



December 13, 2021

Assol Kubeisinova
Technical Advisor, Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU X0B 1J0

**RE: Baffinland's Responses to Comments
2020 QIA & NWB Annual Report for Operations
Mary River Project, Type 'A' Water Licence - 2AM-MRY1325 - Amendment. No. 1**

Baffinland Iron Mines Corporation (Baffinland) has reviewed the comments and recommendations received from the Nunavut Water Board (NWB)¹, the Qikiqtani Inuit Association (QIA), Crown Indigenous Relations and Northern Affairs Canada (CIRNAC)² and Environment and Climate Change Canada (ECCC)³ in regard to Baffinland's 2020 QIA & NWB Annual Report for Operations.

Baffinland thanks all parties for their comments and reviews of the 2020 QIA & NWB Annual Report for Operations. Baffinland's responses to the comments required by December 13, 2021 are provided in Attachment 1 of this letter. Remaining comments will be addressed within the timeline established by the NWB.

Please do not hesitate to contact the undersigned should you have any remaining questions or comments.

Regards,

A handwritten signature in black ink that reads "AMcKenzie".

Amanda McKenzie
Project Manager

Cc: Karén Kharatyan, Richard Dwyer (NWB)
Chris Spencer, Jared Ottenhof (QIA)
Bridget Campbell, Sarah Forte (CIRNAC)

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.

² CIRNAC (2021) Re: Crown-Indigenous Relations and Northern Affairs Canada Review of Baffinland Iron Mine Corporation's 2020 annual report for Type A water licence 2AM-MRY1325 for the Mary River Project. Letter dated August 10, 2021.

³ ECCC (2021) RE: 2AM-MRY1325 – Baffinland Iron Mine Corporation – Mary River Project – 2020 Annual Water Licence Report. Letter dated July 15, 2021.

Melissa Pinto, Anne Wilson (ECCC)

Lou Kamermans, Steve Borcsok, Kendra Button and Connor Devereaux (Baffinland)

Attachments

Attachment 1 – Baffinland Response to Comments

Attachment 2 - Updated Table E.6.4: Deposit No. 1 Waste Rock Geochemistry 1:40000 Sampling - ABA and SFE Sampling Results - 2020

Attachment 3 - Milne Port Fuel Module Photographs

Attachment 1

Baffinland Response to Comments

Table 1 – Baffinland Response to 2020 QIA-NWB Annual Report for Operations – Dec 13

Intervener Cmt. No.	Intervener Recommendation / Concern	Deadline to Respond by and Notes	BIM Response
1	Provide an explanation as to why the Milne Port Fuel Module Construction Summary Report is not available.	December 13, 2021	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.
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.	December 13, 2021 The Board also notes its approval of Modification No. 13.	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.

Intervener Cmt. No.	Intervener Recommendation / Concern	Deadline to Respond by and Notes	BIM Response
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.	December 13, 2021	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.
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.	December 13, 2021	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.

Intervener Cmt. No.	Intervener Recommendation / Concern	Deadline to Respond by and Notes	BIM Response
			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.
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 (QA/QC) program so that the objective of the program can be met in future years.	December 13, 2021	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.
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.	December 13, 2021	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.
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.	December 13, 2021	Please see Attachment 2 – Updated Table E.6.4. The headers have been updated to provide further clarity.

Intervener Cmt. No.	Intervener Recommendation / Concern	Deadline to Respond by and Notes	BIM Response
			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.
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).	December 13, 2021 Subsequent annual reports	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.
7	Provide a discussion of data quality objectives and procedures in section 10 of the Quality Assurance and Quality Control Plan.	December 13, 2021	In accordance with the Type 'A' Water Licence, the QA/QC Plan has been prepared following the general recommendations presented in Quality

Intervener Cmt. No.	Intervener Recommendation / Concern	Deadline to Respond by and Notes	BIM Response
			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 updated plan will be included in the 2021 Annual Report submission. Furthermore, each year Section 7.8 of the QIA-NWB Annual Report for Operations contains a summary and comparison of results on QA/QC samples for the calendar year.

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 ₂ CO ₃ 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.									

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																		

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 Chromatography						
		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	<0.0.																					

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 Chromatography						
		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