwater flow is not influenced by depressurization of the Whale Tail pit.

AMQ16-626 was installed to evaluate groundwater quality in the unfrozen bedrock and to measure the hydraulic gradient below Whale Tail Lake. The hydraulic gradient, in combination with the bedrock hydraulic conductivity, will control the potential flux to or from Whale Tail Lake, and the flooded Whale Tail Pit post-closure.

Table 2 summarizes the calculated freshwater hydraulic heads based on the measured pressure in each sampling port in 2021 along with historical measurements. Although Port 6 (shallowest interval) is included in Table 2, it is interpreted that this port is within or near the cryopeg, which could affect the measured hydraulic head and

groundwater quality. The deeper ports (Ports 1 to 5) are in unfrozen rock and were used to assess the vertical hydraulic gradient.

		Calculated Freshwater Hydraulic Heads at Port (masl)									
Port	Port Position (masl)	Pre-Deve	elopment	Opera	ations						
		9-Nov-18	16-Mar-19	9-Oct-20	2-Nov-21						
6	-103.4	154.0	153.1	148.3	147.6						
5	-124.8			149.0	148.2						
4	-171.8	153.6	153.1	150.5	150.1						
3	-201.7	153.4	153.7	150.5	150.0						
2	-257.2	152.9	152.5	150.4	149.8						
1	-301.4	152.5	152.3	150.4	150.0						

Table 2: AMQ16-626 Estimated Freshwater Hydraulic Heads and Vertical Hydraulic Gradients

Notes:

mbgs = metres below ground surface (vertical down from surface); masl = metres above sea level (elevation); -- = not measured

The calculated freshwater hydraulic heads measured in 2021 are lower than those measured prior to development (2018 and 2019) and slightly lower than measured in 2020, near the start of mine development. The lower hydraulic heads is attributed to the dewatering of the North Basin in 2019 and 2020 and the ongoing excavation of the open pit.

In the pre-development years (2018 and 2019), there was a downward hydraulic gradient observed between Ports 4 and 1, which measured 0.008 m/m in 2018 and 0.006 m/m in 2019. The hydraulic gradients are calculated using the freshwater hydraulic heads and the distance between the sampling interval midpoints. Overall TDS is low and correction of this gradient for buoyancy effects would be within 0.001 – 0.002. Buoyancy effects would act to increase the vertical downward gradient.

After dewatering of the North Basin of Whale Tail Lake and excavation of the open pit, there has been an overall lowering of freshwater heads of several metres, with an upward gradient has been observed between Ports 4 and 5 and a slight downward to near neutral gradient between Ports 4 and 1 since 2020. The downward hydraulic gradient observed between Ports 4 and 1 measured 0.001 m/m in 2020 and 2021 and is lower than what was previously measured during the pre-development phase. The reduction in downward hydraulic gradient change is expected to result from pit dewatering activities and dewatering of the north basin.

4.2 Groundwater Quality

Information on each of the Ports that were monitored and/or sampled in 2021 is presented in Tables 3 and 4. The field measured electrical conductivity and fluorescein concentrations in groundwater accessed from Ports 1, 2, 3, 4 and 6 throughout the monitoring programs since 2016, are illustrated in Figure 2. The sequence of measurements collected during the 2021 field program is shown on Figure 3. Field measurements of electrical conductivity, salinity, pH, fluorescein and TDS concentrations recorded at the time of sampling are summarized in Table 4. The values are averages from the subsamples collected from multiple 'runs' to obtain the required volume of water for analysis.

Table 3: Annual Purging and Field Monitoring Data at AMQ16-626 2021 Westbay Well Monitoring Program – 2016 to 2021

Port	6		4			3		2			1				
Sample Port Interval (mbgs)	Port 257.7 to 268.3 terval		268.3	326.1 to 335.2		356.0 to 366.6		411.5 to 422.2			455.7 to 465.9				
Final Field Parameters / Year	F	EC	Vol.	F	EC	Vol.	F	EC	Vol.	F	EC	Vol.	F	EC	Vol.
2016	48 [9%]	4.6	282	93 [18%]	4.9	1,855	114 [22%]	7.5	177	120 [23%]	23	423	550 [107%]	4.8	50
2018	87 [17%]	9	8.25	73 [14%]	14.8	13.25	97 [19%]	7.6	12.5	78 [15%]	17.7	6.25	248 ^[48%]	9.4	0.25
2019	63 [12%]	9.6	9	120 [22%]	22.1	41	44 [9%]	5.3	76	202 [39%]	32.5	8	137 [27%]	10.7	2
2020	33 [6%]	6.6	15	34 [7%]	4.8	48	41 [8%]	3.4	46	81 [16%]	17.7	15	146 [29%]	3.2	17
2021	109 [21%]	3.6	12	17 [3%]	2.4	22	29 [6%]	4.4	20	92 [18%]	15	22.7	155 ^[30%]	4.1	1
Cumulative Volume Removed (L)		326.2	25		1,979	.25		331	.5		475.	0	70.25		

Notes:

mbgs = metres below ground surface, relative to ground surface; F = fluorescein content (ppb); [%] = estimated percent drill fluid remaining; EC = electrical conductivity (mS/cm); Vol. = volume of water removed from Port in a given year measured in Litres (L)

¹ Final field measured parameters representative of last 1 L volume of water extracted from the Port during the monitoring program.

² F target for sampling based on removal of most of the drilling water introduced into the Formation in 2016, determined based on F content of the raw water sample. A minimum of 10% drill fluid removal is targeted (51 ppb F is 10% of 512.7 ppb). The average F content of drill water in 2016 was 512.7 ppb (F ranged between 173 and 1000 ppb during 2016 drilling activities)

2016 Sampling Targets – 10% drill fluid remaining was not achieved during the allocated development period. Sample collected upon stabilization of field parameters (EC and F)

2018 Sampling Targets - document groundwater quality information

2019 Sampling Targets – Port 3 (50 ppb, 10% target of initial F measured in 2016), Port 4 (coupled decreasing trends of F and EC as time permits) and Ports 2 and 6 (document groundwater quality information).

2020 and 2021 Sampling Targets – Ports 3 and 4 (50 ppb, 10% initial F measurement in 2016) and Ports 1, 2 and 6 (document groundwater quality information)

Port	Sample	Sample Sample ID		Average Field Measured Parameters at Sampling Period ¹						
	Date		F	EC	TDS	Salinity	рН	Parameters ²		
6	10-Nov-21	Port 6A	95 ± 12	4.30	3,878	3.7	6.54	Schedule I Table 2		
4	5-Nov-21	Port-4A, Port- 4-DUP1A	20 ± 9	2.21	2,075	1.7	6.03	Schedule I		
4	6-Nov-21	Port-4B, Port- 4-DUP1B	22 ± 4	2.42	2,196	2.1	6.31	Table 2 ³		
	8-Nov-21	Port-3A, Port- 3-DUP1A	35 ±2	4.41	4,034	3.9	6.79	Sebedule I		
3	9-Nov-21	Port-3-3B, Port-3- DUP1B	31 ± 6	4.40	3,844	3.7	6.90	Schedule I Table 2 ³		
	12-Nov-21	Port-2A	56 ± 4	9.37	8,328	8.4	8.18	Sabadula I		
2	13-Nov-21	Port-2A- DUP1A	88 ± 6	12.75	10,753	10.4	8.15	Schedule I Table 2		

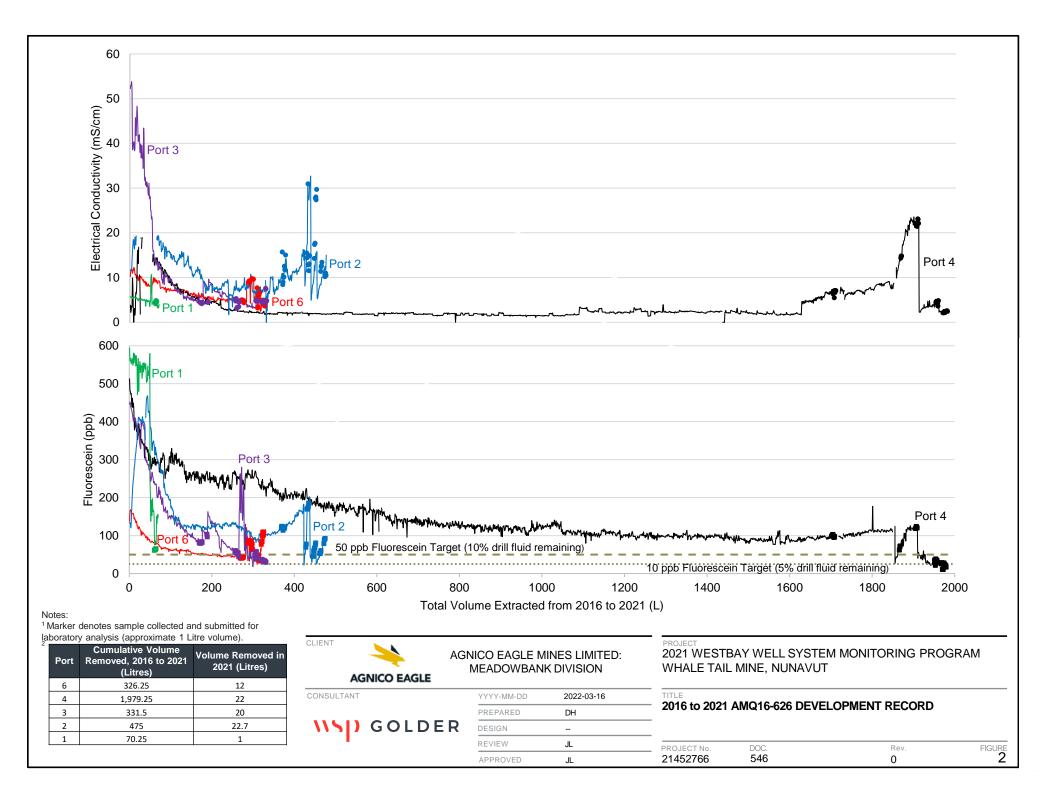
Table 4: Summary of AMQ16-626 Westbay Well 2021 Monitoring Program Sampling Data

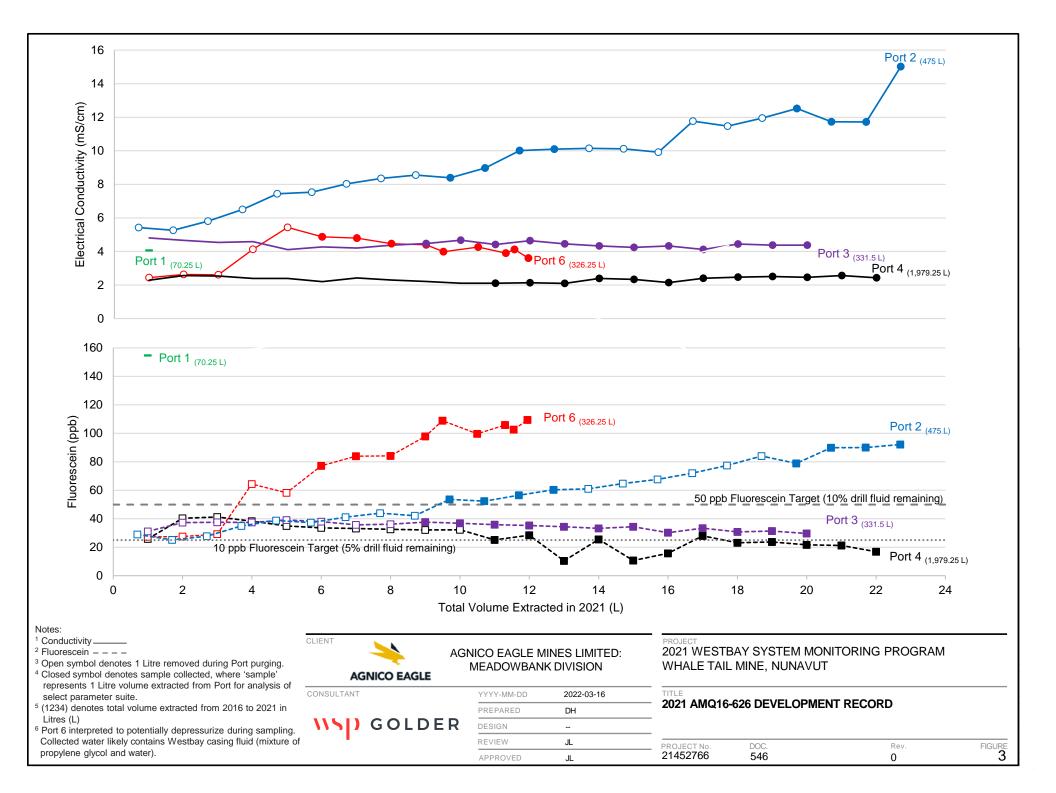
Notes:

F = fluorescein content (ppb) ± standard deviation; EC = electrical conductivity (mS/cm); TDS = total dissolved solids (mg/L); salinity units (ppt) ¹ Average field measurement for all runs for the sample collected (i.e., between 3 and 10 runs per sample ID).

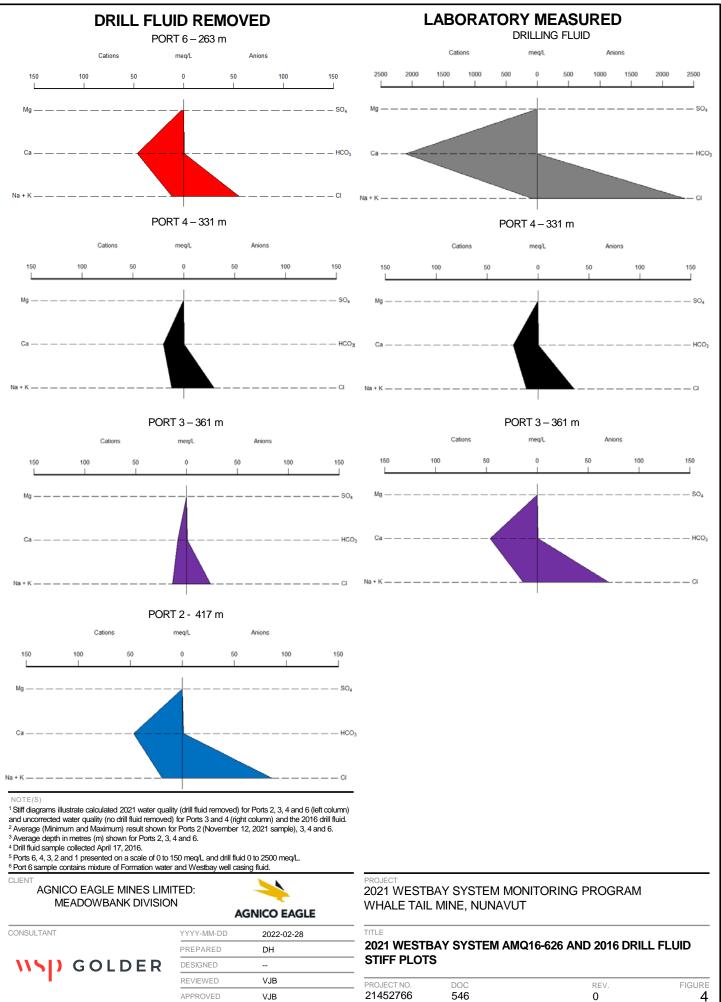
² Ports 2, 3, 4 and 6 sampled for complete list of parameters listed in Section 4.2 of the GWMP and in Schedule I Table 2 of the Water License.

³Complete sample suite collected over two days.





Stiff diagrams for the 2021 calculated (drill fluid removed) Formation guality is presented in Figure 4, along with the 2016 brine fluid chemistry. Stiff diagrams are used to illustrate the major ion composition of a water sample in order to rapidly compare 'signatures' from different sources, such as natural groundwater compared to brine fluid water chemistry. Figure 4 also includes stiff diagrams of the laboratory result for Ports 3 and 4 (no drill brine fluid removed) for comparative purposes. The stiff diagrams illustrate how the major ion composition of the samples collected from Ports 2, 3, 4 and 6 is still dominated by calcium and chloride. As shown in Figure 4, the Port 4 stiff diagrams are similar for the corrected and uncorrected for drill brine fluid, although the calcium and chloride values are less pronounced as expected with the component of the drill fluid removed. Groundwater quality at depth in the Canadian Shield, away from the influence of sea water (such as is the case at Meadowbank and Whale Tail) are expected to be dominated by calcium and chloride (Gascoyne, 2000; Frape and Fritz, 1987), however the intensity of the peaks could also reflect some residual content of the calcium chloride brine fluid introduced into the Formation during well installation (Golder 2016b). In general, the 2021 stiff diagrams are consistent to previous years, however the calcium and chloride peaks are less pronounced in Ports 2, 3, 4 and 6 in 2021. The decrease in drilling brine signature parameters is likely related to interval purging/natural flushing, which would increase the accuracy of the water quality calculations, and/or potentially by the alteration of the groundwater flow system by the active mining / depressurization at the Whale Tail Pit.



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Calculated Formation water quality for Ports 3, 4 and 6 are shown in Table D-2 of Attachment D and include the calculated range of constituent concentrations of Formation water at each Port sampled in 2016, 2018, 2019 (Ports 3 and 6 only), 2020 and 2021. The 2021 laboratory results (uncorrected for drill fluid) groundwater samples are included in Table D-3 and the analytical reports are included in Attachment C. 9

Data is not presented in Table D-2 for Ports 1 and 2. The field schedule allowed for limited purging of Ports 1 and 2. Elevated concentrations of fluorescein and electrical conductivity values at Port 2 (11 to 17% drill fluid remaining) in 2021 indicate that the zone still contains too much drill brine to effectively extrapolate (calculate) Formation water quality. Port 2 was sampled to track the evolution of groundwater quality with natural flushing which, in time, is expected to displace drilling fluids and return the interval to pre-drilling groundwater quality. No sample was collected from Port 1 in 2021 due to power-outage (uncontrolled event), however the field measured fluorescein content and electrical conductivity were similar to the final 2020 readings.

The following provides further information on water quality at each Port.

Port 6

The temperature measured by the Mosdax sampler during the 2018 pressure profile at Port 6 was below zero (-0.17°C; Golder, 2019a). Considering the calculated freezing point depression of 0.2 °C suggests Port 6 may be within or at the cusp of the basal cryopeg. The cryopeg zone is interpreted to extend to at least 258 m depth (top interval of Port 6) within the vicinity of the Westbay System. As Port 6 is interpreted to be located in the cryopeg zone, the liquid phase and fluorescein are preferentially conveyed into the sampling device. Groundwater within the cryopeg would flow through the permeable (unfrozen) sections of the aquifer. Groundwater collected from Port 6 has the potential to yield variable water quality even following sufficient development (Golder 2019a) because this zone is partially frozen, and chemicals are expected to concentrate in the liquid phase as ice forms.

Throughout the 2021 monitoring program and similar to previous years, electrical conductivity and fluorescein progressed at different rates during purging (fluorescein content increased, while electrical conductivity was variable over time; see Figures 2 and 3 possibly because of partial freezing of drilling water and exclusion of fluorescein from the ice (i.e., potential variability of fluorescein within the cryopeg and/or mixing with Westbay well casing (2021 only)).

Port 6 is completed in a very low permeability unit (2 x 10⁻¹⁰ metres per second, Golder 2016b). With the exception of the first three litres removed in 2021, the pressure readings recorded during the subsequent purging and sampling period indicate the Formation pressure was reduced excessively because of multiple sampling events, which stressed the measurement port beyond its specifications (100 psi pressure differential). As a result, it's probable a small amount of Westbay casing fluid (dilute propylene glycol mixture) mixed with the Port 6 Formation water, resulting in a blend of both fluids being collected. Therefore, there is a degree of uncertainty in the quality of water recovered during the 2021 Port 6 monitoring program. The presence of elevated concentrations of DOC and TOC (both 14,000 mg/L) in the laboratory results indicate the sample likely contains an artefact of the Westbay casing fluid.

The Formation water was calculated for Port 6 but is not considered sufficiently reliable to use for validation of results. The unreliability comes from the high residual drill fluid in the collected water (19%) and because pressure monitoring during sample collection in 2021 indicates that the sample value at Port 6 may not be fully closing between sample runs. If the sample value does not close, casing fluid can enter the zone interval and result in the collection of the casing fluid (propylene glycol and water) along with formation groundwater. The 2016 results are therefore a more accurate representation of Formation water quality based on the lower average fluorescein content measured in the sample and TDS and electrical conductivity trends.

The estimation of true Formation water quality was carried out per the method described in Section 3.3. Table D-2 presents the minimum and maximum of the range of calculated concentrations of Formation water at Port 6 sampled in 2021 and in 2016, 2018, 2019 and 2020 for comparative purposes only. The Port 6 corrected Formation water are the same order of magnitude but slightly higher than those previously reported, with the exception of a few parameters such as ammonia, calcium, chloride, Radium 226 and sulphate which were lower.

Port 4

The 2021 field-measured groundwater fluorescein content and electrical conductivity at Port 4 were lower than values recorded at the end of the previous groundwater monitoring programs. An increasing trend was observed in 2018 and 2019, followed by a sharp decline in 2020, where conductivity and fluorescein trended toward stabilization at the end of the 2020 program and remained consistent in 2021. In general, the lower proportion of drilling fluid in the Formation and in the samples collected results in an increase reliability of calculated Formation water quality (drill fluid removed).

Estimation of Port 4 Formation water quality is included in Table D-2 for 2016, 2018, 2020 and 2021. The 2021 laboratory results (uncorrected for drill fluid) groundwater samples are included in Table D-3 for comparative purposes. The estimated 2021 results are within the same magnitude of those reported in 2016, albeit slightly lower with the exception of reactive silica. The concentration of cyanide, trace metals and arsenic in groundwater is low. Concentrations of cyanide species (total and WAD) were not detected in the Port 4 sample, while free cyanide was present in trace amounts. Agnico Eagle communicated that cyanide was present in a trip blank at the Meadowbank mine, and it is therefore uncertain if the observed cyanide is representative of groundwater at Whale Tail. As it has not been historically analysed for, future monitoring will be required to confirm its presence. The 2021 calculated Radium-226 concentration is estimated to be between 0.19 and 0.21 Bq/L, which, for comparative purposes, is below the MDMER limit of 0.37 Bq/L and slightly higher than the 2016 concentration value (of <0.1 Bq/L).

Port 4 2021 data is considered to be reliable in representing Formation water quality with both a calculated TDS range (1,593 and 2,328 mg/L) and laboratory result TDS range (2,100 to 2,350 mg/L) that is similar but slightly lower than the previously reported calculated TDS range (3,581 to 3,966 mg/L) based on the 2016 results. The slight change in TDS concentrations may reflect improved reliability in the sample results due to reduced drill fluid content or a shift in the groundwater flow conditions from pit dewatering.

Port 3

The 2021 field-measured fluorescein content and electrical conductivity at Port 3 were similar to values recorded at the end of the well development period in 2016. Concentrations of fluorescein and electrical conductivity stabilized towards the end of the 2020 monitoring program in Port 3 (Figure 2) and remained similar in 2021. This suggests that a steady state is established with the small amount of residual drilling water present in the Formation water in this zone.

Estimated Port 3 Formation water quality is included in Table D-2. The 2021 Formation water quality data are within the same order of magnitude to those reported in 2016, albeit slightly lower with the exception of a few parameters. Concentrations of zinc is an order of magnitude higher than previously reported in one of the 2021 Port 3 duplicate sample sets. The concentration of cyanide, trace metals and arsenic in groundwater is low. For comparative purposes only, the calculated Radium-226 concentration is estimated to be between 0.32 and 0.40 Bq/L, where the upper range exceeds the MDMER limit of 0.37 Bq/L.

Port 3 2021 data is considered to be reliable in representing Formation water quality with a calculated TDS range (1,417 and 1,741 mg/L) that is lower than the previously reported calculated TDS range (3,483 to 3,918 mg/L). The 2021 Port 3 laboratory result TDS result was within the range and slightly higher (3,580 to 4,270 mg/L) compared to the calculated 2016 results. The slight change in TDS concentrations may reflect improved reliability in the sample results due to reduced drill fluid content or a shift in the groundwater flow conditions from pit dewatering.

Port 2

The field-measured groundwater fluorescein content and electrical conductivity have remained variable at Port 2 between 2016 and 2021 (refer to Figure 3). Both fluorescein and electrical conductivity values have consistently been lower at the start of each monitoring session, and increased throughout the brief purging period. The observed trend in the purge water quality throughout each monitoring program may be related to a density segregation within Port 2 completed at a depth from 412 to 422 metres. The groundwater interval tapped by Port 2 still has a large remaining proportion of drill brine and had an elevated salt content at the end of drilling (per the elevated electrical conductivity in that interval in 2016). In this condition, the salt could potentially segregate to the bottom of the interval and not be fully purged with the low volume of purge water removed each year. Given the continued high proportion of drilling brine in the samples collected, proper estimation of Formation water quality is not deemed possible for from Port 2 at this time.

Summary

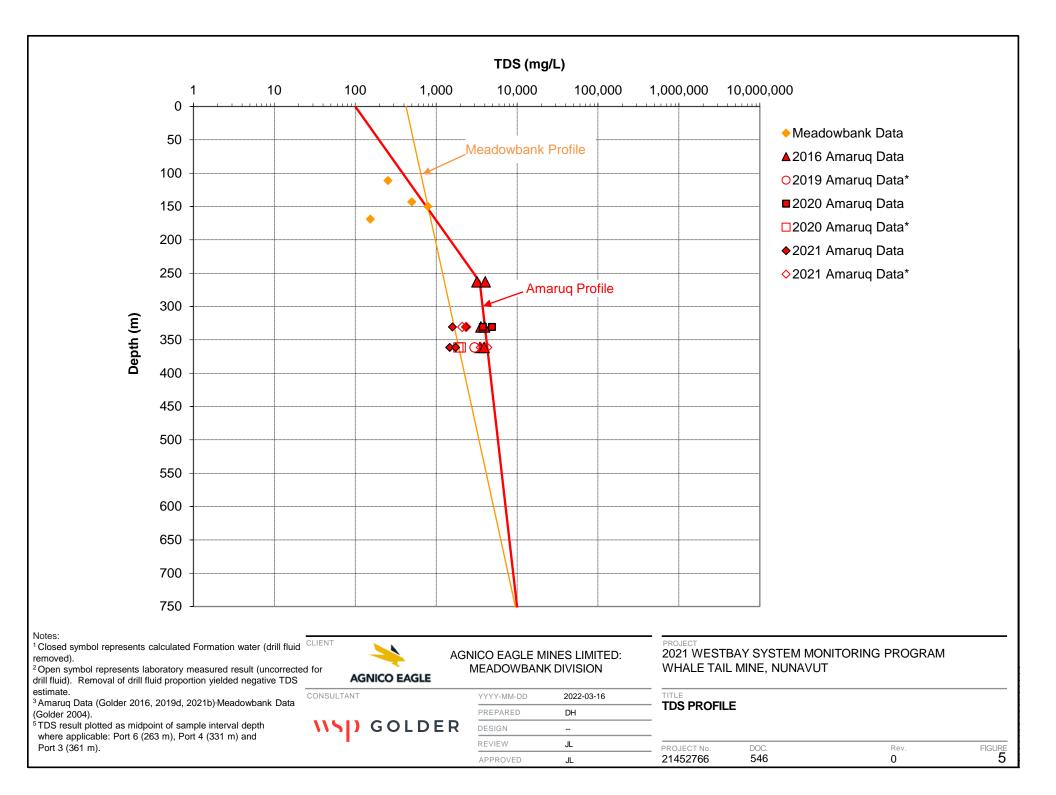
Based on the 2021 groundwater monitoring programs, the 2021 formation water quality from Ports 3 and 4 are considered reliable. This builds on the larger data set from historical monitoring, in which 2016 and 2020 monitoring data at Port 6 and Port 4 is considered to be reliable, along with the 2016 monitoring data at Port 3. The precision of the estimated water quality remains affected by the presence of residual brine in the intervals sampled. The calculated Port 3 Formation water as part of the 2018, 2019 and 2020 investigations yielded negative values for TDS and major ions calcium, chloride, potassium and select metals which include arsenic, lithium, selenium and strontium. In 2021, the calculated Port 3 Formation water yield only yielded negative values for iron, lithium, nickel and potassium. Therefore, the results have previously reported have been less than the laboratory result measured during each investigation as shown in Table D-2.

Based on data from Ports 3 and 4, the calculated TDS content of Formation water is estimated to range between 1,417 and 4,904 mg/L. The lower TDS value for Port 3 (1,417 mg/L) was calculated from the using the estimated Formation water dissolved constituents. The 2021 laboratory result TDS in Ports 3 and 4 TDS was within this same range (2,100 to 4,270 mg/L). The TDS profile that was adopted in the FEIS for the Approved Project is presented in Figure 5, along with the supplemental reliable TDS collected since its submission. For 2019 to 2021 data both the uncorrected (raw water) TDS and the calculated formation TDS is presented on Figure 5 for comparative purposes.

As presented on Figure 5, the TDS in samples from Ports 3 and 4 is similar to, though slightly lower than historical sampling results and the established Amaruq TDS profile adopted for the FEIS. The slight change in TDS

concentrations may reflect a shift in the groundwater conditions resulting from pit dewatering; however, more likely it may only reflect improved reliability in the sample results due to reduced drill fluid content. Overall, the results do no deviate significantly from the FEIS assumptions. TDS concentrations should be reviewed as part of the 2022 model recalibration efforts.

Arsenic, which is a constituent of interest in the ore and waste rock to be mined, occurs in groundwater at concentrations that are low and consistent with previous reliable data collected from the Westbay System. Radium-226 in groundwater is slightly higher in 2021 at Port 3 with concentrations that are higher than the Federal MDMER Effluent criteria; though this criteria is not directly applicable to groundwater because it will not be discharged directly to the receiving environment.



5.0 QUALITY ASSURANCE/QUALITY CONTROL

Duplicate samples collected from Ports 3 and 4 were submitted to the analytical laboratory as part of the quality assurance/quality control ('QA/QC') protocol. A trip blank was also submitted for analysis of the full parameter suite, with the exception of total, free and WAD cyanide. The analytical laboratory performs equipment blanks as a method of internal QA/QC verification.

Analytical repeatability was tested by assessing the similarity between duplicate pairs of results. For each duplicate pairs of analysis where both results were higher than 5 times the method detection limit (MDL), the relative percent difference (RPD) was calculated as follows:

RPD = <u>absolute [difference (concentration of a given parameter)]</u> x 100 [average (concentration of a given parameter)]

Per USEPA recommended methods (USEPA, 1994), an RPD of 20% or less is considered acceptable. Where one or both results of the duplicate pair are less than 5 times the MDL, a margin of +/- MDL is considered acceptable.

Table D-4 of Attachment D presents the RPD or +/- MDL value calculated from the duplicate pair of results. Approximately 37% of duplicate pairs of analyses have one or both results below the method detection limit and consequently cannot be assessed for repeatability. QA/QC results for the duplicate samples are within acceptable tolerance limits (RPD or +/- MDL) with the exception of duplicate concentrations of total arsenic and zinc in Port 3 (sample IDs: Port-3-3B and Port-3-DUP1B) as well as duplicate concentrations of total phosphorus, total chromium and nickel in Port 4 (sample IDs: Port 4B and Port-4-DUP1B). All other trace components and major elements for samples are considered adequately repeatable. The reason for the deviations in concentrations of these parameters may be attributed to the presence of trace sediments in the sample. Concentrations of dissolved constituents are consistently lower than their total counterparts.

The trip blank returned concentrations that are very low or below the laboratory detection limits for all parameters analyzed.

TDS values are also calculated from the laboratory results in order to assess potential discrepancies between uncertainty of the results (refer to Tables D-1 and D-4). The results of the field values, calculated values, and laboratory values are within reasonable range limits for all samples with the exception of Port 2. Calculated TDS values for the Port 2 samples are between 38 to 39% lower than the laboratory result. The ratio of the laboratory-measured electrical conductivity versus TDS for Port 2 is 1 compared to Port 3 (0.61), Port 4 (0.52) and Port 6 (0.84). The lower electrical conductivity/TDS ratios in Ports 3 and 4 indicate the samples are trending away from drill brine fluid.

Uncertainty in the calculated Formation water quality stems from 1) variability in drill water composition at the time of drilling and 2) possible mixing between aquifer zones having different levels of development (purging of drill water). These have an influence on the accuracy of all calculated Formation water quality; the effect of which is decreased with lower drilling brine proportion. The 2021 data remain adequate to estimate water quality at Ports 3 and 4, however the Port 6 2016 results may be a more accurate representation of Formation water quality than 2021 based on elements described previously. Samples collected from Port 2 in 2021 do not offer an accurate representation of Formation water quality.

6.0 CONCLUSION

The 2021 AMQ16-626 Westbay System groundwater monitoring program was carried out in support of the Whale Tail Pit Project Certificate No. 008, Water License no. 2AM-WTP1830 and in accordance with Section 3.1 of the Whale Tail Pit Project Groundwater Monitoring Plan Version 3_NWB dated May 2019. The hydraulic head and groundwater quality data were used to monitor changes in groundwater quality and the hydraulic gradient near the mine development areas.

The 2021 hydraulic heads measured in the Westbay System have decreased from the pre-development phase which is attributed to the dewatering of the North Basin and active excavation of the Whale Tail Open Pit. Hydraulic head measurements in 2021 indicate an upward gradient is present between Ports 1 and 5. The upward gradient is anticipated to result from the depressurization induced from dewatered North Basin and Whale Tail Pit operations.

Formation water quality was estimated from the samples collected in 2021, by subtracting the effect of residual drilling water in the Formation (in the raw water sample). The 2021 program estimated Formation water quality at Ports 3 and 4 are in the same range as estimated in 2016. The data collected from Ports 3 and 4 are considered reliable. Data from Port 6 in 2021 is considered unreliable because of the probably influence of Westbay casing water in the samples recovered in addition to the higher proportion of drill fluid in the sample and the possible interference of ice development at that depth (within the basal cryopeg). Given the continued high proportion of drilling brine remaining in Port 2, an accurate estimation of Formation water quality is not possible at this depth at this time. The assumptions for the conceptual model, which were developed based on 2016 data prior to development are still considered reliable and appropriate. Changes to the water quality model or the water management plan are not considered necessary based on the data presented in this report.

The slightly lower TDS reported in Ports 3 and 4 in 2021 may reflect a shift in the groundwater conditions resulting from pit dewatering; however, more likely it may only reflect improved reliability in the sample results due to reduced drill fluid content. Overall, the results do not deviate significantly from the FEIS assumptions. TDS concentrations should be reviewed as part of the 2022 recalibration efforts.

The concentrations of metals and arsenic in groundwater at Ports 3 and 4 are low, similar to previous estimates from reliable sample collection. Given that the arsenic concentrations remain similar to the assumptions adopted in the geochemical models (low arsenic in Formation water), the contention that the natural content of arsenic in groundwater is not likely to have a significant effect on mine surface water quality not pit lake water quality is still valid.

7.0 RECOMMENDATIONS

A drill fluid content of 5 to 10% has previously been targeted to provide a reasonable estimate of Formation water quality at the AMQ16-626 Westbay System. Although the drill water content below 10% were achieved in Ports 3 and 4 in 2021, calculated Formation water quality is still displaying a signature influenced by drilling brine, where the drill fluid signature in Ports 3 and 4 is more dilute compared to previous years. More accurate Formation water quality estimates could be obtained with lower proportion of residual drill fluids in the groundwater. This can be accelerated by further developing the Ports prior to collecting the water sample (i.e., purging at least one Port interval volume: 5.43 Litres per metre in the annulus based on the known dimensions of the 38-millimeter diameter Westbay casing and the 96-millimeter diameter HQ outer hole).

It is recommended that additional development and groundwater sampling be carried out at Port 1 and 2 on an annual basis as time permits to accelerate the removal of drill fluid remaining in the aquifer at these locations. Ports 1 and 2 are located below the anticipated ramp development zone (0 to 385 mbgs), however the water quality data at these deeper intervals (412 and 456 mbgs) is of interest in developing the salinity profile of the Whale Tail Lake talik as the deep groundwater is expected to upwell into the underground mine openings. This water quality information will be of use in identifying the need for mitigating the effect of salinity (which is expected to increase with depth) during mining at greater depths. Port 1 represents a more conductive zone; its salinity is of interest because it can represent a significant volume of water to be pumped during operations.

8.0 STUDY LIMITATIONS

This technical memorandum was prepared for the exclusive use of Agnico Eagle Mines Limited. The technical memorandum, which specifically includes all tables and attachments, is based on data and information collected by Golder Associates Ltd. and is based solely on the conditions of the property at the time of the work, supplemented by historical information and data obtained by Golder Associates Ltd. as described in this technical memorandum.

Golder Associates Ltd. has relied in good faith on all information provided and does not accept responsibility for any deficiency, misstatements, or inaccuracies contained in the technical memorandum as a result of omissions, misinterpretation, or fraudulent acts of the persons contacted or errors or omissions in the reviewed documentation.

The services performed, as described in this technical memorandum, were conducted in a manner consistent with that level of care and skill normally exercised by other members of the engineering and science professions currently practicing under similar conditions, subject to the time limits and financial and physical constraints applicable to the services.

Any use which a third party makes of this technical memorandum, or any reliance on, or decisions to be made based on it, are the responsibilities of such third parties. Golder Associates Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this technical memorandum.

The findings and conclusions of this technical memorandum are valid only as of the date of this technical memorandum and for the locations investigated. If new information is discovered in future work, including excavations, borings, or other studies, Golder Associates Ltd. should be requested to re-evaluate the conclusions of this technical memorandum and provide amendments as required.

9.0 CLOSURE

We trust this technical memorandum meets your current requirements. If you have any questions regarding this technical memorandum, please contact the undersigned.

Golder Associates Ltd.

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Original Stamped by

Dale Holtze, M.Sc., P.Geo. (NT/NU) *Hydrogeologist* Valérie Bertrand, M.A.Sc., P.Geo. (NT/NU) Senior Principal Geochemist-Geologist

DH/VJB/JL/rk

Attachments: Attachment A – AQM16-626 Westbay System Installation Details Attachment B – Westbay Instruments Mosdax Sampler Calibration Reports Attachment C – 2021 Laboratory Certificates of Analysis Attachment D – Water Quality Results

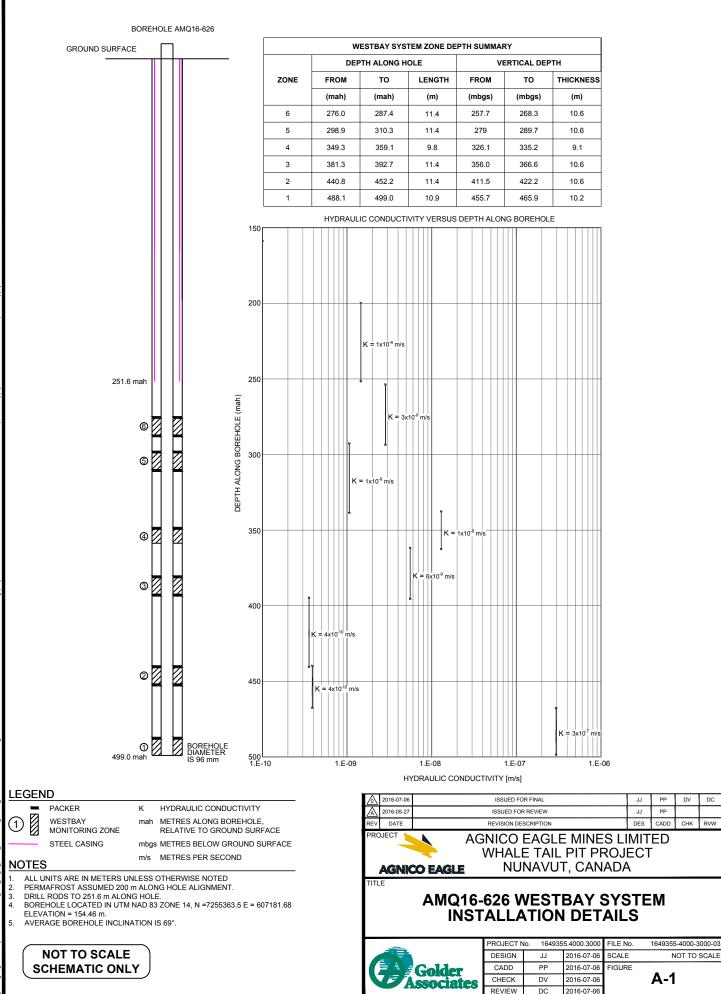
https://golderassociates.sharepoint.com/sites/140929/project files/6 deliverables/whale tail/21452766-546-tm-wt westbay-rev0/21452766-546-tm-rev0-2021 wt westbay gw monitoring_2022-03-22.docx

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ATTACHMENT A

AMQ16-626 Westbay System Installation Details



ATTACHMENT B

Westbay Instruments Mosdax Sampler Calibration Reports

MOSDAX Calibration Report 1: EMS - 2652 Module 3008

Full Scale: 2000 (psia)

File: E:\DATA\CAL\0-2021\2K'S\11JUNE~1\02652

Pressure Reference: Paroscientific Model 42K-101 S/N 59937 Date of last reference to traceable standard: Oct 9 2019 Range: 2K PSI

EMS - 2652 Ji Range 1 Terr		23 2021	EMS - 2652 Jr Range 2 Tem		58 2021	EMS - 2652 Ju Range 3 Tem		28 2021
Ref Pres (psia)	Error (psia)	(% FS)	Ref Pres (psia)	Error (psia)	(% FS)	Ref Pres (psia)	Error (psia)	(% FS)
$\begin{array}{c} 14.826\\ 194.988\\ 391.453\\ 591.084\\ 788.765\\ 987.305\\ 1189.168\\ 1385.164\\ 1584.100\\ 1786.851\\ 1991.318\\ 1816.568\\ 1607.088\\ 1407.289\\ 1207.368\\ 1009.313\\ 808.034\\ 607.558\\ 406.283\\ 205.879\\ 14.829\end{array}$	0.095 0.033 0.060 0.026 -0.155 -0.100	-0.007 -0.001 0.005 0.002 0.003 -0.008 -0.005 -0.006 0.004 0.011 0.005 0.003 0.000 0.004 0.000 0.004 0.007 0.007 0.007 0.009 0.004 0.002	$\begin{array}{c} 14.807\\ 193.228\\ 390.619\\ 591.085\\ 789.134\\ 987.408\\ 1187.018\\ 1385.190\\ 1583.782\\ 1789.737\\ 1991.627\\ 1816.464\\ 1608.052\\ 1406.830\\ 1206.488\\ 1010.396\\ 807.517\\ 615.853\\ 407.056\\ 205.788\\ 14.797\\ \end{array}$	-0.070 0.111 0.141 0.192 0.129 0.102 0.051 0.034 0.122 0.292 0.444 0.307 0.360 0.263 0.151 0.248 0.289 0.320 0.220 0.221 -0.023	-0.003 0.006 0.007 0.010 0.006 0.005 0.003 0.002 0.006 0.015 0.022 0.015 0.015 0.013 0.013 0.013 0.013 0.014 0.011 0.011 -0.001	$\begin{array}{c} 14.750\\ 193.918\\ 391.540\\ 590.367\\ 788.194\\ 987.183\\ 1185.593\\ 1385.307\\ 1583.164\\ 1785.755\\ 1991.795\\ 1816.349\\ 1606.821\\ 1407.578\\ 1206.839\\ 1010.181\\ 807.451\\ 606.642\\ 406.088\\ 206.022\\ 14.752\end{array}$	0.008 0.061 0.054 0.094 0.085 -0.079 -0.039 0.019 0.062 0.307 0.200 0.157 0.116 0.117 0.233 0.206 0.226 0.196 0.096	-0.006 0.003 0.003 0.005 0.004 -0.004 -0.004 -0.002 0.001 0.015 0.010 0.008 0.006 0.006 0.012 0.010 0.011 0.010 0.011 0.010 0.015 -0.001
EMS - 2652 Ju Range 4 Tem Ref Pres (psia)	p 29.9° C		EMS - 2652 Ju Range 5 Tem	p 39.8° C				
14.735 193.244 392.004 589.409 789.637 988.317 1185.970 1391.108 1591.229 1786.237 1991.888 1817.535 1618.865 1408.089 1206.814 1010.213 807.462 606.464 406.008 206.226 14.739	0.025 0.022 0.042 -0.010 -0.049 -0.110 -0.279 -0.275 -0.187 -0.156 0.086 0.046 -0.036 -0.036 -0.045	0.001 0.001 0.002 0.000 -0.002 -0.005 -0.014 -0.009 -0.008 0.004 0.002 -0.004 0.002 -0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.002 0.004 0.001 0.001 0.001 0.001 0.001 0.002 0.004 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.001 0.002 0.001	Ref Pres (psia) 14.731 193.930 390.734 591.059 790.072 987.526 1185.173 1385.182 1590.325 1786.245 1992.137 1818.212 1616.221 1418.107 1217.945 1009.812 807.531 606.510 406.621 206.069 14.756	-0.013 0.044 0.094 0.085 0.110 0.086	-0.001 0.002 0.005 0.004 0.006 0.004 -0.003 0.001 0.004 0.007 0.016 0.014 0.007 0.008 0.009 0.016 0.016 0.016 0.016 0.011 0.009 0.003			

MAUL Issued by



Document: 5CAL 9607

MOSDAX Calibration Report 2: EMS - 2652 Module 3008

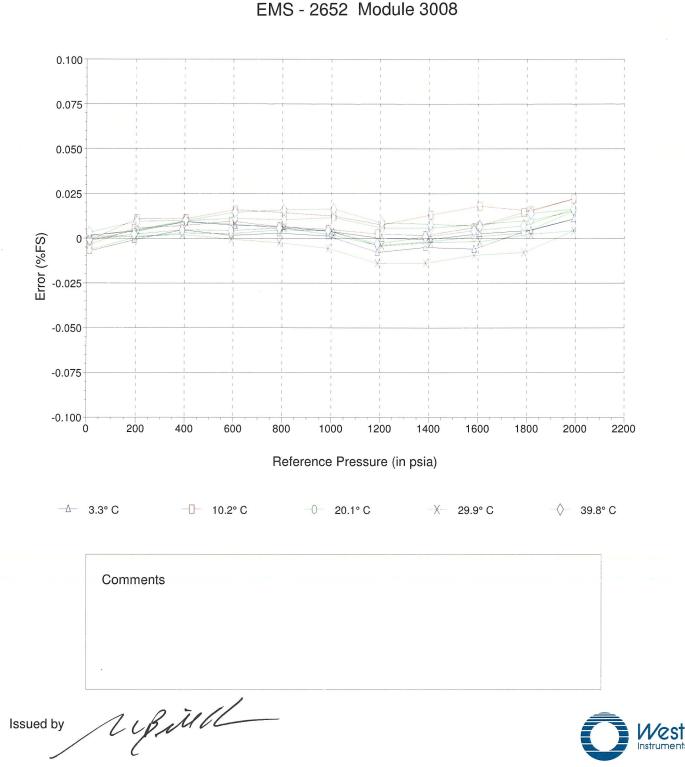
Full Scale: 2000 (psia)

File: E:\DATA\CAL\0-2021\2K'S\11JUNE~1\02652

Pressure Reference: Paroscientific Model 42K-101 S/N 59937 Date of last reference to traceable standard: Oct 9 2019

Range: 2K PSI

Plot of Error vs. Reference Pressure



Document: 5CAL 9607

MOSDAX Calibration Report 1: EMS - 5239 Module 3019

Full Scale: 2000 (psia)

File: E:\DATA\CAL\0-2021\2K'S\9JAN20~1\05239

Pressure Reference: Paroscientific Model 42K-101 S/N 59937 Date of last reference to traceable standard: Oct 9 2019

Range: 2K PSI

Range 1 Tem	an 09 14:36: p 3.2° C	03 2021	EMS - 5239 Ja Range 2 Tem		18 2021	EMS - 5239 Ja Range 3 Tem		51 2021
Ref Pres (psia)	Error (psia)	(% FS)	Ref Pres (psia)	Error (psia)	(% FS)	Ref Pres (psia)	Error (psia)	(% FS)
14.882 193.111 390.983 590.203 788.656 991.617 1190.380 1383.041 1580.629 1786.548 1984.789 1814.187 1617.108 1409.528 1206.542 1005.898 807.569 606.812 406.602 206.325 14.886	-0.115 -0.235 -0.139 0.005 0.149 0.056 0.064 -0.038 -0.017 -0.018 0.018 0.018 0.018 0.0137 0.126	-0.010 0.002 0.000 -0.005 -0.002 -0.006 -0.012 -0.007 0.000 0.007 0.003 -0.002 -0.001 -0.001 0.001 0.001 0.001 0.000 0.007 0.000 -0.002	14.945 193.290 390.683 589.260 792.417 991.429 1184.691 1389.559 1581.784 1786.709 1985.674 1813.416 1618.304 1417.197 1211.876 1012.732 807.574 606.423 406.258 205.741 14.949	0.029 0.012 0.001 -0.079 -0.117 -0.021 -0.098 -0.105 0.021 0.218 0.090 0.067 -0.048 0.065 -0.018 -0.011 -0.038 0.050 -0.004	-0.011 0.001 0.001 -0.004 -0.006 -0.001 -0.005 -0.005 0.001 0.011 0.004 0.003 -0.002 0.003 -0.001 -0.002 0.003 -0.001 -0.002 0.003 0.000 -0.009	14.989 193.608 392.858 588.848 792.716 986.282 1191.025 1389.767 1588.070 1784.249 1984.447 1811.989 1617.445 1405.825 1205.673 1009.450 807.469 606.481 406.388 206.212 14.978	-0.005 -0.014 -0.009 -0.021 -0.077 -0.102 -0.111 0.017 0.122 -0.005 -0.094 -0.073 0.050 -0.041 0.071 0.068 0.065 0.003	-0.006 0.000 -0.001 -0.002 -0.001 -0.004 -0.005 -0.006 0.001 0.006 0.000 -0.005 -0.004 0.003 -0.002 0.004 0.003 0.000 0.003 0.000 -0.007
EMS - 5239 Ja Range 4 Tem Ref Pres (psia)	p 30.0° C		EMS - 5239 Ja Range 5 Tem Ref Pres (psia)	p 39.9° C				
14.987 193.056 391.096 589.159 793.134 985.781 1185.432 1389.369 1589.804 1787.458 1985.740 1814.985 1613.048 1405.311 1215.990 1011.960 807.382 606.597 406.252	0.024 0.033 0.038 -0.053 -0.043 -0.025 -0.132 -0.111 -0.147 0.093 0.093 -0.049 -0.142 0.057	-0.007 0.001 0.002 -0.003 -0.002 -0.001 -0.007 -0.006 -0.007 0.005 -0.007 0.005 -0.002 -0.007 0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.003 -0.001 0.002 0.001	14.955 194.128 393.193 589.885 787.419 992.253 1191.781 1390.593 1590.074 1789.316 1987.068 1815.707 1618.826 1415.809 1206.319 1010.054 807.683 606.786 406.699 205.949	-0.003 -0.008 -0.027 -0.061 -0.040 -0.020 -0.056 -0.105 -0.013 0.152 0.081 0.057 -0.091 0.010 -0.006 0.007 0.055 0.067	-0.007 0.000 0.000 -0.001 -0.003 -0.002 -0.001 -0.003 -0.005 -0.001 0.008 0.004 0.003 -0.005 0.001 0.000 0.000 0.000 0.003 -0.003 -0.003 -0.003 -0.003			

Mith Issued by



MOSDAX Calibration Report 2: EMS - 5239 Module 3019

Full Scale: 2000 (psia)

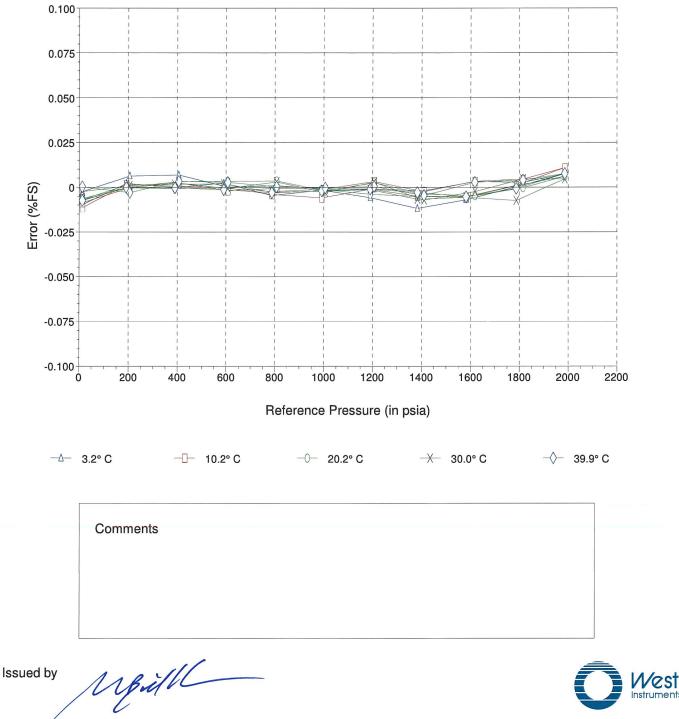
File: E:\DATA\CAL\0-2021\2K'S\9JAN20~1\05239

Pressure Reference: Paroscientific Model 42K-101 S/N 59937 Date of last reference to traceable standard: Oct 9 2019

Range: 2K PSI

Plot of Error vs. Reference Pressure

EMS - 5239 Module 3019



Document: 5CAL 9607

ATTACHMENT C

2021 Laboratory Certificates of Analyses



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 435933

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/13 Report #: R6961232 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X1888

Received: 2021/11/10, 09:30

Sample Matrix: Ground Water # Samples Received: 4

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2022/01/05	CAM SOP-00448	SM 23 2320 B m
Alkalinity (1)	1	N/A	2022/01/06	CAM SOP-00448	SM 23 2320 B m
Alkalinity (1)	2	N/A	2021/11/12	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	2	N/A	2021/11/12	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry (1)	2	N/A	2022/01/06	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity (1)	2	N/A	2021/11/12	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	2	N/A	2021/11/15	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	2	2021/11/16	2021/11/16	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 6)	2	N/A	2021/11/16	CAM SOP-00446	SM 23 5310 B m
Field Measured Conductivity (1, 7)	4	N/A	2021/11/11		Field Meter
Fluoride (1)	2	2021/11/11	2021/11/12	CAM SOP-00449	SM 23 4500-F C m
Fluoride (1)	2	2021/11/15	2021/11/16	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	2	2021/11/15	2021/11/17	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	2	2021/11/15	2021/11/17	CAM SOP-00453	EPA 7470 m
Bromide in water by IC (2)	2	N/A	2021/11/16		
Low Level Chloride and Sulphate by AC (2)	2	N/A	2021/11/18	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	2	2021/11/17	2021/11/17	CAL SOP-00266	EPA 9016d R0 m
Hardness Total (calculated as CaCO3) (3, 8)	2	N/A	2021/11/17	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	2	N/A	2021/11/17	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	2	N/A	2021/11/17	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (dissolved) (3)	4	N/A	2021/11/16	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	2	N/A	2021/11/17	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (total) (3)	2	N/A	2021/11/17	BBY7SOP-00002	EPA 6020B R2 m
Ammonia-N Low Level (2)	2	2021/11/17	2021/11/17	AB SOP-00007	SM23 4500 NH3 A G m
Orthophosphate by Konelab (low level) (2)	2	N/A	2021/11/16		
Silica (Reactive) (2)	2	N/A	2021/11/23	AB SOP-00011	EPA370.1 R1978 m
Fotal Phosphorus Low Level Total (2)	2	2021/11/17	2021/11/17	AB SOP-00024	SM 23 4500-P A,B,F m
Nitrate & Nitrite as Nitrogen in Water (1, 9)	2	N/A	2021/11/12	CAM SOP-00440	SM 23 4500-NO3I/NO2I
Nitrate & Nitrite as Nitrogen in Water (1, 9)	2	N/A	2021/11/16	CAM SOP-00440	SM 23 4500-NO3I/NO2
pH (1)	1	2022/01/05	2022/01/05	CAM SOP-00413	SM 4500H+ B m



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 435933

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/13 Report #: R6961232 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X1888

Received: 2021/11/10, 09:30

Sample Matrix: Ground Water # Samples Received: 4

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
рН (1)	1	2022/01/06	2022/01/06	CAM SOP-00413	SM 4500H+ B m
рН (1)	2	2021/11/11	2021/11/12	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (1, 7)	4	N/A	2021/11/11		Field pH Meter
Radium-226 Low Level (4, 10)	2	N/A	2021/12/14	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Salinity (5, 11)	2	N/A	2021/11/17		SM 22 2520B
Sulphate by Automated Colourimetry (1)	2	N/A	2022/01/07	CAM SOP-00464	EPA 375.4 m
Calculated Total Dissolved Solids (1)	1	N/A	2022/01/06		Auto Calc
Calculated Total Dissolved Solids (1)	3	N/A	2022/01/07		Auto Calc
Total Dissolved Solids (1)	2	2021/11/15	2021/11/16	CAM SOP-00428	SM 23 2540C m
Field Temperature (1, 7)	4	N/A	2021/11/11		Field Thermometer
Total Kjeldahl Nitrogen in Water (1)	1	2021/11/14	2021/11/16	CAM SOP-00938	OMOE E3516 m
Total Kjeldahl Nitrogen in Water (1)	1	2021/11/14	2021/11/17	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 12)	2	N/A	2021/11/15	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids (1)	2	2021/11/15	2021/11/16	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	2	N/A	2021/11/12	CAM SOP-00417	SM 23 2130 B m

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.



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 435933

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/13 Report #: R6961232 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X1888

Received: 2021/11/10, 09:30

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.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE, Calgary, AB, T2E 6P8

(3) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5

(4) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9

(5) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

(6) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(7) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas Laboratories.

(8) "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).

(9) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(10) Radium-226 results have not been corrected for blanks.

(11) Non-accredited test method

(12) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Katherine Szozda, Project Manager Email: Katherine.Szozda@bureauveritas.com Phone# (613)274-0573 Ext:7063633

BV Labs 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 Signature Page.



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		REX637			REX637			REX638		
Sampling Date		2021/11/05			2021/11/05			2021/11/05		
		16:05			16:05			16:05		
COC Number		435933			435933			435933		
	UNITS	Port-4A	RDL	QC Batch	Port-4A Lab-Dup	RDL	QC Batch	Port-4-DUP1A	RDL	QC Batch
Calculated Parameters										
Calculated TDS	mg/L	2100	1.0	7695611				2100	1.0	7695611
Field Measurements										
Field Measured Conductivity	uS/cm	2194	N/A	ONSITE				2194	N/A	ONSITE
Field Temperature	Celsius	4.8	N/A	ONSITE				4.8	N/A	ONSITE
Field Measured pH	рН	6.1		ONSITE				6.1		ONSITE
Inorganics	_		•					•	•	
Dissolved Bromide (Br-)	mg/L	11	0.10	7712009				10	0.10	7712009
Fluoride (F-)	mg/L	0.48	0.10	7701936				0.50	0.10	7701936
Orthophosphate (P)	mg/L	<0.0010	0.0010	7712010	<0.0010	0.0010	7712010	<0.0010	0.0010	7712010
рН	рН	6.83		7765222	6.90		7765222	6.75		7767915
Reactive Silica (SiO2)	mg/L	7.9	0.050	7719050				8.2	0.050	7719050
Total Suspended Solids	mg/L	2	1	7701149				2	1	7701149
Dissolved Sulphate (SO4)	mg/L	0.87	0.50	7712011				0.82	0.50	7712011
Alkalinity (Total as CaCO3)	mg/L	26	1.0	7765215	26	1.0	7765215	24	1.0	7767898
Dissolved Chloride (Cl-)	mg/L	1300	13	7712011				1300	13	7712011
Nitrite (N)	mg/L	<0.010	0.010	7701848	<0.010	0.010	7701848	<0.010	0.010	7701845
Nitrate (N)	mg/L	<0.10	0.10	7701848	<0.10	0.10	7701848	<0.10	0.10	7701845
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7701848	<0.10	0.10	7701848	<0.10	0.10	7701845
Metals										
Dissolved Iron (Fe)	ug/L	24.8	5.0	7706294				27.2	5.0	7706294
Dissolved Calcium (Ca)	ug/L	476000	50	7706294				476000	50	7706294
Dissolved Magnesium (Mg)	ug/L	4450	50	7706294				4410	50	7706294
Dissolved Potassium (K)	ug/L	10000	50	7706294				10000	50	7706294
Dissolved Sodium (Na)	ug/L	259000	50	7706294				256000	50	7706294
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		REX638			REX639			REX639		
Sampling Date		2021/11/05			2021/11/06			2021/11/06		
		16:05			15:00			15:00		
COC Number		435933			435933			435933		
	UNITS	Port-4-DUP1A Lab-Dup	RDL	QC Batch	Port-4B	RDL	QC Batch	Port-4B Lab-Dup	RDL	QC Batch
CONVENTIONALS										
Total Nitrogen (Ammonia Nitrogen)	mg/L				0.075	0.0050	7712013			
Calculated Parameters		•				•				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				23	1.0	7694447			
Calculated TDS	mg/L				2000	1.0	7695611			
Carb. Alkalinity (calc. as CaCO3)	mg/L				<1.0	1.0	7694447			
Dissolved Hardness (CaCO3)	mg/L				1260	0.50	7707097			
Field Measurements		•				•				
Field Measured Conductivity	uS/cm				2423	N/A	ONSITE			
Field Temperature	Celsius				4.9	N/A	ONSITE			
Field Measured pH	рН				6.3		ONSITE			
Inorganics		•				•				
Conductivity	mS/cm				4.00	0.001	7696128	4.01	0.001	7696128
Free Cyanide (CN)	ug/L				1.3 (1)	1.0	7712012	1.8	1.0	7712012
Total Dissolved Solids	mg/L				2340	10	7700775			
Fluoride (F-)	mg/L				0.46	0.10	7696125	0.46	0.10	7696125
Total Kjeldahl Nitrogen (TKN)	mg/L				0.43	0.20	7699910			
Dissolved Organic Carbon	mg/L				320	4.0	7701390			
Total Organic Carbon (TOC)	mg/L				320	4.0	7699915			
рН	рН	6.82		7767915	6.53		7696130	6.60		7696130
Salinity	N/A				2.4	2.0	7705048	2.4	2.0	7705048
Dissolved Sulphate (SO4)	mg/L				<1.0	1.0	7765307			
Total Cyanide (CN)	mg/L				<0.0050	0.0050	7703014			
Turbidity	NTU				0.6	0.1	7695241			
WAD Cyanide (Free)	ug/L				<1	1	7700852			
Alkalinity (Total as CaCO3)	mg/L	25	1.0	7767898	23	1.0	7696129	24	1.0	7696129
Dissolved Chloride (Cl-)	mg/L				1200	15	7765300			

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable

(1) 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 OF ANALYSES OF GROUND WATER

Bureau Veritas ID		REX638			REX639			REX639		
Sampling Date		2021/11/05			2021/11/06			2021/11/06		
		16:05		-	15:00			15:00		
COC Number		435933			435933			435933		
	UNITS	Port-4-DUP1A Lab-Dup	RDL	QC Batch	Port-4B	RDL	QC Batch	Port-4B Lab-Dup	RDL	QC Batch
Nitrite (N)	mg/L				<0.010	0.010	7696134			
Nitrate (N)	mg/L				<0.10	0.10	7696134			
Nitrate + Nitrite (N)	mg/L				<0.10	0.10	7696134			
Metals										
Dissolved Aluminum (Al)	ug/L				6.3	2.5	7706294			
Total Aluminum (Al)	ug/L				8.0	2.5	7707096			
Dissolved Antimony (Sb)	ug/L				0.96	0.10	7706294			
Total Antimony (Sb)	ug/L				0.90	0.10	7707096			
Dissolved Arsenic (As)	ug/L				3.20	0.10	7706294			
Total Arsenic (As)	ug/L				3.96	0.10	7707096			
Dissolved Barium (Ba)	ug/L				90.4	0.10	7706294			
Total Barium (Ba)	ug/L				84.6	0.10	7707096			
Dissolved Beryllium (Be)	ug/L				<0.050	0.050	7706294			
Total Beryllium (Be)	ug/L				<0.050	0.050	7707096			
Dissolved Bismuth (Bi)	ug/L				<0.025	0.025	7706294			
Total Bismuth (Bi)	ug/L				<0.025	0.025	7707096			
Dissolved Boron (B)	ug/L				493	50	7706294			
Total Boron (B)	ug/L				456	50	7707096			
Dissolved Cadmium (Cd)	ug/L				<0.025	0.025	7706294			
Total Cadmium (Cd)	ug/L				<0.025	0.025	7707096			
Dissolved Chromium (Cr)	ug/L				<0.50	0.50	7706294			
Total Chromium (Cr)	ug/L				5.44	0.50	7707096			
Dissolved Cobalt (Co)	ug/L				0.102	0.025	7706294			
Total Cobalt (Co)	ug/L				0.123	0.025	7707096			
Dissolved Copper (Cu)	ug/L				<0.25	0.25	7706294			
Total Copper (Cu)	ug/L				0.46	0.25	7707096			
Dissolved Iron (Fe)	ug/L				25.7	5.0	7706294			
Total Iron (Fe)	ug/L				174	5.0	7707096			
Dissolved Lead (Pb)	ug/L				<0.025	0.025	7706294			
Total Lead (Pb)	ug/L				0.284	0.025	7707096			

Lab-Dup = Laboratory Initiated Duplicate



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		REX638			REX639			REX639		
Sampling Date		2021/11/05 16:05			2021/11/06 15:00			2021/11/06 15:00		
COC Number		435933			435933			435933		
	UNITS	Port-4-DUP1A Lab-Dup	RDL	QC Batch	Port-4B	RDL	QC Batch	Port-4B Lab-Dup	RDL	QC Batch
Dissolved Lithium (Li)	ug/L				124	2.5	7706294			
Total Lithium (Li)	ug/L				117	2.5	7707096			
Dissolved Manganese (Mn)	ug/L				15.0	0.25	7706294			
Total Manganese (Mn)	ug/L				14.5	0.25	7707096			
Dissolved Molybdenum (Mo)	ug/L				0.86	0.25	7706294			
Total Molybdenum (Mo)	ug/L				1.73	0.25	7707096			
Dissolved Nickel (Ni)	ug/L				1.35	0.10	7706294			
Total Nickel (Ni)	ug/L				4.76	0.10	7707096			
Dissolved Phosphorus (P)	ug/L				<10	10	7706294			
Dissolved Selenium (Se)	ug/L				<0.20	0.20	7706294			
Total Silicon (Si)	ug/L				3130	250	7707096			
Total Selenium (Se)	ug/L				<0.20	0.20	7707096			
Dissolved Silicon (Si)	ug/L				3350	250	7706294			
Dissolved Silver (Ag)	ug/L				<0.025	0.025	7706294			
Total Silver (Ag)	ug/L				<0.025	0.025	7707096			
Dissolved Strontium (Sr)	ug/L				7560	0.25	7706294			
Total Strontium (Sr)	ug/L				7090	0.25	7707096			
Dissolved Thallium (Tl)	ug/L				<0.010	0.010	7706294			
Total Thallium (Tl)	ug/L				<0.010	0.010	7707096			
Dissolved Tin (Sn)	ug/L				<1.0	1.0	7706294			
Total Tin (Sn)	ug/L				<1.0	1.0	7707096			
Dissolved Titanium (Ti)	ug/L				<2.5	2.5	7706294			
Total Titanium (Ti)	ug/L				<2.5	2.5	7707096			
Dissolved Uranium (U)	ug/L				<0.010	0.010	7706294			
Total Uranium (U)	ug/L				0.011	0.010	7707096			
Dissolved Vanadium (V)	ug/L				<1.0	1.0	7706294			
Total Vanadium (V)	ug/L				<1.0	1.0	7707096			
Dissolved Zinc (Zn)	ug/L				17.2	0.50	7706294			
Total Zinc (Zn)	ug/L				188	0.50	7707096			
Dissolved Calcium (Ca)	mg/L				496	0.25	7707098			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Lab-Dup = Laboratory Initiated Duplicate



Bureau Veritas ID		REX638			REX639			REX639		
Sampling Date		2021/11/05 16:05			2021/11/06 15:00			2021/11/06 15:00		
COC Number		435933			435933			435933		
	UNITS	Port-4-DUP1A Lab-Dup	RDL	QC Batch	455955 Port-4B	RDL	QC Batch	Port-4B Lab-Dup	RDL	QC Batch
Total Calcium (Ca)	mg/L				453	0.25	7707095			
Dissolved Magnesium (Mg)	mg/L				4.73	0.25	7707098			
Total Magnesium (Mg)	mg/L				4.24	0.25	7707095			
Dissolved Potassium (K)	mg/L				10.6	0.25	7707098			
Total Potassium (K)	mg/L				9.26	0.25	7707095			
Dissolved Sodium (Na)	mg/L				265	0.25	7707098			
Total Sodium (Na)	mg/L				233	0.25	7707095			
Dissolved Tellurium (Te)	ug/L				<0.10	0.10	7706294			
Total Tellurium (Te)	ug/L				<0.10	0.10	7707096			
Nutritional Parameters										
Total Phosphorus (P)	mg/L				0.0072	0.0010	7708810			
RADIONUCLIDE										
Radium-226	Bq/L				0.20	0.0050	7759804			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplic	ate		•			•		•		•



RESULTS OF ANAL	1323 01	GROOND	AILN	
Bureau Veritas ID		REX640		
Sampling Date		2021/11/06 15:00		
COC Number		435933		
	UNITS	Port-4-DUP1B	RDL	QC Batch
CONVENTIONALS				
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.073	0.0050	7712013
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	23	1.0	7694447
Calculated TDS	mg/L	2100	1.0	7695611
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7694447
Dissolved Hardness (CaCO3)	mg/L	1320	0.50	7707097
Field Measurements	*		•	
Field Measured Conductivity	uS/cm	2423	N/A	ONSITE
Field Temperature	Celsius	4.9	N/A	ONSITE
Field Measured pH	pН	6.3		ONSITE
Inorganics	•	•	•	
Conductivity	mS/cm	4.06	0.001	7696128
Free Cyanide (CN)	ug/L	1.3 (1)	1.0	7712012
Total Dissolved Solids	mg/L	2350	10	7700775
Fluoride (F-)	mg/L	0.48	0.10	7696125
Total Kjeldahl Nitrogen (TKN)	mg/L	0.31	0.10	7699910
Dissolved Organic Carbon	mg/L	330	4.0	7701390
Total Organic Carbon (TOC)	mg/L	310	4.0	7699915
рН	рН	6.57		7696130
Salinity	N/A	2.3	2.0	7705048
Dissolved Sulphate (SO4)	mg/L	<1.0	1.0	7765307
Total Cyanide (CN)	mg/L	<0.0050	0.0050	7703014
Turbidity	NTU	0.5	0.1	7695241
WAD Cyanide (Free)	ug/L	<1	1	7700852
Alkalinity (Total as CaCO3)	mg/L	23	1.0	7696129
Dissolved Chloride (Cl-)	mg/L	1300	15	7765300
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

RESULTS OF ANALYSES OF GROUND WATER

N/A = Not Applicable

(1) 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.



Bureau Veritas ID		REX640		
Sampling Date		2021/11/06		
		15:00		
COC Number		435933		
	UNITS	Port-4-DUP1B	RDL	QC Batch
Nitrite (N)	mg/L	<0.010	0.010	7696134
Nitrate (N)	mg/L	<0.10	0.10	7696134
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7696134
Metals				
Dissolved Aluminum (Al)	ug/L	6.9	2.5	7706294
Total Aluminum (Al)	ug/L	8.5	2.5	7707096
Dissolved Antimony (Sb)	ug/L	0.94	0.10	7706294
Total Antimony (Sb)	ug/L	0.88	0.10	7707096
Dissolved Arsenic (As)	ug/L	3.20	0.10	7706294
Total Arsenic (As)	ug/L	3.88	0.10	7707096
Dissolved Barium (Ba)	ug/L	92.5	0.10	7706294
Total Barium (Ba)	ug/L	85.7	0.10	7707096
Dissolved Beryllium (Be)	ug/L	<0.050	0.050	7706294
Total Beryllium (Be)	ug/L	<0.050	0.050	7707096
Dissolved Bismuth (Bi)	ug/L	<0.025	0.025	7706294
Total Bismuth (Bi)	ug/L	<0.025	0.025	7707096
Dissolved Boron (B)	ug/L	510	50	7706294
Total Boron (B)	ug/L	456	50	7707096
Dissolved Cadmium (Cd)	ug/L	<0.025	0.025	7706294
Total Cadmium (Cd)	ug/L	<0.025	0.025	7707096
Dissolved Chromium (Cr)	ug/L	<0.50	0.50	7706294
Total Chromium (Cr)	ug/L	1.98	0.50	7707096
Dissolved Cobalt (Co)	ug/L	0.097	0.025	7706294
Total Cobalt (Co)	ug/L	0.127	0.025	7707096
Dissolved Copper (Cu)	ug/L	<0.25	0.25	7706294
Total Copper (Cu)	ug/L	0.36	0.25	7707096
Dissolved Iron (Fe)	ug/L	27.0	5.0	7706294
Total Iron (Fe)	ug/L	161	5.0	7707096
Dissolved Lead (Pb)	ug/L	<0.025	0.025	7706294
Total Lead (Pb)	ug/L	0.250	0.025	7707096
Dissolved Lithium (Li)	ug/L	133	2.5	7706294
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



Bureau Veritas ID		REX640		
Sampling Date		2021/11/06		
		15:00		
COC Number		435933		
	UNITS	Port-4-DUP1B	RDL	QC Batch
Total Lithium (Li)	ug/L	115	2.5	7707096
Dissolved Manganese (Mn)	ug/L	14.7	0.25	7706294
Total Manganese (Mn)	ug/L	14.5	0.25	7707096
Dissolved Molybdenum (Mo)	ug/L	0.89	0.25	7706294
Total Molybdenum (Mo)	ug/L	1.41	0.25	7707096
Dissolved Nickel (Ni)	ug/L	1.36	0.10	7706294
Total Nickel (Ni)	ug/L	3.21	0.10	7707096
Dissolved Phosphorus (P)	ug/L	<10	10	7706294
Dissolved Selenium (Se)	ug/L	<0.20	0.20	7706294
Total Silicon (Si)	ug/L	3230	250	7707096
Total Selenium (Se)	ug/L	<0.20	0.20	7707096
Dissolved Silicon (Si)	ug/L	3540	250	7706294
Dissolved Silver (Ag)	ug/L	<0.025	0.025	7706294
Total Silver (Ag)	ug/L	<0.025	0.025	7707096
Dissolved Strontium (Sr)	ug/L	7870	0.25	7706294
Total Strontium (Sr)	ug/L	7170	0.25	7707096
Dissolved Thallium (Tl)	ug/L	<0.010	0.010	7706294
Total Thallium (Tl)	ug/L	<0.010	0.010	7707096
Dissolved Tin (Sn)	ug/L	<1.0	1.0	7706294
Total Tin (Sn)	ug/L	<1.0	1.0	7707096
Dissolved Titanium (Ti)	ug/L	<2.5	2.5	7706294
Total Titanium (Ti)	ug/L	<2.5	2.5	7707096
Dissolved Uranium (U)	ug/L	<0.010	0.010	7706294
Total Uranium (U)	ug/L	<0.010	0.010	7707096
Dissolved Vanadium (V)	ug/L	<1.0	1.0	7706294
Total Vanadium (V)	ug/L	<1.0	1.0	7707096
Dissolved Zinc (Zn)	ug/L	17.2	0.50	7706294
Total Zinc (Zn)	ug/L	169	0.50	7707096
Dissolved Calcium (Ca)	mg/L	519	0.25	7707098
Total Calcium (Ca)	mg/L	466	0.25	7707095
Dissolved Magnesium (Mg)	mg/L	4.74	0.25	7707098
RDL = Reportable Detection Limit				<u>.</u>
QC Batch = Quality Control Batch				



Bureau Veritas ID		REX640		
Sampling Date		2021/11/06 15:00		
COC Number		435933		
	UNITS	Port-4-DUP1B	RDL	QC Batch
Total Magnesium (Mg)	mg/L	4.39	0.25	7707095
Dissolved Potassium (K)	mg/L	10.7	0.25	7707098
Total Potassium (K)	mg/L	9.60	0.25	7707095
Dissolved Sodium (Na)	mg/L	266	0.25	7707098
Total Sodium (Na)	mg/L	243	0.25	7707095
Dissolved Tellurium (Te)	ug/L	<0.10	0.10	7706294
Total Tellurium (Te)	ug/L	<0.10	0.10	7707096
Nutritional Parameters		•		
Total Phosphorus (P)	mg/L	0.0043	0.0010	7708810
RADIONUCLIDE				
Radium-226	Bq/L	0.18	0.0050	7759804
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		REX639			REX639			REX640		
Sampling Date		2021/11/06			2021/11/06			2021/11/06		
		15:00			15:00			15:00		
COC Number		435933			435933			435933		
	UNITS	Port-4B	RDL	QC Batch	Port-4B	RDL	QC Batch	Port-4-DUP1B	RDL	QC Batch
	UNITS	POIL-4D	KUL	QC Batch	Lab-Dup	KDL		POIL-4-DOP1B	NDL	QC Batch
Calculated Parameters										
Total Hardness (CaCO3)	mg/L	1150	0.50	7707094				1180	0.50	7707094
Metals								•		
Mercury (Hg)	mg/L	<0.00001	0.00001	7701164	<0.00001	0.00001	7701164	<0.00001	0.00001	7701164
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	7701171	<0.00001	0.00001	7701171	<0.00001	0.00001	7701171
RDL = Reportable Detection Limit										
QC Batch = Quality Control Batch										
Lab-Dup = Laboratory Initiated Duplicate										
	ca Bupile									



TEST SUMMARY

Bureau Veritas ID:	REX637
Sample ID:	Port-4A
Matrix:	Ground Water

Collected: 2021/11/05 Shipped: Received: 2021/11/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7765215	N/A	2022/01/05	Neil Dassanayake
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Fluoride	ISE	7701936	2021/11/15	2021/11/16	Surinder Rai
Bromide in water by IC	IC/UV	7712009	N/A	2021/11/16	Kathleen Dalton
Low Level Chloride and Sulphate by AC	KONE	7712011	N/A	2021/11/18	Bradley Freake
Elements by ICPMS Low Level (dissolved)	ICP/MS	7706294	N/A	2021/11/16	Andrew An
Orthophosphate by Konelab (low level)	KONE	7712010	N/A	2021/11/16	Serena Tian
Silica (Reactive)	KONE	7719050	N/A	2021/11/23	Kimberley Wedemire
Nitrate & Nitrite as Nitrogen in Water	LACH	7701848	N/A	2021/11/16	Chandra Nandlal
рН	AT	7765222	2022/01/05	2022/01/05	Neil Dassanayake
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Calculated Total Dissolved Solids	CALC	7695611	N/A	2022/01/06	Automated Statchk
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7701149	2021/11/15	2021/11/16	Kristen Chan

Bureau Veritas ID: REX637 Dup Sample ID: Port-4A Matrix: Ground Water

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7765215	N/A	2022/01/05	Neil Dassanayake
Orthophosphate by Konelab (low level)	KONE	7712010	N/A	2021/11/16	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7701848	N/A	2021/11/16	Chandra Nandlal
рН	AT	7765222	2022/01/05	2022/01/05	Neil Dassanayake

Bureau Veritas ID:	REX638
Sample ID:	Port-4-DUP1A
Matrix:	Ground Water

Collected:	2021/11/05
Shipped:	
Received:	2021/11/10

Collected: 2021/11/05 Shipped: Received: 2021/11/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7767898	N/A	2022/01/06	Neil Dassanayake
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Fluoride	ISE	7701936	2021/11/15	2021/11/16	Surinder Rai
Bromide in water by IC	IC/UV	7712009	N/A	2021/11/16	Kathleen Dalton
Low Level Chloride and Sulphate by AC	KONE	7712011	N/A	2021/11/18	Bradley Freake
Elements by ICPMS Low Level (dissolved)	ICP/MS	7706294	N/A	2021/11/16	Andrew An
Orthophosphate by Konelab (low level)	KONE	7712010	N/A	2021/11/16	Serena Tian
Silica (Reactive)	KONE	7719050	N/A	2021/11/23	Kimberley Wedemire
Nitrate & Nitrite as Nitrogen in Water	LACH	7701845	N/A	2021/11/16	Chandra Nandlal
рН	AT	7767915	2022/01/06	2022/01/06	Neil Dassanayake
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Calculated Total Dissolved Solids	CALC	7695611	N/A	2022/01/07	Automated Statchk
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Low Level Total Suspended Solids	BAL	7701149	2021/11/15	2021/11/16	Kristen Chan



TEST SUMMARY

Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
							2021/11/10
Bureau Veritas ID: Sample ID:	REX638 Dup Port-4-DUP1A					Collected: Shipped:	2021/11/05

 Alkalinity
 AT
 7767898
 N/A
 2022/01/06
 Neil Dassanayake

 pH
 AT
 7767915
 2022/01/06
 2022/01/06
 Neil Dassanayake

Bureau Veritas ID: REX639 Sample ID: Port-4B Matrix: Ground Water Collected: 2021/11/06 Shipped: Received: 2021/11/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7696129	N/A	2021/11/12	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	7694447	N/A	2021/11/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	7765300	N/A	2022/01/06	Alina Dobreanu
Conductivity	AT	7696128	N/A	2021/11/12	Yogesh Patel
Free (WAD) Cyanide	SKAL/CN	7700852	N/A	2021/11/15	Aditiben Patel
Total Cyanide	SKAL/CN	7703014	2021/11/16	2021/11/16	Aditiben Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7701390	N/A	2021/11/16	Julianna Castiglione
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Fluoride	ISE	7696125	2021/11/11	2021/11/12	Yogesh Patel
Dissolved Mercury (low level)	CV/AA	7701171	2021/11/15	2021/11/17	Medhat Nasr
Mercury (low level)	CV/AA	7701164	2021/11/15	2021/11/17	Medhat Nasr
Cyanide (Free)	SPEC	7712012	2021/11/17	2021/11/17	Amy Phan
Hardness Total (calculated as CaCO3)	CALC	7707094	N/A	2021/11/17	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7707097	N/A	2021/11/17	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7707098	N/A	2021/11/17	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7706294	N/A	2021/11/16	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7707095	N/A	2021/11/17	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7707096	N/A	2021/11/17	Andrew An
Ammonia-N Low Level	KONE/UVVS	7712013	2021/11/17	2021/11/17	Ana Katrina Cariaga
Total Phosphorus Low Level Total	KONE	7708810	2021/11/17	2021/11/17	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7696134	N/A	2021/11/12	Chandra Nandlal
рН	AT	7696130	2021/11/11	2021/11/12	Yogesh Patel
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Radium-226 Low Level	AS	7759804	N/A	2021/12/14	Ryan Wong
Salinity		7705048	N/A	2021/11/17	Brent Boudreau
Sulphate by Automated Colourimetry	KONE	7765307	N/A	2022/01/07	Avneet Kour Sudan
Calculated Total Dissolved Solids	CALC	7695611	N/A	2022/01/07	Automated Statchk
Total Dissolved Solids	BAL	7700775	2021/11/15	2021/11/16	Kristen Chan
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Total Kjeldahl Nitrogen in Water	SKAL	7699910	2021/11/14	2021/11/17	Massarat Jan
Total Organic Carbon (TOC)	TOCV/NDIR	7699915	N/A	2021/11/15	Julianna Castiglione
Turbidity	AT	7695241	N/A	2021/11/12	Neil Dassanayake



TEST SUMMARY

Bureau Veritas ID:	REX639 Dup
Sample ID:	Port-4B
Matrix:	Ground Water

Collected: 2021/11/06 Shipped: Received: 2021/11/10

Collected: 2021/11/06

Received: 2021/11/10

Shipped:

Instrumentation	Batch	Extracted	Date Analyzed	Analyst
AT	7696129	N/A	2021/11/12	Yogesh Patel
AT	7696128	N/A	2021/11/12	Yogesh Patel
ISE	7696125	2021/11/11	2021/11/12	Yogesh Patel
CV/AA	7701171	2021/11/15	2021/11/17	Medhat Nasr
CV/AA	7701164	2021/11/15	2021/11/17	Medhat Nasr
SPEC	7712012	2021/11/17	2021/11/17	Amy Phan
AT	7696130	2021/11/11	2021/11/12	Yogesh Patel
	7705048	N/A	2021/11/17	Brent Boudreau
	AT AT ISE CV/AA CV/AA SPEC	AT 7696129 AT 7696128 ISE 7696125 CV/AA 7701171 CV/AA 7701164 SPEC 7712012 AT 7696130	AT 7696129 N/A AT 7696128 N/A ISE 7696125 2021/11/11 CV/AA 7701171 2021/11/15 CV/AA 7701164 2021/11/15 SPEC 7712012 2021/11/17 AT 7696130 2021/11/11	AT 7696129 N/A 2021/11/12 AT 7696128 N/A 2021/11/12 ISE 7696125 2021/11/11 2021/11/12 CV/AA 7701171 2021/11/15 2021/11/17 CV/AA 7701164 2021/11/15 2021/11/17 SPEC 7712012 2021/11/17 2021/11/17 AT 7696130 2021/11/11 2021/11/12

Bureau Veritas ID: REX640 Sample ID: Port-4-DUP1B Matrix: Ground Water

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7696129	N/A	2021/11/12	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	7694447	N/A	2021/11/12	Automated Statchk
Chloride by Automated Colourimetry	KONE	7765300	N/A	2022/01/06	Alina Dobreanu
Conductivity	AT	7696128	N/A	2021/11/12	Yogesh Patel
Free (WAD) Cyanide	SKAL/CN	7700852	N/A	2021/11/15	Aditiben Patel
Total Cyanide	SKAL/CN	7703014	2021/11/16	2021/11/16	Aditiben Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7701390	N/A	2021/11/16	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Fluoride	ISE	7696125	2021/11/11	2021/11/12	Yogesh Patel
Dissolved Mercury (low level)	CV/AA	7701171	2021/11/15	2021/11/17	Medhat Nasr
Mercury (low level)	CV/AA	7701164	2021/11/15	2021/11/17	Medhat Nasr
Cyanide (Free)	SPEC	7712012	2021/11/17	2021/11/17	Amy Phan
Hardness Total (calculated as CaCO3)	CALC	7707094	N/A	2021/11/17	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7707097	N/A	2021/11/17	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7707098	N/A	2021/11/17	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7706294	N/A	2021/11/16	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7707095	N/A	2021/11/17	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7707096	N/A	2021/11/17	Andrew An
Ammonia-N Low Level	KONE/UVVS	7712013	2021/11/17	2021/11/17	Ana Katrina Cariaga
Total Phosphorus Low Level Total	KONE	7708810	2021/11/17	2021/11/17	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7696134	N/A	2021/11/12	Chandra Nandlal
рН	AT	7696130	2021/11/11	2021/11/12	Yogesh Patel
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Radium-226 Low Level	AS	7759804	N/A	2021/12/14	Ryan Wong
Salinity		7705048	N/A	2021/11/17	Brent Boudreau
Sulphate by Automated Colourimetry	KONE	7765307	N/A	2022/01/07	Avneet Kour Sudan
Calculated Total Dissolved Solids	CALC	7695611	N/A	2022/01/07	Automated Statchk
Total Dissolved Solids	BAL	7700775	2021/11/15	2021/11/16	Kristen Chan
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/11	Khanh Vi Trinh
Total Kjeldahl Nitrogen in Water	SKAL	7699910	2021/11/14	2021/11/16	Massarat Jan



TEST SUMMARY

Bureau Veritas ID: Sample ID:	REX640 Port-4-DUP1B	Collected: Shipped:	2021/11/06
	Ground Water		2021/11/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Organic Carbon (TOC)	TOCV/NDIR	7699915	N/A	2021/11/15	Julianna Castiglione
Turbidity	AT	7695241	N/A	2021/11/12	Neil Dassanayake



GENERAL COMMENTS

Fach +	omnoratura is tha	average of up to t	han and a temperatures taken at respirit								
Each	emperature is the	average of up to th	hree cooler temperatures taken at receipt								
	Package 1	13.7°C]								
	•		alyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the essarily imply that results are compromised.								
	Sample REX638 [Port-4-DUP1A] : Sample was analyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.										
Sampl	e REX640 [Port-4-1	DUP1B] : TOC< DO	C: Both values fall within the method uncertainty for duplicates and are likely equivalent.								
Result	s relate only to th	e items tested.									



QUALITY ASSURANCE REPORT

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix Spike		SPIKED	BLANK	Method	Blank	RPD		QC Sta	indard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7695241	Turbidity	2021/11/12			98	85 - 115	<0.1	NTU	0.43	20		
7696125	Fluoride (F-)	2021/11/12	81	80 - 120	103	80 - 120	<0.10	mg/L	0.93	20		
7696128	Conductivity	2021/11/12			98	85 - 115	<0.001	mS/cm	0.24	25		
7696129	Alkalinity (Total as CaCO3)	2021/11/12			95	85 - 115	<1.0	mg/L	6.1	20		
7696130	рН	2021/11/12			102	98 - 103			1.1	N/A		
7696134	Nitrate (N)	2021/11/12	86	80 - 120	91	80 - 120	<0.10	mg/L	1.8	20		
7696134	Nitrite (N)	2021/11/12	102	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
7699910	Total Kjeldahl Nitrogen (TKN)	2021/11/16	80	80 - 120	95	80 - 120	<0.10	mg/L	1.4	20	92	80 - 120
7699915	Total Organic Carbon (TOC)	2021/11/15	97	80 - 120	96	80 - 120	<0.40	mg/L	1.4	20		
7700775	Total Dissolved Solids	2021/11/16					<10	mg/L	0.39	25	97	90 - 110
7700852	WAD Cyanide (Free)	2021/11/15	102	80 - 120	102	80 - 120	<1	ug/L	NC	20		
7701149	Total Suspended Solids	2021/11/16					<1	mg/L	8.0	25	101	85 - 115
7701164	Mercury (Hg)	2021/11/17	90	75 - 125	94	80 - 120	<0.00001	mg/L	NC	20		
7701171	Dissolved Mercury (Hg)	2021/11/17	97	75 - 125	104	80 - 120	<0.00001	mg/L	NC	20		
7701390	Dissolved Organic Carbon	2021/11/16	94	80 - 120	96	80 - 120	<0.40	mg/L	NC	20		
7701845	Nitrate (N)	2021/11/16	102	80 - 120	99	80 - 120	<0.10	mg/L	0.53	20		
7701845	Nitrite (N)	2021/11/16	101	80 - 120	103	80 - 120	<0.010	mg/L				
7701848	Nitrate (N)	2021/11/16	100	80 - 120	98	80 - 120	<0.10	mg/L	NC	20		
7701848	Nitrite (N)	2021/11/16	103	80 - 120	103	80 - 120	<0.010	mg/L	NC	20		
7701936	Fluoride (F-)	2021/11/16	104	80 - 120	103	80 - 120	<0.10	mg/L	1.4	20		
7703014	Total Cyanide (CN)	2021/11/16	95	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
7705048	Salinity	2021/11/17					<2.0	N/A	0	25	102	80 - 120
7706294	Dissolved Aluminum (Al)	2021/11/16	102	80 - 120	101	80 - 120	<0.50	ug/L				
7706294	Dissolved Antimony (Sb)	2021/11/16	99	80 - 120	101	80 - 120	<0.020	ug/L				
7706294	Dissolved Arsenic (As)	2021/11/16	102	80 - 120	100	80 - 120	<0.020	ug/L				
7706294	Dissolved Barium (Ba)	2021/11/16	NC	80 - 120	101	80 - 120	<0.020	ug/L				
7706294	Dissolved Beryllium (Be)	2021/11/16	91	80 - 120	99	80 - 120	<0.010	ug/L				
7706294	Dissolved Bismuth (Bi)	2021/11/16	89	80 - 120	98	80 - 120	<0.0050	ug/L				
7706294	Dissolved Boron (B)	2021/11/16	93	80 - 120	98	80 - 120	<10	ug/L		1		
7706294	Dissolved Cadmium (Cd)	2021/11/16	96	80 - 120	100	80 - 120	<0.0050	ug/L		1		
7706294	Dissolved Calcium (Ca)	2021/11/16	NC	80 - 120	101	80 - 120	<10	ug/L				



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix Spike		SPIKED	BLANK	Method	Blank	RPD		QC Sta	andard
QC Batch	Parameter	Date	% Recovery QC Limit		% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7706294	Dissolved Chromium (Cr)	2021/11/16	95	80 - 120	99	80 - 120	<0.10	ug/L				
7706294	Dissolved Cobalt (Co)	2021/11/16	91	80 - 120	96	80 - 120	<0.0050	ug/L				
7706294	Dissolved Copper (Cu)	2021/11/16	85	80 - 120	94	80 - 120	<0.050	ug/L				
7706294	Dissolved Iron (Fe)	2021/11/16	101	80 - 120	101	80 - 120	<1.0	ug/L				
7706294	Dissolved Lead (Pb)	2021/11/16	92	80 - 120	101	80 - 120	<0.0050	ug/L				
7706294	Dissolved Lithium (Li)	2021/11/16	NC	80 - 120	95	80 - 120	<0.50	ug/L				
7706294	Dissolved Magnesium (Mg)	2021/11/16	102	80 - 120	103	80 - 120	<10	ug/L				
7706294	Dissolved Manganese (Mn)	2021/11/16	94	80 - 120	98	80 - 120	<0.050	ug/L				
7706294	Dissolved Molybdenum (Mo)	2021/11/16	108	80 - 120	104	80 - 120	<0.050	ug/L				
7706294	Dissolved Nickel (Ni)	2021/11/16	90	80 - 120	96	80 - 120	<0.020	ug/L				
7706294	Dissolved Phosphorus (P)	2021/11/16	103	80 - 120	101	80 - 120	<2.0	ug/L				
7706294	Dissolved Potassium (K)	2021/11/16	NC	80 - 120	104	80 - 120	<10	ug/L				
7706294	Dissolved Selenium (Se)	2021/11/16	98	80 - 120	100	80 - 120	<0.040	ug/L				
7706294	Dissolved Silicon (Si)	2021/11/16	101	80 - 120	107	80 - 120	<50	ug/L				
7706294	Dissolved Silver (Ag)	2021/11/16	92	80 - 120	99	80 - 120	<0.0050	ug/L				
7706294	Dissolved Sodium (Na)	2021/11/16	NC	80 - 120	102	80 - 120	<10	ug/L				
7706294	Dissolved Strontium (Sr)	2021/11/16	NC	80 - 120	99	80 - 120	<0.050	ug/L				
7706294	Dissolved Tellurium (Te)	2021/11/16	90	80 - 120	96	80 - 120	<0.020	ug/L				
7706294	Dissolved Thallium (TI)	2021/11/16	93	80 - 120	98	80 - 120	<0.0020	ug/L				
7706294	Dissolved Tin (Sn)	2021/11/16	96	80 - 120	101	80 - 120	<0.20	ug/L				
7706294	Dissolved Titanium (Ti)	2021/11/16	109	80 - 120	101	80 - 120	<0.50	ug/L				
7706294	Dissolved Uranium (U)	2021/11/16	99	80 - 120	102	80 - 120	<0.0020	ug/L				
7706294	Dissolved Vanadium (V)	2021/11/16	101	80 - 120	99	80 - 120	<0.20	ug/L				
7706294	Dissolved Zinc (Zn)	2021/11/16	90	80 - 120	101	80 - 120	<0.10	ug/L				
7707096	Total Aluminum (Al)	2021/11/17	100	80 - 120	104	80 - 120	<0.50	ug/L				
7707096	Total Antimony (Sb)	2021/11/17	101	80 - 120	102	80 - 120	<0.020	ug/L				
7707096	Total Arsenic (As)	2021/11/17	103	80 - 120	99	80 - 120	<0.020	ug/L				
7707096	Total Barium (Ba)	2021/11/17	NC	80 - 120	100	80 - 120	<0.020	ug/L				
7707096	Total Beryllium (Be)	2021/11/17	98	80 - 120	101	80 - 120	<0.010	ug/L				
7707096	Total Bismuth (Bi)	2021/11/17	95	80 - 120	99	80 - 120	<0.0050	ug/L		T		
7707096	Total Boron (B)	2021/11/17	97	80 - 120	103	80 - 120	<10	ug/L				



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix	Spike	SPIKED	BLANK	Method	Blank	RPD		QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7707096	Total Cadmium (Cd)	2021/11/17	100	80 - 120	101	80 - 120	<0.0050	ug/L				
7707096	Total Chromium (Cr)	2021/11/17	97	80 - 120	100	80 - 120	<0.10	ug/L				
7707096	Total Cobalt (Co)	2021/11/17	92	80 - 120	97	80 - 120	<0.0050	ug/L				
7707096	Total Copper (Cu)	2021/11/17	87	80 - 120	95	80 - 120	<0.050	ug/L				
7707096	Total Iron (Fe)	2021/11/17	97	80 - 120	102	80 - 120	<1.0	ug/L				
7707096	Total Lead (Pb)	2021/11/17	100	80 - 120	101	80 - 120	<0.0050	ug/L				
7707096	Total Lithium (Li)	2021/11/17	93	80 - 120	98	80 - 120	<0.50	ug/L				
7707096	Total Manganese (Mn)	2021/11/17	NC	80 - 120	99	80 - 120	<0.050	ug/L				
7707096	Total Molybdenum (Mo)	2021/11/17	109	80 - 120	104	80 - 120	<0.050	ug/L				
7707096	Total Nickel (Ni)	2021/11/17	90	80 - 120	98	80 - 120	<0.020	ug/L				
7707096	Total Selenium (Se)	2021/11/17	104	80 - 120	100	80 - 120	<0.040	ug/L				
7707096	Total Silicon (Si)	2021/11/17	NC	80 - 120	108	80 - 120	<50	ug/L				
7707096	Total Silver (Ag)	2021/11/17	97	80 - 120	98	80 - 120	<0.0050	ug/L				
7707096	Total Strontium (Sr)	2021/11/17	NC	80 - 120	99	80 - 120	<0.050	ug/L				
7707096	Total Tellurium (Te)	2021/11/17	103	80 - 120	102	80 - 120	<0.020	ug/L				
7707096	Total Thallium (Tl)	2021/11/17	100	80 - 120	100	80 - 120	<0.0020	ug/L				
7707096	Total Tin (Sn)	2021/11/17	100	80 - 120	101	80 - 120	<0.20	ug/L				
7707096	Total Titanium (Ti)	2021/11/17	104	80 - 120	105	80 - 120	<0.50	ug/L				
7707096	Total Uranium (U)	2021/11/17	110	80 - 120	105	80 - 120	<0.0020	ug/L				
7707096	Total Vanadium (V)	2021/11/17	100	80 - 120	101	80 - 120	<0.20	ug/L				
7707096	Total Zinc (Zn)	2021/11/17	95	80 - 120	102	80 - 120	<0.10	ug/L				
7708810	Total Phosphorus (P)	2021/11/17	96	80 - 120	96	80 - 120	<0.0010	mg/L	2.3	20	85	80 - 120
7712009	Dissolved Bromide (Br-)	2021/11/16	106	80 - 120	103	80 - 120	<0.010	mg/L				
7712010	Orthophosphate (P)	2021/11/16	116	80 - 120	110	80 - 120	<0.0010	mg/L	NC	20		
7712011	Dissolved Chloride (Cl-)	2021/11/18	NC	80 - 120	101	80 - 120	<0.50	mg/L				
7712011	Dissolved Sulphate (SO4)	2021/11/18	NC	80 - 120	106	80 - 120	<0.50	mg/L				
7712012	Free Cyanide (CN)	2021/11/17	87	80 - 120	91	80 - 120	<1.0	ug/L	NC	20		
7712013	Total Nitrogen (Ammonia Nitrogen)	2021/11/17	99	N/A	99	N/A	<0.0050	mg/L				
7719050	Reactive Silica (SiO2)	2021/11/23	NC	80 - 120	102	80 - 120	<0.050	mg/L	0.32	20		
7759804	Radium-226	2021/12/30			99	85 - 115	<0.0050	Bq/L	NC	N/A		
7765215	Alkalinity (Total as CaCO3)	2022/01/05			94	85 - 115	<1.0	mg/L	1.4	20		



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7765222	рН	2022/01/05			102	98 - 103			0.90	N/A		
7765300	Dissolved Chloride (Cl-)	2022/01/06	102	80 - 120	105	80 - 120	<1.0	mg/L	NC	20		
7765307	Dissolved Sulphate (SO4)	2022/01/07	99	75 - 125	102	80 - 120	<1.0	mg/L	1.6	20		
7767898	Alkalinity (Total as CaCO3)	2022/01/06			97	85 - 115	<1.0	mg/L	6.8	20		
7767915	рН	2022/01/06			102	98 - 103			0.94	N/A		

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).



VALIDATION SIGNATURE PAGE

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

Anastassia Hamanov, Scientific Specialist

Blake Barber, Laboratory Manager

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

Colleen Acker, B.Sc, Scientific Service Specialist

David Huang, BBY Scientific Specialist

U

Marjolen Busslinger, Scientific Specialist

Heather Groves, Dip.BioSci, Laboratory Manager – Organic



VALIDATION SIGNATURE PAGE(CONT'D)

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

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

Sze Yeung Fock, B.Sc., Scientific Specialist

BV Labs 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 Signature Page.



Exceedance Summary Table – Metal Mining Effluent Reg

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summ	ary table is for information purp	oses only and should no	t be considered a compref	nensive listing or	statement of	conformance to
applicable regulatory g	guidelines.					



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/21 Report #: R6971515 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X4737

Received: 2021/11/12, 09:00

Sample Matrix: Ground Water # Samples Received: 4

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	2	N/A	2021/11/17	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	2	N/A	2021/11/18	CAM SOP-00102	APHA 4500-CO2 D
Conductivity (1)	2	N/A	2021/11/17	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	2	N/A	2021/11/17	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	2	2021/11/17	2021/11/17	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 6)	2	N/A	2021/11/18	CAM SOP-00446	SM 23 5310 B m
Field Measured Conductivity (1, 7)	4	N/A	2021/11/13		Field Meter
Fluoride (1)	2	2021/11/16	2021/11/17	CAM SOP-00449	SM 23 4500-F C m
Fluoride (1)	2	2021/11/18	2021/11/19	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	2	2021/11/17	2021/11/17	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	2	2021/11/17	2021/11/17	CAM SOP-00453	EPA 7470 m
Bromide in water by IC (2)	2	N/A	2021/11/17		
Low Level Chloride and Sulphate by AC (2)	1	N/A	2021/11/18	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Low Level Chloride and Sulphate by AC (2)	1	N/A	2021/11/22	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	2	2021/11/19	2021/11/19	CAL SOP-00266	EPA 9016d R0 m
Hardness Total (calculated as CaCO3) (3, 8)	2	N/A	2021/12/15	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	2	N/A	2021/11/18	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	2	N/A	2021/11/18	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (dissolved) (3)	2	N/A	2021/11/18	BBY7SOP-00002	EPA 6020B R2 m
Elements by ICPMS Low Level (dissolved) (3)	2	N/A	2021/12/02	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	2	N/A	2021/12/15	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (total) (3)	2	N/A	2021/11/22	BBY7SOP-00002	EPA 6020B R2 m
Ammonia-N Low Level (2)	2	2021/11/17	2021/11/18	AB SOP-00007	SM23 4500 NH3 A G m
Orthophosphate by Konelab (low level) (2)	2	N/A	2021/11/17		
Silica (Reactive) (2)	2	N/A	2021/11/23	AB SOP-00011	EPA370.1 R1978 m
Total Phosphorus Low Level Total (2)	2	2021/11/18	2021/11/18	AB SOP-00024	SM 23 4500-P A,B,F m
Nitrate & Nitrite as Nitrogen in Water (1, 9)	2	N/A	2021/11/17	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (1, 9)	1	N/A	2021/11/19	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (1, 9)	1	N/A	2021/11/22	CAM SOP-00440	SM 23 4500-NO3I/NO2B



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/21 Report #: R6971515 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X4737

Received: 2021/11/12, 09:00

Sample Matrix: Ground Water # Samples Received: 4

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
pH (1)	2	2021/11/16	2021/11/17	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (1, 7)	4	N/A	2021/11/13		Field pH Meter
Radium-226 Low Level (4, 10)	2	N/A	2022/01/20	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Salinity (5, 11)	2	N/A	2021/11/23		SM 22 2520B
Total Dissolved Solids (1)	2	2021/11/17	2021/11/18	CAM SOP-00428	SM 23 2540C m
Field Temperature (1, 7)	4	N/A	2021/11/13		Field Thermometer
Total Kjeldahl Nitrogen in Water (1)	2	2021/11/16	2021/11/17	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 12)	2	N/A	2021/11/17	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids (1)	2	2021/11/17	2021/11/18	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	2	N/A	2021/11/17	CAM SOP-00417	SM 23 2130 B m

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. This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

Page 2 of 20



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/21 Report #: R6971515 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X4737

Received: 2021/11/12, 09:00

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

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8

(3) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5

(4) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9

(5) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

(6) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(7) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas Laboratories.

(8) "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).

(9) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(10) Radium-226 results have not been corrected for blanks.

(11) Non-accredited test method

(12) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Katherine Szozda, Project Manager Email: Katherine.Szozda@bureauveritas.com Phone# (613)274-0573 Ext:7063633

BV Labs 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 Signature Page.



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFN693		RFN694			RFN694		
Sampling Date		2021/11/08		2021/11/08			2021/11/08		
		16:51		16:51			16:51		
COC Number		435927		435927			435927		
	UNITS	Port-3A	QC Batch	Port-3-DUP1A	RDL	QC Batch	Port-3-DUP1A Lab-Dup	RDL	QC Batch
CONVENTIONALS									
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.082	7719324	0.080	0.0050	7719324			
Field Measurements	•		•						
Field Measured Conductivity	uS/cm	4407	ONSITE	4407	N/A	ONSITE			
Field Temperature	Celsius	6.1	ONSITE	6.1	N/A	ONSITE			
Field Measured pH	рН	7.0	ONSITE	7.0		ONSITE			
Inorganics			•	•			•		
Dissolved Bromide (Br-)	mg/L	26	7719321	26	0.20	7719321			
Total Dissolved Solids	mg/L	4270	7705627	3580	10	7705627			
Fluoride (F-)	mg/L	0.98	7709688	0.97	0.10	7709688			
Total Kjeldahl Nitrogen (TKN)	mg/L	0.75	7703857	0.66	0.20	7703857			
Total Organic Carbon (TOC)	mg/L	370	7703799	380	4.0	7703799			
Orthophosphate (P)	mg/L	<0.0010	7719322	<0.0010	0.0010	7719322	<0.0010	0.0010	7719322
Reactive Silica (SiO2)	mg/L	9.4	7719050	8.2	0.050	7719050			
Total Suspended Solids	mg/L	3	7705797	2	1	7705797			
Total Cyanide (CN)	mg/L	<0.0050	7705467	<0.0050	0.0050	7705467			
WAD Cyanide (Free)	ug/L	<1	7705600	<1	1	7705600			
Dissolved Chloride (Cl-)	mg/L	2400	7719320	2600	25	7712011			
Nitrite (N)	mg/L	<0.010	7709788	<0.010	0.010	7709640			
Nitrate (N)	mg/L	<0.10	7709788	<0.10	0.10	7709640			
Dissolved Sulphate (SO4)	mg/L	0.96	7719320	1.2	0.50	7712011			
Nitrate + Nitrite (N)	mg/L	<0.10	7709788	<0.10	0.10	7709640			
Metals			•	•			•		
Dissolved Aluminum (Al)	ug/L	8.3	7769358	7.2	2.5	7769358			
Dissolved Antimony (Sb)	ug/L	1.20	7769358	1.22	0.10	7769358			
Dissolved Arsenic (As)	ug/L	2.59	7769358	2.46	0.10	7769358			
Dissolved Barium (Ba)	ug/L	80.1	7769358	80.3	0.10	7769358			
Dissolved Beryllium (Be)	ug/L	<0.050	7769358	<0.050	0.050	7769358			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Dupli	cate								

N/A = Not Applicable



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFN693		RFN694			RFN694		
Sampling Date		2021/11/08		2021/11/08			2021/11/08		
		16:51		16:51			16:51		
COC Number		435927		435927			435927		
	UNITS	Port-3A	QC Batch	Port-3-DUP1A	RDL	QC Batch	Port-3-DUP1A Lab-Dup	RDL	QC Batch
Dissolved Bismuth (Bi)	ug/L	<0.025	7769358	<0.025	0.025	7769358			
Dissolved Boron (B)	ug/L	902	7769358	913	50	7769358			
Dissolved Cadmium (Cd)	ug/L	<0.025	7769358	<0.025	0.025	7769358			
Dissolved Chromium (Cr)	ug/L	<0.50	7769358	<0.50	0.50	7769358			
Dissolved Cobalt (Co)	ug/L	0.234	7769358	0.255	0.025	7769358			
Dissolved Copper (Cu)	ug/L	<0.25	7769358	<0.25	0.25	7769358			
Dissolved Iron (Fe)	ug/L	21.7	7769358	18.5	5.0	7769358			
Dissolved Lead (Pb)	ug/L	<0.025	7769358	<0.025	0.025	7769358			
Dissolved Lithium (Li)	ug/L	430	7769358	441	2.5	7769358			
Dissolved Manganese (Mn)	ug/L	13.3	7769358	13.2	0.25	7769358			
Dissolved Molybdenum (Mo)	ug/L	3.65	7769358	3.68	0.25	7769358			
Dissolved Nickel (Ni)	ug/L	0.73	7769358	0.77	0.10	7769358			
Dissolved Phosphorus (P)	ug/L	<10	7769358	<10	10	7769358			
Dissolved Selenium (Se)	ug/L	<0.20	7769358	<0.20	0.20	7769358			
Dissolved Silicon (Si)	ug/L	2860	7769358	2850	250	7769358			
Dissolved Silver (Ag)	ug/L	<0.025	7769358	<0.025	0.025	7769358			
Dissolved Strontium (Sr)	ug/L	15300	7769358	15500	0.25	7769358			
Dissolved Thallium (TI)	ug/L	<0.010	7769358	<0.010	0.010	7769358			
Dissolved Tin (Sn)	ug/L	<1.0	7769358	<1.0	1.0	7769358			
Dissolved Titanium (Ti)	ug/L	<2.5	7769358	<2.5	2.5	7769358			
Dissolved Uranium (U)	ug/L	0.014	7769358	0.021	0.010	7769358			
Dissolved Vanadium (V)	ug/L	<1.0	7769358	<1.0	1.0	7769358			
Dissolved Zinc (Zn)	ug/L	54.5	7769358	45.0	0.50	7769358			
Dissolved Tellurium (Te)	ug/L	0.10	7769358	0.13	0.10	7769358			
Nutritional Parameters				•					
Total Phosphorus (P)	mg/L	0.0055	7719323	0.0047	0.0010	7719323			
RADIONUCLIDE									
Radium-226	Bq/L	0.38	7763072	0.30	0.0050	7763072			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplic	cate								



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFN695			RFN695			RFN696		
Sampling Date		2021/11/09			2021/11/09			2021/11/09		
		10:13			10:13			10:13		
COC Number		435927			435927			435927		
	UNITS	Port-3-3B	RDL	QC Batch	Port-3-3B Lab-Dup	RDL	QC Batch	Port-3-DUP1B	RDL	QC Batch
Calculated Parameters										
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	54	1.0	7699110				52	1.0	7699110
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7699110				<1.0	1.0	7699110
Dissolved Hardness (CaCO3)	mg/L	2350	0.50	7709309				2310	0.50	7709309
Field Measurements										
Field Measured Conductivity	uS/cm	4399	N/A	ONSITE				4399	N/A	ONSITE
Field Temperature	Celsius	6.8	N/A	ONSITE				6.8	N/A	ONSITE
Field Measured pH	рН	6.9		ONSITE				6.9		ONSITE
Inorganics										
Conductivity	mS/cm	6.43	0.001	7704520				6.50	0.001	7704520
Free Cyanide (CN)	ug/L	1.5 (1)	1.0	7719100				1.5 (1)	1.0	7719100
Fluoride (F-)	mg/L	0.99	0.10	7704513				0.97	0.10	7704513
Dissolved Organic Carbon	mg/L	240	2.0	7707222				220	2.0	7704074
рН	рН	6.64		7704530				6.61		7704530
Salinity	N/A	4.0	2.0	7730585	4.0	2.0	7730585	3.9	2.0	7730585
Turbidity	NTU	0.5	0.1	7703556				0.5	0.1	7703556
Alkalinity (Total as CaCO3)	mg/L	54	1.0	7704533				52	1.0	7704533
Nitrite (N)	mg/L	<0.010	0.010	7704711				<0.010	0.010	7704711
Nitrate (N)	mg/L	<0.10	0.10	7704711				<0.10	0.10	7704711
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7704711				<0.10	0.10	7704711
Metals										
Dissolved Aluminum (Al)	ug/L	12.6	2.5	7708874	11.2	2.5	7708874	13.8	2.5	7708874
Total Aluminum (Al)	ug/L	12.0	2.5	7728997				10.8	2.5	7728997
Dissolved Antimony (Sb)	ug/L	1.11	0.10	7708874	1.16	0.10	7708874	1.18	0.10	7708874
Total Antimony (Sb)	ug/L	0.97	0.10	7728997				0.97	0.10	7728997
Dissolved Arsenic (As)	ug/L	1.95	0.10	7708874	1.98	0.10	7708874	1.97	0.10	7708874

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable

(1) 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 OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFN695			RFN695			RFN696		
Sampling Date		2021/11/09 10:13			2021/11/09 10:13			2021/11/09 10:13		
COC Number		435927			435927			435927		
	UNITS	Port-3-3B	RDL	QC Batch	Port-3-3B Lab-Dup	RDL	QC Batch	Port-3-DUP1B	RDL	QC Batch
Total Arsenic (As)	ug/L	3.58	0.10	7728997				2.44	0.10	7728997
Dissolved Barium (Ba)	ug/L	76.3	0.10	7708874	77.1	0.10	7708874	75.5	0.10	7708874
Total Barium (Ba)	ug/L	81.2	0.10	7728997				79.9	0.10	7728997
Dissolved Beryllium (Be)	ug/L	<0.050	0.050	7708874	<0.050	0.050	7708874	<0.050	0.050	7708874
Total Beryllium (Be)	ug/L	<0.050	0.050	7728997				<0.050	0.050	7728997
Dissolved Bismuth (Bi)	ug/L	<0.025	0.025	7708874	<0.025	0.025	7708874	<0.025	0.025	7708874
Total Bismuth (Bi)	ug/L	<0.025	0.025	7728997				<0.025	0.025	7728997
Dissolved Boron (B)	ug/L	918	50	7708874	928	50	7708874	910	50	7708874
Total Boron (B)	ug/L	881	50	7728997				874	50	7728997
Dissolved Cadmium (Cd)	ug/L	<0.025	0.025	7708874	<0.025	0.025	7708874	<0.025	0.025	7708874
Total Cadmium (Cd)	ug/L	<0.025	0.025	7728997				<0.025	0.025	7728997
Dissolved Chromium (Cr)	ug/L	<0.50	0.50	7708874	<0.50	0.50	7708874	<0.50	0.50	7708874
Total Chromium (Cr)	ug/L	<0.50	0.50	7728997				<0.50	0.50	7728997
Dissolved Cobalt (Co)	ug/L	0.215	0.025	7708874	0.198	0.025	7708874	0.188	0.025	7708874
Total Cobalt (Co)	ug/L	0.195	0.025	7728997				0.192	0.025	7728997
Dissolved Copper (Cu)	ug/L	<0.25	0.25	7708874	<0.25	0.25	7708874	<0.25	0.25	7708874
Total Copper (Cu)	ug/L	<0.25	0.25	7728997				<0.25	0.25	7728997
Dissolved Iron (Fe)	ug/L	7.1	5.0	7708874	6.6	5.0	7708874	8.1	5.0	7708874
Total Iron (Fe)	ug/L	43.0	5.0	7728997				44.3	5.0	7728997
Dissolved Lead (Pb)	ug/L	<0.025	0.025	7708874	<0.025	0.025	7708874	<0.025	0.025	7708874
Total Lead (Pb)	ug/L	0.093	0.025	7728997				0.091	0.025	7728997
Dissolved Lithium (Li)	ug/L	446	2.5	7708874	479	2.5	7708874	449	2.5	7708874
Total Lithium (Li)	ug/L	421	2.5	7728997				420	2.5	7728997
Dissolved Manganese (Mn)	ug/L	10.9	0.25	7708874	11.1	0.25	7708874	11.2	0.25	7708874
Total Manganese (Mn)	ug/L	11.7	0.25	7728997				11.2	0.25	7728997
Dissolved Molybdenum (Mo)	ug/L	2.96	0.25	7708874	2.92	0.25	7708874	2.85	0.25	7708874
Total Molybdenum (Mo)	ug/L	2.87	0.25	7728997				2.83	0.25	7728997
Dissolved Nickel (Ni)	ug/L	1.24	0.10	7708874	1.15	0.10	7708874	1.07	0.10	7708874
Total Nickel (Ni)	ug/L	0.90	0.10	7728997				1.10	0.10	7728997
Dissolved Phosphorus (P)	ug/L	17	10	7708874	15	10	7708874	15	10	7708874
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

QC Batch = Quality Control Batch



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFN695			RFN695			RFN696		
Sampling Date		2021/11/09			2021/11/09			2021/11/09		
		10:13			10:13			10:13		
COC Number		435927			435927			435927		
	UNITS	Port-3-3B	RDL	QC Batch	Port-3-3B Lab-Dup	RDL	QC Batch	Port-3-DUP1B	RDL	QC Batch
Total Phosphorus (P)	ug/L	10	10	7728997				<10	10	7728997
Dissolved Selenium (Se)	ug/L	<0.20	0.20	7708874	<0.20	0.20	7708874	<0.20	0.20	7708874
Total Silicon (Si)	ug/L	3270	250	7728997				3270	250	7728997
Total Selenium (Se)	ug/L	0.46	0.20	7728997				0.58	0.20	7728997
Dissolved Silicon (Si)	ug/L	3160	250	7708874	3170	250	7708874	3100	250	7708874
Dissolved Silver (Ag)	ug/L	<0.025	0.025	7708874	<0.025	0.025	7708874	<0.025	0.025	7708874
Total Silver (Ag)	ug/L	<0.025	0.025	7728997				<0.025	0.025	7728997
Dissolved Strontium (Sr)	ug/L	14500	0.25	7708874	14600	0.25	7708874	14600	0.25	7708874
Total Strontium (Sr)	ug/L	15500	0.25	7728997				15300	0.25	7728997
Dissolved Thallium (Tl)	ug/L	<0.010	0.010	7708874	<0.010	0.010	7708874	<0.010	0.010	7708874
Total Thallium (Tl)	ug/L	0.013	0.010	7728997				<0.010	0.010	7728997
Dissolved Tin (Sn)	ug/L	<1.0	1.0	7708874	<1.0	1.0	7708874	<1.0	1.0	7708874
Total Tin (Sn)	ug/L	<1.0	1.0	7728997				<1.0	1.0	7728997
Dissolved Titanium (Ti)	ug/L	<2.5	2.5	7708874	<2.5	2.5	7708874	<2.5	2.5	7708874
Total Titanium (Ti)	ug/L	<2.5	2.5	7728997				<2.5	2.5	7728997
Dissolved Uranium (U)	ug/L	0.017	0.010	7708874	0.020	0.010	7708874	0.015	0.010	7708874
Total Uranium (U)	ug/L	0.018	0.010	7728997				0.015	0.010	7728997
Dissolved Vanadium (V)	ug/L	<1.0	1.0	7708874	<1.0	1.0	7708874	<1.0	1.0	7708874
Total Vanadium (V)	ug/L	<1.0	1.0	7728997				<1.0	1.0	7728997
Dissolved Zinc (Zn)	ug/L	2.45	0.50	7708874	1.75	0.50	7708874	2.25	0.50	7708874
Total Zinc (Zn)	ug/L	211	0.50	7728997				140	0.50	7728997
Dissolved Calcium (Ca)	mg/L	941	0.25	7769355				923	0.25	7769355
Total Calcium (Ca)	mg/L	951	0.25	7769357				945	0.25	7769357
Dissolved Magnesium (Mg)	mg/L	0.91	0.25	7769355				0.91	0.25	7769355
Total Magnesium (Mg)	mg/L	0.96	0.25	7769357				0.93	0.25	7769357
Dissolved Potassium (K)	mg/L	23.0	0.25	7769355				22.1	0.25	7769355
Total Potassium (K)	mg/L	23.2	0.25	7769357				23.0	0.25	7769357
Dissolved Sodium (Na)	mg/L	306	0.25	7769355				306	0.25	7769355
Total Sodium (Na)	mg/L	314	0.25	7769357				307	0.25	7769357
Dissolved Tellurium (Te)	ug/L	0.10	0.10	7708874	<0.10	0.10	7708874	0.13	0.10	7708874
RDL = Reportable Detection Limit										
OC Batch - Quality Control Batch										

QC Batch = Quality Control Batch



RESULTS OF ANALYSES OF GROUND WATER

Total Tellurium (Te)	ug/L	<0.10	0.10	7728997				<0.10	0.10	7728997
	UNITS	Port-3-3B	RDL	QC Batch	Port-3-3B Lab-Dup	RDL	QC Batch	Port-3-DUP1B	RDL	QC Batch
COC Number		435927			435927			435927		
Sampling Date		2021/11/09 10:13			2021/11/09 10:13			2021/11/09 10:13		
Bureau Veritas ID		RFN695			RFN695			RFN696		

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Bureau Veritas ID		RFN696						
Sampling Date		2021/11/09 10:13						
COC Number		435927						
	UNITS	Port-3-DUP1B Lab-Dup	RDL	QC Batch				
Inorganics								
Conductivity	mS/cm	6.44	0.001	7704520				
Fluoride (F-)	mg/L	0.98	0.10	7704513				
рН	рН	6.68		7704530				
Alkalinity (Total as CaCO3)	mg/L	53	1.0	7704533				
RDL = Reportable Detection Limit								
QC Batch = Quality Control Batch								
Lab-Dup = Laboratory Initiated Duplicate								



ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		RFN695			RFN695			RFN696		
Sampling Date		2021/11/09			2021/11/09			2021/11/09		
Sampling Date		10:13			10:13			10:13		
COC Number		435927			435927			435927		
	LINUTS	Port-3-3B	PDI	OC Batab	Port-3-3B	PDI	OC Batab		DDI	
	UNITS	POR-3-3D	RDL	QC Batch	Lab-Dup	RDL	QC Batch	Port-3-DUP1B	RDL	QC Batch
Calculated Parameters										
Total Hardness (CaCO3)	mg/L	2380	0.50	7769356				2360	0.50	7769356
Metals								•		
Mercury (Hg)	mg/L	<0.00001	0.00001	7706518				<0.00001	0.00001	7706518
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	7706511	<0.00001	0.00001	7706511	<0.00001	0.00001	7706511
RDL = Reportable Detection	n Limit		•			•		•		
QC Batch = Quality Control	Batch									

Bureau Veritas ID		RFN696							
Sampling Date		2021/11/09 10:13							
COC Number		435927							
	UNITS	Port-3-DUP1B Lab-Dup	RDL	QC Batch					
Metals									
Mercury (Hg)	mg/L	<0.00001	0.00001	7706518					
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate									



TEST SUMMARY

Bureau Veritas ID: Sample ID:		Collected: Shipped:	2021/11/08
Matrix:	Ground Water	Received:	2021/11/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	7705600	N/A	2021/11/17	Louise Harding
Total Cyanide	SKAL/CN	7705467	2021/11/17	2021/11/17	Aditiben Patel
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Fluoride	ISE	7709688	2021/11/18	2021/11/19	Surinder Rai
Bromide in water by IC	IC/UV	7719321	N/A	2021/11/17	Kathleen Dalton
Low Level Chloride and Sulphate by AC	KONE	7719320	N/A	2021/11/22	Bradley Freake
Elements by ICPMS Low Level (dissolved)	ICP/MS	7769358	N/A	2021/12/02	Andrew An
Ammonia-N Low Level	KONE/UVVS	7719324	2021/11/18	2021/11/18	Ana Katrina Cariaga
Orthophosphate by Konelab (low level)	KONE	7719322	N/A	2021/11/17	Serena Tian
Silica (Reactive)	KONE	7719050	N/A	2021/11/23	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719323	2021/11/18	2021/11/18	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7709788	N/A	2021/11/22	Chandra Nandlal
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Radium-226 Low Level	AS	7763072	N/A	2022/01/20	Priya Sharma
Total Dissolved Solids	BAL	7705627	2021/11/17	2021/11/18	Shaneil Hall
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Total Kjeldahl Nitrogen in Water	SKAL	7703857	2021/11/16	2021/11/17	Rajni Tyagi
Total Organic Carbon (TOC)	TOCV/NDIR	7703799	N/A	2021/11/17	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7705797	2021/11/17	2021/11/18	Shaneil Hall

Bureau Veritas ID:	RFN694
Sample ID:	Port-3-DUP1A
Matrix:	Ground Water

Collected: 2021/11/08 Shipped: Received: 2021/11/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	7705600	N/A	2021/11/17	Louise Harding
Total Cyanide	SKAL/CN	7705467	2021/11/17	2021/11/17	Aditiben Patel
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Fluoride	ISE	7709688	2021/11/18	2021/11/19	Surinder Rai
Bromide in water by IC	IC/UV	7719321	N/A	2021/11/17	Kathleen Dalton
Low Level Chloride and Sulphate by AC	KONE	7712011	N/A	2021/11/18	Bradley Freake
Elements by ICPMS Low Level (dissolved)	ICP/MS	7769358	N/A	2021/12/02	Andrew An
Ammonia-N Low Level	KONE/UVVS	7719324	2021/11/18	2021/11/18	Ana Katrina Cariaga
Orthophosphate by Konelab (low level)	KONE	7719322	N/A	2021/11/17	Serena Tian
Silica (Reactive)	KONE	7719050	N/A	2021/11/23	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719323	2021/11/18	2021/11/18	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7709640	N/A	2021/11/19	Nimarta Singh
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Radium-226 Low Level	AS	7763072	N/A	2022/01/20	Priya Sharma
Total Dissolved Solids	BAL	7705627	2021/11/17	2021/11/18	Shaneil Hall
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Total Kjeldahl Nitrogen in Water	SKAL	7703857	2021/11/16	2021/11/17	Rajni Tyagi
Total Organic Carbon (TOC)	TOCV/NDIR	7703799	N/A	2021/11/17	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7705797	2021/11/17	2021/11/18	Shaneil Hall

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TEST SUMMARY

Bureau Veritas ID: RFN694 Dup Sample ID: Port-3-DUP1A Matrix: Ground Water					Collected: 2021/11/08 Shipped: Received: 2021/11/12
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Orthophosphate by Konelab (low level)	KONE	7719322	N/A	2021/11/17	Serena Tian
Bureau Veritas ID: RFN695 Sample ID: Port-3-3B Matrix: Ground Water					Collected: 2021/11/09 Shipped: Received: 2021/11/12
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7704533	N/A	2021/11/17	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	7699110	N/A	2021/11/18	Automated Statchk
Conductivity	AT	7704520	N/A	2021/11/17	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7707222	N/A	2021/11/18	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Fluoride	ISE	7704513	2021/11/16	2021/11/17	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7706511	2021/11/17	2021/11/17	Medhat Nasr
Mercury (low level)	CV/AA	7706518	2021/11/17	2021/11/17	Medhat Nasr
Cyanide (Free)	SPEC	7719100	2021/11/19	2021/11/19	Amy Phan
Hardness Total (calculated as CaCO3)	CALC	7769356	N/A	2021/12/15	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7709309	N/A	2021/11/18	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7769355	N/A	2021/11/18	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7708874	N/A	2021/11/18	Jeffrey Laporte
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7769357	N/A	2021/12/15	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7728997	N/A	2021/11/22	Andrew An
Nitrate & Nitrite as Nitrogen in Water	LACH	7704711	N/A	2021/11/17	Chandra Nandlal
pH	AT	7704530	2021/11/16	2021/11/17	Surinder Rai
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Salinity		7730585	N/A	2021/11/23	Brent Boudreau
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/13	Yolanda Thompson
Turbidity	AT	7703556	N/A	2021/11/17	Neil Dassanayake
Bureau Veritas ID: RFN695 Dup Sample ID: Port-3-3B Matrix: Ground Water					Collected: 2021/11/09 Shipped: Received: 2021/11/12
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Mercury (low level)	CV/AA	7706511	2021/11/17	2021/11/17	Medhat Nasr
Elements by ICPMS Low Level (dissolved)	ICP/MS	7708874	N/A	2021/11/18	Jeffrey Laporte
Salinity		7730585	N/A	2021/11/23	Brent Boudreau
Bureau Veritas ID: RFN696 Sample ID: Port-3-DUP1B Matrix: Ground Water					Collected: 2021/11/09 Shipped: Received: 2021/11/12
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
· · · ·	AT	7704533	N/A	2021/11/17	Surinder Rai

carbonate, bicarbonate and rivaroxide	CALC	,055110	,		_
Carbonate. Bicarbonate and Hydroxide	CALC	7699110	N/A	2021/11/18 Automated Statchk	
Alkalinity	AI	7704533	N/A	2021/11/17 Surinder Rai	

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TEST SUMMARY

Bureau Veritas ID:	RFN696
Sample ID:	Port-3-DUP1B
Matrix:	Ground Water

Collected: 2021/11/09 Shipped: Received: 2021/11/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Conductivity	AT	7704520	N/A	2021/11/17	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7704074	N/A	2021/11/18	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Fluoride	ISE	7704513	2021/11/16	2021/11/17	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7706511	2021/11/17	2021/11/17	Medhat Nasr
Mercury (low level)	CV/AA	7706518	2021/11/17	2021/11/17	Medhat Nasr
Cyanide (Free)	SPEC	7719100	2021/11/19	2021/11/19	Amy Phan
Hardness Total (calculated as CaCO3)	CALC	7769356	N/A	2021/12/15	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7709309	N/A	2021/11/18	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7769355	N/A	2021/11/18	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7708874	N/A	2021/11/18	Jeffrey Laporte
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7769357	N/A	2021/12/15	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7728997	N/A	2021/11/22	Andrew An
Nitrate & Nitrite as Nitrogen in Water	LACH	7704711	N/A	2021/11/17	Chandra Nandlal
рН	AT	7704530	2021/11/16	2021/11/17	Surinder Rai
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Salinity		7730585	N/A	2021/11/23	Brent Boudreau
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/13	Yolanda Thompson
Turbidity	AT	7703556	N/A	2021/11/17	Neil Dassanayake

Bureau Veritas ID:	RFN696 Dup
Sample ID:	Port-3-DUP1B
Matrix:	Ground Water

Collected: 2021/11/09 Shipped: Received: 2021/11/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7704533	N/A	2021/11/17	Surinder Rai
Conductivity	AT	7704520	N/A	2021/11/17	Surinder Rai
Fluoride	ISE	7704513	2021/11/16	2021/11/17	Surinder Rai
Mercury (low level)	CV/AA	7706518	2021/11/17	2021/11/17	Medhat Nasr
рН	AT	7704530	2021/11/16	2021/11/17	Surinder Rai



GENERAL COMMENTS

Each te	emperature is the ave	erage of up to the	ree cooler temperatures taken at receipt
	Package 1	9.3°C]

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix Spike		SPIKED	BLANK	Method	Blank	RP	D	QC Sta	indard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7703556	Turbidity	2021/11/17			101	85 - 115	<0.1	NTU	6.5	20		
7703799	Total Organic Carbon (TOC)	2021/11/17	97	80 - 120	98	80 - 120	<0.40	mg/L	1.7	20		
7703857	Total Kjeldahl Nitrogen (TKN)	2021/11/17	114	80 - 120	100	80 - 120	<0.10	mg/L	14	20	103	80 - 120
7704074	Dissolved Organic Carbon	2021/11/17	95	80 - 120	96	80 - 120	<0.40	mg/L	0.80	20		
7704513	Fluoride (F-)	2021/11/17	65 (1)	80 - 120	102	80 - 120	<0.10	mg/L	0.96	20		
7704520	Conductivity	2021/11/17			104	85 - 115	<0.001	mS/cm	0.91	25		
7704530	рН	2021/11/17			102	98 - 103			0.99	N/A		
7704533	Alkalinity (Total as CaCO3)	2021/11/17			97	85 - 115	<1.0	mg/L	1.9	20		
7704711	Nitrate (N)	2021/11/17	100	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
7704711	Nitrite (N)	2021/11/17	108	80 - 120	106	80 - 120	<0.010	mg/L	NC	20		
7705467	Total Cyanide (CN)	2021/11/17	96	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
7705600	WAD Cyanide (Free)	2021/11/17	98	80 - 120	97	80 - 120	<1	ug/L	NC	20		
7705627	Total Dissolved Solids	2021/11/18					<10	mg/L	2.3	25	95	90 - 110
7705797	Total Suspended Solids	2021/11/18					<1	mg/L	0	25	100	85 - 115
7706511	Dissolved Mercury (Hg)	2021/11/17	85	75 - 125	93	80 - 120	<0.00001	mg/L	NC	20		
7706518	Mercury (Hg)	2021/11/17	90	75 - 125	99	80 - 120	<0.00001	mg/L	NC	20		
7707222	Dissolved Organic Carbon	2021/11/18	102	80 - 120	101	80 - 120	<0.40	mg/L	NC	20		
7708874	Dissolved Aluminum (Al)	2021/11/18	95	80 - 120	100	80 - 120	<0.50	ug/L	12	20		
7708874	Dissolved Antimony (Sb)	2021/11/18	98	80 - 120	103	80 - 120	<0.020	ug/L	4.7	20		
7708874	Dissolved Arsenic (As)	2021/11/18	100	80 - 120	101	80 - 120	<0.020	ug/L	1.9	20		
7708874	Dissolved Barium (Ba)	2021/11/18	NC	80 - 120	101	80 - 120	<0.020	ug/L	1.1	20		
7708874	Dissolved Beryllium (Be)	2021/11/18	92	80 - 120	105	80 - 120	<0.010	ug/L	NC	20		
7708874	Dissolved Bismuth (Bi)	2021/11/18	90	80 - 120	101	80 - 120	<0.0050	ug/L	NC	20		
7708874	Dissolved Boron (B)	2021/11/18	NC	80 - 120	106	80 - 120	<10	ug/L	1.1	20		
7708874	Dissolved Cadmium (Cd)	2021/11/18	97	80 - 120	101	80 - 120	<0.0050	ug/L	NC	20		
7708874	Dissolved Chromium (Cr)	2021/11/18	89	80 - 120	97	80 - 120	<0.10	ug/L	NC	20		
7708874	Dissolved Cobalt (Co)	2021/11/18	89	80 - 120	97	80 - 120	<0.0050	ug/L	8.7	20		
7708874	Dissolved Copper (Cu)	2021/11/18	81	80 - 120	94	80 - 120	<0.050	ug/L	NC	20		
7708874	Dissolved Iron (Fe)	2021/11/18	98	80 - 120	105	80 - 120	<1.0	ug/L	7.0	20		
7708874	Dissolved Lead (Pb)	2021/11/18	92	80 - 120	104	80 - 120	<0.0050	ug/L	NC	20		
7708874	Dissolved Lithium (Li)	2021/11/18	NC	80 - 120	104	80 - 120	<0.50	ug/L	7.0	20		



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix	Spike	SPIKED	BLANK	Method I	Blank	RP	D	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7708874	Dissolved Manganese (Mn)	2021/11/18	90	80 - 120	100	80 - 120	<0.050	ug/L	1.7	20		
7708874	Dissolved Molybdenum (Mo)	2021/11/18	108	80 - 120	103	80 - 120	<0.050	ug/L	1.2	20		
7708874	Dissolved Nickel (Ni)	2021/11/18	86	80 - 120	98	80 - 120	<0.020	ug/L	7.1	20		
7708874	Dissolved Phosphorus (P)	2021/11/18	96	80 - 120	101	80 - 120	<2.0	ug/L	11	20		
7708874	Dissolved Selenium (Se)	2021/11/18	94	80 - 120	102	80 - 120	<0.040	ug/L	NC	20		
7708874	Dissolved Silicon (Si)	2021/11/18	110	80 - 120	109	80 - 120	<50	ug/L	0.30	20		
7708874	Dissolved Silver (Ag)	2021/11/18	91	80 - 120	98	80 - 120	<0.0050	ug/L	NC	20		
7708874	Dissolved Strontium (Sr)	2021/11/18	NC	80 - 120	99	80 - 120	<0.050	ug/L	0.79	20		
7708874	Dissolved Tellurium (Te)	2021/11/18	82	80 - 120	101	80 - 120	<0.020	ug/L	3.5	20		
7708874	Dissolved Thallium (TI)	2021/11/18	95	80 - 120	102	80 - 120	<0.0020	ug/L	NC	20		
7708874	Dissolved Tin (Sn)	2021/11/18	97	80 - 120	101	80 - 120	<0.20	ug/L	NC	20		
7708874	Dissolved Titanium (Ti)	2021/11/18	100	80 - 120	103	80 - 120	<0.50	ug/L	NC	20		
7708874	Dissolved Uranium (U)	2021/11/18	102	80 - 120	106	80 - 120	<0.0020	ug/L	14	20		
7708874	Dissolved Vanadium (V)	2021/11/18	96	80 - 120	100	80 - 120	<0.20	ug/L	NC	20		
7708874	Dissolved Zinc (Zn)	2021/11/18	84	80 - 120	101	80 - 120	<0.10	ug/L	NC	20		
7709640	Nitrate (N)	2021/11/19	97	80 - 120	102	80 - 120	<0.10	mg/L	0.027	20		
7709640	Nitrite (N)	2021/11/19	100	80 - 120	108	80 - 120	<0.010	mg/L	NC	20		
7709688	Fluoride (F-)	2021/11/19	94	80 - 120	103	80 - 120	<0.10	mg/L	0	20		
7709788	Nitrate (N)	2021/11/22	87	80 - 120	91	80 - 120	<0.10	mg/L	4.1	20		
7709788	Nitrite (N)	2021/11/22	102	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
7712011	Dissolved Chloride (Cl-)	2021/11/18	NC	80 - 120	101	80 - 120	<0.50	mg/L				
7712011	Dissolved Sulphate (SO4)	2021/11/18	NC	80 - 120	106	80 - 120	<0.50	mg/L				
7719050	Reactive Silica (SiO2)	2021/11/23	NC	80 - 120	102	80 - 120	<0.050	mg/L	0.32	20		
7719100	Free Cyanide (CN)	2021/11/19	87	80 - 120	93	80 - 120	<1.0	ug/L	9.9	20		
7719320	Dissolved Chloride (Cl-)	2021/11/22	NC	80 - 120	99	80 - 120	<0.50	mg/L				
7719320	Dissolved Sulphate (SO4)	2021/11/22	NC	80 - 120	107	80 - 120	<0.50	mg/L				
7719321	Dissolved Bromide (Br-)	2021/11/17	111	80 - 120	101	80 - 120	<0.010	mg/L				
7719322	Orthophosphate (P)	2021/11/17	102	80 - 120	112	80 - 120	<0.0010	mg/L	NC	20		
7719323	Total Phosphorus (P)	2021/11/18	91	80 - 120	89	80 - 120	<0.0010	mg/L		T	87	80 - 120
7719324	Total Nitrogen (Ammonia Nitrogen)	2021/11/18	102	N/A	103	N/A	<0.0050	mg/L				
7728997	Total Aluminum (Al)	2021/11/22	97	80 - 120	100	80 - 120	<0.50	ug/L				



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix	Spike	SPIKED	BLANK	Method	Blank	RP	D	QC Sta	indard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7728997	Total Antimony (Sb)	2021/11/22	102	80 - 120	103	80 - 120	<0.020	ug/L				
7728997	Total Arsenic (As)	2021/11/22	104	80 - 120	102	80 - 120	<0.020	ug/L				
7728997	Total Barium (Ba)	2021/11/22	NC	80 - 120	102	80 - 120	<0.020	ug/L				
7728997	Total Beryllium (Be)	2021/11/22	94	80 - 120	98	80 - 120	<0.010	ug/L				
7728997	Total Bismuth (Bi)	2021/11/22	97	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Boron (B)	2021/11/22	96	80 - 120	96	80 - 120	<10	ug/L				
7728997	Total Cadmium (Cd)	2021/11/22	101	80 - 120	103	80 - 120	<0.0050	ug/L				
7728997	Total Chromium (Cr)	2021/11/22	96	80 - 120	99	80 - 120	<0.10	ug/L				
7728997	Total Cobalt (Co)	2021/11/22	93	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Copper (Cu)	2021/11/22	91	80 - 120	98	80 - 120	<0.050	ug/L				
7728997	Total Iron (Fe)	2021/11/22	95	80 - 120	100	80 - 120	<1.0	ug/L				
7728997	Total Lead (Pb)	2021/11/22	100	80 - 120	100	80 - 120	<0.0050	ug/L				
7728997	Total Lithium (Li)	2021/11/22	92	80 - 120	90	80 - 120	<0.50	ug/L				
7728997	Total Manganese (Mn)	2021/11/22	NC	80 - 120	100	80 - 120	<0.050	ug/L				
7728997	Total Molybdenum (Mo)	2021/11/22	109	80 - 120	103	80 - 120	<0.050	ug/L				
7728997	Total Nickel (Ni)	2021/11/22	93	80 - 120	99	80 - 120	<0.020	ug/L				
7728997	Total Phosphorus (P)	2021/11/22	108	80 - 120	105	80 - 120	<2.0	ug/L				
7728997	Total Selenium (Se)	2021/11/22	103	80 - 120	105	80 - 120	<0.040	ug/L				
7728997	Total Silicon (Si)	2021/11/22	103	80 - 120	103	80 - 120	<50	ug/L				
7728997	Total Silver (Ag)	2021/11/22	98	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Strontium (Sr)	2021/11/22	NC	80 - 120	98	80 - 120	<0.050	ug/L				
7728997	Total Tellurium (Te)	2021/11/22	98	80 - 120	105	80 - 120	<0.020	ug/L				
7728997	Total Thallium (TI)	2021/11/22	101	80 - 120	99	80 - 120	<0.0020	ug/L				
7728997	Total Tin (Sn)	2021/11/22	101	80 - 120	103	80 - 120	<0.20	ug/L				
7728997	Total Titanium (Ti)	2021/11/22	102	80 - 120	101	80 - 120	<0.50	ug/L				
7728997	Total Uranium (U)	2021/11/22	105	80 - 120	100	80 - 120	<0.0020	ug/L				
7728997	Total Vanadium (V)	2021/11/22	101	80 - 120	100	80 - 120	<0.20	ug/L				
7728997	Total Zinc (Zn)	2021/11/22	NC	80 - 120	106	80 - 120	<0.10	ug/L				
7730585	Salinity	2021/11/23					<2.0	N/A	0	25	99	80 - 120



QUALITY ASSURANCE REPORT(CONT'D)

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix	Spike	SPIKED	BLANK	Method E	Blank	RPI	2	QC Sta	ndard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7763072	Radium-226	2022/01/20			91	85 - 115	<0.0050	Bq/L	NC	N/A		

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.



VALIDATION SIGNATURE PAGE

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

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

David Huang, BBY Scientific Specialist

Danish Samad, Laboratory Supervisor

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Lisa Thum, C.E.T., QP, Manager, Inorganics

Mike That Sell

Mike MacGillivray, Scientific Specialist (Inorganics)

BV Labs 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 Signature Page.



Exceedance Summary Table – Metal Mining Effluent Reg

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summ	ary table is for information purp	oses only and should no	t be considered a compref	nensive listing or	statement of	conformance to
applicable regulatory g	guidelines.					



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/25 Report #: R6975627 Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X6520

Received: 2021/11/15, 09:30

Sample Matrix: Ground Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2021/11/19	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	1	N/A	2021/12/07	CAM SOP-00102	APHA 4500-CO2 D
Conductivity (1)	1	N/A	2021/11/19	CAM SOP-00414	SM 23 2510 m
Free (WAD) Cyanide (1)	1	N/A	2021/11/18	CAM SOP-00457	OMOE E3015 m
Total Cyanide (1)	1	2021/11/18	2021/11/18	CAM SOP-00457	OMOE E3015 5 m
Dissolved Organic Carbon (DOC) (1, 6)	1	N/A	2021/11/18	CAM SOP-00446	SM 23 5310 B m
Field Measured Conductivity (1, 7)	1	N/A	2021/11/16		Field Meter
Fluoride (1)	1	2021/11/18	2021/11/19	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	1	2021/11/18	2021/11/19	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	1	2021/11/18	2021/11/19	CAM SOP-00453	EPA 7470 m
Bromide in water by IC (2)	1	N/A	2021/11/19		
Low Level Chloride and Sulphate by AC (2)	1	N/A	2021/11/22	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	1	N/A	2021/11/19	CAL SOP-00266	EPA 9016d R0 m
Hardness Total (calculated as CaCO3) (3, 8)	1	N/A	2021/12/15	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	1	N/A	2021/12/10	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	1	N/A	2021/12/10	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (dissolved) (3)	1	N/A	2021/11/20	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	1	N/A	2021/12/15	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (total) (3)	1	N/A	2021/11/22	BBY7SOP-00002	EPA 6020B R2 m
Ammonia-N Low Level (2)	1	N/A	2021/11/20	AB SOP-00007	SM23 4500 NH3 A G m
Orthophosphate by Konelab (low level) (2)	1	N/A	2021/11/19		
Silica (Reactive) (2)	1	N/A	2021/11/23	AB SOP-00011	EPA370.1 R1978 m
Total Phosphorus Low Level Total (2)	1	2021/11/19	2021/11/21	AB SOP-00024	SM 23 4500-P A,B,F m
Nitrate & Nitrite as Nitrogen in Water (1, 9)	1	N/A	2021/11/19	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH (1)	1	2021/11/18	2021/11/19	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (1, 7)	1	N/A	2021/11/16		Field pH Meter
Radium-226 Low Level (4, 10)	1	N/A	2022/01/20	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Salinity (5, 11)	1	N/A	2021/11/23		SM 22 2520B



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/25 Report #: R6975627 Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X6520

Received: 2021/11/15, 09:30

Sample Matrix: Ground Water # Samples Received: 1

	D	ate	Date		
Analyses	Quantity E	xtracted	Analyzed	Laboratory Method	Analytical Method
Calculated Total Dissolved Solids (1)	1 N	/A	2021/12/16		Auto Calc
Total Dissolved Solids (1)	1 20	021/11/18	2021/11/19	CAM SOP-00428	SM 23 2540C m
Field Temperature (1, 7)	1 N	/A	2021/11/16		Field Thermometer
Total Kjeldahl Nitrogen in Water (1)	1 20	021/11/18	2021/11/22	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 12)	1 N	/A	2021/11/18	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids (1)	1 20	021/11/18	2021/11/19	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1 N	/A	2021/11/18	CAM SOP-00417	SM 23 2130 B m

Sample Matrix: Water # Samples Received: 1

	Date	Date		
Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
1	N/A	2021/11/19	CAM SOP-00448	SM 23 2320 B m
1	N/A	2021/12/07	CAM SOP-00102	APHA 4500-CO2 D
1	N/A	2021/11/19	CAM SOP-00414	SM 23 2510 m
1	N/A	2021/11/18	CAM SOP-00446	SM 23 5310 B m
1	N/A	2021/11/16		Field Meter
1	2021/11/18	2021/11/19	CAM SOP-00449	SM 23 4500-F C m
1	2021/11/18	2021/11/19	CAM SOP-00453	EPA 7470 m
1	2021/11/18	2021/11/19	CAM SOP-00453	EPA 7470 m
1	N/A	2021/11/19		
1	N/A	2021/11/22	AB SOP-00020 / AB SOP-	SM23 4500-CL/SO4-E m
			00018	
1	N/A	2021/12/15	BBY WI-00033	Auto Calc
1	N/A	2021/12/10	BBY WI-00033	Auto Calc
1	N/A	2021/12/10	BBY WI-00033	Auto Calc
1	N/A	2021/11/20	BBY7SOP-00002	EPA 6020B R2 m
1	N/A	2021/12/15	BBY WI-00033	Auto Calc
1	N/A	2021/11/22	BBY7SOP-00002	EPA 6020B R2 m
1	N/A	2021/11/20	AB SOP-00007	SM23 4500 NH3 A G m
1	N/A	2021/11/19		
1	N/A	2021/11/23	AB SOP-00011	EPA370.1 R1978 m
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Quantity Extracted 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 N/A 1 2021/11/18 1 2021/11/18 1 2021/11/18 1 N/A 1 N/A <tr t=""> 1 N/A</tr>	Quantity Extracted Analyzed 1 N/A 2021/11/19 1 N/A 2021/12/07 1 N/A 2021/11/19 1 N/A 2021/11/19 1 N/A 2021/11/18 1 N/A 2021/11/18 1 N/A 2021/11/19 1 2021/11/18 2021/11/19 1 2021/11/18 2021/11/19 1 N/A 2021/11/20 1 N/A 2021/12/10 1 N/A 2021/12/10 1 N/A 2021/12/10 1 N/A 2021/12/10 1 N/A 2021/12/20 1 N/A 2021/12/20 1 N/A 2021/11/20 <	Quantity Extracted Analyzed Laboratory Method 1 N/A 2021/11/19 CAM SOP-00448 1 N/A 2021/12/07 CAM SOP-00102 1 N/A 2021/11/19 CAM SOP-00102 1 N/A 2021/11/19 CAM SOP-00448 1 N/A 2021/11/18 CAM SOP-00414 1 N/A 2021/11/18 CAM SOP-00446 1 N/A 2021/11/19 CAM SOP-00449 1 2021/11/18 2021/11/19 CAM SOP-00453 1 2021/11/18 2021/11/19 CAM SOP-00453 1 2021/11/18 2021/11/19 CAM SOP-00453 1 N/A 2021/11/19 CAM SOP-00453 1 N/A 2021/11/19 CAM SOP-00453 1 N/A 2021/11/19 CAM SOP-00020 / AB SOP-00018 1 N/A 2021/12/10 BBY WI-00033 1 N/A 2021/12/10 BBY WI-00033 1 N/A 2021/12/15 BBY WI-00033



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/25 Report #: R6975627 Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X6520

Received: 2021/11/15, 09:30

Sample Matrix: Water # Samples Received: 1

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Total Phosphorus Low Level Total (2)	1	2021/11/19	2021/11/21	AB SOP-00024	SM 23 4500-P A,B,F m
Nitrate & Nitrite as Nitrogen in Water (1, 9)	1	N/A	2021/11/19	CAM SOP-00440	SM 23 4500-NO3I/NO2B
pH (1)	1	2021/11/18	2021/11/19	CAM SOP-00413	SM 4500H+ B m
Field Measured pH (1, 7)	1	N/A	2021/11/16		Field pH Meter
Radium-226 Low Level (4, 10)	1	N/A	2022/01/20	BQL SOP-00006 BQL SOP-00017 BQL SOP-00032	Alpha Spectrometry
Salinity (5, 11)	1	N/A	2021/11/23		SM 22 2520B
Calculated Total Dissolved Solids (1)	1	N/A	2021/12/16		Auto Calc
Total Dissolved Solids (1)	1	2021/11/18	2021/11/19	CAM SOP-00428	SM 23 2540C m
Field Temperature (1, 7)	1	N/A	2021/11/16		Field Thermometer
Total Kjeldahl Nitrogen in Water (1)	1	2021/11/18	2021/11/19	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 12)	1	N/A	2021/11/18	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids (1)	1	2021/11/18	2021/11/19	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2021/11/18	CAM SOP-00417	SM 23 2130 B m

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



Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/25 Report #: R6975627 Version: 2 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X6520

Received: 2021/11/15, 09:30

dilution methods.

Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.

This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8

(3) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5

(4) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9

(5) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

(6) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(7) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas Laboratories.

(8) "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).

(9) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(10) Radium-226 results have not been corrected for blanks.

(11) Non-accredited test method

(12) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Katherine Szozda, Project Manager Email: Katherine.Szozda@bureauveritas.com Phone# (613)274-0573 Ext:7063633

BV Labs 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 Signature Page.



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFX508			RFX508		
Sampling Date		2021/11/10			2021/11/10		
		13:30			13:30		
COC Number		440204			440204		
	UNITS	PORT 6A	RDL	QC Batch	Port 6A Lab-Dup	RDL	QC Batch
CONVENTIONALS							
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.099	0.0050	7719329			
Calculated Parameters							
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	35	1.0	7703447			
Calculated TDS	mg/L	4200	1.0	7703853			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7703447			
Dissolved Hardness (CaCO3)	mg/L	3310	0.50	7728998			
Field Measurements							
Field Measured Conductivity	uS/cm	4526	N/A	ONSITE			
Field Temperature	Celsius	10.1	N/A	ONSITE			
Field Measured pH	рН	6.5		ONSITE			
Inorganics			-				
Dissolved Bromide (Br-)	mg/L	33	0.20	7719326			
Conductivity	mS/cm	7.31	0.001	7709697	7.30	0.001	7709697
Free Cyanide (CN)	ug/L	2.2 (1)	1.0	7719100			
Total Dissolved Solids	mg/L	6140	20	7708350			
Fluoride (F-)	mg/L	0.17	0.10	7709688	0.17	0.10	7709688
Total Kjeldahl Nitrogen (TKN)	mg/L	<10 (2)	10	7708631			
Dissolved Organic Carbon	mg/L	14000	100	7708825			
Total Organic Carbon (TOC)	mg/L	14000	100	7708620			
Orthophosphate (P)	mg/L	<0.0010	0.0010	7719327	<0.0010	0.0010	7719327
рН	рН	6.69		7709703	6.76		7709703
Salinity	N/A	4.6	2.0	7730585			
Reactive Silica (SiO2)	mg/L	8.3	0.050	7719050			

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable

(1) 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.

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



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFX508			RFX508		
Sampling Date		2021/11/10			2021/11/10		
	_	13:30			13:30		
COC Number		440204			440204		
	UNITS	PORT 6A	RDL	QC Batch	Port 6A Lab-Dup	RDL	QC Batch
Total Suspended Solids	mg/L	8	1	7708594			
Total Cyanide (CN)	mg/L	<0.0050	0.0050	7708410			
Turbidity	NTU	3.4	0.1	7709447			
WAD Cyanide (Free)	ug/L	<1	1	7708491			
Alkalinity (Total as CaCO3)	mg/L	35	1.0	7709699	35	1.0	7709699
Dissolved Chloride (Cl-)	mg/L	2600	25	7719320			
Nitrite (N)	mg/L	0.014	0.010	7709640			
Nitrate (N)	mg/L	<0.10	0.10	7709640			
Dissolved Sulphate (SO4)	mg/L	1.7	0.50	7719320			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7709640			
Metals		•					
Dissolved Aluminum (Al)	ug/L	7.2	5.0	7729000			
Total Aluminum (Al)	ug/L	14.9	5.0	7728997			
Dissolved Antimony (Sb)	ug/L	0.42	0.20	7729000			
Total Antimony (Sb)	ug/L	0.42	0.20	7728997			
Dissolved Arsenic (As)	ug/L	4.13	0.20	7729000			
Total Arsenic (As)	ug/L	11.0	0.20	7728997			
Dissolved Barium (Ba)	ug/L	672	0.20	7729000			
Total Barium (Ba)	ug/L	668	0.20	7728997			
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	7729000			
Total Beryllium (Be)	ug/L	<0.10	0.10	7728997			
Dissolved Bismuth (Bi)	ug/L	<0.050	0.050	7729000			
Total Bismuth (Bi)	ug/L	<0.050	0.050	7728997			
Dissolved Boron (B)	ug/L	324	100	7729000			
Total Boron (B)	ug/L	313	100	7728997			
Dissolved Cadmium (Cd)	ug/L	<0.050	0.050	7729000			
Total Cadmium (Cd)	ug/L	<0.050	0.050	7728997			
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	7729000			
Total Chromium (Cr)	ug/L	1.8	1.0	7728997			Ī
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RFX508			RFX508		
Sampling Date		2021/11/10			2021/11/10		
		13:30			13:30		
COC Number		440204			440204		
	UNITS	PORT 6A	RDL	QC Batch	Port 6A Lab-Dup	RDL	QC Batch
Dissolved Cobalt (Co)	ug/L	0.349	0.050	7729000			
Total Cobalt (Co)	ug/L	0.320	0.050	7728997			
Dissolved Copper (Cu)	ug/L	<0.50	0.50	7729000			
Total Copper (Cu)	ug/L	0.79	0.50	7728997			
Dissolved Iron (Fe)	ug/L	707	10	7729000			
Total Iron (Fe)	ug/L	830	10	7728997			
Dissolved Lead (Pb)	ug/L	0.139	0.050	7729000			
Total Lead (Pb)	ug/L	1.02	0.050	7728997			
Dissolved Lithium (Li)	ug/L	434	5.0	7729000			
Total Lithium (Li)	ug/L	348	5.0	7728997			
Dissolved Manganese (Mn)	ug/L	96.3	0.50	7729000			
Total Manganese (Mn)	ug/L	95.6	0.50	7728997			
Dissolved Molybdenum (Mo)	ug/L	8.56	0.50	7729000			
Total Molybdenum (Mo)	ug/L	9.43	0.50	7728997			
Dissolved Nickel (Ni)	ug/L	1.28	0.20	7729000			
Total Nickel (Ni)	ug/L	2.16	0.20	7728997			
Dissolved Phosphorus (P)	ug/L	<20	20	7729000			
Dissolved Selenium (Se)	ug/L	1.77	0.40	7729000			
Total Silicon (Si)	ug/L	2390	500	7728997			
Total Selenium (Se)	ug/L	1.36	0.40	7728997			
Dissolved Silicon (Si)	ug/L	2580	500	7729000			
Dissolved Silver (Ag)	ug/L	<0.050	0.050	7729000			
Total Silver (Ag)	ug/L	<0.050	0.050	7728997			
Dissolved Strontium (Sr)	ug/L	20000	0.50	7729000			
Total Strontium (Sr)	ug/L	18700	0.50	7728997			
Dissolved Thallium (Tl)	ug/L	<0.020	0.020	7729000			
Total Thallium (Tl)	ug/L	<0.020	0.020	7728997			
Dissolved Tin (Sn)	ug/L	<2.0	2.0	7729000			
Total Tin (Sn)	ug/L	<2.0	2.0	7728997			
RDL = Reportable Detection Limit				•	-		•
QC Batch = Quality Control Batch							



Bureau Veritas ID		RFX508			RFX508		
Sampling Date		2021/11/10			2021/11/10		
		13:30			13:30		
COC Number		440204			440204		
	UNITS	PORT 6A	RDL	QC Batch	Port 6A Lab-Dup	RDL	QC Batch
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	7729000			
Total Titanium (Ti)	ug/L	<5.0	5.0	7728997			
Dissolved Uranium (U)	ug/L	<0.020	0.020	7729000			
Total Uranium (U)	ug/L	0.022	0.020	7728997			
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7729000			
Total Vanadium (V)	ug/L	<2.0	2.0	7728997			
Dissolved Zinc (Zn)	ug/L	1820	1.0	7729000			
Total Zinc (Zn)	ug/L	3320	1.0	7728997			
Dissolved Calcium (Ca)	mg/L	1270	0.50	7728999			
Total Calcium (Ca)	mg/L	1230	0.50	7728996			
Dissolved Magnesium (Mg)	mg/L	30.5	0.50	7728999			
Total Magnesium (Mg)	mg/L	29.2	0.50	7728996			
Dissolved Potassium (K)	mg/L	13.5	0.50	7728999			
Total Potassium (K)	mg/L	12.2	0.50	7728996			
Dissolved Sodium (Na)	mg/L	224	0.50	7728999			
Total Sodium (Na)	mg/L	215	0.50	7728996			
Dissolved Tellurium (Te)	ug/L	<0.20	0.20	7729000			
Total Tellurium (Te)	ug/L	<0.20	0.20	7728997			
Nutritional Parameters		-				-	
Total Phosphorus (P)	mg/L	0.0041	0.0010	7719328			
RADIONUCLIDE							
Radium-226	Bq/L	0.23	0.0050	7763072			
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
Lab-Dup = Laboratory Initiated Dupli	cate						

RESULTS OF ANALYSES OF GROUND WATER



ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		RFX508				
Sampling Date		2021/11/10 13:30				
COC Number		440204				
	UNITS	Port 6A	RDL	QC Batch		
Calculated Parameters						
Total Hardness (CaCO3)	mg/L	3180	0.50	7728995		
Metals						
Mercury (Hg)	mg/L	<0.00001	0.00001	7708479		
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	7708483		
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



Bureau Veritas ID		RFX509		
Sampling Date		2021/11/10 17:00		
COC Number		440204		
	UNITS	TB1	RDL	QC Batch
CONVENTIONALS				
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.0087	0.0050	7719329
Calculated Parameters				
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7703447
Calculated TDS	mg/L	<1.0	1.0	7703853
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7703447
Dissolved Hardness (CaCO3)	mg/L	<0.50	0.50	7728998
Field Measurements	•			
Field Measured Conductivity	uS/cm	-	N/A	ONSITE
Field Temperature	Celsius	-	N/A	ONSITE
Field Measured pH	рН	-		ONSITE
Inorganics	•			
Dissolved Bromide (Br-)	mg/L	0.034	0.010	7719326
Conductivity	mS/cm	0.002	0.001	7709697
Total Dissolved Solids	mg/L	<10	10	7708350
Fluoride (F-)	mg/L	<0.10	0.10	7709688
Total Kjeldahl Nitrogen (TKN)	mg/L	<0.20 (1)	0.20	7708631
Dissolved Organic Carbon	mg/L	<0.40	0.40	7708825
Total Organic Carbon (TOC)	mg/L	<0.40	0.40	7708620
Orthophosphate (P)	mg/L	<0.0010	0.0010	7719327
рН	рН	5.62		7709703
Salinity	N/A	<2.0	2.0	7730585
Reactive Silica (SiO2)	mg/L	<0.050	0.050	7719282
Total Suspended Solids	mg/L	2	1	7706911
Turbidity	NTU	<0.1	0.1	7709447
Alkalinity (Total as CaCO3)	mg/L	<1.0	1.0	7709699
Dissolved Chloride (Cl-)	mg/L	<1.0	1.0	7719320
Nitrite (N)	mg/L	<0.010	0.010	7709640
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to sample matrix,sample requ accordingly.	uired dilu [.]	tion.Detection	limit wa	s adjusted



Bureau Veritas ID		RFX509		
Sampling Date		2021/11/10		
		17:00		
COC Number		440204		
	UNITS	TB1	RDL	QC Batch
Nitrate (N)	mg/L	<0.10	0.10	7709640
Dissolved Sulphate (SO4)	mg/L	<0.50	0.50	7719320
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7709640
Metals				
Dissolved Aluminum (Al)	ug/L	<0.50	0.50	7729000
Total Aluminum (Al)	ug/L	<0.50	0.50	7728997
Dissolved Antimony (Sb)	ug/L	<0.020	0.020	7729000
Total Antimony (Sb)	ug/L	<0.020	0.020	7728997
Dissolved Arsenic (As)	ug/L	<0.020	0.020	7729000
Total Arsenic (As)	ug/L	<0.020	0.020	7728997
Dissolved Barium (Ba)	ug/L	<0.020	0.020	7729000
Total Barium (Ba)	ug/L	<0.020	0.020	7728997
Dissolved Beryllium (Be)	ug/L	<0.010	0.010	7729000
Total Beryllium (Be)	ug/L	<0.010	0.010	7728997
Dissolved Bismuth (Bi)	ug/L	<0.0050	0.0050	7729000
Total Bismuth (Bi)	ug/L	<0.0050	0.0050	7728997
Dissolved Boron (B)	ug/L	<10	10	7729000
Total Boron (B)	ug/L	<10	10	7728997
Dissolved Cadmium (Cd)	ug/L	<0.0050	0.0050	7729000
Total Cadmium (Cd)	ug/L	<0.0050	0.0050	7728997
Dissolved Chromium (Cr)	ug/L	<0.10	0.10	7729000
Total Chromium (Cr)	ug/L	<0.10	0.10	7728997
Dissolved Cobalt (Co)	ug/L	<0.0050	0.0050	7729000
Total Cobalt (Co)	ug/L	<0.0050	0.0050	7728997
Dissolved Copper (Cu)	ug/L	<0.050	0.050	7729000
Total Copper (Cu)	ug/L	<0.050	0.050	7728997
Dissolved Iron (Fe)	ug/L	<1.0	1.0	7729000
Total Iron (Fe)	ug/L	<1.0	1.0	7728997
Dissolved Lead (Pb)	ug/L	<0.0050	0.0050	7729000
Total Lead (Pb)	ug/L	<0.0050	0.0050	7728997
	ug/L	<0.50	0.50	7729000



COC Number COC Number Total Lithium (Li) Dissolved Manganese (Mn) Total Manganese (Mn) Dissolved Molybdenum (Mo)	UNITS Ug/L ug/L ug/L	2021/11/10 17:00 440204 TB1 <0.50	RDL	QC Batch
Total Lithium (Li) Dissolved Manganese (Mn) Total Manganese (Mn) Dissolved Molybdenum (Mo)	ug/L ug/L	440204 TB1 <0.50		QC Batch
Total Lithium (Li) Dissolved Manganese (Mn) Total Manganese (Mn) Dissolved Molybdenum (Mo)	ug/L ug/L	TB1 <0.50		QC Batch
Dissolved Manganese (Mn) Fotal Manganese (Mn) Dissolved Molybdenum (Mo)	ug/L ug/L	<0.50		QC Batch
Dissolved Manganese (Mn) Fotal Manganese (Mn) Dissolved Molybdenum (Mo)	ug/L		0 50	
Fotal Manganese (Mn) Dissolved Molybdenum (Mo)	-		0.50	7728997
Dissolved Molybdenum (Mo)	ug/L	<0.050	0.050	7729000
, , ,		<0.050	0.050	7728997
-atal Maluhdanum (Ma)	ug/L	<0.050	0.050	7729000
Total Molybdenum (Mo)	ug/L	<0.050	0.050	7728997
Dissolved Nickel (Ni)	ug/L	<0.020	0.020	7729000
Fotal Nickel (Ni)	ug/L	0.022	0.020	7728997
Dissolved Phosphorus (P)	ug/L	2.0	2.0	7729000
Dissolved Selenium (Se)	ug/L	<0.040	0.040	7729000
Total Silicon (Si)	ug/L	<50	50	7728997
Fotal Selenium (Se)	ug/L	<0.040	0.040	7728997
Dissolved Silicon (Si)	ug/L	<50	50	7729000
Dissolved Silver (Ag)	ug/L	<0.0050	0.0050	7729000
Total Silver (Ag)	ug/L	<0.0050	0.0050	7728997
Dissolved Strontium (Sr)	ug/L	<0.050	0.050	7729000
Fotal Strontium (Sr)	ug/L	<0.050	0.050	7728997
Dissolved Thallium (Tl)	ug/L	<0.0020	0.0020	7729000
Total Thallium (TI)	ug/L	<0.0020	0.0020	7728997
Dissolved Tin (Sn)	ug/L	<0.20	0.20	7729000
Fotal Tin (Sn)	ug/L	<0.20	0.20	7728997
Dissolved Titanium (Ti)	ug/L	<0.50	0.50	7729000
Total Titanium (Ti)	ug/L	<0.50	0.50	7728997
Dissolved Uranium (U)	ug/L	<0.0020	0.0020	7729000
Fotal Uranium (U)	ug/L	<0.0020	0.0020	7728997
Dissolved Vanadium (V)	ug/L	<0.20	0.20	7729000
Fotal Vanadium (V)	ug/L	<0.20	0.20	7728997
Dissolved Zinc (Zn)	ug/L	<0.10	0.10	7729000
Total Zinc (Zn)	ug/L	<0.10	0.10	7728997
Dissolved Calcium (Ca)	mg/L	<0.050	0.050	7728999
Total Calcium (Ca)	mg/L	<0.050	0.050	7729001
Dissolved Magnesium (Mg)	mg/L	<0.050	0.050	7728999



		r	1	r
Bureau Veritas ID		RFX509		
Sampling Date		2021/11/10		
		17:00		
COC Number		440204		
	UNITS	TB1	RDL	QC Batch
Total Magnesium (Mg)	mg/L	<0.050	0.050	7729001
Dissolved Potassium (K)	mg/L	<0.050	0.050	7728999
Total Potassium (K)	mg/L	<0.050	0.050	7729001
Dissolved Sodium (Na)	mg/L	<0.050	0.050	7728999
Total Sodium (Na)	mg/L	<0.050	0.050	7729001
Dissolved Tellurium (Te)	ug/L	<0.020	0.020	7729000
Total Tellurium (Te)	ug/L	<0.020	0.020	7728997
Nutritional Parameters				
Total Phosphorus (P)	mg/L	<0.0010	0.0010	7719328
RADIONUCLIDE		•		
Radium-226	Bq/L	<0.0050	0.0050	7763072
RDL = Reportable Detection Limit				
QC Batch = Quality Control Batch				



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		RFX509							
Sampling Date		2021/11/10 17:00							
COC Number		440204							
	UNITS	TB1	RDL	QC Batch					
Calculated Parameters									
Total Hardness (CaCO3)	mg/L	<0.50	0.50	7728995					
Metals									
Mercury (Hg)	mg/L	<0.00001	0.00001	7708479					
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	7708483					
RDL = Reportable Detection Limit QC Batch = Quality Control Batch									



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

TEST SUMMARY

Bureau Veritas ID:	RFX508
Sample ID:	Port 6A
Matrix:	Ground Water

Collected:	2021/11/10
Shipped:	
Received:	2021/11/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7709699	N/A	2021/11/19	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	7703447	N/A	2021/12/07	Automated Statchk
Conductivity	AT	7709697	N/A	2021/11/19	Surinder Rai
Free (WAD) Cyanide	SKAL/CN	7708491	N/A	2021/11/18	Aditiben Patel
Total Cyanide	SKAL/CN	7708410	2021/11/18	2021/11/18	Aditiben Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7708825	N/A	2021/11/18	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/16	Aaisha Vahora
Fluoride	ISE	7709688	2021/11/18	2021/11/19	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7708483	2021/11/18	2021/11/19	Medhat Nasr
Mercury (low level)	CV/AA	7708479	2021/11/18	2021/11/19	Medhat Nasr
Bromide in water by IC	IC/UV	7719326	N/A	2021/11/19	Karen Graham
Low Level Chloride and Sulphate by AC	KONE	7719320	N/A	2021/11/22	Bradley Freake
Cyanide (Free)	SPEC	7719100	N/A	2021/11/19	Amy Phan
Hardness Total (calculated as CaCO3)	CALC	7728995	N/A	2021/12/15	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7728998	N/A	2021/12/10	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7728999	N/A	2021/12/10	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7729000	N/A	2021/11/20	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7728996	N/A	2021/12/15	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7728997	N/A	2021/11/22	Andrew An
Ammonia-N Low Level	KONE/UVVS	7719329	N/A	2021/11/20	Ana Katrina Cariaga
Orthophosphate by Konelab (low level)	KONE	7719327	N/A	2021/11/19	Fadia Mostafa
Silica (Reactive)	KONE	7719050	N/A	2021/11/23	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719328	2021/11/19	2021/11/21	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7709640	N/A	2021/11/19	Nimarta Singh
рН	AT	7709703	2021/11/18	2021/11/19	Surinder Rai
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/16	Aaisha Vahora
Radium-226 Low Level	AS	7763072	N/A	2022/01/20	Priya Sharma
Salinity		7730585	N/A	2021/11/23	Brent Boudreau
Calculated Total Dissolved Solids	CALC	7703853	N/A	2021/12/16	Automated Statchk
Total Dissolved Solids	BAL	7708350	2021/11/18	2021/11/19	Kristen Chan
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/16	Aaisha Vahora
Total Kjeldahl Nitrogen in Water	SKAL	7708631	2021/11/18	2021/11/22	Massarat Jan
Total Organic Carbon (TOC)	TOCV/NDIR	7708620	N/A	2021/11/18	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7708594	2021/11/18	2021/11/19	Kristen Chan
Turbidity	AT	7709447	N/A	2021/11/18	Neil Dassanayake

Bureau Veritas ID: Sample ID: Matrix:					Shipped:	2021/11/10 2021/11/15
Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Alkalinity	AT	7709699	N/A	2021/11/19	Surinder Ra	ai

7	7.1		,	2021/11/10	Samaer na
Conductivity	AT	7709697	N/A	2021/11/19	Surinder Rai
Fluoride	ISE	7709688	2021/11/18	2021/11/19	Surinder Rai

Bureau Veritas Laboratories 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com



TEST SUMMARY

Bureau Veritas ID: Sample ID:		Collected: Shipped:	2021/11/10
Matrix:	Ground Water	Received:	2021/11/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Orthophosphate by Konelab (low level)	KONE	7719327	N/A	2021/11/19	Fadia Mostafa
рН	AT	7709703	2021/11/18	2021/11/19	Surinder Rai

Bureau Veritas ID: RFX509 Sample ID: TB1 Matrix: Water Collected: 2021/11/10 Shipped: Received: 2021/11/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7709699	N/A	2021/11/19	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	7703447	N/A	2021/12/07	Automated Statchk
Conductivity	AT	7709697	N/A	2021/11/19	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7708825	N/A	2021/11/18	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/16	Aaisha Vahora
Fluoride	ISE	7709688	2021/11/18	2021/11/19	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7708483	2021/11/18	2021/11/19	Medhat Nasr
Mercury (low level)	CV/AA	7708479	2021/11/18	2021/11/19	Medhat Nasr
Bromide in water by IC	IC/UV	7719326	N/A	2021/11/19	Karen Graham
Low Level Chloride and Sulphate by AC	KONE	7719320	N/A	2021/11/22	Bradley Freake
Hardness Total (calculated as CaCO3)	CALC	7728995	N/A	2021/12/15	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7728998	N/A	2021/12/10	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7728999	N/A	2021/12/10	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7729000	N/A	2021/11/20	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7729001	N/A	2021/12/15	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7728997	N/A	2021/11/22	Andrew An
Ammonia-N Low Level	KONE/UVVS	7719329	N/A	2021/11/20	Ana Katrina Cariaga
Orthophosphate by Konelab (low level)	KONE	7719327	N/A	2021/11/19	Fadia Mostafa
Silica (Reactive)	KONE	7719282	N/A	2021/11/23	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719328	2021/11/19	2021/11/21	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7709640	N/A	2021/11/19	Nimarta Singh
рН	AT	7709703	2021/11/18	2021/11/19	Surinder Rai
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/16	Aaisha Vahora
Radium-226 Low Level	AS	7763072	N/A	2022/01/20	Priya Sharma
Salinity		7730585	N/A	2021/11/23	Brent Boudreau
Calculated Total Dissolved Solids	CALC	7703853	N/A	2021/12/16	Automated Statchk
Total Dissolved Solids	BAL	7708350	2021/11/18	2021/11/19	Kristen Chan
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/16	Aaisha Vahora
Total Kjeldahl Nitrogen in Water	SKAL	7708631	2021/11/18	2021/11/19	Massarat Jan
Total Organic Carbon (TOC)	TOCV/NDIR	7708620	N/A	2021/11/18	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7706911	2021/11/18	2021/11/19	Shaneil Hall
Turbidity	AT	7709447	N/A	2021/11/18	Neil Dassanayake



GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt
Package 1 13.3°C
Sample RFX508 [Port 6A] : Sample was analyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised. TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.
Sample RFX509 [TB1] : Sample was analyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the uncertainty of test results but does not necessarily imply that results are compromised.

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

]		Matrix	Spike	SPIKED	BLANK	Method I	Blank	RPD		QC Standard		
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7706911	Total Suspended Solids	2021/11/19					<1	mg/L	0	25	100	85 - 115
7708350	Total Dissolved Solids	2021/11/19					<10	mg/L	2.1	25	100	90 - 110
7708410	Total Cyanide (CN)	2021/11/18	34 (1)	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
7708479	Mercury (Hg)	2021/11/19	103	75 - 125	103	80 - 120	<0.00001	mg/L	NC	20		
7708483	Dissolved Mercury (Hg)	2021/11/19	98	75 - 125	101	80 - 120	<0.00001	mg/L	NC	20		
7708491	WAD Cyanide (Free)	2021/11/18	94	80 - 120	93	80 - 120	<1	ug/L	NC	20		
7708594	Total Suspended Solids	2021/11/19					<1	mg/L	0	25	95	85 - 115
7708620	Total Organic Carbon (TOC)	2021/11/18	NC	80 - 120	97	80 - 120	<0.40	mg/L	4.9	20		
7708631	Total Kjeldahl Nitrogen (TKN)	2021/11/19	95	80 - 120	103	80 - 120	<0.10	mg/L	NC	20	100	80 - 120
7708825	Dissolved Organic Carbon	2021/11/18	96	80 - 120	97	80 - 120	<0.40	mg/L	2.4	20		
7709447	Turbidity	2021/11/18			98	85 - 115	<0.1	NTU	1.8	20		
7709640	Nitrate (N)	2021/11/19	97	80 - 120	102	80 - 120	<0.10	mg/L	0.027	20		
7709640	Nitrite (N)	2021/11/19	100	80 - 120	108	80 - 120	<0.010	mg/L	NC	20		
7709688	Fluoride (F-)	2021/11/19	94	80 - 120	103	80 - 120	<0.10	mg/L	0	20		
7709697	Conductivity	2021/11/19			98	85 - 115	<0.001	mS/cm	0.13	25		
7709699	Alkalinity (Total as CaCO3)	2021/11/19			96	85 - 115	<1.0	mg/L	1.3	20		
7709703	рН	2021/11/19			102	98 - 103			1.0	N/A		
7719050	Reactive Silica (SiO2)	2021/11/23	NC	80 - 120	102	80 - 120	<0.050	mg/L	0.32	20		
7719100	Free Cyanide (CN)	2021/11/19	87	80 - 120	93	80 - 120	<1.0	ug/L	9.9	20		
7719282	Reactive Silica (SiO2)	2021/11/23	NC	80 - 120	102	80 - 120	<0.050	mg/L	1.3	20		
7719320	Dissolved Chloride (Cl-)	2021/11/22	NC	80 - 120	99	80 - 120	<0.50	mg/L				
7719320	Dissolved Sulphate (SO4)	2021/11/22	NC	80 - 120	107	80 - 120	<0.50	mg/L				
7719326	Dissolved Bromide (Br-)	2021/11/19	NC	80 - 120	101	80 - 120	<0.010	mg/L				
7719327	Orthophosphate (P)	2021/11/19	91	80 - 120	106	80 - 120	<0.0010	mg/L	NC	20		
7719328	Total Phosphorus (P)	2021/11/21	98	80 - 120	97	80 - 120	<0.0010	mg/L			92	80 - 120
7719329	Total Nitrogen (Ammonia Nitrogen)	2021/11/20	106	N/A	109	N/A	<0.0050	mg/L				
7728997	Total Aluminum (Al)	2021/11/22	97	80 - 120	100	80 - 120	<0.50	ug/L				
7728997	Total Antimony (Sb)	2021/11/22	102	80 - 120	103	80 - 120	<0.020	ug/L				
7728997	Total Arsenic (As)	2021/11/22	104	80 - 120	102	80 - 120	<0.020	ug/L				
7728997	Total Barium (Ba)	2021/11/22	NC	80 - 120	102	80 - 120	<0.020	ug/L				
7728997	Total Beryllium (Be)	2021/11/22	94	80 - 120	98	80 - 120	<0.010	ug/L				



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix Spike		SPIKED	BLANK	Method	Blank	RP	D	QC Sta	indard
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7728997	Total Bismuth (Bi)	2021/11/22	97	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Boron (B)	2021/11/22	96	80 - 120	96	80 - 120	<10	ug/L				
7728997	Total Cadmium (Cd)	2021/11/22	101	80 - 120	103	80 - 120	<0.0050	ug/L				
7728997	Total Chromium (Cr)	2021/11/22	96	80 - 120	99	80 - 120	<0.10	ug/L				
7728997	Total Cobalt (Co)	2021/11/22	93	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Copper (Cu)	2021/11/22	91	80 - 120	98	80 - 120	<0.050	ug/L				
7728997	Total Iron (Fe)	2021/11/22	95	80 - 120	100	80 - 120	<1.0	ug/L				
7728997	Total Lead (Pb)	2021/11/22	100	80 - 120	100	80 - 120	<0.0050	ug/L				
7728997	Total Lithium (Li)	2021/11/22	92	80 - 120	90	80 - 120	<0.50	ug/L				
7728997	Total Manganese (Mn)	2021/11/22	NC	80 - 120	100	80 - 120	<0.050	ug/L				
7728997	Total Molybdenum (Mo)	2021/11/22	109	80 - 120	103	80 - 120	<0.050	ug/L				
7728997	Total Nickel (Ni)	2021/11/22	93	80 - 120	99	80 - 120	<0.020	ug/L				
7728997	Total Selenium (Se)	2021/11/22	103	80 - 120	105	80 - 120	<0.040	ug/L				
7728997	Total Silicon (Si)	2021/11/22	103	80 - 120	103	80 - 120	<50	ug/L				
7728997	Total Silver (Ag)	2021/11/22	98	80 - 120	97	80 - 120	<0.0050	ug/L				
7728997	Total Strontium (Sr)	2021/11/22	NC	80 - 120	98	80 - 120	<0.050	ug/L				
7728997	Total Tellurium (Te)	2021/11/22	98	80 - 120	105	80 - 120	<0.020	ug/L				
7728997	Total Thallium (TI)	2021/11/22	101	80 - 120	99	80 - 120	<0.0020	ug/L				
7728997	Total Tin (Sn)	2021/11/22	101	80 - 120	103	80 - 120	<0.20	ug/L				
7728997	Total Titanium (Ti)	2021/11/22	102	80 - 120	101	80 - 120	<0.50	ug/L				
7728997	Total Uranium (U)	2021/11/22	105	80 - 120	100	80 - 120	<0.0020	ug/L				
7728997	Total Vanadium (V)	2021/11/22	101	80 - 120	100	80 - 120	<0.20	ug/L				
7728997	Total Zinc (Zn)	2021/11/22	NC	80 - 120	106	80 - 120	<0.10	ug/L				
7729000	Dissolved Aluminum (Al)	2021/11/20	94	80 - 120	104	80 - 120	<0.50	ug/L				
7729000	Dissolved Antimony (Sb)	2021/11/20	97	80 - 120	103	80 - 120	<0.020	ug/L				
7729000	Dissolved Arsenic (As)	2021/11/20	98	80 - 120	102	80 - 120	<0.020	ug/L				
7729000	Dissolved Barium (Ba)	2021/11/20	NC	80 - 120	102	80 - 120	<0.020	ug/L				
7729000	Dissolved Beryllium (Be)	2021/11/20	98	80 - 120	105	80 - 120	<0.010	ug/L				
7729000	Dissolved Bismuth (Bi)	2021/11/20	92	80 - 120	98	80 - 120	<0.0050	ug/L				
7729000	Dissolved Boron (B)	2021/11/20	97	80 - 120	104	80 - 120	<10	ug/L		T		
7729000	Dissolved Cadmium (Cd)	2021/11/20	96	80 - 120	104	80 - 120	<0.0050	ug/L				



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

			Matrix	Spike	SPIKED	BLANK	Method B	lank	RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7729000	Dissolved Chromium (Cr)	2021/11/20	89	80 - 120	99	80 - 120	<0.10	ug/L				
7729000	Dissolved Cobalt (Co)	2021/11/20	88	80 - 120	98	80 - 120	<0.0050	ug/L				
7729000	Dissolved Copper (Cu)	2021/11/20	84	80 - 120	98	80 - 120	<0.050	ug/L				
7729000	Dissolved Iron (Fe)	2021/11/20	92	80 - 120	103	80 - 120	<1.0	ug/L				
7729000	Dissolved Lead (Pb)	2021/11/20	96	80 - 120	100	80 - 120	<0.0050	ug/L				
7729000	Dissolved Lithium (Li)	2021/11/20	97	80 - 120	101	80 - 120	<0.50	ug/L				
7729000	Dissolved Manganese (Mn)	2021/11/20	NC	80 - 120	101	80 - 120	0.056 <i>,</i> RDL=0.050 (2)	ug/L				
7729000	Dissolved Molybdenum (Mo)	2021/11/20	104	80 - 120	103	80 - 120	<0.050	ug/L				
7729000	Dissolved Nickel (Ni)	2021/11/20	87	80 - 120	101	80 - 120	<0.020	ug/L				
7729000	Dissolved Phosphorus (P)	2021/11/20	100	80 - 120	105	80 - 120	<2.0	ug/L				
7729000	Dissolved Selenium (Se)	2021/11/20	101	80 - 120	102	80 - 120	<0.040	ug/L				
7729000	Dissolved Silicon (Si)	2021/11/20	99	80 - 120	108	80 - 120	<50	ug/L				
7729000	Dissolved Silver (Ag)	2021/11/20	92	80 - 120	99	80 - 120	<0.0050	ug/L				
7729000	Dissolved Strontium (Sr)	2021/11/20	NC	80 - 120	100	80 - 120	<0.050	ug/L				
7729000	Dissolved Tellurium (Te)	2021/11/20	95	80 - 120	103	80 - 120	<0.020	ug/L				
7729000	Dissolved Thallium (Tl)	2021/11/20	95	80 - 120	99	80 - 120	<0.0020	ug/L				
7729000	Dissolved Tin (Sn)	2021/11/20	95	80 - 120	104	80 - 120	<0.20	ug/L				
7729000	Dissolved Titanium (Ti)	2021/11/20	97	80 - 120	107	80 - 120	<0.50	ug/L				
7729000	Dissolved Uranium (U)	2021/11/20	103	80 - 120	103	80 - 120	<0.0020	ug/L				
7729000	Dissolved Vanadium (V)	2021/11/20	93	80 - 120	100	80 - 120	<0.20	ug/L				
7729000	Dissolved Zinc (Zn)	2021/11/20	NC	80 - 120	111	80 - 120	<0.10	ug/L				
7730585	Salinity	2021/11/23					<2.0	N/A	0	25	99	80 - 120



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: NU

				Matrix	Spike	SPIKED	BLANK	Method B	Blank	RPI	2	QC Sta	ndard
Γ	QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
Γ	7763072	Radium-226	2022/01/20			91	85 - 115	<0.0050	Bq/L	NC	N/A		

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 for TI - 2X RDL acceptable for low level metals determination.



VALIDATION SIGNATURE PAGE

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

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

David Huang, BBY Scientific Specialist

aym

Ghayasuddin Khan, M.Sc., P.Chem., QP, Scientific Specialist, Inorganics

Lisa Thum, C.E.T., QP, Manager, Inorganics

Mike Mac Sul

Mike MacGillivray, Scientific Specialist (Inorganics)



Steven Simpson, Eab Director

BV Labs 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 Signature Page.



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 441689

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/24 Report #: R6974461 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X9875

Received: 2021/11/17, 09:30

Sample Matrix: Ground Water # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Alkalinity (1)	1	N/A	2021/11/22	CAM SOP-00448	SM 23 2320 B m
Alkalinity (1)	1	N/A	2021/11/23	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide (1)	2	N/A	2021/12/07	CAM SOP-00102	APHA 4500-CO2 D
Conductivity (1)	1	N/A	2021/11/22	CAM SOP-00414	SM 23 2510 m
Conductivity (1)	1	N/A	2021/11/23	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (1, 6)	2	N/A	2021/11/22	CAM SOP-00446	SM 23 5310 B m
Field Measured Conductivity (1, 7)	2	N/A	2021/11/18		Field Meter
Fluoride (1)	1	2021/11/20	2021/11/22	CAM SOP-00449	SM 23 4500-F C m
Fluoride (1)	1	2021/11/20	2021/11/23	CAM SOP-00449	SM 23 4500-F C m
Dissolved Mercury (low level) (1)	2	2021/11/22	2021/11/24	CAM SOP-00453	EPA 7470 m
Mercury (low level) (1)	2	2021/11/22	2021/11/24	CAM SOP-00453	EPA 7470 m
Bromide in water by IC (2)	2	N/A	2021/12/13		
Low Level Chloride and Sulphate by AC (2)	2	N/A	2021/11/24	AB SOP-00020 / AB SOP- 00018	SM23 4500-CL/SO4-E m
Cyanide (Free) (2)	2	N/A	2021/11/23	CAL SOP-00266	EPA 9016d R0 m
Cyanide, Strong Acid Dissociable (SAD) (2)	2	N/A	2021/11/26	CAL SOP-00270	SM 23 4500-CN m
Cyanide WAD (weak acid dissociable) (2)	1	N/A	2021/11/23	CAL SOP-00270	SM 23 4500-CN m
Cyanide WAD (weak acid dissociable) (2)	1	N/A	2021/11/26	CAL SOP-00270	SM 23 4500-CN m
Hardness Total (calculated as CaCO3) (3, 8)	2	N/A	2022/01/12	BBY WI-00033	Auto Calc
Hardness (calculated as CaCO3) (3)	2	N/A	2022/01/11	BBY WI-00033	Auto Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.) (3)	2	N/A	2022/01/11	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (dissolved) (3)	2	N/A	2021/12/07	BBY7SOP-00002	EPA 6020B R2 m
Na, K, Ca, Mg, S by CRC ICPMS (total) (3)	2	N/A	2022/01/12	BBY WI-00033	Auto Calc
Elements by ICPMS Low Level (total) (3)	2	N/A	2021/12/07	BBY7SOP-00002	EPA 6020B R2 m
Ammonia-N Low Level (2)	2	N/A	2021/11/24	AB SOP-00007	SM23 4500 NH3 A G m
Orthophosphate by Konelab (2)	2	N/A	2021/12/13	AB SOP-00025	SM 23 4500-P A,F m
Silica (Reactive) (2)	2	N/A	2021/11/28	AB SOP-00011	EPA370.1 R1978 m
Total Phosphorus Low Level Total (2)	2	2021/11/24	2021/11/24	AB SOP-00024	SM 23 4500-P A,B,F m
Nitrate & Nitrite as Nitrogen in Water (1, 9)	2	N/A	2021/11/23	CAM SOP-00440	SM 23 4500-NO3I/NO2B
рН (1)	1	2021/11/20	2021/11/22	CAM SOP-00413	SM 4500H+ B m
рН (1)	1	2021/11/20	2021/11/23	CAM SOP-00413	SM 4500H+ B m



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 441689

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/24 Report #: R6974461 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X9875

Received: 2021/11/17, 09:30

Sample Matrix: Ground Water # Samples Received: 2

		Date	Date		
Analyses	Quantity	Extracted	Analyzed	Laboratory Method	Analytical Method
Field Measured pH (1, 7)	2	N/A	2021/11/18		Field pH Meter
Radium-226 Low Level (4, 10)	2	N/A	2022/01/06	BQL SOP-00006	Alpha Spectrometry
				BQL SOP-00017	
				BQL SOP-00032	
Salinity (5, 11)	2	N/A	2021/12/29		SM 22 2520B
Calculated Total Dissolved Solids (1)	2	N/A	2022/01/19		Auto Calc
Total Dissolved Solids (1)	2	2021/11/20	2021/11/30	CAM SOP-00428	SM 23 2540C m
Field Temperature (1, 7)	2	N/A	2021/11/18		Field Thermometer
Total Kjeldahl Nitrogen in Water (1)	2	2021/11/19	2021/11/19	CAM SOP-00938	OMOE E3516 m
Total Organic Carbon (TOC) (1, 12)	2	N/A	2021/11/19	CAM SOP-00446	SM 23 5310B m
Low Level Total Suspended Solids (1)	2	2021/11/19	2021/11/30	CAM SOP-00428	SM 23 2540D m
Turbidity (1)	1	N/A	2021/11/19	CAM SOP-00417	SM 23 2130 B m
Turbidity (1)	1	N/A	2021/11/22	CAM SOP-00417	SM 23 2130 B m

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.



Your P.O. #: 997577 Your Project #: 21452766 Site Location: Whale Tail Your C.O.C. #: 441689

Attention: Reporting

Agnico Eagle Amaruq Amaruq Keewatin, NU CANADA POX 0A1

> Report Date: 2022/01/24 Report #: R6974461 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: C1X9875

Received: 2021/11/17, 09:30

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

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

(1) This test was performed by Bureau Veritas Mississauga, 6740 Campobello Rd , Mississauga, ON, L5N 2L8

(2) This test was performed by Bureau Veritas Calgary (19th), 4000 19th Street NE , Calgary, AB, T2E 6P8

(3) This test was performed by Bureau Veritas Burnaby, 4606 Canada Way , Burnaby, BC, V5G 1K5

(4) This test was performed by Bureau Veritas Kitimat, 6790 Kitimat Road, Unit 4, Mississauga, ON, L5N 5L9

(5) This test was performed by Bureau Veritas Bedford, 200 Bluewater Rd Suite 105, Bedford, NS, B4B 1G9

(6) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(7) This is a field test, therefore, the results relate to items that were not analysed at Bureau Veritas Laboratories.

(8) "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).

(9) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(10) Radium-226 results have not been corrected for blanks.

(11) Non-accredited test method

(12) Total Organic Carbon (TOC) present in the sample should be considered as non-purgeable TOC.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager. Katherine Szozda, Project Manager Email: Katherine.Szozda@bureauveritas.com Phone# (613)274-0573 Ext:7063633

BV Labs 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 Signature Page.



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RGP720			RGP720			RGP721		
Sampling Date		2021/11/12			2021/11/12			2021/11/13		
		11:30			11:30			12:00		
COC Number		441689			441689			441689		
	UNITS	Port 2A	RDL	QC Batch	Port 2A Lab-Dup	RDL	QC Batch	Port 2A - Dup 1A	RDL	QC Batch
CONVENTIONALS										
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.11	0.0050	7787580				0.71	0.0050	7787580
Calculated Parameters			•		•	•	••		*	
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	58	1.0	7708663				53	1.0	7708663
Calculated TDS	mg/L	8200	1.0	7709206				11000	1.0	7709206
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	7708663				<1.0	1.0	7708663
Dissolved Hardness (CaCO3)	mg/L	5600	0.50	7753075				8380	0.50	7753075
Field Measurements	•		•						•	
Field Measured Conductivity	uS/cm	9368	N/A	ONSITE				12748	N/A	ONSITE
Field Temperature	Celsius	10.1	N/A	ONSITE				9.4	N/A	ONSITE
Field Measured pH	pН	8.3		ONSITE				8.3		ONSITE
Inorganics						•	••		*	
Dissolved Bromide (Br-)	mg/L	48	0.50	7787575				75	0.50	7787575
Conductivity	mS/cm	14.3	0.001	7713348				19.8	0.001	7713348
Free Cyanide (CN)	ug/L	<1.0	1.0	7787579				<1.0	1.0	7787579
Strong Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	7787577				<0.00050	0.00050	7787581
Weak Acid Dissoc. Cyanide (CN)	mg/L	<0.00050	0.00050	7787578				<0.00050	0.00050	7787582
Total Dissolved Solids	mg/L	14000	20	7710875				18800	20	7710875
Fluoride (F-)	mg/L	0.61	0.10	7713329				0.52	0.10	7713329
Total Kjeldahl Nitrogen (TKN)	mg/L	1.2	0.50	7711090				1.5	0.50	7711090
Dissolved Organic Carbon	mg/L	380	4.0	7713375				350	4.0	7713375
Total Organic Carbon (TOC)	mg/L	380	4.0	7711076				370	4.0	7711076
Orthophosphate (P)	mg/L	<0.0030	0.0030	7787576				<0.0030	0.0030	7787576
рН	рН	7.77		7713349				7.52		7713349
Salinity	N/A	7.8	2.0	7756776				11	2.0	7756776
Reactive Silica (SiO2)	mg/L	10	0.25	7719305				38	0.25	7719305
Total Suspended Solids	mg/L	10	1	7710955				12	1	7710955
Turbidity	NTU	0.7	0.1	7713322	0.9	0.1	7713322	0.7	0.1	7712108
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Lab-Dup = Laboratory Initiated Duplicate

N/A = Not Applicable



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RGP720			RGP720			RGP721		
Sampling Date		2021/11/12			2021/11/12			2021/11/13		
		11:30			11:30			12:00		
COC Number		441689			441689			441689		
	UNITS	Port 2A	RDL	QC Batch	Port 2A Lab-Dup	RDL	QC Batch	Port 2A - Dup 1A	RDL	QC Batch
Alkalinity (Total as CaCO3)	mg/L	58	1.0	7713347				54	1.0	7713347
Dissolved Chloride (Cl-)	mg/L	5500	25	7787574	5500	25	7787574	7400	50	7787574
Nitrite (N)	mg/L	<0.010	0.010	7712690				<0.010	0.010	7711448
Nitrate (N)	mg/L	<0.10	0.10	7712690				<0.10	0.10	7711448
Dissolved Sulphate (SO4)	mg/L	1.4	0.50	7787574	1.5	0.50	7787574	2.3	0.50	7787574
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	7712690				<0.10	0.10	7711448
Metals										
Dissolved Aluminum (Al)	ug/L	13.3	5.0	7777786				18	10	7777786
Total Aluminum (Al)	ug/L	18.7	5.0	7777787				23	10	7777787
Dissolved Antimony (Sb)	ug/L	0.52	0.20	7777786				0.61	0.40	7777786
Total Antimony (Sb)	ug/L	0.59	0.20	7777787				0.83	0.40	7777787
Dissolved Arsenic (As)	ug/L	1.93	0.20	7777786				2.02	0.40	7777786
Total Arsenic (As)	ug/L	1.89	0.20	7777787				1.40	0.40	7777787
Dissolved Barium (Ba)	ug/L	69.8	0.20	7777786				95.2	0.40	7777786
Total Barium (Ba)	ug/L	75.0	0.20	7777787				101	0.40	7777787
Dissolved Beryllium (Be)	ug/L	<0.10	0.10	7777786				<0.20	0.20	7777786
Total Beryllium (Be)	ug/L	<0.10	0.10	7777787				<0.20	0.20	7777787
Dissolved Bismuth (Bi)	ug/L	<0.050	0.050	7777786				<0.10	0.10	7777786
Total Bismuth (Bi)	ug/L	<0.050	0.050	7777787				<0.10	0.10	7777787
Dissolved Boron (B)	ug/L	1150	100	7777786				1460	200	7777786
Total Boron (B)	ug/L	1280	100	7777787				1560	200	7777787
Dissolved Cadmium (Cd)	ug/L	<0.050	0.050	7777786				<0.10	0.10	7777786
Total Cadmium (Cd)	ug/L	<0.050	0.050	7777787				<0.10	0.10	7777787
Dissolved Chromium (Cr)	ug/L	<1.0	1.0	7777786				<2.0	2.0	7777786
Total Chromium (Cr)	ug/L	<1.0	1.0	7777787				<2.0	2.0	7777787
Dissolved Cobalt (Co)	ug/L	0.431	0.050	7777786				0.58	0.10	7777786
Total Cobalt (Co)	ug/L	0.499	0.050	7777787				0.65	0.10	7777787
Dissolved Copper (Cu)	ug/L	<0.50	0.50	7777786				<1.0	1.0	7777786
Total Copper (Cu)	ug/L	0.50	0.50	7777787				1.3	1.0	7777787

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RGP720			RGP720			RGP721		
Sampling Date		2021/11/12 11:30			2021/11/12 11:30			2021/11/13 12:00		
COC Number		441689			441689			441689		
	UNITS	Port 2A	RDL	QC Batch	Port 2A Lab-Dup	RDL	QC Batch	Port 2A - Dup 1A	RDL	QC Batch
Dissolved Iron (Fe)	ug/L	<10	10	7777786				<20	20	7777786
Total Iron (Fe)	ug/L	36	10	7777787				26	20	7777787
Dissolved Lead (Pb)	ug/L	<0.050	0.050	7777786				<0.10	0.10	7777786
Total Lead (Pb)	ug/L	0.089	0.050	7777787				0.13	0.10	7777787
Dissolved Lithium (Li)	ug/L	1410	5.0	7777786				2330	10	7777786
Total Lithium (Li)	ug/L	1550	5.0	7777787				2390	10	7777787
Dissolved Manganese (Mn)	ug/L	9.09	0.50	7777786				13.0	1.0	7777786
Total Manganese (Mn)	ug/L	9.75	0.50	7777787				14.2	1.0	7777787
Dissolved Molybdenum (Mo)	ug/L	4.48	0.50	7777786				5.7	1.0	7777786
Total Molybdenum (Mo)	ug/L	4.74	0.50	7777787				5.4	1.0	7777787
Dissolved Nickel (Ni)	ug/L	1.36	0.20	7777786				1.26	0.40	7777786
Total Nickel (Ni)	ug/L	2.16	0.20	7777787				4.58	0.40	7777787
Dissolved Phosphorus (P)	ug/L	<20	20	7777786				<40	40	7777786
Dissolved Selenium (Se)	ug/L	0.43	0.40	7777786				<0.80	0.80	7777786
Total Silicon (Si)	ug/L	3490	500	7777787				3460	1000	7777787
Total Selenium (Se)	ug/L	<0.40	0.40	7777787				<0.80	0.80	7777787
Dissolved Silicon (Si)	ug/L	3310	500	7777786				3320	1000	7777786
Dissolved Silver (Ag)	ug/L	<0.050	0.050	7777786				<0.10	0.10	7777786
Total Silver (Ag)	ug/L	<0.050	0.050	7777787				<0.10	0.10	7777787
Dissolved Strontium (Sr)	ug/L	40200	0.50	7777786				59200	1.0	7777786
Total Strontium (Sr)	ug/L	43300	0.50	7777787				60100	1.0	7777787
Dissolved Thallium (Tl)	ug/L	<0.020	0.020	7777786				<0.040	0.040	7777786
Total Thallium (Tl)	ug/L	<0.020	0.020	7777787				<0.040	0.040	7777787
Dissolved Tin (Sn)	ug/L	<2.0	2.0	7777786				<4.0	4.0	7777786
Total Tin (Sn)	ug/L	<2.0	2.0	7777787				<4.0	4.0	7777787
Dissolved Titanium (Ti)	ug/L	<5.0	5.0	7777786				<10	10	7777786
Total Titanium (Ti)	ug/L	<5.0	5.0	7777787				<10	10	7777787
Dissolved Uranium (U)	ug/L	<0.020	0.020	7777786				<0.040	0.040	7777786
Total Uranium (U)	ug/L	0.022	0.020	7777787				<0.040	0.040	7777787

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

Lab-Dup = Laboratory Initiated Duplicate



RESULTS OF ANALYSES OF GROUND WATER

Bureau Veritas ID		RGP720			RGP720			RGP721		
Sampling Date		2021/11/12			2021/11/12			2021/11/13		
		11:30			11:30			12:00		
COC Number		441689			441689			441689		
	UNITS	Port 2A	RDL	QC Batch	Port 2A Lab-Dup	RDL	QC Batch	Port 2A - Dup 1A	RDL	QC Batch
Dissolved Vanadium (V)	ug/L	<2.0	2.0	7777786				<4.0	4.0	7777786
Total Vanadium (V)	ug/L	<2.0	2.0	7777787				<4.0	4.0	7777787
Dissolved Zinc (Zn)	ug/L	5.0	1.0	7777786				5.9	2.0	7777786
Total Zinc (Zn)	ug/L	153	1.0	7777787				132	2.0	7777787
Dissolved Calcium (Ca)	mg/L	2240	0.50	7777785				3350	1.0	7777785
Total Calcium (Ca)	mg/L	2440	0.50	7734048				3420	1.0	7734048
Dissolved Magnesium (Mg)	mg/L	0.50	0.50	7777785				<1.0	1.0	7777785
Total Magnesium (Mg)	mg/L	0.58	0.50	7734048				<1.0	1.0	7734048
Dissolved Potassium (K)	mg/L	69.2	0.50	7777785				112	1.0	7777785
Total Potassium (K)	mg/L	76.0	0.50	7734048				114	1.0	7734048
Dissolved Sodium (Na)	mg/L	393	0.50	7777785				423	1.0	7777785
Total Sodium (Na)	mg/L	418	0.50	7734048				433	1.0	7734048
Dissolved Tellurium (Te)	ug/L	<0.20	0.20	7777786				<0.40	0.40	7777786
Total Tellurium (Te)	ug/L	<0.20	0.20	7777787				<0.40	0.40	7777787
Nutritional Parameters										
Total Phosphorus (P)	mg/L	0.0068	0.0010	7719280				0.0041	0.0010	7719280
RADIONUCLIDE	-									
Radium-226	Bq/L	1.1	0.0050	7754276				1.4	0.0050	7754276
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Dupli	cate					-	•			



Bureau Veritas ID		RGP721							
Sampling Date		2021/11/13 12:00							
COC Number		441689							
	UNITS	Port 2A - Dup 1A Lab-Dup	RDL	QC Batch					
Inorganics									
Conductivity	mS/cm	19.6	0.001	7713348					
Fluoride (F-)	mg/L	0.53	0.10	7713329					
рН	рН	7.54		7713349					
Salinity	N/A	11	2.0	7756776					
Alkalinity (Total as CaCO3)	mg/L	56	1.0	7713347					
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate									

RESULTS OF ANALYSES OF GROUND WATER



ELEMENTS BY ATOMIC SPECTROSCOPY (GROUND WATER)

Bureau Veritas ID		RGP720			RGP720			RGP721			
Sampling Date		2021/11/12			2021/11/12			2021/11/13			
Sampling Date		11:30			11:30			12:00			
COC Number		441689			441689			441689			
	UNITS	Port 2A	RDL	QC Batch	Port 2A	RDL	QC Batch	Port 2A - Dup	RDL	QC Batch	
	UNITS	POIL ZA	NDL	QC Batch	Lab-Dup	KUL	QC Batch	1A	KUL	QC Batti	
Calculated Parameters											
Total Hardness (CaCO3)	mg/L	6090	0.50	7734044				8560	0.50	7734044	
Metals											
Mercury (Hg)	mg/L	<0.00001	0.00001	7718971				<0.00001	0.00001	7718971	
Dissolved Mercury (Hg)	mg/L	<0.00001	0.00001	7718910	<0.00001	0.00001	7718910	<0.00001	0.00001	7718910	
RDL = Reportable Detection	Limit										
QC Batch = Quality Control Batch											
Lab-Dup = Laboratory Initiat	ed Duplic	ate									



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: DH

TEST SUMMARY

Bureau Veritas ID:	RGP720
Sample ID:	Port 2A
Matrix:	Ground Water

Collected: 2021/11/12 Shipped: Received: 2021/11/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7713347	N/A	2021/11/22	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	7708663	N/A	2021/12/07	Automated Statchk
Conductivity	AT	7713348	N/A	2021/11/22	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7713375	N/A	2021/11/22	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/18	Aaisha Vahora
Fluoride	ISE	7713329	2021/11/20	2021/11/22	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7718910	2021/11/22	2021/11/24	Medhat Nasr
Mercury (low level)	CV/AA	7718971	2021/11/22	2021/11/24	Medhat Nasr
Bromide in water by IC	IC/UV	7787575	N/A	2021/12/13	Coralynn Topping
Low Level Chloride and Sulphate by AC	KONE	7787574	N/A	2021/11/24	Shanna McKort
Cyanide (Free)	SPEC	7787579	N/A	2021/11/23	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7787577	N/A	2021/11/26	Zoe Wu
Cyanide WAD (weak acid dissociable)	TECH	7787578	N/A	2021/11/26	Zoe Wu
Hardness Total (calculated as CaCO3)	CALC	7734044	N/A	2022/01/12	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7753075	N/A	2022/01/11	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7777785	N/A	2022/01/11	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7777786	N/A	2021/12/07	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7734048	N/A	2022/01/12	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7777787	N/A	2021/12/07	Andrew An
Ammonia-N Low Level	KONE/UVVS	7787580	N/A	2021/11/24	Ana Katrina Cariaga
Orthophosphate by Konelab	KONE	7787576	N/A	2021/12/13	Serena Tian
Silica (Reactive)	KONE	7719305	N/A	2021/11/28	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719280	2021/11/24	2021/11/24	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7712690	N/A	2021/11/23	Chandra Nandlal
рН	AT	7713349	2021/11/20	2021/11/22	Surinder Rai
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/18	Aaisha Vahora
Radium-226 Low Level	AS	7754276	N/A	2022/01/06	Ryan Wong
Salinity		7756776	N/A	2021/12/29	Brent Boudreau
Calculated Total Dissolved Solids	CALC	7709206	N/A	2022/01/19	Automated Statchk
Total Dissolved Solids	BAL	7710875	2021/11/20	2021/11/30	Shaneil Hall
Field Measured Conductivity	PH	ONSITE	N/A	2021/11/18	Aaisha Vahora
Total Kjeldahl Nitrogen in Water	SKAL	7711090	2021/11/19	2021/11/19	Massarat Jan
Total Organic Carbon (TOC)	TOCV/NDIR	7711076	N/A	2021/11/19	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7710955	2021/11/19	2021/11/30	Shaneil Hall
Turbidity	AT	7713322	N/A	2021/11/22	Neil Dassanayake

	GP720 Dup ort 2A Ground Water					Collected: Shipped: Received:	2021/11/12 2021/11/17
Test Description		Instrumentation	Batch	Extracted	Date Analyzed	Analyst	
Dissolved Mercury (low leve	l)	CV/AA	7718910	2021/11/22	2021/11/24	Medhat Na	isr

Low Level Chloride and Sulphate by AC	KONE	7787574 N/A	2021/11/24	Shanna McKort	
Turbidity	AT	7713322 N/A	2021/11/22	Neil Dassanayake	
		Page 10 of 18			

Bureau Veritas Laboratories 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com



TEST SUMMARY

Bureau Veritas ID:	RGP721
Sample ID:	Port 2A - Dup 1A
Matrix:	Ground Water

Collected: 2021/11/13 Shipped: Received: 2021/11/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7713347	N/A	2021/11/23	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	7708663	N/A	2021/12/07	Automated Statchk
Conductivity	AT	7713348	N/A	2021/11/23	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	7713375	N/A	2021/11/22	Julianna Castiglione
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/18	Aaisha Vahora
Fluoride	ISE	7713329	2021/11/20	2021/11/23	Surinder Rai
Dissolved Mercury (low level)	CV/AA	7718910	2021/11/22	2021/11/24	Medhat Nasr
Mercury (low level)	CV/AA	7718971	2021/11/22	2021/11/24	Medhat Nasr
Bromide in water by IC	IC/UV	7787575	N/A	2021/12/13	Coralynn Topping
Low Level Chloride and Sulphate by AC	KONE	7787574	N/A	2021/11/24	Shanna McKort
Cyanide (Free)	SPEC	7787579	N/A	2021/11/23	Amy Phan
Cyanide, Strong Acid Dissociable (SAD)	TECH/UVVS	7787581	N/A	2021/11/26	Zoe Wu
Cyanide WAD (weak acid dissociable)	TECH	7787582	N/A	2021/11/23	Zoe Wu
Hardness Total (calculated as CaCO3)	CALC	7734044	N/A	2022/01/12	Automated Statchk
Hardness (calculated as CaCO3)	CALC	7753075	N/A	2022/01/11	Automated Statchk
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	ICP	7777785	N/A	2022/01/11	Automated Statchk
Elements by ICPMS Low Level (dissolved)	ICP/MS	7777786	N/A	2021/12/07	Andrew An
Na, K, Ca, Mg, S by CRC ICPMS (total)	ICP	7734048	N/A	2022/01/12	Automated Statchk
Elements by ICPMS Low Level (total)	ICP/MS	7777787	N/A	2021/12/07	Andrew An
Ammonia-N Low Level	KONE/UVVS	7787580	N/A	2021/11/24	Ana Katrina Cariaga
Orthophosphate by Konelab	KONE	7787576	N/A	2021/12/13	Serena Tian
Silica (Reactive)	KONE	7719305	N/A	2021/11/28	Kimberley Wedemire
Total Phosphorus Low Level Total	KONE	7719280	2021/11/24	2021/11/24	Serena Tian
Nitrate & Nitrite as Nitrogen in Water	LACH	7711448	N/A	2021/11/23	Chandra Nandlal
рН	AT	7713349	2021/11/20	2021/11/23	Surinder Rai
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/18	Aaisha Vahora
Radium-226 Low Level	AS	7754276	N/A	2022/01/06	Ryan Wong
Salinity		7756776	N/A	2021/12/29	Brent Boudreau
Calculated Total Dissolved Solids	CALC	7709206	N/A	2022/01/19	Automated Statchk
Total Dissolved Solids	BAL	7710875	2021/11/20	2021/11/30	Shaneil Hall
Field Measured Conductivity	РН	ONSITE	N/A	2021/11/18	Aaisha Vahora
Total Kjeldahl Nitrogen in Water	SKAL	7711090	2021/11/19	2021/11/19	Massarat Jan
Total Organic Carbon (TOC)	TOCV/NDIR	7711076	N/A	2021/11/19	Julianna Castiglione
Low Level Total Suspended Solids	BAL	7710955	2021/11/19	2021/11/30	Shaneil Hall
Turbidity	AT	7712108	N/A	2021/11/19	Neil Dassanayake

Bureau Veritas ID:	RGP721 Dup
Sample ID:	Port 2A - Dup 1A
Matrix:	Ground Water

Collected:	2021/11/13
Shipped:	
Received:	2021/11/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	7713347	N/A	2021/11/23	Surinder Rai
Conductivity	AT	7713348	N/A	2021/11/23	Surinder Rai
Fluoride	ISE	7713329	2021/11/20	2021/11/23	Surinder Rai

Bureau Veritas Laboratories 100 – 36 Antares Dr. Nepean, ON, K2E 7W5 Phone: 613-274-0573 Website: www.bvna.com



TEST SUMMARY

RGP721 Dup Port 2A - Dup 1A Ground Water			Shipped:	2021/11/13 2021/11/17	

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
рН	AT	7713349	2021/11/20	2021/11/23	Surinder Rai
Salinity		7756776	N/A	2021/12/29	Brent Boudreau



GENERAL COMMENTS

Each te	emperature is the	average of up to t	three cooler temperatures taken at receipt
	Package 1	12.3°C	
•	ainty of test result		nalyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the cessarily imply that results are compromised. Sample was analyzed past method specified hold time for
	ainty of test result		ole was analyzed past method specified hold time for orthophosphate. Exceedance of hold time increases the cessarily imply that results are compromised. Sample was analyzed past method specified hold time for

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: DH

			Matrix Spike		SPIKED BLANK		Method Blank		RP	D	QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7710875	Total Dissolved Solids	2021/11/30					<10	mg/L	2.7	25	102	90 - 110
7710955	Total Suspended Solids	2021/11/30					<1	mg/L	18	25	97	85 - 115
7711076	Total Organic Carbon (TOC)	2021/11/19	98	80 - 120	98	80 - 120	<0.40	mg/L	3.6	20		
7711090	Total Kjeldahl Nitrogen (TKN)	2021/11/19	99	80 - 120	101	80 - 120	<0.10	mg/L	12	20	96	80 - 120
7711448	Nitrate (N)	2021/11/23	101	80 - 120	101	80 - 120	<0.10	mg/L	NC	20		
7711448	Nitrite (N)	2021/11/23	108	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
7712108	Turbidity	2021/11/19			95	85 - 115	<0.1	NTU	16	20		
7712690	Nitrate (N)	2021/11/23	102	80 - 120	101	80 - 120	<0.10	mg/L	0.060	20		
7712690	Nitrite (N)	2021/11/23	110	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
7713322	Turbidity	2021/11/22			91	85 - 115	<0.1	NTU	17	20		
7713329	Fluoride (F-)	2021/11/23	55 (1)	80 - 120	102	80 - 120	<0.10	mg/L	1.4	20		
7713347	Alkalinity (Total as CaCO3)	2021/11/23			93	85 - 115	<1.0	mg/L	4.5	20		
7713348	Conductivity	2021/11/23			100	85 - 115	<0.001	mS/cm	0.78	25		
7713349	рН	2021/11/23			102	98 - 103			0.25	N/A		
7713375	Dissolved Organic Carbon	2021/11/22	96	80 - 120	96	80 - 120	<0.40	mg/L	0.33	20		
7718910	Dissolved Mercury (Hg)	2021/11/24	83	75 - 125	95	80 - 120	<0.00001	mg/L	NC	20		
7718971	Mercury (Hg)	2021/11/24	95	75 - 125	102	80 - 120	<0.00001	mg/L	NC	20		
7719280	Total Phosphorus (P)	2021/11/24	87	80 - 120	88	80 - 120	<0.0010	mg/L			87	80 - 120
7719305	Reactive Silica (SiO2)	2021/11/28	NC	80 - 120	104	80 - 120	<0.050	mg/L				
7754276	Radium-226	2021/12/24			109	85 - 115	<0.0050	Bq/L	NC	N/A		
7756776	Salinity	2021/12/29					<2.0	N/A	0	25	101	80 - 120
7787574	Dissolved Chloride (Cl-)	2021/11/24	NC	80 - 120	102	80 - 120	<0.50	mg/L	0.50	20		
7787574	Dissolved Sulphate (SO4)	2021/11/24	105	80 - 120	102	80 - 120	<0.50	mg/L	4.7	20		
7787575	Dissolved Bromide (Br-)	2021/12/13	108	80 - 120	104	80 - 120	<0.010	mg/L				
7787576	Orthophosphate (P)	2021/12/13	94	80 - 120	98	80 - 120	<0.0030	mg/L				
7787577	Strong Acid Dissoc. Cyanide (CN)	2021/11/26			105	80 - 120	<0.00050	mg/L				
7787578	Weak Acid Dissoc. Cyanide (CN)	2021/11/26	90	80 - 120	103	80 - 120	<0.00050	mg/L				
7787579	Free Cyanide (CN)	2021/11/23	96	80 - 120	100	80 - 120	<1.0	ug/L				
7787580	Total Nitrogen (Ammonia Nitrogen)	2021/11/24	NC	N/A	101	N/A	<0.0050	mg/L				
7787581	Strong Acid Dissoc. Cyanide (CN)	2021/11/26	8.7 (1)	80 - 120	105	80 - 120	<0.00050	mg/L				



Agnico Eagle Client Project #: 21452766 Site Location: Whale Tail Your P.O. #: 997577 Sampler Initials: DH

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
7787582	Weak Acid Dissoc. Cyanide (CN)	2021/11/23	100	80 - 120	105	80 - 120	<0.00050	mg/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.



VALIDATION SIGNATURE PAGE

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

Brad Newman, B.Sc., C.Chem., Scientific Service Specialist

Colleen Acker, B.Sc, Scientific Service Specialist

David Huang, BBY Scientific Specialist

Lisa Thum, C.E.T., QP, Manager, Inorganics



Steven Simpson, Eab Director

Sze Yeung Fock, B.Sc., Scientific Specialist



Automated Statchk



VALIDATION SIGNATURE PAGE(CONT'D)

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

BV Labs 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 Signature Page.



Exceedance Summary Table – Metal Mining Effluent Reg

Result Exceedances

Sample ID	Bureau Veritas ID	Parameter	Criteria	Result	DL	UNITS
No Exceedances						
The exceedance summ	ary table is for information purp	oses only and should no	t be considered a compreh	nensive listing or	statement of	conformance to
applicable regulatory g	guidelines.					

ATTACHMENT D

Water Quality Results and QA/QC Analysis

Table D-1 Drilling Brine Composition Westbay System AMQ16-626 Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

Sample	Units	Brine Fluid	Calculated I	Dilute Brine Port 6	Calculated I	Dilute Brine Port 4	Calculated D	ilute Brine Port 3
Sample	Units	Brille Fluiu	Initial Brine	Maximum Brine	Initial Brine	Maximum Brine	Initial Brine	Maximum Brine
Date		17-Apr-16	21-Jul-16	21-Jul-16	24-Apr-16	27-Apr-16	02-Sep-16	02-Sep-16
Field measured parameters							·	
Fluorescein Concentration	mg/L	512.70	138.00	158.10	512.70	341.90	445.90	437.20
Drilling Fluid Proportion		1.00	0.27	0.31	1.00	0.67	0.87	0.85
Formation Water Proportion		0.00	0.73	0.69	0.00	0.33	0.13	0.15
Initial Conductivity Reading	uS/cm	0	10240	12210	3810	19400	52280	53800
Dilution of Brine Factor in Port		0.00	0.06	0.07	0.02	0.11	0.30	0.31
Conventional Parameters								
Alkalinity (Total as CaCO3)	mg CaCO ₃ /L	145.0	8.5	38.0	3.2	16.2	43.6	44.8
Alkalinity, bicarbonate (as CaCO3)	mg CaCO ₃ /L	27.0	1.6	1.9	0.6	3.0	8.1	8.3
Alkalinity, carbonate (as CaCO3)	mg CaCO3/L							
Alkalinity, hydroxide (as CaCO3)	mg CaCO3/L							
Chemical oxygen demand [COD]	mg/L							
Conductivity (calculated)	uS/cm	174000	10240	12210	3810	19400	52280	53800
Conductivity (lab)	uS/cm	55420						
Hardness (as CaCO3), from dissolved Ca/Mg	mg CaCO ₃ /L	105554	6212	7407	2311	11769	31715	32637
	S.U.	10	11.25	7.40	11.68	10.97	10.54	10.53
Total Dissolved Solids (calculated)	mg/L	130500	7680	9158	2858	14550	39210	40350
Total Dissolved Solids (lab)	mg/L	36946						
Total Suspended Solids (TSS)	mg/L							
Turbidity	NTU							
Anions and Nutrients	1						<u> </u>	
Ammonia, total (as N)	mg/L							
Bromide (Br)	mg/L	1066	63	75	23	119	320	330
Chloride (CI)	mg/L	83700	4926	5873	1833	9332	25149	25880
Dissolved Organic Carbon (DOC)	mg/L							
Fluoride (F)	mg/L	0.06	0.004	0.004	0.001	0.01	0.02	0.02
Kjeldahl nitrogen, total [TKN]	mg/L							
Nitrate + nitrite (as N)	mg/L							
Nitrates (NO3)	mg/L	0.54	0.03	0.04	0.01	0.06	0.2	0.2
Nitrites (NO2)	mg/L	0.06	0.004	0.004	0.001	0.007	0.02	0.02
Phosphate, ortho-, dissolved (as P)	mg/L							
Phosphorus, total	mg/L							
Silicate (as SiO2)	mg/L							
Sulphate (SO4)	mg/L	<0.6	0	0	0	0	0	0
Total Organic Carbon (TOC)	mg/L							
Metals (dissolved)								
Aluminium (Al)	mg/L	0.5	0.03	0.03	0.01	0.06	0.1	0.2
Antimony (Sb)	mg/L	0.035	0.002	0.002	0.001	0.004	0.011	0.011
Arsenic (As)	mg/L	0.8	0.05	0.05	0.02	0.09	0.2	0.2
Barium (Ba)	mg/L	0.1	0.007	0.008	0.002	0.01	0.03	0.03
Beryllium (Be)	mg/L	<0.0005	0	0	0	0	0	0
Boron (B)	mg/L	13.2	0.8	0.9	0.3	1.5	4.0	4.1
Cadmium (Cd)	mg/L	<0.00002	0	0	0	0	0	0
Calcium (Ca)	mg/L	42266	2487	2966	925	4712	12699	13068
Chromium (Cr)	mg/L	<0.0006	0	0	0	0	0	0
Cobalt (Co)	mg/L	0.0406	0.002	0.003	0.001	0.005	0.012	0.013
Copper (Cu)	mg/L	0.0039	0.0002	0.0003	0.0001	0.0004	0.0012	0.0012
Iron (Fe)	mg/L	2.6	0.2	0.2	0.1	0.3	0.8	0.8
Lead (Pb)	mg/L	< 0.0003	0	0	0	0	0	0

Table D-1 Drilling Brine Composition Westbay System AMQ16-626 Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

Sample	Units	Brine Fluid	Calculated I	Dilute Brine Port 6	Calculated I	Dilute Brine Port 4	Calculated Dilute Brine Port 3		
	0	Brine Franc	Initial Brine	Maximum Brine	Initial Brine	Maximum Brine	Initial Brine	Maximum Brine	
Date		17-Apr-16	21-Jul-16	21-Jul-16	24-Apr-16	27-Apr-16	02-Sep-16	02-Sep-16	
Lithium (Li)	mg/L	34.52	2.0	2.4	0.8	3.8	10.4	10.7	
Magnesium (Mg)	mg/L	3.9	0.2	0.3	0.1	0.4	1.2	1.2	
Manganese (Mn)	mg/L	<0.0005	0	0	0	0	0	0	
Dissolved Mercury (Hg)	mg/L		0.00002	0.00003	0.00001	0.00004	0.00012	0.00012	
Molybdenum (Mo)	mg/L	<0.0005	0	0	0	0	0	0	
Nickel (Ni)	mg/L	1.35	0.08	0.09	0.03	0.15	0.41	0.42	
Potassium (K)	mg/L	1717	101	120	38	191	516	531	
Selenium (Se)	mg/L	3.83	0.23	0.27	0.08	0.43	1.15	1.18	
Silicon (Si)	mg/L	2.93	0.17	0.21	0.06	0.33	0.88	0.91	
Silver (Ag)	mg/L	<0.0001	0	0	0	0	0	0	
Sodium (Na)	mg/L	838	49	59	18	93	252	259	
Strontium (Sr)	mg/L	656.0	38.61	46.03	14.36	73.14	197.1	202.83	
Tellurium (Te)	mg/L	< 0.0005	0	0	0	0	0	0	
Thallium (TI)	mg/L	<0.002	0	0	0	0	0	0	
Tin (Sn)	mg/L	<0.001	0	0	0	0	0	0	
Titanium (Ti)	mg/L	45.2	2.66	3.17	0.99	5.04	13.58	13.98	
Uranium (U)	mg/L	-	0	0	0	0	0	0	
Vanadium (V)	mg/L	<0.001	0	0	0	0	0	0	
Zinc (Zn)	mg/L	< 0.0005	0	0	0	0	0	0	
Radioactive lons									
Radium (Ra 226)	Bq/L	<0.066	0	0	0	0	0	0	
Hydrocarbons									
Hydrocarbons (C10-C50)	mg/L	0	0	0	0	0	0	0	
QA/QC									
Calculated TDS (lab)	-	130500							
Lab measured vs Calculated TDS	-	28%							
Lab measured TDS vs Conductivity	-	0.7							
Calculated TDS vs Calculated Conductivity	-	0.8							

Notes:

-- denotes parameter was not analyzed

0																		1	
Sample Date		2-Au	ıq-2016	13-No	v-2018	PC 3-Apr	ort 6 -2019	18-00	t-2020	10-No	v-2021	20-,10	I-2016		ort 4 v-2018	19-00	ct-2020	5/6-N	lov-21
Drilling Fluid Proportion		0.04	0.24		16	0.			08		.19	0.09	0.18		13		.06		.04
Formation Water Proportion		0.96	0.76	0.	84	0.	86	0.	92	0.	.81	0.91	0.82	0.	87	-	.94	0.	.96
Sampling interval depth (metres alo	/						- 287.4 m									n - 359.1 m			
Sampling interval vertical depth (me Estimated concentration range (calc	· · · ·	minimum	maximum	minimum	maximum	257.7 m minimum	- 268.3 m maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	326.1 m maximum	n - 335.2 m minimum	maximum	minimum	maximum
Conventional parameters	ulateu)	mmmum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	mmmum	maximum	minimum	maximum	mmmum	maximum	minimum	maximum
Alkalinity	mg CaCO ₃ /L	40	51	30	31	34	34	24	28	41	41	18	20	9	11	24	25	23	27
Alkalinity, bicarbonate (as CaCO3)	mg/L	40	51	31	32	35	35	27.3	28.4	42.5	42.6	18	20	11	12	24.9	25.5	24	24
Alkalinity, carbonate (as CaCO3)	mg/L	-	-	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0			<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical oxygen demand [COD]	mg/L	-	-	-	-	-	-	3100	3200	-	-	-	-	-	-	580	633	-	-
Conductivity (lab)	uS/cm	4797	6042	8041	8496	8388	8720	9084	9390	6197	6644	5366	5938	13084	15511	6394	7695	3326	4071
Hardness (as CaCO3)	mg CaCO ₃ /L	2397	3030	2883	3127	3167	3369	3498	3391	2379	2651	2627	2910	4169	5582	2148	2789	800	1277
pH	S.U.	7.41	7.27	6.50	6.57	6.29	6.29	6.16	6.53	6.60	6.62	7.87	7.82	6.88	6.91	6.32	6.50	6.51	6.81
Salinity	ppt	-	-	-	-	-	-	-	-	3.1	4.5	-	-	-	-	-	-	1.5	2.3
Total dissolved Solids (TDS)	mg/L	3198	<u>4042</u>	4681	5171	5712	5962	5066	4934	5349	6827	3581	3966	7970	9945	3779	4904	1593	2069
Total Suspended Solids (TSS)	mg/L	-	-	8.3	9.5	5.1	5.1	<3.0	<3.0	10	10	-	-	20.3	24.3	<3.0	<3.0	2.1	2.1
Turbidity Anions and Nutrients	mg/L	-	-	-	-	-	-	2.6	2.7	3.4	3.4	-	-	-	-	2.0	2.1	1	1
Anions and Nutrients Ammonia, total (as N)	mg/L			<0.437	<0.443	<0.466	<0.466	0.510	0.517	0.121	0.121		_	<0.157	<0.158	0.129	0.129	0.076	0.078
Bromide (Br)	mg/L	- 25	32	34	37	40	42	40	41	24	26	32	- 35	51	77	22	29	6	10
Chloride (Cl)	mg/L	2089	2641	2453	2697	2959	3119	3027	3111	1856	2072	2582	2860	3818	5722	1879	2405	844	1278
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	-	-	-	-	<14000	<14000	-	-	-	-	-	-	334	344
Fluoride (F)	mg/L	0.21	0.27	<1.0	<1.0	<1.0	<1.0	<1.00	<1.00	0.21	0.21	0.5	0.5	<1.0	<1.0	<1.00	<1.00	0.5	0.5
Kjeldahl nitrogen, total [TKN]	mg/L	-	-	-	-	-	-	0.892	0.900	<10	<10	-	-	-	-	0.325	0.349	0.324	0.449
Nitrates (NO3)	mg/L	0.063	0.079	<0.25	<0.25	<0.25	<0.25	<0.250	<0.250	<0.10	<0.10	0.06	0.06	<0.25	<0.25	<0.250	<0.250	<0.10	<0.10
Nitrites (NO2)	mg/L	0.010	0.013	<0.050	<0.050	<0.050	<0.050	<0.0500	<0.0500	0.02	0.02	0.011	0.012	<0.050	<0.050	<0.0500	<0.0500	<0.010	<0.010
phosphate, ortho-, dissolved (as P)	mg/L	-	-	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010	-	-	-	-	<0.0010	<0.0010	<0.0010	<0.0010
phosphorus, total	mg/L	0.021	0.026	<0.0043	<0.0043	<0.0020	<0.0020	<0.0020	<0.0020	0.01	0.01	0.011	0.012	0.01	0.01	0.008	0.010	0.004	0.008
Reactive Silica	mg/L	-	-	-	-	<50	<50	7.0	7.3	10.2	10.2	<0.1	<0.1	-	-	6.1	6.2	8.3	8.6
Sulphate (SO4)	mg/L	-	-	<15	<15	<15	<15	<15.0	<15.0	2.1	2.1	-	-	<15	<15	<15.0	<15.0	0.85	<1.0
Total Organic Carbon (TOC)	mg/L	-	-	-	-	-	-	-	-	<14000	<14000	-	-	-	-	-	-	324	334
Metals (dissolved)											1	1							
Aluminium (Al)	mg/L	< 0.006	<0.006	< 0.0050	< 0.0050	<0.0050	<0.0050	< 0.0100	0.003	0.001	0.002	-	-	0.0005	0.008	0.005	0.008	0.004	0.007
Antimony (Sb)	mg/L	0.0002	0.0003	0.001	0.001	< 0.0010	< 0.0010	< 0.00100	0.00045	< 0.00042	0.00004	0.003	0.004	0.001	0.002	0.001	0.002	0.001	0.001
Arsenic (As)	mg/L	0.0050	0.0063	<0.0021	< 0.0024	<0.0025 0.999	<0.0025	< 0.00272	<0.00278	<0.00413	0.0000	0.0031	0.0035	< 0.0020	<0.0020 0.561	0.002	<0.00311	0.0026	< 0.0032
Barium (Ba) Beryllium (Be)	mg/L mg/L	0.528	0.667 <0.0005	0.947	0.976	0.999 <0.0005	0.999 <0.0005	0.880	0.978	0.823	<0.00010	0.134	0.148 <0.0005	0.533	<0.00050	0.187	0.191 <0.000100	0.094 <0.00050	0.096
Boron (B)	mg/L	0.3	0.4	0.2	0.3	0.2	0.2	0.3	0.3	0.2	0.2	0.6	0.6	0.8	1.0	0.5	0.6	0.5	0.5
Cadmium (Cd)	mg/L	-	0.4	<0.000050	<0.000050	0.2	0.2	<0.0000500	<0.0000500	<0.000050	<0.000050	<0.00002	<0.00002	<0.000050	<0.000050	<0.000250	<0.000250	<0.00025	<0.000025
Calcium (Ca)	mg/L	960	1213	1071	1164	1194	1275	1293	1368	885	993	1032	1143	1563	2125	846	1101	304	501
Chromium (Cr)	mg/L	0.007	0.009	< 0.00050	<0.00050	<0.00050	< 0.00050	< 0.00100	< 0.00100	<0.0010	<0.0010	0.005	0.006	<0.00050	<0.00050	< 0.00250	< 0.00250	<0.00050	0.000
Cobalt (Co)	mg/L	0.002	0.002	< 0.000050	< 0.000050	< 0.000050	< 0.000050	< 0.00100	< 0.00100	< 0.000349	0.0000000	0.002	0.002	< 0.000050	< 0.000050	< 0.00050	< 0.00050	< 0.000097	< 0.000102
Copper (Cu)	mg/L	0.005	0.007	< 0.00050	< 0.00050	<0.00020	<0.00020	< 0.00200	< 0.00200	< 0.00050	< 0.00050	0.0020	0.0023	< 0.00050	< 0.00050	< 0.00100	< 0.00100	< 0.00025	<0.00025
Iron (Fe)	mg/L	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.8	0.8	0.1	0.2	0.1	0.1	<0.050	<0.050	0.014	0.026
Lead (Pb)	mg/L	<0.0003	<0.0003	<0.00030	<0.00030	<0.000050	<0.000050	<0.000500	<0.000500	0.000171	0.000171	0.0027	0.003	<0.00030	<0.00030	<0.000250	<0.000250	<0.000025	<0.000025
Lithium (Li)	mg/L	0.3	0.4	0.1	0.2	0.1	0.2	0.2	0.3	0.00000000	0.1	0.6	0.7	1.1	1.6	0.4	0.7	<0.124	<0.133
Magnesium (Mg)	mg/L	22	27	51	51	44	44	41	42	37	37	12	14	62	66	8	9	5	5
Manganese (Mn)	mg/L	0.04	0.05	0.11	0.12	0.11	0.11	0.10	0.10	0.12	0.12	0.02	0.02	0.09	0.10	0.03	0.03	<0.0147	<0.015
Dissolved Mercury (Hg)	mg/L	0.0005	0.0006	<0.000010	<0.000010	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.00001	<0.00001	0.0031	0.0034	<0.000010	<0.000010	<0.0000050	<0.0000050	<0.00001	<0.00001
Molybdenum (Mo)	mg/L	0.02	0.02	0.03	0.03	0.03	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	<0.00086	<0.00089
Nickel (Ni)	mg/L	0.05	0.06	<0.00050	<0.00050	<0.00050	<0.00050	<0.00500	< 0.00500	<0.00128	0.0000000	0.05	0.05	<0.00050	< 0.00050	<0.00250	<0.00250	<0.00135	< 0.00136
Phosphorus (P)	mg/L	< 0.0003	<0.0003	<0.00030	<0.00030	<0.000050	<0.000050	<0.500	< 0.500	< 0.02	< 0.02	0.0027	0.0030	<0.00030	<0.00030	<0.250	<0.250	<0.01	< 0.01
Potassium (K)	mg/L	8	10	<20	<20	11	11	1	3	<13.5	0.000000	38	42	67	67	22	35	3	10
Selenium (Se)	mg/L	0.1	0.1	<0.0020	<0.0020	< 0.00050	<0.00050	<0.0025	< 0.000658	<0.00177	0.0000	0.12	0.13	<0.0020	<0.0020	<0.000250	0	<0.00020	<0.00020
Silicon (Si)	mg/L	4.0	5.1	3.2	3.3	3.2	3.2	3.4	3.5	3.1	3.1	4.2	4.6	2.5	2.6	3.0	3.1	3.5	3.7
Silver (Ag)	mg/L	<0.0001	<0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.000100	<0.000100	<0.000050	<0.000050	<0.0001	<0.0001	<0.00010	<0.00010	<0.000050	<0.000050	<0.000025	<0.000025

Sample						Po	ort 6							F	Port 4				
Date		2-Au	g-2016	13-No	v-2018	3-Ap	r-2019	18-Oc	:t-2020	10-No	ov-2021	20-Ju	I-2016	11-No	v-2018	19-Oc	:t-2020	5/6-N	Nov-21
Drilling Fluid Proportion		0.04	0.24		.16	-	.14		.08	-	.19	0.09	0.18		.13		0.06		.04
Formation Water Proportion		0.96	0.76	0.	.84	-	.86	0.	92	0.	.81	0.91	0.82	0.	.87				.96
Sampling interval depth (metres alon							i - 287.4 m									n - 359.1 m			
Sampling interval vertical depth (met			257.7 m - 268.3 m 326.1 m - 335.2 m																
Estimated concentration range (calcu	ulated)	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum
Sodium (Na)	mg/L	232	293	287	293	308	310	304	306	262	264	267	296	341	365	279	290	263	277
Strontium (Sr)	mg/L	13.2	16.7	14.3	16.0	16.0	17.2	20.1	21.8	14.1	15.8	18.9	20.9	27.7	36.5	13.0	18.8	4.7	7.6
Tellurium (Te)	mg/L	< 0.0005	<0.0005	<0.00050	<0.00050	0.001	0.001	<0.00200	0.001	<0.00020	<0.00020	<0.0005	<0.0005	<0.00050	<0.00050	0.002	0.002	<0.00010	<0.00010
Thallium (TI)	mg/L	<0.0008	<0.0008	<0.000050	<0.000050	<0.000050	<0.000050	<0.000100	<0.000100	<0.000020	<0.000020	<0.0008	<0.0008	<0.000050	<0.000050	<0.000050	<0.000050	<0.000010	<0.000010
Tin (Sn)	mg/L	0.0010	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.00050	<0.00100	<0.0020	<0.0020	0.0011	0.0012	<0.0010	<0.0010	<0.00050	<0.00050	<0.0010	<0.0010
Titanium (Ti)	mg/L	0.3	0.4	<0.0050	<0.0050	<0.0050	<0.0050	<0.00150	<0.00300	<0.0050	<0.0050	0.3	0.4	<0.0050	<0.0050	<0.00150	<0.00150	<0.0025	<0.0025
Uranium (U)	mg/L	<0.001	<0.001	0.02	0.03	0.03	0.03	<0.000050	<0.000100	<0.000020	<0.000020	<0.001	<0.001	0.05	0.05	0.000	0.000	<0.000010	<0.000010
Vanadium (V)	mg/L	0.002	0.002	<0.000050	<0.000050	<0.000050	<0.000050	<0.00250	<0.00500	<0.0020	<0.0020	<0.0005	<0.0005	<0.000050	<0.000050	<0.00250	<0.00250	<0.0010	<0.0010
Zinc (Zn)	mg/L	1.3	1.7	<0.00050	<0.00050	<0.00050	<0.00050	0.026	0.026	2.2	2.2	0.63	0.70	<0.00050	<0.00050	0.010	0.014	0.018	0.018
Radioactive lons															_				
Radium (Ra226)	Bq/L	0.43	0.52	-	-	0.99	0.99	0.72	1.20	0.28	0.28	0.13	0.13	-	-	0.31	0.38	0.19	0.21
Hydrocarbons																			
Hydrocarbons (C10-C50)	mg/L	0.2	0.2	-	-	<0.52	<0.52	-	-	-	-	<0.1	<0.1	-	-	-	-	-	-
Cyanide																			
Cyanide	mg/l	-	-	-	-	-	-	-	-	<0.0050	<0.0050	-	-	-	-	-	-	<0.00050	<0.00050
Cyanide (free)	mg/l	-	-	-	-	-	-	-	-	<0.0022	<0.0022	-	-	-	-	-	-	<0.0013	<0.0013
Cyanide (WAD)	mg/l	-	-	-	-	-	-	-	-	<0.001	<0.001	-	-	-	-	-	-	<0.001	<0.001

Sample Date Date Drilling Fluid Proportion Formation Water Proportion Sampling interval depth (metres along bor Sampling interval vertical depth (metres) Estimated concentration range (calculated Conventional parameters Alkalinity Alkalinity, bicarbonate (as CaCO3)		14-Se 0.08 0.92	p-2016 0.18 0.82	12-No 0.:	v-2018 20	29-Ma	ort 3 r-2019 11		t-2020	8/9-No	ov-2021
Drilling Fluid ProportionFormation Water ProportionSampling interval depth (metres along borSampling interval vertical depth (metres)Estimated concentration range (calculatedConventional parametersAlkalinity		0.08	0.18								
Sampling interval depth (metres along bor Sampling interval vertical depth (metres) Estimated concentration range (calculated Conventional parameters Alkalinity		0.92	0.82			υ.		0.	09	0.07	0.06
Sampling interval vertical depth (metres) Estimated concentration range (calculated Conventional parameters Alkalinity				0.3	80	0.	89	0.	91	0.93	0.94
Estimated concentration range (calculated Conventional parameters Alkalinity mg	d)						n - 392.7 m				
Conventional parameters Alkalinity mg	d)						n - 366.6 m				
Alkalinity mg		mininum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum
		50		E 4	50	E 4	F 4	50		50	55
Alkalinity, bicarbonate (as CaCO3)	ng CaCO ₃ /L	52	58	51	52	54	54	56	58	52	55
	mg/L	52	58	60	61	58	59	59	61	55	57
Alkalinity, carbonate (as CaCO3)	mg/L	-	-	<1.0	<1.0	<1.0	<1.0	<2.0	<2.0	<1.0	<1.0
Chemical oxygen demand [COD]	mg/L	-	-	-	-	-	-	1100	1120	-	-
Conductivity (lab)	uS/cm	5220	5866	<7350	<7530	<4660	<4730	1275	1527	3419	3590
	ng CaCO₃/L	1680	1891	<2600	<2740	<1300	<1320	<1890	<1950	382	484
pH	S.U.	7.96	7.91	7.31	7.41	6.73	6.84	6.77	6.79	6.58	6.61
Salinity	ppt	-	-	-	-	-	-	-	-	3.9	4
Total dissolved Solids (TDS)	mg/L	3483	<u>3918</u>	<4980	<5100	<2980	<2990	<3770	<4040	1417*	1741
Total Suspended Solids (TSS)	mg/L	-	-	7.5	7.9	<3.0	<3.0	<3.0	<3.0	2.1	3.2
Turbidity	mg/L	-	-	-	-	-	-	0.96	0.99	0.5	0.5
Anions and Nutrients				0.400	0.470	0.400	0.400	0.0054	0.000	0.00	0.000
Ammonia, total (as N)	mg/L	-	-	0.169	0.173	0.103	0.106	0.0854	0.086	0.08	0.082
Bromide (Br)	mg/L	22	25	<32.5	<32.7	<17	<18.2	<17.7	<17.8	4	5
Chloride (Cl)	mg/L	1714	1929	<2700	<2700	<1580	<1580	<1900	<1910	700	968
Dissolved Organic Carbon (DOC)	mg/L	-	-	-	-	-	-	-	-	234	255
	mg/L	1.1	1.2	<1.0	<1.0	<0.80	<0.80	<1.00	<1.00	1.0	1.1
Kjeldahl nitrogen, total [TKN]	mg/L	-	-	-	-	-	-	0.294	0.295	0.66	0.75
Nitrates (NO3)	mg/L	0.016	0.018	<0.25	<0.25	<0.10	<0.10	<0.250	<0.250	<0.10	<0.10
Nitrites (NO2)	mg/L	0.038	0.043	<0.050	<0.050	<0.020	<0.020	<0.0500	<0.0500	<0.010	<0.010
phosphate, ortho-, dissolved (as P)	mg/L	-	- 0.055	-	- 0.01	-	-	<0.0010	<0.0010	< 0.0010	<0.0010
phosphorus, total	mg/L	0.049	0.055	0.01	0.01	0.003	0.005 7.6	0.0064	0.0067	0.005	0.011
Sulphate (SO4)	mg/L	-	-	- <15	- <15	<6.0	<6.0	6.31 <15.0	6.33 <15.0	8.8 1.0	10.1 1.3
Total Organic Carbon (TOC)	mg/L	-	-	<15	<15	<0.0		< 15.0	<15.0	397	408
Metals (dissolved)	mg/L	-	-	-	-	-	-	-	-	397	408
Aluminium (Al)	mg/L			<0.0115	<0.0126	<0.0067	<0.0069	<0.0084	<0.0092	0.0036	<0.0083
Antimony (Sb)	mg/L	0.0026	- 0.0029	0.001	0.001	0.00001	0.0003	0.0004	0.00092	0.0005	0.0006
Arsenic (As)	mg/L	<0.0020	<0.0029	<0.001	< 0.001	<0.002	< 0.002	< 0.000174	<0.0002	<0.0003	< 0.00259
Barium (Ba)	mg/L	0.057	0.065	0.098	0.104	0.064	0.065	0.075	0.075	0.078	0.084
Beryllium (Be)	mg/L	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	<0.000200	<0.000200	<0.000050	<0.000050
Boron (B)	mg/L	0.5	0.6	0.3	0.3	0.3	0.4	0.460	0.508	0.672	0.724
Cadmium (Cd)	mg/L	< 0.00002	<0.00002	< 0.000050	<0.000050	<0.000010	<0.000010	<0.0000100	<0.0000100	< 0.00025	<0.000025
Calcium (Ca)	mg/L	671	756	<1040	<1090	<521	<528	<755	<779	151.027394	193.639351
Chromium (Cr)	mg/L	0.005	0.005	<0.00050	<0.00050	<0.00050	<0.00050	<0.00020	0.00026	< 0.00050	< 0.00050
Cobalt (Co)	mg/L	0.001	0.001	< 0.000050	< 0.000050	< 0.000050	< 0.000050	<0.00020	<0.00020	< 0.000188	<0.000255
Copper (Cu)	mg/L	0.0046	0.0052	< 0.00050	< 0.00050	< 0.00020	< 0.00020	< 0.00040	< 0.00040	< 0.00025	< 0.00025
Iron (Fe)	mg/L	0.1	0.1	< 0.018	< 0.019	< 0.010	<0.010	< 0.020	<0.020	< 0.0071	<0.0217
Lead (Pb)	mg/L	< 0.0003	< 0.0003	< 0.00030	< 0.00030	< 0.000050	< 0.000050	< 0.000100	<0.000100	< 0.000025	< 0.000025
Lithium (Li)	mg/L	0.3	0.3	<0.749	<0.779	<0.156	<0.163	< 0.334	< 0.35	<0.43	<0.449
Magnesium (Mg)	mg/L	1	1	1	1	<1.0	<1.0	1	1	1	1
Manganese (Mn)	mg/L	0.01	0.01	0.02	0.02	0.005	0.01	0.008	0.010	0.012	0.014
Dissolved Mercury (Hg)	mg/L	0.00217	0.00244	<0.000010	< 0.000010	< 0.0000050	<0.0000050	<0.0000050	<0.0000050	< 0.00001	< 0.00001
Molybdenum (Mo)	mg/L	0.02	0.02	0.02	0.02	0.005	0.005	0.002	0.002	0.003	0.004
Nickel (Ni)	mg/L	0.04	0.05	< 0.00050	< 0.00050	< 0.00050	<0.00050	< 0.00100	< 0.00100	< 0.00073	<0.00124
Phosphorus (P)	mg/L	< 0.0003	< 0.0003	< 0.00030	< 0.00030	<0.000050	<0.000050	<0.100	<0.100	< 0.01	0.018
Potassium (K)	mg/L	16	18	<38	<40	<11.5	<11.8	<15.8	<17	<22.1	<23
Selenium (Se)	mg/L	0.08	0.09	<0.0020	<0.0020	< 0.00074	<0.00081	<0.000275	<0.000364	<0.00020	<0.00020
Silicon (Si)	mg/L	4.3	4.8	3.5	3.5	3.5	3.6	3.2	3.3	3.0	3.3
Silver (Ag)	mg/L	<0.0001	<0.0001	<0.00010	<0.00010	< 0.00010	<0.00010	<0.000020	<0.000020	< 0.000025	0.0000000

Sample						Р	ort 3				
Date		14-Se	ep-2016	12-No	v-2018	29-Ma	r-2019	13-Oc	t-2020	8/9-No	ov-2021
Drilling Fluid Proportion		0.08	0.18		20	0.			09	0.07	0.06
Formation Water Proportion		0.92	0.82	0.	80		89	0.	91	0.93	0.94
Sampling interval depth (metres along Sampling interval vertical depth (metr		-					n - 392.7 m n - 366.6 m				
Estimated concentration range (calcu		mininum	maximum	minimum	maximum	minimum	maximum	minimum	maximum	minimum	maximum
	1	-				-		-			
Sodium (Na)	mg/L	306	344	285	313	323	332	293	316	309	310
Strontium (Sr)	mg/L	12.7	14.2	<16.9	<17.2	<8.7	<8.8	<12.8	<13.2	1.724	3.000
Tellurium (Te)	mg/L	<0.0005	<0.0005	<0.00050	<0.00050	<0.00050	<0.00050	0.001	0.001	0.00011	0.00014
Thallium (TI)	mg/L	<0.0008	<0.0008	<0.000050	<0.000050	<0.000050	<0.000050	<0.000020	<0.000020	<0.000010	<0.000010
Tin (Sn)	mg/L	<0.001	<0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.00020	<0.00020	<0.0010	<0.0010
Titanium (Ti)	mg/L	0.2	0.3	<0.0050	<0.0050	<0.0050	<0.0050	<0.00150	<0.00150	<0.0025	<0.0025
Uranium (U)	mg/L	0.06	0.07	0.09	0.09	<0.000050	<0.000050	<0.000020	0.000024	0.000	0.000023
Vanadium (V)	mg/L	<0.001	<0.001	0.00020	0.00020	<0.00050	<0.00050	<0.00100	<0.00100	<0.0010	<0.0010
Zinc (Zn)	mg/L	<0.0005	<0.0005	<0.00050	<0.00050	0.004	0.005	<0.0020	<0.0020	0.002	0.058
Radioactive lons											
Radium (Ra226)	Bq/L	0.15	0.16	-	-	0.21	0.22	0.30	0.36	0.32	0.40
Hydrocarbons											
Hydrocarbons (C10-C50)	mg/L	0.27	0.31	-	-	<0.52	<0.52	-	-	-	-
Cyanide											
Cyanide	mg/l	-	-	-	-	-	-	-	-	<0.00050	<0.00050
Cyanide (free)	mg/l	-	-	-	-	-	-	-	-	<0.0022	<0.0022
Cyanide (WAD)	mg/l	-	-	-	-	-	-	-	-	<0.001	<0.001

Notes:

<u>Underline</u> denotes estimated formation water quality (Golder 2016a)

- denotes parameter was not analyzed

* denotes calculated TDS using calculated Formation water dissolved constituents (mg/L). Corrected laboratory measured TDS result biased low. Calculated reported result below detection limit assumed to be neglible (zero) in the calculated TDS value.

Calculated Port 3 Formation water as part of the 2018, 2019 and 2020 investigations yielded negative values for TDS and major ions Ca, Cl, K, As, Li, Se and Sr and negative values of Ni, Fe, Li and K in 2021. Less than laboratory result is reported.

2019 Port 4 corrected sample was not representative of Formation groundwater quality due to elevated electrical conductivity and fluorescein content in sample (120 ppb, 23% drill fluid remaining)

2021 Port 6 water samples contain mixture of Formation water and Westbay well casing fluid. Higher degree of uncertainty in calculated Formation water due to presence of casing water and higher fluorecein content in sample (95 ppb, 19% drill fluid remaining)

Table D-3 Westbay System AMQ16-626 Raw Groundwater Sample Water Whale Tail Lake Talik Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

Location		AMQ16-626 PORT 2 AMQ16-626				26 PORT 3			AMQ16-6		AMQ16-626 PORT 6	
Date		12-Nov-2021	13-Nov-2021	08-Nov-2021	08-Nov-2021	09-Nov-2021	09-Nov-2021	05-Nov-2021	05-Nov-2021	06-Nov-2021	06-Nov-2021	10-Nov-2021
Golder Sample ID		PORT 2A	PORT 2A - DUP 1A	PORT-3-DUP1A	PORT-3A	PORT-3-DUP1B	PORT-3-3B	PORT-4-DUP1A	PORT-4A	PORT-4-DUP1B	PORT-4B	PORT 6A
Average Field measured parameters	Units											
Fluorescein Concentration	ppb	55.72	87.72	34.	61	30.	64	20.0	05	21.	51	94.92
Drilling Fluid Proportion	-	0.11	0.17	0.0		0.0		0.0		0.0	-	0.19
Formation Water Proportion	-	0.89	0.83	0.9		0.9		0.9		0.9		0.81
Electrical Conductivty	uS/cm	9368	12748	44		43		221		242	-	4304
Specific Conductance	uS/cm	12813	16540	62		59		316		33		6063
Total Dissolved Solids (TDS)	mg/L S.U.	8328 8.18	10753 8.15	40		38		207		219		<u>3878</u> 6.54
Salinity	ppt	8.4	10.4	3.		3.		1.	-	2.		3.7
Conventional Parameters	ppt	0.4	10.4		.5			1 1.	1	Z.		3.7
Alkalinity	mg CaCO ₃ /L	58	54			52	54	24	26	23	23	35
,		58	53			52	54	LT		23	23	35
alkalinity, bicarbonate (as CaCO3)	mg CaCO ₃ /L						-					
alkalinity, carbonate (as CaCO3) Electrical Conductivty	mg CaCO3/L uS/cm	<1.0 14300	<1.0 19800			<1.0 6500	<1.0 6430			<1.0 4060	<1.0 4000	<u><1.0</u> 7310
pH	S.U.	7.77	7.52			6.61	6.64	6.75	6.83	6.57	6.53	6.69
Salinity	ppt	7.8	11			3.9	4			2.3	2.4	4.6
Total dissolved solids (calculated)	mg/L	8200	11000					2100	2100	2100	2000	4200
Total dissolved solids (lab)	mg/L	14000	18800	3580	4270			2100	2100	2350	2340	6140
Total Suspended Solids (TSS)	mg/L	10	12	2	3			2	2			8
Turbidity	NTU	0.7	0.7			0.5	0.5			0.5	0.6	3.4
Anions and Nutrients												
Ammonia, total (as N)	mg/L	0.11	0.71	0.08	0.082					0.073	0.075	0.099
Bromide (Br)	mg/L	48	75	26	26			10	11			33
Chloride (Cl)	mg/L	5500	7400	2600	2400			1300	1300	1300	1200	2600
Dissolved Organic Carbon	mg/L	380	350		0.98	220 0.97	240			<u>330</u> 0.48	320 0.46	14000
Fluoride (F)	mg/L	0.61	0.52 1.5	0.97 0.66	0.98	0.97	0.99	0.5	0.48	0.48	0.46	0.17 <10
Kjeldahl nitrogen, total [TKN] nitrate + nitrite (as N)	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	 <0.10	<0.10	<0.43	<0.10
Nitrates (NO3)	mg/L mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrites (NO2)	mg/L	<0.10	<0.10	<0.010	<0.010	<0.10	<0.010	<0.10	<0.10	<0.010	<0.010	0.014
phosphate, ortho-, dissolved (as P)	mg/L	<0.0030	<0.0030	< 0.0010	<0.010			<0.010	<0.0010			<0.0010
phosphorus, dissolved	mg/L	< 0.02	< 0.04	< 0.01	< 0.01	0.015	0.017			< 0.01	<0.01	< 0.02
phosphorus, total	mg/L	0.0068	0.0041	0.0047	0.0055	<0.01	0.01			0.0043	0.0072	0.0041
silicate (as SiO2)	mg/L	10	38	8.2	9.4			8.2	7.9			8.3
Sulphate (SO4)	mg/L	1.4	2.3	1.2	0.96			0.82	0.87	<1.0	<1.0	1.7
Total Organic Carbon	mg/L	380	370	380	370					310	320	14000
Metals (dissolved)		/										
Aluminium (Al)	mg/L	0.0133	0.018	0.0072	0.0083	0.0138	0.0126			0.0069	0.0063	0.0072
Antimony (Sb) Arsenic (As)	mg/L	0.00052	0.00061 0.00202	0.00122 0.00246	0.0012	0.00118 0.00197	0.00111 0.00195			0.00094 0.0032	0.00096	0.00042
Barium (Ba)	mg/L mg/L	0.0698	0.00202	0.0803	0.00259	0.0755	0.00195			0.0925	0.0904	0.00413
Berillium (Be)	mg/L	<0.00010	<0.00020	< 0.000050	< 0.000050	< 0.000050	<0.000050			< 0.000050	< 0.000050	<0.00010
Boron (B)	mg/L	1.15	1.46	0.913	0.902	0.91	0.918			0.51	0.493	0.324
Cadmium (Cd)	mg/L	< 0.000050	<0.00010	< 0.000025	< 0.00025	<0.000025	< 0.000025			< 0.000025	<0.000025	<0.000050
Calcium (Ca)	mg/L	2240	3350			923	941	476	476	519	496	1270
Chromium (Cr)	mg/L	<0.0010	<0.0020	<0.00050	<0.00050	<0.00050	<0.00050			<0.00050	<0.00050	<0.0010
Cobalt (Co)	mg/L	0.000431	0.00058	0.000255	0.000234	0.000188	0.000215			0.000097	0.000102	0.000349
Copper (Cu)	mg/L	< 0.00050	<0.0010	< 0.00025	< 0.00025	<0.00025	< 0.00025			< 0.00025	< 0.00025	<0.00050
Iron (Fe)	mg/L	<0.01	< 0.02	0.0185	0.0217	0.0081	0.0071	0.0272	0.0248	0.027	0.0257	0.707
Lead (Pb) Lithium (Li)	mg/L mg/L	<0.000050 1.41	<0.00010 2.33	<0.000025 0.441	<0.000025 0.43	<0.000025 0.449	<0.000025 0.446			<0.000025 0.133	<0.000025 0.124	0.000139 0.434
Magnesium (Mg)	mg/L	0.5	<1.0	0.441		0.449	0.446	4.41	4.45	4.74	4.73	30.5
Manganese (Mn)	mg/L	0.00909	0.013	0.0132	0.0133	0.0112	0.0109			0.0147	0.015	0.0963
Dissolved Mercury (Hg)	mg/L	<0.00001	< 0.00001			<0.00001	<0.00001			<0.00001	< 0.00001	<0.00001
Molybdenum (Mo)	mg/L	0.00448	0.0057	0.00368	0.00365	0.00285	0.00296			0.00089	0.00086	0.00856
Nickel (Ni)	mg/L	0.00136	0.00126	0.00077	0.00073	0.00107	0.00124			0.00136	0.00135	0.00128
Potassium (K)	mg/L	69.2	112			22.1	23	10	10	10.7	10.6	13.5
Selenium (Se)	mg/L	0.00043	<0.00080	<0.00020	<0.00020	<0.00020	<0.00020			<0.00020	<0.00020	0.00177
Silicon (Si)	mg/L	3.31	3.32	2.85	2.86	3.1	3.16			3.54	3.35	2.58
Silver (Ag)	mg/L	<0.000050	<0.00010	<0.000025	<0.000025	<0.000025	<0.000025			<0.000025	< 0.000025	<0.000050
Sodium (Na)	mg/L	393	423 59.2		 15.3	306	306	256	259	266 7.87	265 7.56	224
Strontium (Sr) Tellurium (Te)	mg/L mg/L	40.2 <0.00020	<0.00040	15.5 0.00013	0.0001	14.6 0.00013	14.5 0.0001			<0.00010	<0.00010	20 <0.00020
	iiig/∟	-0.00020	-0.000+0	0.00015	0.0001	0.00013	0.0001			-0.00010	-0.00010	\$0.00020

Table D-3 Westbay System AMQ16-626 Raw Groundwater Sample Water Whale Tail Lake Talik Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

ocation		AMQ16-626 PORT 2			AMQ16-6	26 PORT 3			AMQ16-626 PORT 6			
Pate		12-Nov-2021	13-Nov-2021	08-Nov-2021	08-Nov-2021	09-Nov-2021	09-Nov-2021	05-Nov-2021	05-Nov-2021	06-Nov-2021	06-Nov-2021	10-Nov-2021
older Sample ID		PORT 2A	PORT 2A - DUP 1A	PORT-3-DUP1A	PORT-3A	PORT-3-DUP1B	PORT-3-3B	PORT-4-DUP1A	PORT-4A	PORT-4-DUP1B	PORT-4B	PORT 6A
nallium (TI)	mg/L	<0.000020	<0.000040	<0.000010	<0.000010	<0.000010	<0.000010			<0.000010	<0.000010	<0.000020
n (Sn)	mg/L	<0.0020	< 0.0040	< 0.0010	< 0.0010	< 0.0010	< 0.0010			<0.0010	< 0.0010	< 0.0020
tanium (Ti)	mg/L	<0.0050	< 0.01	< 0.0025	< 0.0025	< 0.0025	< 0.0025			< 0.0025	< 0.0025	< 0.0050
anium (U)	mg/L	<0.000020	<0.000040	0.000021	0.000014	0.000015	0.000017			< 0.000010	< 0.000010	<0.000020
anadium (V)	mg/L	< 0.0020	< 0.0040	< 0.0010	< 0.0010	< 0.0010	< 0.0010			<0.0010	<0.0010	< 0.0020
nc (Zn)	mg/L	0.005	0.0059	0.045	0.0545	0.00225	0.00245			0.0172	0.0172	1.82
etals (total)	Ŭ Ŭ					· · ·						
uminum	mg/l	0.0187	0.023			0.0108	0.012			0.0085	0.008	0.0149
timony	mg/l	0.00059	0.00083			0.00097	0.00097			0.00088	0.0009	0.00042
senic	mg/l	0.00189	0.0014			0.00244	0.00358			0.00388	0.00396	0.011
Irium	mg/l	0.075	0.101			0.0799	0.0812			0.0857	0.0846	0.668
ryllium	mg/l	<0.00010	<0.00020			< 0.000050	< 0.000050			< 0.000050	< 0.000050	< 0.00010
pron	mg/l	1.28	1.56			0.874	0.881			0.456	0.456	0.313
Idmium	mg/l	<0.000050	<0.00010			<0.000025	<0.000025			<0.000025	<0.000025	< 0.000050
lcium	mg/l	2440	3420			945	951			466	453	1230
Iromium	mg/l	< 0.0010	< 0.0020			< 0.00050	<0.00050			0.00198	0.00544	0.0018
balt	mg/l	0.000499	0.00065			0.000192	0.000195			0.000127	0.000123	0.00032
pper	mg/l	0.0005	0.0013			<0.00025	<0.00025			0.00036	0.00046	0.00079
n	mg/l	0.036	0.026			0.0443	0.043			0.161	0.174	0.83
ad	mg/l	0.000089	0.00013			0.000091	0.000093			0.00025	0.000284	0.00102
hium	mg/l	1.55	2.39			0.42	0.421			0.115	0.117	0.348
agnesium	mg/l	0.58	<1.0			0.93	0.96			4.39	4.24	29.2
anganese	mg/l	0.00975	0.0142			0.0112	0.0117			0.0145	0.0145	0.0956
ercury	mg/l	< 0.00001	<0.00001			< 0.00001	<0.00001			<0.00001	<0.00001	<0.00001
olybdenum	mg/l	0.00474	0.0054			0.00283	0.00287			0.00141	0.00173	0.00943
ckel	mg/l	0.00216	0.00458			0.0011	0.0009			0.00321	0.00476	0.00216
otassium	mg/l	76	114			23	23.2			9.6	9.26	12.2
elenium	mg/l	<0.00040	<0.00080			0.00058	0.00046			<0.00020	<0.00020	0.00136
licon	mg/l	3.49	3.46			3.27	3.27			3.23	3.13	2.39
lver	mg/l	<0.000050	<0.00010			<0.000025	<0.000025			<0.000025	<0.000025	<0.000050
odium	mg/l	418	433			307	314			243	233	215
rontium	mg/l	43.3	60.1			15.3	15.5			7.17	7.09	18.7
llurium	mg/l	<0.00020	<0.00040			<0.00010	<0.00010			<0.00010	<0.00010	<0.00020
allium	mg/l	<0.000020	<0.000040			<0.000010	0.000013			<0.000010	<0.000010	<0.000020
1	mg/l	<0.0020	<0.0040			<0.0010	<0.0010			<0.0010	<0.0010	<0.0020
tanium	mg/l	<0.0050	<0.01			<0.0025	<0.0025			<0.0025	<0.0025	<0.0050
anium	mg/l	0.000022	<0.000040			0.000015	0.000018			<0.000010	0.000011	0.000022
anadium	mg/l	<0.0020	<0.0040			<0.0010	<0.0010			<0.0010	<0.0010	<0.0020
10	mg/l	0.153	0.132			0.14	0.211			0.169	0.188	3.32
dioactive lons												
dium (Ra 226)	Bq/L	1.1	1.4	0.3	0.38					0.18	0.2	0.23
anide												
anide	mg/l	<0.00050	<0.00050	<0.0050	<0.0050					< 0.0050	<0.0050	<0.0050
vanide (free)	mg/l	< 0.0010	<0.0010			0.0015	0.0015			0.0013	0.0013	0.0022
vanide (WAD)	mg/l	<0.00050	<0.00050	<0.001	<0.001					<0.001	<0.001	<0.001
A/QC								· · · ·				
alculated TDS	mg/L	8748	11873	2657	2458	1544	1585	2090	2096	2467	2332	4171
Iculated TDS VS Lab Measured TDS	%	62%	63%	74%*	58%*	NA	NA	100%	100%	105%	100%	99%

-- denotes parameter was not analyzed
 * Calculated TDS value biased low due to partial suite of dissolved constituents analyzed

NA - not applicable. Sample was not analyzed for TDS.

Table D-4 QA/QC of Westbay System AMQ16-626 Raw Groundwater Sample Water Whale Tail Lake Talik Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

Bureau Veritas ID			RFN693	RFN694			RFN695	RFN696			REX637	REX638			REX639	REX640		RFX509
Sampling Date COC Number			2021-11-08 435927	2021-11-08 435927			2021-11-09 435927	2021-11-09 435927			2021-11-05 435933	2021-11-05 435933			2021-11-06 435933	2021-11-06 435933		2021-11-10 440204
	UNITS	MDL	Port-3A	Port-3-DUP1A	RPD	MDL	Port-3-3B	Port-3-DUP1B	RPD	MDL	Port-4A	Port-4-DUP1A	RPD	RDL	Port-4B	Port-4-DUP1B	RPD	TB1
CONVENTIONALS																		
Total Nitrogen (Ammonia Nitrogen)	mg/L	0.005	0.082	0.08	2%									0.005	0.075	0.073	3%	0.01
Calculated Parameters Bicarb. Alkalinity (calc. as CaCO3)	mg/L					1	54	52	4%					1	23	23	0%	<1.0
Calculated TDS	mg/L						04	02	470	1	2100	2100	0%	1	2000	2100	5%	<1.0
Carb. Alkalinity (calc. as CaCO3)	mg/L					1	<1.0	<1.0						1	<1.0	<1.0		<1.0
Dissolved Hardness (CaCO3)	mg/L					0.5	2350	2310	2%					0.5	1260	1320	5%	<0.50
Total Hardness (CaCO3)	mg/L					0.5	2380	2360	1%					0.5	1150	1180	3%	
Inorganics Alkalinity (Total as CaCO3)	mg/L					1	54	52	4%	1	26	24	8%	1	23	23	0%	<1.0
Conductivity	mS/cm					0.001	6.43	6.5	1%	· ·	20		0.0	0.001	4	4.06	1%	0.00
Dissolved Bromide (Br-)	mg/L	0.2	26	26	0%					0.1	11	10	10%					0.034
Dissolved Chloride (CI-)	mg/L	25	2400	2600	8%					13	1300	1300	0%	15	1200	1300	8%	<1.0
Dissolved Organic Carbon	mg/L	0.5	0.96	10	<mdl< td=""><td>2</td><td>240</td><td>220</td><td>9%</td><td>0.5</td><td>0.97</td><td>0.00</td><td><mdl< td=""><td>4</td><td>320 <1.0</td><td>330 <1.0</td><td>3%</td><td><0.40</td></mdl<></td></mdl<>	2	240	220	9%	0.5	0.97	0.00	<mdl< td=""><td>4</td><td>320 <1.0</td><td>330 <1.0</td><td>3%</td><td><0.40</td></mdl<>	4	320 <1.0	330 <1.0	3%	<0.40
Dissolved Sulphate (SO4) Fluoride (F-)	mg/L mg/L	0.5	0.96	1.2 0.97	1%	0.1	0.99	0.97	2%	0.5	0.87	0.82	<mdl< td=""><td>0.1</td><td>0.46</td><td>0.48</td><td> <mdl< td=""><td><0.50 <0.10</td></mdl<></td></mdl<>	0.1	0.46	0.48	 <mdl< td=""><td><0.50 <0.10</td></mdl<>	<0.50 <0.10
Free Cyanide (CN)	ug/L	0.1	0.30	0.51	170	1	1.5	1.5	<mdl< td=""><td>0.1</td><td>0.40</td><td>0.5</td><td>SIVIDE</td><td>1</td><td>1.3</td><td>1.3</td><td><mdl< td=""><td>\$0.10</td></mdl<></td></mdl<>	0.1	0.40	0.5	SIVIDE	1	1.3	1.3	<mdl< td=""><td>\$0.10</td></mdl<>	\$0.10
Nitrate (N)	mg/L	0.1	<0.10	<0.10		0.1	<0.10	<0.10		0.1	<0.10	<0.10		0.1	<0.10	<0.10		<0.10
Nitrate + Nitrite (N)	mg/L	0.1	<0.10	<0.10		0.1	<0.10	<0.10		0.1	<0.10	<0.10		0.1	<0.10	<0.10		<0.10
Nitrite (N)	mg/L	0.01	<0.010	< 0.010		0.01	<0.010	<0.010		0.01	<0.010	<0.010		0.01	<0.010	<0.010		<0.010
Orthophosphate (P)	mg/L	0.001	<0.0010	<0.0010			6.64	6.61	00/	0.001	<0.0010	<0.0010			6 50	6.57	1%	< 0.0010
pH Reactive Silica (SiO2)	pH mg/L	0.05	9.4	8.2	14%		6.64	6.61	0%	0.05	6.83 7.9	6.75 8.2	1% 4%		6.53	0.57	1%	5.62 <0.050
Salinity	N/A	0.00	J.4	0.2	1+70	2	4	3.9	<mdl< td=""><td>0.00</td><td>1.3</td><td>0.2</td><td>+ /0</td><td>2</td><td>2.4</td><td>2.3</td><td><mdl< td=""><td><2.0</td></mdl<></td></mdl<>	0.00	1.3	0.2	+ /0	2	2.4	2.3	<mdl< td=""><td><2.0</td></mdl<>	<2.0
Strong Acid Dissoc. Cyanide (CN)	mg/L	0.005	< 0.0050	<0.0050		-		2.0					1	0.005	<0.0050	< 0.0050		
Total Dissolved Solids	mg/L	10	4270	3580	18%									10	2340	2350	0%	<10
Total Kjeldahl Nitrogen (TKN)	mg/L	0.2	0.75	0.66	<mdl< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.2</td><td>0.43</td><td>0.31</td><td><mdl< td=""><td><0.20</td></mdl<></td></mdl<>									0.2	0.43	0.31	<mdl< td=""><td><0.20</td></mdl<>	<0.20
Total Organic Carbon (TOC)	mg/L	4	370	380	3%									4	320	310	3%	<0.40
Total Suspended Solids Turbidity	mg/L NTU	1	3	2	<mdl< td=""><td>0.1</td><td>0.5</td><td>0.5</td><td>0%</td><td>1</td><td>2</td><td>2</td><td><mdl< td=""><td>0.1</td><td>0.6</td><td>0.5</td><td>18%</td><td>2.00</td></mdl<></td></mdl<>	0.1	0.5	0.5	0%	1	2	2	<mdl< td=""><td>0.1</td><td>0.6</td><td>0.5</td><td>18%</td><td>2.00</td></mdl<>	0.1	0.6	0.5	18%	2.00
Weak Acid Dissoc. Cyanide (CN)	mg/L	1	<1	<1		0.1	0.5	0.5	0%					0.1	<1	<1	10%	×0.1
Dissolved Metals	ilig/2	·													•			
Dissolved Aluminum (Al)	ug/L	2.5	8.3	7.2	<mdl< td=""><td>2.5</td><td>12.6</td><td>13.8</td><td>9%</td><td></td><td></td><td></td><td></td><td>2.5</td><td>6.3</td><td>6.9</td><td><mdl< td=""><td><0.50</td></mdl<></td></mdl<>	2.5	12.6	13.8	9%					2.5	6.3	6.9	<mdl< td=""><td><0.50</td></mdl<>	<0.50
Dissolved Antimony (Sb)	ug/L	0.1	1.2	1.22	2%	0.1	1.11	1.18	6%					0.1	0.96	0.94	2%	<0.020
Dissolved Arsenic (As)	ug/L	0.1	2.59	2.46	5%	0.1	1.95	1.97	1%					0.1	3.2	3.2	0%	<0.020
Dissolved Barium (Ba) Dissolved Beryllium (Be)	ug/L	0.1	80.1 <0.050	80.3 <0.050	0%	0.1	76.3 <0.050	75.5 <0.050	1%					0.1	90.4	92.5 <0.050	2%	<0.020 <0.010
Dissolved Boron (B)	ug/L ug/L	50	902	913	1%	50	918	910	1%					50	493	510	3%	<10
Dissolved Cadmium (Cd)	ug/L	0.025	<0.025	< 0.025		0.025	<0.025	<0.025						0.025	<0.025	<0.025		< 0.0050
Dissolved Calcium (Ca)	mg/L					0.25	941	923	2%	0.05	476	476	0%					< 0.050
Dissolved Chromium (Cr)	ug/L	0.5	<0.50	<0.50		0.5	<0.50	<0.50						0.5	<0.50	<0.50		<0.10
Dissolved Cobalt (Co)	ug/L	0.025	0.234	0.255	9%	0.025	0.215	0.188	13%					0.025	0.102	0.097	<mdl< td=""><td>< 0.0050</td></mdl<>	< 0.0050
Dissolved Copper (Cu)	ug/L	0.25	<0.25	<0.25 18.5	 <mdl< td=""><td>0.25</td><td>< 0.25</td><td><0.25</td><td> <mdl< td=""><td>E</td><td>24.8</td><td>27.2</td><td><mdl< td=""><td>0.25</td><td><0.25 25.7</td><td><0.25 27</td><td> 5%</td><td>< 0.050</td></mdl<></td></mdl<></td></mdl<>	0.25	< 0.25	<0.25	 <mdl< td=""><td>E</td><td>24.8</td><td>27.2</td><td><mdl< td=""><td>0.25</td><td><0.25 25.7</td><td><0.25 27</td><td> 5%</td><td>< 0.050</td></mdl<></td></mdl<>	E	24.8	27.2	<mdl< td=""><td>0.25</td><td><0.25 25.7</td><td><0.25 27</td><td> 5%</td><td>< 0.050</td></mdl<>	0.25	<0.25 25.7	<0.25 27	5%	< 0.050
Dissolved Iron (Fe) Dissolved Lead (Pb)	ug/L ug/L	5 0.025	21.7 <0.025	<0.025	<wd></wd>	5 0.025	7.1 <0.025	<u>8.1</u> <0.025		5	24.0	21.2	NIDL	5 0.025	<0.025	<0.025	5%	<1.0 <0.0050
Dissolved Lithium (Li)	ug/L	2.5	430	441	3%	2.5	446	449	1%					2.5	124	133	7%	< 0.50
Dissolved Magnesium (Mg)	mg/L					0.25	0.91	0.91	<mdl< td=""><td>0.05</td><td>4.45</td><td>4.41</td><td>1%</td><td></td><td></td><td></td><td></td><td>< 0.050</td></mdl<>	0.05	4.45	4.41	1%					< 0.050
Dissolved Manganese (Mn)	ug/L	0.25	13.3	13.2	1%	0.25	10.9	11.2	3%					0.25	15	14.7	2%	<0.050
Dissolved Mercury (Hg)	mg/L	1				0.00001	< 0.00001	<0.00001						0.00001	< 0.00001	<0.00001		< 0.00001
Dissolved Molybdenum (Mo) Dissolved Nickel (Ni)	ug/L	0.25	3.65 0.73	3.68 0.77	1% 5%	0.25	2.96 1.24	2.85	4%				-	0.25	0.86	0.89	<mdl 1%</mdl 	<0.050 <0.020
Dissolved Phosphorus (P)	ug/L ug/L	10	<10	<10	5%	10	1.24	1.07	<mdl< td=""><td></td><td></td><td></td><td>+</td><td>10</td><td><10</td><td><10</td><td>1%</td><td><0.020</td></mdl<>				+	10	<10	<10	1%	<0.020
Dissolved Potassium (K)	mg/L		10			0.25	23	22.1	4%	0.05	10	10	0%			-10		<0.050
Dissolved Selenium (Se)	ug/L	0.2	<0.20	<0.20		0.2	<0.20	<0.20						0.2	<0.20	<0.20		<0.040
Dissolved Silicon (Si)	ug/L	250	2860	2850	0%	250	3160	3100	2%					250	3350	3540	6%	<50
Dissolved Silver (Ag)	ug/L	0.025	<0.025	<0.025		0.025	<0.025	< 0.025				050	10/	0.025	<0.025	<0.025		< 0.0050
Dissolved Sodium (Na)	mg/L	0.25	15300	15500	1%	0.25	306 14500	<u>306</u> 14600	0%	0.05	259	256	1%	0.25	7560	7870	4%	< 0.050
Dissolved Strontium (Sr) Dissolved Tellurium (Te)	ug/L ug/L	0.25	0.1	0.13	1% <mdl< td=""><td>0.25</td><td>0.1</td><td>0.13</td><td>1% <mdl< td=""><td></td><td></td><td></td><td>+</td><td>0.25</td><td><0.10</td><td><0.10</td><td>4%</td><td><0.050 <0.020</td></mdl<></td></mdl<>	0.25	0.1	0.13	1% <mdl< td=""><td></td><td></td><td></td><td>+</td><td>0.25</td><td><0.10</td><td><0.10</td><td>4%</td><td><0.050 <0.020</td></mdl<>				+	0.25	<0.10	<0.10	4%	<0.050 <0.020
Dissolved Thallium (TI)	ug/L	0.01	<0.010	<0.010		0.01	<0.010	<0.010					+	0.01	<0.10	<0.010		<0.020
Dissolved Tin (Sn)	ug/L	1	<1.0	<1.0		1	<1.0	<1.0						1	<1.0	<1.0		<0.20
Dissolved Titanium (Ti)	ug/L	2.5	<2.5	<2.5		2.5	<2.5	<2.5						2.5	<2.5	<2.5		<0.50
Dissolved Uranium (U)	ug/L	0.01	0.014	0.021	<mdl< td=""><td>0.01</td><td>0.017</td><td>0.015</td><td><mdl< td=""><td></td><td></td><td></td><td></td><td>0.01</td><td><0.010</td><td><0.010</td><td></td><td><0.0020</td></mdl<></td></mdl<>	0.01	0.017	0.015	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.01</td><td><0.010</td><td><0.010</td><td></td><td><0.0020</td></mdl<>					0.01	<0.010	<0.010		<0.0020
Dissolved Vanadium (V)	ug/L	1	<1.0	<1.0		1	<1.0	<1.0						1	<1.0	<1.0		<0.20
Dissolved Zinc (Zn) Total Metals	ug/L	0.5	54.5	45	19%	0.5	2.45	2.25	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.5</td><td>17.2</td><td>17.2</td><td>0%</td><td><0.10</td></mdl<>					0.5	17.2	17.2	0%	<0.10
Total Aluminum (Al)	ug/L					2.5	12	10.8	<mdl< td=""><td></td><td></td><td></td><td></td><td>2.5</td><td>8</td><td>8.5</td><td><mdl< td=""><td><0.50</td></mdl<></td></mdl<>					2.5	8	8.5	<mdl< td=""><td><0.50</td></mdl<>	<0.50
Total Antimony (Sb)	ug/L				1	0.1	0.97	0.97	0%				1	0.1	0.9	0.88	2%	<0.020
Total Arsenic (As)	ug/L					0.1	3.58	2.44	38%					0.1	3.96	3.88	2%	<0.020
Total Barium (Ba) Total Beryllium (Be)	ug/L					0.1	81.2	79.9	2%					0.1	84.6	85.7	1%	<0.020
	ug/L	1		1	1	0.05	<0.050	<0.050		1	I	1	1	0.05	< 0.050	< 0.050		< 0.010

Table D-4 QA/QC of Westbay System AMQ16-626 Raw Groundwater Sample Water Whale Tail Lake Talik Agnico Eagle Mines Limited, Whale Tail Mine, Nunavut

Bureau Veritas ID			RFN693	RFN694			RFN695	RFN696			REX637	REX638			REX639	REX640		RFX509
Sampling Date			2021-11-08	2021-11-08			2021-11-09	2021-11-09			2021-11-05	2021-11-05			2021-11-06	2021-11-06		2021-11-10
COC Number			435927	435927			435927	435927			435933	435933			435933	435933		440204
	UNITS	MDL	Port-3A	Port-3-DUP1A	RPD	MDL	Port-3-3B	Port-3-DUP1B	RPD	MDL	Port-4A	Port-4-DUP1A	RPD	RDL	Port-4B	Port-4-DUP1B	RPD	TB1
Total Boron (B)	ug/L					50	881	874	1%					50	456	456	0%	<10
Total Cadmium (Cd)	ug/L					0.025	< 0.025	<0.025						0.025	<0.025	<0.025		< 0.0050
Total Calcium (Ca)	mg/L					0.25	951	945	1%					0.25	453	466	3%	< 0.050
Total Chromium (Cr)	ug/L					0.5	< 0.50	<0.50						0.5	5.44	1.98	>MDL	<0.10
Total Cobalt (Co)	ug/L					0.025	0.195	0.192	2%					0.025	0.123	0.127	<mdl< td=""><td>< 0.0050</td></mdl<>	< 0.0050
Total Copper (Cu)	ug/L					0.25	< 0.25	<0.25						0.25	0.46	0.36	<mdl< td=""><td>< 0.050</td></mdl<>	< 0.050
Total Iron (Fe)	ug/L					5	43	44.3	3%					5	174	161	8%	<1.0
Total Lead (Pb)	ug/L					0.025	0.093	0.091	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.025</td><td>0.284</td><td>0.25</td><td>13%</td><td>< 0.0050</td></mdl<>					0.025	0.284	0.25	13%	< 0.0050
Total Lithium (Li)	ug/L					2.5	421	420	0%					2.5	117	115	2%	< 0.50
Total Magnesium (Mg)	mg/L					0.25	0.96	0.93	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.25</td><td>4.24</td><td>4.39</td><td>3%</td><td>< 0.050</td></mdl<>					0.25	4.24	4.39	3%	< 0.050
Total Manganese (Mn)	ug/L					0.25	11.7	11.2	4%					0.25	14.5	14.5	0%	< 0.050
Mercury (Hg)	mg/L					0.00001	< 0.00001	< 0.00001						0.00001	< 0.00001	<0.00001		< 0.00001
Total Molybdenum (Mo)	ug/L					0.25	2.87	2.83	1%					0.25	1.73	1.41	20%	< 0.050
Total Nickel (Ni)	ug/L					0.1	0.9	1.1	20%					0.1	4.76	3.21	39%	0.022
Total Potassium (K)	mg/L					0.25	23.2	23	1%					0.25	9.26	9.6	4%	< 0.050
Total Selenium (Se)	ug/L					0.2	0.46	0.58	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.2</td><td><0.20</td><td><0.20</td><td></td><td>< 0.040</td></mdl<>					0.2	<0.20	<0.20		< 0.040
Total Silicon (Si)	ug/L					250	3270	3270	0%					250	3130	3230	3%	<50
Total Silver (Ag)	ug/L					0.025	< 0.025	< 0.025						0.025	< 0.025	<0.025		< 0.0050
Total Sodium (Na)	mg/L					0.25	314	307	2%					0.25	233	243	4%	< 0.050
Total Strontium (Sr)	ug/L					0.25	15500	15300	1%					0.25	7090	7170	1%	< 0.050
Total Tellurium (Te)	ug/L					0.1	<0.10	<0.10						0.1	<0.10	<0.10		< 0.020
Total Thallium (TI)	ug/L					0.01	0.013	<0.010						0.01	<0.010	<0.010		< 0.0020
Total Tin (Sn)	ug/L					1	<1.0	<1.0						1	<1.0	<1.0		<0.20
Total Titanium (Ti)	ug/L					2.5	<2.5	<2.5						2.5	<2.5	<2.5		< 0.50
Total Uranium (U)	ug/L					0.01	0.018	0.015	<mdl< td=""><td></td><td></td><td></td><td></td><td>0.01</td><td>0.011</td><td><0.010</td><td></td><td>< 0.0020</td></mdl<>					0.01	0.011	<0.010		< 0.0020
Total Vanadium (V)	ug/L					1	<1.0	<1.0						1	<1.0	<1.0		<0.20
Total Zinc (Zn)	ug/L					0.5	211	140	40%					0.5	188	169	11%	<0.10
Nutritional Parameters													_					
Total Phosphorus (P)	mg/L	0.001	0.0055	0.0047	<mdl< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.001</td><td>0.0072</td><td>0.0043</td><td>>MDL</td><td>< 0.0010</td></mdl<>									0.001	0.0072	0.0043	>MDL	< 0.0010
RADIONUCLIDE					_													
Radium-226	Bq/L	0.005	0.38	0.3	24%									0.005	0.2	0.18	11%	< 0.0050
Notes:								•										

Notes: MDL = method detection limit RPD = relative percent difference

- denotes RPD value exceeds 20% or duplicate outside of MDL tolerance (both samples are between the MDL and 5 times the MDL) - denotes not calculated (one or both result below MDL)

ATTACHMENT B

2021 Thermal Monitoring Report and Supplemental IVR Long V651A TH Data



WHALE TAIL PIT PROJECT

Thermal Monitoring Report 2021

In Accordance with Project Certificate No. 008, T&C 14

Prepared by: Agnico Eagle Mines Limited – Meadowbank Division

March 2022

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APPENDIX A: WHALE TAIL THERMAL MONITORING DATA

1 INTRODUCTION

Agnico Eagle Mines Limited – Meadowbank Division (Agnico Eagle) is developing the Whale Tail Pit Project (Project), a satellite deposit located on the Amaruq property, to continue mine operations and milling at Meadowbank Mine.

This document presents the Thermal Monitoring Report including the following mine facilities and natural locations as described in the Thermal Monitoring Plan:

- Whale Tail Waste rock storage facility (WRSF)
- Water management facilities including Whale Tail Dike, Mammoth Dike, IVR Dike, WRSF Dike, and the Whale Tail and IVR Attenuation Ponds
- Whale Tail Pit

The Thermal Monitoring Report provides the instrumentation data and their interpretation. Refer to the Thermal Monitoring Plan for a general description of the different facilities, the anticipated impact of operation of the facilities on the permafrost, and the general guidelines that are used to define instrumentation needs for each facility.

2 AVAILABLE DATA

There are currently 71 active thermistors at the Whale Tail Site project area.

The location, installation summary, and status of all the thermistors installed within the Whale Tail Project site are presented in the table in Appendix A. Figure 1 shows locations of active thermistors. Data are collected from the thermistors by data loggers every three hours or by using manual readout units.

Results of active thermistors are presented in Appendix A.

3 THERMAL MONITORING RESULT

This section presents a summary of the expected thermal effects as well as interpretation of the instrumentation data gathered for the reporting period.

3.1 WASTE ROCK STORAGE FACILITY

3.1.1 Expected Thermal Effects on Permafrost

Construction of the WRSF on the permafrost is expected to result in aggradation of permafrost into the pile. The permafrost under the pile would remain, but temperatures in the upper permafrost zone are expected to increase gradually until a thermal equilibrium is established with the active zone and zero-amplitude zone moving upward and being located within the waste rock pile. Convective cooling conditions often occur in waste piles and would potentially offset some of the temperature increase in the permafrost.

The waste rock pile itself is expected to freeze back with time and have an active layer formed on the upper portion (Okane 2019b). Climate change in the long term is expected to extend the depth of the active layer in the pile, but the thick waste rock pile will constitute a protection to the underlying permafrost. If heat generation occurs associated with the oxidation of sulphide-bearing minerals within the pile, the process of freeze-back would be delayed and, depending on the location of the heat generation source, the upper portion of the permafrost foundation could be impacted.

3.1.2 Thermal Monitoring Results

For the thermistors installed in the foundation of the WT WRSF, the instrumentation data is showing thermal behaviour along the expected trend (permafrost aggradation).

The instruments installed at mid-elevation in the PAG of the first bench are now covered in waste rock and lots of beads have been lost especially in the NAG. The available data indicate that the active layer did not reach the PAG waste rock.

For the instruments located in the second instrumented cross section installed at 40 m above the ground elevation on top of the second bench, less than a year of data has been collected so its not possible to assess the extent of the active layer.

3.2 WATER MANAGEMENT FACILITIES

3.2.1 Expected Thermal Effects on Permafrost

The Whale Tail Dike is constructed within the lake where talik is anticipated to exist. The construction of the Whale Tail Dike is expected to have a cooling effect on the lake ground underneath the dike due to exposure to lower dike temperature than lake water. Minimal effects to the permafrost at the abutment areas are expected.

Following lake dewatering and the beginning of operations, areas downstream of the Whale Tail Dike are expected to freeze back progressively, and the upstream area of the dike is expected to remain unfrozen.

After the dike is breached in the final stages of closure, the Whale Tail Lake will be restored, causing frozen zones located downstream of the dike to thaw, progressively restoring the original lake talik.

The other dewatering dike areas are expected to have similar thermal impacts on the permafrost associated with construction, operation, and closure of the dikes.

The WRSF Dike will periodically contain a pond formed from water flowing out of the waste rock facility. Depending on pond depth and operational conditions there would be an impact with possible thawing of a shallow upper permafrost zone underlying the pond. However, due to the operational pond level that is normally maintained low to reduce the hydraulic gradient, this issue is unlikely.

The talik zone under the Whale Tail Attenuation Pond would remain, but the depth of the talik could be reduced as the Attenuation Pond is shallower than the existing lake at that location. The surrounding areas to the pond would freeze back progressively after dewatering but would restore to talik condition after breaching of the dewatering dikes and flooding of the area.

As for the IVR Attenuation Pond, with the maximum water elevation of the pond above the former lake elevation, some minor localized thawing of the permafrost is expected to occur in areas never exposed to water before outside of the dike footprint.

3.2.2 Thermal Monitoring Results

Mammoth Dike

The instrumentation data are showing thermal behaviour along the expected trend at Mammoth Dike with an active layer contained in the rockfill shell and the foundation and key trench are in permafrost condition.

WRSF Dike

A degradation of the thermal condition in the key trench of WRSF Dike was observed in the summer of 2019 leading to seepage. In 2021, the instruments show that the foundation and key trench remained frozen all year long with sign of permafrost aggradation which indicate that the mitigation measures implemented in 2020 were successful. The active layer is contained within the rockfill or upper portion of the key trench at most.

Whale Tail Dike

The trend of permafrost degradation at the abutments did not continue in 2021. No new zone of permafrost degradation were observed in the instruments, while the trends observed in 2020 remained similar which could signify that the thermal regime following the dike construction and the South Whale Tail Channel commissioning has reached a steady state.

The thermistors show that limited freeze back is happening in deep bedrock in some areas (0+142, 0+260, 0+360, 0+407, 0+500, 0+520, 0+530, 0+607, 0+618).

IVR Dike D-1

The thermistors installed in IVR Dike D-1 show that there is a 2m active layer contained within the rockfill portion or in the overburden, while the key trench, filters system, and bedrock remained in permafrost for the entire 2021 period.

3.3 OPEN PIT

3.3.1 Expected Effects on Permafrost

Whale Tail Pit will be excavated through an upper closed talik zone and underlying permafrost. During operations of the pit the talik zone is expected to freeze back progressively and the lower permafrost zone surrounding the pit walls will, in general, experience a reduction in temperature other than at a shallow active zone adjacent to the pit walls subjected to seasonal thawing during summer.

Upon closure and subsequent flooding of the Whale Tail Pit, permafrost areas underneath the pit lake are expected to gradually thaw. Thermal assessments have indicated this process would take hundreds of years (Golder, 2018). The pit lake would eventually reduce the permafrost depth in the pit surrounding ground, but this process could take significantly longer time (in the order of 10,000 years) to complete.

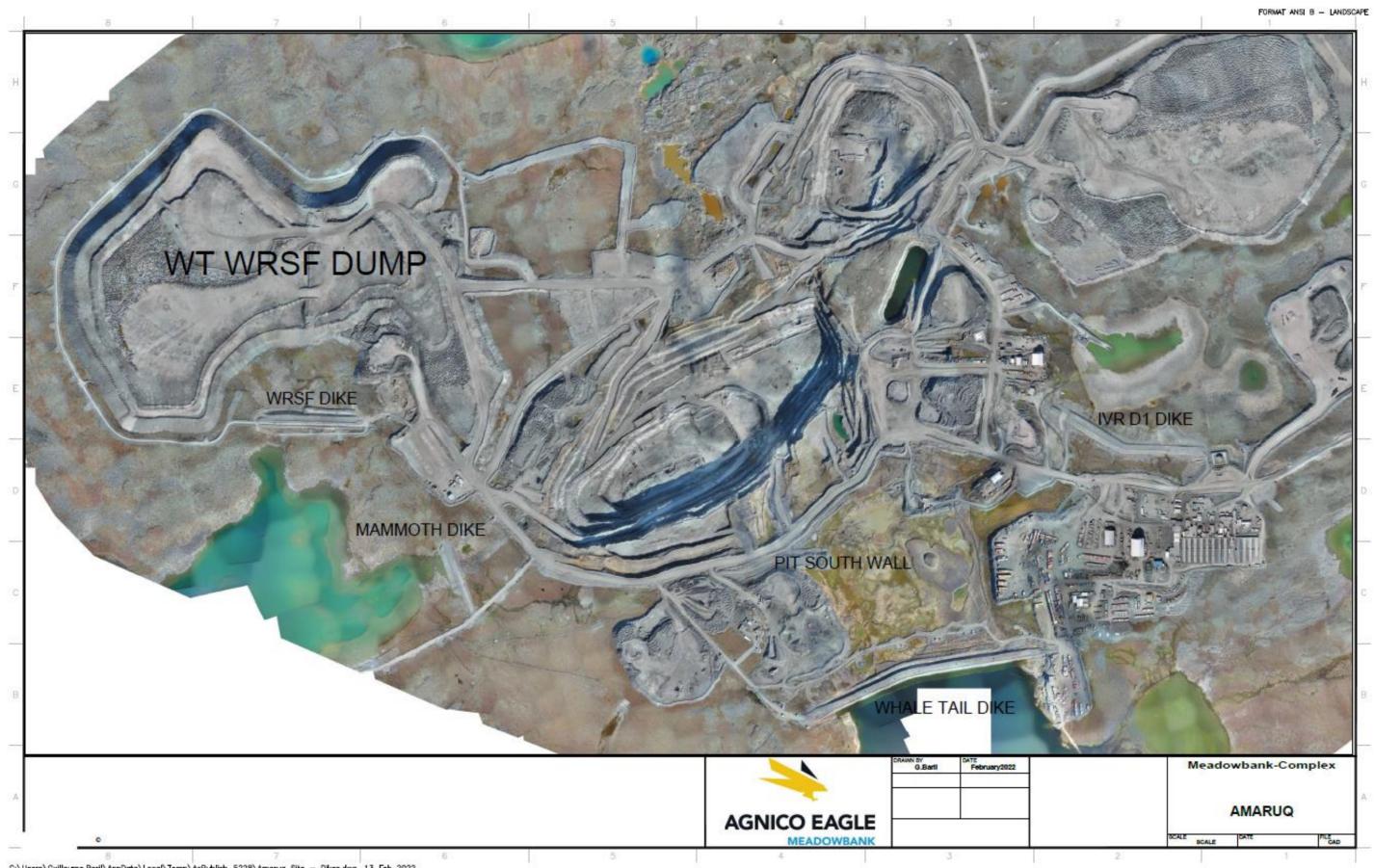
IVR Pit is excavated through permafrost and as a result the mining activities are not expected to impact the thermal regime of that area.

3.3.2 Thermal Monitoring Results

Thermistors have been installed in 2020 in the talik zone near the south wall of the Whale Tail Pit. Through the year 2021 until their dismantling in August it was possible to observe a freezing of the upper bedrock area.

The previous thermistors installed in the IVR area are no longer functioning due to mining activity in the sector but were showing permafrost until they stopped working. A deep thermistor has been installed in 2020 in that area (IVR long TH) and shows permafrost conditions down to 500 m below ground surface, to El. 9600 m (mining datum).

APPENDIX A – WHALE TAIL THERMAL MONITORING DATA



Whale Tail Thermal Monitoring Report 2021 – Appendix A

TABLE 1: Instruments Coordinates

Line					Elevation			
#	Name	Area	Easting (X)	Northing (Y)	(Z)	Azimuth	Dip	Ins
1	WTD 0+110	WTD	607090.500	7254625.000	156.40		-90	2
2	WTD 0+142	WTD	607119.94	7254637.98	156.75		-90	2
3	WTD 0+190 U/S	WTD	607165.34	7254653.83	157.42		-90	2
4	WTD 0+210	WTD	607182.85	7254666.19	157		-90	2
5	WTD 0+240	WTD	607209.40	7254676.80	158.1		-90	2
6	WTD 0+260	WTD	607227.51	7254686.28	157		-90	2
7	WTD 0+276 U/S	WTD	607237.2	7254677.3	157		-90	2
8	WTD 0+310	WTD	607237.98	7254707.09	157		-90	2
9	WTD 0+336 U/S	WTD	607298.44	7254713.45	157		-90	2
10	WTD 0+340 DS West	WTD	607246.597	7254841.993	149.6		-90	2
11	WTD 0+360	WTD	607318.81	7254727.15	157		-90	2
12	WTD-0+380	WTD	607338.0	7254734.4	157.1		-90	2
13	WTD 0+407	WTD	607363.08	7254744.86	157		-90	2
14	WTD-0+425	WTD	607380.8	7254380.8	158.5		-90	2
15	WTD 0+453	WTD	607408.60	7254753.72	157		-90	2
16	WTD 0+475	WTD	607429.5	7254758.2	161		-90	2
17	WTD 0+500	WTD	607454.9	7254759.9	157.1		-90	2
18	WTD 0+520	WTD	607473.78	7254764.22	157		-90	2
19	WTD 0+530	WTD	607483.77	7254766.00	159		-90	2
20	WTD 0+550	WTD	607505.20	7254768.00	157.9		-90	2
21	WTD 0+580	WTD	607533.163	7254773.95	158		-90	2
22	WTD 0+596	WTD	607549.60	7254775.20	157.8		-90	2
23	WTD 0+607	WTD	607561.24	7254778.35	157		-90	2
24	WTD 0+618 DS East	WTD	607548.9	7254905.6	152.1		-90	2
25	WTD 0+635	WTD	607587.7	7254782.9	158.3		-90	2
26	WTD 0+645	WTD	607597.30	7254782.8	158.6		-90	2
27	WTD 0+665	WTD	607617.0	7254788.0	158.3		-90	2
28	WTD 0+675	WTD	607262.31	7254788.86	157		-90	2
29	WTD 0+685	WTD	607636.9	7254791.2	160.5		-90	2
30	WTD 0+695	WTD	607646.7	7254792.9	157.5		-90	2
31	WTD 0+707.5	WTD	607659.0	7254795.1	158		-90	2
32	WTD 0+710 U/S	WTD	607662.32	7254790.63	157		-90	2
33	WTD 0+720	WTD	607671.5	7254797.1	160		-90	2
34	WTD 0+740	WTD	607691.0	7254800.0	160		-90	2
35	WTD 0+750	WTD	607701.81	7254797.04	157		-90	2
36	WTD 0+772 U/S	WTD	607724.15	7254804.63	157		-90	2
37	WTD 0+790	WTD	607740.0	7254807.3	157.2		-90	2

Installed	Active (Y) or (N)
2020	Y (13/16) beads)
2018	Y
2018	Y (10/16) beads)
2018	Y
2020	Y
2018	Y
2020	Y
2018	Y
2020	Y
2018	Y
2020	Y
2018	Y
2020	Y
2020	Y
2018	Y
2020	Y
2018	Y
2020	Y
2018	Y
2020	Y
2020	Y
2020	Y
2018	Y
2020	Y
2020	Y
2018	Y
2018	Y
2020	Y

38	WT WRSF TH01	WRSF	615797.25	7238129.77	161.546	-90	2
39	WT WRSF TH02	WRSF	615861.49	7238133.24	162.053	-90	2
40	WT WRSF TH03	WRSF	615814.31 to 615799.6	7238118.6 to 7238117	162.744 to 162.042	0	2
41	WT WRSF TH04	WRSF	615813.38 to 615797.7	7238134.1to 7238132.8	162.138 to 161.619	0	2
42	WT WRSF TH05	WRSF	615860.9 to 615800.3	71238133.3 to 7238126	162.202	0	2
43	WT WRSF TH06	WRSF	-		-	-	2
44	WT WRSF TH07	WRSF	14041.823/822.075(AMQ)	14051.510/8232.486(AMQ)	199.6	0	2
45	WT WRSF TH08	WRSF	14029.392/14039.081(AMQ)	8227.543/8238.974(AMQ)	199.7	0	2
46	WT WRSF TH09	WRSF	14035.675/14189.86(AMQ)	8224.663/8407.910 (AMQ)	200.2	0	2
47	WT WRSF TH10	WRSF	14259.183 (AMQ)	8479.248 (AMQ)	199.484- 195.386	-37	2
48	WT WRSF TH11	WRSF	14259.183	8479.249	198.637- 168.637	0	2
49	WT WRSF TH12	WRSF	14241.323/14231.698 (AMQ)	8481.427/8469.988 (AMQ)	200.2	0	2
50	WT WRSF TH13	WRSF	14521.240/14241.576 (AMQ)	8471.614/8460.159 (AMQ)	200.1	-90	2
51	WT WRSF TH14	WRSF	14245.84/14101.278	8476.032/8304.453	200.2	0	2
52	WT WRSF TH15	WRSF	14254.017/14248.950	8481.414/8477.225	200.2	-37	2
53	WT WRSF TH16	WRSF	14259.183	8479.248	167.637- 152.637	-90	2
54	MD-TH01	MD	Slope	Slope	-	Slope	2
55	MD-TH02	MD	605926.19	7255102.52	154.9	-90	2
56	MD-TH03	MD	605926.74	7255102.6	154.9	-90	2
57	WRSF TH01	WRSF Dike	Slope	Slope	-	Slope	2
58	WRSF TH02	WRSF Dike	605416.44	7255526.7	159.07	-90	2
59	WRSF TH03	WRSF Dike	605414.98	7255545.01	155.29	-90	2
60	WRSF TH04	WRSF Dike	605387.14	7255524.47	158.15	-90	2
61	WRSF TH05	WRSF Dike	605428.59	7255566.21	153.63	-90	2
62	WRSF TH06	WRSF Dike	605435.56	7255544.29	155.35	-90	2
63	WRSF TH07	WRSF Dike	605466.94	7255541.78	155.13	-90	2
64	WRSF TH08	WRSF Dike	605384.991	7255544.818	159.886	-90	2
65	WRSF TH09	WRSF Dike	605425.1	7255546.038	160.037	-90	2
66	PSW DH2 TH	Pit South Wall	606998.837	7255127.783	149.02	-90	2
67	PSW DH3 TH	Pit South Wall	607016.336	7255140.383	148.041	-90	2
68	PSW DH6 TH	Pit South Wall	607058.391	7255184.293	148.181	-90	2
69	PSW DH7 TH	Pit South Wall	607070.111	7255198.772	148.734	-90	2
70	PSW DH10 TH	Pit South Wall	607142.218	7255272.101	150.109	-90	2
71	PSW DH11 TH	Pit South Wall	607155.955	7255287.46	151.241	-50	2
72	PSW DH12 TH	Pit South Wall	607168.065	7255293.87	151.934	-50	2

2019 Y 2019 N (since 2020) 2019 Y (9/16) beads) 2019 Y (8/16) beads) 2019 Y (9/16) beads) 2021 Y (9/16) beads) 2021 NOT INSTALLED 2021 Y 2019 Y 2019 Y 2019 Y 2019 Y 2019 Y 2020		
2019 Y (9/16) beads) 2019 Y (8/16) beads) 2019 Y (9/16) beads) 2021 NOT INSTALLED 2021 Y 2019 Y 2020 N 2	2019	Y
2019 Y (8/16) beads) 2019 Y (9/16) beads) 2021 NOT INSTALLED 2021 Y 2019 Y 2020 N 202	2019	N (since 2020)
2019 Y (9/16) beads) 2021 NOT INSTALLED 2021 Y 2019 Y 2020 N 2020	2019	Y (9/16) beads)
2021 NOT INSTALLED 2021 Y 2019 Y 2020 N 2020 N	2019	Y (8/16) beads)
2021 Y 2019 Y 2020 N 2020 N 2020 N 2020 N <td< td=""><td>2019</td><td>Y (9/16) beads)</td></td<>	2019	Y (9/16) beads)
2021 Y 2019 Y 2020 N 2020 N <td< td=""><td>2021</td><td>NOT INSTALLED</td></td<>	2021	NOT INSTALLED
2021 Y 2019 Y 2020 N 2020 N 2020 N 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2019 Y 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2019 Y 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2019 Y 2020 N 2020 N 2020 N 2020 N 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2021 Y 2021 Y 2021 Y 2019 Y 2020 N 2020 N 2020 N 2020 N 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2021 Y 2021 Y 2019 Y 2020 N 2020 N 2020 N 2020 N 2020 N 2020 N <td< td=""><td>2021</td><td>Y</td></td<>	2021	Y
2021 Y 2021 Y 2019 Y 2020 N	2021	Y
2021 Y 2019 Y 2020 N	2021	Y
2019 Y 2020 N	2021	Y
2019 Y 2020 N	2021	Y
2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2019 Y 2019 Y 2019 Y 2019 Y 2019 Y 2020 N	2019	Y
2019 Y 2019 Y 2019 Y 2019 Y 2020 N	2019	Y
2019 Y 2019 Y 2020 N	2019	Y
2019 Y 2020 N	2019	Y
2020 N	2019	Y
2020 N 2020 N 2020 N 2020 N 2020 N 2020 N	2019	Y
2020 N 2020 N 2020 N 2020 N 2020 N 2020 N	2020	N
2020 N 2020 N 2020 N 2020 N	2020	N
2020 N 2020 N	2020	N
2020 N	2020	N
	2020	N
2020 N	2020	
	2020	N

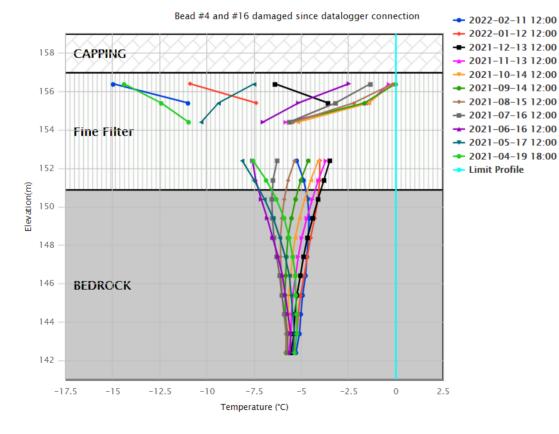
73	PSW DH13 TH	Pit South Wall	606980.7	7255276.8	145.398		-90	
74	PSW DH14 Th	Pit South Wall	606937.5	7255411.5	130.761		-90	
75	AMQ15-324	WT PIT	606496.8	7254995.2	161.79	323.41	-55.46	
76	AMQ17-1233	IVR	606778.0	7256254.0	162.0	252.71	-59.06	
77	AMQ17-1337	IVR	607078.0	7256522.0	x			
78	V651A	IVR	607624.208	7256122.348	10163.28		-69	
79	BH-T2	IVR	607850.8	7255563.9	164.303		-90	
80	BH-4	IVR	608048	7255442	163.982		-90	
81	IVR D1 TH1	IVR D1	607909.036	7255508.205	164.486		Liner	
82	IVR D1 TH2	IVR D1	607908.144	7255506.309	164.895		-90	
83	IVR D1 TH3	IVR D1	607912.603	7255515.354	165.1		90	
84	IVR D1 TH4	IVR D1	607906.637	7255503.624	165.76		90	
85	IVR D1 TH5	IVR D1					Key	
	WILDI HIS		607899.06	7255512.94	159.666		Trench	1
86	IVR D1 TH6	IVR D1	607923.8	7255480.4	162.08		90	
87	IVR D1 TH7	IVR D1	607930.032	7255525.355	162.12		90	

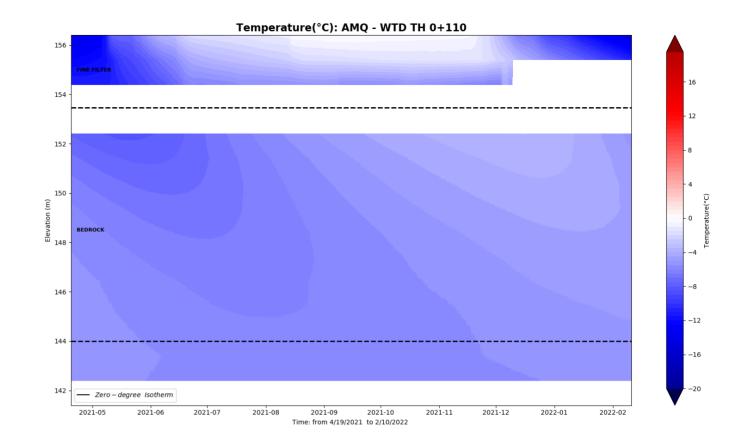
Whale Tail Thermal Monitoring Report 2021 – Appendix A

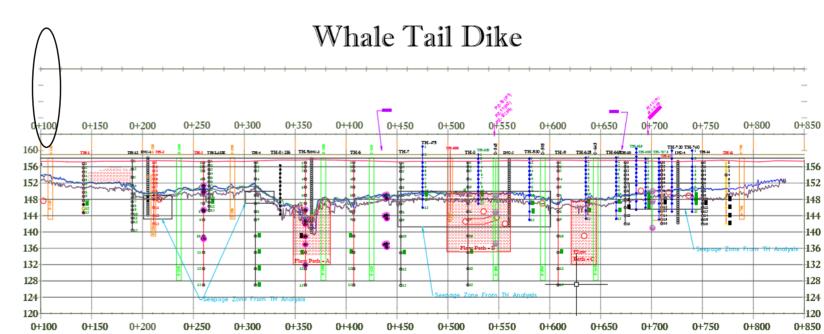
2020	N
2020	Ν
2015	Ν
2017	Ν
2019	Y
2019	N
2019	Ν
2021	Y
2021	Y
2021	Y



AMQ – WTD TH: 0+110

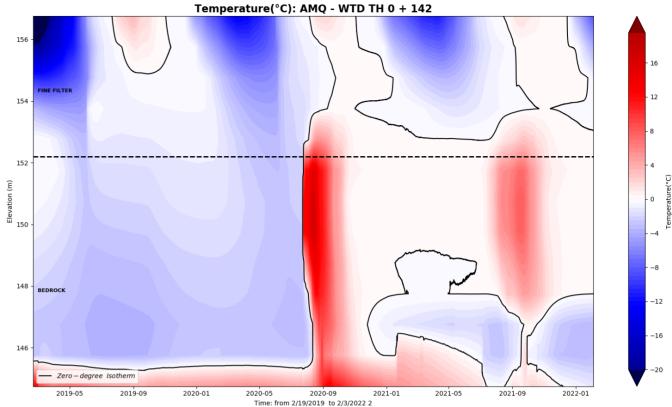


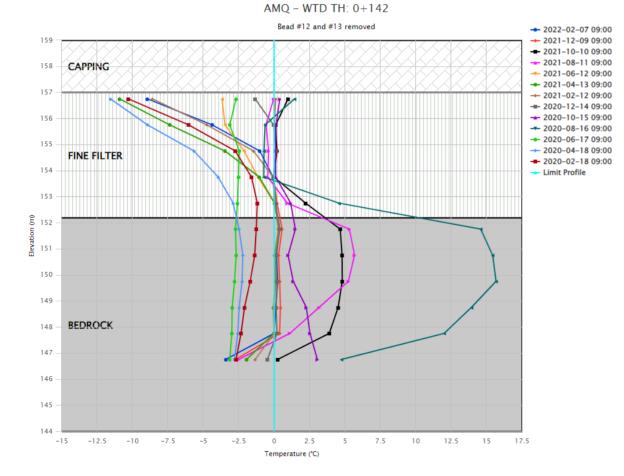


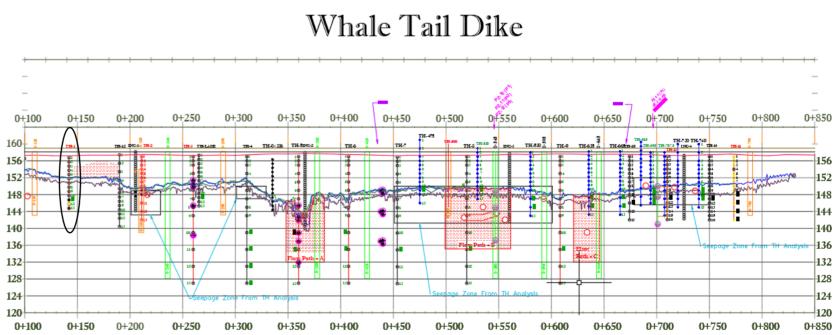


Whale Tail Thermal Monitoring Report 2021 – Appendix A



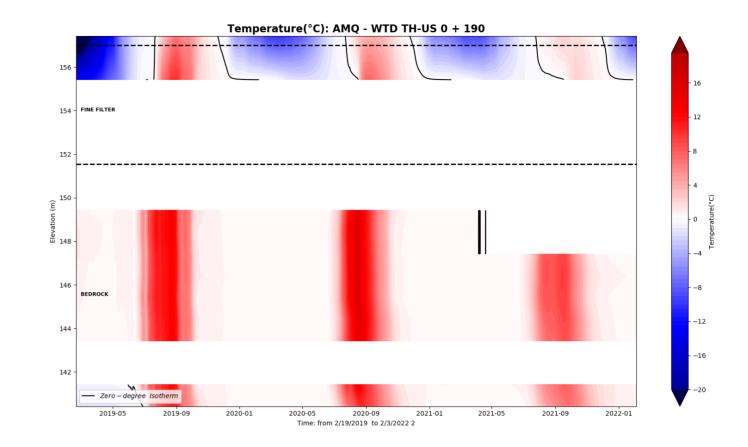


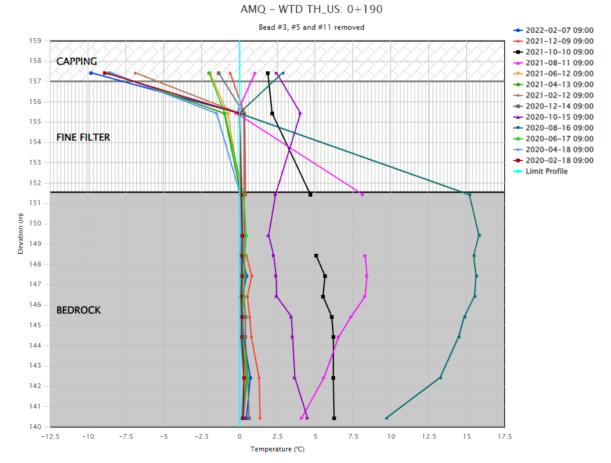


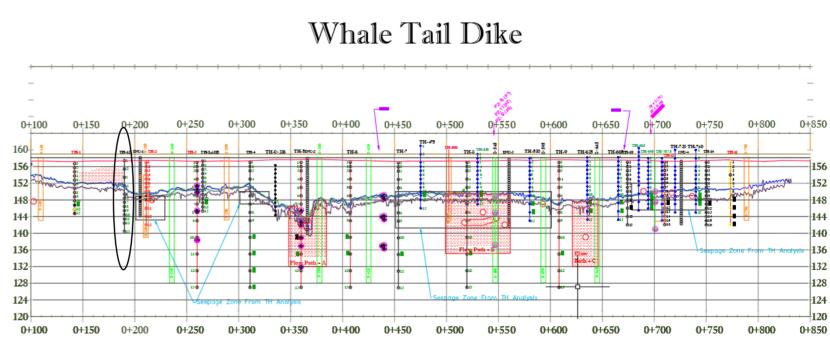


WTD-TH 0+190 U/S

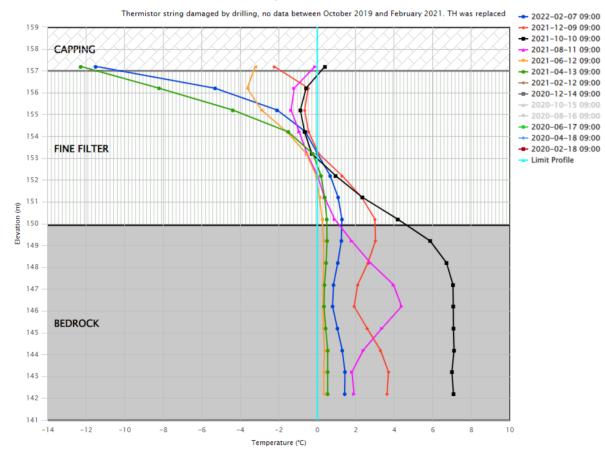


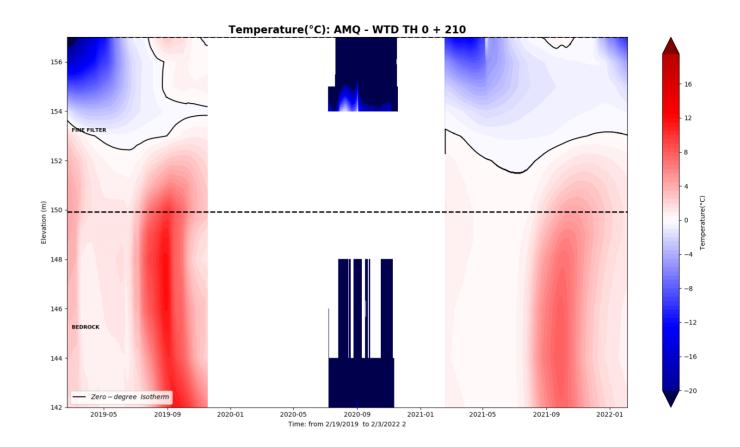


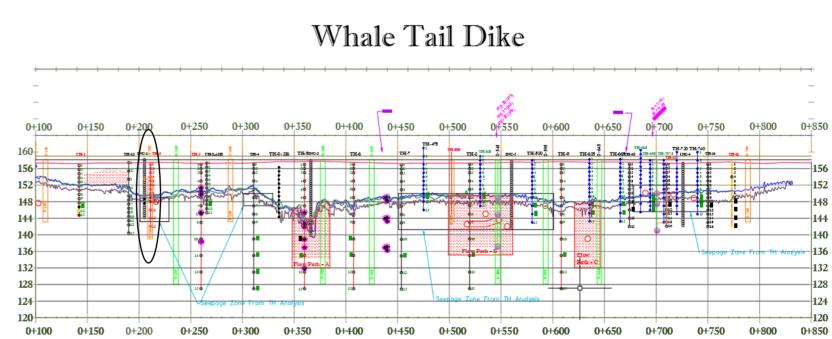




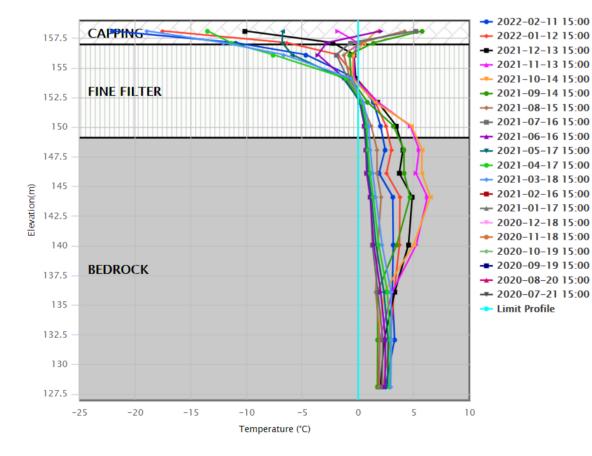


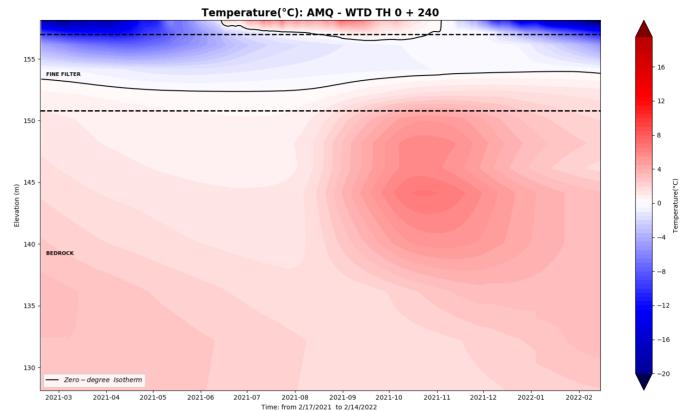


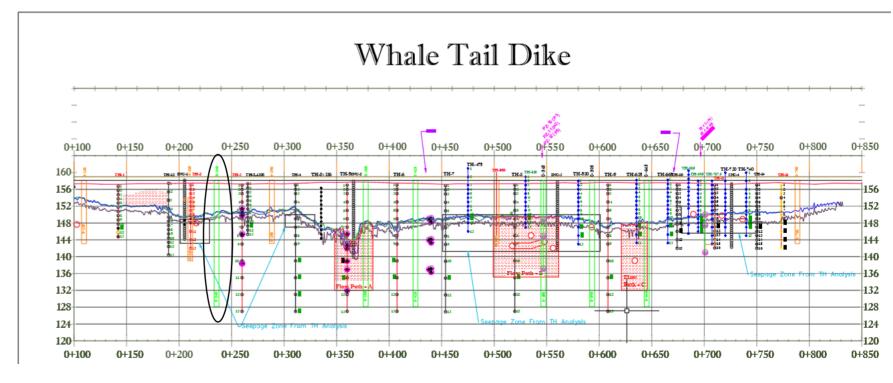






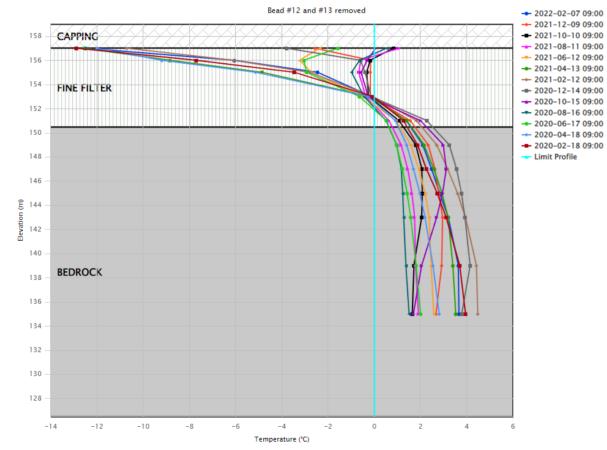


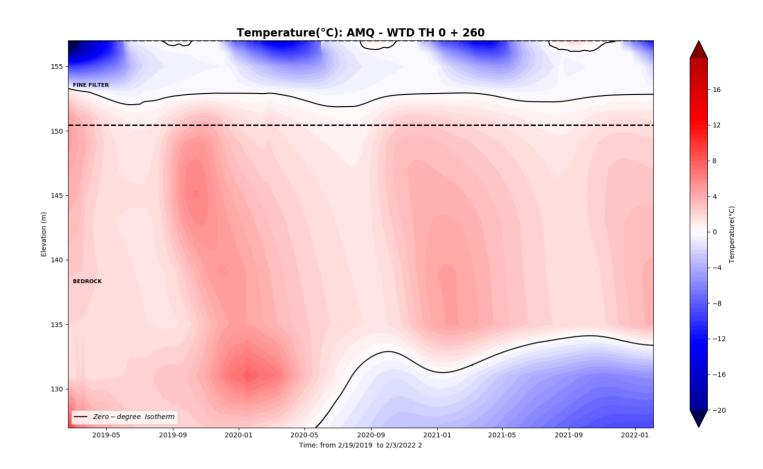


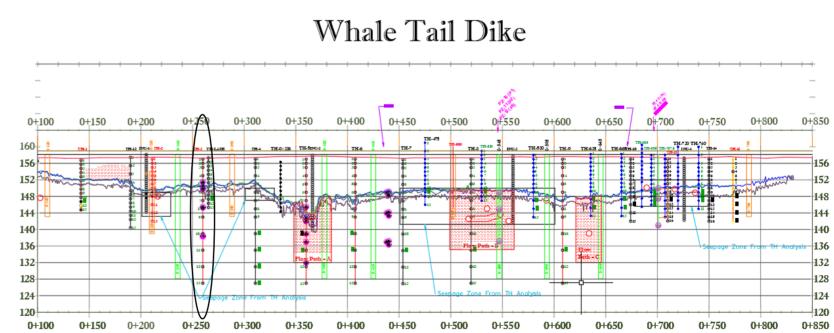




AMQ - WTD TH: 0+260



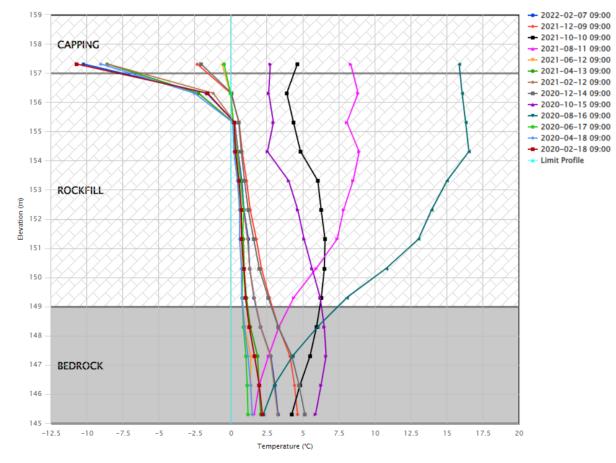


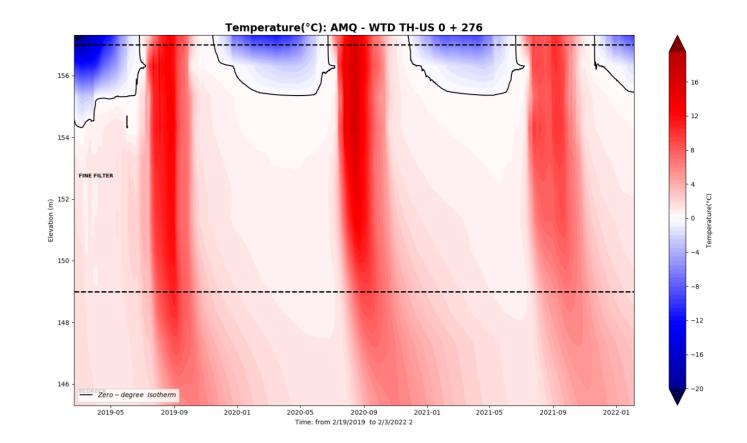


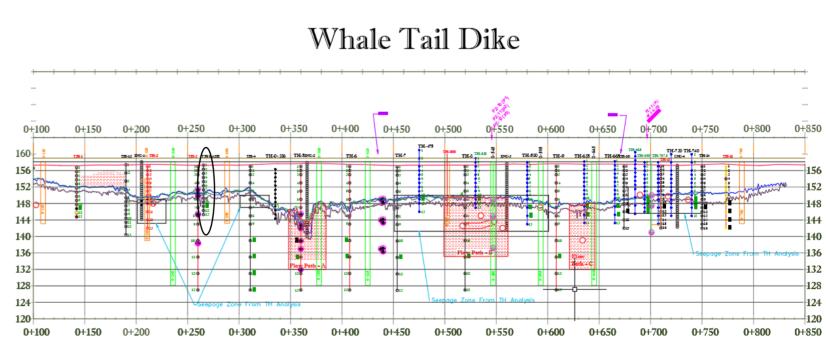
Whale Tail Thermal Monitoring Report 2021 – Appendix A

WTD-TH 0+276 U/S

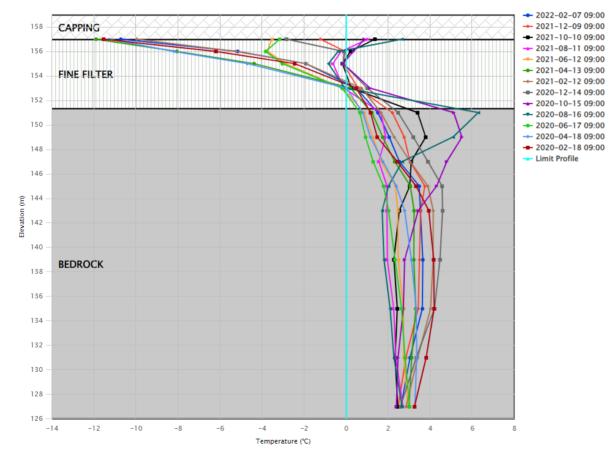


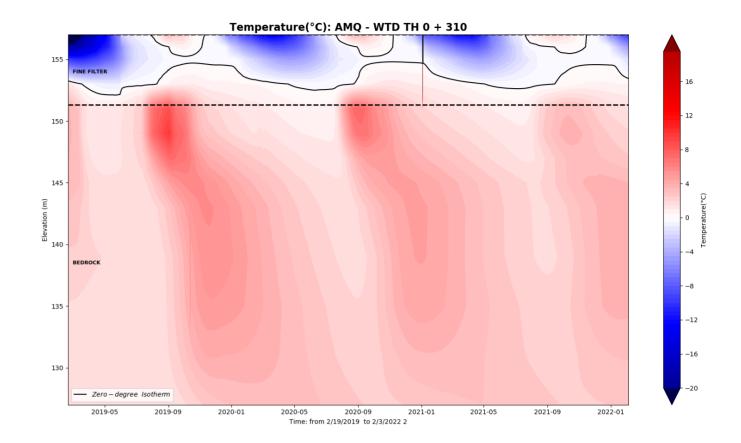


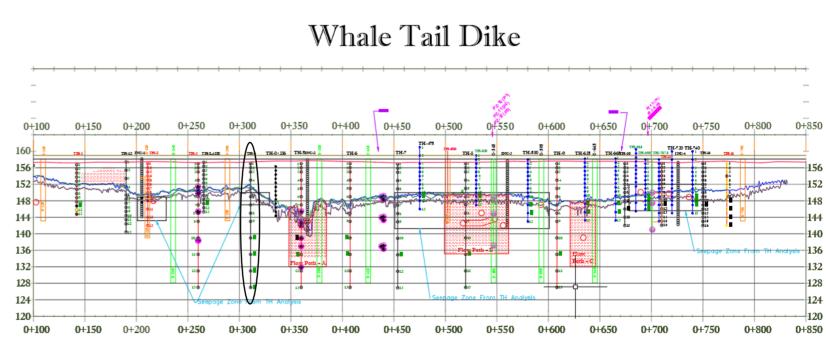






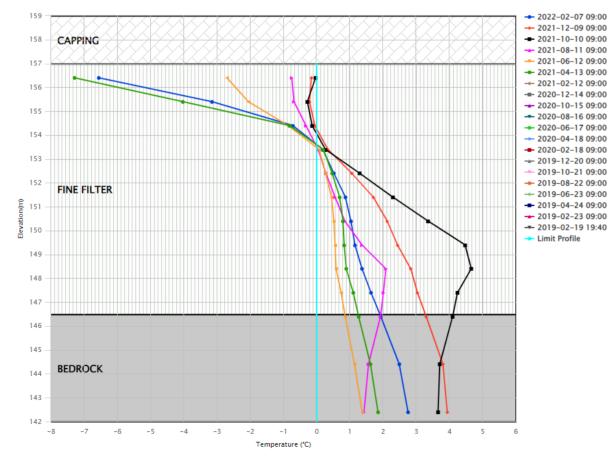


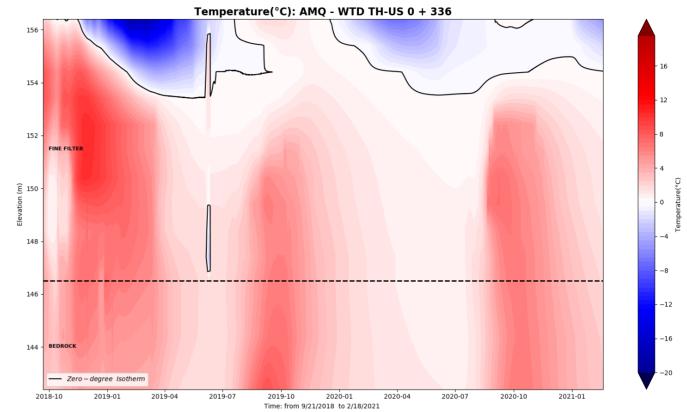


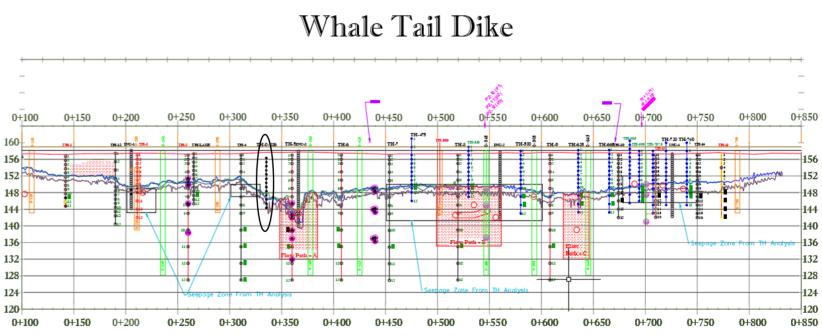


WTD-TH 0+336 U/S

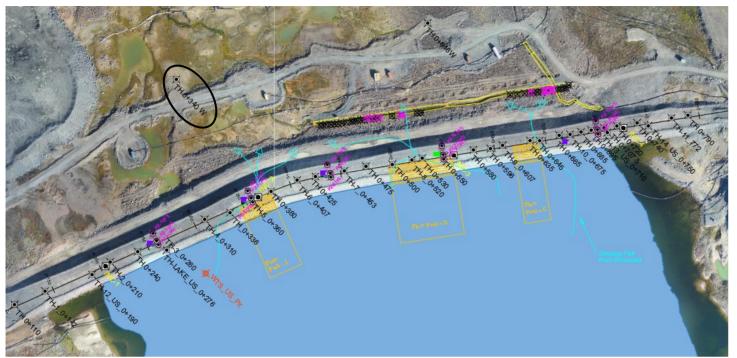


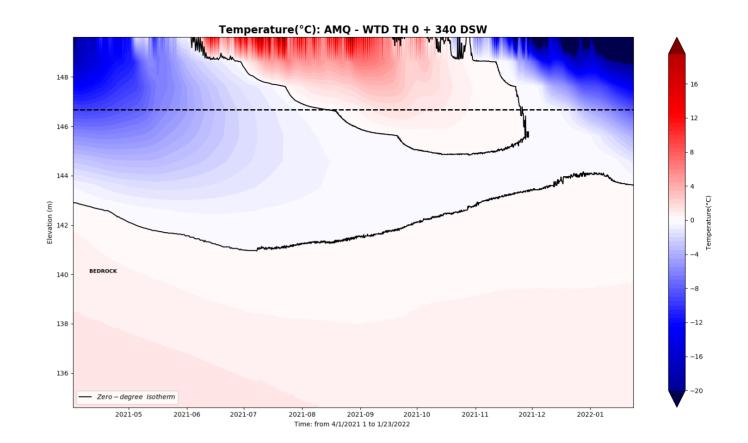




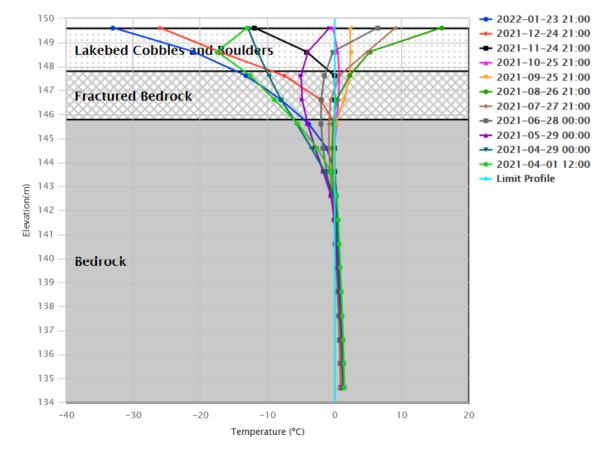


WTD-TH 0+340 DSW

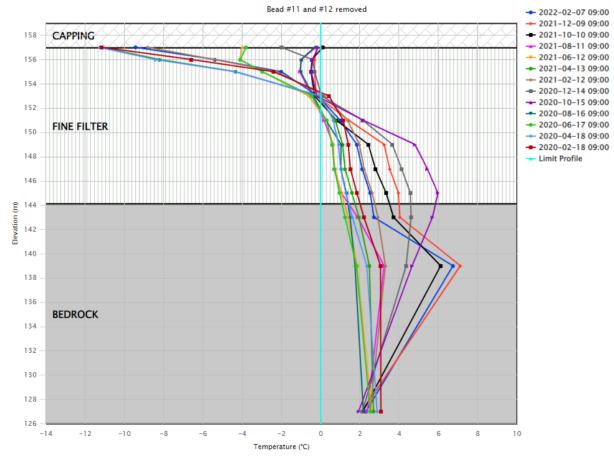


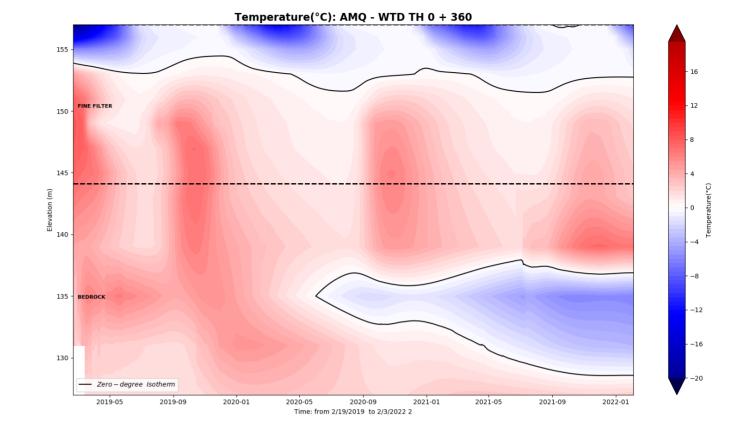


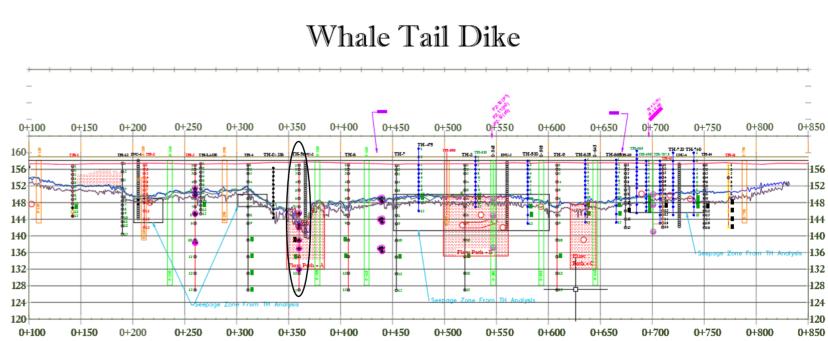


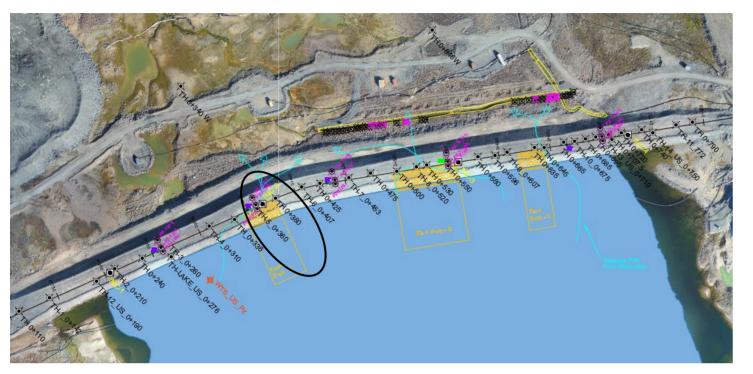


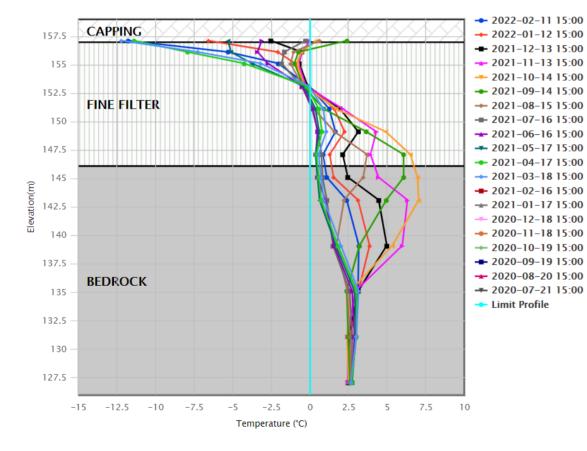


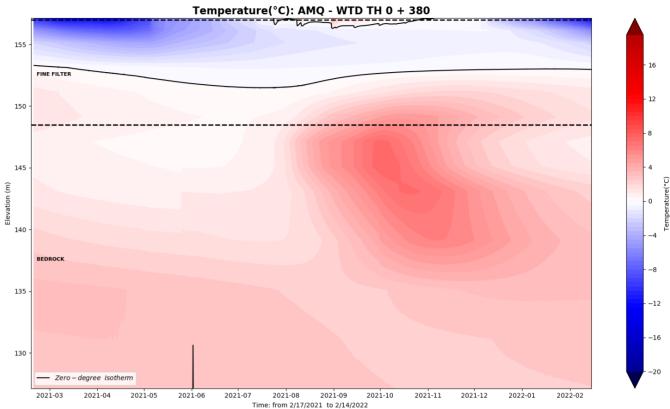


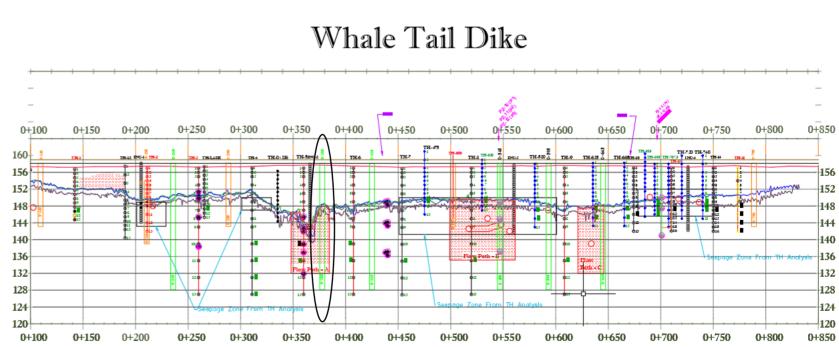




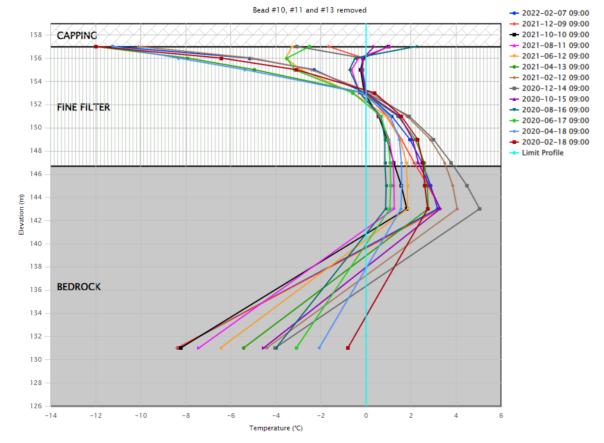


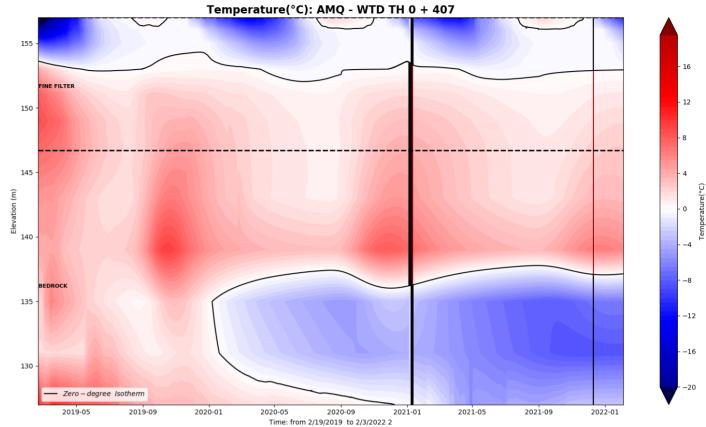


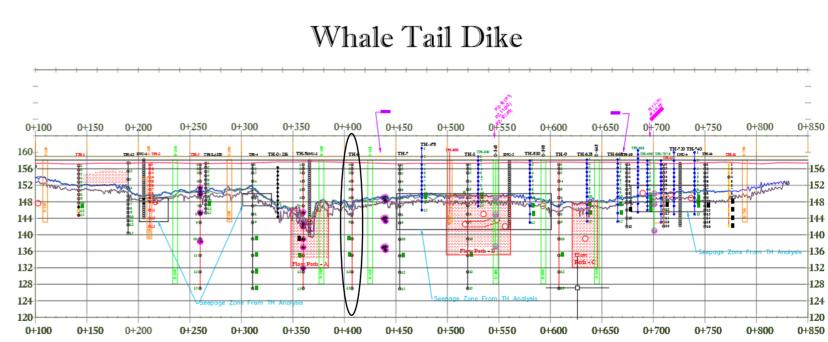




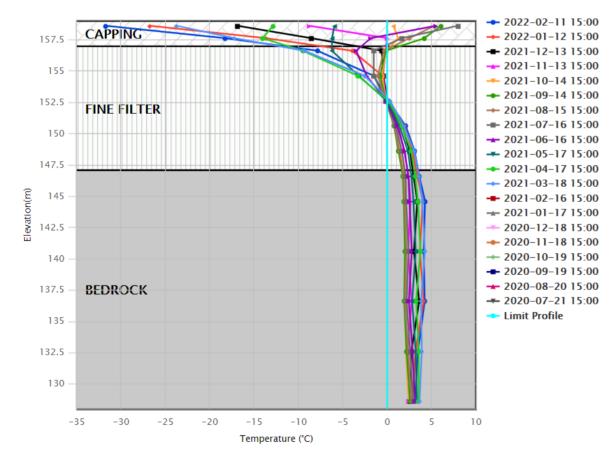


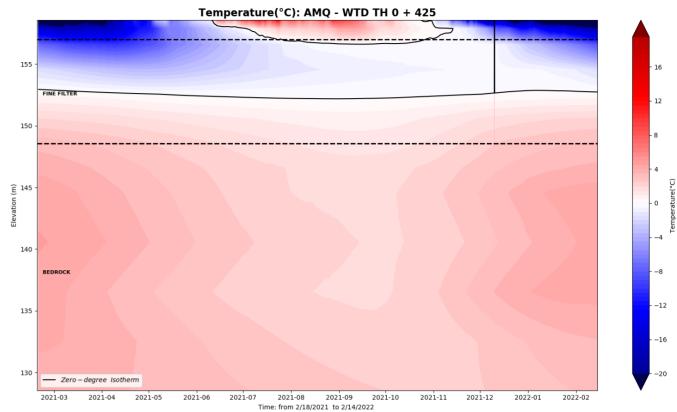


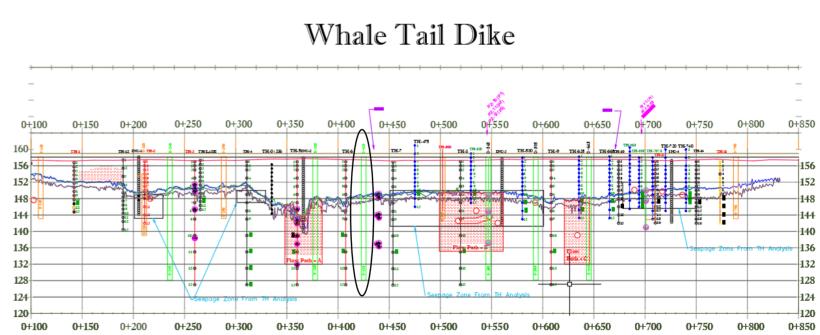




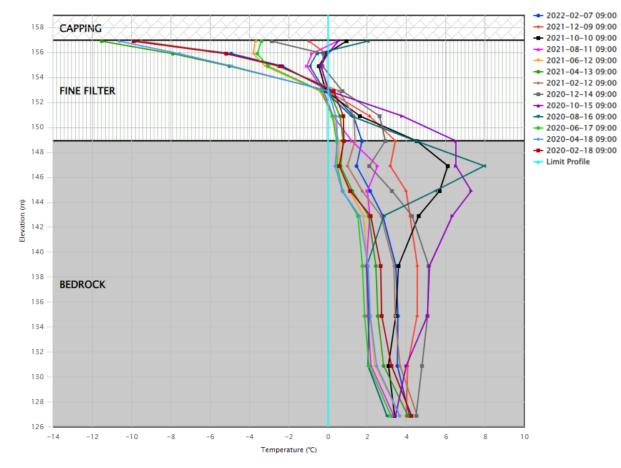


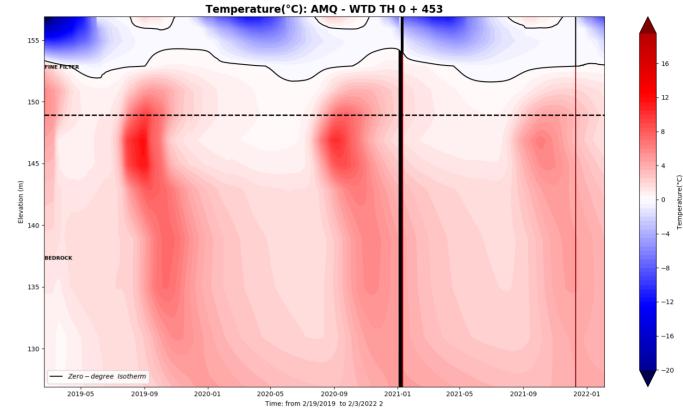


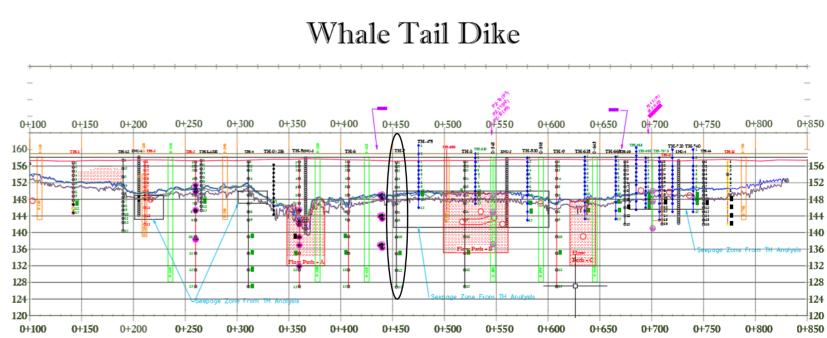






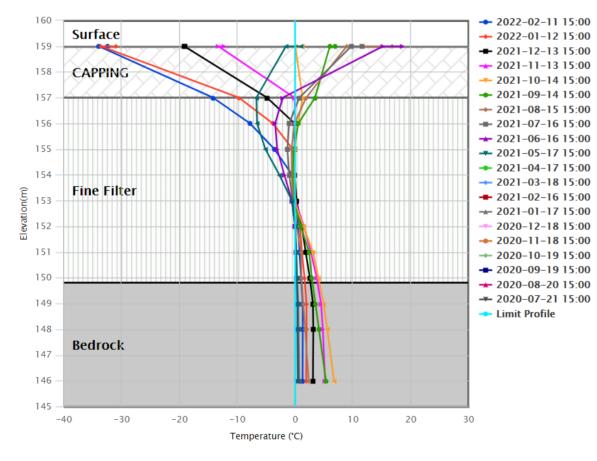


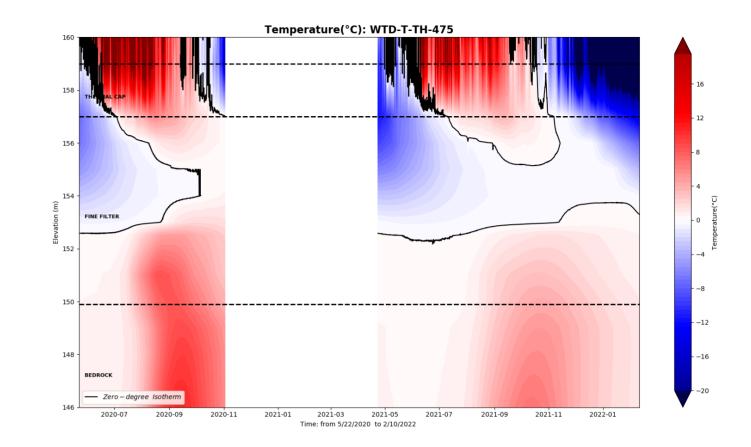


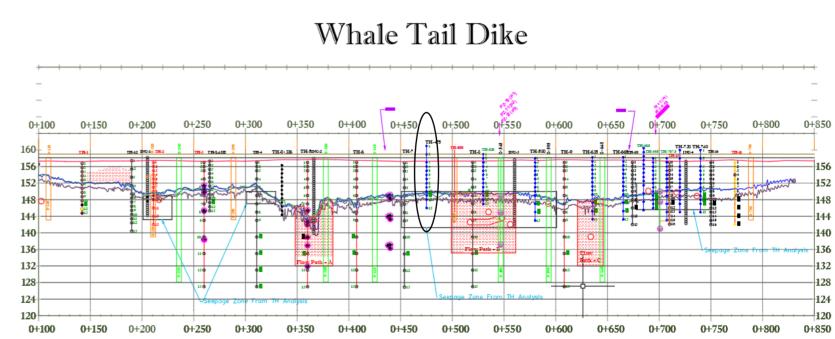




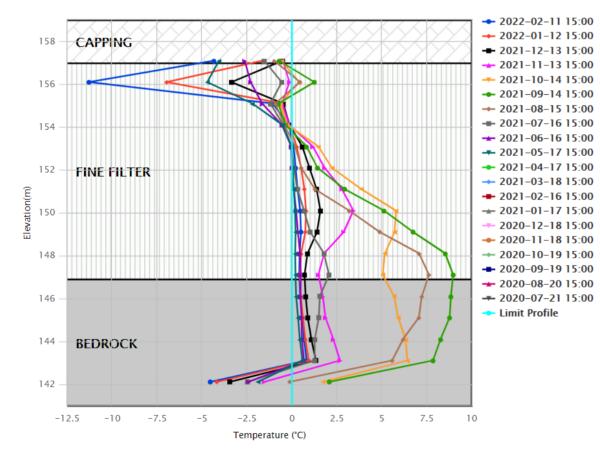
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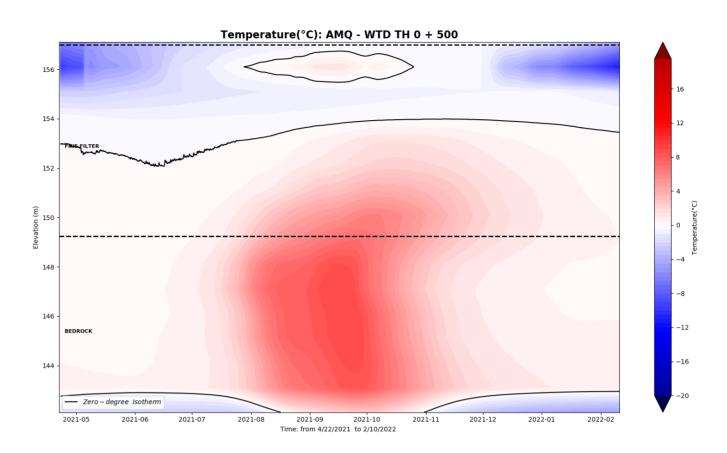


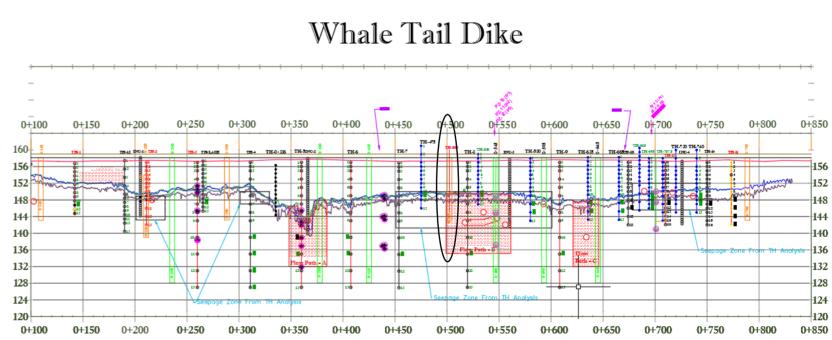




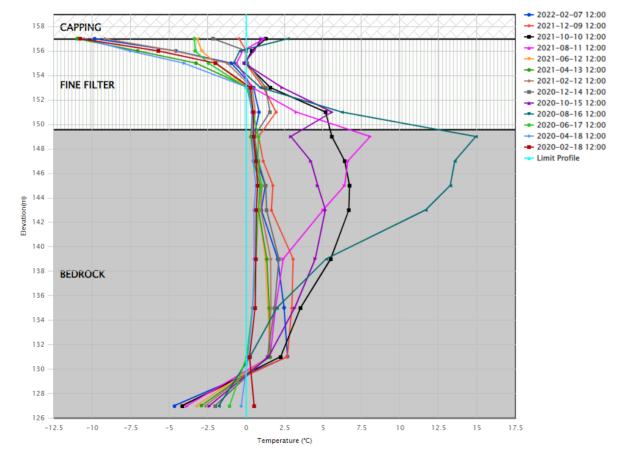


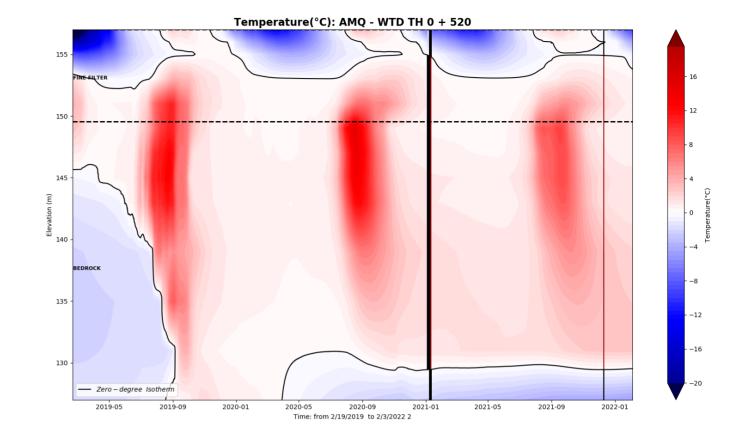


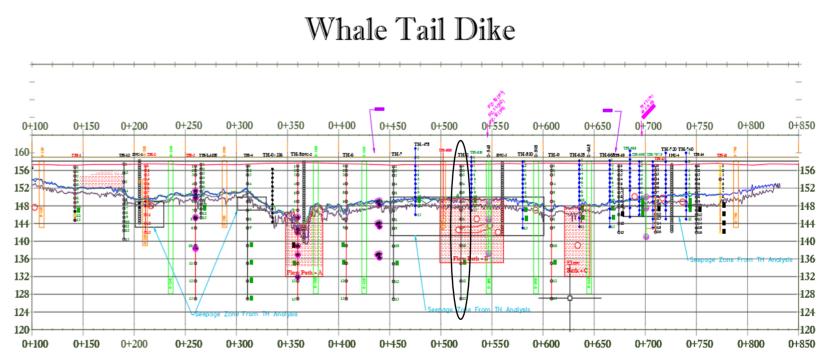






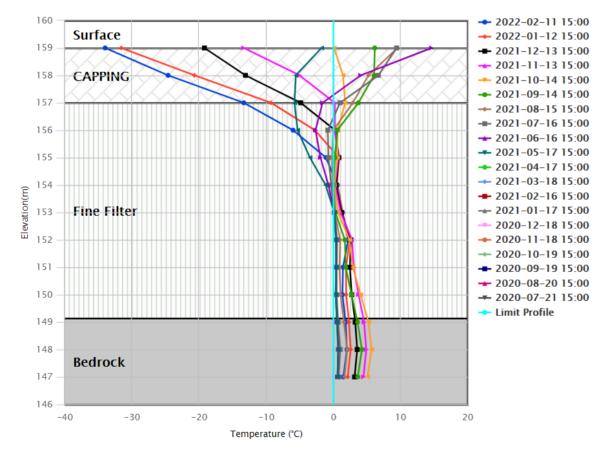


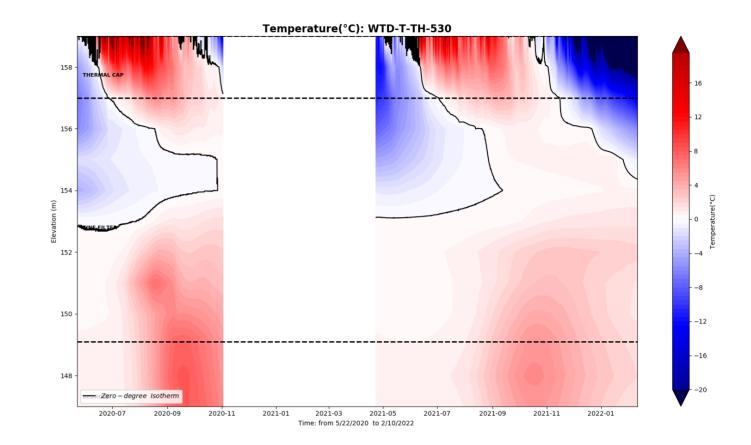


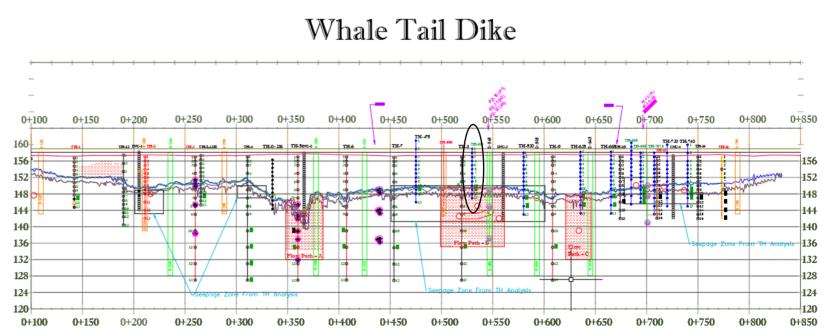




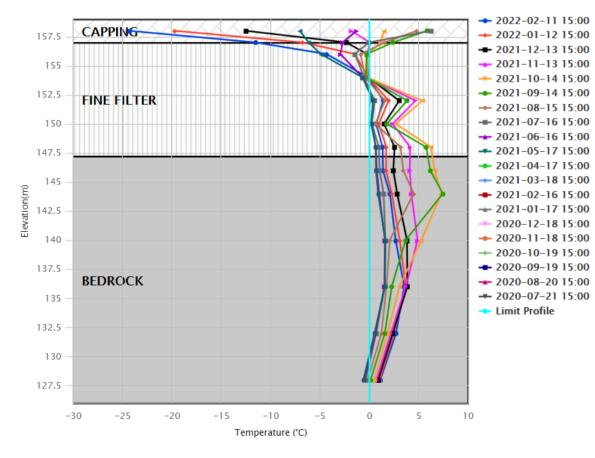
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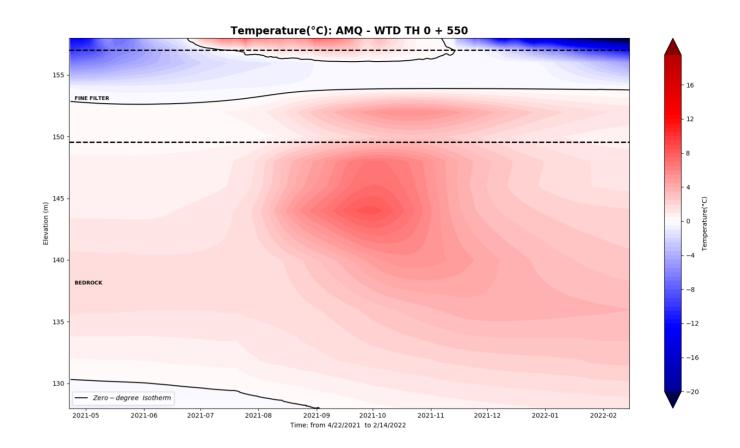


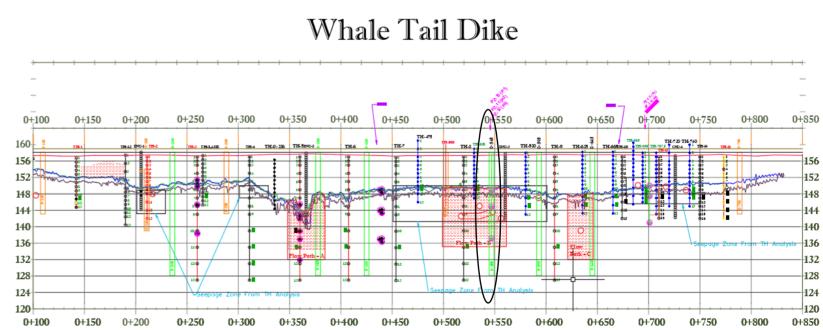






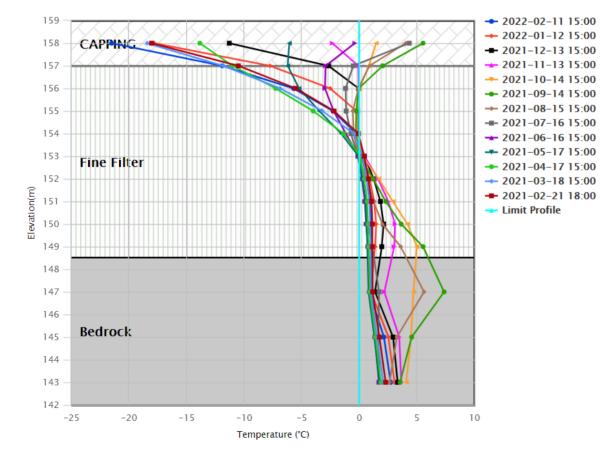


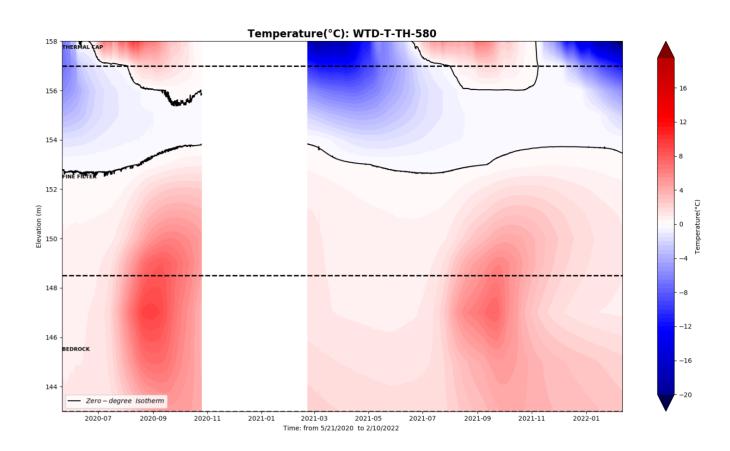


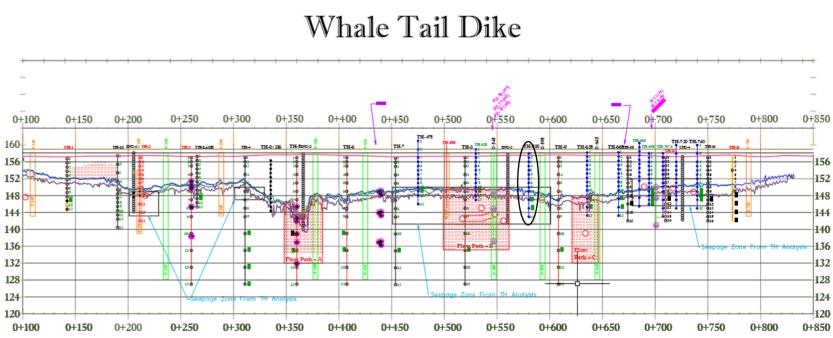




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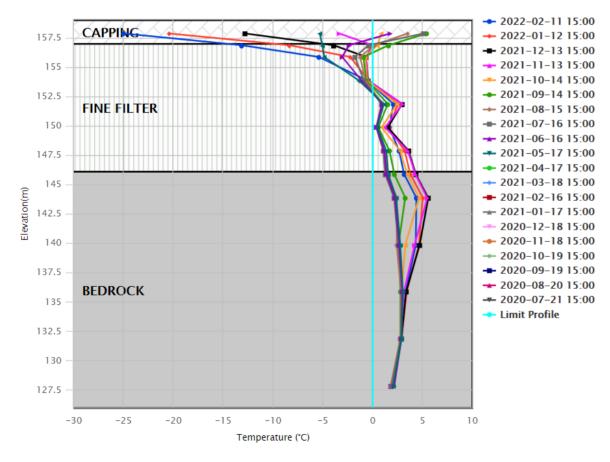


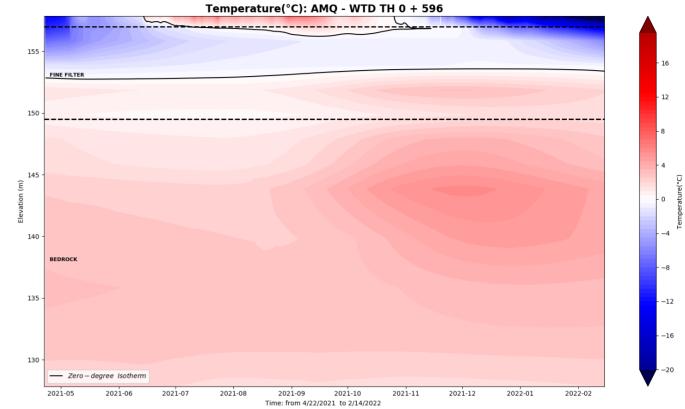


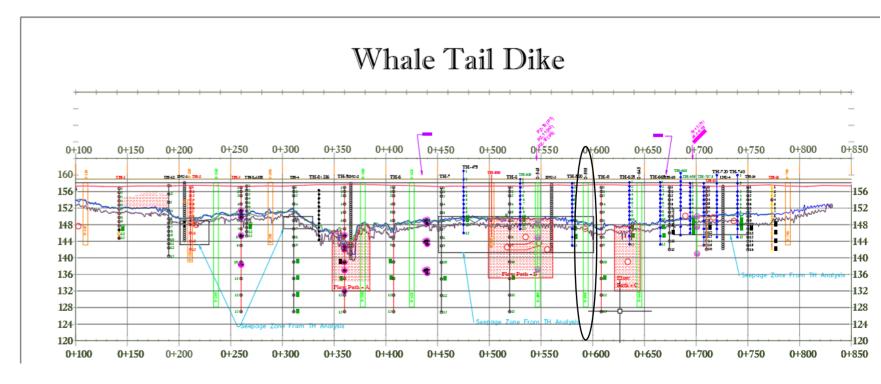




AMQ - WTD TH: 0+596

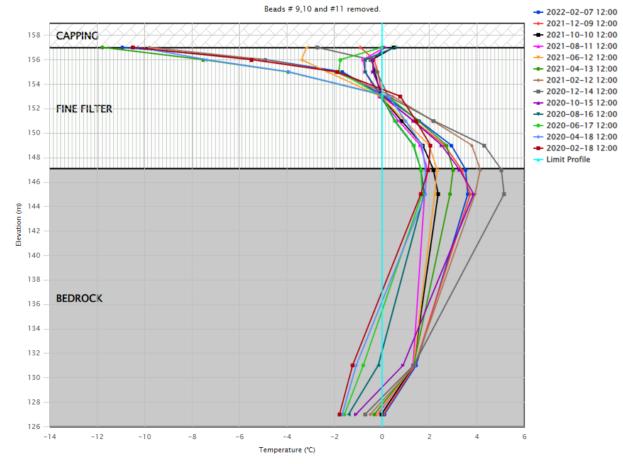


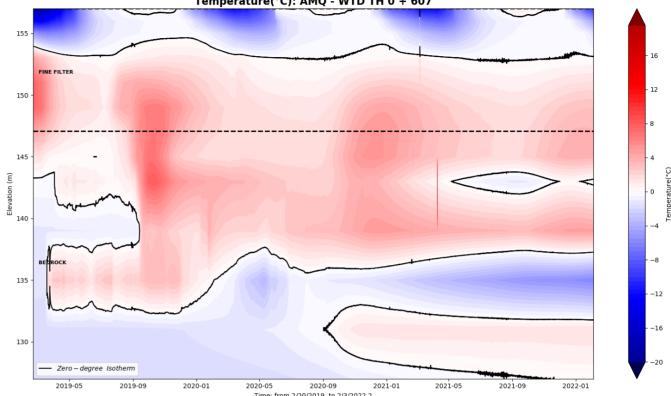


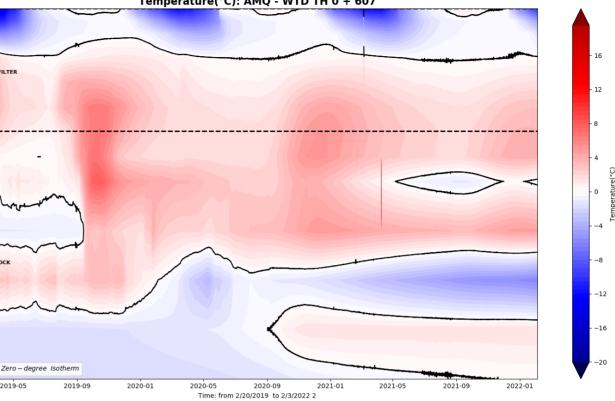


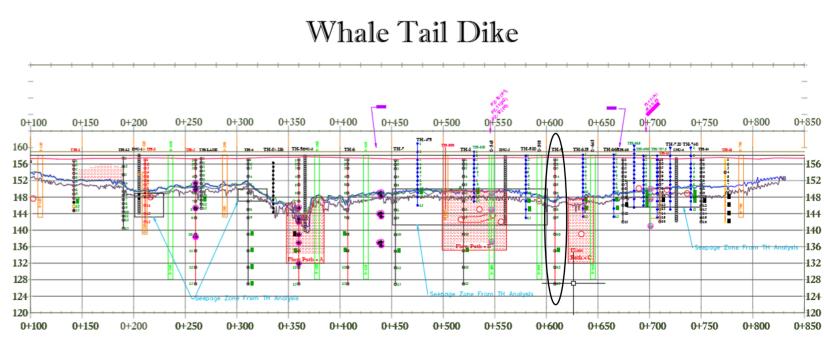


AMQ - WTD TH: 0+607









Temperature(°C): AMQ - WTD TH 0 + 607

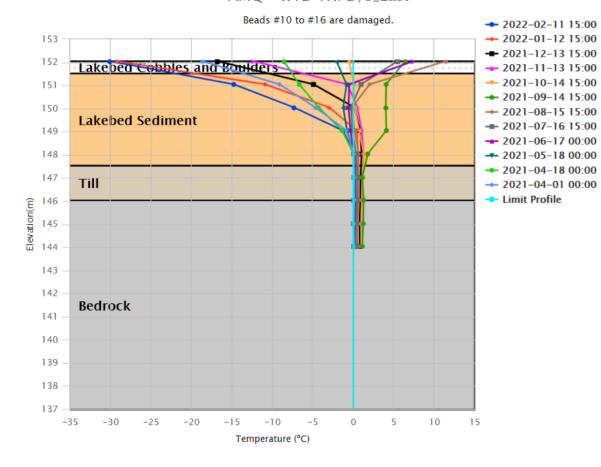
WTD-TH 0+618 DSE

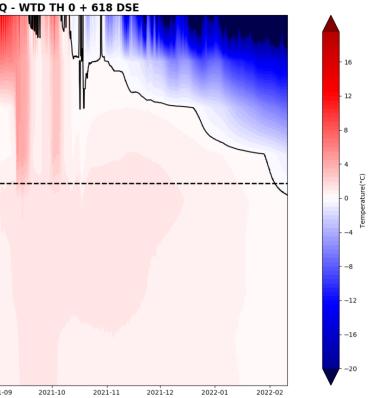


Temperature(°C): AMQ - WTD TH 0 + 618 DSE 152 -151 150 · 149 14 147 146 -BEDROC 145 Zero – degree Isother

2021-04 2021-05 2021-06 2021-07 2021-08 1-08 2021-09 2021-10 Time: from 4/1/2021 0 to 2/10/2022

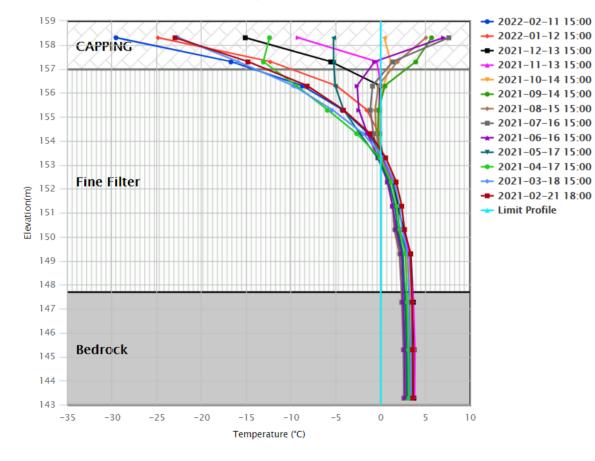


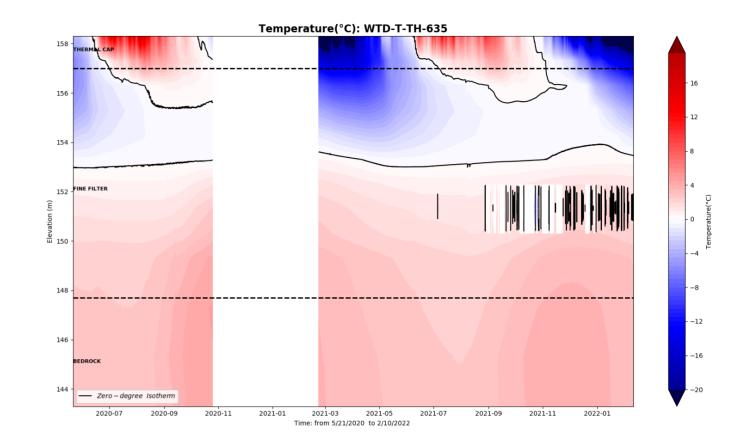


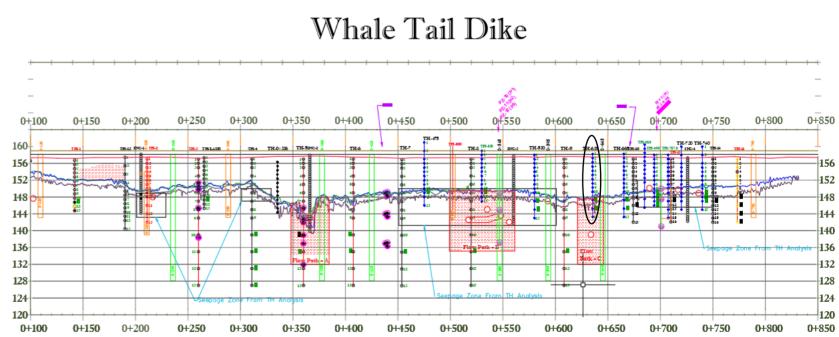




AMQ - WTD TH: 0+635_T

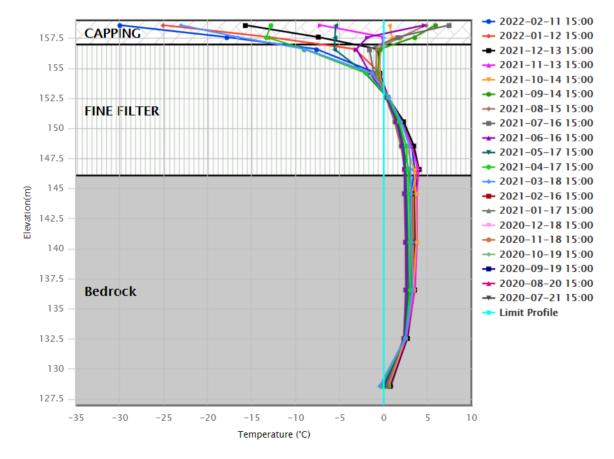


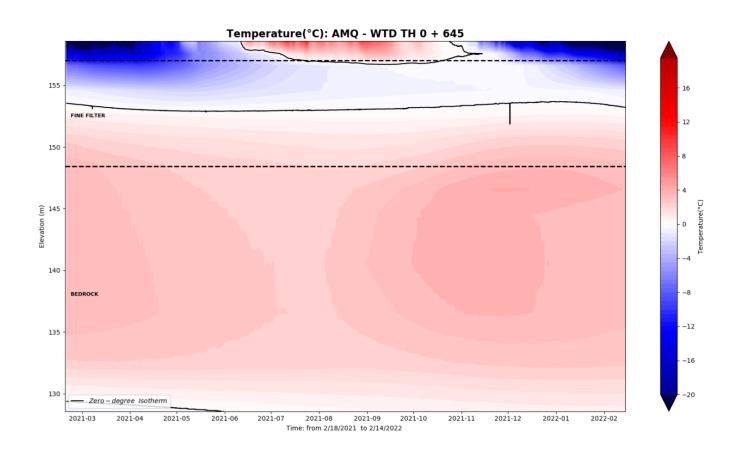


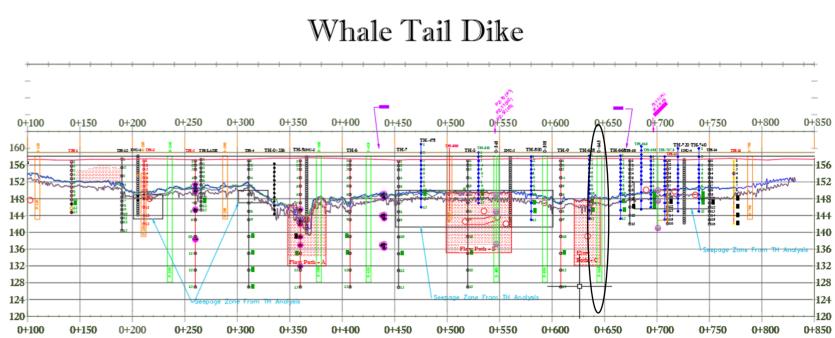




AMQ - WTD TH: 0+645

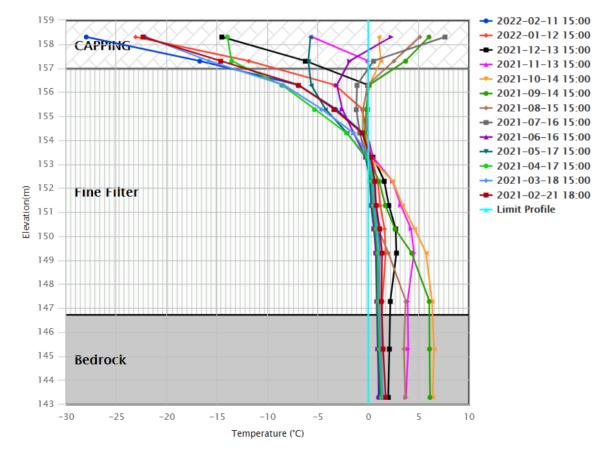


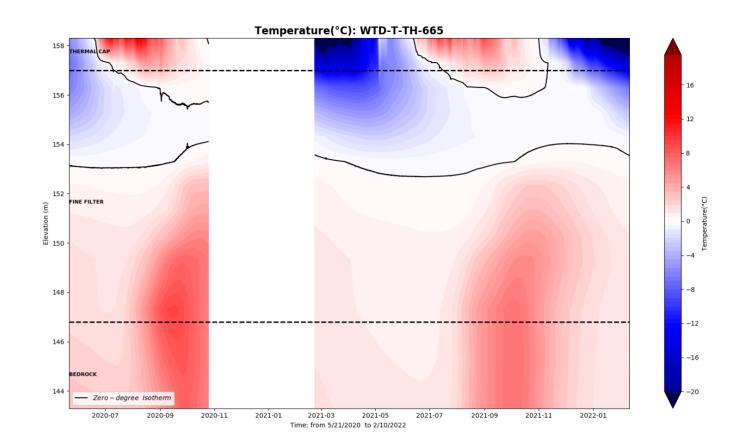


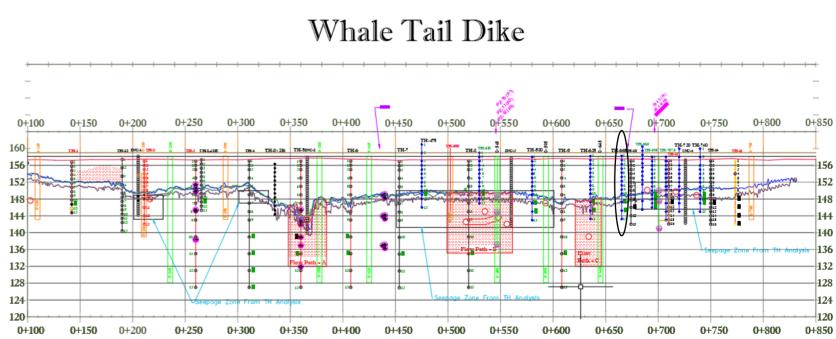




AMQ - WTD TH: 0+665_T

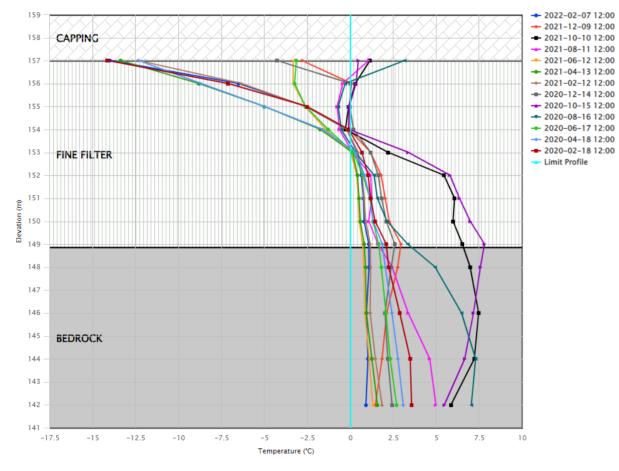


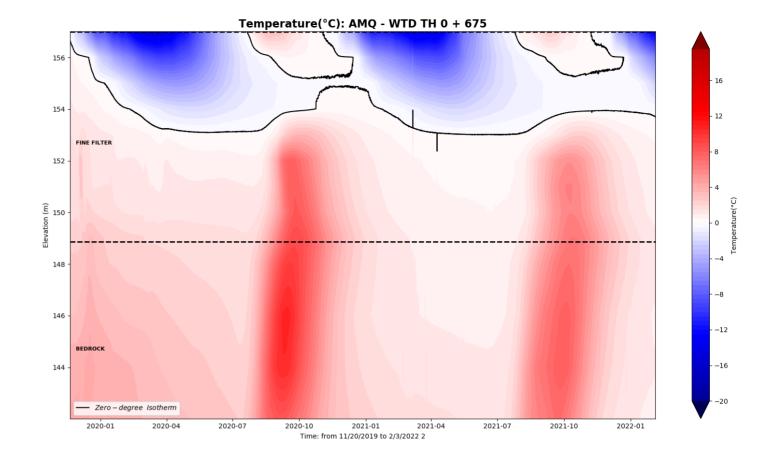


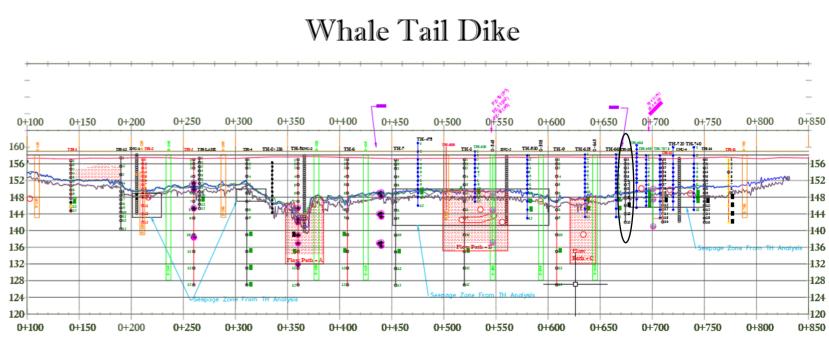


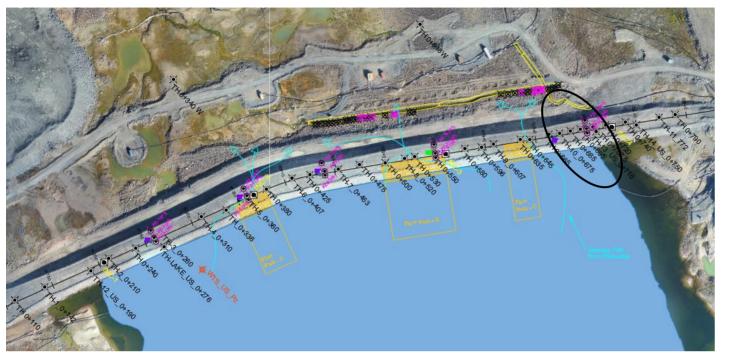


AMQ - WTD TH: 0+675

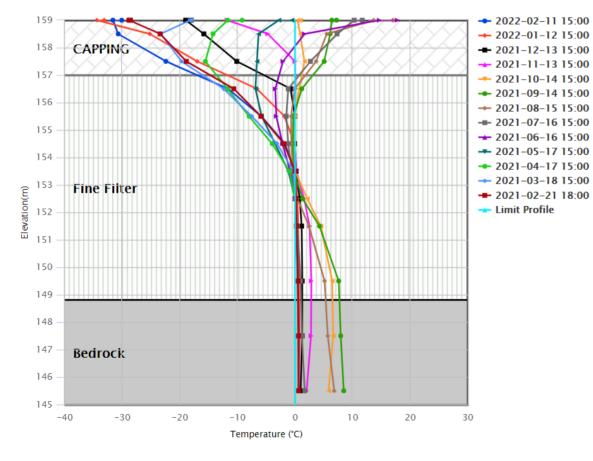


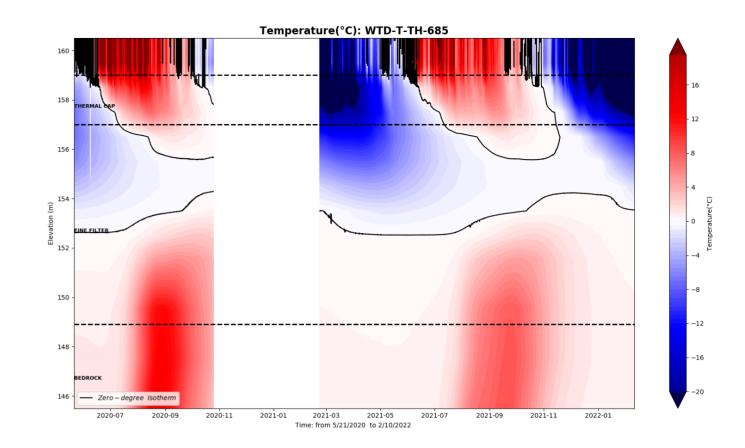


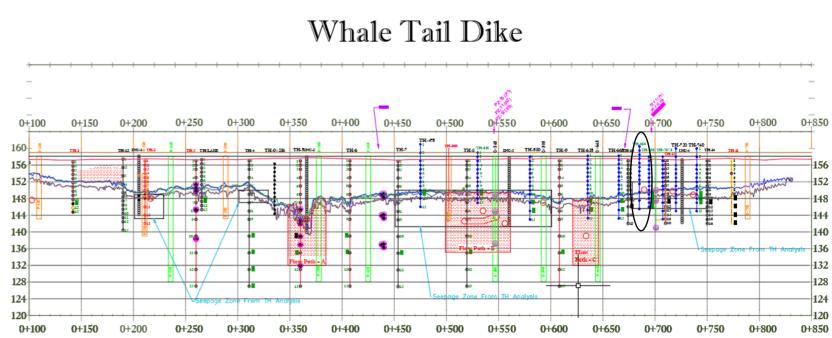




AMQ - WTD TH: 0+685_T

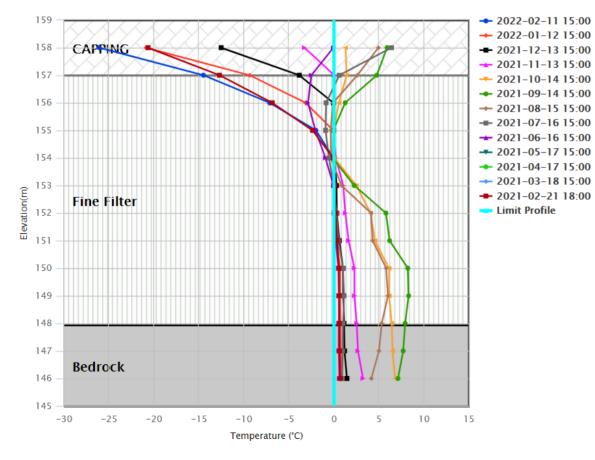


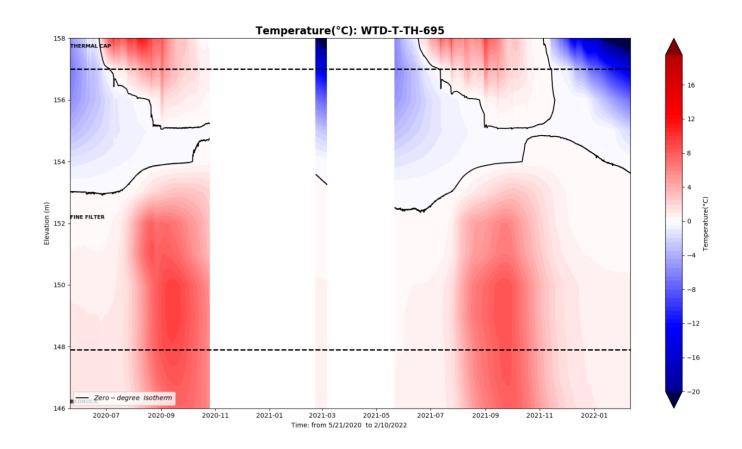


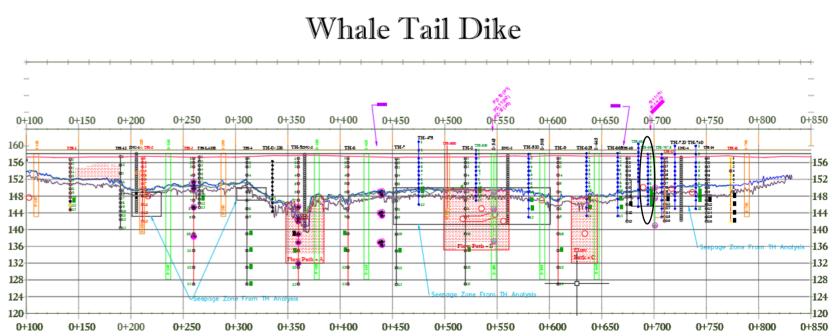




AMQ - WTD TH: 0+695_T

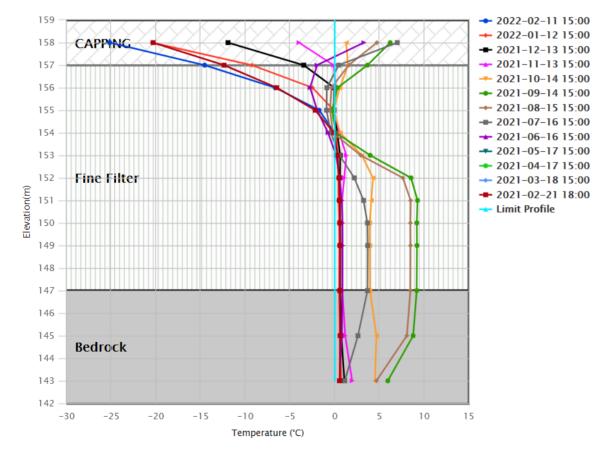


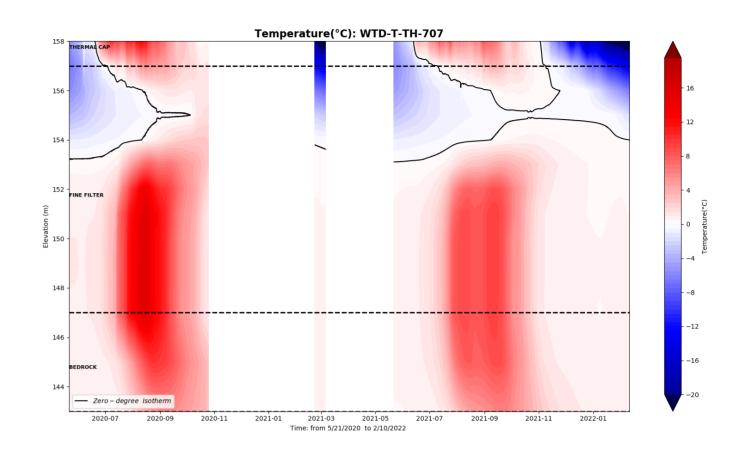


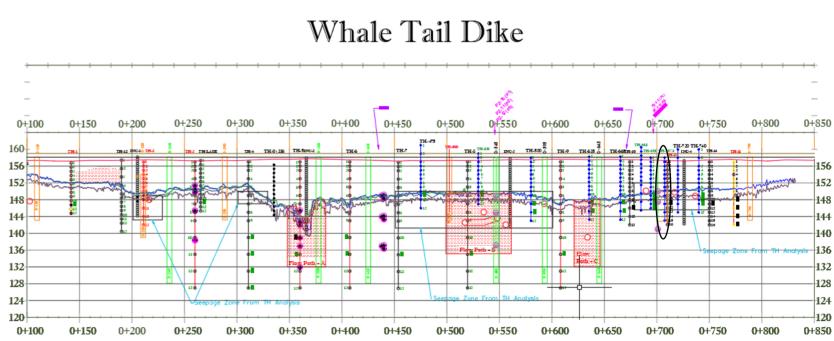




AMQ - WTD TH: 0+707_T

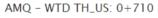


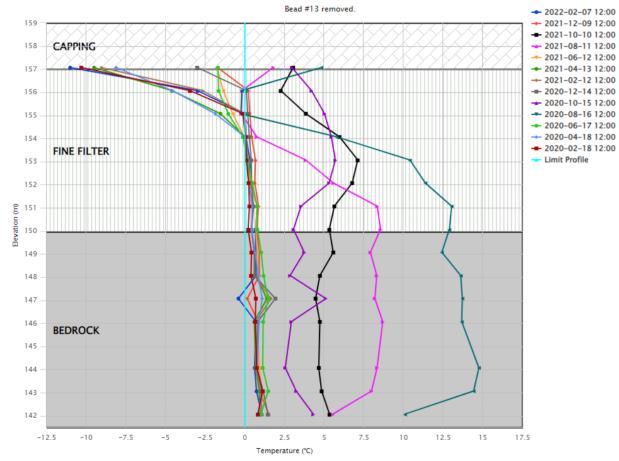


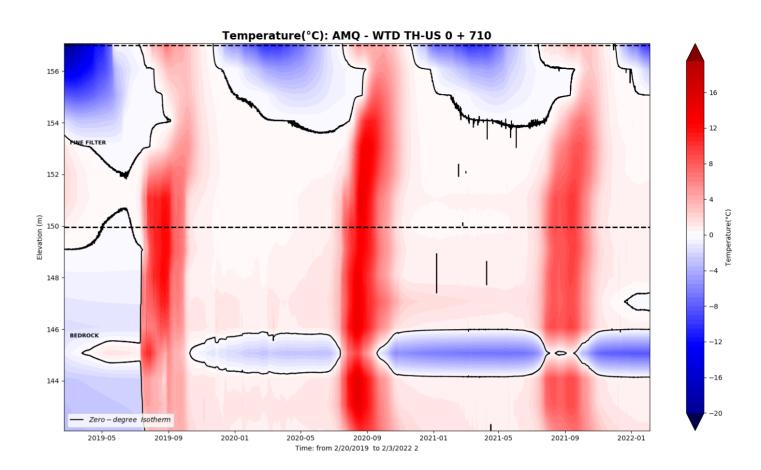


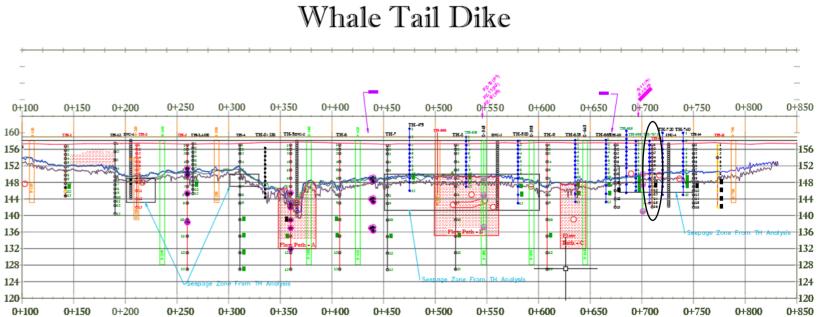
WTD-TH 0+710 U/S





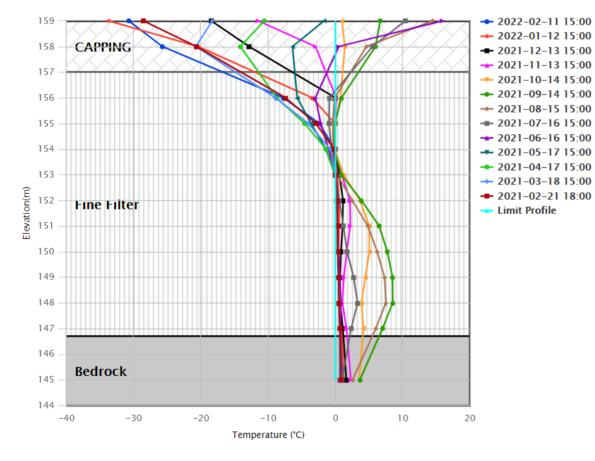


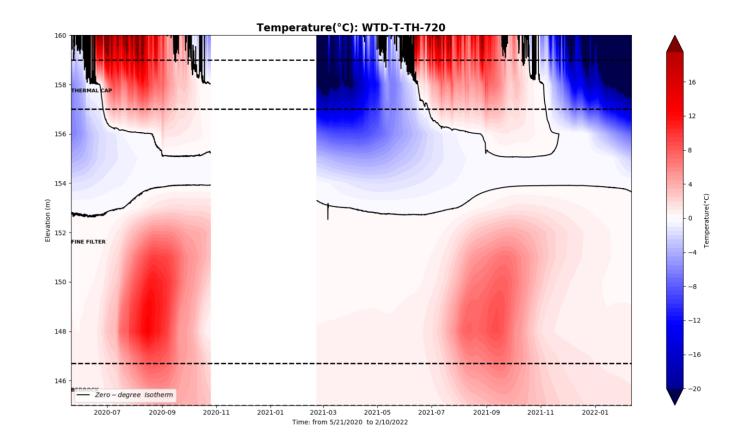


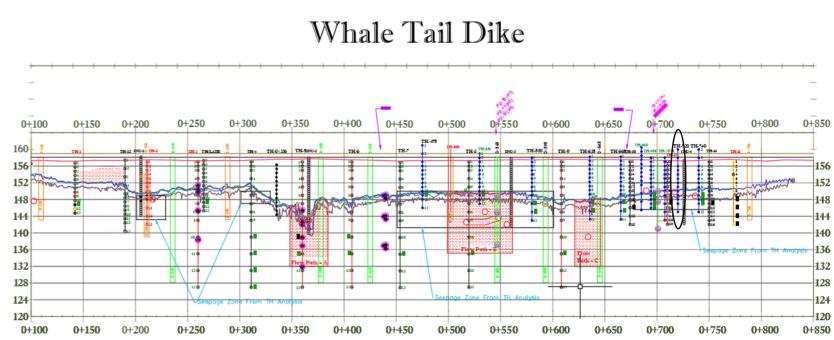




AMQ - WTD TH: 0+720_T

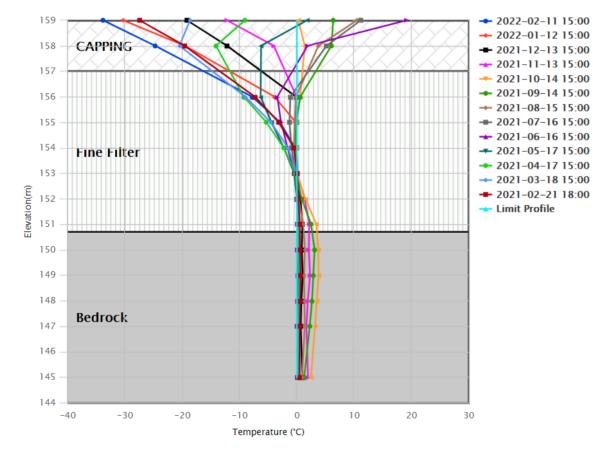


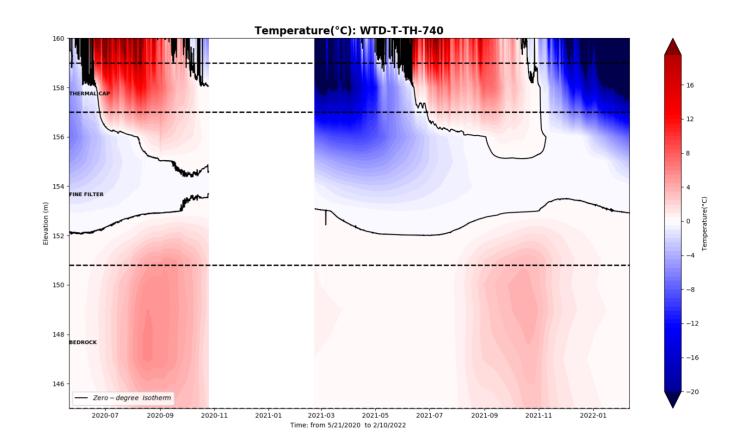


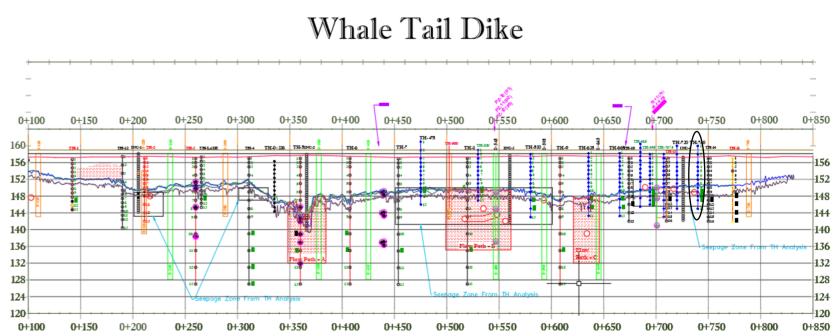




AMQ - WTD TH: 0+740_T

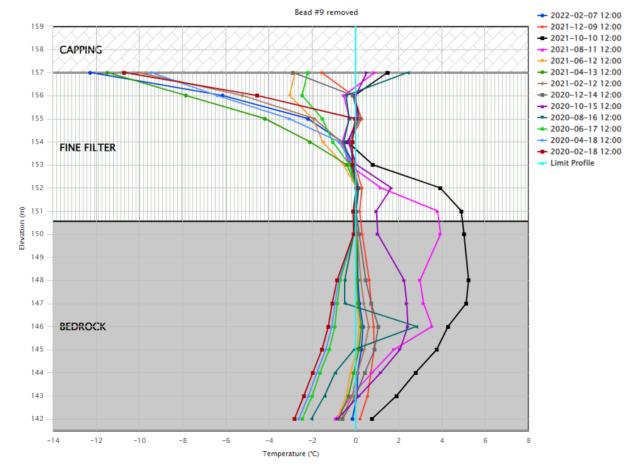


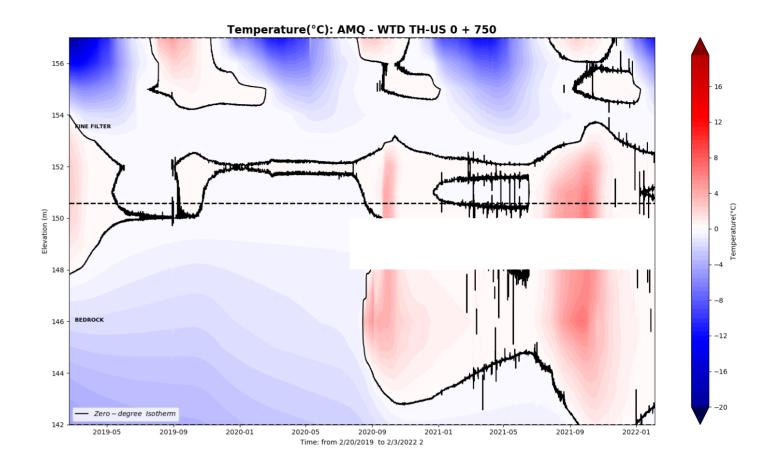


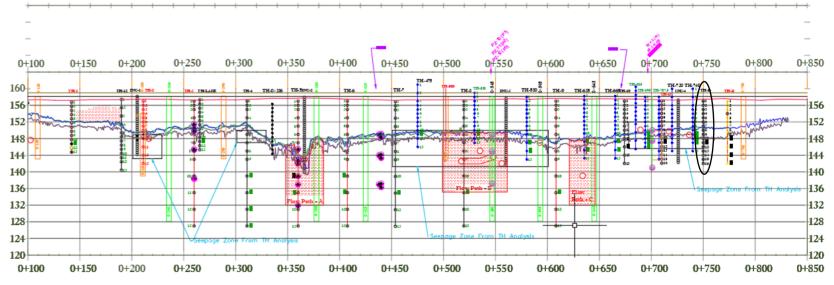




AMQ - WTD TH_US: 0+750





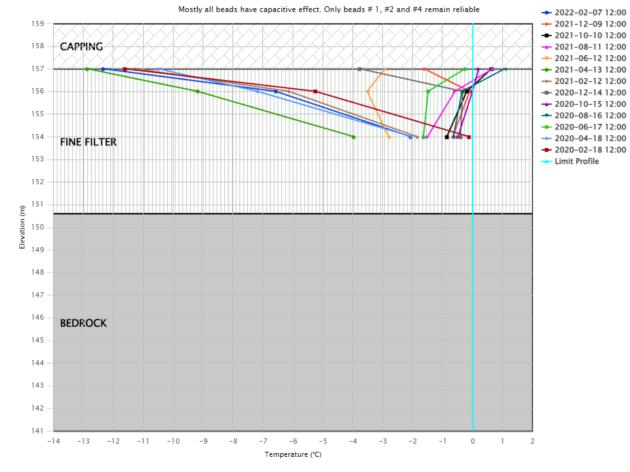


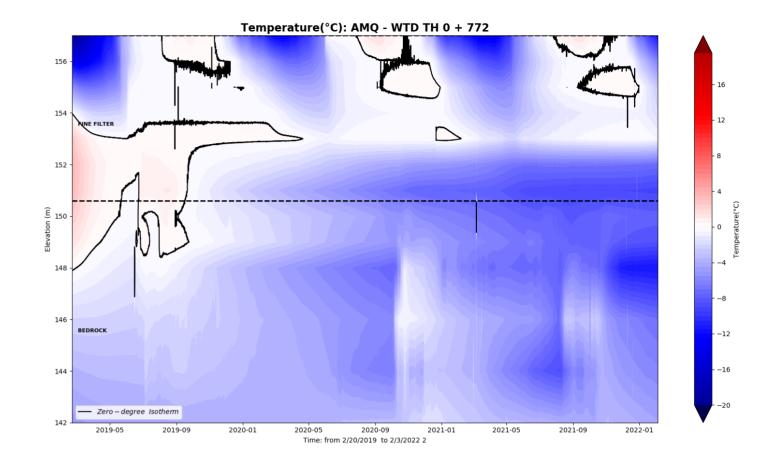
Whale Tail Dike

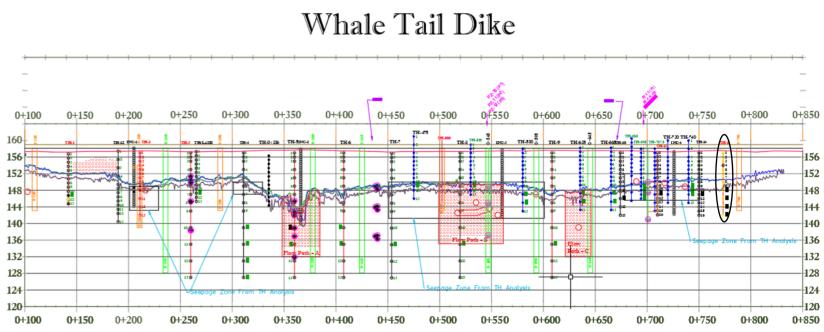
WTD-TH 0+772 U/S



AMQ - WTD TH: 0+772

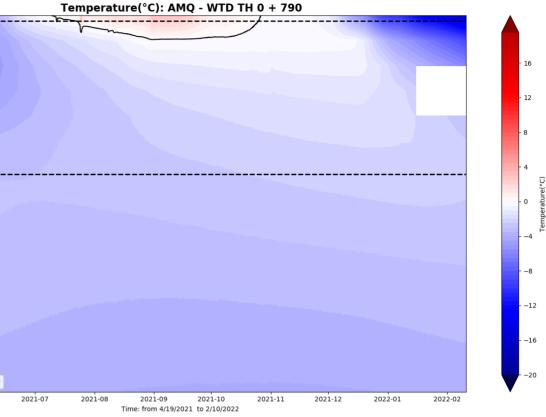






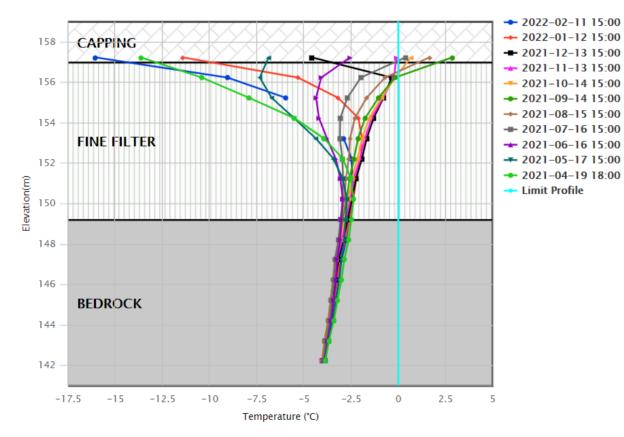


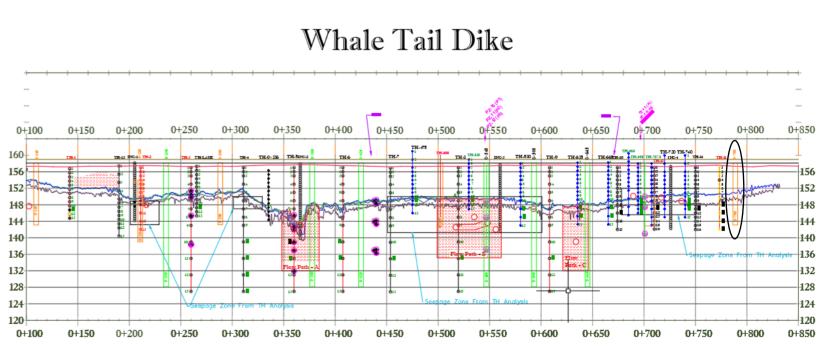
156 154 -FINE FILTER 152 150 148 146 144 Zero – dearee Isotherm 2021-05 2021-06 2021-07 2021-08



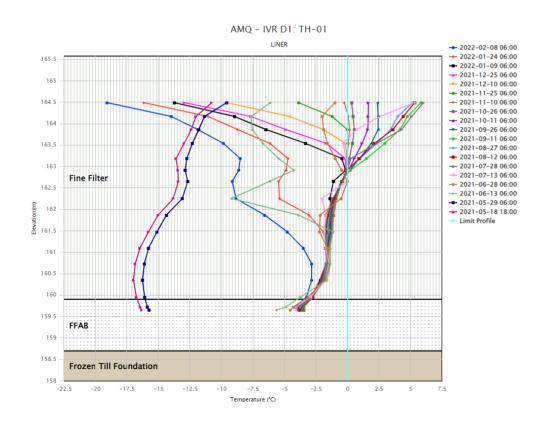


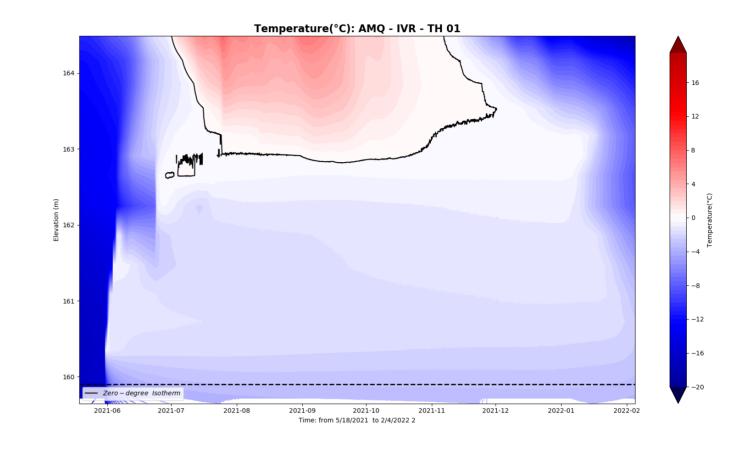
AMQ - WTD TH: 0+790

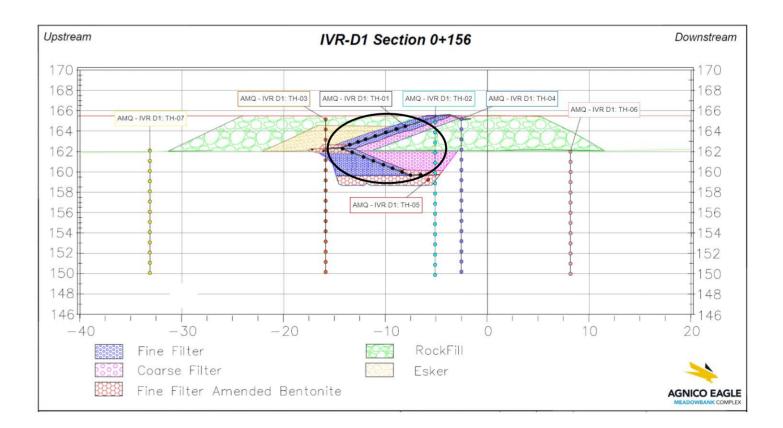




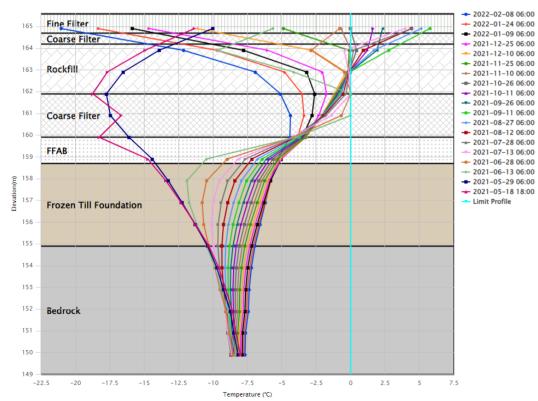




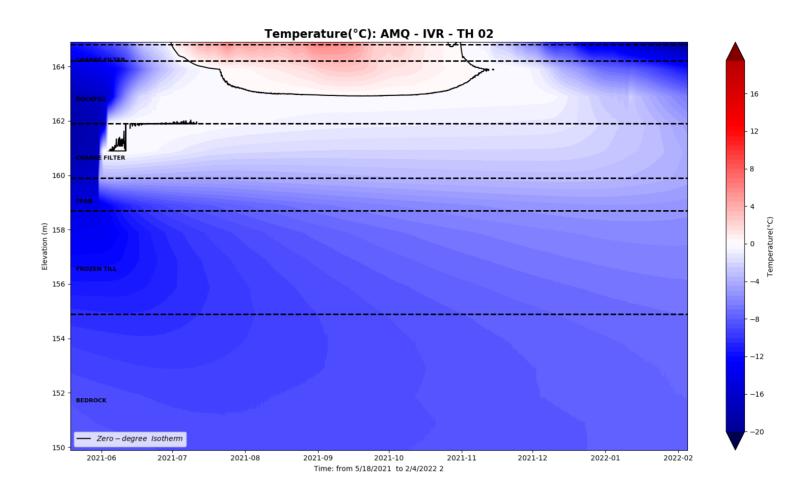


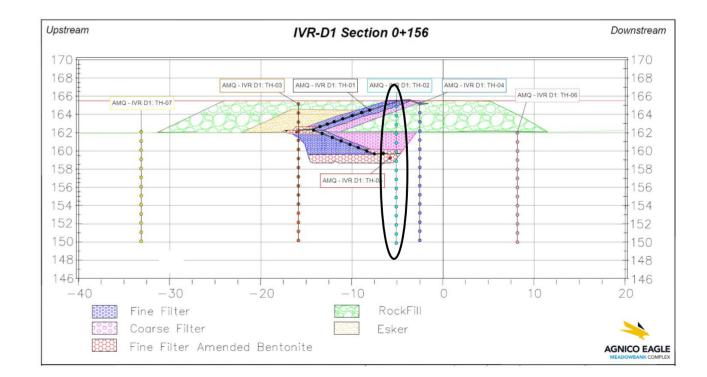






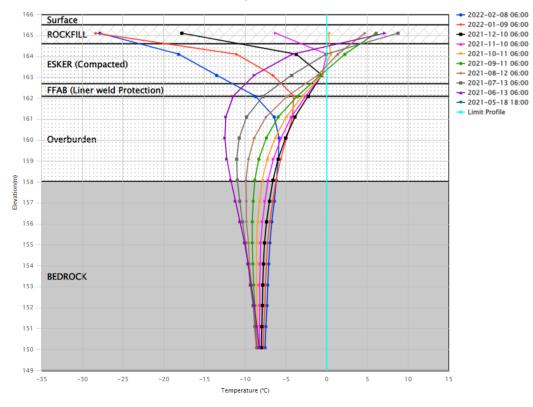
AMQ - IVR D1: TH-02

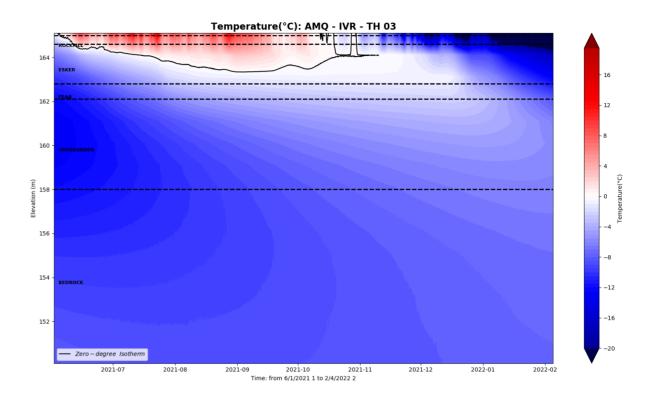


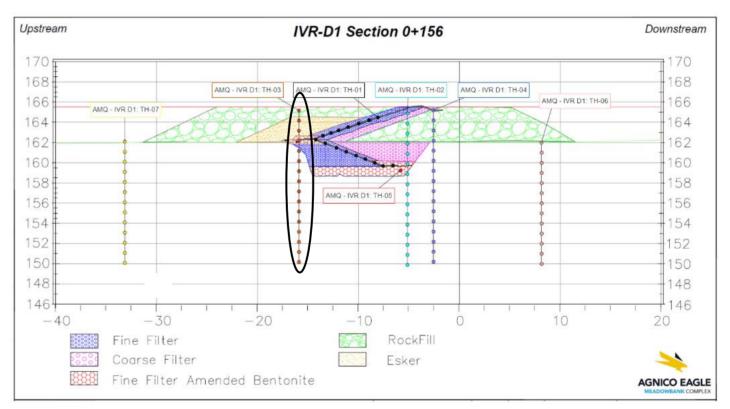




AMQ - IVR D1: TH-03

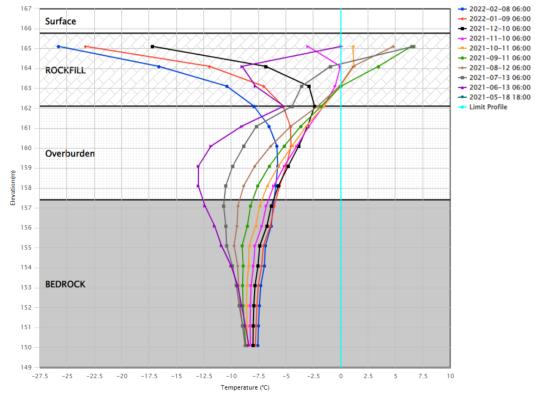




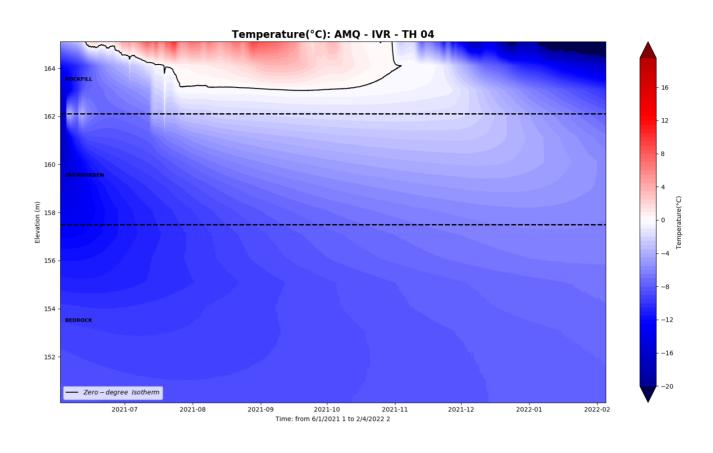


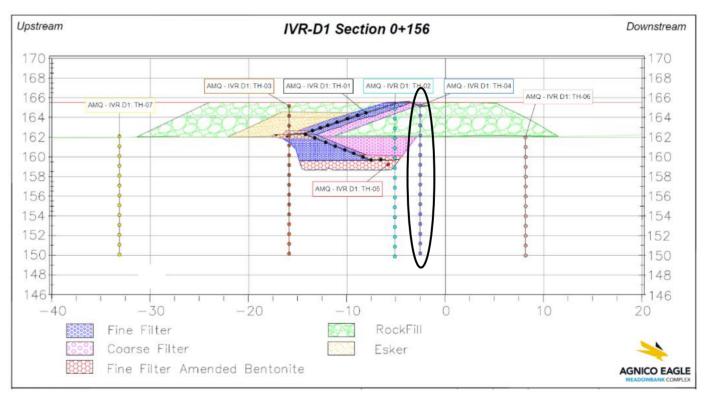


AMQ - IVR D1: TH-04

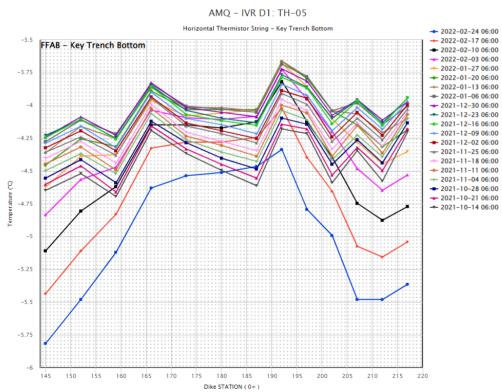


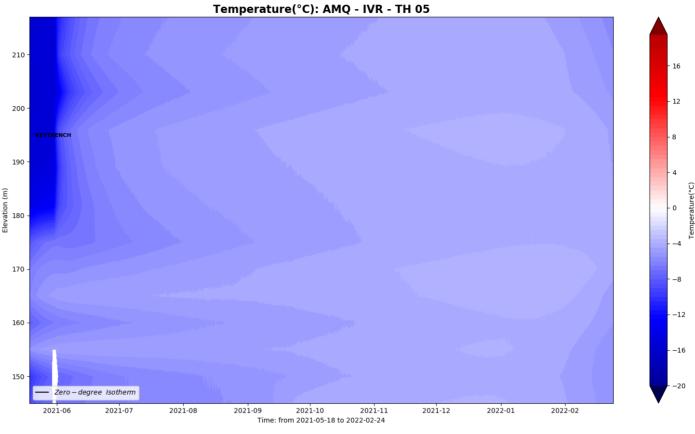
IVR-D1-TH5



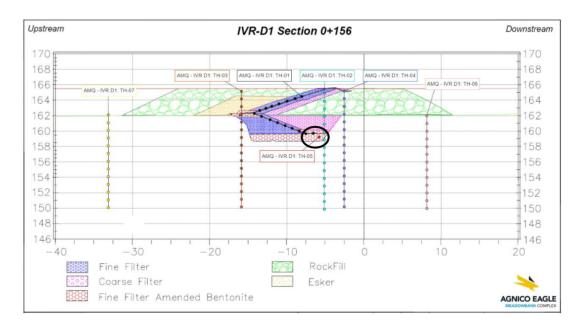






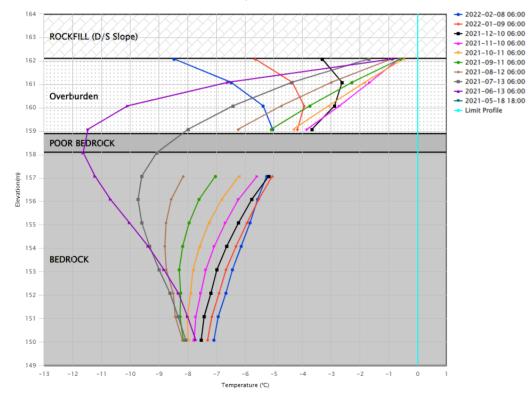


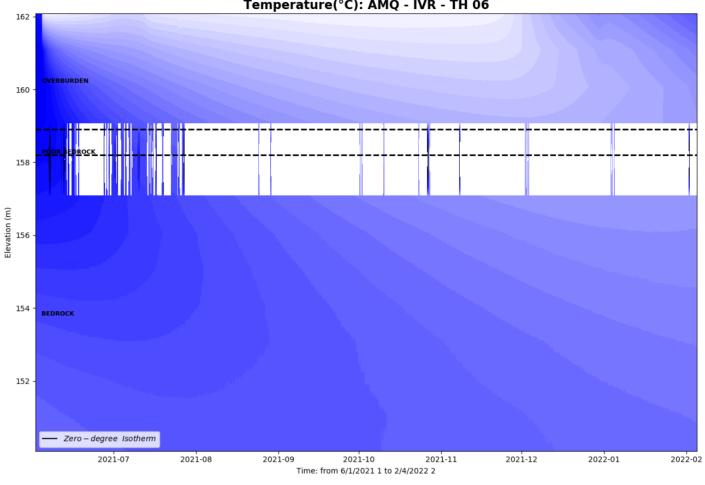
NOTE: This TH is horizontal and in Keytrench and must be reflected this way when reading the thermal graph

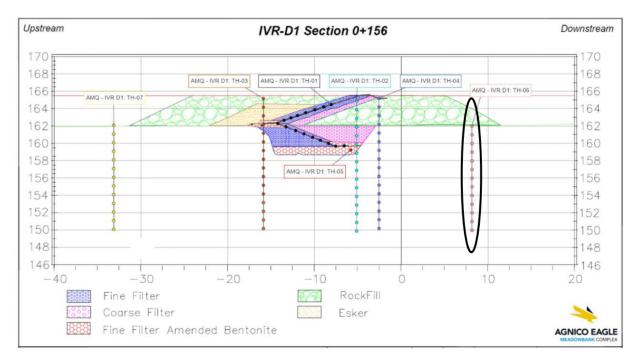


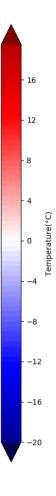


AMQ - IVR D1: TH-06

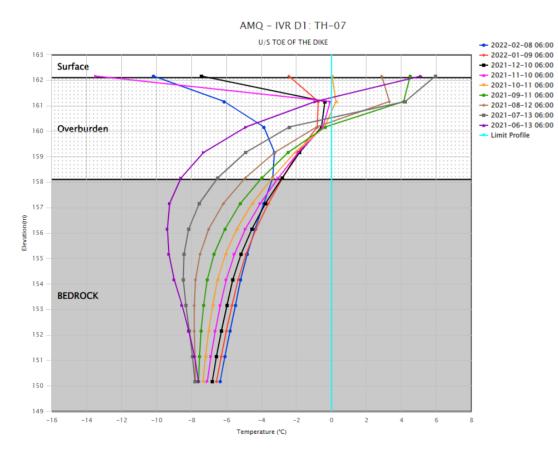


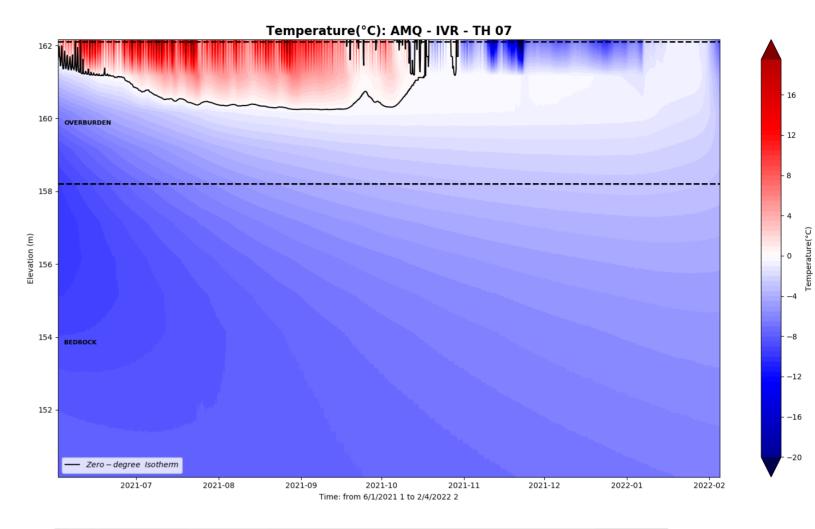


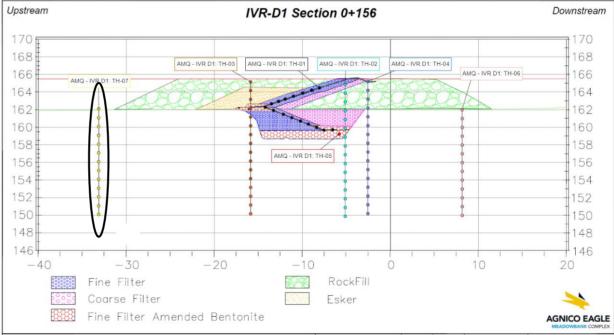


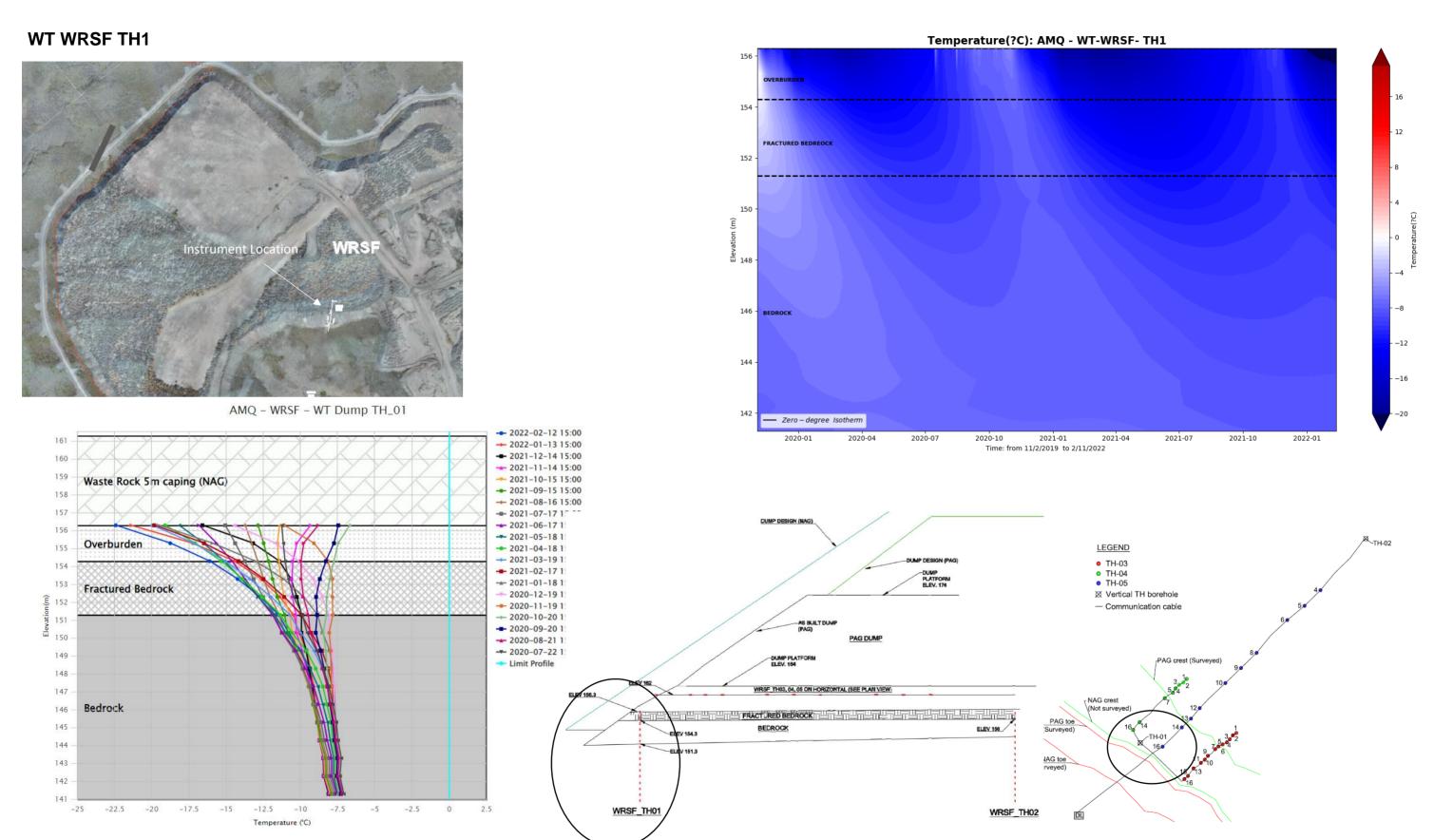


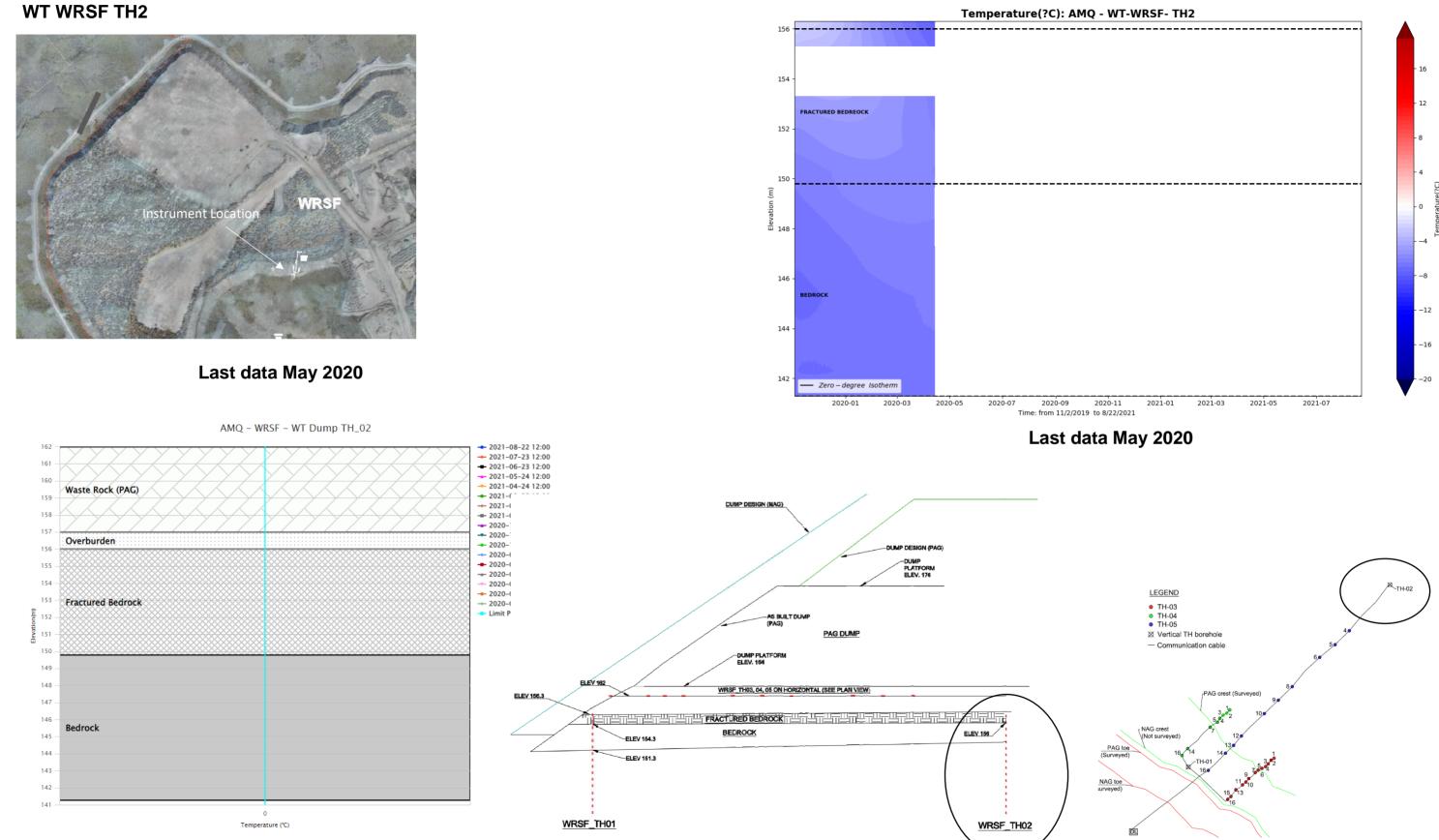




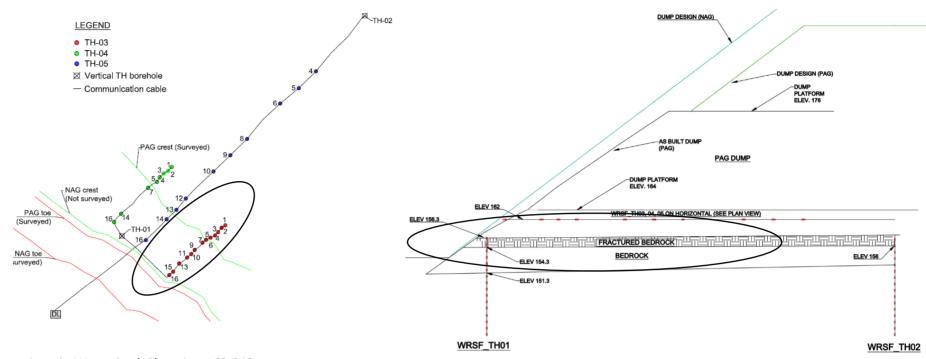










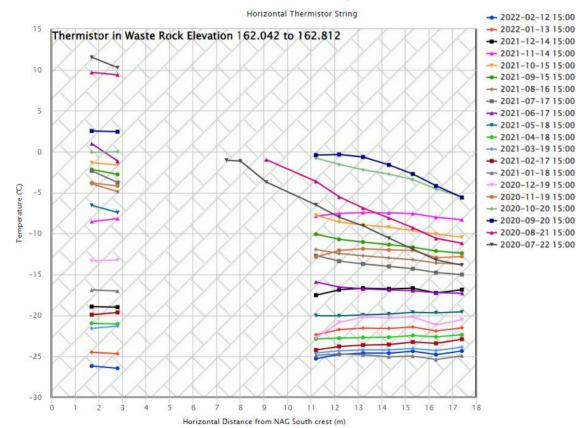


Thermistor in Waste Rock Elevation 162.042 to 162.812.

Temperature(?C): AMQ - WT-WRSF- TH3 16 PAG 14 Crest Distance from tor in Waste Rock Elev: 162.042 to 162.812 NAG Zero – degree 020-10 2021-01 202 Time: from 2019-11-02 to 2022-02-12 2020-07 2020-10 2021-04 2020-01 2020-04

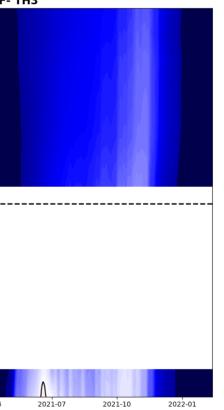
This instrument is installed horizontally and chart needs to be read accordingly

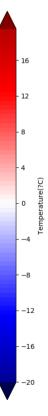
Beads 3 to 10 are not working



AMQ - WRSF - WT Dump TH_03

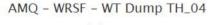


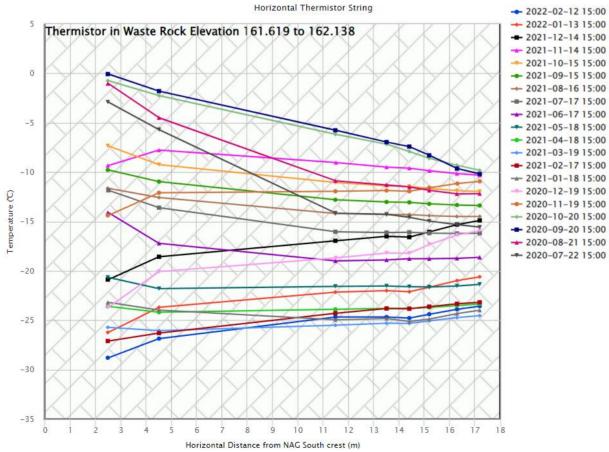


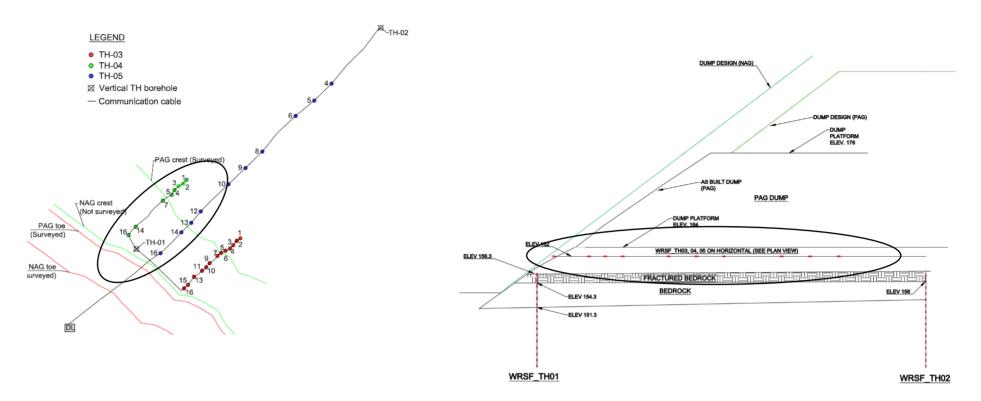


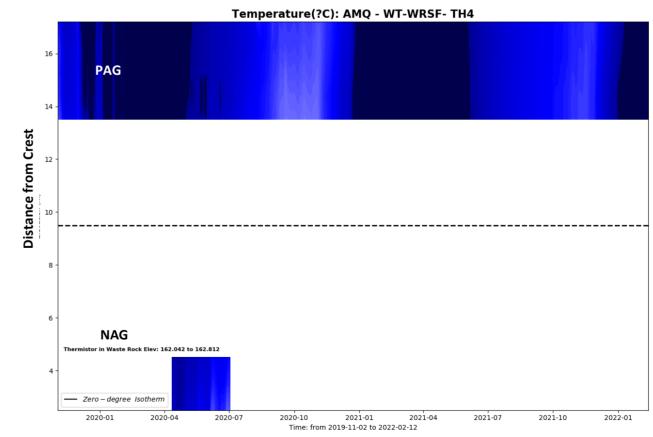








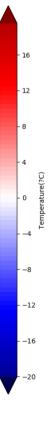




This instrument is installed horizontally and chart needs to be read accordingly

Beads 3 to 10 are not working



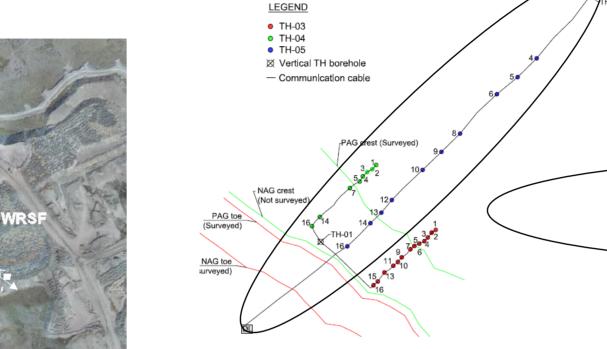


-ELEV 154.3

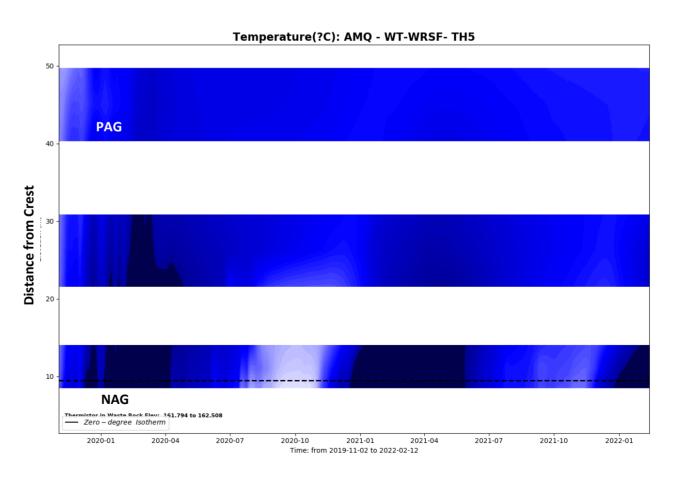
-ELEV 151.3

WRSF_TH01



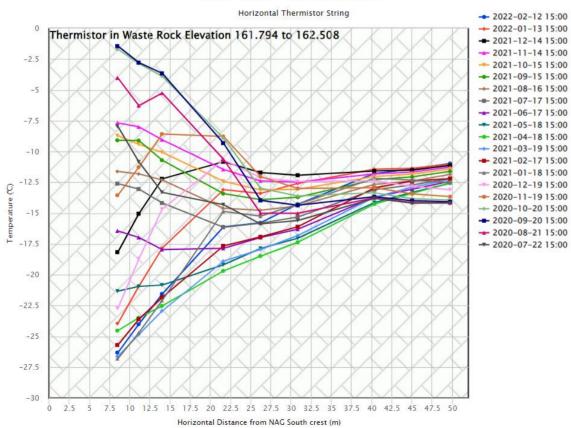




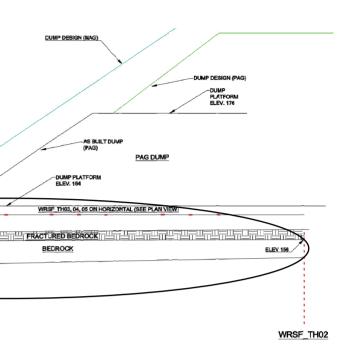


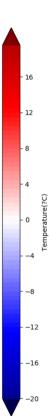
ELEV 156.3

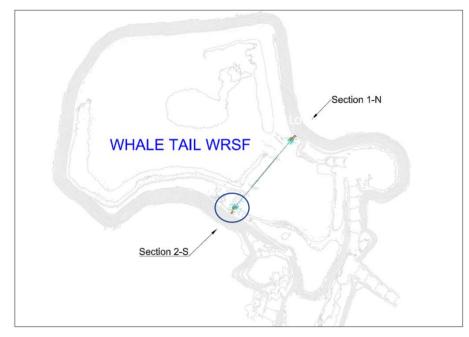
AMQ - WRSF - WT Dump TH_05

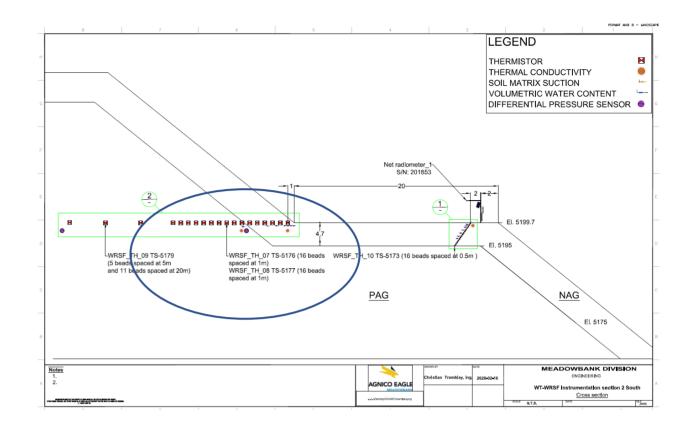


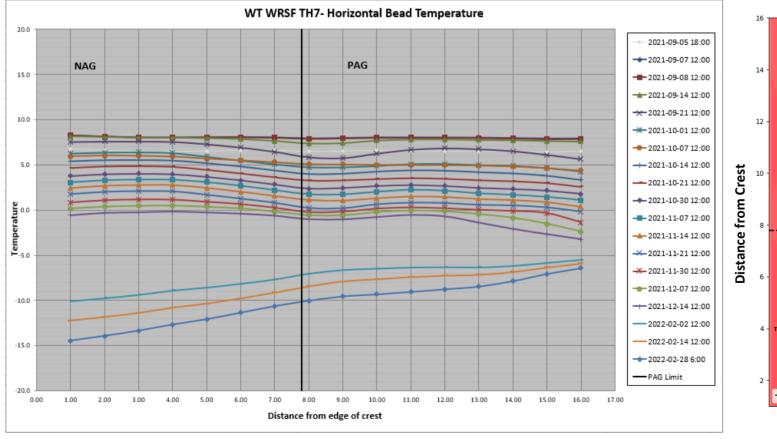








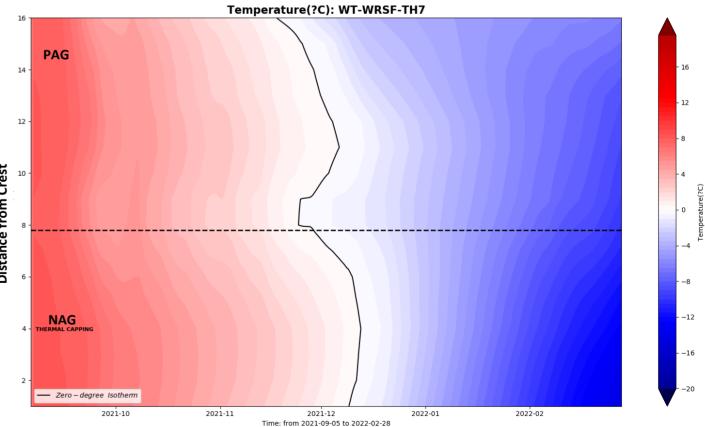




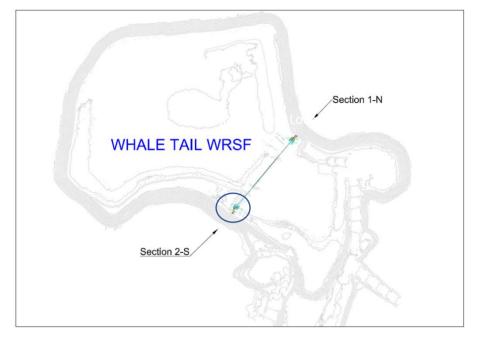
There was no data from Dec 20 to

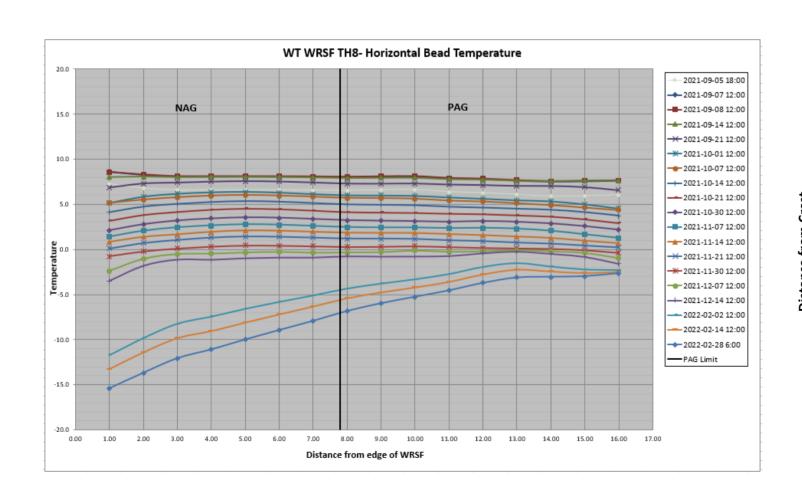
Feb 2 due to loss of battery power

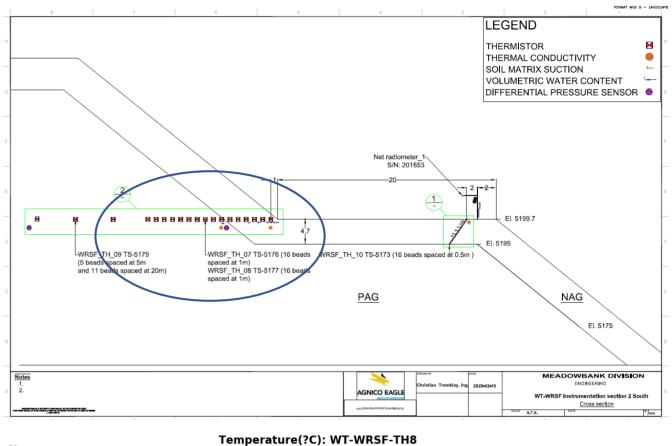
in the instrument.

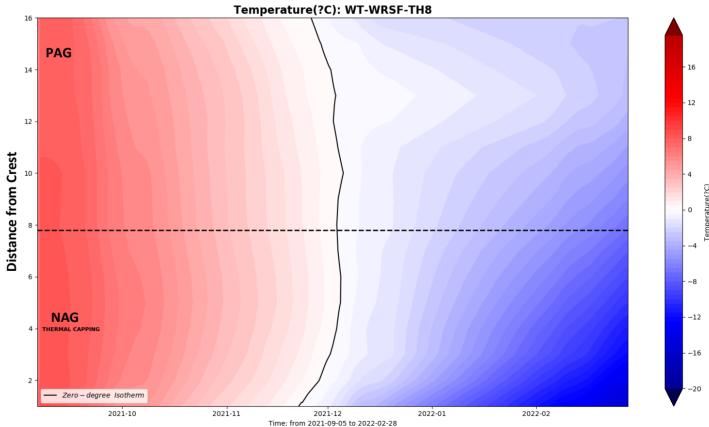


This instrument is installed horizontally and chart needs to be read accordingly

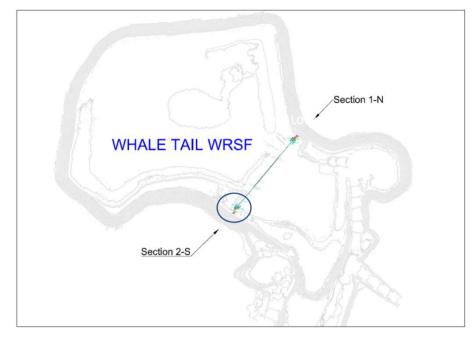


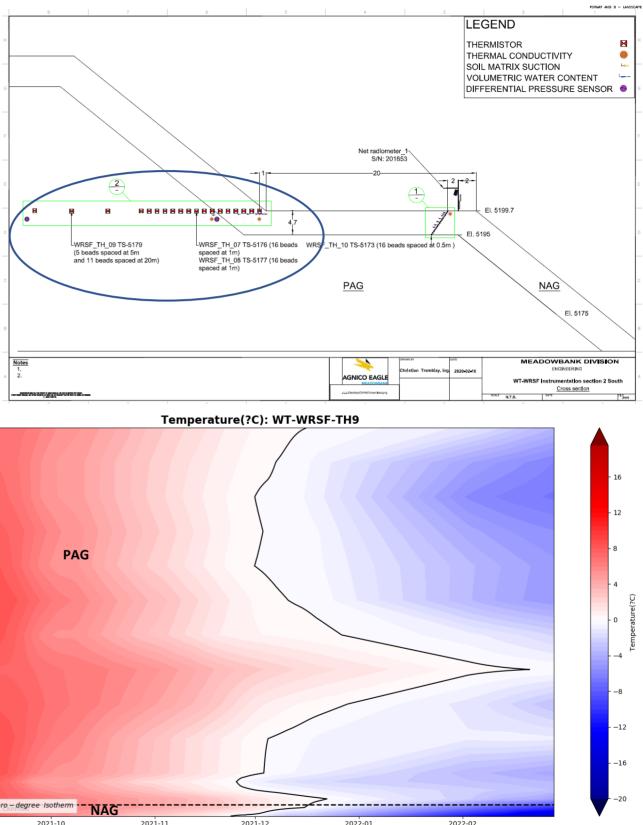


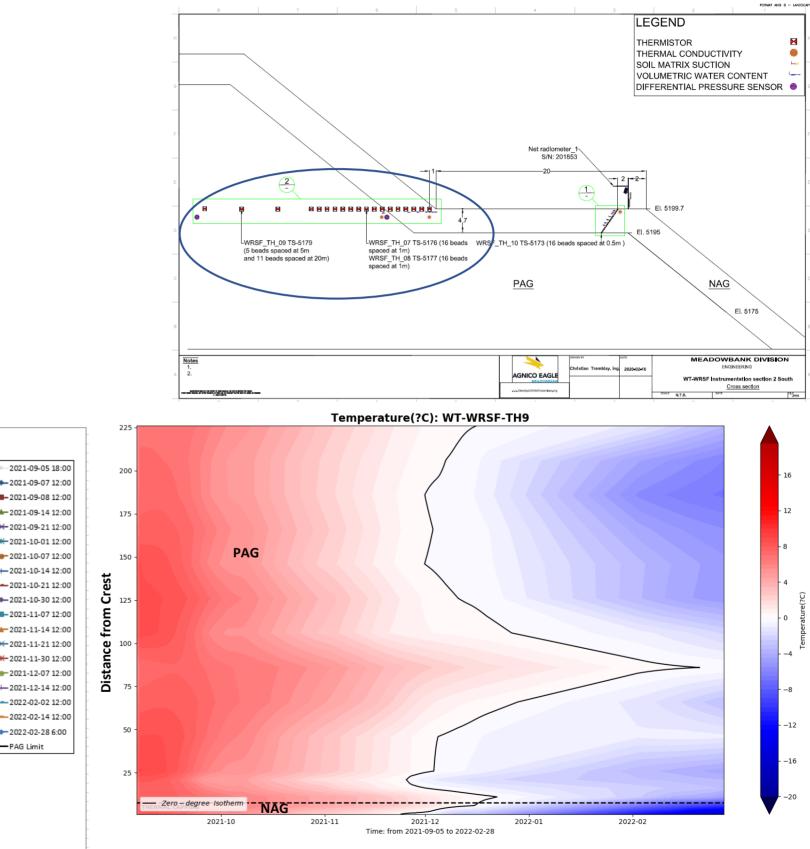


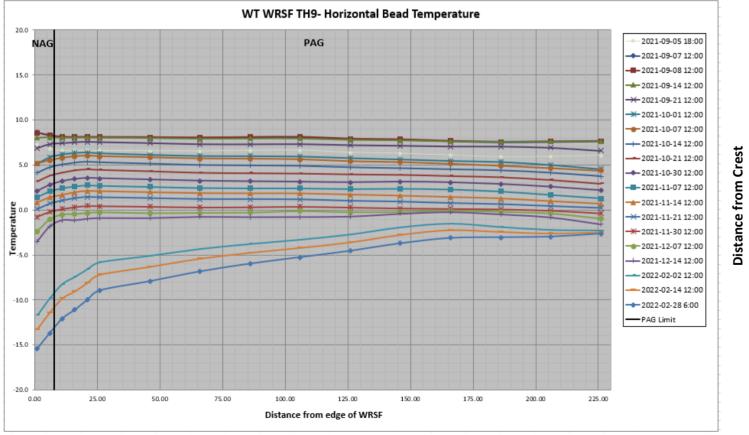


This instrument is installed horizontally and chart needs to be read accordingly

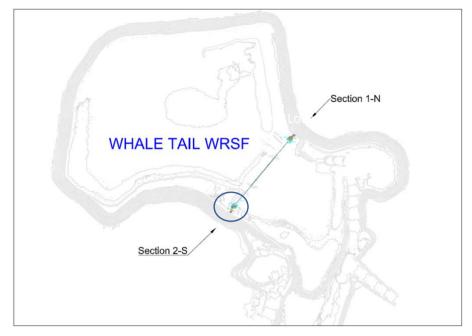


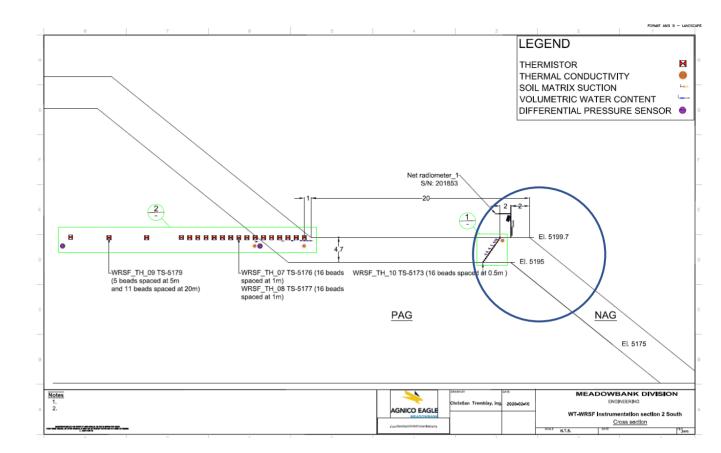




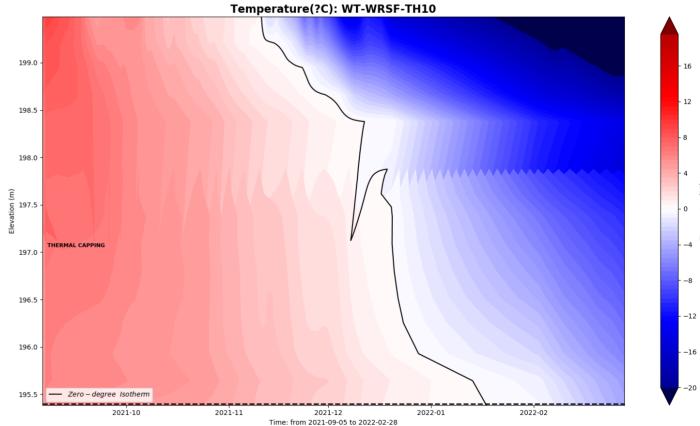


This instrument is installed horizontally and chart needs to be read accordingly

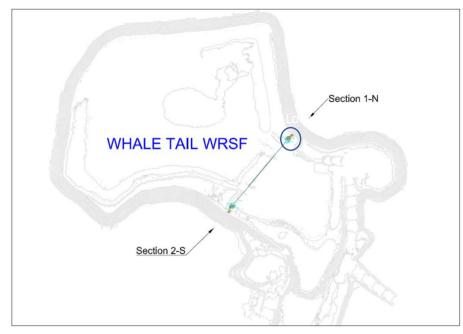


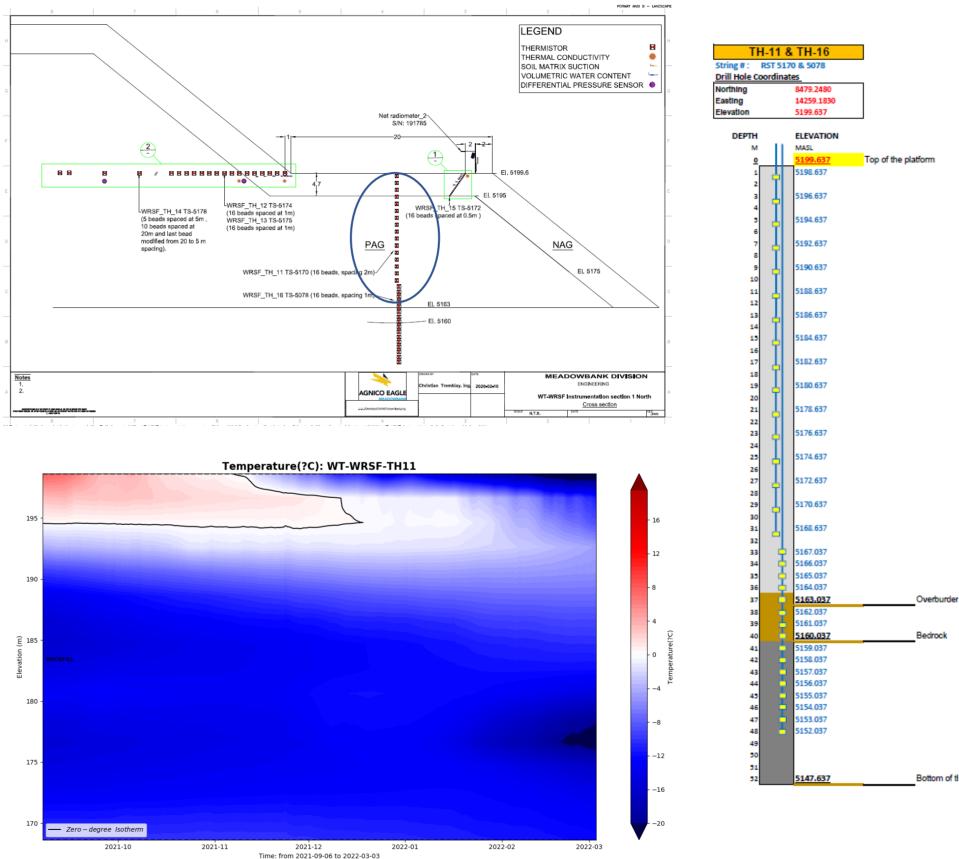


× 2021-09-13 18:00 WT WRSF TH10- Bead Temperature vs Elevation -2021-09-21 6:00 200.0 NAG -2021-10-01 12:00 199.5 199.0 × 2021-11-14 12:00 ** 2021-11-20 12:00 198.5 + 2021-12-12 12:00 198.0 **5**197.5 ۳ 197.0 → 2022-02-28 6:00 196.5 196.0 195.5 195.0 -25 -20 -15 -10 5 -5 0 10 Temperature

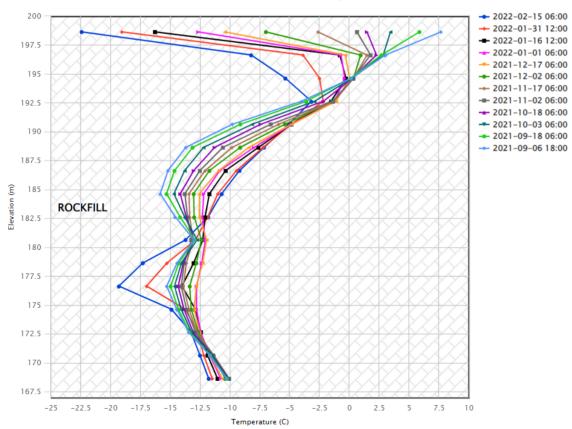


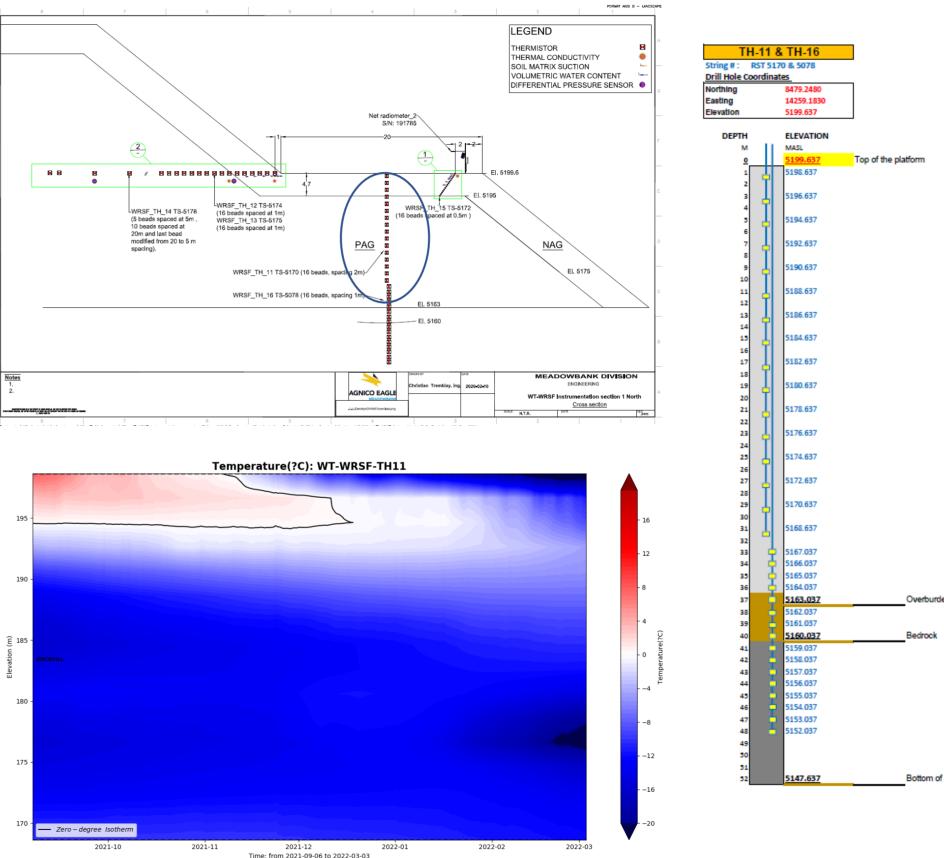


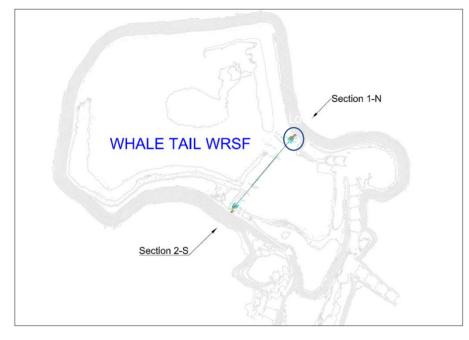




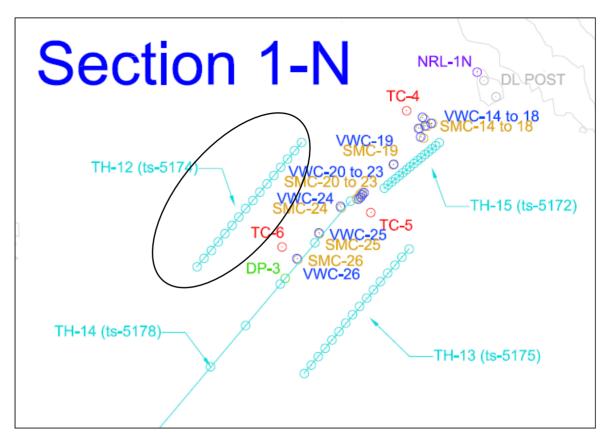
AMQ - WRSF - WT Dump TH_11

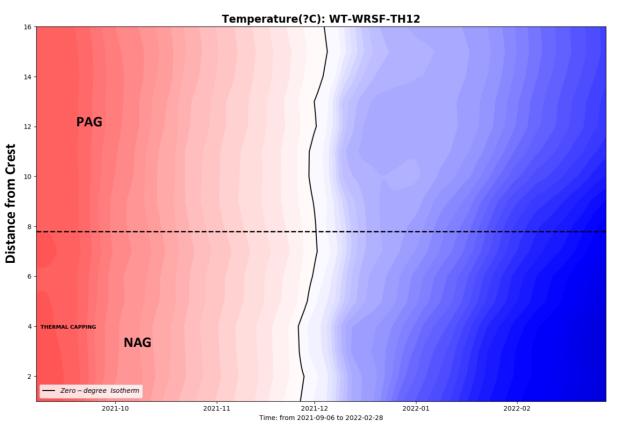






AMQ - WRSF - WT Dump TH_12 Horizontal TH String - 2022-02-27 06:00 ^{7.5} [TH in Waste Rock Elevation: 200.337 to 200.242 -- 2022-02-20 06:00 5 - 2022-01-23 12:00 -- 2022-01-16 12:00 --- 2022-01-09 12:00 2.5 - 2021-12-26 06:00 → 2021-12-19 06:00
 → 2021-12-12 06:00 0 - 2021-12-05 06:00 <u>+</u> 2021-11-28 06:00 2021-11-21 06:00 - 2021-11-14 06:00 -2.5 --- 2021-11-07 06:00 - 2021-10-31 06:00 **--** 2021-10-24 06:00 -5 --- 2021-10-17 06:00 -7.5 -10 -12.5 -15 -17.5 1 2 3 4 8 9 10 11 12 13 14 15 16 17 5 6 7 ò Horizontal Dist. from NAG South Crest (m)

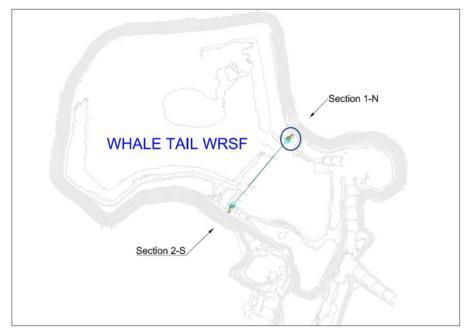




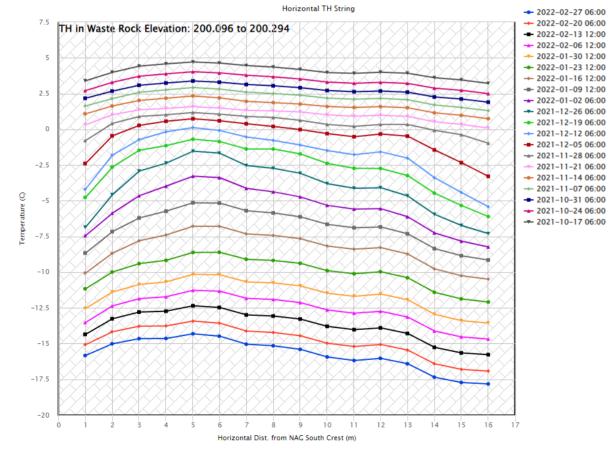
This instrument is installed horizontally and chart needs to be read accordingly

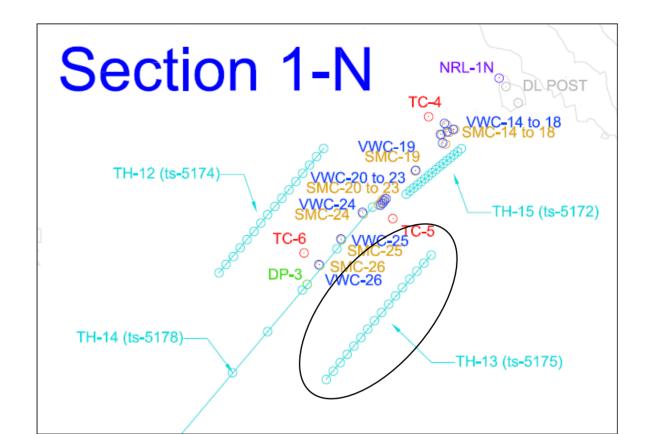
-12

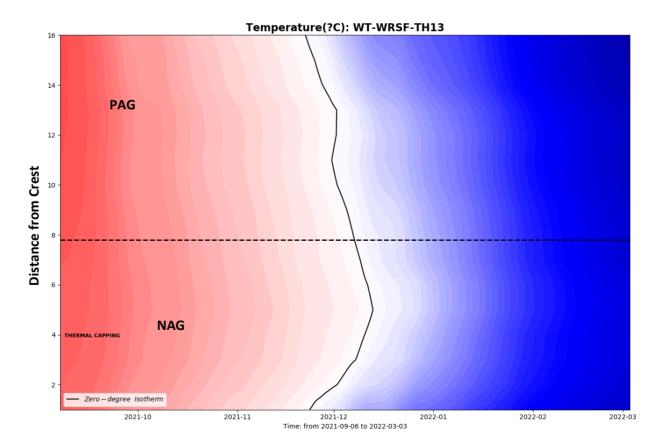
-16



AMQ - WRSF - WT Dump TH_13





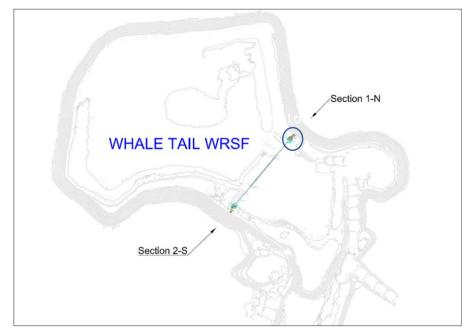


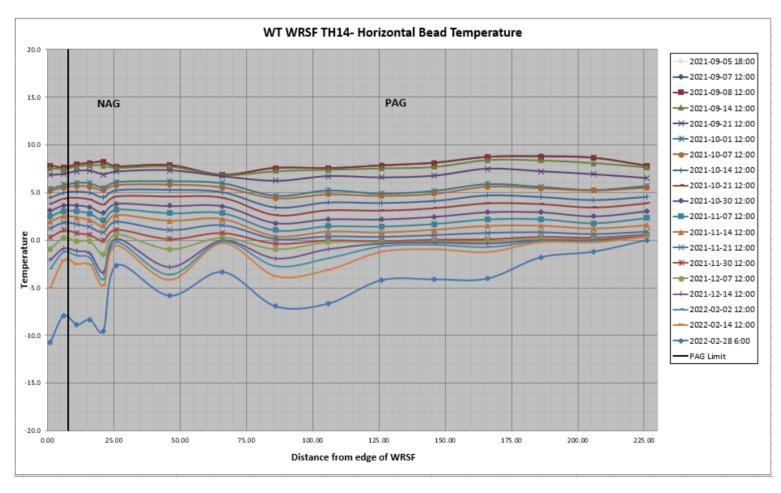
This instrument is installed horizontally and chart needs to be read accordingly

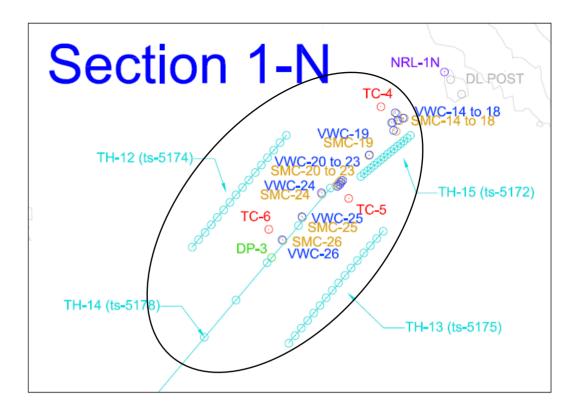


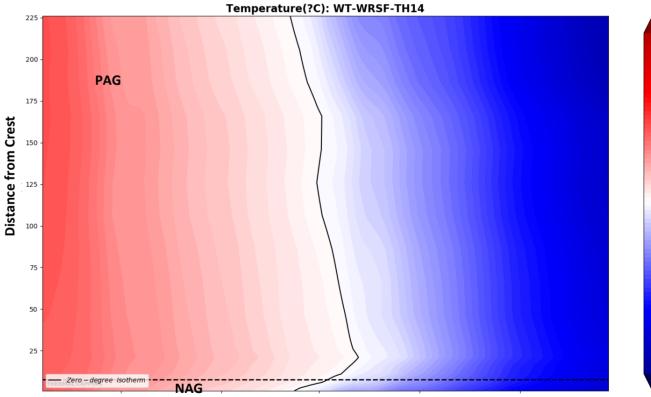
-12

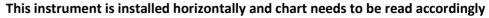
-16









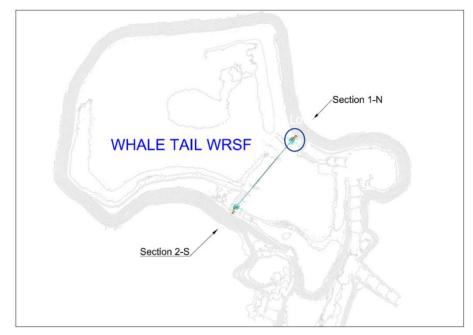


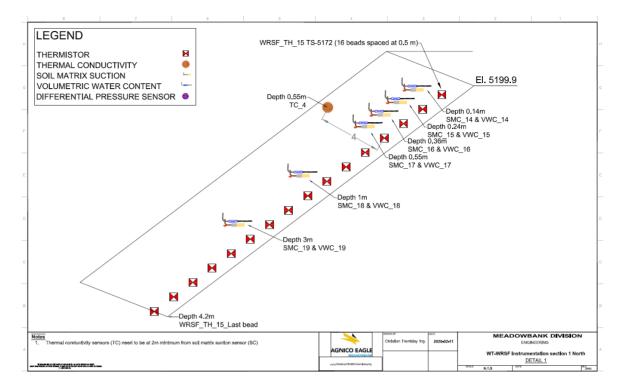
-12

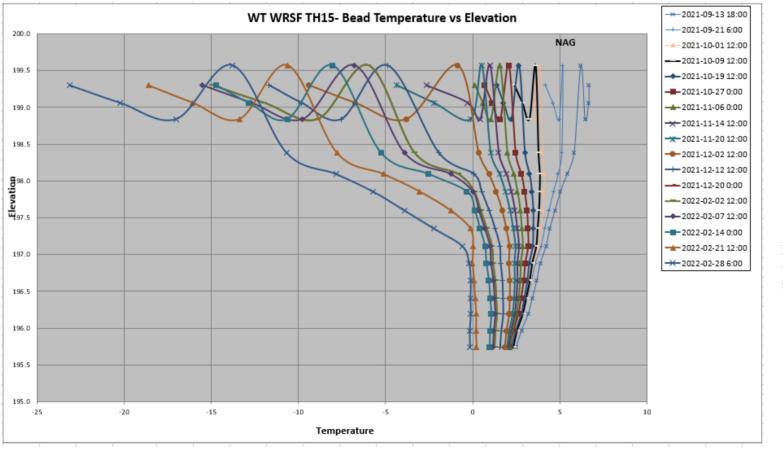
-16

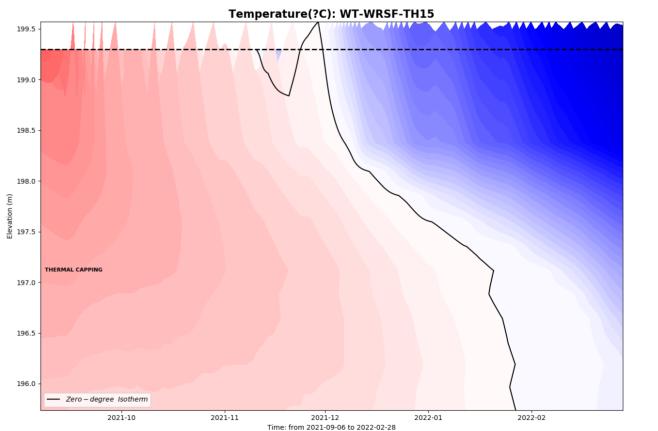
-20

WT WRSF TH15









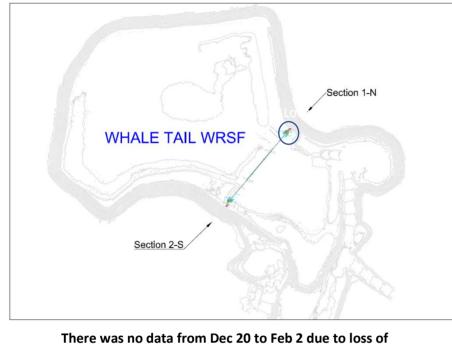
Whale Tail Thermal Monitoring Report 2021 – Appendix A

-12

-16

-20

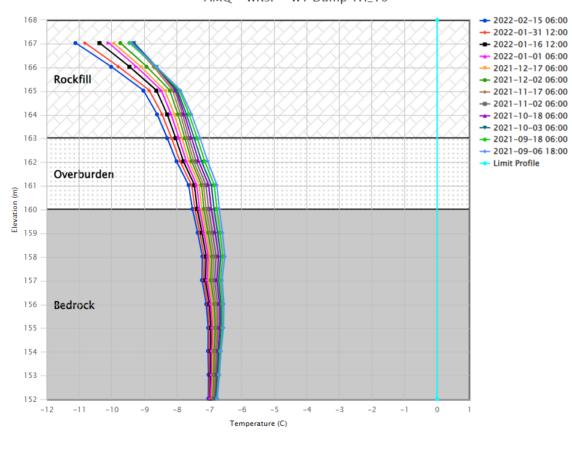
WT WRSF TH16

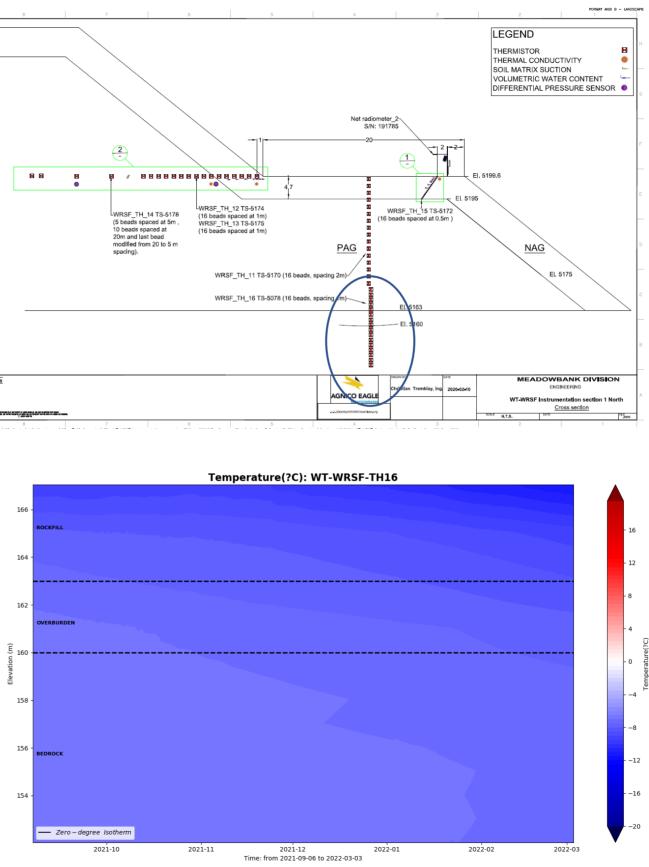


battery power in the instrument.







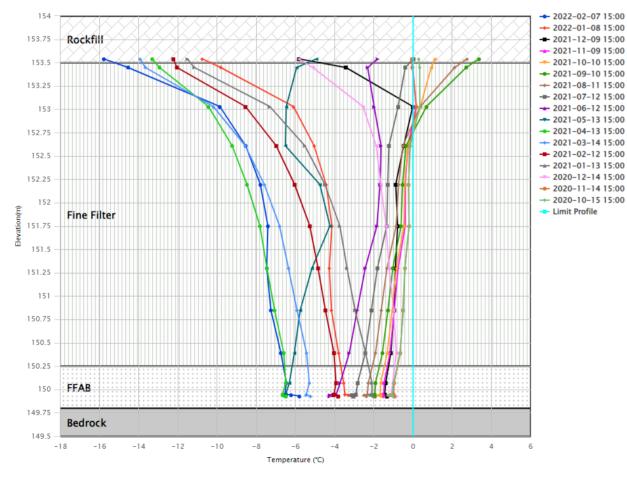


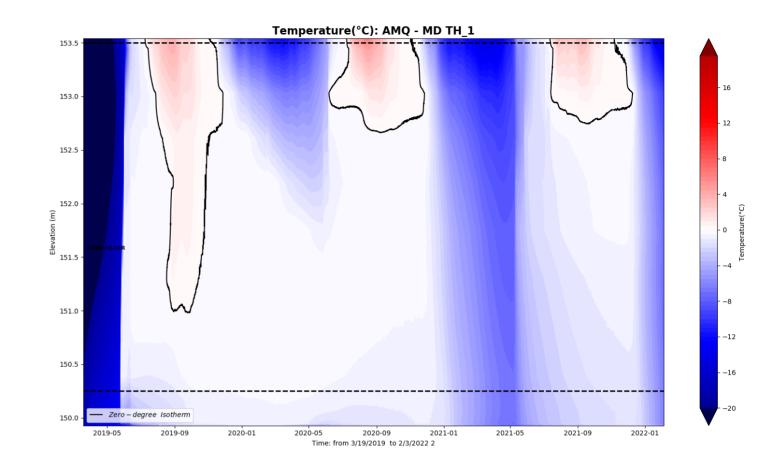
		& TH-16	
		70 & 5078	
Drill Hole Co	pordina		-
Northing		8479.2480	
Easting		14259.1830	
Elevation		5199.637	
		ELE LA TION	
DEPTH		ELEVATION	
м	- 11	MASL	Tax of the slatters
<u>0</u>		<u>5199.637</u>	Top of the platform
1	- 中	5198.637	
2	- 11	5105 637	
3	히	5196.637	
4	- 11	5104 627	
5	- 中	5194.637	
I	- 11	5103 637	
7	•	5192.637	
8		5100 637	
9		5190.637	
10		5100 637	
11	여	5188.637	
12		5186.637	
13	여	5180.057	
15	- 11	5184.637	
16	우	5104.037	
17	- 11	5182.637	
18	우	5102.057	
19		5180.637	
20			
21	Ш	5178.637	
22			
23	11	5176.637	
24	TI		
25	Ц	5174.637	
26	TI		
27	11	5172.637	
28	TI		
29	비	5170.637	
30	TI		
31	비	5168.637	
32	-		
33	, e	5167.037	
34	<u> </u>	5166.037	
35		5165.037	
36	- ¢	5164.037	_
37		5163.037	Overburd
38		5162.037	
39	- ¢	5161.037	
40		5160.037	Bedrock
41	- 7	5159.037	
42	-	5158.037	
43	-	5157.037	
44	1	5156.037	
45	-	5155.037	
46	T	5154.037	
47		5153.037	
48	-	5152.037	
49			
50			
51		5147.637	Bottom of
32		3147.037	Bollom o

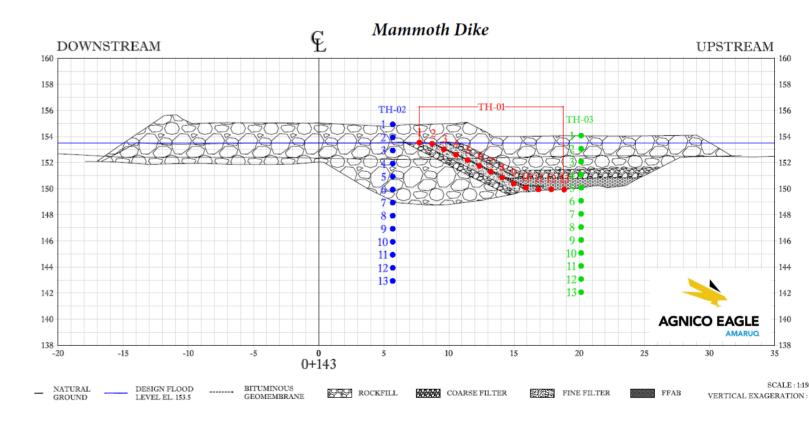
MD TH01



AMQ - MD TH_01



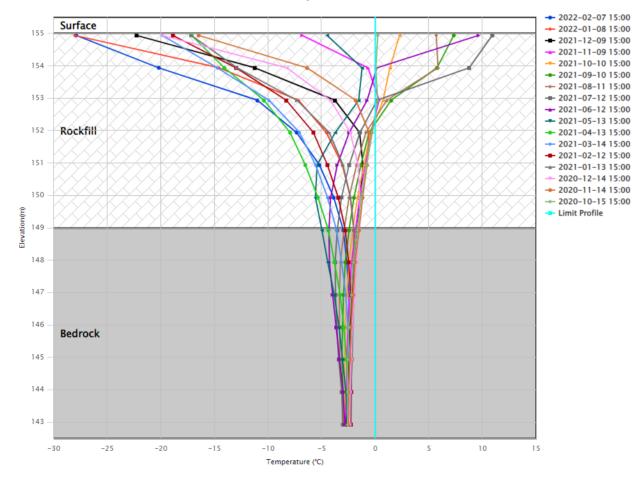


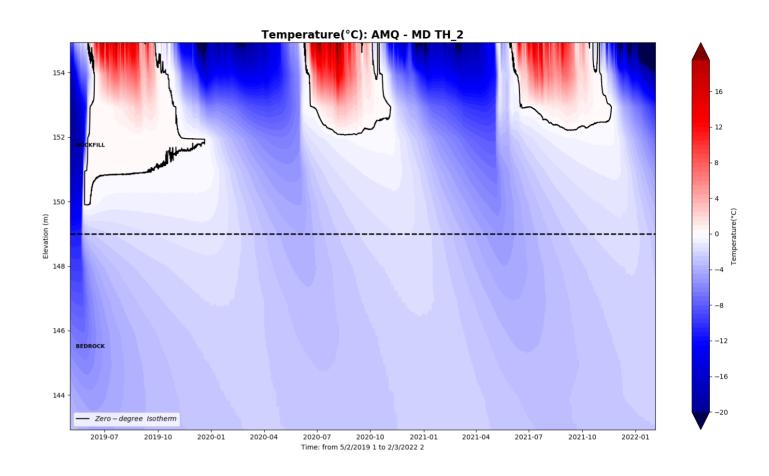


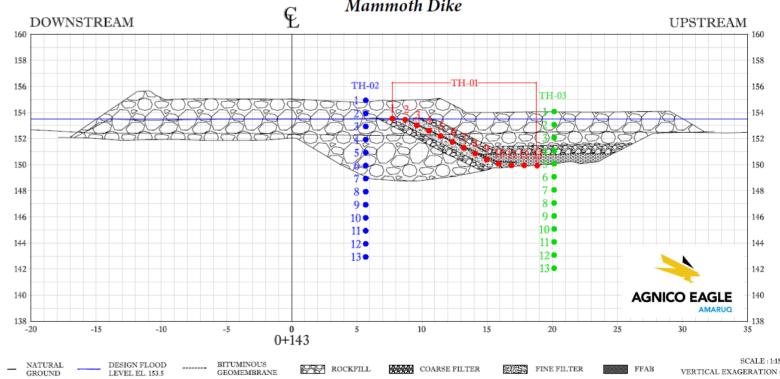
MD TH02



AMQ - MD TH_02





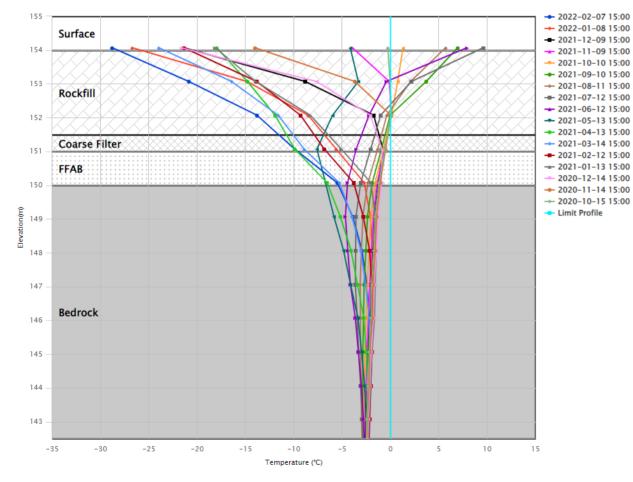


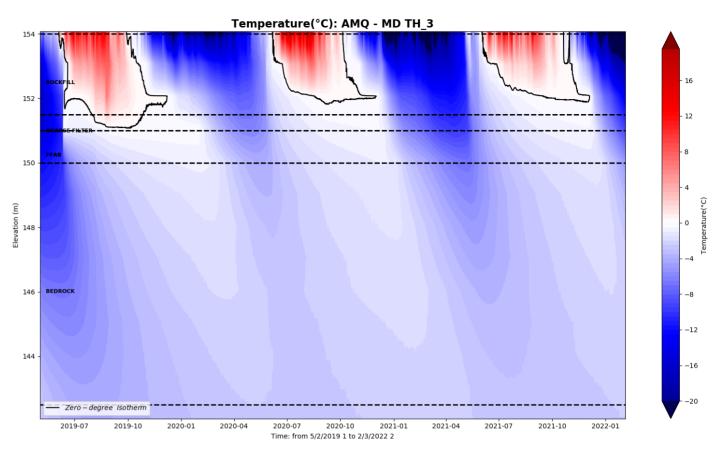
Mammoth Dike

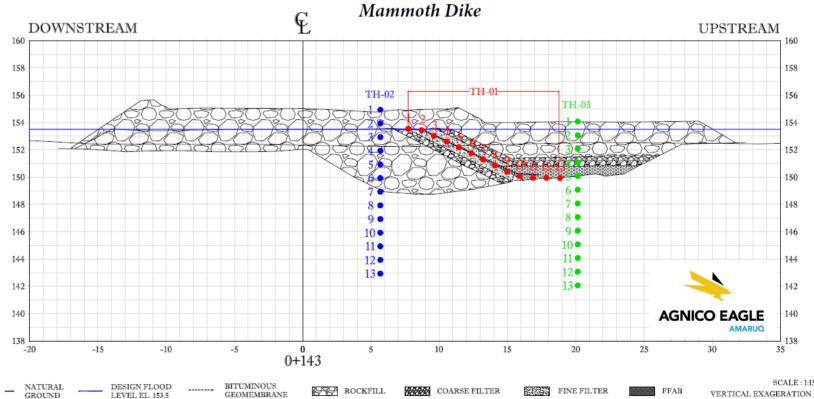
MD TH03

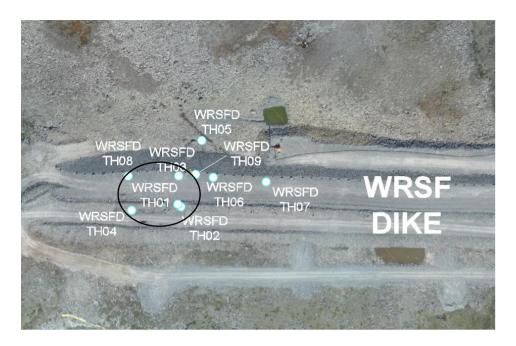


AMQ - MD TH_03

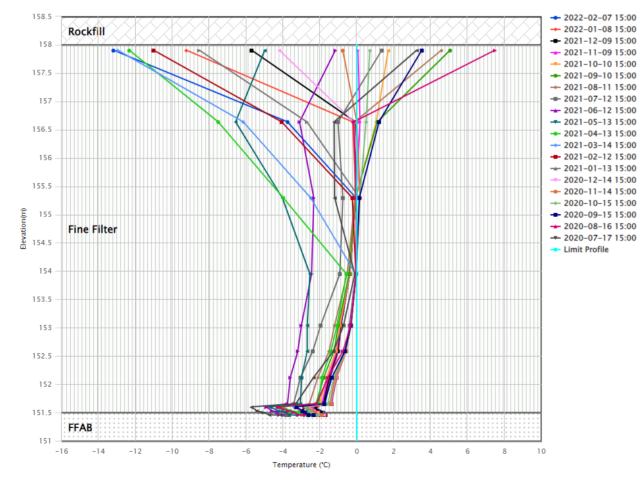


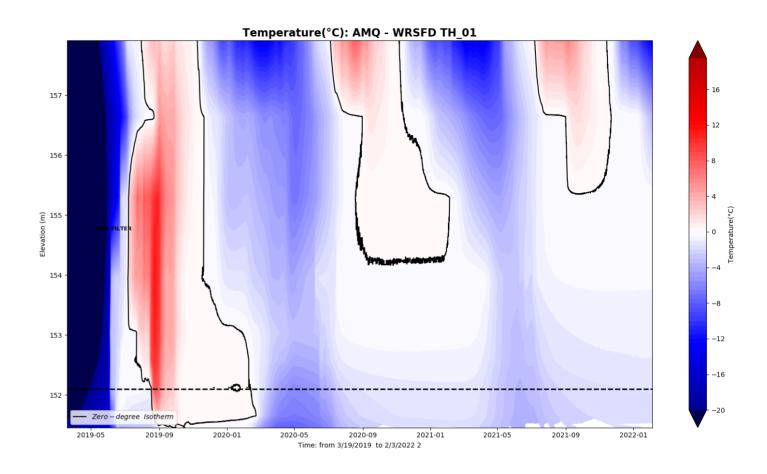


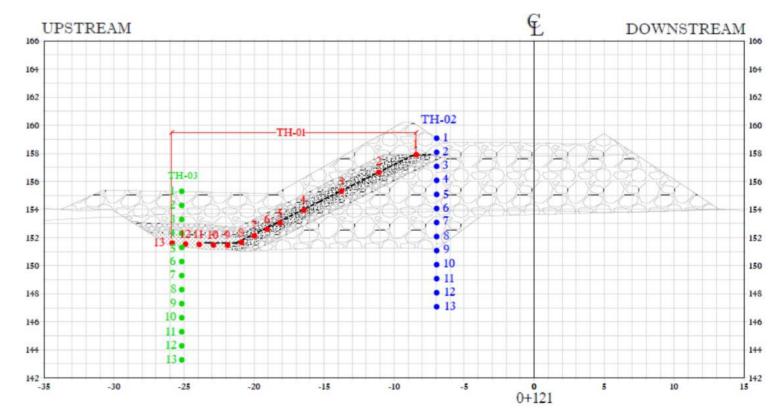


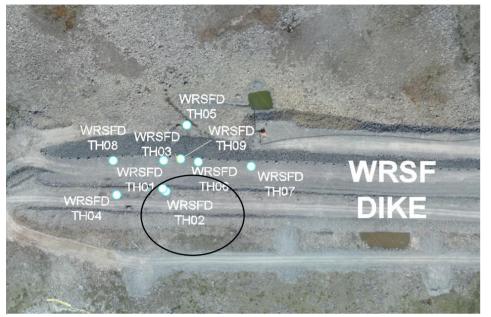


AMQ - WRSFD TH_01

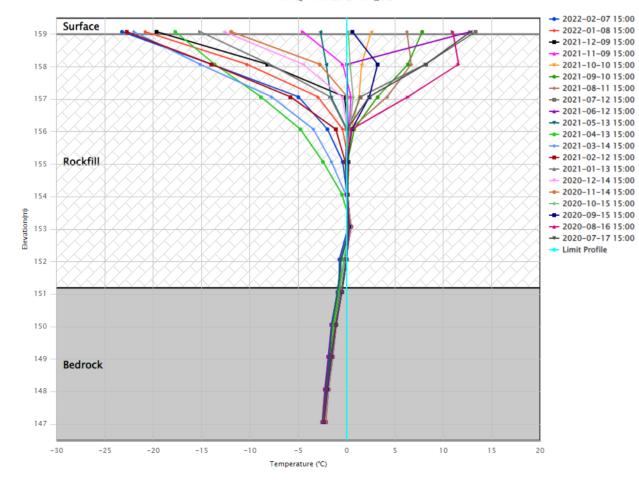


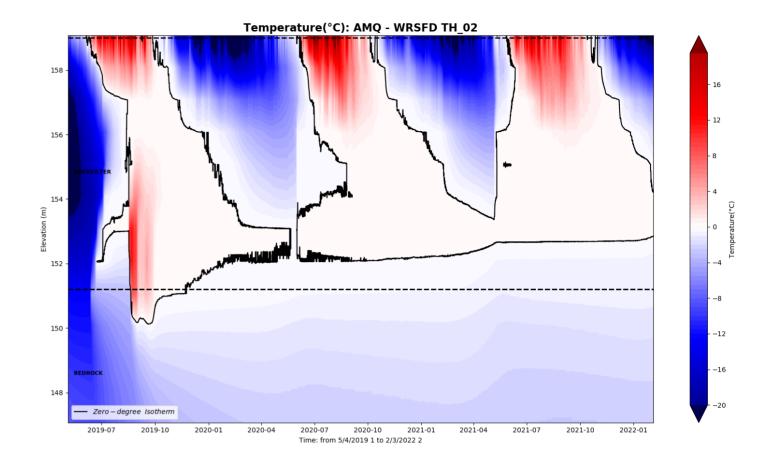


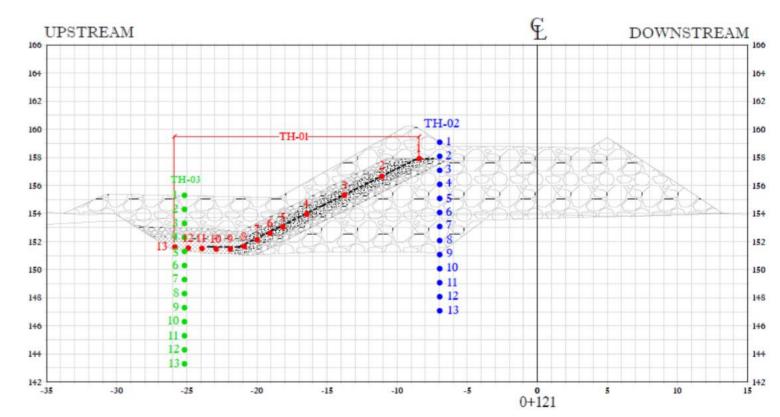


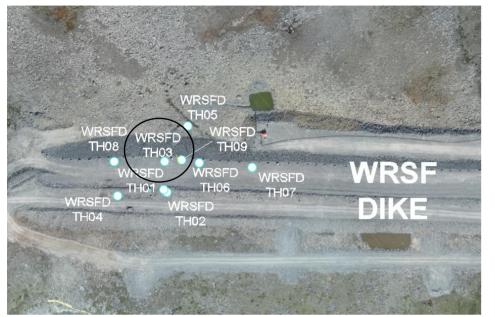


AMQ - WRSFD TH_02

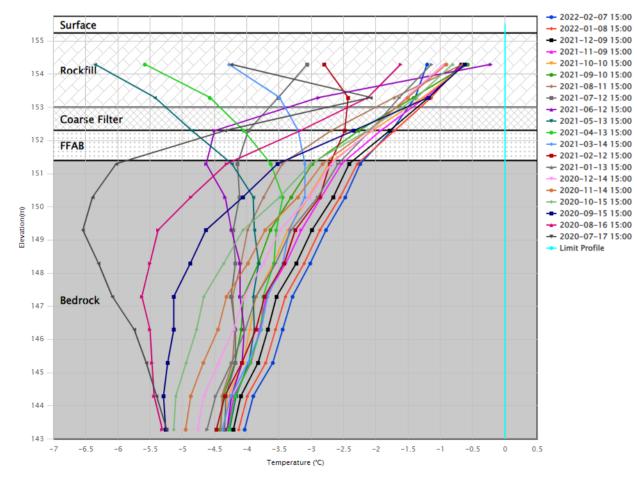


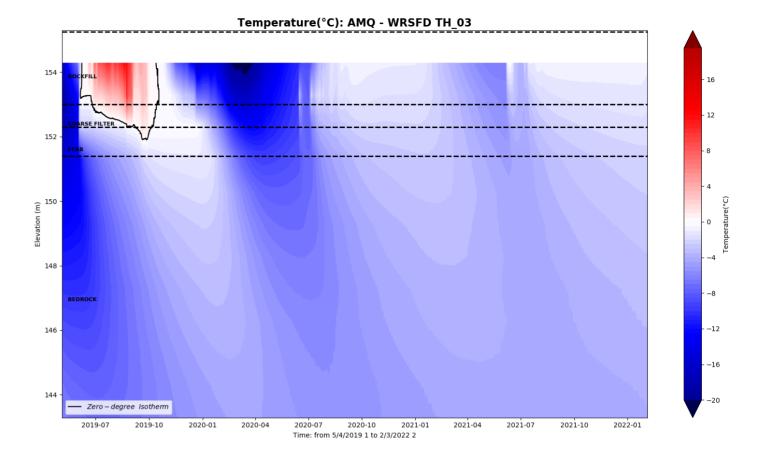


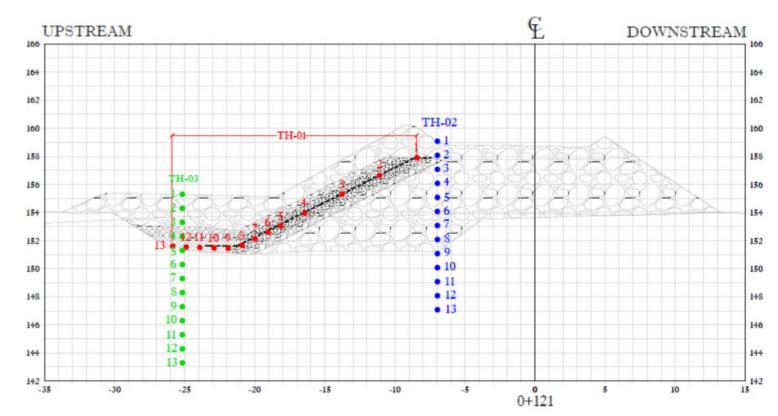




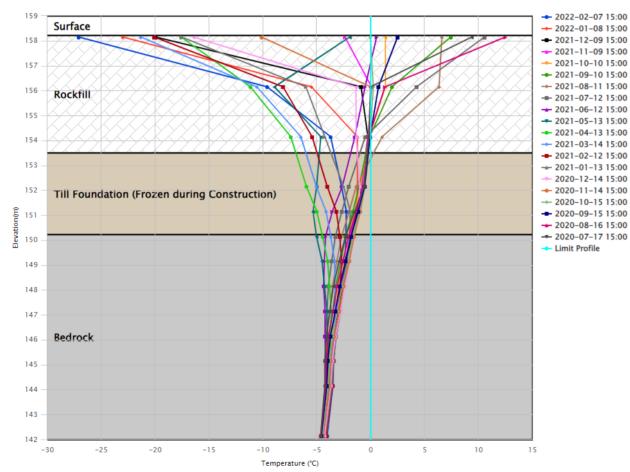
AMQ - WRSFD TH_03

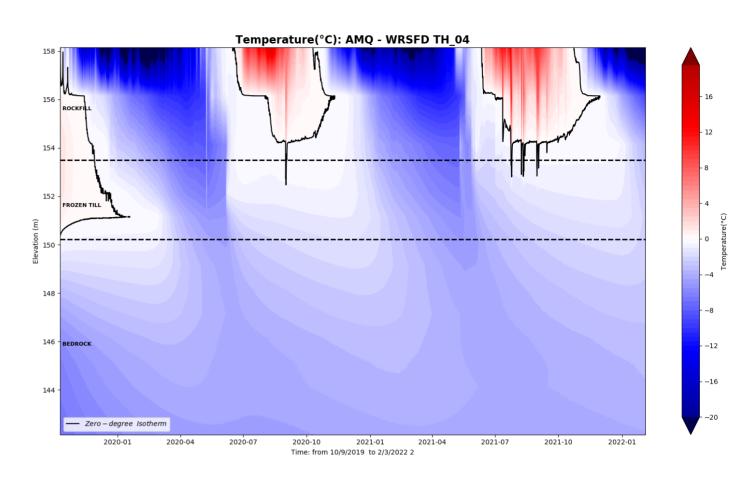


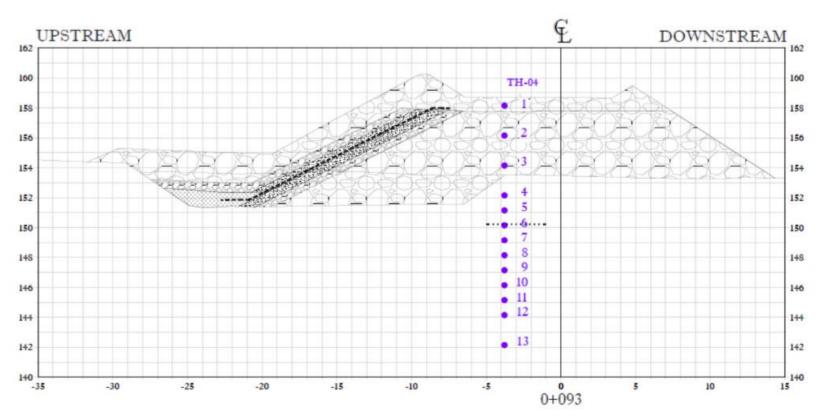


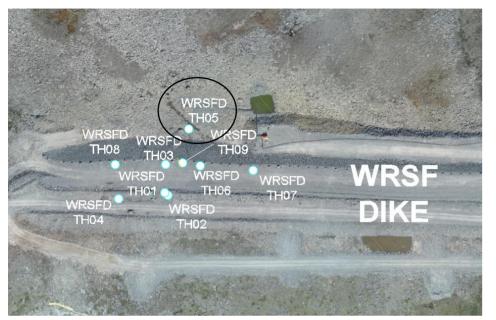




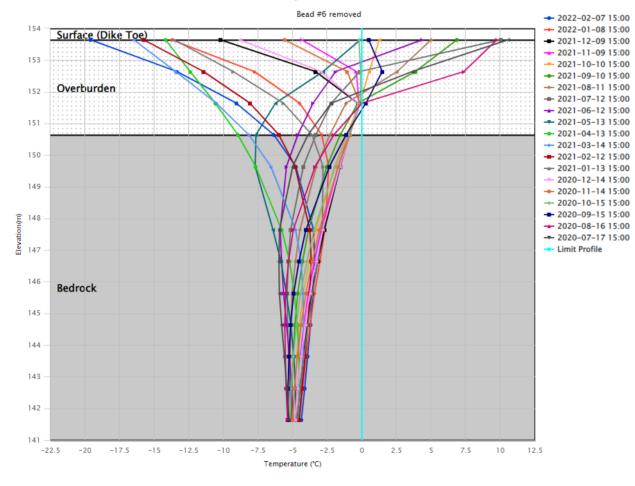


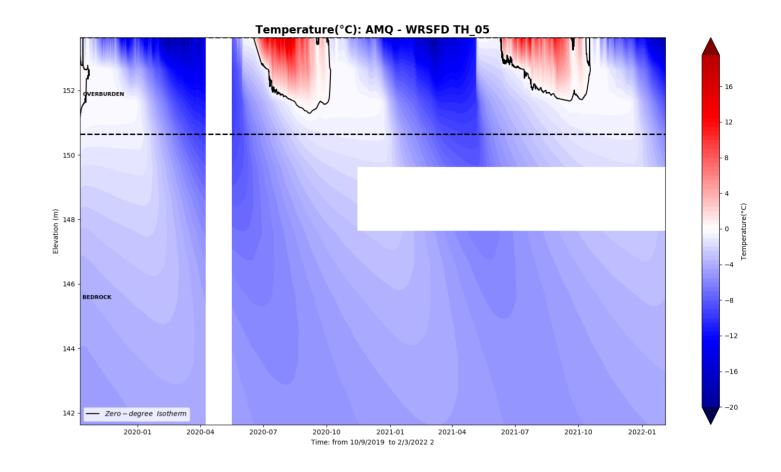


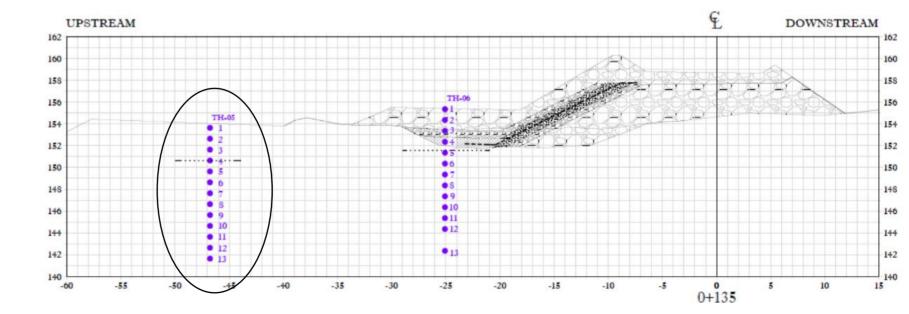


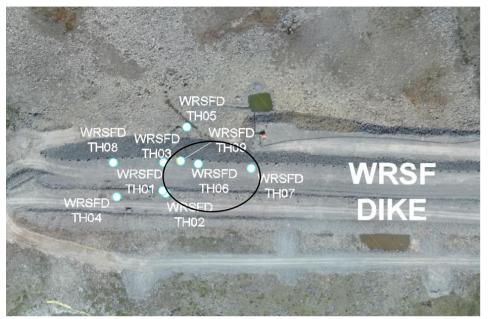


AMQ - WRSFD TH_05

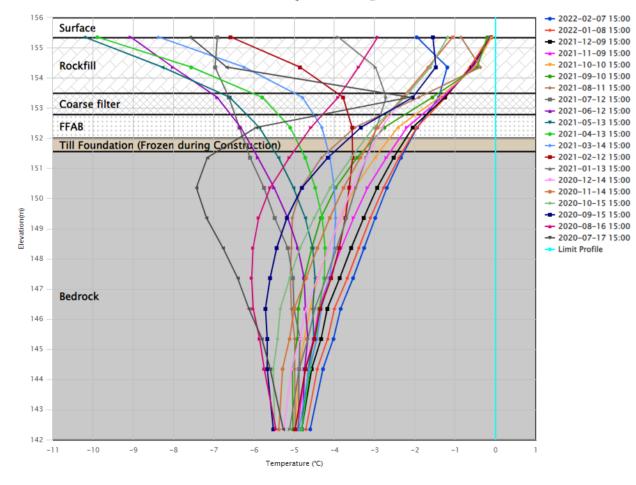


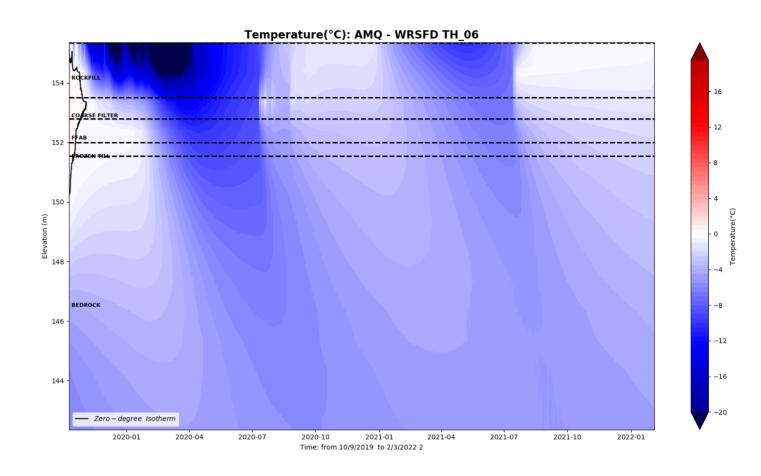


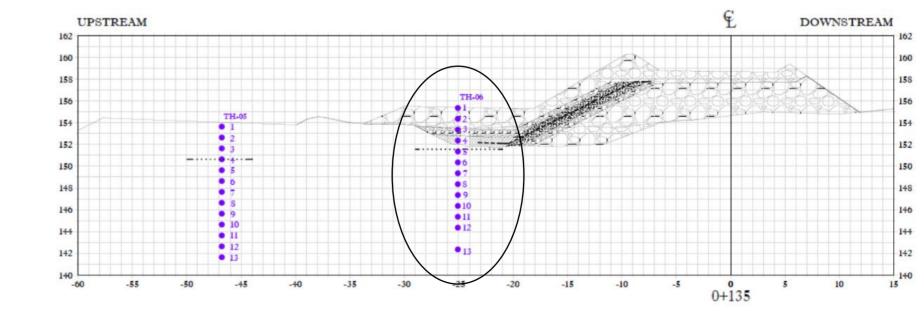


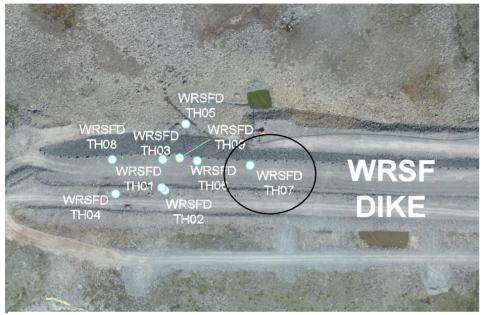


AMQ - WRSFD TH_06

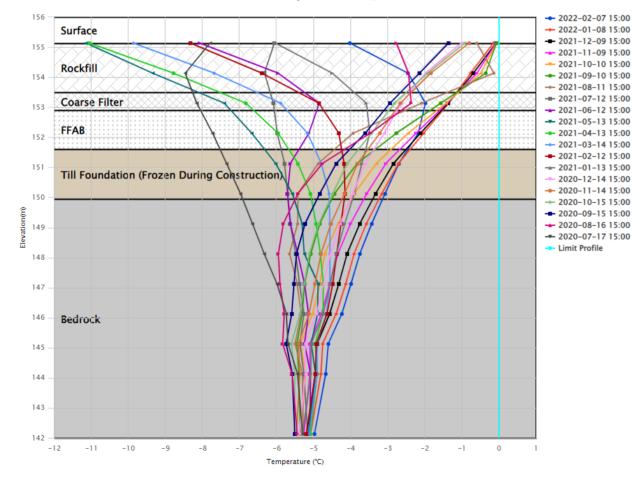


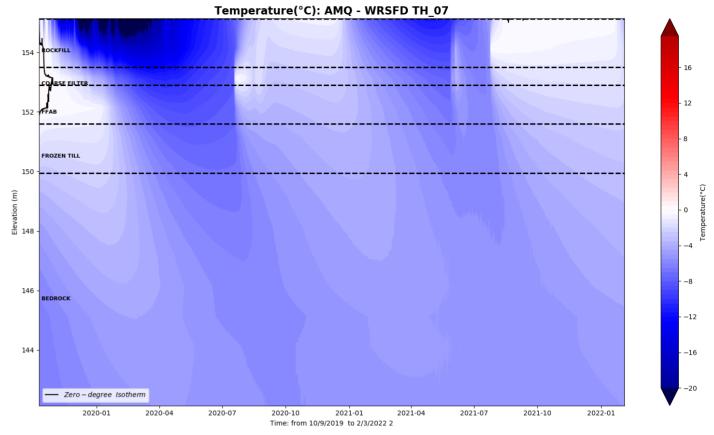


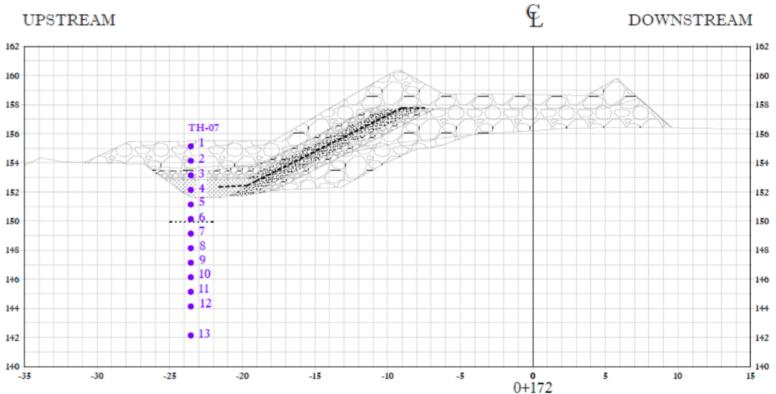


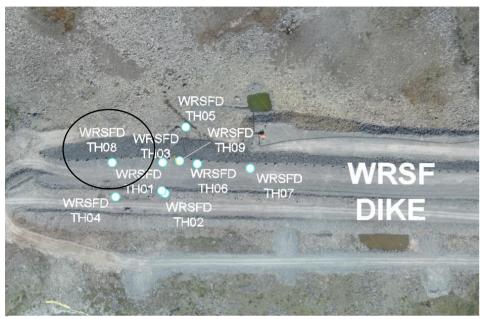


AMQ - WRSFD TH_07

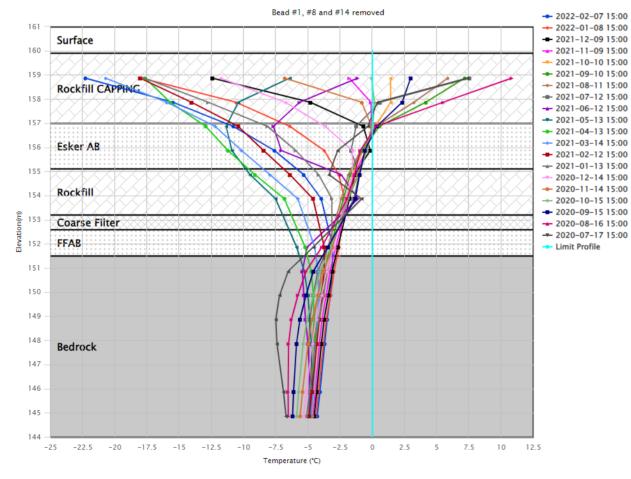


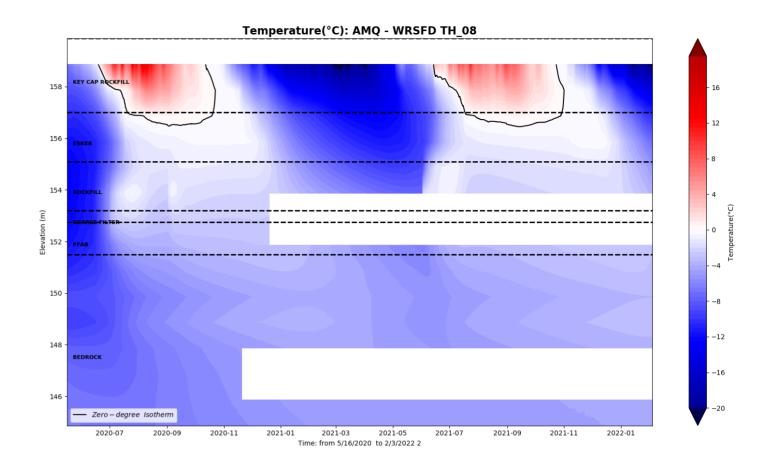


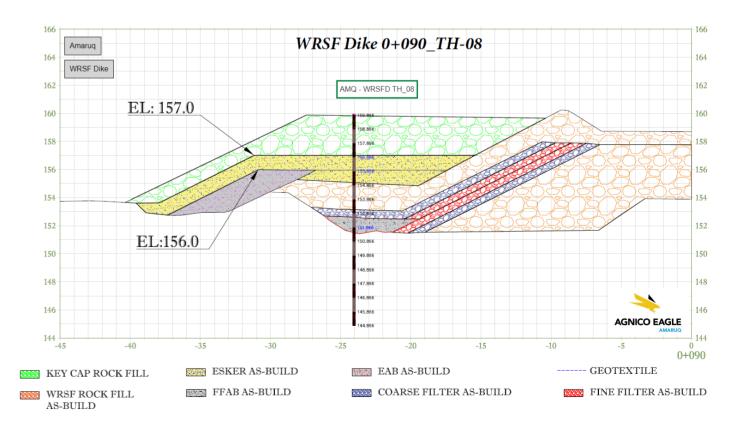


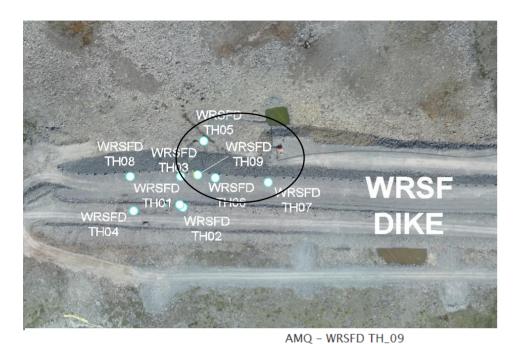


AMQ - WRSFD TH_08

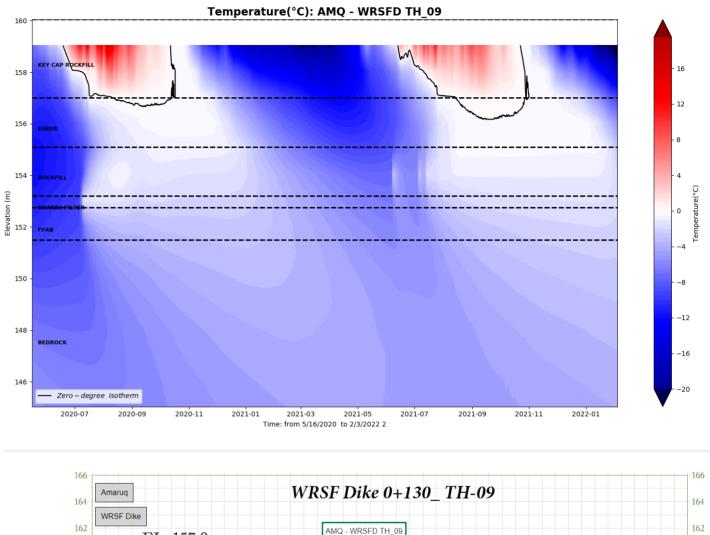


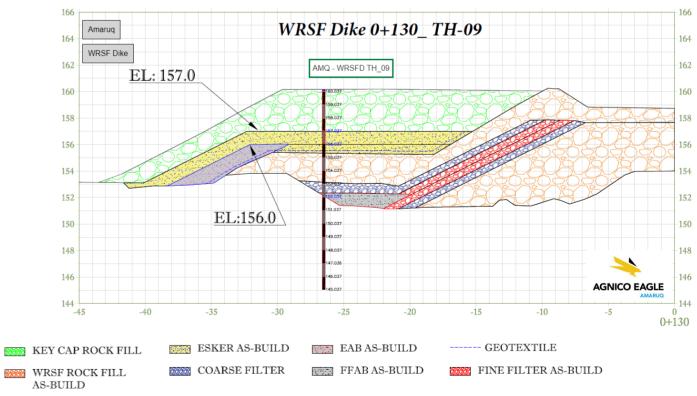






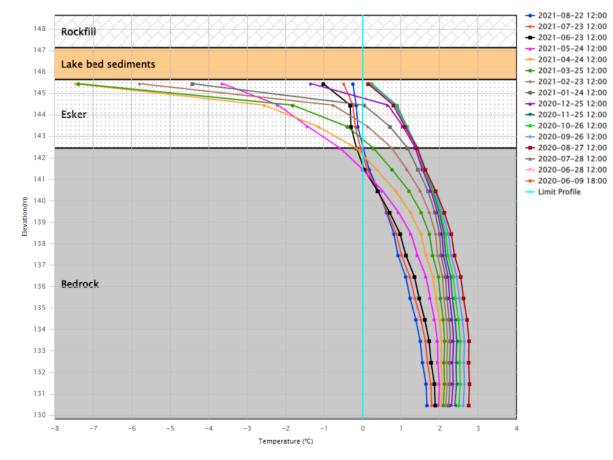
Bead #1 removed - 2022-02-07 15:00 161 + 2022-01-08 15:00 Surface - 2021-12-09 15:00 160 + 2021-11-09 15:00 + 2021-10-10 15:00 - 2021-09-10 15:00 159 Rockfill CAPPING + 2021-08-11 15:00 --- 2021-07-12 15:00 158 + 2021-06-12 15:00 + 2021-05-13 15:00 157 - 2021-04-13 15:00 -- 2021-03-14 15:00 Esker AB 156 - 2021-02-12 15:00 + 2021-01-13 15:00 155 - 2020-12-14 15:00 **-** 2020-11-14 15:00 Rockfill 154 -- 2020-10-15 15:00 - 2020-09-15 15:00 153 + 2020-08-16 15:00 **Coarse Filter** + 2020-07-17 15:00 FFAB 152 - Limit Profile 151 150 149 148 Bedrock 147 146 145 144 -17.5 -15 -12.5 -10 -7.5 -2.5 2.5 7.5 10 -20 -5 0 5 Temperature (°C)

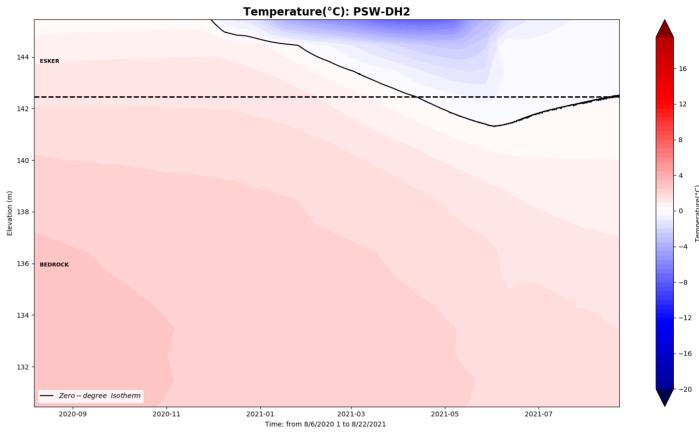






AMQ - PSW - DH02_TH





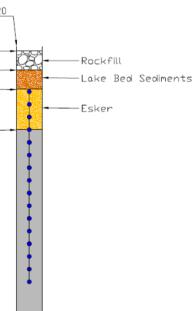
Top Casing 149.020

148.650 <u>147.150</u> 145.650

142.450

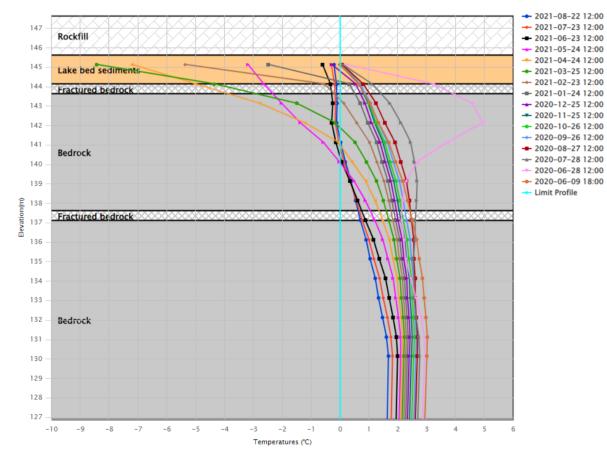
<u>129.845</u>

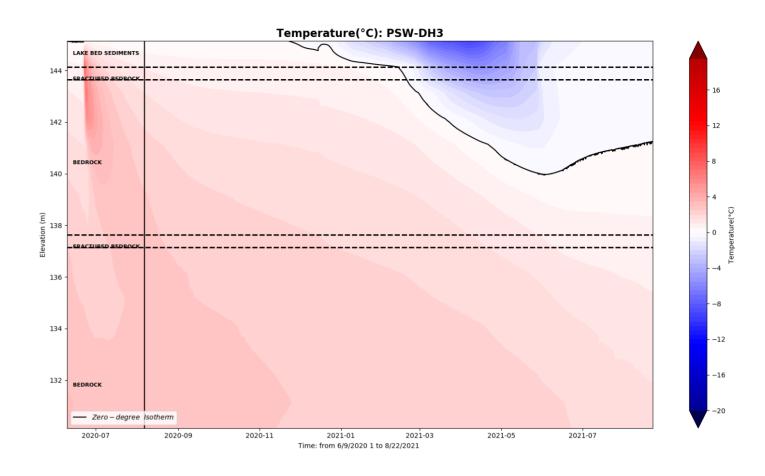
Whale Tail Thermal Monitoring Report 2021 – Appendix A





AMQ - PSW - DH03_TH



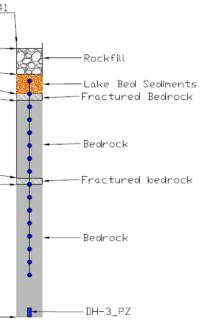


<u>Top Casing 148.041</u>

147.641 <u>145.641</u> 144.141 143.641

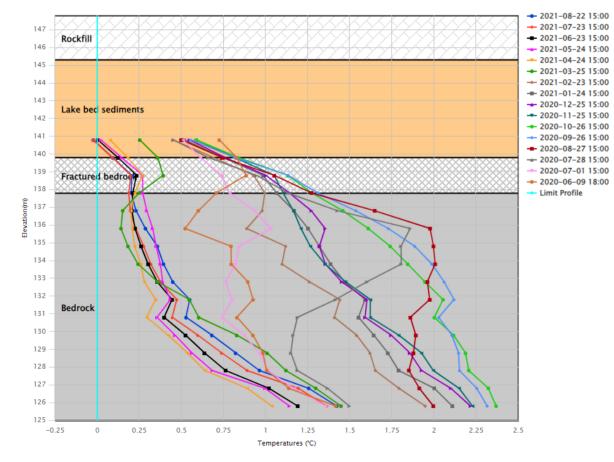
> 137.641 137.141

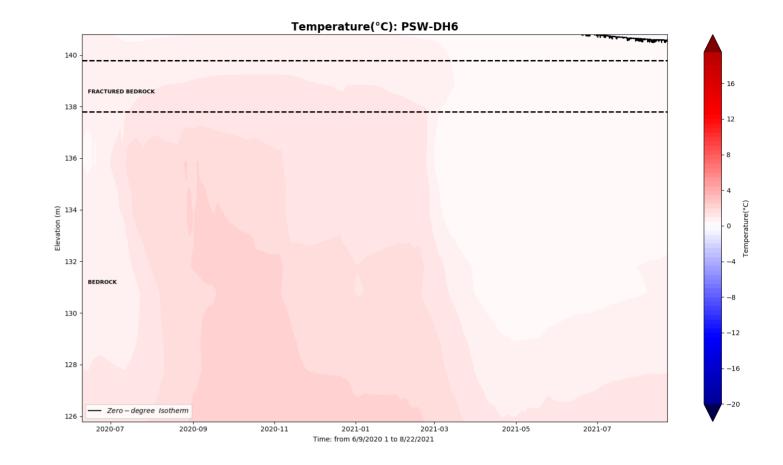
126.891



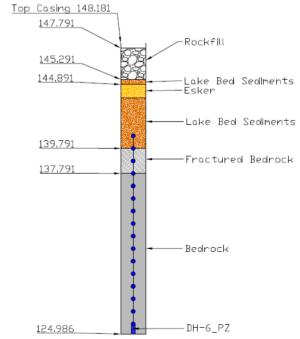


AMQ - PSW - DH06_TH







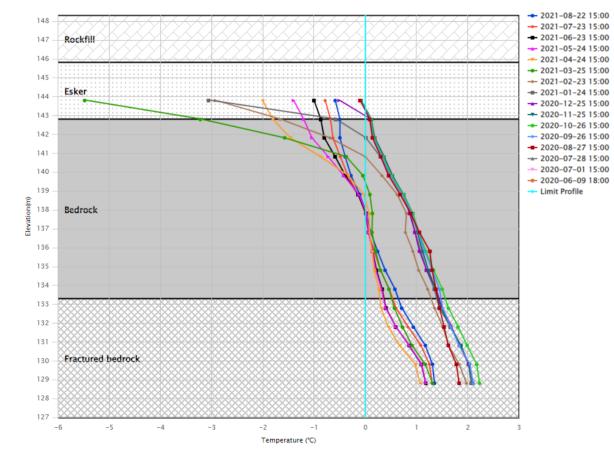


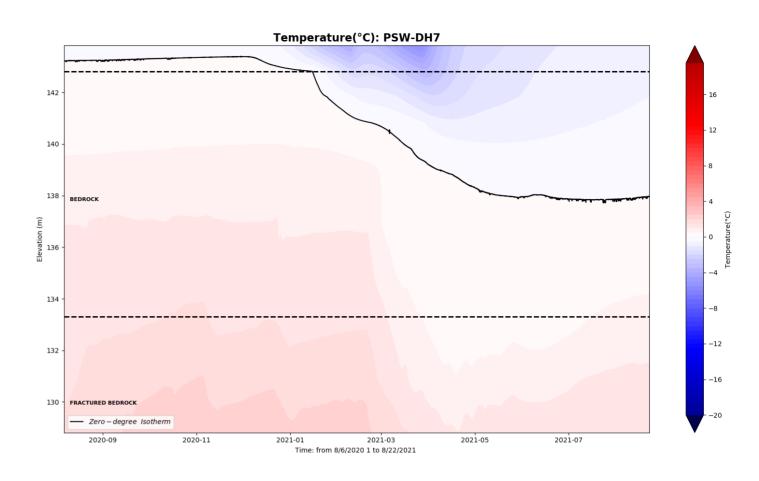
<u>139,791</u>	
<u>137.791</u>	

Whale Tail Thermal Monitoring Report 2021 – Appendix A



AMQ - PSW - DH07_TH





Top Casing 148.734

148.314

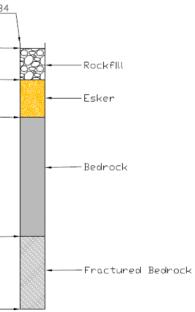
145.814

142,814

<u>133,314</u>

126,994

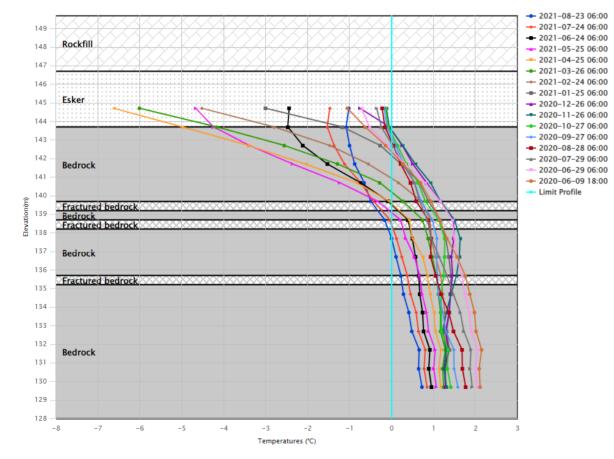
Whale Tail Thermal Monitoring Report 2021 – Appendix A

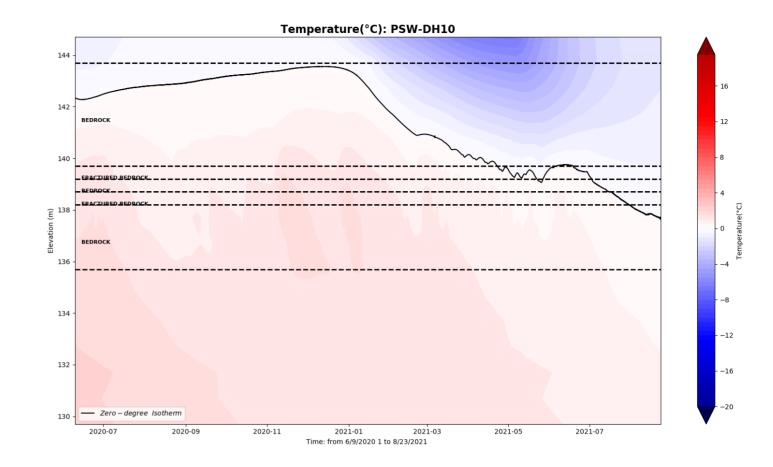


PSW – DH 10 TH



AMQ - PSW - DH10_TH





Top Casing 150,109

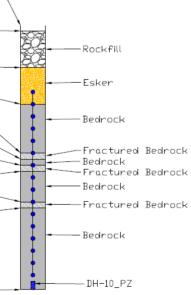
<u>149.699</u> 146.699 143.699 <u>139,699</u>

139,199 138.699

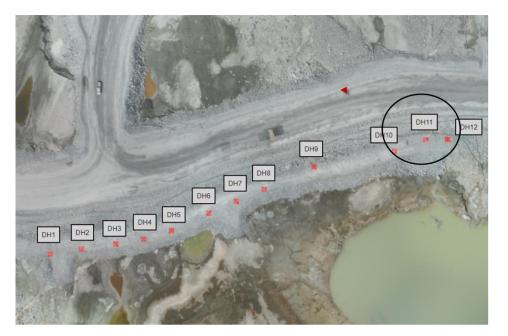
<u>138,199</u> 135.699

135,199

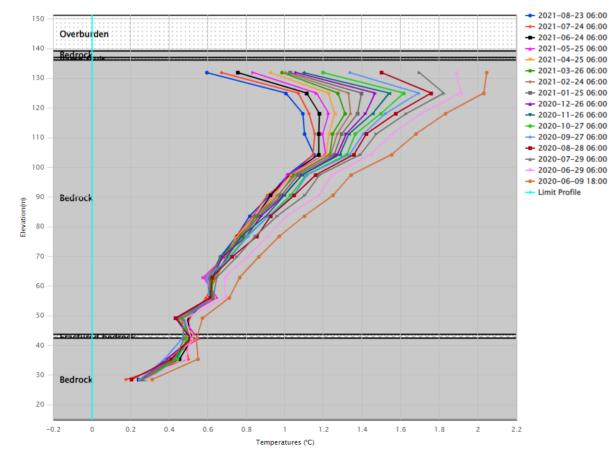
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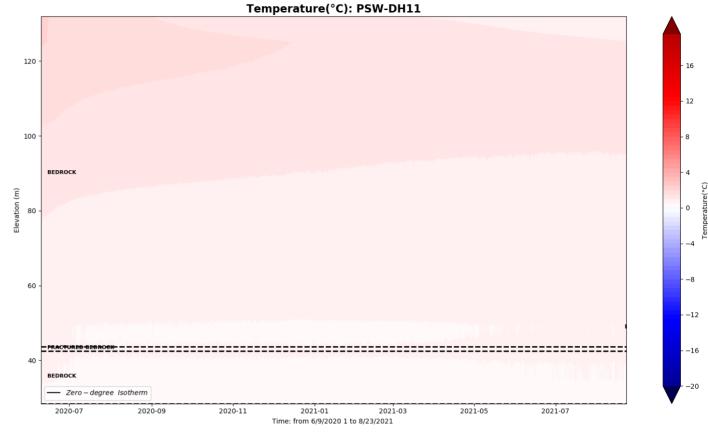


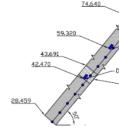
PSW – DH 11 TH



AMQ - PSW - DH11_TH







Whale Tail Thermal Monitoring Report 2021 – Appendix A



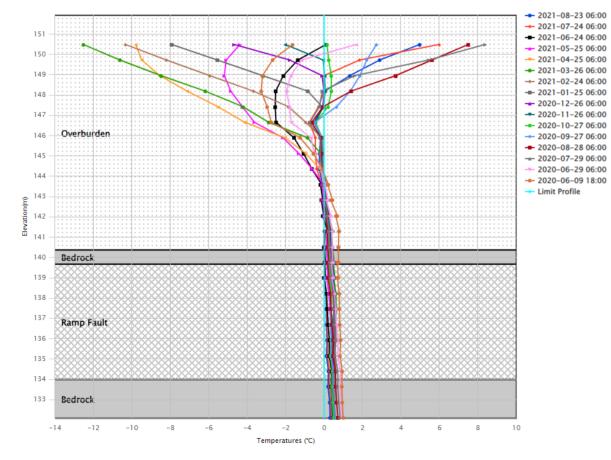
DDH-11 Top Casing 151.241 139.369 136,993 136.691 DH-11-PZI 136,304 ault mistor String

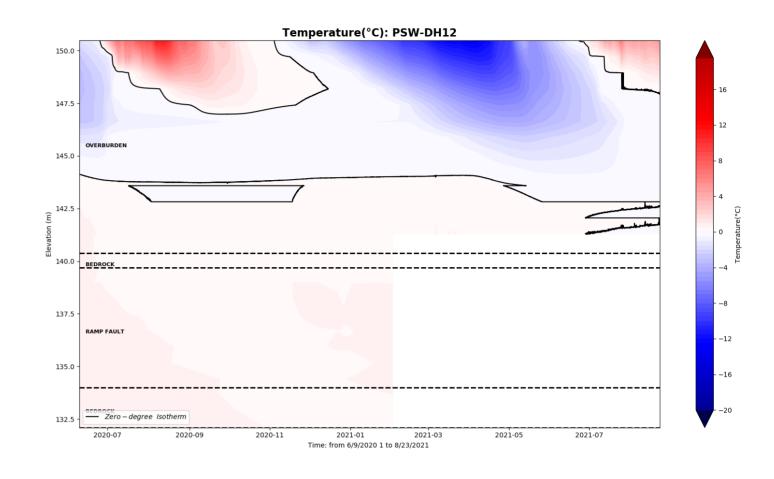
Bedrock - DH-11-PZC-1&2 -DH-11_PZB -DH-11_PZA -Fractured Bedrock

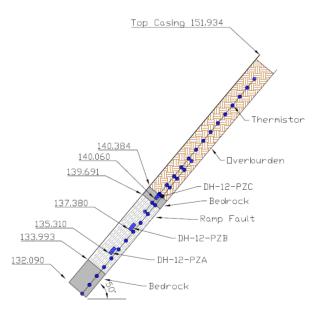
PSW – DH 12 TH



AMQ - PSW - DH12_TH



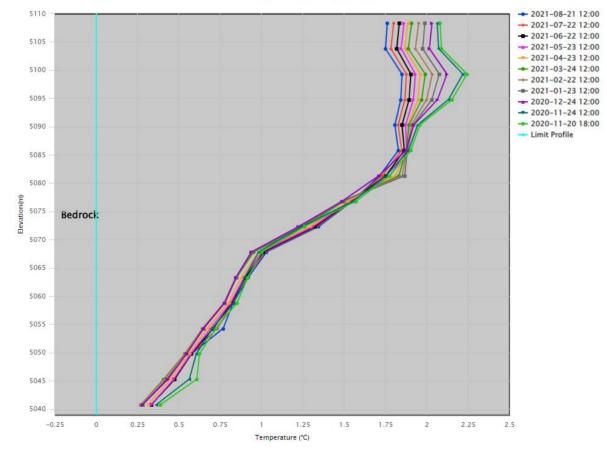


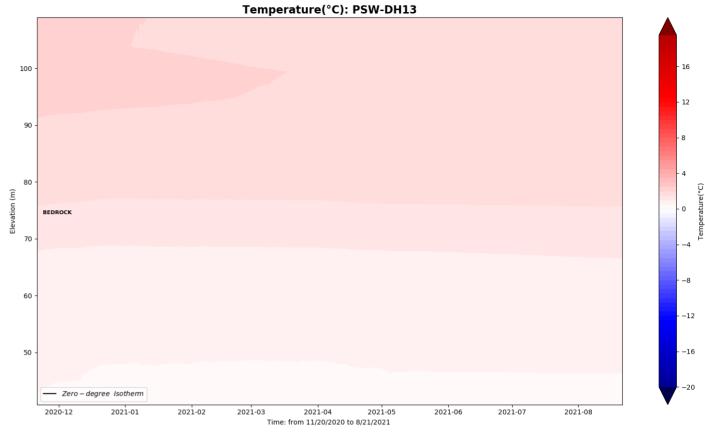


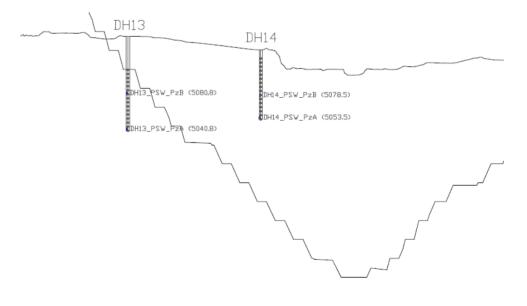
PSW – DH 13 TH



AMQ - PSW - DH13_TH



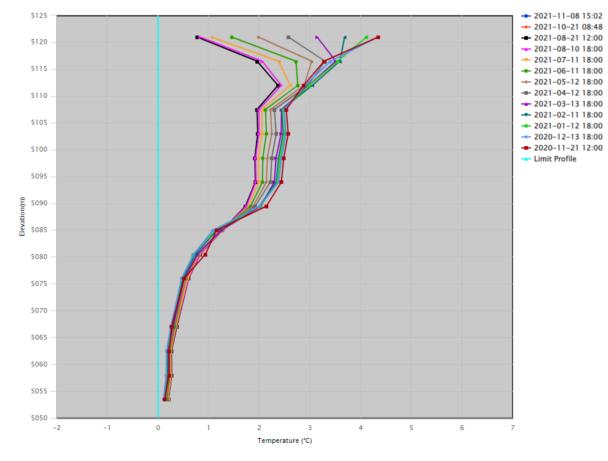


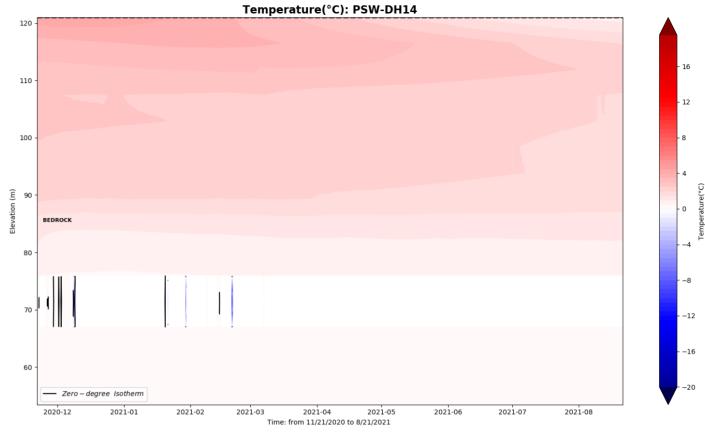


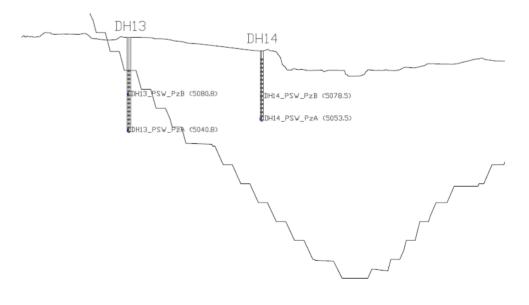




AMQ - PSW - DH14_TH



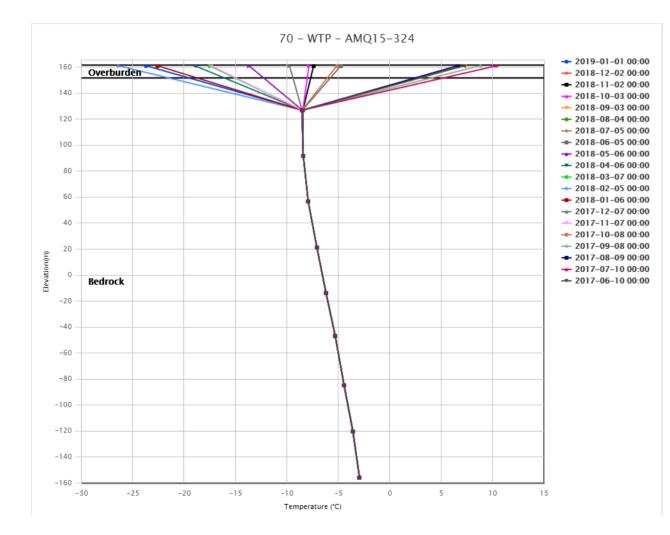


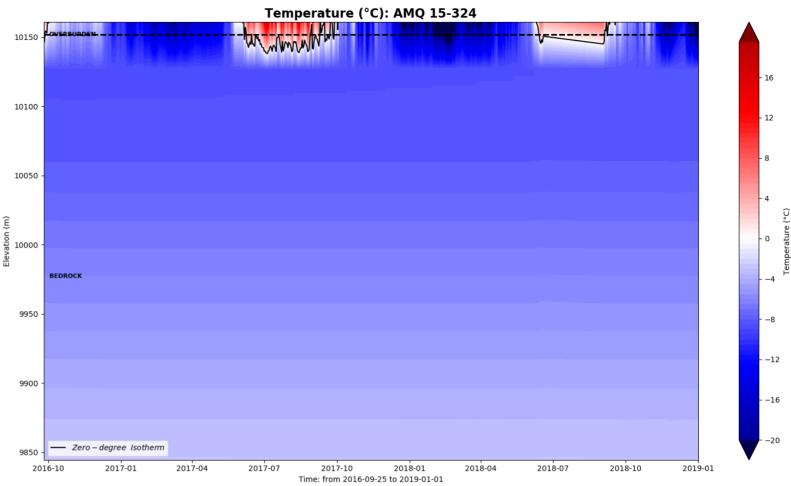




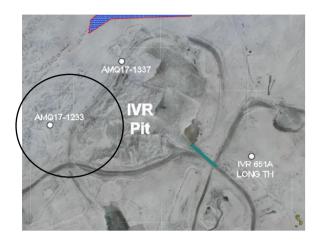
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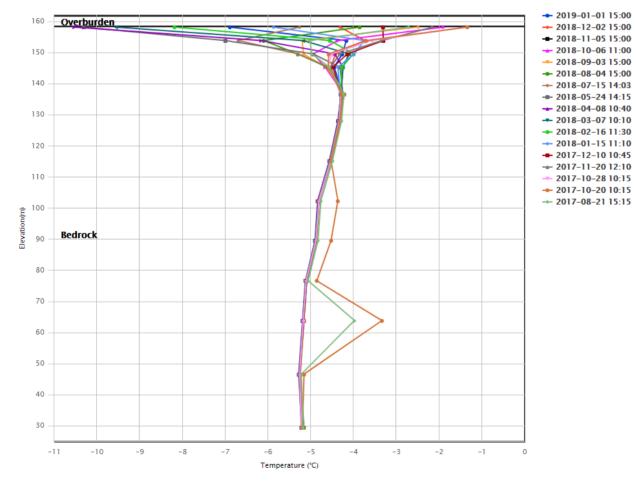


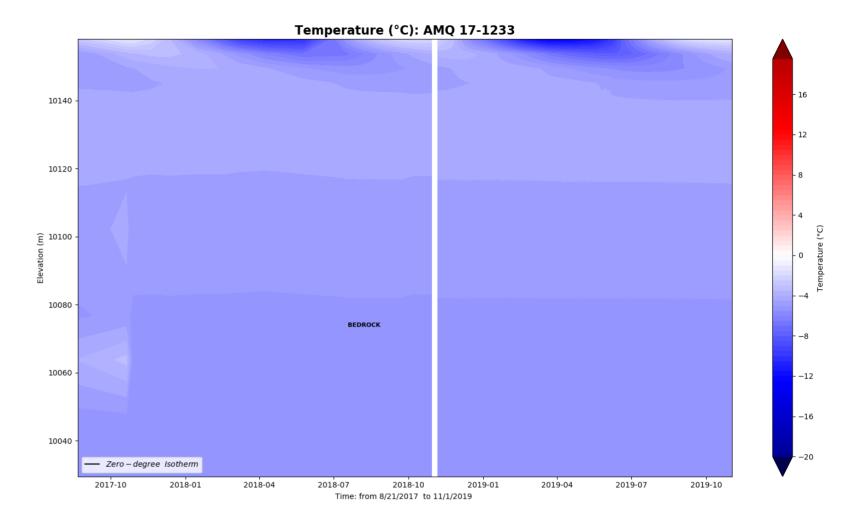


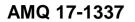
AMQ 17-1233

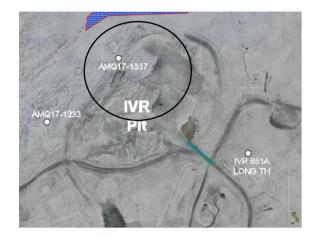


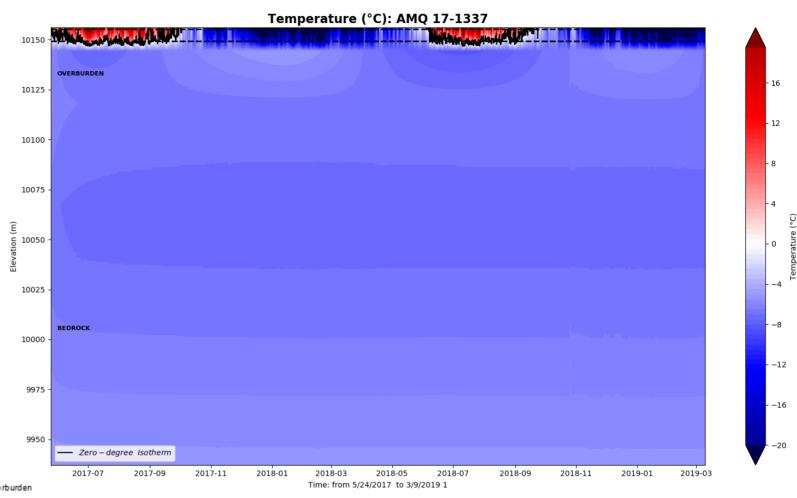
70 - IVR - AMQ17-1233





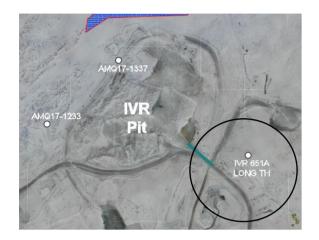


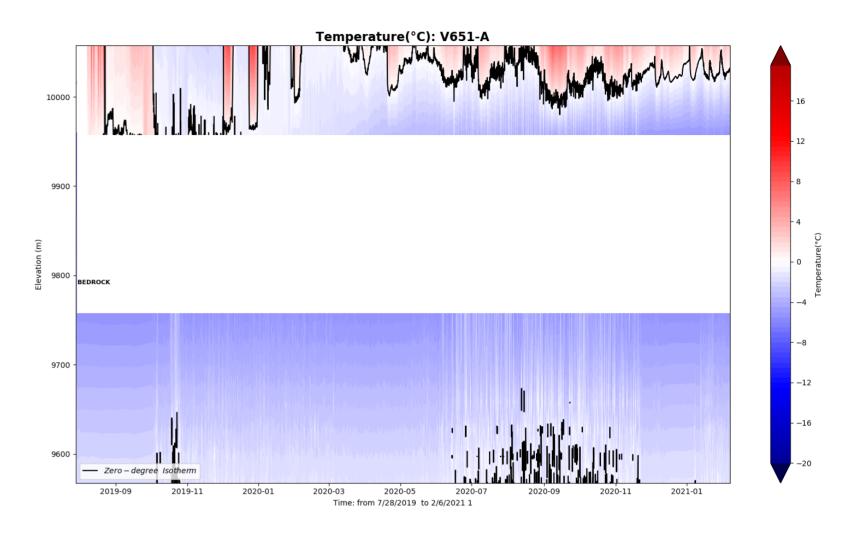


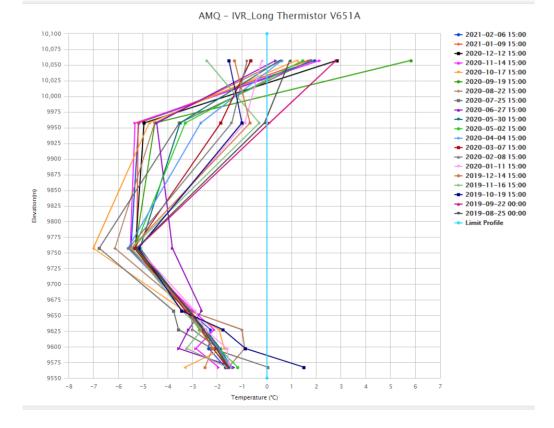


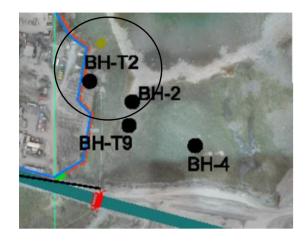
AMQ17-1337_ IVR Pit - Bead Temperature vs. Elevation - 2017 -o°c --- Overburden 10160 --- Bedrock ----10150 _____ 28-May-17 _____ 4-Jun-17 10140 10130 10120 _____ 25-Jun-17 _____ 2-Jul-17 10110 ------ 16-Jul-17 10100 _____ 23-Jul-17 _____ 30-Jul-17 10090 10080 Ξ¹⁰⁰⁷⁰ ------ 20- Aug-17 ------- 25- Aug-17 _____ 19-Oct-17 _____ 20-Nov-17 **b** 10050 тория 10040 Ш 10030 10020 10010 10000 9990 9980 9970 9960 9950 9940 ------ 16-Jan-19 9930 - 30-Jan-19 ------ 14-Feb-19 -25 -20 -15 -10 -5 5 10 15 20 25 -30 0 30 _____1-Mar-19 _____8-Mar-19 Temperature (°C)

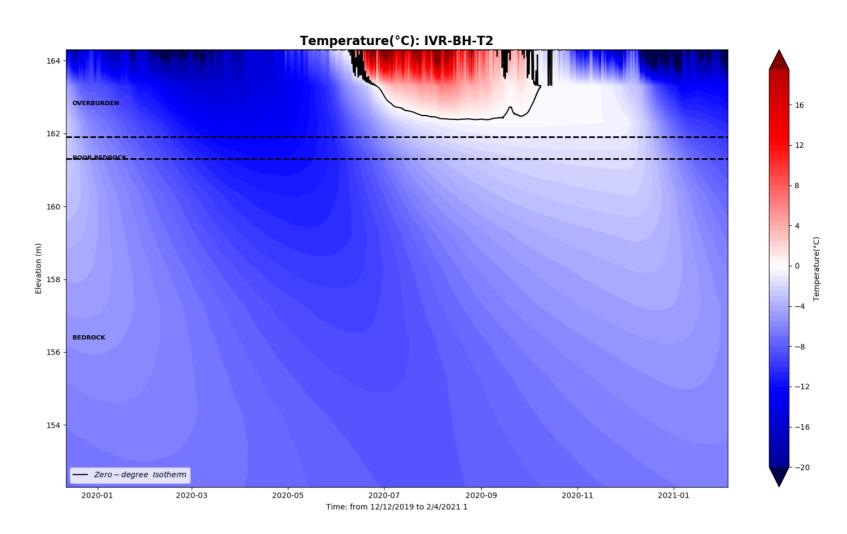
V651A Long TH



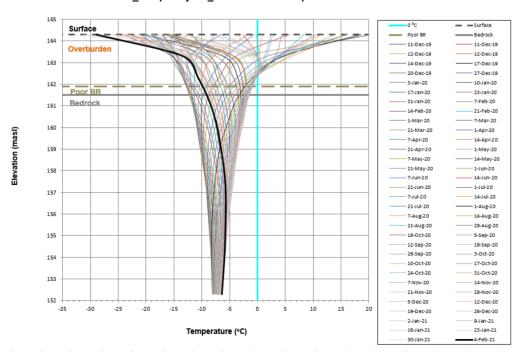


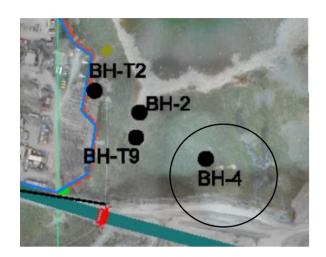


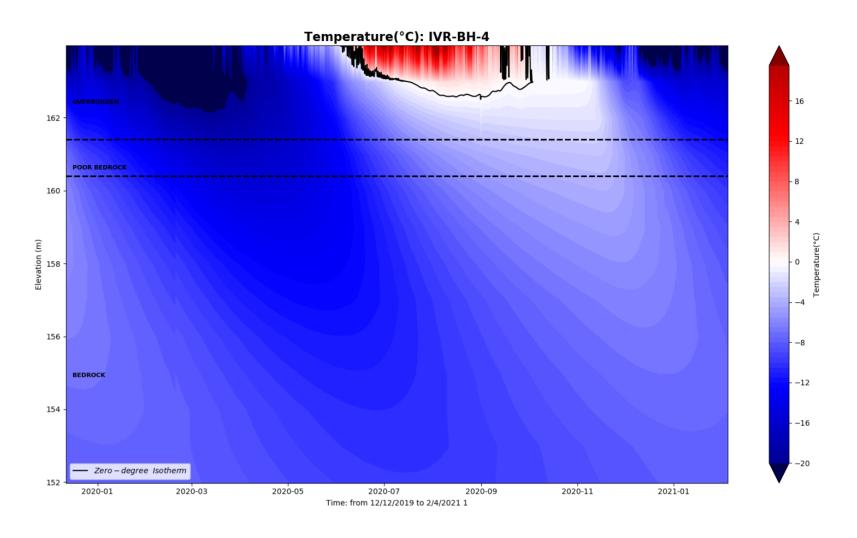


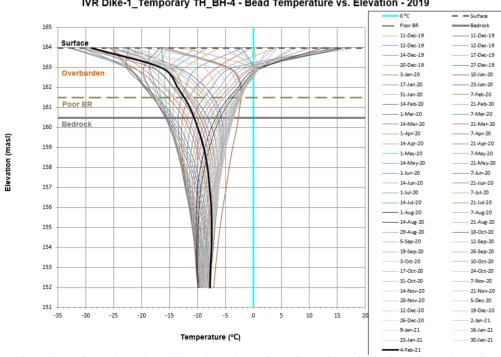


IVR Dike-1_Temporary TH_BH-T2 - Bead Temperature vs. Elevation - 2019



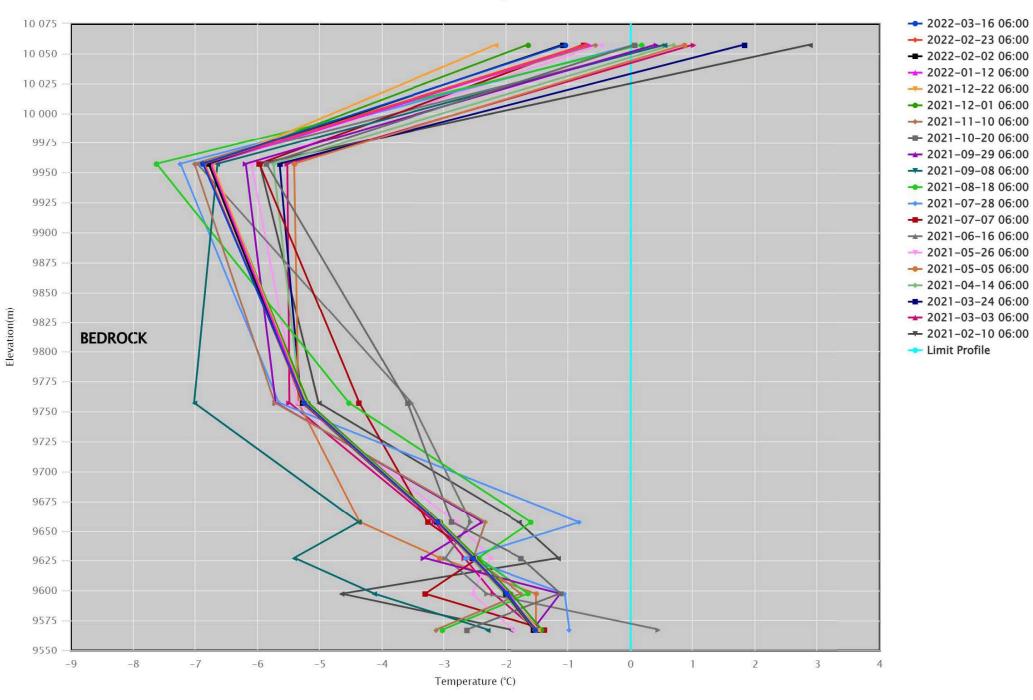






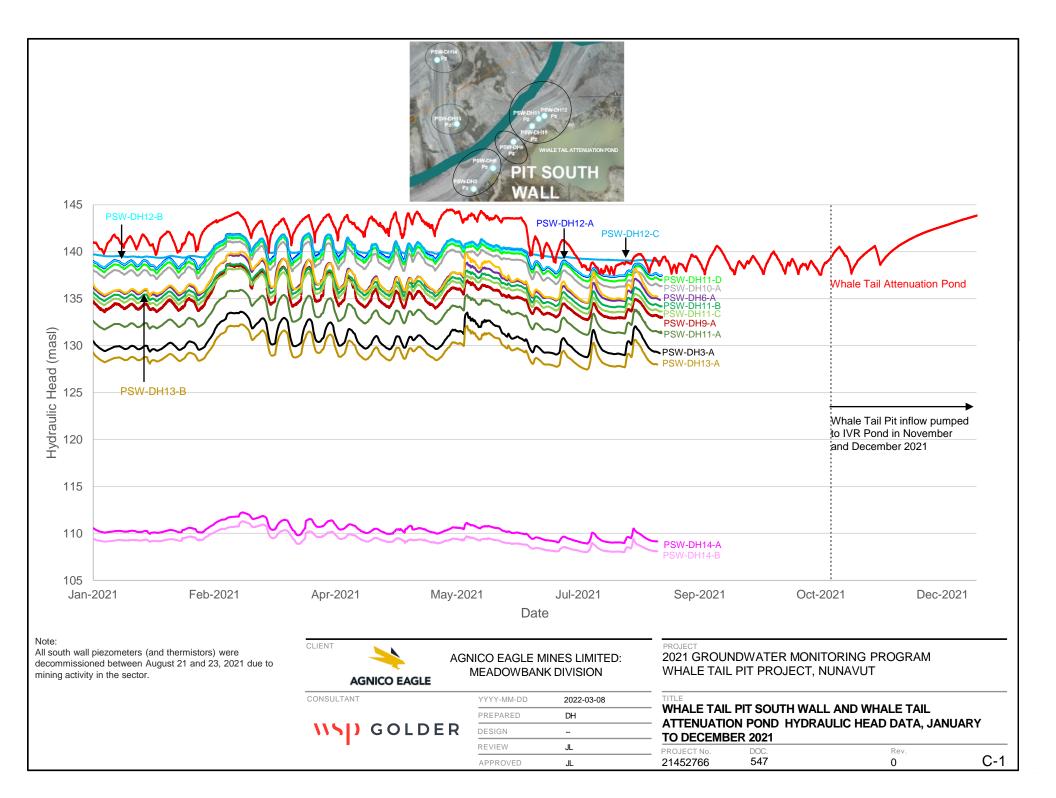
IVR Dike-1_Temporary TH_BH-4 - Bead Temperature vs. Elevation - 2019

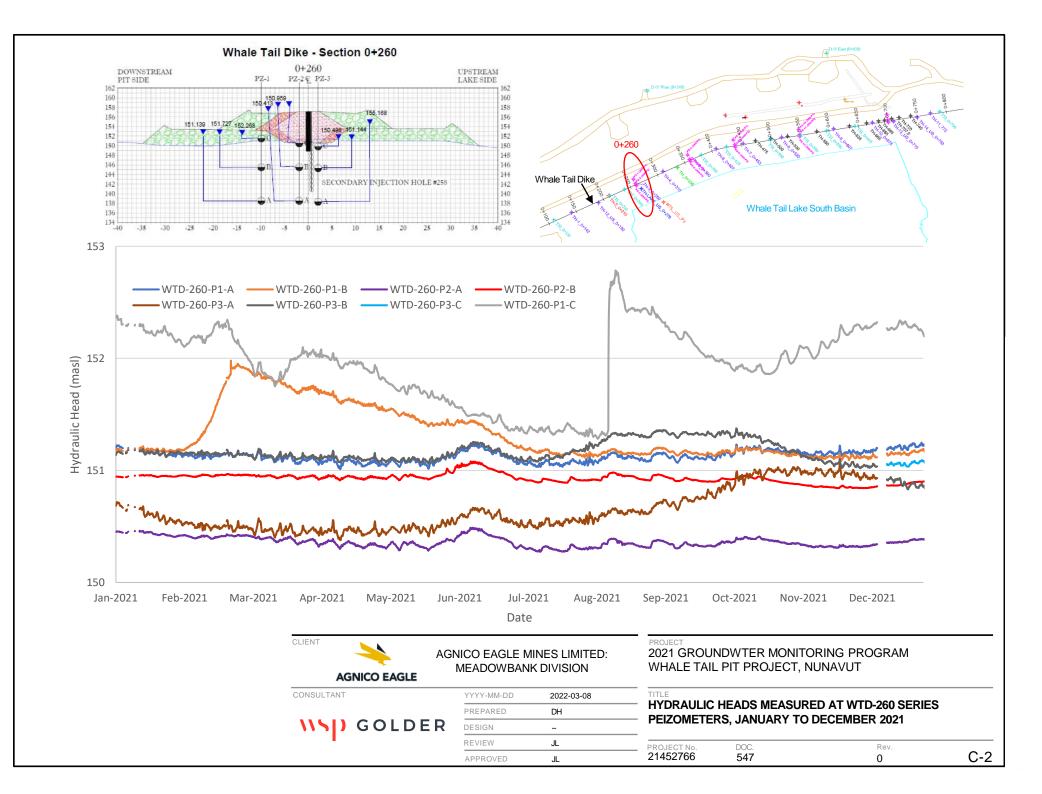
AMQ – IVR_Long Thermistor V651A

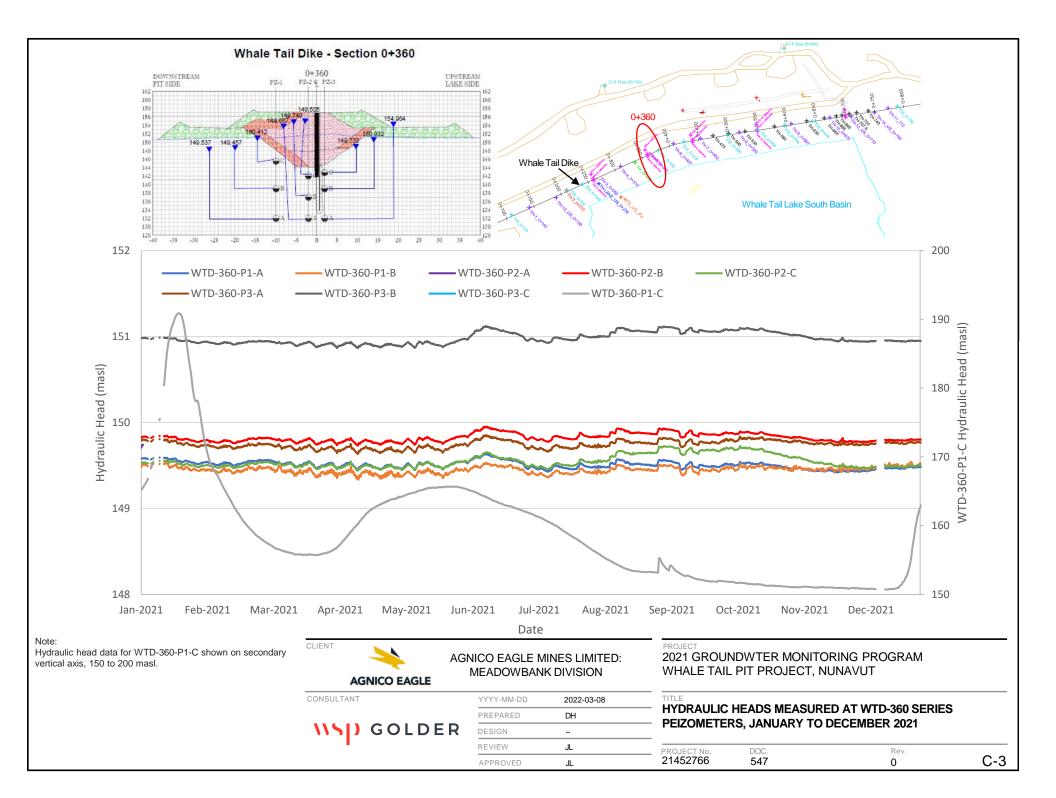


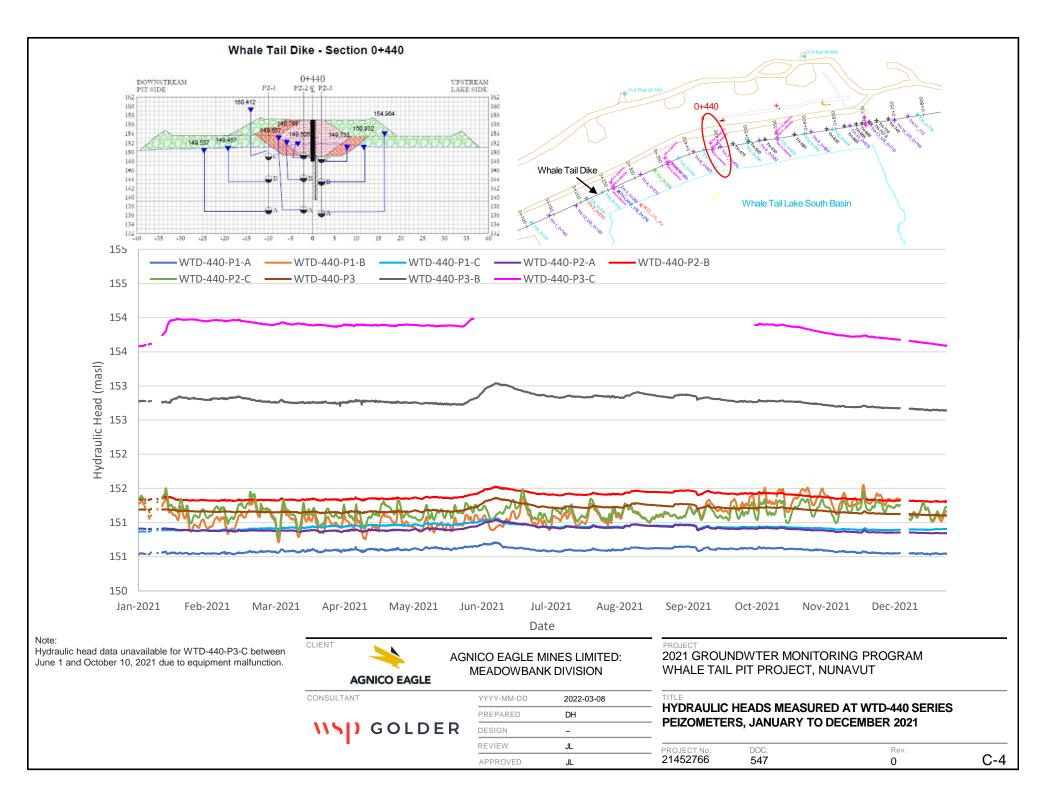
ATTACHMENT C

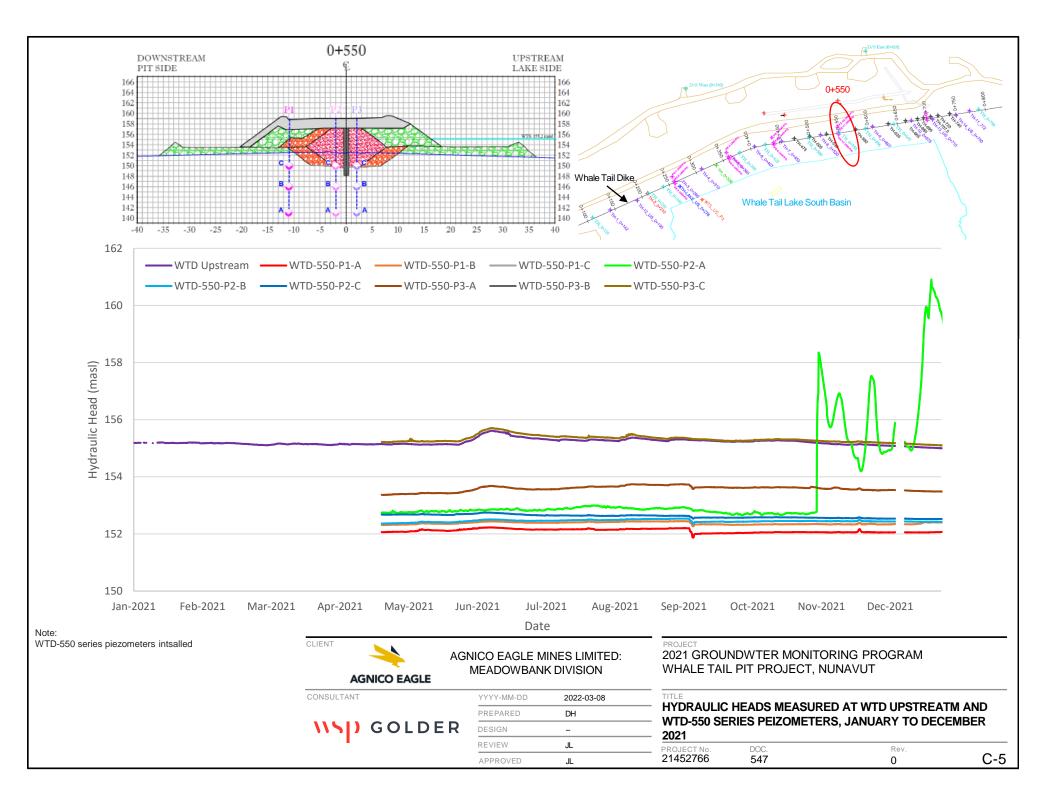
2021 Piezometric Data

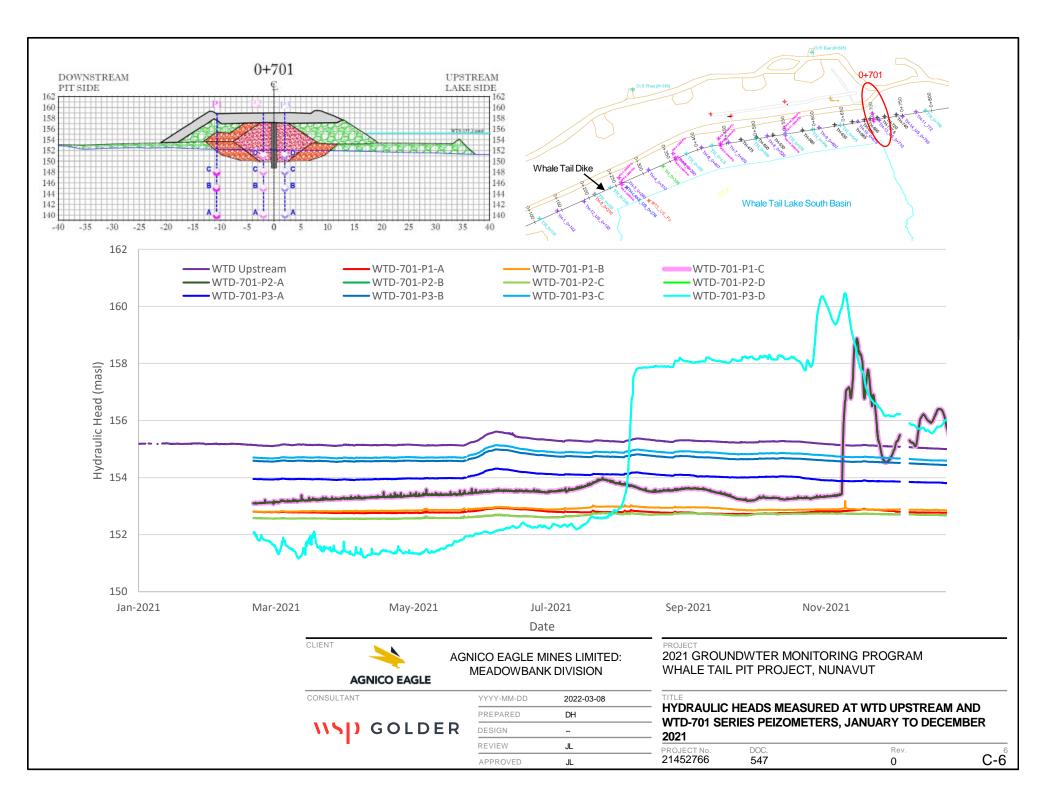












ATTACHMENT D

2021 Seepage Survey Photographs (provided by Agnico Eagle)



Photo 1: Pit seepage along Whale Tail Pit south wall, looking south (January 15, 2021).

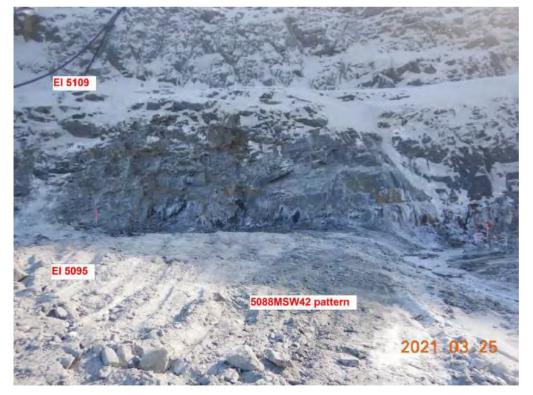


Photo 2: Pit seepage along south wall, looking south (March 25, 2021).

ISOLDER



Photo 3: Pit seepage along south wall, looking south during ST-GW-WT-1 seepage sampling (April 4, 2021).



Photo 4: Pit seepage along south wall, looking southeast (April 26, 2021).



Photo 5: Pit seepage along south wall, looking southeast (April 26, 2021).



Photo 6: Pit seepage along south wall, looking south towards Drill hole-1 and seepage sample location ST-GW-WT-1 (October 22, 2021).

****SI GOLDER



Photo 7: Pit seepage along south wall, looking south towards Drill hole-1 and seepage sample location ST-GW-WT-1 (October 22, 2021).



Photo 8: Pit seepage along south wall, looking southeast towards Drill hole-1 during flow measurement (November 2, 2021).



Photo 9: Pit seepage along south wall, looking northeast of Drill hole-1 and seepage sample location ST-GW-WT-1 (November 2, 2021).

ATTACHMENT E

Supplemental 2021 Water Quality Data

Table E-1: Whale Tail Pit South Wall Seepage Water Quality Whale Tail Pit, Nunavut

Pit Wall Seep Station ID Sample name						ST	-GW-WT-1					ST-GW-WT-2	ST-GW-WT-3	ST-GW-WT-4
		ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1-DUP	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-2	ST-GW-WT-3	ST-GW-WT-4
Sample date		15-02-2021	04-04-2021	09-05-2021	13-06-2021	12-07-2021	12-07-2021	02-08-2021	27-09-2021	11-10-2021	02-11-2021	15-02-2021	15-02-2021	15-02-2021
Sample type		N	N	N	N	N	FD	N	N	N	N	N	N	N
Approximate Elevat	ion (masl)	109	109	109	109	109	109	109	109	109	109	109	109	109
Parameter	Unit	-												
WQ01- Field Measured														
Temperature	۵°	0.3	0	0.2	4.4	4.9	-	8.7	2.3	1.1	0.7	0.3	0.3	0.3
рН	pH units	7.27	7.41	7.32	7.49	7.16	-	7.89	6.62	8.13	7.43	7.58	7.75	7.61
Conductivity	uS/cm	525	288	314	378	351	-	393	344	422	345	303	269	304
Dissolved oxygen	mg/L	13.21	12.04	12.91	8.36	10.57	-	10.75	12.66	12.17	11.31	12.16	11.01	10.37
Dissolved oxygen	%	98.5	100.7	118.6	108.6	106.2	-	104.4	104.4	106.4	95.9	90	81.7	78.9
Turbidity	NTU	8.29	8.97	4.63	4.01	2.97	-	3.26	1.5	9.11	2.1	4.11	3.02	1.11
WQ02- Conventional Parameter	'S			-										
рН	pH units	7.84	7.94	7.87	7.74	7.71	7.7	7.88	7.74	7.54	10	7.94	7.8	7.78
Turbidity	NTU	3.1	2.1	2.7	1.6	1.8	1.6	1.9	1.4	18	16	3.6	3.3	2.9
Specific conductivity	ms/cm	-	-	-	-	0.364	0.364	0.396	0.357	0.423	0.1	-	-	-
Hardness, as CaCO3 (T)	mg/L	129	113	118	140	140	139	151	135	169	139	115	113	111
Carbonate, as CaCO3	mg/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	19	< 1.0	< 1.0	< 1.0
Bicarbonate, as CaCO3	mg/L	58	52	51	57	54	54	59	55	53	18	58	54	51
TDS	mg/L	200	210	230	135	210	220	240	240	230	265	185	180	200
TSS	mg/L	7	11	2	2	2	2	2	2	5	31	6	4	3
Total organic carbon	mg/L	1.8	1.6	3	2.3	1.8	1.8	1.8	1.9	1.6	1.6	1.7	1.7	1.6
Dissolved organic carbon	mg/L	1.6	1.5	2.5	1.5	1.5	1.5	1.5	1.4	1.3	1.4	1.5	1.5	1.4
Total alkalinity, as CaCO3	mg/L	58	52	51	57	55	55	59	55	54	43	59	55	52
WQ03- Major Ions														
Chloride (SM4500-CI-)	mg/L	57	43	43	37	41	41	40	47	37	38	50	45	55
Cyanide	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0066	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Cyanide (free)	mg/L	0.0019	< 0.0010	< 0.0010	0.005	< 0.0010	< 0.0010	0.0016	0.0037	0.0046	0.002	0.0022	0.0022	0.0031
Sulfate (E375.4)	mg/L	24	21	34	48	46	43	56	37	85	47	19	20	17
Silica	mg/L	12	11	11	11	12	12	11	12	11	11	13	13	12
WQ04- Nutrients and Chloroph	yll a			_		_	_							
Ammonia (NH3)	mg/L	0.27	0.4	0.22	0.26	0.27	0.27	0.31	0.26	0.31	0.3	0.27	0.34	0.34
Ammonia Nitrogen	mg/L	0.22	0.33	0.18	0.21	0.23	0.23	0.26	0.21	0.26	0.24	0.22	0.28	0.28
Nitrate	mg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Nitrite	mg/L	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
Nitrate + nitrite	mg/L	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Kjeldahl nitrogen	mg/L	0.26	0.43	0.35	0.27	0.38	0.34	0.37	0.29	0.55	0.34	0.3	0.3	0.27
Total phosphorus	mg/L	0.015	0.012	0.016	0.013	0.018	0.02	0.012	0.0057	0.011	0.039	0.02	0.021	0.025
Orthophosphate (P)	mg/L	< 0.010	0.015	0.015	< 0.010	0.011	< 0.010	< 0.010	< 0.010	< 0.010	0.011	0.016	0.014	0.022
WQ06- Total Metals					0.0100	0.0007		0.0070		0.0000		0.404	0.057	0.0100
Aluminum	mg/L	0.221	0.37	0.0181	0.0138	0.0327	0.0331	0.0078	0.0088	0.0808	0.223	0.104	0.257	0.0126
Antimony	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	mg/L	0.0422	0.036	0.038	0.0185	0.0197	0.0198	0.0168	0.0284	0.0315	0.0562	0.0618	0.0575	0.0516
Barium	mg/L	0.0734	0.0772	0.0739	0.0952	0.0873	0.0892	0.108	0.082	0.114	0.0946	0.0657	0.0703	0.0678
Beryllium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	mg/L	< 0.000010 39.1	< 0.000010	< 0.000010 35.6	< 0.000010 42.9	0.000026	0.000036	< 0.000010 46.9	< 0.000010 41.1	0.000019 51.8	< 0.000010 42	< 0.000010 34.4	< 0.000010 33.9	< 0.000010 33.7
Calcium Chromium	mg/L	0.0054	33.6 0.0093	35.6 < 0.0010	42.9 < 0.0010	42.9 < 0.0010	42.7 < 0.0010	46.9 < 0.0010	41.1	0.0011	42	0.0021	0.005	< 0.0010
	mg/L	0.0054	< 0.00050	< 0.0010	< 0.0010	0.00495	0.00551	< 0.0010	< 0.0010	0.0011	< 0.00050	0.0021	0.00096	< 0.0010
Copper Iron	mg/L	0.848	0.696	0.836	< 0.00050	0.00495	0.00551	0.862	0.59	2.62	2.5	0.902	1.08	0.645
Lead	mg/L	0.848	0.00042	< 0.00020	< 0.00020	0.00166	0.862	< 0.00020	< 0.00020	< 0.00020	< 0.00020	0.902	0.00075	< 0.00020
Lithium	mg/L	0.00095	0.00042	0.0049	0.0066	0.00166	0.00192	0.00020	0.00020	0.0083	0.0057	0.00058	0.00075	0.00020
Magnesium	mg/L mg/L	7.66	7.16	6.98	8.05	7.97	7.89	8.27	7.93	9.7	8.19	7.06	6.87	6.52
Manganese	mg/L mg/L	0.236	0.203	0.98	0.316	0.319	0.321	0.27	0.31	0.488	0.356	0.243	0.244	0.198
Manganese		< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
INICICUI Y	mg/L	< 0.00001	< 0.00001	< 0.0000 I	< 0.0000 I		< 0.00001	< 0.0000 I				< 0.0000 I	< 0.0000 I	▼ 0.0000 I

Table E-1: Whale Tail Pit South Wall Seepage Water Quality Whale Tail Pit, Nunavut

Pit Wall Seep Station ID						ST	-GW-WT-1					ST-GW-WT-2	ST-GW-WT-3	ST-GW-WT-4
Sample name		ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1-DUP	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-1	ST-GW-WT-2	ST-GW-WT-3	ST-GW-WT-4
Sample date		15-02-2021	04-04-2021	09-05-2021	13-06-2021	12-07-2021	12-07-2021	02-08-2021	27-09-2021	11-10-2021	02-11-2021	15-02-2021	15-02-2021	15-02-2021
Sample type		N	N	N	N	N	FD	N	N	N	N	N	N	N
Approximate Elevation (masl)		109	109	109	109	109	109	109	109	109	109	109	109	109
Parameter	Unit	-												
Molybdenum	mg/L	0.0089	0.007	0.0071	0.0044	0.0034	0.0034	0.003	0.0042	0.0038	0.0055	0.0077	0.0087	0.0065
Nickel	mg/L	0.0043	0.0035	< 0.0010	< 0.0010	0.0055	0.006	< 0.0010	< 0.0010	0.0087	0.0027	0.0011	0.0021	< 0.0010
Potassium	mg/L	3.09	2.86	2.39	2.69	2.73	2.71	2.97	2.85	3.43	2.84	2.53	2.54	2.17
Selenium	mg/L	0.00011	< 0.00010	< 0.00010	0.00011	0.00041	0.00042	< 0.00010	< 0.00010	0.00012	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	mg/L	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Sodium	mg/L	8.45	7.3	7.04	6.74	7.03	7.08	6.97	7.92	6.9	7	7.82	7.49	7.6
Strontium	mg/L	0.18	0.178	0.177	0.21	0.196	0.195	0.22	0.191	0.245	0.189	0.168	0.167	0.179
Thallium	mg/L	< 0.000010	0.000013	-	< 0.000010	< 0.000010	0.00001	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium	mg/L	0.0147	0.0286	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	0.0179	0.006	0.0131	< 0.0050
Uranium	mg/L	0.00086	0.00024	0.00012	< 0.00010	0.00074	0.00081	0.00014	< 0.00010	0.00097	0.00022	0.00023	0.00042	< 0.00010
Vanadium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
WQ07- Dissolved Metals														
Aluminum	mg/L	0.0032	0.004	< 0.0030	0.0072	0.0079	0.0106	< 0.0030	< 0.0030	0.0047	< 0.0030	< 0.0030	< 0.0030	< 0.0030
Antimony	mg/L	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050	< 0.00050
Arsenic	mg/L	0.0307	0.0339	0.0398	0.0169	0.016	0.016	0.0108	0.0255	0.0214	0.0469	0.0598	0.0548	0.0513
Barium	mg/L	0.0725	0.0714	0.0771	0.0966	0.0861	0.0869	0.106	0.0857	0.112	0.0908	0.0658	0.0675	0.0689
Beryllium	mg/L	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Boron	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Cadmium	mg/L	0.000013	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Chromium	mg/L	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Copper	mg/L	0.00028	< 0.00020	0.00052	0.0002	< 0.00020	< 0.00020	0.00051	< 0.00020	0.00021	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Iron	mg/L	0.127	0.0729	0.756	0.718	0.304	0.3	0.0064	0.329	1.39	1.54	0.641	0.504	0.602
Lead	mg/L	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Lithium	mg/L	0.0054	0.0046	0.0055	0.0066	0.007	0.0069	0.0063	0.0052	0.0085	0.0053	0.0046	0.0045	0.0047
Manganese	mg/L	0.243	0.197	0.244	0.321	0.328	0.328	0.365	0.326	0.493	0.347	0.243	0.236	0.201
Mercury	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Molybdenum	mg/L	0.0101	0.007	0.0075	0.0045	0.0033	0.0033	0.0029	0.0042	0.0036	0.0054	0.0086	0.0092	0.0069
Nickel	mg/L	0.0027	0.0014	< 0.0010	< 0.0010	0.0055	0.0057	0.001	< 0.0010	0.0086	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Selenium	mg/L	< 0.00010	< 0.00010	< 0.00010	0.00013	0.00035	0.00037	< 0.00010	< 0.00010	0.00014	< 0.00010	< 0.00010	< 0.00010	< 0.00010
Silver	mg/L	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020	< 0.000020
Strontium	mg/L	0.187	0.177	0.192	0.208	0.2	0.199	0.222	0.219	0.251	0.193	0.175	0.167	0.182
Thallium	mg/L	< 0.000010	< 0.000010	-	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010	< 0.000010
Tin	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Titanium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Uranium	mg/L	0.00066	0.00017	0.00011	< 0.00010	0.00068	0.00066	0.00015	< 0.00010	0.00084	0.00017	< 0.00010	0.00014	< 0.00010
Vanadium	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Zinc	mg/L	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
QA/QC														
Calculated TDS	mg/L	189	160	174	194	196	193	211	192	240	185	172.768	165.358	168.482
Lab Measured TDS	mg/L	200	210	230	135	210	220	240	240	230	265	185	180	200
TDS (Lab vs Calc)	not analyzed	95%	76%	75%	143%	93%	88%	88%	80%	104%	70%	93%	92%	84%

Note: - denotes parameter was not analyzed

