APPENDIX E.14

RESPONSE TO 2020 ANNUAL REPORT COMMENTS

Appendix E:14: Baffinland Response to Comments on the 2020 QIA & NWB Annual Report for Operations – March 31, 2022

No.	Intervener Cmt. No.	Intervener Recommendation / Concern	Baffinland Response	Due Dates Assigned by NWB[1]
QIA Comments				
1	1	Provide an explanation as to why the Milne Port Fuel Module Construction Summary Report is not available.	Baffinland provided an as built survey drawing related to the Milne Port Fuel Module in Appendix C.1.3 of the 2020 NWB QIA Annual Report for Operations. Baffinland continues to review records from the 2015 construction season and has provided photographs in Attachment 3 of construction activities in 2015. Baffinland has also reviewed Construction Summary Report requirements with all staff responsible for construction activities and sufficient information is collected throughout the construction period to meet reporting requirements under the Commercial Lease and Water Licence.	December 13, 2021 submittal
2	4	QIA requests the following information be provided: Confirmation if Baffinland will still proceed with the multi-bench mining system if Phase 2 is not approved. Confirmation if QIA will be notified when works at the Waste Rock Storage Facility are completed. Confirmation that an amended Quarry Management Plan for QMR2 will be provided.	1. To clarify, the phase 2 pit reference is a section in the ultimate pit limit and not related to the Phase 2 expansion Project. This is the current mining strategy and will continue under a Phase 2 scenario regardless. Mining active benches at the same time as approved by the Chief Mines Inspector on May 18, 2021. 2. Baffinland submitted all requested documents by the Mines Inspector in November 2021 and received an order completion form. Waste rock deposition at this facility is ongoing. 3. The QMR2 Quarry Management Plan was submitted to the WSCC in November 2021 and with the NWB QIA Annual Report for Operations. Note QMR2 was inactive in 2021.	March 31, 2022 (2021 Annual Report submission)
3	5	QIA requests elaboration as to when the Long-Term Water Management Plan will be developed, noting the Interim Water Management Plan is limited to the next five years of mining operations.	The water management infrastructure proposed under Modification No.13 and associated design criteria are for life of mine. The development of the conceptual water management infrastructure in the LTWMP was carried out over the selected planning timeline which was five years and included infrastructure under the Phase 2 proposal. If additional water management infrastructure is required in the future Baffinland would obtain the necessary approvals.	December 13, 2021 submittal
4	6	QIA seeks to better understand what footprint Baffinland believes would represent pit conditions. It is requested that Baffinland delineate or provide indicators that would define active dewatering compared to pumping of localized ponding. In addition, it is requested that discussions on how security can be allocated for the observed status of the pit be held.	Baffinland is currently working with QIA to further discuss the Deposit 1, and management of localized ponding water. Discussions on how security can be allocated for the observed status of the hill top outcrop are currently being addressed through several workshops between BIM and QIA taking place between Q1-Q2 2022.	March 31, 2022 (2021 Annual Report submission)
CIRNAC Comments				

[1] 1 NWB (2021) Re: Licence No: 2AM-MRY1325 Type “A”; Mary River Project, Baffinland Iron Mines Corporation; 2020 Annual Report Review. Letter dated October 19, 2021.

No.	Intervener Cmt. No.	Intervener Recommendation / Concern	Baffinland Response	Due Dates Assigned by NWB[1]
3	R-01	Develop and implement a system to respect authorized water withdrawal volumes at each water source.	As identified in Table 4.3, total daily water volume withdrawal limits for dust suppression purposes were exceeded two (2) times at approved Project water sources in 2021, including; one (1) exceedance at Muriel Lake, and one (1) exceedance at KM 32 Lake. This is a significant improvement over 2020 when thirty-one (31) exceedances of the daily water volume for dust suppression use exceeded the dust suppression daily withdrawal limits, and is attributed to improved controls for tracking daily water use at the individual water sources with respect to the daily limits. Both of the exceedances which occurred in 2021 resulted from a water use accounting issue which occurred because the water use limits are daily limits and do not correspond with operator work shifts which occur over two (2) partial days. Corrective actions that Baffinland has taken to improve tracking of water use for dust suppression include installing signs at dust suppression water sources that indicate the daily water use limits in numbers of truckloads per day, implementing an improved water truck operator log that indicates when the maximum daily volume of water has been collected from each source based on the number of water truck loads filled, and installing waterproof storage systems at each water source to house daily water use logs; enabling the use of a common log sheet for all operators. Baffinland is committed to continue to improving controls for tracking source specific daily water withdrawal limits as necessary and maintaining effective record keeping practices for the approved dust suppression water sources.	March 31, 2022 (2021 Annual Report submission)
4	R-02	Investigate why acid drainage formation occurred at locations where only non-potentially acid generating (Non-PAG) waste rock would be placed (including examination of markers of active dissolution of acidic soluble sulphates and oxidation of iron sulphides at surveillance network program (SNP) station MS-08 and sampling locations within diversion ditches), take corrective and/or mitigation measures if necessary, and provide a summary of the investigation.	BH2 intersects both NAG and PAG waste. This was confirmed by Baffinland geologists during the drilling of this borehole in Q4-2018. Notably, the brief temperature increases observed within BH2 in July 2019 occurred in locations that were greater than 4 m from the edge of the waste rock dump. Furthermore, as noted by Golder, the temperature patterns in BH2 changed in 2020 after about 6 m of rock was deposited on top of BH2, where there were no events of rapid temperature increase and all thermistor beads showed rockfill frozen below -2.5 deg C. This confirms that the waste rock management plan is being executed and the design objective of maintaining the pile in frozen conditions is being met. Sampling of BH1 cuttings during drilling in Q4-2018 indicated this material was NAG waste. Notably, as testing was completed in 2018, this NAG assessment was made using BIM's old material type classification scheme, which relied solely on total sulphur. To further validate the presence of NAG in this area, Baffinland will execute a focused grab-sampling program in the vicinity of BH1 in the summer of 2022, when there is access to this site. Samples will be tested for both total sulphur and paste pH. Regarding the temperature data from BH1, continued collection of thermistor data is planned for 2022 and required in order to validate and understand the patterns identified thus far.	March 31, 2022 (2021 Annual Report submission)
5	R-03	Implement the Groundwater Monitoring Program recommendations, or propose alternative actions to better characterize the impact the landfill has on surrounding groundwater and groundwater conditions at the four additional areas identified as potentially impacted.	Baffinland continued to conduct groundwater monitoring at the Project in 2021. Groundwater consultants, specialized in Arctic environments, were retained to further assess the current program and provide recommendations. The consultants completed a desktop review of available groundwater monitoring data, as well as available data regarding lithology and hydrogeology in the area of the Mary River Project, to identify any trends in groundwater quality, groundwater flow, and any discernible information about the condition of subsurface and stratigraphy of the investigated area, and reviewed methodologies used in the execution of the previous monitoring programs including the use of drive-point piezometers and low-flow sampling techniques. Following this review, the consultants made recommendations on the implementation of the groundwater monitoring program for 2021 and subsequently executed the recommendations during the 2010 field season and	March 31, 2022 (2021 Annual Report submission)

No.	Intervener Cmt. No.	Intervener Recommendation / Concern	Baffinland Response	Due Dates Assigned by NWB[1]
			completed the groundwater monitoring program. The 2021 monitoring program was expanded to include the installation of additional temporary shallow monitoring wells around the Mine Site Hazardous Waste Berms to establish background conditions and assess down-gradient groundwater quality. The groundwater monitoring program was completed using the same methodology as in previous years and involved establishing shallow groundwater wells up-gradient and down-gradient of the Landfill Facility and Mine Site Hazardous Waste Berms using drive-point piezometers and collecting water samples near the depth of the active layer (approximately 1.1 to 1.8 metres) during 2021. For additional details on the 2021 groundwater monitoring program conducted at the Landfill Facility, refer to Appendix E.12 of this report.	
6	R-04	Implement the Core Receiving Environment Monitoring Program Report recommendations, or propose alternative actions to address the causes of Aquatic Effects Monitoring Plan benchmark exceedances.	In response to the 2020 CREMP Report recommendations, Baffinland implemented the following actions in 2021: • At the CLT1 north branch, an expanded spatial water quality sampling program was implemented as a special investigation to identify distinct source(s) of copper to the watercourse. See Sections 2.5.2 and 3.1.1 of the 2021 CREMP Report. • At the CLT1 upper main stem Station L2-03, a benthic invertebrate community sampling area was established in fall 2021 to provide information on possible biological effects related to iron concentrations in this portion of the CLT1 system. See Sections 2.5.2 and 3.1.3.2 of the 2021 CREMP Report. • At SDLT1, an expanded spatial water quality sampling program was implemented as a special investigation to identify distinct source(s) of copper to the watercourse. See Sections 2.5.2 and 4.1.1 of the 2021 CREMP Report. • The previous CREMP study identified the lack of water quality monitoring at SDLT12 and SDLT9 as a data gap for understanding potential mine-related effects on benthic invertebrate communities sampled in these tributaries under the CREMP (Minnow 2021b). In response, water quality monitoring stations were established at SDLT12 and SDLT9 in fall 2021. See Sections 2.5.2 and 4.1.1 of the 2021 CREMP Report. • At Camp Lake, concentrations of some metals were above AEMP benchmarks for sediment. A recommendation was made to relocate and harmonize sediment quality monitoring stations with benthic invertebrate monitoring stations. This recommendation intended to improve the ability of the CREMP to evaluate mine related effects to biota by potentially establishing linkages between metal concentrations in sediment and benthic invertebrate responses at Camp Lake. In response, updates to the design of the CREMP that reflected this recommendation were incorporated into the draft Revision 2 AEMP for intervenor review and the Nunavut Water Board approval. See Sections 2.5.2 of the 2021 CREMP Report. • At Sheardown Lake, lake-specific AEMP benchmarks for sediment quality were exceeded for several metals. However, none of these metals were elevated in the sediment of either the Sheardown lakes compared to the reference lake or to concentrations at the Sheardown lakes during baseline. It was recommended that because concentrations of metals in Sheardown Lake NW and Sheardown Lake SE sediment were similar to those shown at the reference lake, updates to the AEMP sediment quality benchmarks for these lakes should be completed to reflect not only baseline data, but also reference lake data and/or applicable SQG. In response, updates to the design of the CREMP that reflected this recommendation were incorporated into the draft Revision 2 AEMP for intervenor review and the Nunavut Water Board approval. See Sections 2.5.2 of the 2021 CREMP Report.	March 31, 2022 (2021 Annual Report submission)

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7	R-05	Once the Mine Site Water Management Plan is approved, the Licensee should take actions as quickly as possible to eliminate future sediment laden water discharges to the project area streams.	Baffinland recently developed a Water Management Plan (WMP) for the Mine Site (Knight Piésold, 2021). The WMP proposes various measures and facilities to address erosion and sedimentation effects within the Mine Site, and will be implemented to prevent future sedimentation events onsite. Baffinland continued to implement the Surveillance Network Program (SNP) outlined in Schedule I of the Type 'A' Water Licence, monitoring surface water quality within specific Project areas. In 2021, Baffinland further implemented several measures to address sedimentation as further discussed in Section 7 of the Type A Annual Report. Baffinland continues to assess and implement the appropriate corrective and mitigation measures to address ongoing sedimentation concerns at the Project. This included - prior to the start of freshet, excess snow along the Tote Road was removed and relocated to approved snow stockpile locations to reduce the amount of surface water runoff from snowmelt. Additional excess snow around the inlets and outlets of select culvert locations was removed to further reduce the volume of snowmelt and subsequent amount of overland flow present to mobilize sediment. Steam was applied to culverts as necessary to remove ice and snow blockages to ensure the effective movement of water during freshet conditions. A plan is being developed for Road Maintenance work to complete the permanent corrective actions at the remaining identified culverts and embankments in 2022. Routine freshet preparation activities and maintenance of ESC measures will be performed prior to freshet 2022 as necessary to reduce snow and ensure effective operation of ESC measures.	March 31, 2022 (2021 Annual Report submission)
8	R-06	Provide information on where water previously reporting to station MP-C-C is now directed and discuss whether the station could be relocated to capture the diverted flow.	The removal of SNP station MP-C-C was proposed because the station was no longer capturing surface discharge following construction of laydowns. The water previously reporting to MP-C-C is now contained in the ditch running alongside the Tote Road until it is diverted into the W3/W14 ditch that flows out into the tundra. It is not necessary to relocate this station as the water is eventually captured and sampled at the MP-C-K (formerly MP-C-B) SNP station.	December 13, 2021 submittal
9	R-07	Clarify: a. where operational changes to eliminate water quantity withdrawal exceedances are recorded for implementation; b. where operational changes to avoid holding time exceedances for acute lethality water samples are recorded for implementation; and c. if day tanks have been installed within 100 m of water bodies at Milne Port and justify changes if they have occurred.	a. If there is an operational change, the relevant Standard Operating Procedure or Management Plan would be updated and reviewed. Through Baffinland's document control management system this would be issued to all staff for review and implementation. b. This information is captured in Baffinland's Environmental Shipping Standard Operating Procedure. c. No new day tanks were installed within 100 m of a water body at Milne Port in 2020. This administrative edit was to align with the Water Licence requirement which states a minimum distance of at least thirty-one (31) metres above the ordinary High Water Mark of any water body. The Spill Contingency Plan will be updated to reflect this change at the Mine Site as well and will be submitted with the 2021 QIA NWB Annual Report for Operations.	December 13, 2021 submittal
10	R-08	Investigate where the 376,352 tonnes of potentially acid generating (PAG) waste rocks were placed in the Waste Rock Facility (WRF) in 2020 and review the design and the implementation of its WRF Quality Control / Quality Assurance	The 376,352 tonnes of PAG rock deposited in the Waste Rock Facility during 2020 was placed in the interior of the NE and SW sections of the WRF and deposited as per the method outlined in the Phase 1 Waste Rock Management Plan rev.3. A minimum of 5m of NAG is placed on the exterior faces of the WRF prior to PAG deposition to ensure that PAG does not make up the outer/active layer of the facility.	December 13, 2021 submittal

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		(QA/QC) program so that the objective of the program can be met in future years.		
11	R-09	Implement the QA/QC Plan fully in order to prevent sampling errors resulting in exceedance to discharge criteria.	Field QA/QC procedures adopted by the Project are described in detail in the Project's Surface Water Sampling Program - Quality Assurance and Quality Control Plan (QA/QC Plan; BAF-PH1-830-P16-0001). Field QA/QC samples include the collection of field duplicates and the use of field and travel blanks. Of the 430 discrete sets of Type 'A' Water Licence regulatory samples collected in 2021, field QA/QC samples (47 duplicates, 12 field blanks and 21 travel blanks) comprised 18.6 % of the total samples collected. This satisfied the minimum 10% QA/QC sampling requirement stipulated in the QA/QC Plan. Baffinland will continue to adhere to the water sampling protocols outlined in the QA/QC Plan, including the 10% QA/QC sampling requirement, to ensure the collection of representative water quality data at the Project.	March 31, 2022 (2021 Annual Report submission)
12	R-10	List the locations along the Tote Road identified as having potential project related impacts so that Inspectors can monitor these locations if appropriate and interveners can follow the monitoring results.	The Tote Road Monitoring Program is very subjective to influences such as weather conditions and road maintenance/construction activities. Because of the nature and frequency of road maintenance activities, the locations identified as having potential project related impacts are not always consistent and can vary throughout the season based on many variables. Baffinland can include a list of exceedances by location for the 2021 annual report for reference.	December 13, 2021 submittal
13	R-11	Clarify what the four different values for S represent in Table E.6.4 and which value was applied as total sulfur in its waste rock identification and classification.	Please see Attachment 2 – Updated Table E.6.4. The headers have been updated to provide further clarity. Table E.6.4 includes follow-up SFE and ABA test results that are inputs into the larger geochemical database and were not used for original NAG/PAG determination. Material classifications presented in the table are based on original on-site blast hole total sulphur results. Tables E.6.1, E.6.2 and E.6.3 in the 2020 NWB QIA Annual Report for Operations contain the data used to classify material as NAG/PAG against the criteria outlined in the Phase 1 Waste Rock Management Plan Rev. 3.	December 13, 2021 submittal
14	R-12	Include settlement monitoring and inspections of swale as part of the required maintenance or propose alternatives.	Part D, Item 18 in the Type 'A' Water Licence requires that Baffinland shall ensure the proper function of earthworks associated with facilities at the Mine Site and Milne Port such as the bulk fuel storage and ancillary fuel facilities. Bi-annual geotechnical inspections are required to be performed by a geotechnical engineer registered in Nunavut. To fulfil the requirement, geotechnical inspections of Project sites were conducted in June and September 2021 Reports for the geotechnical inspections were submitted to the NWB within 60 days of each inspection. Copies of the 2021 geotechnical inspection reports are provided in Appendix C.2.	March 31, 2022 (2021 Annual Report submission)
ECCC Comments				
15	1	In regards to groundwater monitoring, assess impacts to nearby receptors (i.e. Sheardown Lake NW and SE) with 2021 data, and if trends and elevated levels are confirmed, ECCC recommends further actions be identified to assess risk to receptors and mitigative measures. ECCC notes that the data for sampling stations in Sheardown Lake NW and SE closest to the landfill do not yet show any differences in the parameters that are elevated in groundwater, but recommends that the	The groundwater monitoring indicated increasing trends of sulphate and dissolved iron, nickel, and uranium. Of these parameters, sulphate and dissolved uranium concentrations were elevated at Sheardown Lake NW and sulphate was elevated at Sheardown Lake SE in 2021, as compared to at the reference lake in 2021 as well as compared to baseline. Despite slight elevation of concentrations of these parameters at Sheardown Lake compared to the reference lake and/or to baseline, concentrations remained well below AEMP benchmarks and/or water quality guidelines. Therefore, Baffinland will continue to monitor concentrations of the parameters indicated above in surface water of Sheardown Lake, and will implement trend analyses in future CREMP studies for these parameters in order to track changes over time.	March 31, 2022 (2021 Annual Report submission)

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		movement of contaminants towards the lake be monitored, and mitigation identified if necessary.		
16	2	Evaluate contaminant mobility in the substrate adjacent to the landfill; specifically, the likelihood of movement of particulate-associated contaminants whether through direct transport or desorption processes.	Baffinland has retained a consultant to review existing groundwater data and prepare a memo to evaluate contaminate mobility in the substrate adjacent to the landfill. The analysis is ongoing and Baffinland will submit this memo to the NWB and ECCC by April 30, 2022.	March 31, 2022 (2021 Annual Report submission)
17	3	Provide a discussion of 2019 and 2020 results for Aluminum, Copper and Iron in Mary River samples.	See Section 5.1.1 of the 2021 CREMP Report for discussion of 2019 and 2020 water quality assessment of aluminum, copper, and iron concentrations in water samples collected at Mary River.	March 31, 2022 (2021 Annual Report submission)
18	4	Use the updated values for Zinc from Canadian Council of Ministers of the Environment (CCME) Water Quality Guideline for analysis in future monitoring years, and Discuss whether the newly released CCME Manganese Water Quality Guideline is more appropriate for use at the mine site than the BC Water Quality Guideline.	Updates to the design of the CREMP included use of the new dissolved zinc and dissolved manganese water quality guidelines, and these updates were incorporated into the draft Revision 2 AEMP for intervenor review and the Nunavut Water Board approval.	Subsequent annual reports March 31, 2022 (2021 Annual Report submission)
19	5	Provide a discussion of final pit depth and geotechnical investigations required to evaluate groundwater inflows which may inform data collection activities outlined in the Reclamation Research Studies Pit Lake Literature Review.	The proposed maximum depth of the Deposit 1 pit provided in Baffinland's 2012 Final Environment Impact Statement for the Mary River Project was 465 m. Based on further refinements to the mine plan the maximum depth is currently anticipated to be approximately 160m. The Mary River Project is located in a zone of continuous permafrost, which extends to a projected 610 m below ground surface at Deposit 1. The Deposit 1 pit is not expected to develop significant groundwater inflow below the active layer, as discussed further in Volume 6, Section 2.1.5 of Baffinland's Final Environmental Impact Statement for the Mary River Project. As the open pit is advanced, the potential for groundwater inflows will be monitored and additional geotechnical and/or hydrogeological investigations will be proposed as necessary.	March 31, 2022 (2021 Annual Report submission)
20	6	Clarify the Metal and Diamond Mining Effluent Regulations (MDMER) details and whether they are applied in the Oily Water Treatment Plant (For Vehicle Wash Water) O & M Manuals. ECCC also notes that the discharge criteria for Arsenic and Lead were amended as of June 1, 2021 (for reference in the next Annual Report).	This is an administrative referencing error to a different appendix. The correct reference is to Appendix K for the MDMER Emergency Response Plan. The discharge criteria for arsenic and lead will be updated to reflect the amended MDMER as of June 1, 2021. Baffinland will update the Fresh Water Supply, Sewage and Wastewater Management Plan with this in its next revision and include with the 2021 QIA NWB Annual Report for Operations. The discharge criteria for arsenic and lead will be updated to reflect the amended MDMER as of June 1, 2021.	December 13, 2021 submittal
21	7	Provide a discussion of data quality objectives and procedures in section 10 of the Quality Assurance and Quality Control Plan.	In accordance with the Type 'A' Water Licence, the QA/QC Plan has been prepared following the general recommendations presented in Quality Assurance (QA) and Quality Control (QC) Guidelines for use by Class "A" Licensees in Meeting SNP Requirements and for Submission of a QA/QC Plan published by CIRNAC. The purpose of this Plan is to identify Baffinland's framework for accurate and effective QA/QC management by providing instruction for standardized field sampling and laboratory analytical procedures. Section 7 of the Sampling Program - Quality Assurance and Quality Control Plan will be updated to include data quality objectives and procedures. The	December 13, 2021 submittal

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			updated plan will be included in the 2021 Annual Report submission. Furthermore, each year Section 7.8 of the QIANWB Annual Report for Operations contains a summary and comparison of results on QA/QC samples for the calendar year.	
22	8	Continue monitoring, investigating and updating the thermal assessment of the WRF and identifying other possible hot spots in the WRF.	The overall design and concept for the WRF (thin lift deposition and freezing/ encapsulation of PAG within WRF) remains valid. This is demonstrated by the thermal monitoring to date that has shown the WRF is frozen, with the exception of a seasonal active layer. Encapsulation of the WRF with Non-AG material in closure will eliminate any potential for PAG to be exposed in the seasonally thawed layer and thereby mitigate the potential for ARD/ML. Continued monitoring and management will be required to ensure this closure scenario remains valid, and will be evaluated on an on-going basis. Appendix D6 of the Interim Closure and Reclamation Plan for the Project provides details on planned reclamation research for the Project, including updates to the thermal model to the WRF.	Subsequent annual reports

Attachment 2
Updated Table E.6.4

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	SAMPLE 1		SAMPLE 2		MATERIAL CLASSIFICATION	Acid Base Accounting (ABA)													Shake Flask Extraction Results				
		SAMPLE 1	Sample 1 HOLE ID	SAMPLE 2	SAMPLE 2 HOLE ID		WEIGHT	MPA	FIZZ RATING	NNP	NP	pH	Ratio (NP:MPA)	Total Sulphur - LECO	SO_4 - Na_2CO3 Leach	SO_4 - HCl Leach	Sulfide	C	CO2	Ag	Al	As	B	Ba
							kg	tCaCO3/1Kt	Unity	tCaCO3/1Kt	tCaCO3/1Kt	Unity	Unity	%	%	%	%	%	%	mg/L	mg/L	mg/L	mg/L	mg/L
600	N1-600-103	R797472	1804	R797508	2709	NAG	0.31	0.3	1	13	13	7.5	41.6	0.01	<0.01	0.01	0.01	<0.05	<0.2	<0.00005	0.184	<0.001	0.08	0.002
600	N1-600-103	R797578	2303	R797470	2109	NAG	0.31	0.3	1	14	14	8.6	44.8	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	4.36	<0.001	0.05	0.056
650	N2-650-089	R797684	1611	R797644	1804	NAG	0.31	0.6	1	16	17	8	27.2	0.02	<0.01	<0.01	0.02	0.07	0.3	<0.00005	0.149	<0.001	0.05	0.01
590	N1-590-063	R797693	1105	R797740	1305	NAG	0.34	0.9	1	6	7	6.8	7.47	0.03	<0.01	0.02	0.03	<0.05	<0.2	<0.00005	0.015	<0.001	0.15	<0.001
600	N1-600-105	R797878	2502	R797990	2400	NAG	0.27	<0.3	1	14	14	7.6	89.6	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	0.426	<0.001	0.13	0.01
580	N1_580_047	S108739	1309	S108760	1311	NAG	0.38	0.3	1	11	11	8.2	35.2	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	7.92	<0.001	0.07	0.076
580	N1_580_047	S108881	0212	S108885	0208	NAG	0.27	0.3	1	12	12	8.6	38.4	0.01	<0.01	0.01	0.01	<0.05	<0.2	<0.00005	15.5	0.002	0.16	0.348
580	N1_580_047	S108886	210	S666176	3020	NAG	0.27	0.3	1	11	11	8.5	35.2	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	15.9	<0.001	0.19	0.26
580	N1_580_047	S108960	0216	S108965	0215	NAG	0.41	4.4	1	10	14	8.1	3.2	0.14	<0.01	<0.01	0.14	<0.05	<0.2	<0.00005	15.9	0.001	0.3	0.209
580	N1_580_047	S108977	2301	S108979	2307	NAG	0.3	1.6	1	10	12	8.5	7.68	0.05	<0.01	<0.01	0.05	<0.05	<0.2	<0.00005	16.2	0.003	0.18	0.54
580	N1_580_047	S108991	0222	S108995	2404	NAG	0.26	<0.3	1	13	13	8.9	83.2	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	13	<0.001	0.12	0.18
590	N1-590-077	S109071	1913	S109185	2721	NAG	0.31	0.6	1	15	16	8.8	25.6	0.02	<0.01	<0.01	0.02	<0.05	<0.2	<0.00005	3.74	<0.001	0.06	0.035
590	N1-590-077	S109138	2507	S109163	2412	NAG	0.29	0.6	1	16	17	8.3	27.2	0.02	<0.01	<0.01	0.02	<0.05	<0.2	<0.00005	1.35	<0.001	0.13	0.008
590	N1-590-077	S109161	2612	S109204	2519	NAG	0.29	0.9	1	13	14	8.5	14.93	0.03	<0.01	0.01	0.03	<0.05	<0.2	<0.00005	3.64	<0.001	0.16	0.027
580	N1-580-033	S109266	2011	S109325	1712	NAG	0.32	2.2	1	14	16	7.7	7.31	0.07	<0.01	<0.01	0.07	<0.05	<0.2	<0.00005	0.096	<0.001	0.02	0.003
580	N1-580-033	S109272	1814	S109295	1704	NAG	0.3	0.9	1	16	17	7.7	18.13	0.03	<0.01	0.02	0.03	<0.05	<0.2	<0.00005	0.112	<0.001	0.04	0.001
590	N1-590-079	S109415	1522	S109423	1520	NAG	0.29	0.9	1	13	14	8.8	14.93	0.03	<0.01	<0.01	0.03	<0.05	<0.2	<0.00005	7.48	<0.001	0.04	0.166
580	N1-580-039	S110078	1027	S110013	1124	NAG	0.32	<0.3	1	17	17	7.8	108.8	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	0.097	<0.001	0.19	0.002
580	N1-580-037	S110286	1501	S110293	1905	NAG	0.29	1.6	1	14	16	7.6	10.24	0.05	<0.01	0.02	0.05	<0.05	<0.2	<0.00005	0.066	<0.001	0.03	<0.001
640	N2-640-101	S111556	1707	S111776	1812	PAG	0.2	38.8	1	-26	13	6.8	0.34	1.24	0.15	0.16	1.09	<0.05	<0.2	<0.00005	0.028	<0.001	0.06	0.028
640	N2-640-101	S111761	1713	S113462	1719	PAG	0.29	0.9	1	13	14	8.1	14.93	0.03	<0.01	<0.01	0.03	<0.05	<0.2	<0.00005	0.268	<0.001	0.2	0.02
640	N2-640-101	S111773	1826	S111762	1816	PAG	0.27	14.1	1	0	14	7.3	1	0.45	0.01	0.03	0.44	<0.05	<0.2	<0.00005	0.059	<0.001	0.21	0.038
590	N1-590-075	S111789	0306	S111739	0304	NAG	0.26	1.3	1	11	12	7.7	9.6	0.04	<0.01	<0.01	0.04	<0.05	<0.2	<0.00005	0.152	<0.001	0.09	0.006
600	N1-600-108	S112280	1342	S112286	1354	NAG	0.31	1.3	1	12	13	7.8	10.4	0.04	<0.01	<0.01	0.04	<0.05	<0.2	<0.00005	4.69	<0.001	0.05	0.096
580	N1-580-023	S112288	1109	S112259	1208	NAG	0.27	1.3	1	7	8	6.9	6.4	0.04	<0.01	0.01	0.04	<0.05	<0.2	<0.00005	0.022	<0.001	0.35	0.004
590	N1-590-073	S112537	0216	S112538	0218	NAG	0.31	<0.3	1	8	8	7	51.2	<0.01	<0.01	0.01	<0.01	<0.05	<0.2	<0.00005	0.027	<0.001	0.15	0.002
640	N2-640-095	S112539	1516	S112546	1920	NAG	0.21	1.9	1	12	14	8	7.47	0.06	<0.01	<0.01	0.06	<0.05	<0.2	0.00005	8.15	<0.001	0.1	0.064
640	N2-640-095	S112540	1520	S112545	1916	NAG	0.24	<0.3	1	10	10	7.9	64	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	1.91	<0.001	0.49	0.009
640	N2-640-099	S112790	2306	S112840	1106	NAG	0.31	1.9	1	14	16	8.5	8.53	0.06	<0.01	<0.01	0.06	<0.05	<0.2	<0.00005	1.9	<0.001	0.11	0.021
640	N2-640-097	S112798	3404	S112794	3707	NAG	0.27	<0.3	1	12	12	8.7	76.8	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	3.57	<0.001	0.25	0.029
640	N2-640-099	S112816	1406	S112809	1706	NAG	0.31	0.9	1	13	14	9.1	14.93	0.03	<0.01	<0.01	0.03	<0.05	<0.2	<0.00005	4.77	<0.001	0.02	0.048
580	N1-580-027	S112908	1614	S112011	2614	NAG	0.28	1.6	1	16	18	7.3	11.52	0.05	<0.01	0.02	0.05	<0.05	<0.2	<0.00005	0.027	<0.001	0.04	0.001
640	N2-640-101	S113100	1103	S113466	1210	NAG	0.27	1.3	1	14	15	8.7	12	0.04	<0.01	<0.01	0.04	<0.05	<0.2	<0.00005	3.89	<0.001	0.07	0.058
590	N1-590-077	S113233	2002	S113268	1715	NAG	0.31	0.6	1	14	15	8.4	24	0.02	<0.01	0.01	0.02	<0.05	<0.2	<0.00005	3.86	<0.001	0.09	0.036
590	N1-590-077	S113294	3109	S109197	2418	NAG	0.31	0.6	1	13	14	8.6	22.4	0.02	<0.01	<0.01	0.02	<0.05	<0.2	<0.00005	3.82	<0.001	0.09	0.031
580	N1-580-021	S113810	1602	S113784	1505	PAG	0.31	4.7	1	2	7	6.4	1.49	0.15	0.06	0.12	0.09	<0.05	<0.2	<0.00005	0.007	<0.001	0.07	0.002
580	N1-580-021	S113836	2307	S113783	1507	NAG	0.27	0.3	1	9	9	7.6	28.8	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	0.087	<0.001	0.3	0.003
580	N1_580_047	S666051	0315	S666054	0317	NAG	0.25	<0.3	1	11	11	9.1	70.4	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	0.0001	12.9	<0.001	0.04	0.228
580	N1_580_047	S666084	3121	S666089	2921	NAG	0.27	0.3	1	12	12	8.7	38.4	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	10.3	<0.001	0.22	0.106
580	N1_580_047	S666113	3112	S666119	0218	NAG	0.39	0.6	1	11	12	8.7	19.2	0.02	<0.01	<0.01	0.02	<0.05	<0.2	<0.00005	8.31	<0.001	0.11	0.109
580	N1_580_047	S666123	2913	S666125	2814	NAG	0.29	<0.3	1	11	11	8.5	70.4	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	8.8	<0.001	0.2	0.083
580	N1_580_047	S666131	3012	S666132	2816	NAG	0.3	0.3	1	11	11	8.2	35.2	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	10.3	<0.001	0.2	0.099
580	N1_580_047	S666144	2614	S666146	2713	NAG	0.27	0.3	1	12	12	8.4	38.4	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	7.85	<0.001	0.08	0.081
580	N1_580_047	S666147	2715	S666148	2513	NAG	0.27	0.3	1	9	9	8.6	28.8	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	8.78	<0.001	0.07	0.115
580	N1_580_047	S666151	3016	S666153	2711	NAG	0.27	<0.3	1	10	10	8.3	64	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	7.49	<0.001	0.18	0.065
580	N1_580_049	S666301	1400	S666299	1301	NAG	0.29	0.3	1	10	10	8.8	32	0.01	<0.01	<0.01	0.01	<0.05	<0.2	0.0001	8.96	0.001	0.03	0.094
580	N1_580_049	S666302	1600	S666300	1501	NAG	0.27	0.3	1	10	10	7.7	32	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	0.203	<0.001	0.06	0.002
580	N1_580_038	S666542	0115	S666557	0105	NAG	0.41	0.3	1	9	9	7.6	28.8	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	0.091	<0.001	0.06	0.002
570	N1_570_013	S666613	2601	S666610	2605	NAG	0.46	3.1	1	9	12	7.1	3.84	0.1	0.04	0.02	0.06	<0.05	<0.2	<0.00005	0.024	<0.001	0.07	0.003
570	N1_570_013	S666640	2409	S666641	2405	NAG	0.49	4.7	1	0	5	6.1	1.07	0.15	0.06	0.04	0.09	<0.05	<0.2	<0.00005	<0.005	<0.001	0.39	0.008
660	N2_660_104	S666663	1726	S666664	1722	NAG	0.38	0.3	1	15	15	8.4	48	0.01	<0.01	<0.01	0.01	0.06	0.2	<0.00005	0.841	<0.001	0.05	0.012

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	Shake Flask Extraction Results																								
		Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Moisture	Na	Ni	Pb	P	Sb	Se	Si	Sn	Sr	Ti	Tl
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ppm
600	N1-600-103	<0.0005	<0.0005	0.5	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	20.8	0.008	4.17	0.0007	0.0144	0.3	1.67	<0.0005	<0.0001	<0.3	<0.0001	0.0007	2.49	<0.0005	0.0034	<0.01	<0.0001
600	N1-600-103	<0.0005	<0.0005	0.1	<0.00005	0.0008	<0.0005	0.003	4.03	<0.00005	33.7	0.008	1.57	0.0139	0.0246	<0.3	3.35	0.0008	0.0005	<0.3	<0.0001	0.0006	7.14	<0.0005	0.0015	0.17	<0.0001
650	N2-650-089	<0.0005	<0.0005	10.3	<0.00005	<0.0001	<0.0005	0.001	<0.03	<0.00005	26.3	0.009	7.94	0.0044	0.0041	0.3	5.31	<0.0005	<0.0001	<0.3	<0.0001	0.0006	3.84	<0.0005	0.0121	<0.01	<0.0001
590	N1-590-063	<0.0005	<0.0005	0.9	<0.00005	0.0002	0.0037	<0.001	0.03	<0.00005	1.41	0.06	17	0.0126	0.0052	1	0.68	0.0007	<0.0001	<0.3	<0.0001	0.0014	6.7	<0.0005	0.0063	<0.01	<0.0001
600	N1-600-105	<0.0005	<0.0005	0.8	<0.00005	<0.0001	<0.0005	<0.001	0.26	<0.00005	22.8	0.014	3.43	0.0035	0.0134	0.5	3.1	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.98	<0.0005	0.0042	<0.01	<0.0001
580	N1_580_047	<0.0005	<0.0005	0.2	<0.00005	0.0009	0.0007	0.004	4.52	<0.00005	36.8	0.008	2.89	0.0234	0.0365	0.3	2.82	0.001	0.0004	<0.3	0.0002	<0.0005	12.9	<0.0005	0.0039	0.17	<0.0001
580	N1_580_047	0.0013	<0.0005	0.3	<0.00005	0.0018	0.0015	0.008	8.27	<0.00005	27.6	0.046	4.39	0.0511	0.0126	0.3	2.53	0.002	0.0012	<0.3	<0.0001	<0.0005	19.9	<0.0005	0.004	0.33	0.0001
580	N1_580_047	0.0014	<0.0005	0.3	<0.00005	0.0029	0.0013	0.011	9.31	<0.00005	30.1	0.044	5.88	0.0899	0.0083	0.3	3.6	0.0043	0.0015	<0.3	<0.0001	<0.0005	21.5	<0.0005	0.0065	0.25	0.0001
580	N1_580_047	0.0013	<0.0005	0.5	<0.00005	0.0048	0.0019	0.047	8.79	<0.00005	30.1	0.106	6.36	0.0597	0.014	0.5	2.79	0.0057	0.0019	<0.3	0.0001	0.0011	20.2	<0.0005	0.0127	0.22	<0.0001
580	N1_580_047	0.0014	<0.0005	0.4	<0.00005	0.0032	0.002	0.021	7.38	<0.00005	31	0.051	5.34	0.0566	0.0021	0.3	3	0.0029	0.0032	<0.3	0.0001	<0.0005	20.5	<0.0005	0.0087	0.28	0.0001
580	N1_580_047	0.0006	<0.0005	0.3	<0.00005	0.002	0.0031	0.005	5.83	<0.0003	45	0.035	4.52	0.0544	0.0052	0.6	3.83	0.004	0.0041	0.3	<0.0001	<0.0005	15.1	<0.0005	0.0062	0.28	<0.0001
590	N1-590-077	<0.0005	<0.0005	<0.1	<0.00005	0.0006	0.0008	<0.001	2.87	<0.00005	41.4	0.01	1.05	0.0081	0.0057	<0.3	3.7	0.0014	0.0005	0.4	<0.0001	<0.0005	5.62	<0.0005	0.0007	0.13	<0.0001
590	N1-590-077	<0.0005	<0.0005	0.2	<0.00005	0.0002	0.0024	<0.001	0.5	<0.00005	39.6	0.018	1.25	0.0033	0.0047	0.3	3.16	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	3.38	<0.0005	0.0016	0.02	<0.0001
590	N1-590-077	<0.0005	<0.0005	0.1	<0.00005	0.0004	<0.0005	0.001	2.03	<0.00005	39.5	0.029	1.35	0.0093	0.0043	0.3	3.16	<0.0005	0.0004	<0.3	0.0002	<0.0005	6.24	<0.0005	0.0021	0.09	<0.0001
580	N1-580-033	<0.0005	<0.0005	2.8	<0.00005	<0.0001	0.0006	<0.001	<0.03	<0.00005	9.06	<0.005	18.3	0.0065	0.0055	0.6	1.53	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.31	<0.0005	0.004	<0.01	<0.0001
580	N1-580-033	<0.0005	<0.0005	1.1	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	16.4	<0.005	11.1	0.0026	0.0043	0.7	2.96	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.54	<0.0005	0.0032	<0.01	<0.0001
590	N1-590-079	<0.0005	<0.0005	0.3	<0.00005	0.0018	0.001	0.005	9.04	<0.00005	42	0.008	2.83	0.0268	0.0112	<0.3	3.99	0.0023	0.0013	0.5	<0.0001	0.0013	11.8	<0.0005	0.0025	0.39	0.0001
580	N1-580-039	<0.0005	<0.0005	1.9	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	7.43	0.105	14.9	0.0048	0.0005	1	5.83	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.7	<0.0005	0.0103	<0.01	<0.0001
580	N1-580-037	<0.0005	<0.0005	0.8	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	3.99	<0.005	15.9	0.0049	0.004	0.9	1.34	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.32	<0.0005	0.0043	<0.01	<0.0001
640	N2-640-101	<0.0005	<0.0005	42.9	<0.00005	0.0004	<0.0005	<0.001	<0.03	<0.00005	31	0.008	232	0.407	0.0099	1	1.57	0.0005	<0.0001	<0.3	<0.0001	0.0025	3.34	<0.0005	0.0074	<0.01	<0.0001
640	N2-640-101	<0.0005	<0.0005	0.8	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	69.4	0.058	3.57	0.0025	0.0115	0.3	4.85	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.77	<0.0005	0.0057	<0.01	<0.0001
640	N2-640-101	<0.0005	<0.0005	15.9	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	51.2	0.08	49.8	0.0588	0.0078	0.5	3.34	<0.0005	<0.0001	<0.3	<0.0001	0.0016	3.56	<0.0005	0.0318	<0.01	<0.0001
590	N1-590-075	<0.0005	<0.0005	3.2	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	60.7	0.023	10.7	0.0038	0.009	0.3	6.4	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	3.01	<0.0005	0.0072	<0.01	<0.0001
600	N1-600-108	<0.0005	<0.0005	0.5	<0.00005	0.0016	0.001	0.005	5.94	<0.00005	30.6	0.007	2.36	0.0302	0.0181	<0.3	3.5	0.0022	0.0009	<0.3	0.0001	0.0008	8.77	<0.0005	0.0029	0.24	<0.0001
580	N1-580-023	<0.0005	<0.0005	2.5	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	15.3	0.037	40.2	0.0188	0.0008	0.9	3.35	<0.0005	<0.0001	<0.3	<0.0001	0.0012	4.68	<0.0005	0.0112	<0.01	<0.0001
590	N1-590-073	<0.0005	<0.0005	2.6	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	10.8	0.026	5.32	0.014	0.0568	1.4	2.37	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	6.59	<0.0005	0.009	<0.01	<0.0001
640	N2-640-095	<0.0005	<0.0005	1	0.00012	0.0032	0.0009	0.008	7.35	<0.00005	34.4	0.031	4.98	0.224	0.0131	<0.3	3.71	0.0033	0.014	<0.3	0.0001	<0.0005	12.1	<0.0005	0.0078	0.26	<0.0001
640	N2-640-095	<0.0005	<0.0005	0.3	<0.00005	0.0003	<0.0005	0.001	0.66	<0.00005	24.2	0.011	1.03	0.0142	0.0033	0.5	2.42	<0.0005	0.0001	<0.3	<0.0001	<0.0005	8.47	<0.0005	0.0011	0.03	<0.0001
640	N2-640-099	<0.0005	<0.0005	1.5	<0.00005	0.0003	0.0005	0.002	0.94	<0.00005	40.6	0.024	1.83	0.0259	0.0348	<0.3	5.76	<0.0005	0.0004	<0.3	0.0001	<0.0005	7.08	<0.0005	0.0062	0.05	<0.0001
640	N2-640-097	<0.0005	<0.0005	0.2	<0.00005	0.0007	<0.0005	<0.001	1.55	<0.00005	29.8	0.013	1.13	0.032	0.0027	<0.3	4.26	0.001	0.0003	<0.3	<0.0001	<0.0005	7.97	<0.0005	0.0018	0.09	<0.0001
640	N2-640-099	<0.0005	<0.0005	1.9	<0.00005	0.0011	0.0011	0.002	3.52	<0.00005	52.9	0.017	1.57	0.0776	0.0221	<0.3	7.86	0.0014	0.0021	<0.3	0.0003	<0.0005	9.4	<0.0005	0.005	0.27	<0.0001
580	N1-580-027	<0.0005	<0.0005	2.6	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	9.33	<0.005	74.3	0.0231	0.0061	1.7	2.48	<0.0005	<0.0001	<0.3	<0.0001	0.0008	3.91	<0.0005	0.0054	<0.01	<0.0001
640	N2-640-101	<0.0005	<0.0005	<0.1	<0.00005	0.0008	<0.0005	<0.001	2.6	<0.00005	40.8	0.013	1.27	0.026	0.0075	<0.3	3.7	0.0009	0.0004	<0.3	<0.0001	<0.0005	5.71	<0.0005	0.0007	0.12	<0.0001
590	N1-590-077	<0.0005	<0.0005	0.1	<0.00005	0.0006	<0.0005	0.002	2.91	<0.00005	39.7	0.012	1.6	0.0137	0.0361	<0.3	2.97	0.0009	0.0004	<0.3	<0.0001	<0.0005	5.88	<0.0005	0.0013	0.11	<0.0001
590	N1-590-077	<0.0005	<0.0005	0.1	<0.00005	0.0007	0.001	0.001	2.43	<0.00005	40.1	0.015	1.38	0.0144	0.008	<0.3	3.66	0.0011	0.0005	<0.3	<0.0001	<0.0005	6.39	<0.0005	0.0012	0.09	<0.0001
580	N1-580-021	<0.0005	<0.0005	2.6	<0.00005	0.0005	<0.0005	<0.001	<0.03	<0.00005	1.74	0.018	210	0.108	0.0001	1.4	0.38	0.0028	<0.0001	<0.3	<0.0001	0.0038	5.48	<0.0005	0.0067	<0.01	<0.0001
580	N1-580-021	<0.0005	<0.0005	1.8	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	23.1	0.018	16	0.0016	0.0011	0.6	4.27	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	3.35	<0.0005	0.0128	<0.01	<0.0001
580	N1_580_047	<0.0005	<0.0005	0.2	<0.00005	0.0016	0.0011	0.006	5.85	<0.0003	49.5	0.01	3.71	0.0563	0.0081	0.4	3.46	0.0015	0.007	0.5	<0.0001	<0.0005	16.1	<0.0005	0.0037	0.33	0.0001
580	N1_580_047	0.0006	<0.0005	0.3	<0.00005	0.0016	0.001	0.005	4.57	<0.0003	31.5	0.066	3.66	0.0447	0.0011	0.7	3.73	0.0019	0.0008	<0.3	<0.0001	<0.0005	13.5	<0.0005	0.0081	0.18	<0.0001
580	N1_580_047	0.0005	0.0008	0.3	<0.00005	0.0016	0.0024	0.01	4.87	<0.0003	31.5	0.017	2.9	0.0397	0.0066	0.4	3.23	0.002	0.0034	<0.3	<0.0001	<0.0005	12.6	<0.0005	0.0033	0.21	<0.0001
580	N1_580_047	0.0011	<0.0005	0.2	<0.00005	0.0014	0.0009	0.003	4.03	<0.0003	26.9	0.049	2.61	0.0268	0.0009	0.6	3.41	0.0024	0.0009	<0.3	<0.0001	<0.0005	12.9	<0.0005	0.0036	0.12	<0.0001
580	N1_580_047	0.0013	<0.0005	0.3	<0.00005	0.0017	0.001	0.004	5.13	<0.0003	28.4	0.052	3.42	0.0354	0.001	0.6	3.43	0.0022	0.001	<0.3	<0.0001	<0.0005	13.8	<0.0005	0.0044	0.16	<0.0001
580	N1_580_047	0.0005	<0.0005	0.2	<0.00005	0.0013	0.0013	0.007	4.27	<0.0003	28.8	0.014	2.65	0.032	0.0035	0.5	2.5	0.0017	0.0016	<0.3	<0.0001	<0.0005	11.6	<0.0005	0.0023	0.14	<0.0001
580	N1_580_047	<0.0005	<0.0005	0.2	<0.00005	0.0014	0.0014	0.007	4.17	<0.0003	30.8	0.011	2.22	0.0266	0.0033	0.4	2.98	0.0019	0.0009	<0.3	0.0001	<0.0005	13	<0.0005	0.0024	0.17	<0.0001
580	N1_580_047	0.001	<0.0005	0.2	<0.00005	0.0013	0.0011	0.004	3.66	<0.0003	24	0.043	2.83	0.0285	0.0014	0.6	2.84	0.0017	0.0015	<0.3	<0.0001	<0.0005	11.5	<0.0005	0.0037	0.08	<0.0001
580	N1_580_049	<0.0005	<0.0005	0.2	<0.00005	0.0016	0.0011	0.013	6.2	<0.0003	39.5	0.009	3.1	0.0499	0.0088	0.4	3.23	0.0012	0.0039	0.3	0.0001	<0.0005	12.8	<0.0005	0.0059	0.24	0.0001
580	N1_580_049	<0.0005	<0.0005	0.4	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	27.4	0.006	3.98	0.0017	0.0128	0.7	2.18	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.42	<0.0005	0.0032	<0.01	<0.0001
580	N1_580_038	<0.0005	<0.0005	3	<0.00005	<0.0001	<0.0005	<0.001	0.07	<0.00005	3.28	0.005	7.58	0.0024	0.0041	0.8	1.55	<0.0005	<0.0001	<0.3	<0.0001	0.0005	4.07	<0.0005	0.007	<0.01	<0.0001
570	N1_570_013	<0.0005	<0.0005	9.6	<0.00005	0.0002	<0.0005	<0.001	<0.03	<0.00005	16.1	0.006	86.8	0.0674	0.0029	1.1	2.75	<0.0005	<0.0001	<0.3	<0.0001	0.0022	3.78	<0.0005	0.0085	<0.01	<0.0001
570	N1_570_013	<0.0005	<0.0005	4.6	<0.00005	0.0152	<0.0005	<0.001	<0.03	<0.00005	6.28	0.136	136	1.56	<0.0001	1.4	1.02	0.0277	<0.0001	<0.3	<0.0001	0.0024	9.98	<0.0005	0.0299	<0.01	<0.0001
660	N2_660_104	<0.0005	<0.0005	10.7	<0.00005	0.0001	0.0005	0.004	0.4	<0.0003	17.4	0.006	3.24	0.0115	0.0188	0.4	15.7	0.0006	0.0009	<0.3	0.0001	0.0009	5.37	<0.0005	0.0119	0.02	<0.0001

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	Shake Flask Extraction Results						Anions by Ion Chromotography						
		U	V	Zn	Hardness	Final pH	Br	Cl	F	NO3 (as N)	SO4	TDS	Conductivity	Alkalinity Total
		mg/L	mg/L	mg/L	mg/L CaCO3eq	Unity	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	uS/cm	mg/L CaCO3eq
600	N1-600-103	<0.00001	<0.001	<0.01	18.4	7.1	<0.05	3	0	0	1	50	99	17
600	N1-600-103	0.00028	0.007	<0.01	6.8	7.9	<0.05	1	1	1	2	86	106	22
650	N2-650-089	0.00046	0.001	<0.01	58.4	7.9	<0.05	6	0	0	30	125	215	46
590	N1-590-063	0.00003	<0.001	<0.01	72.1	6.7	<0.05	4	0	0	30	79	149	8
600	N1-600-105	0.00002	<0.001	<0.01	16.1	7.2	<0.05	2	1	0	2	56	109	19
580	N1_580_047	0.00027	0.006	<0.01	12.3	7.6	<0.05	2	1	1	9	117	121	20
580	N1_580_047	0.00096	0.011	<0.01	18.7	8	<0.05	2	1	0	2	134	80	23
580	N1_580_047	0.00134	0.013	<0.01	25	7.9	<0.05	2	1	2	2	154	102	30
580	N1_580_047	0.0007	0.009	0.03	27.5	7.5	<0.05	2	1	0	5	143	99	23
580	N1_580_047	0.00161	0.013	0.03	22.9	8	<0.05	2	1	0	4	142	91	24
580	N1_580_047	0.00085	0.019	0.01	19.4	8.9	<0.05	1	1	2	2	143	131	28
590	N1-590-077	0.00013	0.01	<0.01	4.3	8.2	<0.05	2	1	0	2	87	134	20
590	N1-590-077	0.00004	0.004	<0.01	5.6	7.7	<0.05	2	1	0	<0.5	70	136	16
590	N1-590-077	0.00021	0.006	<0.01	5.9	7.9	<0.05	2	1	0	1	82	127	17
580	N1-580-033	<0.00001	<0.001	<0.01	82.2	7.6	<0.05	2	0	0	3	60	187	24
580	N1-580-033	<0.00001	<0.001	<0.01	48.4	7.2	<0.05	2	0	0	1	52	149	14
590	N1-590-079	0.00066	0.012	<0.01	12.3	8	<0.05	1	1	0	10	125	134	23
580	N1-580-039	<0.00001	<0.001	<0.01	66.1	7.2	0.16	13	0	0	<0.5	61	174	14
580	N1-580-037	<0.00001	<0.001	<0.01	67.4	7.1	<0.05	2	0	0	1	42	144	14
640	N2-640-101	0.00003	<0.001	<0.01	1060	6.6	<0.5	6	1	0	996	1,330	1,670	20
640	N2-640-101	0.00004	0.001	<0.01	16.7	7.4	<0.05	4	1	0	58	162	278	20
640	N2-640-101	0.00004	<0.001	<0.01	245	6.8	<0.3	4	0	0	268	410	627	9
590	N1-590-075	0.00002	<0.001	<0.01	51.9	7	<0.05	3	1	0	80	181	321	11
600	N1-600-108	0.0003	0.006	<0.01	10.9	7.4	<0.05	2	1	1	9	92	106	11
580	N1-580-023	<0.00001	<0.001	<0.01	172	6.6	0.05	5	0	0	149	232	396	5
590	N1-590-073	<0.00001	<0.001	<0.01	28.5	6.9	<0.05	5	0	0	2	54	97	9
640	N2-640-095	0.00377	0.007	0.03	23.1	7.5	<0.05	3	1	0	4	115	119	23
640	N2-640-095	0.00043	0.004	<0.01	5	7.3	<0.05	2	1	0	1	70	85	19
640	N2-640-099	0.00053	0.004	<0.01	11.2	8.1	<0.05	4	1	0	3	105	157	41
640	N2-640-097	0.00057	0.014	<0.01	5.1	8	<0.05	2	1	0	1	82	100	24
640	N2-640-099	0.00212	0.015	<0.01	11.3	9.2	<0.05	2	1	0	3	143	187	60
580	N1-580-027	<0.00001	<0.001	<0.01	312	6.9	<0.05	2	0	0	259	367	603	9
640	N2-640-101	0.00044	0.009	<0.01	5.2	7.9	<0.05	2	1	0	12	98	135	23
590	N1-590-077	0.00014	0.005	<0.01	6.8	7.9	<0.05	2	1	0	3	90	129	25
590	N1-590-077	0.00022	0.007	<0.01	6	7.9	<0.05	2	1	0	2	88	134	21
580	N1-580-021	<0.00001	<0.001	<0.01	871	6.3	<0.05	1	0	0	156	391	1,390	6
580	N1-580-021	0.00001	<0.001	<0.01	70.4	7.1	0.06	8	0	0	30	101	229	11
580	N1_580_047	0.00126	0.019	0.02	15.9	9.1	<0.05	1	1	1	2	150	142	33
580	N1_580_047	0.00048	0.012	<0.01	15.8	8	<0.05	1	1	0	<0.5	108	98	22
580	N1_580_047	0.00053	0.015	0.01	12.6	8	<0.05	2	1	1	2	107	99	20
580	N1_580_047	0.00066	0.008	<0.01	11.3	7.7	<0.05	2	1	0	<0.5	96	86	17
580	N1_580_047	0.00084	0.008	<0.01	14.8	7.8	<0.05	2	1	1	1	105	90	17
580	N1_580_047	0.00074	0.009	<0.01	11.4	7.7	<0.05	2	1	1	1	95	90	16
580	N1_580_047	0.00058	0.016	<0.01	9.6	8	<0.05	3	1	1	2	106	96	18
580	N1_580_047	0.00113	0.006	<0.01	12.2	7.6	<0.05	2	1	0	<0.5	87	78	16
580	N1_580_049	0.00172	0.013	<0.01	13.3	8	<0.05	1	1	1	11	126	122	21
580	N1_580_049	0.00002	<0.001	<0.01	17.3	7.1	<0.05	4	0	0	2	57	120	14
580	N1_580_038	0.00001	<0.001	<0.01	38.8	7.4	0.05	4	0	0	5	50	95	19
570	N1_570_013	<0.00001	<0.001	<0.01	381	6.6	<0.3	3	0	1	346	484	770	8
570	N1_570_013	0.00001	<0.001	<0.01	572	5.9	<0.3	9	<0.1	0	537	725	1,060	2
660	N2_660_104	0.00941	0.003	<0.01	40.1	8.2	<0.05	6	1	1	5	111	183	58

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	SAMPLE 1		SAMPLE 2		MATERIAL CLASSIFICATION	Acid Base Accounting (ABA)													Shake Flask Extraction Results				
		SAMPLE 1	Sample 1 HOLE ID	SAMPLE 2	SAMPLE 2 HOLD ID		Recvd Wt.	MPA	FIZZ RATING	NNP	NP	pH	Ratio (NP:MPA)	S LECO	S	S	S	C	CO2	Ag	Al	As	B	Ba
							kg	tCaCO3/1Kt	Unity	tCaCO3/1Kt	tCaCO3/1Kt	Unity	Unity	%	%	%	%	%	%	mg/L	mg/L	mg/L	mg/L	mg/L
580	N1_580_051	S666909	1018	S666954	2104	NAG	0.31	<0.3	1	10	10	8.5	64	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	8.43	<0.001	0.12	0.074
580	N1_580_051	S666939	2403	S666964	2003	NAG	0.33	0.3	1	12	12	8.4	38.4	0.01	<0.01	0.02	0.01	<0.05	<0.2	<0.00005	7.54	<0.001	0.21	0.066
580	N1_580_051	S666947	2102	S666948	2203	NAG	0.37	<0.3	1	10	10	8.5	64	<0.01	<0.01	<0.01	<0.01	<0.05	<0.2	<0.00005	7.18	<0.001	0.14	0.067
580	N1_580_051	S667190	1100	S667145	1301	NAG	0.39	1.3	1	13	14	7.3	11.2	0.04	<0.01	0.01	0.04	<0.05	<0.2	<0.00005	0.038	<0.001	0.23	0.01
580	N1_580_051	S667217	3036	S667058	2304	NAG	0.33	1.3	1	14	15	7.8	12	0.04	<0.01	<0.01	0.04	<0.05	<0.2	<0.00005	0.104	<0.001	0.07	0.003
580	N1_580_051	S667236	3430	S667275	2343	NAG	0.42	1.6	1	10	12	7.3	7.68	0.05	<0.01	<0.01	0.05	<0.05	<0.2	<0.00005	0.04	<0.001	0.32	0.009
570	N1_570_015	S667367	1117	S667371	1119	NAG	0.32	1.6	1	9	11	7.7	7.04	0.05	<0.01	0.02	0.05	<0.05	<0.2	<0.00005	0.136	<0.001	0.03	<0.001
570	N1_570_015	S667379	1115	S667378	1121	NAG	0.35	1.9	1	10	12	7.7	6.4	0.06	<0.01	0.02	0.06	<0.05	<0.2	<0.00005	0.109	<0.001	0.05	0.001
570	N1_570_015	S667404	1113	S667429	1622	NAG	0.38	3.1	1	9	12	7.8	3.84	0.1	<0.01	0.02	0.1	<0.05	<0.2	<0.00005	0.16	<0.001	0.03	0.001
570	N1_570_015	S667408	1008	S667411	1010	NAG	0.3	0.6	1	15	16	7.9	25.6	0.02	<0.01	0.02	0.02	<0.05	<0.2	<0.00005	0.142	<0.001	0.03	0.002
570	N1_570_015	S667442	1206	S667495	1410	PAG	0.41	5.6	1	8	14	7.9	2.49	0.18	<0.01	0.04	0.18	<0.05	<0.2	<0.00005	0.114	<0.001	0.04	0.002
570	N1_570_015	S667446	1909	S667445	1006	NAG	0.5	3.8	1	15	19	7.9	5.07	0.12	0.01	0.01	0.11	<0.05	<0.2	<0.00005	0.042	<0.001	0.04	0.002
570	N1_570_015	S667453	1808	S667451	1705	NAG	0.44	0.6	1	17	18	7.8	28.8	0.02	<0.01	0.01	0.02	<0.05	<0.2	<0.00005	0.09	<0.001	0.02	0.002
570	N1_570_015	S667470	1123	S667498	1002	NAG	0.45	2.8	1	7	10	7.6	3.56	0.09	<0.01	<0.01	0.09	<0.05	<0.2	<0.00005	0.032	<0.001	0.31	0.002
570	N1_570_015	S667483	1707	S667488	1408	NAG	0.4	0.6	1	15	16	8	25.6	0.02	<0.01	0.01	0.02	<0.05	<0.2	<0.00005	0.129	<0.001	0.04	0.002
570	N1_570_015	S667485	1606	S667494	1608	NAG	0.36	3.8	1	14	18	8	4.8	0.12	<0.01	0.01	0.12	<0.05	<0.2	<0.00005	0.112	<0.001	0.09	0.003
570	N1_570_015	S667491	1101	S667487	1604	NAG	0.32	2.5	1	15	17	8	6.8	0.08	<0.01	0.01	0.08	<0.05	<0.2	<0.00005	0.089	<0.001	0.02	0.001
570	N1_570_015	S667496	1004	S667500	1204	PAG	0.34	3.4	1	13	16	7.8	4.65	0.11	0.01	0.02	0.1	<0.05	<0.2	<0.00005	0.051	<0.001	0.03	0.002
570	N1_570_015	S667555	1305	S667554	1200	NAG	0.32	3.4	1	11	14	7.9	4.07	0.11	<0.01	0.02	0.11	<0.05	<0.2	<0.00005	0.118	<0.001	0.04	0.002
570	N1_570_015	S667557	1000	S667497	1202	NAG	0.35	1.3	1	17	18	7.8	14.4	0.04	<0.01	0.02	0.04	<0.05	<0.2	<0.00005	0.048	<0.001	0.03	0.003
570	N1_570_021	S667765	1139	S667790	1725	NAG	0.42	2.5	1	11	13	7.1	5.2	0.08	<0.01	0.02	0.08	<0.05	<0.2	<0.00005	0.045	<0.001	0.04	0.002
570	N1_570_021	S667772	3000	S667770	3101	NAG	0.47	0.3	1	3	3	8	9.6	0.01	<0.01	0.02	0.01	<0.05	<0.2	<0.00005	0.151	<0.001	0.07	0.002
570	N1_570_021	S667810	2416	S667808	2517	PAG	0.35	16.9	1	5	22	7.5	1.3	0.54	<0.01	0.05	0.54	<0.05	<0.2	<0.00005	0.036	<0.001	0.05	0.003
570	N1_570_021	S667864	2406	S667825	1511	PAG	0.39	27.8	1	-10	18	6.3	0.65	0.89	0.21	0.27	0.68	<0.05	<0.2	<0.00005	<0.005	<0.001	0.09	0.004
570	N1_570_021	S667892	2505	S667898	2608	NAG	0.4	<0.3	1	18	18	7.9	115.2	<0.01	<0.01	0.02	<0.01	<0.05	<0.2	<0.00005	0.123	<0.001	0.35	<0.001
570	N1_570_019	S667902	1026	S667900	1030	PAG	0.39	9.1	1	3	12	7.6	1.32	0.29	0.01	0.01	0.28	<0.05	<0.2	<0.00005	0.038	<0.001	0.09	<0.001
570	N1_570_019	S667905	1120	S667977	1028	PAG	0.36	7.5	1	1	8	7.6	1.07	0.24	0.01	0.01	0.23	<0.05	<0.2	<0.00005	0.06	<0.001	0.24	0.001
570	N1_570_019	S667922	2015	S667950	1520	PAG	0.38	15	1	-3	12	7.2	0.8	0.48	0.01	0.03	0.47	<0.05	<0.2	<0.00005	0.019	<0.001	0.07	<0.002
570	N1_570_019	S667928	1019	S667908	1123	NAG	0.34	0.6	1	12	13	7.9	20.8	0.02	0.01	0.02	0.01	<0.05	<0.2	<0.00005	0.118	0.002	0.24	0.001
570	N1_570_019	S667949	1817	S667933	1819	PAG	0.34	41.9	1	-32	10	7.2	0.24	1.34	0.02	0.01	1.32	<0.05	<0.2	<0.00005	0.009	<0.001	0.08	<0.001
570	N1_570_019	S667963	1217	S667907	1024	NAG	0.32	0.6	1	10	11	7.8	17.6	0.02	<0.01	0.04	0.02	<0.05	<0.2	<0.00005	0.098	<0.001	0.24	<0.001
570	N1_570_021	S668162	1624	S668208	2414	NAG	0.29	1.6	1	14	16	7.2	10.24	0.05	0.03	0.06	0.02	<0.05	<0.2	<0.00005	0.046	<0.001	0.05	0.001
570	N1_570_021	S668169	1824	S667791	1034	NAG	0.4	1.9	1	12	14	7.3	7.47	0.06	0.03	0.08	0.03	<0.05	<0.2	<0.00005	0.063	<0.001	0.03	0.002
570	N1_570_021	S668186	2123	S667869	1909	NAG	0.36	0.3	1	13	13	7.7	41.6	0.01	<0.01	0.03	0.01	<0.05	<0.2	<0.00005	0.273	<0.001	<0.01	<0.001
570	N1_570_021	S668222	2511	S668223	2610	NAG	0.43	<0.3	1	7	7	7.5	44.8	<0.01	<0.01	0.01	<0.01	<0.05	<0.2	<0.00005	0.03	<0.001	0.04	<0.001
570	N1_570_023	S668536	2307	S668539	2307	NAG	0.38	0.6	1	12	13	8.3	20.8	0.02	<0.01	<0.01	0.02	<0.05	<0.2	<0.00005	4.35	<0.001	0.07	0.07
570	N1_570_023	S668537	2305	S668538	2307	NAG	0.38	0.3	1	14	14	8.3	44.8	0.01	<0.01	<0.01	0.01	<0.05	<0.2	<0.00005	5.33	<0.001	0.07	0.059
580	N1_580_054	S668744	2010	S668745	2012	NAG	0.29	<0.3	1	10	10	8.2	64	<0.01	<0.01	0.01	<0.01	<0.05	<0.2	0.00006	12.6	<0.001	0.16	0.04

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	Shake Flask Extraction Results																								
		Be	Bi	Ca	Cd	Co	Cr	Cu	Fe	Hg	K	Li	Mg	Mn	Mo	Moisture	Na	Ni	Pb	P	Sb	Se	Si	Sn	Sr	Ti	Tl
		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ppm
580	N1_580_051	0.0009	<0.0005	0.1	<0.00005	0.0012	0.0006	0.006	3.98	<0.0003	29.4	0.026	2.47	0.03	0.0055	0.5	3.43	0.0014	0.0013	<0.3	<0.0001	<0.0005	14.1	<0.0005	0.0034	0.11	<0.0001
580	N1_580_051	0.001	<0.0005	0.4	<0.00005	0.0013	0.002	0.003	3.71	<0.0003	32.1	0.034	3.53	0.0365	0.0025	0.6	4.1	0.0026	0.0023	<0.3	<0.0001	<0.0005	11.5	<0.0005	0.0056	0.12	<0.0001
580	N1_580_051	0.0009	<0.0005	0.2	<0.00005	0.0011	0.0008	0.003	3.49	<0.0003	28.4	0.025	2.21	0.028	0.0012	0.4	3.38	0.0014	0.0013	<0.3	<0.0001	<0.0005	11.8	<0.0005	0.0031	0.12	<0.0001
580	N1_580_051	<0.0005	<0.0005	1.2	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	18.6	0.036	41.4	0.0065	0.0369	1.5	2.53	<0.0005	<0.0001	<0.3	<0.0001	0.0008	3.04	<0.0005	0.0144	<0.01	<0.0001
580	N1_580_051	<0.0005	<0.0005	0.7	<0.00005	<0.0001	0.0021	<0.001	<0.03	<0.00005	23.2	0.008	9.69	0.0028	0.0258	0.9	3.9	<0.0005	<0.0001	<0.3	0.0002	0.0006	3.06	<0.0005	0.0042	<0.01	<0.0001
580	N1_580_051	<0.0005	<0.0005	1.5	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	10.5	0.182	35	0.0108	0.0336	1.4	2.03	<0.0005	<0.0001	<0.3	<0.0001	0.0017	3.72	<0.0005	0.0119	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	0.5	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	5.33	<0.005	16.8	0.004	0.0073	0.5	0.6	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	1.66	<0.0005	0.0039	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	0.9	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	6.99	<0.005	18.3	0.0037	0.0048	0.7	0.87	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.08	<0.0005	0.0066	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	0.9	<0.00005	<0.0001	0.0008	<0.001	<0.03	<0.00005	9.1	<0.005	12.6	0.0028	0.0062	0.6	1.05	<0.0005	<0.0001	<0.3	0.0001	<0.0005	2.18	<0.0005	0.0057	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.2	<0.00005	<0.0001	0.0024	<0.001	<0.03	<0.00005	9.79	<0.005	14.7	0.0023	0.0065	0.8	0.99	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.31	<0.0005	0.0042	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.5	<0.00005	<0.0001	0.0017	<0.001	<0.03	<0.00005	7.91	<0.005	11.4	0.0038	0.0073	0.6	1.39	<0.0005	<0.0001	<0.3	<0.0001	0.0012	2.44	<0.0005	0.0044	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	2.8	<0.00005	<0.0001	0.0029	<0.001	<0.03	<0.00005	7.12	<0.005	15.7	0.0034	0.0112	1.4	1.63	<0.0005	<0.0001	<0.3	<0.0001	0.0008	4.85	<0.0005	0.0046	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.6	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	8.09	<0.005	10.9	0.0052	0.0072	0.9	2.27	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	3.17	<0.0005	0.0029	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	2	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	4.29	0.101	19.3	0.0075	0.0199	1.2	0.67	0.0016	<0.0001	<0.3	<0.0001	0.001	4.91	<0.0005	0.0101	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.2	<0.00005	<0.0001	0.0009	<0.001	<0.03	<0.00005	11.5	<0.005	7.66	0.0027	0.0073	0.8	2.05	0.0014	<0.0001	<0.3	<0.0001	<0.0005	2.89	<0.0005	0.0045	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.4	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	10.8	<0.005	9.01	0.0033	0.0044	1	1.8	<0.0005	<0.0001	<0.3	<0.0001	0.0006	2.82	<0.0005	0.0048	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.5	<0.00005	<0.0001	0.0012	<0.001	<0.03	<0.00005	6.91	<0.005	9.48	0.0024	0.0259	0.8	1.73	<0.0005	<0.0001	<0.3	<0.0001	0.0006	2.84	<0.0005	0.0029	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	3	<0.00005	<0.0001	0.0033	<0.001	<0.03	<0.00005	6.18	<0.005	19	0.0037	0.0205	0.8	0.96	<0.0005	<0.0001	<0.3	<0.0001	0.0018	3.14	<0.0005	0.0041	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	1.1	<0.00005	<0.0001	0.0019	<0.001	<0.03	<0.00005	6.28	<0.005	10.4	0.002	0.0081	0.6	1.02	<0.0005	<0.0001	<0.3	0.0002	0.0005	2.56	<0.0005	0.003	<0.01	<0.0001
570	N1_570_015	<0.0005	<0.0005	2.2	<0.00005	<0.0001	0.003	<0.001	<0.03	<0.00005	5.62	<0.005	17.2	0.005	0.0061	1.1	1.02	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	3.21	<0.0005	0.0046	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	6.9	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	5.63	<0.005	61.8	0.0286	0.005	1.1	3.37	<0.0005	<0.0001	<0.3	<0.0001	0.001	3.7	<0.0005	0.0046	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	5	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	3.28	0.007	8.75	0.001	0.0061	<0.3	1.81	<0.0005	<0.0001	<0.3	<0.0001	0.0009	3.8	<0.0005	0.0197	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	4.7	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	5.64	0.01	36.4	0.0069	0.0181	2.2	2.04	<0.0005	<0.0001	<0.3	<0.0001	0.0058	4.45	<0.0005	0.0209	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	16.8	<0.00005	0.0004	<0.0005	<0.001	<0.03	<0.00005	7	0.04	240	0.321	0.0001	3.4	1.48	0.002	<0.0001	<0.3	<0.0001	0.0058	6.82	<0.0005	0.0508	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	2.3	<0.00005	<0.0001	0.0011	<0.001	0.13	<0.00005	2.23	0.027	11	0.0014	0.0004	1.4	2.34	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	4.3	<0.0005	0.0058	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	2.1	<0.00005	<0.0001	0.0007	<0.001	<0.03	<0.00005	2.03	0.014	21.6	0.0172	0.0059	1.1	1.04	0.001	<0.0001	<0.3	<0.0001	0.0025	6.41	<0.0005	0.0062	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	1.3	<0.00005	<0.0001	0.0005	<0.001	0.03	<0.00005	5.66	0.033	18.5	0.0064	0.0027	0.8	1.33	<0.0005	<0.0001	<0.3	0.0001	0.0014	6.76	<0.0005	0.0065	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	5.1	<0.00005	0.0001	<0.0005	<0.001	<0.03	<0.00005	4.89	0.012	79.6	0.0392	0.0016	1.4	1.58	0.0006	<0.0001	<0.3	<0.0001	0.0129	5.03	<0.0005	0.0368	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	1.1	<0.00005	<0.0001	0.0009	<0.001	<0.03	<0.00005	10	0.029	12.9	0.0018	0.003	0.8	2.85	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.77	<0.0005	0.0068	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	1.7	<0.00005	0.0003	<0.0005	<0.001	<0.03	<0.00005	2.28	0.012	45.4	0.0481	0.0027	1.5	0.81	0.0019	<0.0001	<0.3	<0.0001	0.0081	10.2	<0.0005	0.0068	<0.01	<0.0001
570	N1_570_019	<0.0005	<0.0005	1.3	<0.00005	<0.0001	0.0007	<0.001	<0.03	<0.00005	9.04	0.022	13.9	0.0016	0.0038	0.6	3.25	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	2.9	<0.0005	0.0087	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	3	<0.00005	<0.0001	0.0007	<0.001	<0.03	<0.00005	7.92	0.007	56.3	0.0166	0.0037	1.1	1.9	<0.0005	<0.0001	<0.3	<0.0001	0.001	3.82	<0.0005	0.0058	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	4.2	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	11.6	<0.005	40	0.0205	0.0095	1	3.23	<0.0005	<0.0001	<0.3	<0.0001	0.0012	3.55	<0.0005	0.0066	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	0.5	<0.00005	<0.0001	0.002	<0.001	<0.03	<0.00005	2.61	<0.005	15.9	0.0012	0.0015	0.4	0.49	<0.0005	<0.0001	<0.3	<0.0001	<0.0005	1.43	<0.0005	0.003	<0.01	<0.0001
570	N1_570_021	<0.0005	<0.0005	1.4	<0.00005	<0.0001	<0.0005	<0.001	<0.03	<0.00005	1.58	0.023	9.52	0.0008	0.0038	0.8	0.59	<0.0005	<0.0001	<0.3	<0.0001	0.0023	7.89	<0.0005	0.0077	<0.01	<0.0001
570	N1_570_023	<0.0005	<0.0005	0.2	<0.00005	0.0008	0.0006	0.002	4.07	<0.00005	45.9	0.006	3.17	0.0255	0.0438	0.3	3.91	0.0009	0.0003	<0.3	<0.0001	<0.0005	7.26	<0.0005	0.0033	0.13	<0.0001
570	N1_570_023	<0.0005	<0.0005	0.2	<0.00005	0.0009	0.0009	0.002	4.47	<0.00005	47.9	0.006	3.32	0.0286	0.05	0.3	3.29	0.0011	0.0004	<0.3	0.0002	<0.0005	8.51	<0.0005	0.004	0.17	<0.0001
580	N1_580_054	0.0007	0.0025	0.6	0.00007	0.001	0.0007	0.03	3.43	<0.0003	31.1	0.008	4.2	0.0224	0.0022	0.7	2.05	0.0014	0.0021	<0.3	<0.0001	<0.0005	16.7	<0.0005	0.0035	0.05	<0.0001

Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Bench	Blast ID	Shake Flask Extraction Results						Anions by Ion Chromotography						
		U	V	Zn	Hardness	Final pH	Br	Cl	F	NO3 (as N)	SO4	TDS	Conductivity	Alkalinity Total
		mg/L	mg/L	mg/L	mg/L CaCO3eq	Unity	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	uS/cm	mg/L CaCO3eq
580	N1_580_051	0.00211	0.007	<0.01	10.5	7.5	<0.05	2	1	0	2	102	95	14
580	N1_580_051	0.00079	0.007	<0.01	15.5	7.5	<0.05	2	1	0	2	100	108	17
580	N1_580_051	0.00098	0.008	<0.01	9.6	7.7	<0.05	2	1	0	<0.5	91	88	16
580	N1_580_051	0.00001	<0.001	<0.01	173	6.9	<0.05	4	0	0	123	209	384	11
580	N1_580_051	0.00003	<0.001	<0.01	41.6	7.2	<0.05	4	0	0	28	87	168	11
580	N1_580_051	0.00002	<0.001	<0.01	148	7.1	0.05	8	0	1	114	193	333	11
570	N1_570_015	<0.00001	<0.001	<0.01	70.5	7.4	<0.05	2	0	0	<0.5	47	162	24
570	N1_570_015	<0.00001	<0.001	<0.01	77.6	7.2	<0.05	2	0	1	1	55	177	25
570	N1_570_015	<0.00001	<0.001	<0.01	54.1	7.4	<0.05	2	0	1	2	52	141	22
570	N1_570_015	<0.00001	<0.001	<0.01	63.4	7.4	<0.05	3	0	1	1	58	165	28
570	N1_570_015	<0.00001	<0.001	<0.01	50.6	7.3	<0.05	2	0	1	5	53	134	21
570	N1_570_015	<0.00001	<0.001	<0.01	71.5	7.4	<0.05	2	0	8	6	98	196	23
570	N1_570_015	<0.00001	<0.001	<0.01	48.9	7.2	<0.05	2	0	1	3	56	136	20
570	N1_570_015	0.00003	<0.001	<0.01	84.5	7.2	0.06	5	0	0	40	94	202	11
570	N1_570_015	<0.00001	<0.001	<0.01	34.6	7.4	<0.05	3	0	1	2	55	116	21
570	N1_570_015	<0.00001	<0.001	<0.01	40.6	7.4	<0.05	3	0	1	5	58	124	22
570	N1_570_015	<0.00001	<0.001	<0.01	42.8	7.4	<0.05	3	0	0	5	51	119	20
570	N1_570_015	<0.00001	<0.001	<0.01	85.8	7.2	<0.05	2	1	1	43	101	212	19
570	N1_570_015	<0.00001	<0.001	<0.01	45.6	7.3	<0.05	2	0	1	3	48	121	20
570	N1_570_015	<0.00001	<0.001	<0.01	76.2	7.3	<0.05	2	0	13	4	109	215	19
570	N1_570_021	0.00001	<0.001	<0.01	272	7	<0.05	2	0	0	239	337	524	9
570	N1_570_021	0.00003	<0.001	<0.01	48.5	7.7	0.13	9	0	0	3	62	114	30
570	N1_570_021	0.00002	<0.001	<0.01	162	7.6	<0.05	4	1	2	110	199	335	26
570	N1_570_021	<0.00001	<0.001	<0.01	1030	6.2	<0.5	6	<0.2	1	979	1,280	1,580	4
570	N1_570_021	<0.00001	<0.001	<0.01	51.1	7.6	0.08	7	1	0	<0.5	57	117	26
570	N1_570_019	0.00002	<0.001	<0.01	94.2	7.2	<0.05	4	0	0	49	111	213	20
570	N1_570_019	0.00002	<0.001	<0.01	79.5	7.1	<0.05	4	0	0	37	100	192	18
570	N1_570_019	<0.00001	<0.001	<0.01	340	6.9	<0.05	3	0	0	289	404	628	8
570	N1_570_019	<0.00001	<0.001	<0.01	55.9	7.3	0.11	9	0	0	1	61	156	22
570	N1_570_019	0.00001	<0.001	<0.01	191	6.9	<0.05	3	0	1	133	222	362	11
570	N1_570_019	<0.00001	<0.001	<0.01	60.6	7.2	0.13	14	0	0	5	69	168	21
570	N1_570_021	0.00002	<0.001	<0.01	239	6.9	<0.05	1	0	2	202	298	476	8
570	N1_570_021	<0.00001	<0.001	<0.01	175	7	<0.05	2	1	3	141	230	388	9
570	N1_570_021	<0.00001	<0.001	<0.01	66.8	7.5	<0.05	1	0	1	2	49	136	24
570	N1_570_021	<0.00001	<0.001	<0.01	42.6	7.2	<0.05	3	1	7	3	79	115	10
570	N1_570_023	0.00019	0.004	<0.01	13.6	7.8	<0.05	2	1	0	6	108	158	26
570	N1_570_023	0.00022	0.006	<0.01	14.2	7.9	<0.05	2	1	0	3	113	159	27
580	N1_580_054	0.00161	0.004	<0.01	18.7	7.4	<0.05	4	1	0	1	115	98	13

Attachment 3
Milne Port Fuel Module Photographs

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7