AGNICO EAGLE

UPPER BEAVER
PROJECT

Upper Beaver Gold Project
Impact Statement

Appendix H-1:

Metal Leaching and Acid Rock Drainage Characterization Report (Operations Phase)

AGNICO EAGLE

Upper Beaver Gold Project:
Metal Leaching and Acid Rock Drainage Characterization Report
(Operations Phase)

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LORAX ENVIRONMENTAL

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AGNICO EAGLE

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1. Introduction

AGNICO EAGLE

1. Introduction

The Upper Beaver Project (Project) is a proposed gold-copper mine located approximately 5 km northeast of the town of Dobie and 19 km east of the town of Kirkland Lake in northeastern Ontario. It is fully owned by Agnico Eagle Mines Limited (Agnico Eagle) who plan to develop the deposit through both underground and open pit mining methods. The Project entered the Advanced Exploration phase (AEX Project) in the summer of 2024. In parallel, Agnico Eagle is now undertaking the necessary technical studies to support the federal Impact Assessment (IA), as well as future federal and provincial permitting for the Project's proposed operations phase. In addition, First Nations engagement is being advanced to develop favourable health, social and economic conditions for local communities. The Impact Assessment Agency of Canada (IAAC) released the Notice of Commencement of the IA process in April 2022.

As part of the IA, mining effects on water quality need to be evaluated and quantified. In this regard, metal leaching and acid rock drainage (ML/ARD) associated with the disturbance, processing, and storage of geologic materials must be considered in the assessment of potential water quality impacts. Specifically, the release of geochemical loads into mine site drainage can occur as a result of weathering of naturally occurring minerals or leaching of explosives residues and process plant reagents.

In support of the federal IA, as well as subsequent provincial permitting documentation such as the Project's Closure Plan and Industrial Sewage Works Environmental Compliance Approval, the following report prepared by Lorax Environmental Services Ltd. (Lorax), provides an ML/ARD assessment of ore, mine rock, tailings, and overburden. Based on the geochemical characterization, this report also proposes measures for ML/ARD management and associated monitoring.

2. Project Understanding

AGNICO EAGLE

2. Project Understanding

2.1 Geological Setting

A geological description of the Upper Beaver deposit is provided in the following. Table 2-1 gives an overview of the Project's key stratigraphic and lithological units that were used for the resource block model. Note that the nomenclature defined under "ML/ARD Unit" is adopted for the remainder of this ML/ARD assessment.

The Upper Beaver deposit falls into the southern extents of the Neoarchean volcano-sedimentary assemblages of the Abitibi Greenstone belt (AGB) in the Superior Province of the Canadian Shield. The southern AGB comprises felsic to ultramafic subaqueous volcanism that is ~2,750-2,695 Ma in age and is now unconformably overlain by igneous and sedimentary rock associated with Timiskaming volcanism (2,679-2,669 Ma), the early phases of which prompted Upper Beaver gold mineralization via volcanic construction and overprinting metamorphism. Most gold deposits in the region occur along two major crustal faults known as the Porcupine-Destor deformation zone and the Cadillac-Larder Lake deformation zone (CLLDZ).

Many gold deposits in the Kirkland Lake area, where the Project is located, are genetically and spatially related to major regional structures, most notably the east-west trending CLLDZ. Stratigraphic units that are encountered in the Project district encompass the following groups: Tisdale, Blake River and Timiskaming. The stratigraphy is locally intersected by a series of subvolcanic intrusions of Timiskaming age. All of these units contain various styles of gold showings.

Locally, bedrock is covered by up to 30 m of unconsolidated glacio-lacustrine and glacio-fluvial deposits comprised primarily of sand and clay. For the purpose of this study, any unconsolidated, relatively recent materials overlying bedrock, including such sediment deposits and organics-rich topsoil horizons, are referred to as "overburden" as they will be stripped and stockpiled as one unit.

2.1.1 Project Geological Domains

A representative cross-section of the Project's geological domains is shown in Figure 2-1. The Tisdale group represents a range of calc-alkaline felsic to intermediate and mafic volcanic rocks as well as volcaniclastic sediments. It is exposed along the CLLDZ to the southwest of the property and intersects the Project infrastructure in the southern extents of the underground workings as well as at depth. A pocket of sedimentary strata ("Sediments"; Table 2-1) derived from Tisdale group materials is also encountered in the southwestern portion of the underground development. These materials comprise argillite,

greywackes, chert, and conglomerates. However, this sedimentary unit is situated within the Blake River group stratigraphically.

The Upper Beaver property is located along the contact zone of the upper and lower Blake River groups. The upper Blake River group hosts an intermediate to felsic volcano-sedimentary succession (andesitic lava flows and volcaniclastics) and is overlain by mafic volcanic units (pillowed basalts, hyaloclastite horizons; "Blake River Mafic", Table 2-1) that make up the lower Blake River group. A mafic volcaniclastic deposit ("Volcanoclastics", Table 2-1) with minor to moderate heterogeneity forms a wedge within the Blake River group. The Volcanoclastics comprise tuff-breccia to lapilli-tuffs along with the mentioned Tisdale-derived Sediments. The volcaniclastic wedge marks a change in Blake River group composition from andesitic to tholeiitic.

The Dog's Breakfast ("Dogs BF") ore horizon is a stratabound system encountered at the contact of the Blake River Mafic and the Volcanoclastics and exhibits replacement-style mineralization in the form of skarnoid alteration. The spatial and geochemical review of this unit in combination with its low volume, and consequently small number of samples relative to other mine rock lithologies, prompted the grouping of Dogs BF samples with the Volcanoclastics unit for the purpose of this assessment (Table 2-1).

Table 2-1:
Stratigraphic and Lithological Breakdown of Major Units Described within the Upper Beaver Property

Stratigraphic Group	Resource Model Unit	Composition	ML/ARD Unit (this study)
Tisdale	Tisdale	Calc-alkaline, andesite-dacite, and intermediate volcanic sediments	Tisdale
	Sediment	Some graphitic argillites	
Blake River Group	Blake River Mafic	Mafic tholeiitic	Blake River Mafic
	Volcanoclastic		Volcanoclastic
	Dogs BF	Distinct skarnoid alteration within Blake River Group	
	Gabbro	Mafic tholeiitic	Gabbro
Upper Beaver Intrusive Complex (UBIC)	Mafic Syenite	Amp diorite	Mafic Syenite
	Mafic Syenite Porphyritic	Plg-amp diorite	Mafic Syenite Porphyritic
	Crowded Porphyry	Plg quartz-monzonite to monzodiorite (marker horizon)	Crowded Porphyry
	Spotted Porphyry	Late plg-amp diorite dykes (post-mineralization)	Late-Stage Dykes
Post-UBIC	Diabase Dike	Late diabase	

Notes: Amp = Amphibole; Dogs BF = Dog's Breakfast; Plg = Plagioclase; UBIC = Upper Beaver Intrusive Complex

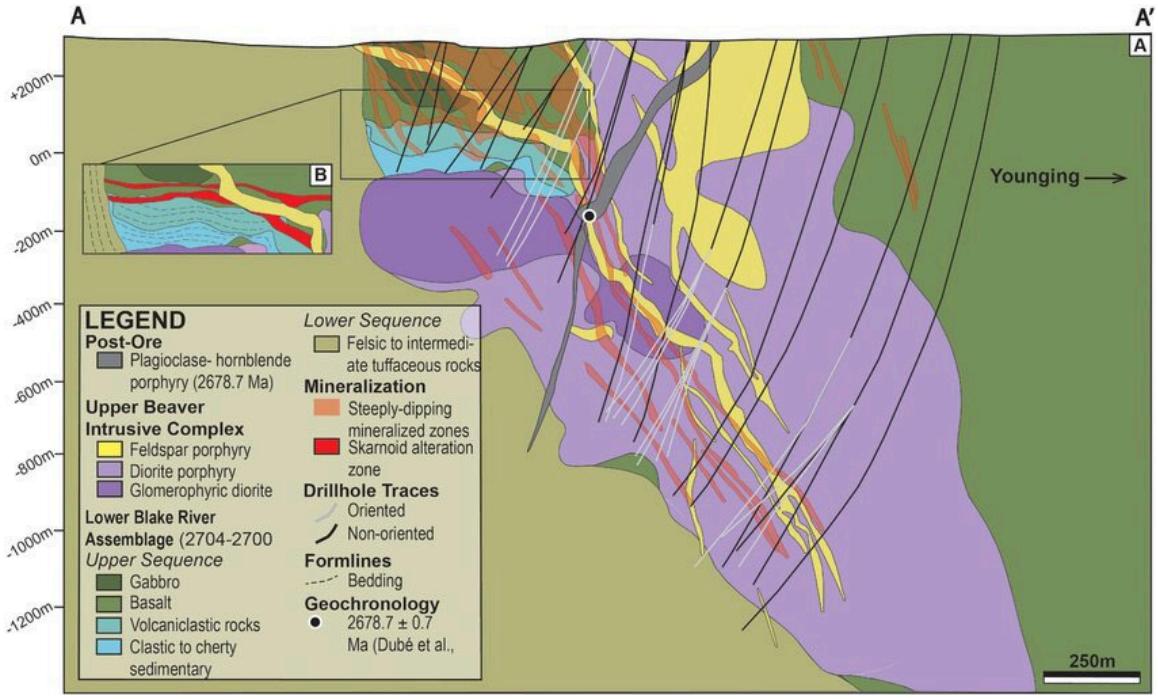


Figure 2-1: Geological cross-section of the Upper Beaver deposit (from Orlóci-Goodison *et al.*, 2025)

A series of gabbroic intrusions is observed cross-cutting the basalts of the Blake River volcanics. This unit often occurs as a dark green to grey melanocratic, medium- to coarse-grained, massive intrusion with pyroxene phenocrysts and is exposed in the southernmost section of the open pit.

At ±2,680 Ma, the Blake River sequence was intruded by various mineralized dykes collectively referred to as the Upper Beaver Intrusive Complex (UBIC). The UBIC is a roughly circular (~1 km diameter at surface) composite stock with associated dykes, sills and apophyses that are primarily emplaced along the southwest margin of the stock, which in turn, is hosted within volcanic rocks of the Blake River group. Compositionally, this series of units comprises plagioclase-, amphibole-, and/or quartz-phyric (monzo)diorites and monzonites. A characteristic feature of the UBIC is the large variation in colour that is controlled by early alteration associations. Unique block model domains under the UBIC and adopted for this study include “Mafic Syenite”, “Mafic Syenite Porphyritic”, “Crowded Porphyry”, and “Spotted Porphyry” (Table 2-1). The Crowded Porphyry was found to be an important marker unit for geological interpretation. The intrusion of the UBIC caused the hydrothermal activity that is responsible for economic gold mineralization of the deposit.

Two occurrences of post-mineralization cross-cutting dykes are present within the property bounds, namely Spotted Porphyry and Diabase Dykes. The former is genetically associated

with the youngest pulses of the UBIC, while the Diabase Dykes stem from a later Proterozoic intrusive event. Both of these intrusive units are unmineralized, low in volume, and are discussed as a single unit ("Late-Stage Dykes") for the purpose of this ML/ARD study (Table 2-1).

2.1.2 Mineralization and Alteration

Regional metamorphic grades are lower- to mid-Greenschist facies. At the Upper Beaver property, secondary mineral assemblages contain chlorite, albite, epidote, actinolite, carbonates, sericite and quartz, consistent with lower Greenschist metamorphism.

The bulk of the ore at Upper Beaver is associated with veins and veinlets, which are subdivided into various types and generations. Mineralization styles that distinguish the Upper Beaver deposit include vein-hosted (magnetite-chalcopyrite, quartz-calcite-chalcopyrite-magnetite, quartz-calcite-molybdenite, anhydrite-carbonate), disseminated, and replacement (skarnoid). Copper mineralization occurs in the form of sulphide ± sulfosalt minerals, predominantly chalcopyrite, and to a lesser extent, bornite and tetrahedrite. Pyrite is present as a common sulphide mineral as part of various mineralization styles. Molybdenite mineralization is relatively common, and like chalcopyrite, is spatially associated with Crowded Porphyry dykes and occurs in all three host rock domains. Regional metamorphism and the different mineralization events have facilitated carbonate formation, with calcite and ankerite being noted in association with vein systems.

2.2 Project History

The Upper Beaver Gold Project site has a long mineral exploration and development history. Gold was discovered west of Beaverhouse Lake in 1912. Since that time, various periods of exploration and underground mining have occurred, as well as a number of ownership changes. Past operations included the following project names and time spans:

- La Mine d'Or Huronia, 1912 to 1919;
- Argonaut Gold Mines, 1919 to 1935; and
- Upper Beaver Gold Mines, 1965 to 1972.

The historic Upper Beaver mine produced approximately 140 koz of gold and 5.4 kt of copper during intermittent operations from 1912 to 1972. Legacy infrastructure and mining-related features currently still present at site include underground workings, mill and pumphouse foundations, three partially revegetated tailings deposition areas, and three mine rock stockpiles. Agnico Eagle and previous mine owners have taken steps to manage

environmental and safety liabilities associated with these areas. All historic mine facilities west of York Lake will be consumed by the development of the proposed open pit.

In 2014, Agnico Eagle and 50-50 Joint Venture Partner, Yamana Gold, acquired the property from Osisko Mining with the Canadian Malartic Corporation ("CMC"). On March 28, 2018, Agnico Eagle acquired 100% of CMC's interest, giving it full ownership of the Project.

2.3 Previous ML/ARD Work

In 2013, when the Project was under the ownership of Osisko Mining, Story Environmental Inc. (SEI) prepared a baseline ML/ARD assessment (SEI, 2013) in support of the AEX Project. It should be noted that the AEX Project at that time had a different design than the program currently underway. However, despite the marked differences in the Project design at the time and the relatively small scale of the ML/ARD program, it nevertheless provided useful insight into Upper Beaver bedrock and tailings geochemical characteristics, which helped inform the subsequent assessment phases presented as part of this document. The most salient results from this study are summarized below.

Six mine rock samples were composited from drill core and were submitted for analysis alongside two laboratory-generated tailings samples. All samples produced neutral to alkaline paste pH values and were classified as non-potentially acid generating (NPAG) based on acid-base accounting (ABA) results. The two tailings samples exhibited relatively low total S contents of ≤0.11% while mine rock composites showed a range of 0.014% to 0.26%. Overall, it was found that carbonate-based acid buffering potential was well in excess of potential acidity afforded by sulphur minerals (SEI, 2013).

Short-term leach tests were conducted on all mine rock and tailings samples. The water chemistry results were compared against Metal Mining Effluent Regulations (MMER) applicable at the time. None of the tests produced water quality results above these thresholds (SEI, 2013).

2.4 Current Mine Plan and Facilities

The Project will produce gold doré bars and copper concentrate for sale from ore produced during underground and open pit mining. Infrastructure required to support the Project will include the following key components:

- Underground mine accessed via a shaft and two ramps;
- Open pit;
- Northeast Deposit excavations for Retention Pond 2;

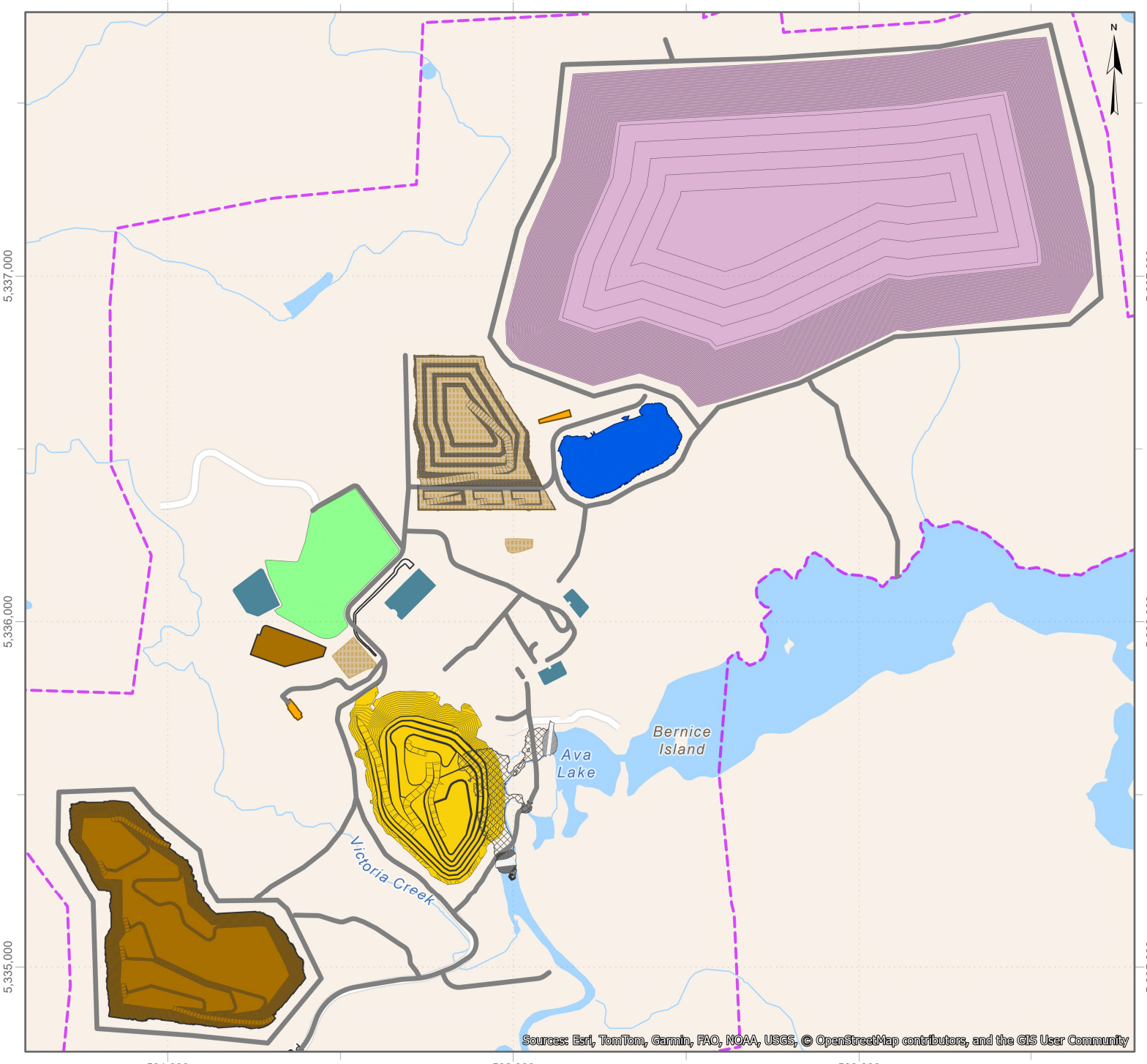
- Stockpiles (ore and overburden/organics);
- Ore processing facilities (crushers and processing plant);
- Dry stack tailings storage / mine rock co-disposal facility (TSF);
- Water management system;
- Hauling and access roads; and
- Buildings and supporting infrastructure.

With the exception the latter bullet, all areas listed above are relevant to this ML/ARD study as they expose or are built with geological mine materials. A map showing the site layout in its fully built-out configuration is given in Figure 2-2. The operations phase of the Project will utilize or expand on infrastructure developed for the AEX Project as much as possible. Following the AEX Project, and assuming external and internal approvals are received, the mine will transition to a full-scale, 14-year operations phase. Mine decommissioning and closure are subsequently expected to be completed within two years following the cessation of operations. Key Project components and related activities are described in more detail in the following sections.

2.4.1 Underground Workings

The underground mine to be developed during the operations phase will expand on historical and AEX Project workings. Ore will be produced from stopes via conventional drilling and blasting and will be trucked to surface (by ramp) or transported via the shaft. Mine rock will be either re-handled as underground backfill or transported to the surface where it will be used for construction purposes or co-disposed with tailings in the TSF. The determination of suitable construction material will be made based on geochemical and geotechnical suitability.

During the operations phase, the underground mine will be actively dewatered via a sump system. Collected groundwater will be pumped to the surface for additional management. At the end of mining, all underground access will be secured in accordance with applicable codes. Underground workings will be allowed to flood naturally through groundwater ingress. Due to the expected location of the final groundwater table, underground contact water is not expected to leave the facility at the surface anywhere on the property.



LEGEND

- Open Pit
- Open Pit Dewatered Area
- Tailings Storage Facility
- Rock Storage Facility (Advanced Exploration)
- Ore Stockpile
- Overburden Stockpile
- Portal
- Retention Pond 2
- Water Management Pond
- Road
- Contours
- Property Boundary

Coordinate System: *NAD 1983 UTM Zone 17N*
Projection: *Transverse Mercator*
Datum: *North American 1983*
Units: *Metres*

1:16,000

0 250 500 Metres

DATE SAVED:	May 20, 2026
DRAWN BY:	DM
REVIEWED:	TK
VERSION:	1

CLIENT:

AGNICO EAGLE

LORAX ENVIRONMENTAL

PROJECT:

Upper Beaver

TITLE: Upper Beaver Mine Site General Arrangement

PROJECT #: A836-1 *FIGURE:* 2-2

Printed by: DesMacDonald

Figure 2-2 Upper Beaver Mine Site General Arrangement

P:\@202506\Upper Beaver (AE)\Drafting Figures\APRX\Upper Beaver General Arrangement\Upper Beaver General Arrangement.aprx

2.4.2 Open Pit

Following geotechnical assessments, it was determined that the shallow domains of the Upper Beaver deposit near York Lake would be best removed through open pit mining rather than expanding the existing network of underground workings in this zone. This was based on safety related to the thin crown pillars associated with the historical underground workings. The open pit, located in the south of the property, will be developed via traditional blasting techniques and span approximately 300 to 400 m in diameter, partially intersecting York Lake at the surface.

A series of water management dykes will be constructed to prevent water from entering the open pit area from adjacent water bodies (*i.e.,* the Misema River Diversion System). During active mining/construction, the open pit will be dewatered using a sump system. At closure, the pit void will be flooded naturally through a combination of rebounding groundwater, meteoric water, and site runoff flows. Agnico Eagle is further considering enhanced flooding of the open pit as a water management option should it prove beneficial environmentally or otherwise.

2.4.3 Retention Pond and Northeast Deposit

Ongoing exploration work has identified a small and relatively shallow deposit on the plateau area northeast of the main zone of the deposit (Main Deposit) and south of the TSF. This secondary deposit will be mined during the construction phase as part of the excavations required to construct Retention Pond 2. To distinguish this unique ore zone from the remainder of the deposit, it is referred to as the Northeast Deposit for the remainder of this document.

The Northeast Deposit will be developed via traditional blasting techniques, similar to the open pit. Water management in the Northeast Deposit area will also mirror the open pit, as described above.

2.4.4 Stockpiles

Various stockpiles will be constructed at surface to temporarily store ore and overburden produced during the Project. Excess mine rock (*i.e.,* not used for construction purposes) will be co-disposed within the TSF or utilized as backfill in the underground workings. An AEX Project mine rock stockpile will be present temporarily during the operations phase; this mine rock will be utilized as needed for construction purposes, including the TSF, and any remaining material will be progressively reclaimed during operations.

The ore crusher system will be fed at an annual average rate of 5,200-8,000 tonnes per day (tpd). Ore stockpiles will be fully consumed by the end of mining.

Overburden material stripped during construction and mine development will be stored in a designated overburden stockpile located in the southwest portion of the property. As the Project enters the reclamation phase, these materials will be utilized as needed for use as cover materials and provide growth media for revegetation and re-establishment of naturalized landforms across the site.

2.4.5 Process Plant and Tailings Storage

Processing will consist of several stages of conventional mineral processing that include crushing, grinding, flotation, and cyanidation. The processing plant has been designed to produce both doré bars and copper concentrate. Copper concentrate will periodically be trucked to offsite facilities for additional refining.

Tailings are the waste product of the ore processing circuit and consist of a slurry of ground, gangue material mixed with process water. Supernatant water (also referred to as process water) is generated as part of the mill and flotation process. Operationally, tailings will be filtered, and a portion of the supernatant will be recycled back to the mill circuit, while residual moisture associated with the dewatered tailings solids will report to the dry stack TSF. Prior to dewatering, the tailings slurry will undergo cyanide destruction. The TSF is located in the northeast of the property and will have a capacity of up to 17 Mt of material. The remaining portion of tailings that will not be stored at surface (~50%) will be sent to the paste backfill plant and subsequently be used as backfill in the underground workings.

2.4.6 Water Management

Operationally, all surface water that interacts with mine components (contact water) will be captured via a ditch and pond system, recycled for ore processing, and/or treated prior to discharge to the receiving environment.

Water management infrastructure not required at closure will be decommissioned during the mine closure phase after the cessation of underground and open pit dewatering. Surrounding dykes will be breached and recontoured to allow natural drainage to the environment. A comprehensive water quality monitoring program will be maintained in the long term for regulatory compliance of reclaimed mine site runoff.

3. Methods

AGNICO EAGLE

3. Methods

Methods and procedures used for sample selection, preparation, and analysis related to the ML/ARD assessment program are summarized in this section. A complete inventory of all Upper Beaver ML/ARD samples with metadata is presented in Appendix A1. Geological snapshots of the deposit from above and all four cardinal directions generated using the Leapfrog Viewer software are given in Appendix A2. The methodology and results of previous work conducted by SEI (2013) are not required to inform the results of this study and are not further discussed as part of this document.

3.1 Sampling

3.1.1 Mine Rock

3.1.1.1 Static Testing

The selection and collection of mine rock and ore ML/ARD samples were carried out by Lorax, or with guidance from Lorax, in multiple phases and in consideration of geologic and mine plan information available at the time (*e.g.,* drill hole databases, Leapfrog block model files). The sampling frequency was generally aligned with recommendations from industry guidelines (*e.g.,* Price, 2009) and in consideration of overall material tonnages to be produced. An overview of the integrated sample inventory, broken out by lithology, grade, and location, is given in Table 3-1. The sample distribution across the deposit is illustrated in Figure 3-1. Specific criteria informing the sample selection for all phases include five main categories: grade, lithology, spatial distribution, sample age and type, and ancillary data:

- Grade: sample selection was biased towards mine rock over ore to inform the geochemical assessment of materials that will be permanently exposed in mine walls and used for construction; however, both types of mine rock were collected.
- Lithology: sample selection was approximately proportional to the lithology that is scheduled to be excavated per the mine schedule.
- Spatial distribution: sample selection maintained an even spatial distribution across the underground and open pit development shells. Samples within a 5 m buffer of the underground workings were prioritized where possible. While spatial distribution was a key driver for the sampling program, perceived sampling gaps (Figure 3-1) are due to the lack of drillholes in general or drillhole intersects with the development shell.

- Sample age and type: samples were generally selected from core material drilled after 2008 over reject material to minimize post-drilling weathering artifacts. Exceptions were made where post-2008 core material was not available or suitable.
- Ancillary data: samples with multi-element exploration assay data were prioritized.

The first sampling phase (Phase 1) occurred in 2018 and targeted underground mine rock that would be produced as part of the AEX Project. During a Lorax site visit in September 2018, a total of 108 samples (72 mine rock and 36 ore; *note: the original selection contained 93 mine rock samples; however, resource model updates led to the reclassification of a subset of samples*) were collected from core and reject materials. For quality assurance and quality control (QA/QC) purposes, nine duplicate samples were generated by splitting the reject sample.

The second round of sampling (Phase 2) focused on characterizing the geochemical properties of mine rock that is representative of the full spatial extent of the proposed operations phase mine plan. During this ML/ARD phase, 196 mine rock and 20 ore samples were collected for a total of 216. The sample selection and collection program was led by Agnico Eagle geology team (Agnico Eagle Geology) with guidance from Lorax. Key updates relative to the previous Phase 1 sampling program included a stronger emphasis on the characterization of mine rock over ore; expansion of the spatial domain to include the full operations phase underground extent, as well as the open pit shell; and more recent drill core (2019 onwards) was utilized as much as possible. Seven duplicate core samples were also submitted for QA/QC purposes as part of the Phase 2 sampling campaign. These duplicates were collected as quarter core from identical intervals as the original sample.

Lastly, Agnico Eagle's decision to include the Northeast Deposit prompted the expansion of the ML/ARD program in this area. Specifically, Retention Pond 2 and underlying underground workings were targeted during this third sampling phase (Phase 3), consistent with the overall Project sampling criteria. As with the Phase 2 sampling, Agnico Eagle Geology led the sampling effort with input from Lorax. A total of 50 samples (42 mine rock and 8 ore) were collected exclusively from drill core.

Over the course of the three sampling campaigns completed for the Upper Beaver Project, a total of 374 samples, including 310 mine rock and 64 ore samples, were collected and submitted for geochemical analysis. For the remainder of the document, methods and results of this integrated database are presented collectively without consideration of mine phases (AEX Project *versus* operations) to provide the most comprehensive assessment of all ML/ARD data available.

All 374 ML/ARD samples underwent routine static testwork, while a subset of samples were further analyzed using more involved analytical methods (*e.g.,* Shake Flask

Extractions [SFE], mineralogy). Broadly, the rationale for the selection of this subset is as follows: representative coverage of all mine rock types (mine rock lithologies, ore) as well as spatial distribution (underground, open pit); representative to conservative ranges of solid phase contents produced by initial static testwork for specific trace elements (*e.g.,* As, Cu, Hg, Mo) with respect to their larger sample populations; samples with large discrepancies in geochemical results relating to neutralization capacity (*e.g.,* carbonates *versus* non-carbonates) or sulphur speciation (*e.g.,* high sulphate S); and splits of all kinetic test samples. Refer to Section 3.2 for a description of all static test analytical techniques.

Table 3-1:
Mine Rock and Ore Static Test Sample Inventory for the Upper Beaver Project

Rock Type	Expected Tonnage (Mt)	Proportion (%)	Number of Samples		
			Mine Rock	Ore	Total
Lithologies					
Blake River Mafic	10.0	50	143	15	158
Tisdale	3.0	15	56	17	73
Crowded Porphyry	1.8	8.9	35	9	44
Gabbro	1.7	8.4	28	1	29
Mafic Syenite	1.4	7.2	24	9	33
Volcanoclastic	0.56	2.8	12	3	15
Mafic Syenite Porphyritic	1.2	6.0	9	10	19
Late-Stage Dyke	0.31	1.6	3	0	3
Total	***20***	***100***	***310***	***64***	***374***

Notes: Tonnages represent estimated totals for the life of mine (Agnico Eagle, pers. comm., 2026)

3.1.1.2 Kinetic Testing

To support the understanding of geochemical reaction rates and generate data for source term modelling, a kinetic test program comprising laboratory- and field-based kinetic tests was initiated for Upper Beaver mine rock samples. This program initially entailed four mine rock humidity cells (samples "HC") constructed with samples representing the major lithologies (Mafic Syenite, Tisdale, Blake River Mafic) and variable sulphur contents from the Phase 1 sampling campaign in 2018. For QA/QC purposes, one duplicate (HC1) and one blank humidity cell were also operated during this time.

In 2022, a suite of four additional humidity cells was added to the program to capture the full range of lithological, spatial, and geochemical properties associated with the operations phase of the Project. One mixed-lithology, high-S potentially acid generating (PAG) sample (HC10) was added to the humidity cell inventory during this phase in order to

quantify acidic loading rates for PAG rock. To shorten the time to onset of ARD, this sample was pre-leached with sulphuric acid in an effort to remove readily available NP.

In 2025, following the inclusion of the Northeast Deposit in the operations phase mine plan, a final humidity cell (HC11; Table 3-2) was initiated with samples from the Phase 3 static test sampling. The intent was to generate a relatively conservative humidity cell (*e.g.,* representing greater than the median total S content) with respect to the static test population of this domain.

The default experimental duration for the Upper Beaver humidity cells was set at 40 weeks, which is generally considered to be sufficient time for metal loading rates to stabilize under neutral pH-conditions (Price, 2009). Since none of the Upper Beaver mine rock cells produced acidic conditions after 40 weeks, the operation of HC2 and HC10 (PAG samples) was continued to promote the generation of site-specific acidic loading rates. Further, HC8 (Crowded Porphyry) was also extended due to its relatively elevated loading rates for multiple aqueous parameters of interest. This cell's leachate output has since stabilized, and the experiment was terminated at the end of 2025 (total of 117 weeks).

Six field bins (samples "FB") were built on-site with drill core material; four (FB-1 through FB-4) from the volumetrically most abundant Upper Beaver lithologies represented in the mine plan, one mixed-lithology, high-S PAG sample (FB-5), and one mixed-lithology sample from the Northeast Deposit (FB-8). The lithology-specific field bin samples contain Mafic Syenite, Blake River Mafic, Crowded Porphyry, and Gabbro (Table 3-2).

Drill hole intervals for field bins were selected to generate relatively conservative composites with respect to sulphur content (70^{th}-90^{th} percentile S) based on assay results. The combined lengths of drill hole intervals ranged from 160 to 200 m, with composite masses from 125 to 184 kg per field bin sample. Once collected, the samples were sent to a commercial laboratory for blending and crushing to a particle size of <1". An overview document detailing the sample selection and collection procedure is given in Appendix A3.

It is important to note that relogging of core, as well as revision of various major lithological units over time, have led to the reclassification of multiple samples used for the construction of kinetic tests, thereby rendering the original sample selection rationale outdated in some instances. As an example, HC2 was originally intended to represent conservative (high-S PAG) Mafic Syenite. This sample (R353389) was subsequently revised to "Mafic Syenite Breccia" which, in the latest resource model update, falls within the Tisdale unit (Table 3-2). Despite these inconsistencies, kinetic test results still produced invaluable data representative of the different model domains and used in the development of geochemical source terms, albeit via a slightly adjusted approach.

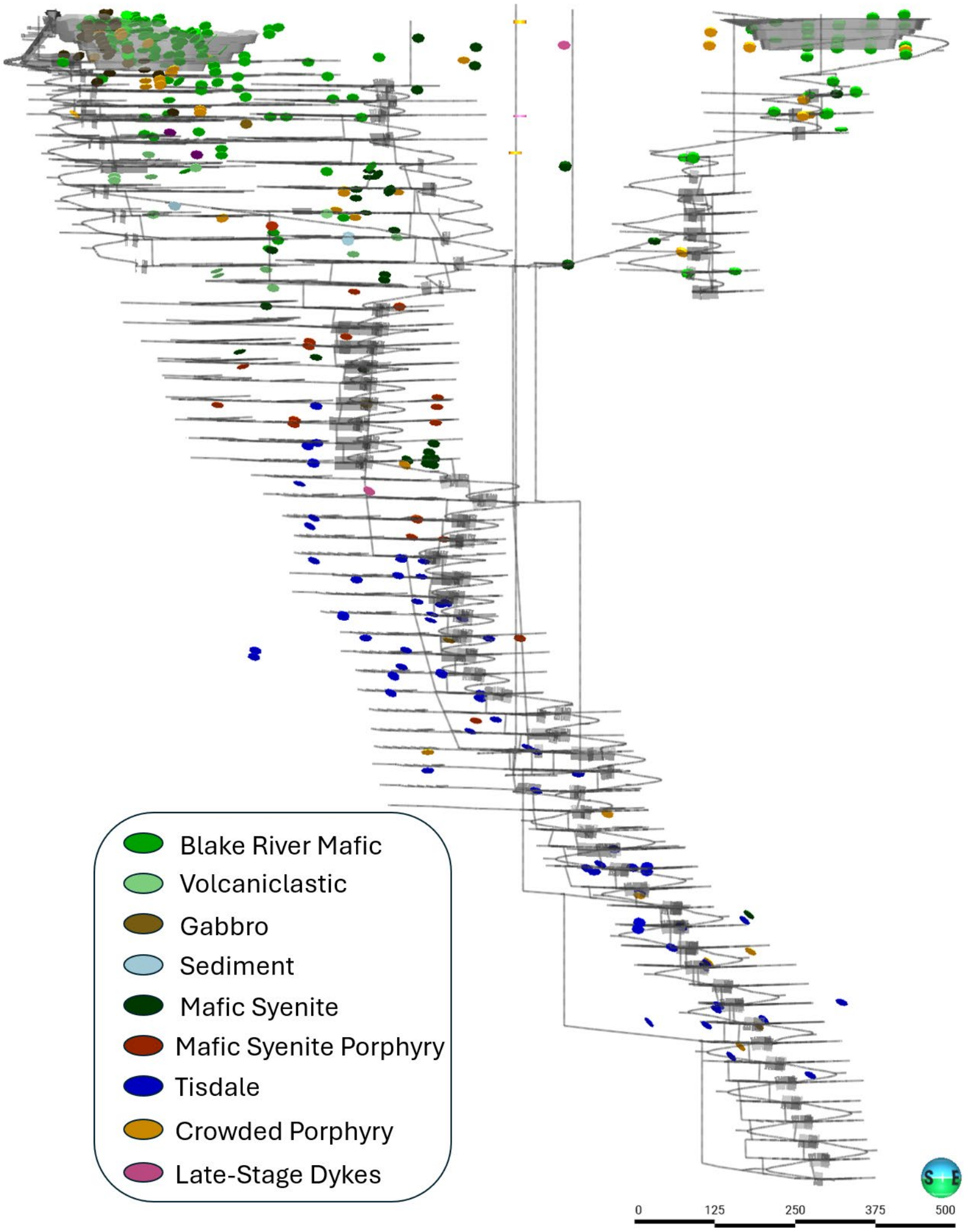


Figure 3-1: Leapfrog Viewer image showing distribution of static test samples (discs) across the Upper Beaver mine infrastructure looking northwest

Table 3-2:
Overview of the Mine Rock Kinetic Test Program for the Upper Beaver Project

Kinetic Test ID	Sample ID	Target Rock Type	Sampling Round	Weeks	Status
Humidity Cells					
HC1	R353465	Mafic Syenite	1	40	Terminated
	176396				
HC2	R353389	Tisdale		233	Ongoing
HC3	Q303652	Blake River Mafic		40	Terminated
	271241				
HC4	223687	Blake River Mafic		40	Terminated
HC7	CAOND147309	Blake River Mafic (Open Pit)	2	40	Terminated
	CAOND162513				
	CAOND186426				
HC8	CAOND128183	Crowded Porphyry		117	Terminated
	CAOND130973				
	CAOND191089				
HC9	CAOND128147	Gabbro		40	Terminated
	CAOND135719				
	CAOND188631				
HC10	KLUB12_207W1_256537	PAG (Mixed lithology)		161	Ongoing
	KLUB12_207W1_256548				
	CAOND135669				
	CAOND200894				
HC11	CAOND270714	Blake River Mafic (NE)	3	10	Ongoing
	CAOND270704				
	CAOND270679				
Field Bins					
FB-1	Various (Appendix A3)	Mafic Syenite	2	160	Ongoing
FB-2	Various (Appendix A3)	Blake River Mafic		160	Ongoing
FB-3	Various (Appendix A3)	High-S PAG		160	Ongoing
FB-4	Various (Appendix A3)	Crowded Porphyry		160	Ongoing
FB-5	Various (Appendix A3)	Gabbro		160	Ongoing
FB-7	Blank		3	20	Ongoing
FB-8	Various	NE Deposit		-	Ongoing

Notes: HC = Humidity Cell; FB = Field Bin; PAG = potentially acid generating.
One duplicate of HC1 and one blank HC were run for QA/QC purposes and are not listed above.
Due to a lab inventory error, sample ID HC6 was not allocated.
Following updates to core logging, lithological definitions, and resource modelling, some humidity cell sub-samples were re-classified and no longer correspond to the targeted lithology.
Operating time frames for ongoing kinetic tests reflect a reporting date of December 1, 2025.

3.1.2 Tailings

Several rounds of metallurgical testwork were completed for the Project at Base Metallurgical Laboratories Ltd. (BaseMet) in Kamloops, BC and at SGS Canada Laboratories (SGS) in Burnaby, BC. A series of tailings, including rougher, cleaner, and master composite samples were selected for ML/ARD testing to support the geochemical characterization of representative tailings materials from 2019 to 2025 with guidance from Agnico Eagle metallurgists. All samples underwent static testing while kinetic testing was performed on, or is currently still underway for, samples produced in 2024 or later. Descriptions of the sample inventory and kinetic testwork conducted during the ML/ARD assessment study are provided in Table 3-3 and Table 3-4, respectively. A representative example of a metallurgical flowsheet is illustrated in Figure 3-2.

Table 3-3:
Inventory of Upper Beaver Tailings Samples Analyzed

Sample ID	Date Received	Type	Location/Mine Phase
BL416 De-S Rougher	Mar-19	Desulphurized rougher tailings	Deep underground ore (400-1200 m)
BL465 De-S Rougher	Aug-19		Shallow underground ore (0-400 m)
BL416 Recombined	Nov-19	Recombined whole tails*	Deep underground ore (400-1200 m)
BL465 Recombined			Shallow underground ore (0-400 m)
18806-01	Dec-21	Master composite	Underground and open pit ore (Horizons 1 through 5)
BL1614-01	Dec-24	Master composite	Shallow zones (First 4 years of operations)
BL1614-01 Cleaner		Cleaner stream	
BL1614-01 Rougher		Rougher stream	
BL1614-02		Master composite	Deeper zones (Later mine phases)
BL1614-02 Cleaner		Cleaner stream	
18806-03	Aug-25	Master composite	First 5 years of operations

Notes: *Sulphide concentrate reintroduced to rougher tailings samples at following proportions: BL416 Comp = 6% S concentrate (not detoxified); BL465 Comp = 5.2% S concentrate.
Agnico Eagle indicated that metallurgical testwork utilized Na-MBS as part of the cyanide destruction circuit while liquid SO_2 is intended for use during full-scale operations.

Table 3-4:
Overview of the Tailings Kinetic Test Program for the Upper Beaver Project

Sample ID	Kinetic Tests	Kinetic Test Status
BL416 De-S Rougher	Humidity Cell (75%/25%), Saturated Column (50%/50%)	Terminated (Humidity Cell: 40 weeks Saturated Column: 38 weeks)
BL465 De-S Rougher		
18806-01	Unsaturated Column	Terminated (84 weeks)
BL1614-01	Unsaturated Column	Ongoing (28 weeks)
BL1614-02	Unsaturated Column	Ongoing (28 weeks)
18806-03	Unsaturated Column	Ongoing (4 weeks)

Notes: Operating time frames for ongoing kinetic tests reflect a reporting date of December 1, 2025.
Supernatant chemistry was analyzed for all tailings slurry samples that underwent kinetic testing.

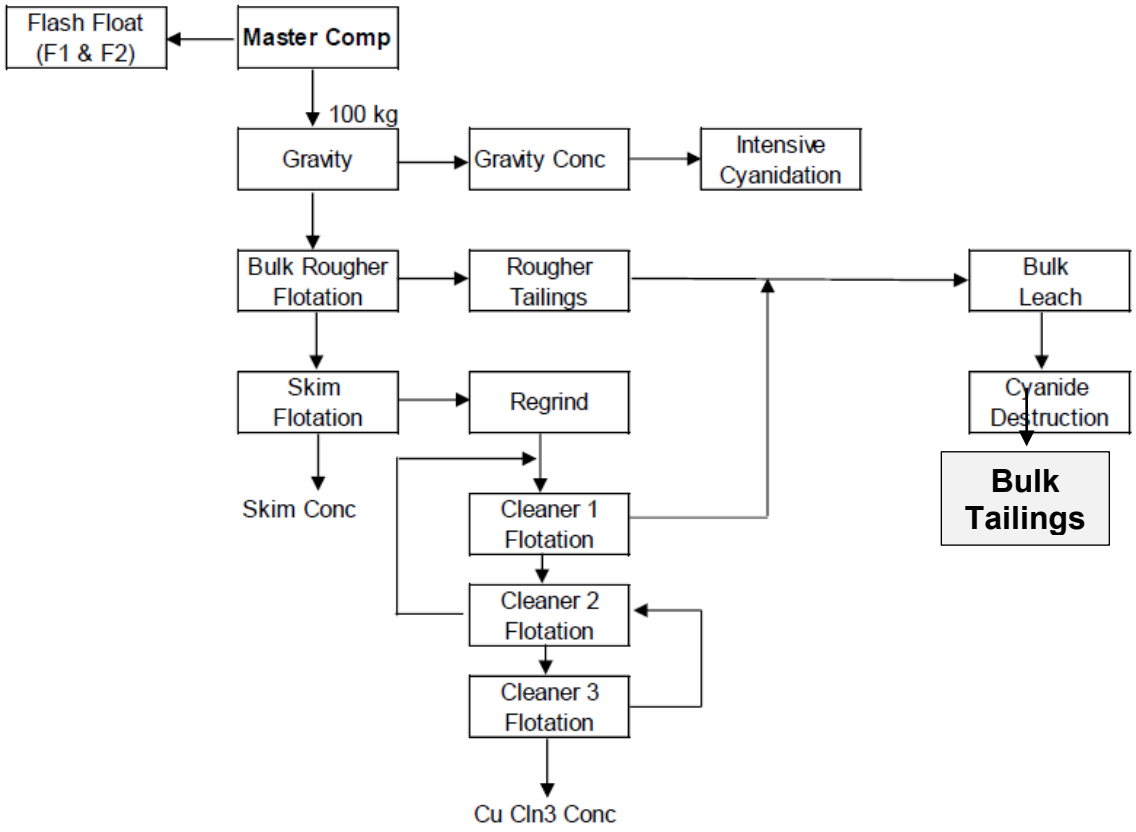


Figure 3-2: Example of a representative metallurgical flowsheet utilized for sample 18806-3

In 2019, metallurgical test programs generated two tailings slurries from various depths within the underground development. Samples were generated before the open pit was incorporated into the mine plan. Sample BL416 represents ore from depths of 400-1200 m, while sample BL465 was produced from shallower ore horizons up to 400 m in depth (Table 3-3). When these samples were generated, the metallurgical flowsheet contained a desulphurization step where rougher tailings would be deposited in a conventional TSF with a tailings pond and/or backfilled into the underground in the form of paste tailings.

Kinetic experiments conducted on these tailings comprised one humidity cell made up of a sample which, at the time, was blended in proportions representative of the later development phases in an effort to mimic the composition of potential tailings beaches. In addition, saturated column testing was performed on a 50%-50% blend of the two tailings samples (Table 3-3). The blended approach was chosen to simulate material within the tailings impoundment with even proportions of the deep and shallow ore zones. Both the humidity cell and saturated column experiments were operated for 40 weeks.

The desulphurization step was removed from the mill circuit design later in 2019, and as such, the kinetic test samples described above were deemed unrepresentative. To quantify the geochemical composition of whole tailings solids without desulphurization, sulphur concentrates for BL416 and BL465 were recombined proportionally with the rougher materials to produce whole tailings blends representative of the expected composition to be discharged to the TSF. Due to sample mass limitations, these samples only underwent static testing.

Following a mine plan change in 2021, a separate metallurgical test program was initiated by Agnico Eagle. The mine plan change entailed the development of an open pit as well as a dry stack TSF rather than a conventional slurry tailings impoundment. The program produced cyanide (CN) detoxified whole tailings based on an updated process flow sheet. The resulting sample (18806-01) is considered representative of the top 500 m of open pit and underground ore. Sample 18806-01 underwent detailed static testing, including supernatant analysis, as well as unsaturated column testing at SGS (Table 3-4).

A 2024 metallurgical test program (BL1614) subsequently produced a suite of tailings samples resulting from processing of early phase (BL1614-01) and later phase (BL1614-02) ore horizons. Master composite tailings slurry samples from both mine phases were submitted for both static and kinetic (unsaturated column) testwork. In addition, filter cakes of rougher and cleaner tailings samples from this program underwent static testing only to assess the process fractionation and elemental mobility within the different tailings streams.

Most recently, a 2025 metallurgical test program aimed to process ore to be mined in the first five years of the operations phase. One specific objective of this program was to align the spatial locations of the different ore feed samples composited for this metallurgical test with the most current resource model and mine plan.. The resulting tailings sample (18806-03; Table 3-3) underwent detailed static testwork and is currently being used in an unsaturated column experiment at the Lorax laboratory (Table 3-4). For the remainder of this study, any whole tailings samples are identified by their metallurgical test ID only (e.g., 18806-01), while unique tailings streams that are not expected to be discharged to the TSF are specified as such (e.g., BL1614-01 Cleaner).

For any tailings samples provided in slurry form, supernatant was decanted and submitted for chemical analysis. In some cases, the water was stored and is being used as influent for tailings unsaturated column testing. Periodic re-analysis of this water has been conducted to monitor chemical changes in response to natural oxygenation over time.

3.1.3 Mercury Study

Elevated Hg concentrations were identified in supernatant, SFE, and kinetic test leachates of multiple tailings samples and most notably in the unsaturated column leachate of sample composite tailings sample 18806-01. Consequently, Hg emerged as a parameter of potential concern (POPC) during water quality modelling for the TSF.

To understand and mitigate the risks of Hg leaching from tailings, an in-depth supplemental investigation was undertaken to determine the source, degree, and controls governing Hg leaching. This investigation was broadly completed as four study components with unique research objectives, as outlined in Table 3-5.

Table 3-5:
Mercury Study Components and Approach

Potential Hg Control	Analysis/Approach	Material type	No. of Samples	Study Lead
1. Geological distribution and mineralogical sources of Hg	Review of assay database, geological model and mineralogical data	Mine Rock	>1,000	Agnico Eagle
2. Solid phase Hg abundance	Comparison of solid phase composition with leaching trends of like materials	Ore & Tailings	37	Agnico Eagle & Lorax
3. Particle/grind size	SFE test program (ore)	Ore	26	Agnico Eagle & Lorax
4. Mill process and reagent addition	Combined static and kinetic test database	Ore, Tailings, Supernatant	Up to 11 (test-dependent)	Lorax

Notes: SFE = Shake Flask Extraction
Supernatant chemistry was analyzed for all tailings slurry samples that underwent kinetic testing.

Component 1 involved the geostatistical processing of all available assay data and resource model domains to delineate repositories for Hg as a function of lithological, alteration, and structural properties. This study component was completed by Agnico Eagle Geology and informed the identification of Hg-rich stopes. This component is not further detailed herein.

Component 2 evaluated the interrelation of solid phase Hg and the corresponding leachability of Hg in SFE tests for 26 ore samples selected by Agnico Eagle and all tailings samples included as part of the broader ML/ARD assessment.

For the particle size test program under Component 3, the same 26 ore samples used for Component 2 were further processed. The objective of this study was to conduct paired SFE tests on reject materials (P_{80} = 2 mm) and ground ore samples (P_{80} = 105 µm or 150 mesh) from a range of resource horizons and metallurgical characteristics to evaluate Hg leaching effects as a function of particle size. A subset of samples (n=6) from this study component was ground under both wet and dry conditions to gain additional insight into potential Hg load removal during grinding. Sample preparation and SFE testing for this test phase were completed at SGS.

Component 4 was designed to further the understanding of Hg leachability and speciation at different stages of the mill process. Solid phase and aqueous Hg speciation (methyl-Hg [MeHg] *versus* total Hg) were assessed in tailings from one of the unsaturated column experiments (18806-01), the corresponding ore feed sample (30107-MTCP-005), and their SFE leachates.

Three sequential extraction tests were additionally completed to quantify the phase association of Hg. Each sequential extraction test was carried out on the tailings and ore samples discussed above, in addition to the 'washed' 18806-01 tailings sample. The washing procedure was conducted as a standard SFE test to evaluate the fraction of leachable Hg associated with the supernatant/tailings pore water.

While Hg results are covered broadly in Sections 4 and 5, a standalone discussion is provided in Section 6 for a more comprehensive and cohesive summary of the findings. Section 6 integrates results from all types of geochemical testwork as they relate to Hg distribution and mobility.

3.1.4 Overburden

Two geotechnical test pitting campaigns, completed in 2020 and 2021, produced a series of overburden samples, a subset of which was used for geochemical characterization purposes. The sampling programs were designed and executed by Agnico Eagle and other consultants with the test pit distribution, sampling methodology, and classifications described elsewhere (Golder, 2021; SEI, 2022). Lorax involvement in this program was

restricted to the formulation of recommendations with respect to sampling techniques and criteria for the more recent sampling campaign. Key overburden sampling criteria that were communicated are good spatial distribution to fill gaps of the 2020 test pitting program (Golder, 2021); test pitting frequency roughly proportional to the volume of overburden materials to be excavated during Operations; and increased sampling resolution within each test pit to produce unique till and (top)soil horizon samples for geochemical analysis.

3.2 Analytical Methods

3.2.1 Static Testing

A phased analytical approach was chosen for the Project to gather routine data that are required to determine environmental classifications and general geochemical properties of mine waste materials. This tier of testwork includes ABA and a form of solid phase elemental analysis. In this case, the primary solid phase elemental digestion method utilizes aqua regia acid. In order to allow the comparison of ML/ARD data with the larger exploration database, which employed the use of four acid digestion (Section 3.2.1.3), a subset of 197 mine rock samples was further submitted for analyses using this same digestion method (Table 3-6). The primary objective of this task was the derivation of ML/ARD proxies that could reliably be incorporated into the geological block model to delineate PAG volumes.

More detailed geochemical and mineralogical techniques were reserved for a subset of samples to provide additional resolution and address specific geochemical aspects such as metal leachability and mineralogical associations (Table 3-6).

An overview of the static testwork employed for the Upper Beaver ML/ARD assessment, along with relevant references and broad descriptions, are given in Table 3-7. All static testwork was carried out at SGS in Burnaby, BC.

3.2.1.1 Acid-Base Accounting

Acid-base accounting consists of a series of static tests which are used to evaluate the ARD potential of materials and includes paste pH, S speciation, C speciation, and neutralization potential (NP). Total S and C were determined via combustion and infrared absorption using a LECO furnace. Sulphate S was determined by acid leach (25% HCl) and analysis by inductively coupled mass spectrometry (ICP-MS). Carbonate NP (CaNP) is calculated based on the assumption that total inorganic carbon (TIC), measured via coulometry, is present as $CaCO_3$. Lastly, the Modified NP is a titration-based bulk NP measurement that accounts for the acid-buffering capacity of other reactive minerals (*e.g.,* silicates, hydroxides) in addition to carbonates.

Table 3-6:
Inventory of Static Analytical Testwork Completed on Different Material Types

Analysis	Number of Samples		
	Mine Rock & Ore	Tailings	Overburden
1. Acid-Base Accounting			
Paste pH	374	10	95
Total S and C	374	10	95
Inorganic C	374	10	95
Sulphate S	374	10	95
Modified NP	374	10	95
2. Solid Phase Composition			
Aqua Regia Metals	374	10	95
Four Acid Metals	197	-	-
3. Supplemental Testing			
Shake Flask Extractions	32	10	13
Mineralogical Investigation	29	2	-
Net Acid Generation Test	-	-	13
4. Mercury Study			
Shake Flask Extractions	26	1	-
Aqueous Hg speciation	1	1	-
Sequential Extractions	1	2	-

Notes: Count of supplemental testwork for mine rock includes kinetic test subsamples (n=15).
Ore samples used in the Mercury Study are not otherwise discussed as part of the regular static test program.

3.2.1.2 Net Acid Generation Test

The Net Acid Generation (NAG) test, as described in AMIRA (2002), is used to assess the acid-forming potential of mine materials by directly measuring their capacity to generate acidity under fully oxidizing conditions. This method is considered supplementary to routine ABA testwork and was only completed on overburden samples in this study. In this method, a finely crushed sample is subjected to accelerated oxidation by adding an excess volume of 15% hydrogen peroxide (H_2O_2), which promotes rapid oxidation of sulphide minerals to their corresponding sulphate species. The reaction is allowed to proceed to completion. The final leachate is analyzed for pH (NAG pH) and titratable acidity (NAG acidity), which together indicate whether the sample is likely to generate net acidity as a result of sulphide oxidation. Samples are generally classified as PAG or NPAG based on the NAG pH (*i.e.,* PAG: NAG pH < 4.5) if primary static tests are inconclusive.

Table 3-7:
Static Geochemical Methods Employed in the Upper Beaver ML/ARD Assessment

Analysis	Reference	Comment
Paste pH	Price (2009)	1:2 liquid:solid ratio
Total Sulphur & Carbon	ASTM E1915 (2020)	Combustion + infrared absorption of SO_2 and CO_2
Sulphate Sulphur	ASTM D2492 (2002)	HCl digestion with ICP finish
Inorganic Carbon	ASTM D6316 (2017)	Infrared absorption of CO_2 evolved from acid digestion + coulometry
Modified NP	Lawrence *et al.* (1996)	Modified NP by excess acid addition and back titration to pH 8.3
Net Acid Generation Test	Amira (2002)	Reaction with H_2O_2 and measurement of pH
Aqua Regia Metals	Van Loon and Barefoot (1989)	Weak/moderate acid digestion + ICP-MS finish
Four Acid Metals	*e.g.,* EPA (1996)	Strong acid digestion + ICP-MS finish
Shake Flask Extraction	Price (2009)	Deionized water leach at 3:1 liquid:solid ratio for 24 hours
Mineralogy	SGS (2019)	QEMSCAN & TIMA
Sequential Extractions	Larios *et al.* (2012)	7-stage sequential extraction with high specificity for As and Hg
Particle Size (Rock)	ASTM D6913 & D6913M (2017)	Mechanical dry sieving
Particle Size (Tailings)	www.malvernpanalytical.com	Laser diffraction

Notes: NP = Neutralization Potential; ICP-MS = Inductively Coupled Plasma Mass Spectrometry; QEMSCAN = Quantitative Evaluation of Minerals by SCANning electron microscopy; TIMA = TESCAN® Integrated Mineral Analyzer.
SGS employs a mix of techniques for the four acid metals analysis, and therefore, the provided reference (EPA, 1996) should only be considered a general description.

3.2.1.3 Solid Phase Elemental Abundance

Solid phase elemental abundance was determined by digesting a pulverized sample in aqua regia acid (HNO_3 + HCl). The extract is subsequently diluted and analyzed for elemental concentrations by inductively coupled plasma mass spectrometry (ICP-MS). Data from these analyses are used to characterize materials and to identify preliminary parameters of potential environmental concern (POPC) by screening against applicable reference values. Aqua regia is considered a relatively weak acid that fully dissolves most carbonate, oxide, and sulphide species, but does not generally attack more weathering-resistant minerals such as silicate minerals (*e.g.,* Price, 2009). In addition, aqua regia digestion is conducted at a lower temperature than other methods, which facilitates the analysis of volatile elements such as Hg and Se.

Select samples underwent four acid digestion to allow for the development of geochemical proxies across the assay exploration database. The four acid solution combines HCl, HNO_3, $HClO_4$, and HF and is one of the strongest commercially available acids in mineral exploration. Following reaction with a pulverized sample, the extract is analyzed for elemental concentrations by ICP-MS. The acid dissolves all but the most refractory mineral phases and is therefore considered a 'near-total' digest.

3.2.1.4 Mineralogy

Modal abundances and other mineralogical properties of Upper Beaver mine rock and tailings were quantified using a combination of automated mineralogical techniques, including Quantitative Evaluation of Minerals by SCANning electron microscopy (QEMSCAN) and the more novel TESCAN Integrated Mineral Analyzer (TIMA). These analyses employ both Energy Dispersive X-Ray (EDX) and backscattered electron (BSE) signals to identify minerals at each measurement point. The EDX spectra and BSE data are then compared to entries in a mineral library on a first-match principle to identify the mineral phase. Both QEMSCAN and TIMA represent highly automated techniques that provide information on the modal mineral abundances in addition to other metrics such as grain sizes and exposure surfaces of the sulphide and carbonate minerals in a sample.

3.2.1.5 Shake Flask Extraction Testing

Shake flask extraction (SFE) tests are short-term leach experiments intended to quantify aqueous species that are leachable upon relatively short exposure times to water. These tests involve agitating a representative sample (crushed to <1/4" particle size) in deionized water at a liquid:solid ratio of 3:1 for 24 hours. While a useful advanced screening tool, the SFE test does not give meaningful insight into mineral reaction rates and the timing of ARD generation.

3.2.1.6 Sequential Extractions

Sequential extraction experiments are completed to determine the phase association of elements in a given material. For this test, a pulverized sample (0.5 g) is sequentially exposed to different reagents that selectively dissolve specific minerals as follows:

1. Readily soluble, using nano-pure distilled water
2. Highly adsorbed on mineral surfaces, using 0.5 M Na_2HPO_4 (pH 8.0)
3. Associated with Al hydroxides, using 0.5 M NH_4F (pH 8.2)
4. Bound to organic matter, using 0.1 M $Na_4P_2O_7$

5. Incorporated into amorphous Fe oxyhydroxides, using 0.2 M Ammonium Oxalate – Oxalic Acid (pH 3.0)
6. Associated with poorly crystalline Fe Hydroxides, using CBA solution (0.2 M Na citrate + 0.6 M $NaHCO_3$ + 0.4 M Ascorbic Acid, adjusted to pH 8.0)
7. Residual fraction, using four-acid digestion (HCl, HNO_3, HF, and $HClO_4$)

Compared to other sequential extraction methods, the above sequence was specifically optimized to achieve a high specificity for As and Hg distribution and leachability (Larios *et al.,* 2012).

3.2.1.7 Particle Size Distribution

Particle size analysis (PSA) was carried out to quantify the relative distribution of grain sizes of material placed in the various kinetic tests. An estimate of the particle size distribution (PSD) and associated specific surface area is often informative for the interpretation of kinetic test results. Standard mechanical sieving methods were used to characterize the general PSD of mine rock humidity cell subsamples, while the PSD of tailings samples was quantified with the Malvern Mastersizer which uses laser diffraction and yields a significantly higher resolution of fine particle fractions than dry sieving.

3.2.2 Kinetic Testing

In ML/ARD studies, kinetic testing is performed to quantify the rates at which minerals weather and release acidity, metals, and sulphate under controlled conditions. Unlike static tests, kinetic experiments (*e.g.,* humidity cells, column tests, field bins) aim to simulate longer-term geochemical behaviour to determine how quickly acid generation or neutralization will occur, how drainage chemistry may evolve over time, and which mineral reactions dominate at different stages. These tests help predict the timing, magnitude, and persistence of ML/ARD and directly inform the development of source terms used for water quality modelling.

3.2.2.1 Humidity Cells

Laboratory-based humidity cells are composed of a plexiglass cylinder containing 1 kg (dry weight) of sample crushed to 80% passing <6.4 mm. For tailings materials, no crushing is required due to the fine grain size. The contents of the cells are subjected to dry air for three days, followed by humid air for three days (<10% relative humidity). At the end of each wet/dry cycle on day seven, the sample is inundated with 500 mL of deionized water. Contact water is allowed to drain freely from the bottom of the humidity cell after a residence time of at least two hours, and the resulting leachate is submitted for chemical

analysis (Price, 2009). The analytical suite comprises, at a minimum, pH, conductivity, alkalinity; anions including SO_4, Cl, F; and dissolved metals/metalloids.

For the tailings humidity cell (BL416/BL465; Table 3-4), additional analytes were measured to obtain a fulsome understanding of N-species leaching and decay/conversion mechanisms, including total CN, weak acid dissociable (WAD) CN, free CN, CNO; and NO_2, NO_3, and NH_3.

The analytical frequency depends on the parameter and was initially weekly (pH, SO_4) to biweekly (remaining species) for all cells. During later experimental stages, this frequency was reduced to every four weeks for certain parameters to allow prolonged, cost-effective operation of the tests.

3.2.2.2 Column Experiments (Tailings)

A saturated column experiment, containing 7 kg (wet weight) of the BL416/BL465 desulphurized rougher tailings sample was operated at the Lorax laboratory in 2019. A cast acrylic cylinder was equipped with one inlet port at the bottom of the column and an outlet port at the top of the column for sampling. A peristaltic pump was used to introduce influent into the column from the port at the bottom. Sampling occurred from the top port of the column after contact with the tailings material as the influent is forced upward. This method is used to prevent gravity-driven drainage and minimize the development of preferential flow paths.

To preserve redox speciation and reduce the potential for oxidation artifacts, sample bottles used for the saturated column leachate were purged with nitrogen gas to displace oxygen from the bottles prior to sampling. Saturated column sampling occurred biweekly for the first six weeks and was then reduced to every four weeks until the end of the experiment. Leachates were submitted to ALS Global Laboratories in Burnaby, BC, for chemical analysis including pH, conductivity, alkalinity; anions including SO_4, Br, Cl, F; dissolved metals/metalloids; NO_2, NO_3, and NH_3; total CN, free CN, WAD CN; and dissolved organic carbon (DOC) and total dissolved phosphorous (TD-P).

The first unsaturated column experiment (sample 18806-01) was completed at SGS in Burnaby, BC. The column consisted of perforated Plexiglas with an inner diameter of 17 cm and a height of 30 cm. The dry weight of the tailings was calculated to be 4.6 kg. Sampling and analysis occurred biweekly throughout the 84-week experimental period. Following the initial settling of solids and draining of supernatant and pore water over the first two weeks, 750 mL of deionized water was subsequently applied to the column via a coiled, perforated tubing installed at the top of the column to allow for controlled and even irrigation. The leachate was collected from a port located at the bottom of the column,

preserved, and sent for analysis. On occasion, due to the fine-grained nature of the tailings, the production of the leachate sample required vacuum-suction to be applied.

Subsequent ongoing unsaturated columns are being operated at the Lorax laboratory. Columns use cast acrylic cylinders containing approximately 6 to 8 kg (measured wet weight) of tailings material. The tailings are subjected to a trickle leach whereby influent water (tailings supernatant) is slowly added to the top of the vertical column over a period of forty-eight hours, allowing gravity-driven percolation through the tailings. Contact water is allowed to freely drain from the bottom of the column, and the resulting leachate is submitted for chemical analysis. The analytical suite comprises pH, conductivity, alkalinity; anions including SO_4, Br, Cl, F; dissolved metals/metalloids; total CN, weak acid dissociable (WAD) CN, SCN, CNO; NO_2, NO_3, and NH_3; and dissolved organic carbon (DOC) and total dissolved phosphorous (TD-P)

The trickle leach and sampling frequency were initially biweekly for all column experiments. For the two unsaturated columns containing samples from the BL1614 metallurgical test, this frequency was reduced to every four weeks for long-term and cost-effective operation of the experiments.

3.2.2.3 Field Bins

Field bin experiments are conducted in 114 L polyethylene drums that are housed in specially designed wooden cribs, which can hold four field bins each and are installed on the Upper Beaver property. Drain holes are drilled into the bottom of the bins from where a plumbing system connects the sample with a 9.5 L polyethylene jug installed below the field bin. A pair of collection jugs is placed into larger plastic containers covered with a lid for additional protection (Figure 3-3).

Meteoric water enters the top of the drum, interacts with the mine rock sample, and naturally gravity-drains into the collection system. The experiment simulates water-rock interactions under site climatic conditions in a less controlled and predictable manner than humidity cells. For example, depending on the intensity of the rain event preceding a given sampling cycle, the water/rock ratio influencing drainage chemistry can vary seasonally. Further, temperature fluctuations are expected to affect sulphide and other mineral reaction rates throughout the year.

Field bin leachates are collected from the collection jugs at least monthly during the ice-free season and more frequently if the collection system approaches capacity. Field parameters recorded as part of every sampling cycle include pH, conductivity, temperature, and volume of leachate collected. Laboratory water chemistry analyses are carried out at AGAT Laboratories. For QA/QC purposes and to investigate potential data quality issues,

a subset of water samples was also submitted to Bureau Veritas Laboratories (BV) in September 2023. Analytes included in the water chemistry scan are pH, conductivity, and alkalinity; anions and nutrients including SO_4, Cl, F, NH_3, NO_2, NO_3, and dissolved organic carbon (DOC); and total and dissolved metals/metalloids.

Figure 3-3: Set up of field bin experiment at the Upper Beaver site

4. Static Test Results

4. Static Test Results

4.1 Geochemical Background

While the dissolution of any mineral and amorphous phase can have an impact on contact water chemistry, the oxidative weathering of Fe-sulphide minerals commonly represents the dominant long-term control on drainage quality in mine environments. The most common sulphide phase in many mineral deposits is pyrite, which weathers according to the following reaction:

$$FeS_2 + 15/4\,O_2 + 7/2\,H_2O \longrightarrow Fe(OH)_3 + 4H^+ + 2SO_4^{2-}$$

Whether ARD will occur is dependent on various factors, including the relative abundance and reactivity of acid-generating *versus* acid-neutralizing phases. The most effective acid-consuming phases are carbonate minerals, although silicate phases may also become important contributors following carbonate depletion. Under neutral pH conditions, oxygen is the dominant oxidant driving the reaction rate of sulphide weathering (*e.g.,* Blowes *et al.*, 2003). In the most simplistic scenario of pyrite oxidation and resulting carbonate dissolution, the acid-neutralization reaction is pH-dependent. Two reaction stoichiometries can describe the process, including:

at pH < 6.3:

$$FeS_2 + \tfrac{15}{4}O_2 + \tfrac{7}{2}H_2O + 2\left[Ca^{2+}, Mg^{2+}\right]CO_3 \longrightarrow Fe(OH)_3 + 2SO_4^{2-} + 2H_2CO_3^0 + 2\left[Ca^{2+}, Mg^{2+}\right]$$

and at 6.3<pH<10.3:

$$FeS_2 + \tfrac{15}{4}O_2 + \tfrac{7}{2}H_2O + 4\left[Ca^{2+}, Mg^{2+}\right]CO_3 \longrightarrow Fe(OH)_3 + 2SO_4^{2-} + 4HCO_3^- + 4\left[Ca^{2+}, Mg^{2+}\right]$$

Neutralization of acidity up to a pH of 6.3 consumes one mole of Ca/Mg-carbonate for each mole of S oxidized. At pH levels above 6.3, HCO_3^- becomes the dominant form of inorganic carbon in an aqueous solution, and two moles of Ca/Mg-carbonate are required to neutralize the same amount of sulphide oxidized. The relationships derived from these chemical equations assume that pyrite oxidation is the sole source of sulphur and iron in the reaction products, dissolved SO_4 and solid $Fe(OH)_3$, respectively.

The association of metal leaching with sulphide oxidation is twofold. First, sulphide minerals commonly host base metals (*e.g.,* Cu, Cd, Zn, and Pb) and metalloids (*e.g.,* As, Se) in their crystal lattice, which will be released upon oxidation and dissolution of the sulphide phase. Second, many metals are more mobile under acidic conditions such that ARD causes the increase of dissolved metal concentrations, commonly by orders of

magnitude. However, elements that exist as oxyanions may be more mobile in a pH-neutral regime (*e.g.,* As, Sb, Se, and Mo).

In the following sections, the ML/ARD characteristics of mine rock and ore materials are examined through the lens of mineralogical, static, and kinetic test results.

4.2 Mine Rock

Over the course of the various sampling campaigns completed for the Upper Beaver Project, a total of 374 samples, including 310 mine rock and 64 ore samples, were recovered and submitted for geochemical analysis. Ore samples are grouped into a single category for static test data analysis, while mine rock samples are subdivided by lithology as listed in Table 3-1. This distribution is adopted given that mine rock will be the primary material exposed at the surface in the long term, while excavated ore will be stored only temporarily before being processed and ultimately discharged as tailings. Thus, mine rock characterization requires increased resolution to better guide source term development and ML/ARD management planning. All static test results are presented collectively in this section without consideration of the mine phases (AEX Project *versus* operation phase) to provide the most comprehensive assessment of all ML/ARD data available and to reduce the sensitivity of this discussion to changes in the mine plan.

4.2.1 Mineralogy

Mineralogical data are available for a total of 29 samples. Laboratory raw files with the quantitative results of the mineralogical investigation for mine rock are given in Appendix B1. A simplified graphic illustration of the modal abundances is provided in Figure 4-1.

The primary rock-forming minerals are quartz and feldspars (plagioclase and K-feldspar), with micas and amphibole/pyroxene contributing to the primary mineralogy in some samples. Plagioclase is the dominant feldspar in the majority of samples. Chlorite is the most common hydrothermal phase, while calcite shows abundances of >10% in select samples. Other minor minerals include carbonates other than calcite (*i.e.,* dolomite, ankerite, siderite), sulphur-bearing phases (sulphides and sulphates), Fe-oxides and hydroxides. Lastly, other silicate and non-silicate phases that have been identified less consistently and only at minor or trace amounts are consolidated under “Minor/Trace Minerals” in Figure 4-1. This group comprises a variety of phases such as garnet, pumpellyite, clays, titanite, tourmaline, and apatite.

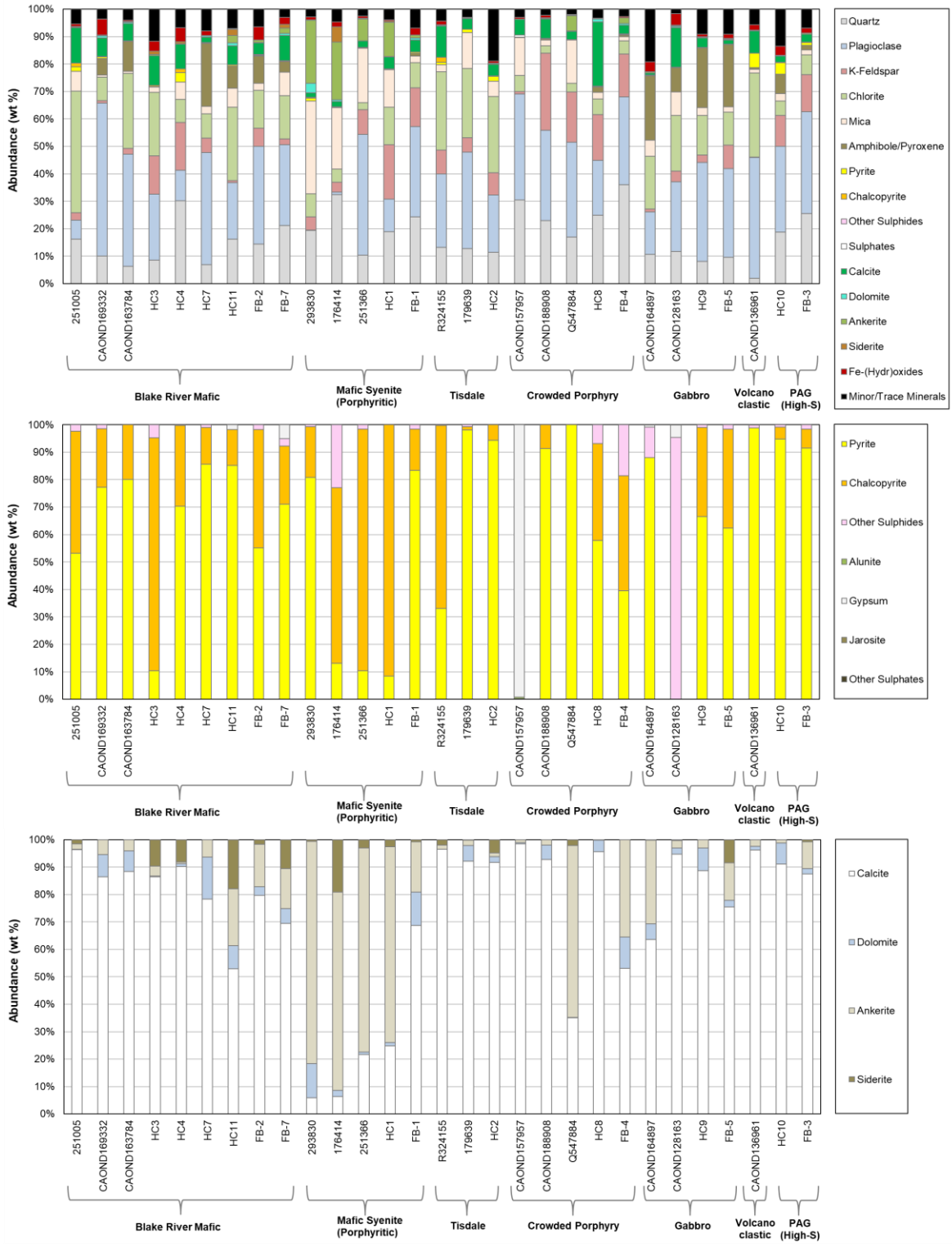


Figure 4-1: Mineralogical results for Upper Beaver mine rock samples as determined via QEMSCAN/TIMA analysis. Top: Overall mineralogical make-up; middle: Sulphur-bearing minerals; bottom: carbonate mineralogy.

Some mineralogical trends are evident across the different lithological units presented. For instance, appreciable amounts (>5%) of amphibole and pyroxene are generally limited to Blake River Mafic and Gabbro samples, reflecting the more mafic nature of these units. Chlorite is generally also most abundant in these two lithologies as well as the Tisdale unit. The highest abundance of micas tends to be associated with the Mafic Syenite unit, although variability exists. For example, the Mafic Syenite field bin subsample (FB-1) has a mineralogical make-up that is somewhat different from the remainder of the Mafic Syenite and Mafic Syenite Porphyry samples tested for mineralogy (Figure 4-1).

4.2.1.1 Sulphur-Bearing Minerals

The sulphide mineralogy is dominated by pyrite and lesser chalcopyrite. These minerals represent up to 5.2% of the total mineral assemblage (maximum in sample CAOND136961). Other samples containing greater than 3% modal abundance of the combined sulphides are the Blake River Mafic humidity cell sample (HC4), the mixed-lithology PAG humidity cell sample (HC10), and Blake River Mafic sample 251005.

Pyrite is the primary sulphide mineral in 70% (19 of 27 samples) of the samples (Figure 4-1), while chalcopyrite is the primary sulphide mineral in six samples, four of which are Mafic Syenite. Other sulphides comprise most of the sulphide modal abundance in only a single sample (CAOND157957). In samples with high total sulphide contents, pyrite tends to be the dominant one; however, appreciable abundances of chalcopyrite (>1%) were reported for samples 251005, HC4, and R324155.

The total sulphide mineral abundance quantified by QEMSCAN/TIMA correlates well with the sulphide S content calculated by ABA (Figure 4-2). In addition, the abundance of chalcopyrite shows a good positive relationship with aqua regia digestible Cu, indicating that chalcopyrite is the dominant host for this species. Weak correlations are evident for other “Other Sulphides” with Mo (Figure 4-2) and Cd (not shown). It is inferred that possible molybdenite and sphalerite may be present at trace amounts and driving the solid phase contents for these elements.

Sulphate minerals were detected in six samples and comprise gypsum, jarosite, and alunite (Figure 4-1). Abundances are generally low; the highest values measured in sample CAOND157957 which contains 0.81% gypsum. Jarosite and alunite fall below 0.01% in abundance in the four samples in which they were detected. It is unclear whether these sulphate phases represent hydrothermal phases or weathering products that have formed during storage of the reject/core material prior to ML/ARD sampling. Sulphate minerals identified via QEMSCAN/TIMA do not generally correlate with sulphate S values produced by ABA analysis, with the exception of sample CAOND157957 which shows elevated sulphate abundance in both tests.

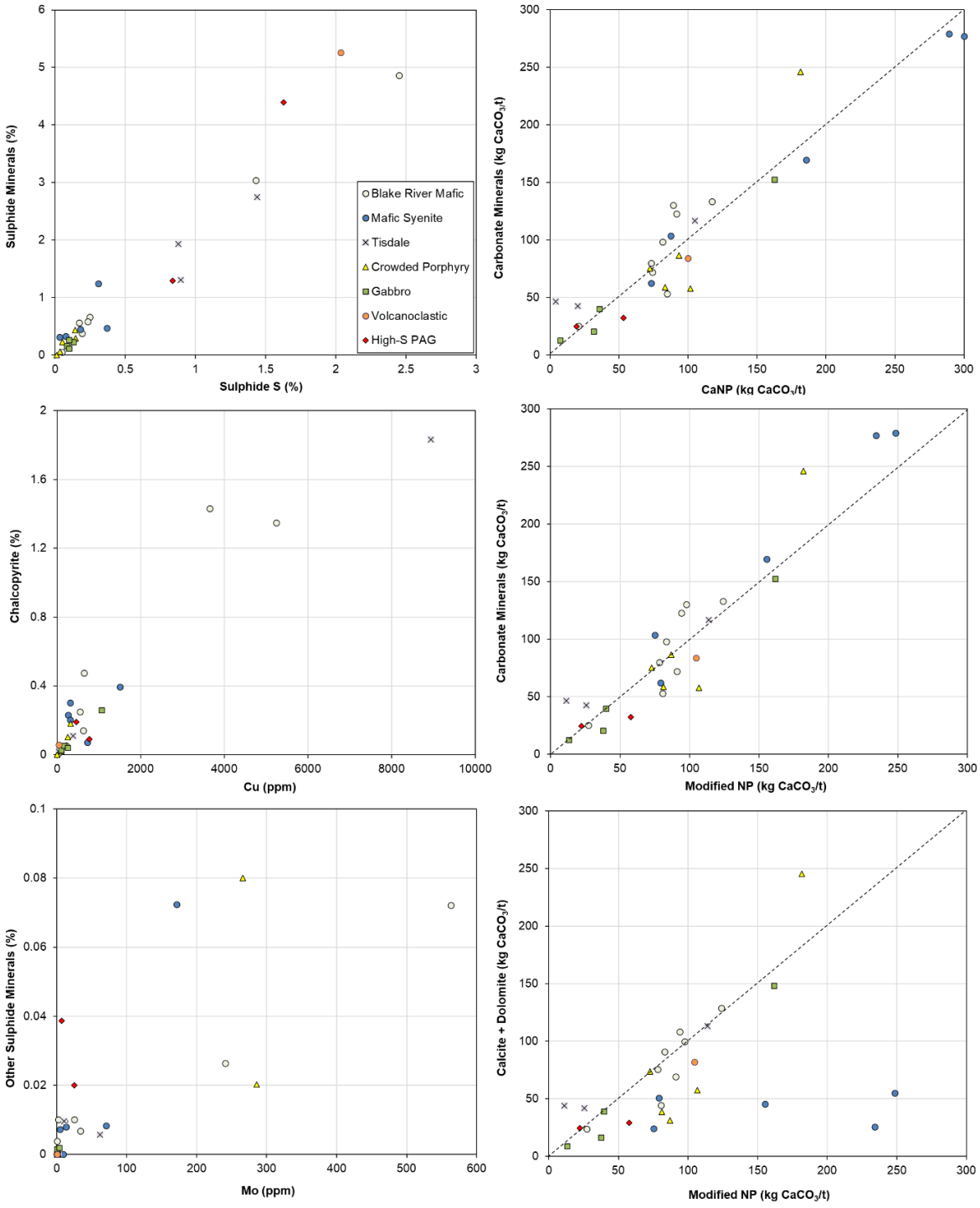


Figure 4-2: Mineralogy *versus* acid-base accounting and solid phase composition results for sulphide (left panel) and carbonate (right panel) phases

4.2.1.2 Carbonate Minerals

The carbonate mineralogy across the Upper Beaver samples constitutes calcite, dolomite, ankerite, and siderite. Carbonates are present in all analyzed samples ranging in modal abundance from 1.3% to 29% with a median value of 7.9%. Calcite is typically the most abundant carbonate mineral that makes up more than half of the carbonate inventory in 24 of the 29 samples. Dolomite is a relatively minor carbonate mineral that was reported at abundances of ≤3.5% in most samples submitted for mineralogical. Ankerite is the primary carbonate in five samples with a content of up to 22% of the total mineral inventory. Most of the samples in which ankerite dominates belong to the Mafic Syenite unit. It is therefore inferred that ankerite formation is controlled by, or strongly associated with, the hydrothermal pulse that affected this unit. Siderite is more commonly associated with the Blake River Mafic and Mafic Syenite samples compared with the remainder of the sample suite and occurs in abundances of up to 5.6%.

Not all carbonates contribute equally to the neutralization of acidity generated by sulphide oxidation. Dissolution of Fe- and Mn-bearing carbonates under oxidizing conditions releases Fe^{2+} and Mn^{2+} ions that subsequently undergo oxidation and hydrolysis. Hydrolysis of Fe and Mn, in turn, generates acidity that counteracts neutralization generated by dissolution of the carbonate mineral. For example, siderite dissolution produces ferrous Fe (Fe^{2+}) and carbonate (CO_3^{2-}). Although carbonate contributes to acidity buffering ($CO_3^{2-} + H+ \rightarrow HCO_3^-$) and the oxidation of ferrous iron consumes acidity ($Fe^{2+} + ¼\ O_2 + H^+ \rightarrow Fe^{3+} + ½\ H_2O$), ferric iron hydrolysis generates acidity ($Fe^{3+} + 3H_2O \rightarrow Fe(OH)_3 + 3H^+$). As such, under oxidizing conditions and assuming complete hydrolysis, pure siderite will not neutralize any acidity (Price, 2009).

The recalculation of the carbonate abundance into units of kg $CaCO_3$/t, considering typical mineral chemistry, allows for the direct comparison between the two types of NP (*i.e.,* CaNP and Modified NP) determined by chemical techniques. Figure 4-2 shows plots of different mineralogical NPs *versus* CaNP and Modified NP. There is good alignment along the 1:1 line when all carbonate phases are considered. Plotting only the theoretical NP generated by calcite and dolomite against the corresponding static test data results in greater divergence from the equivalence line, especially for Mafic Syenite samples with elevated ankerite contents.

In combination, the plots in Figure 4-2 suggest that (i) carbonate phases are the primary source of NP across Upper Beaver lithologies and (ii) the Ca/Mg-bearing solid solution component of ankerite is a contributor to overall NP in addition to calcite and dolomite. Uncertainty in this interpretation (scatter in Figure 4-2) is likely a result of mineralogical and geochemical heterogeneity. The possible influence of non-carbonate NP sources (*e.g.,*

mafic and aluminosilicates) would lead to a perceived overestimation of Modified NP and datapoints preferentially falling below the equivalence line. A more detailed discussion of CaNP and Modified NP is presented in the following subsection.

4.2.2 Acid-Base Accounting

An overview of the ABA statistics for the major mine rock types and ore is presented in Table 4-1. The full ABA database including laboratory results in given in Appendix B2.

Generally, paste pH is circum-neutral to alkaline, with 90% of all samples producing $8.3 < pH < 9.6$. One ore sample with a very high sulphide S content (16%) shows the lowest paste pH value at 6.2. It should be noted that paste pH only gives insight into the acid-base balance at the time of analysis and is therefore not an indicator of long-term ARD potential.

More than 90% of samples have less than 2% total S contents, although the complete range of total S content spans from the analytical detection limit (0.005%) to 28%. Mine rock and ore median total S concentrations are 0.10% and 0.30%, respectively. Mine rock lithologies have median mine rock total S concentrations ranging from 0.04% in Late-Stage Dykes to 0.27% in Crowded Porphyry. The largest unit, Blake River Mafic, has a median total S content of 0.1% (Table 4-1).

Sulphide S, calculated as [total S – sulphate S] represents the dominant form of S across all samples (Figure 4-3) and makes up >90% of total S in more than 83% of all the samples. Sulphate S was measured near or below the analytical detection limit (0.01%) in most samples. Where sulphate was identified to make up >20% of the total S inventory, no clear lithological trends were identified. However, no sulphate S was detected in gabbro samples submitted for analysis. High sulphate S (> 1.0%) occurs primarily in both ore and mine rock of the Tisdale unit. Other sulphate S concentrations an order of magnitude greater than the detection limit (> 0.1%) occur in Volcanoclastic (mine rock only), Mafic Syenite (ore and mine rock), Mafic Syenite Porphyritic (ore only) and Crowded Porphyry (ore and mine rock) samples. All measurable (*e.g.,* above the detection limit) sulphate S concentrations occur in samples from the main deposit.

The mineralogical association of sulphate S may be primary (pre-sampling/hydrothermal) or secondary (post-sampling sulphide oxidation) in origin. An indication that at least some sulphate S may be primary/hydrothermal in nature is given by sample CAOND157957 which has a high gypsum abundance (Figure 4-1) and, correspondingly, is dominated by sulphate S (100% of total S). Since the relative importance of primary or secondary sulphate formation mechanisms is difficult to discern and only affects a relatively small number of samples, the total S content of the sample is conservatively used as the basis for the calculation of acid potential (AP) in this ML/ARD study.

Table 4-1:
Statistical Overview of Acid-Base Accounting Results for the Upper Beaver Mine Rock and Ore Static Test Populations

Rock Type	Paste pH	Total S	Sulphate S	CaNP	Modified NP	NPR
	-	*%*	*%*	*kg CaCO3/t*	*kg CaCO3/t*	-
Ore	n = 64					
Minimum	6.2	0.0090	0.010	1.7	3.7	0.020
Median	8.7	0.30	0.020	90	84	9.3
90th Percentile	9.6	0.99	0.43	191	187	133
Maximum	9.8	16	0.72	300	545	615
Mine Rock Units						
Tisdale	n = 56					
Minimum	7.0	0.0060	0.010	2.5	11	0.040
Median	9.0	0.20	0.01	75	74	8.6
90th Percentile	9.6	2.3	0.25	138	133	110
Maximum	9.8	28	3.0	181	153	433
Blake River Mafic	n = 143					
Minimum	8.2	0.010	0.010	1.7	5.5	0.29
Median	9.1	0.10	0.010	67	71	19
90th Percentile	9.5	0.32	0.020	162	161	108
Maximum	9.7	4.9	0.070	276	232	931
Volcanoclastic	n = 12					
Minimum	8.1	0.080	0.010	3.3	8.2	0.080
Median	8.8	0.26	0.010	39	51	6.4
90th Percentile	9.4	2.2	0.050	98	103	20
Maximum	9.5	5.2	0.24	169	168	36
Gabbro	n = 28					
Minimum	8.8	0.010	0.010	4.2	9.3	2.6
Median	9.2	0.060	0.010	25	35	21
90th Percentile	9.3	0.14	0.010	120	121	85
Maximum	9.4	0.76	0.010	176	170	121
Mafic Syenite	n = 24					
Minimum	8.3	0.010	0.010	3.3	8.5	0.16
Median	9.1	0.080	0.010	69	75	32
90th Percentile	9.5	1.1	0.17	224	186	178
Maximum	9.6	2.9	0.67	306	249	242
Mafic Syenite Porphyritic	n = 9					
Minimum	8.3	0.010	0.010	17	22	2.8
Median	9.0	0.27	0.020	108	87	7.5
90th Percentile	9.3	0.63	0.040	180	184	262
Maximum	10	0.73	0.060	235	230	1107
Crowded Porphyry	n = 35					
Minimum	8.2	0.0050	0.010	23	14	0.38
Median	9.3	0.050	0.010	67	71	46
90th Percentile	9.7	0.71	0.20	123	126	237
Maximum	9.9	2.1	0.39	458	461	401
Late-Stage Dykes	n = 3					
Minimum	8.9	0.007	0.010	27	36	26
Median	9.6	0.044	0.010	57	59	56
90th Percentile	9.7	0.056	0.010	143	94	228
Maximum	9.7	0.059	0.010	165	103	271

Notes: NP = Neutralization Potential; CaNP = Carbonate NP; NPR = Neutralization Potential Ratio.

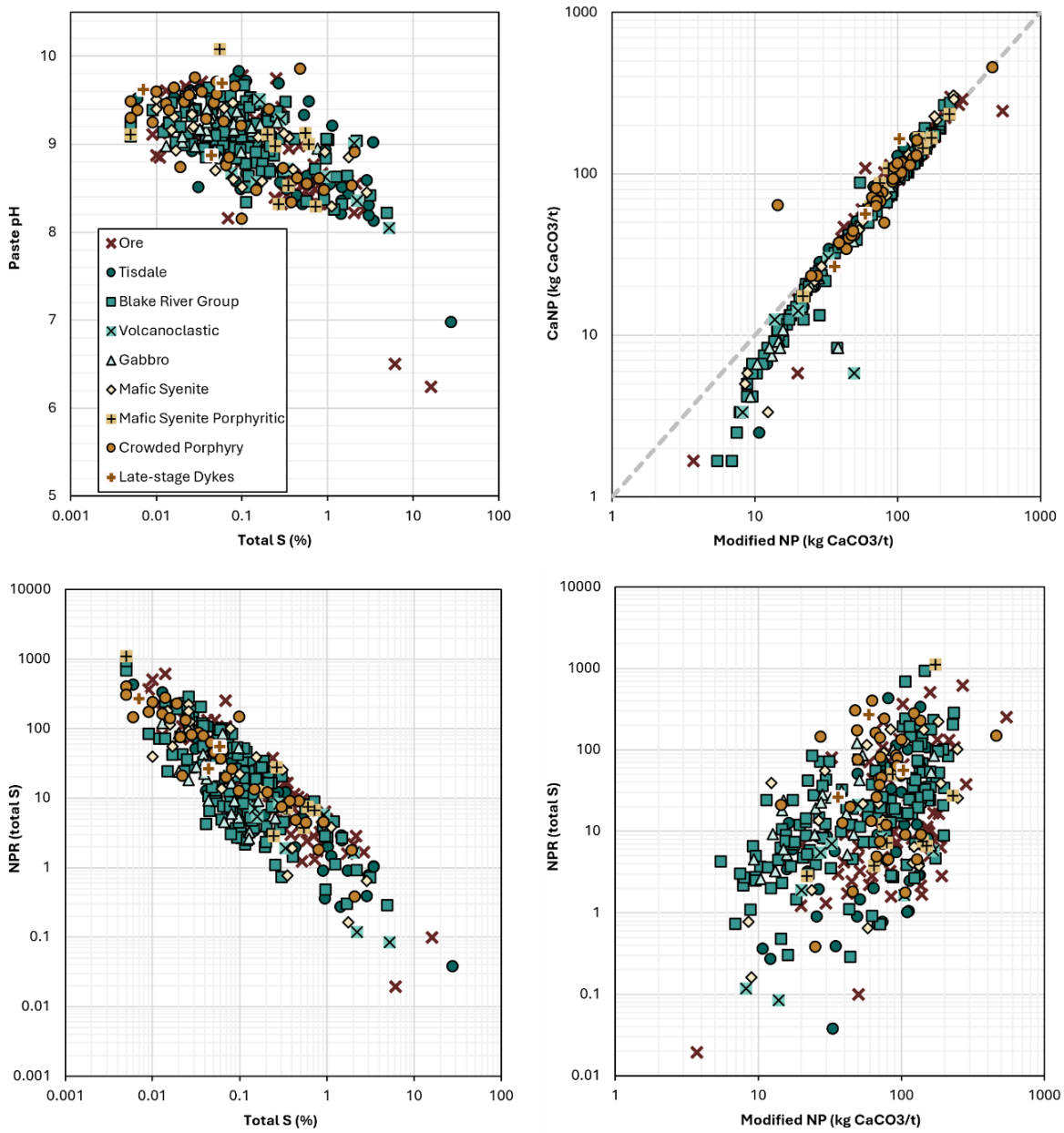


Figure 4-3: Key acid-base accounting data for the Upper Beaver static test population. (Upper Left) Paste pH *versus* Total S; (Upper Right) Carbonate NP (CaNP) *versus* Modified NP; (Lower Left) NPR *versus* Total S; and (Lower Right) NPR *versus* Modified NP.

The stoichiometric relationship is based on pyrite oxidation principles and can be written as follows:

$$AP \text{ (in kg } CaCO_3/t) = [\text{total S}] \times 31.25$$

This AP derivation is considered conservative since chalcopyrite, which was determined to represent the second most common sulphide mineral in Upper Beaver mine rock, produces less effective acidity relative to pyrite (Bouzahzah *et al.*, 2013) and at generally lower rates (Chopard *et al.*, 2017). Similarly, the derivation of CaNP is based on the stoichiometric recalculation of the TIC content of a sample assuming all carbonate is in the form of calcite:

$$\text{CaNP (in kg } CaCO_3\text{/t)} = [\text{TIC}] \times 83.33$$

Comparison of CaNP with Modified NP shows strong alignment around the 1:1 equivalence line and indicates that the majority of NP is provided by carbonate minerals. This is consistent with the findings from the mineralogical investigations (Section 4.2.1).

Crowded Porphyry mine rock samples show better than typical agreement between the two parameters with minor scatter around the 1:1 line (Figure 4-3). Where CaNP values exceed Modified NP, the presence of Fe- and Mn-bearing carbonates (*e.g.,* ankerite, siderite) is indicated. In these circumstances, CaNP may overestimate the effective NP. Given the improved mineralogical understanding around the Upper Beaver mine rock samples discussed in Section 4.2.1, Modified NP is considered the more accurate representation of NP across the dataset and is used as the primary metric for the calculation of ARD risk of Upper Beaver mine rock henceforth.

Modified NP values range from 5.5 to 461 kg $CaCO_3$/t across mine rock lithologies and from 3.7 to 545 kg $CaCO_3$/t in the ore sample population. Of the mine rock lithologies, Gabbro displays the lowest median Modified NP (35 kg $CaCO_3$/t) while the highest median was calculated for the Mafic Syenite Porphyritic unit (87 kg $CaCO_3$/t; Table 4-1). In the lower NP range (<50 kg $CaCO_3$/t), Modified NP trends slightly higher than CaNP (Figure 4-3). This is inferred to be the result of non-carbonate minerals contributing to acid-buffering reactions and/or sample heterogeneity. Mineralogical analysis has identified mafic silicate minerals such as Ca-rich plagioclase and pyroxene, which have been shown to contribute low to modest acid-buffering capacity (*e.g.*, Jambor *et al.*, 2000, Eary & Williamson, 2006). For mine planning purposes, it is recommended that the potential for unavailable NP, resulting from locked or passivated carbonate grains, be considered as a sensitivity in low-NP materials in particular. Additional analysis to this effect is presented below and practical guidance is provided in Section 7.1.2.1.

The Neutralization Potential Ratio (NPR) is defined as NP/AP and represents a key metric in ML/ARD studies that allows for the classification of PAG and NPAG materials. In accordance with recommendations made in Price (2009) and geochemical principles discussed at the beginning of this chapter, an NPR value of 2.0 was chosen to discriminate

between PAG (NPR < 2.0) and NPAG (NPR ≥ 2.0) rock. In other words, for a sample to be considered NPAG, it needs to contain at least twice the amount of NP compared to AP.

NPR is more sensitive to changes in Total S than Modified NP as there is a stronger relationship between Total S and NPR than between Modified NP and NPR (Figure 4-3). Amongst both the mine rock and ore populations, 11% of samples are classified as PAG (Table 4-2). The highest proportion of PAG mine rock occurs in the Volcanoclastic (33%) and Tisdale (23%) units, although it should be noted that the number of samples in the Volcanoclastic unit (n = 9) is limited compared to some other lithologies. Three mine rock units, namely Gabbro, Mafic Syenite Porphyritic, and Late-Stage Dykes, are exclusively NPAG. Within the PAG mine rock population, Modified NP values range from 3.7 kg $CaCO_3$/t to 138 kg $CaCO_3$/t with a median of 34 kg $CaCO_3$/t. This suggests that NP is available to delay the onset of ARD in much of the PAG mine rock population for extended periods of time, potentially on the order of decades. A more in-depth discussion of NP depletion rates and the lag time to the onset of ARD, based on kinetic test data, is provided in Section 5.

A sensitivity analysis was conducted to assess whether and to what extent the potential unavailability of NP affects PAG proportions of the overall database and lithological sub-units. It was found that, if a portion of 25% of the Modified NP measurement of a given sample was unavailable during full-scale operations due to particle size limiting the liberation of acid-buffering minerals, the total PAG volume of the ML/ARD database would increase to 13% in mine rock (Table 4-2). With respect to individual lithologies, this translates to an increase in PAG for Tisdale, Blake River Mafic, and Gabbro units. The PAG percentage of remaining lithological groups is unchanged in the sensitivity (Table 4-2). Hence, PAG proportions show limited dependence on the amount of NP. To maintain conservatism and provide additional contingency for mine planning, this sensitivity is carried forward in the assay proxy calculations derived in Section 7.1.2.1.

There is no discernible trend of PAG prevalence as a function of depth as illustrated in Figure 4-4. It should be noted that this figure does not show the vertical depth below the surface but rather the start of the interval depth along the drill core, which may affect the precise location of the sample vertically. Nevertheless, geological controls including lithological cross-cutting relationships and hydrothermal veining are stronger predictors of PAG occurrence than depth.

Table 4-2:
Proportions of PAG Rock Using Standard and Sensitivity Parameterization for Different Static Test Populations

Geological Unit	Total Number of Samples	Standard Classification		Sensitivity Classification	
		Number of PAG Samples	PAG %	Number of PAG Samples	PAG %
Ore	64	7	11%	10	16%
Mine Rock	310	33	11%	40	13%
Mine Rock by Lithology					
Tisdale	56	13	23%	14	25%
Blake River Mafic	143	9	6%	14	10%
Volcanoclastic	12	4	33%	4	33%
Gabbro	28	0	0.0%	1	3.6%
Mafic Syenite	24	4	17%	4	17%
Mafic Syenite Porphyritic	9	0	0.0%	0	0.0%
Crowded Porphyry	35	3	8.6%	3	8.6%
Late-Stage Dykes	3	0	0.0%	0	0.0%
Mine Rock by Location					
Main Deposit	268	33	12%	40	15%
Northeast Deposit	50	0	0.0%	0	0.0%
Main Deposit Mine Rock by Component					
Open Pit	143	6	4.1%	12	8.2%
Underground	167	27	16%	28	17%

Notes: PAG = Potentially Acid Generating.

The proportion of PAG mine rock varies significantly by deposit, and within the main deposit, by open pit versus underground domains (Table 4-2). There are no PAG samples in the Northeast Deposit zone. By contrast, 12% of mine rock samples from the main deposit are classified as PAG. Within the main deposit, the underground domain has approximately four times the proportion of PAG samples compared to the open pit. Considering the sensitivity parameterization, the open pit PAG proportion doubles relative to baseline. This is due to the Gabbro samples being more strongly influenced by the simulated reduction in available NP. Aside from this specific unit and location, the change in PAG % as a function of NP across different mining domains is low.

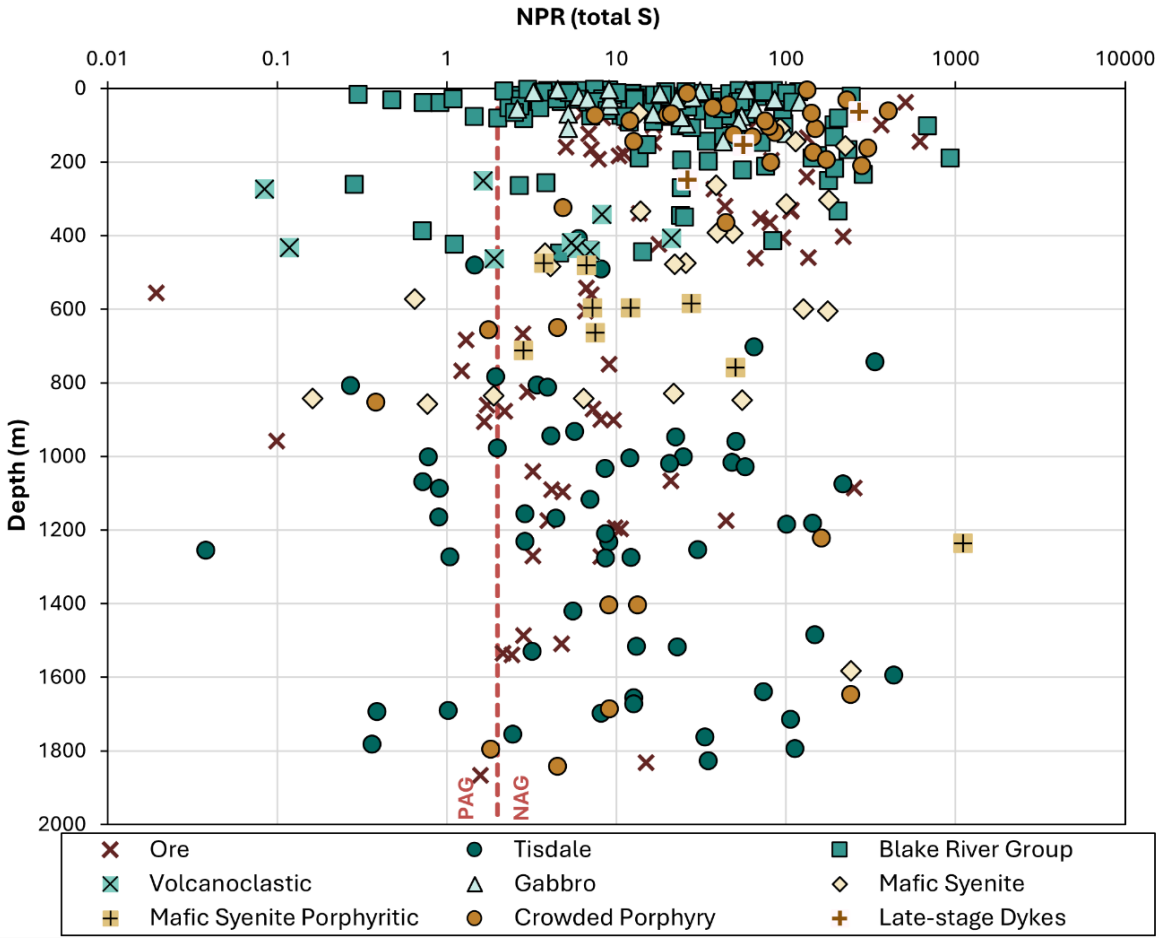


Figure 4-4: Relationship of Neutralization Potential Ratio (NPR) with core interval depths for the Upper Beaver mine rock and ore samples

Acid-base accounting data for kinetic test samples (humidity cells and field bins; Table 4-3) were compared against their respective lithological units and indicate that the selected kinetic test materials are generally conservative with respect to the corresponding mine rock units (Figure 4-5). Specifically, total S contents of kinetic test samples are consistently slightly to moderately greater than the median value of static populations, except for the PAG field bin sample (FB-4). Modified NP of kinetic test samples show a relatively wide range. However, the NPR values of kinetic test samples are generally lower than the median values of the corresponding static test populations. It can therefore be said that the kinetic test sample composites are an appropriate data source for the conservative assessment of ML/ARD behaviour and source term modelling of the different mine rock lithologies.

Table 4-3:
Statistical Overview of Acid-Base Accounting Results for the Upper Beaver Mine Rock Kinetic Test Samples

Sample ID	Paste pH	Total S	Sulphate S	CaNP	Mod. NP	NPR
	-	*%*	*%*	*kg CaCO3/t*	*kg CaCO3/t*	*total S*
Tisdale						
HC2	9.1	0.89	0.010	4.2	11	0.40
Blake River Mafic						
HC3	9.2	0.17	<0.01	92	94	18
HC4	8.9	2.5	0.020	82	83	1.1
HC7	9.3	0.19	<0.01	21	27	4.5
FB-3	8.9	0.23	<0.01	85	81	11
Gabbro						
HC9	9.1	0.084	<0.01	36	40	15
FB-5	9.2	0.097	<0.01	32	38	12
Mafic Syenite						
FB-1	8.5	0.45	0.080	73	79	5.7
HC1	8.0	0.23	0.15	186	155	22
Crowded Porphyry						
FB-2	8.9	0.15	0.010	83	81	17
HC8	8.5	0.15	<0.01	182	182	40
PAG Mixed Lithologies						
HC10	9.3	1.6	0.020	19	22	0.4
FB-4	8.5	1.1	0.23	53	58	1.7
NE Deposit						
HC11	-	0.33	<0.01	104	104	10
FB-8	9.2	0.097	N/A	89	98	32

Notes: NP = Neutralization Potential; CaNP = Carbonate NP, NPR = Neutralization Potential Ratio; HC = Humidity Cell; FB = Field Bin; PAG = Potentially Acid Generating.

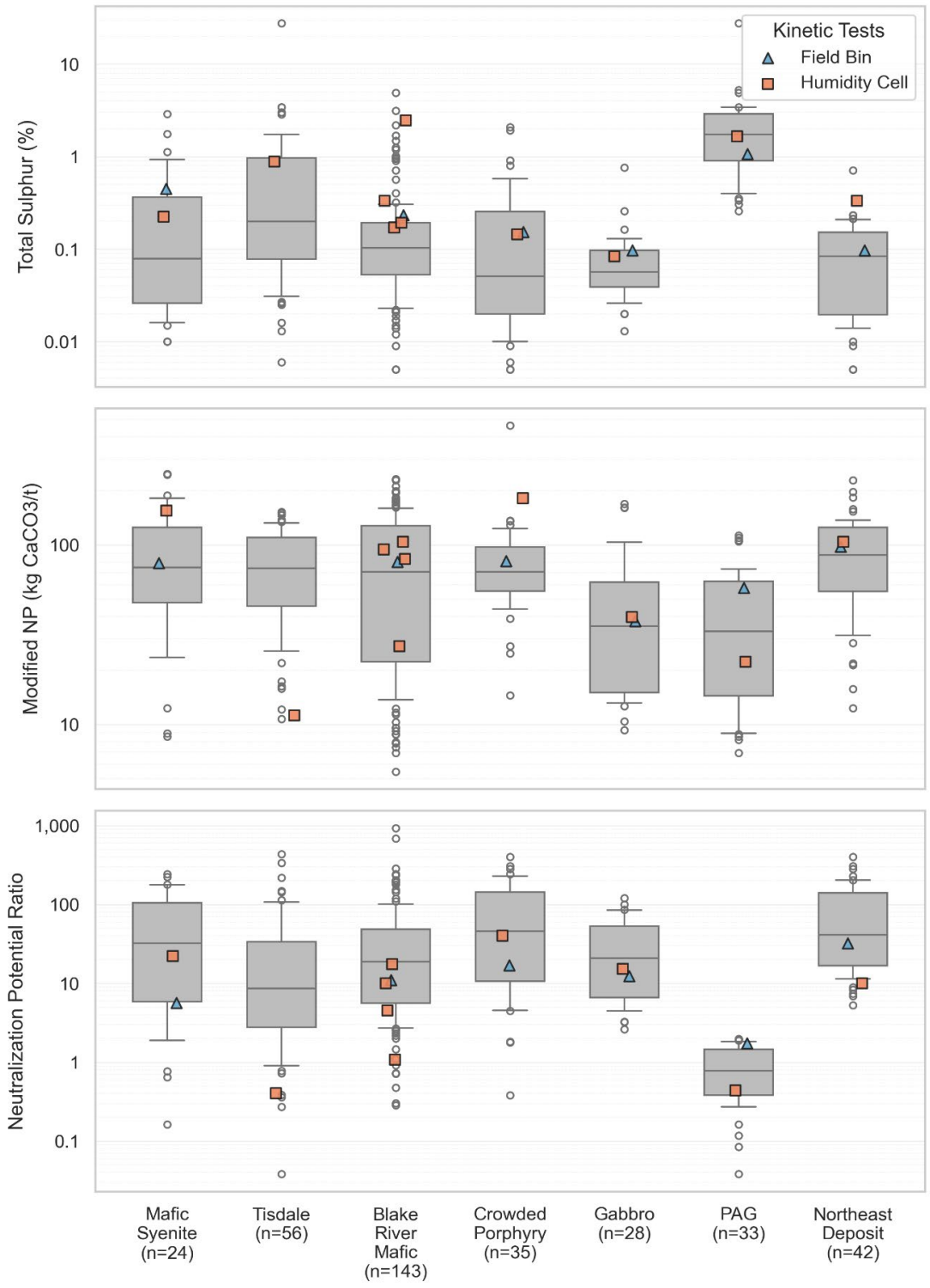


Figure 4-5: Selected acid-base accounting results of kinetic test samples compared against the mine rock database. Box limits represent 25th and 75th percentiles, the horizontal bar represents the median, and the whiskers represent the 10th and 90th percentiles.

4.2.3 Elemental Abundance

Results of the aqua regia digestible solid phase elemental contents for the different Upper Beaver sample populations are given in Table 4-4. Values greater than 5x the average upper crustal abundance (AUCCA) as presented in Rudnick and Gao (2014) are considered enriched and are highlighted in this discussion. This assessment serves as a screening tool to identify preliminary parameters of potential concern that will be further scrutinized via short-term leach and kinetic testing. An element present at an elevated contents in the solid phase does not necessarily imply a metal leaching issue, since several factors influence elemental leaching rates, including the nature and texture of the metal-phases present, as well as the environmental conditions of placement (*e.g.,* pH, redox potential). Sections 4.2.3.1 and 4.2.3.2 discuss contents determined by aqua regia digestion. A comparison and discussion of contents determined by four acid digestion is presented in Section 4.2.3.3. The complete four acid digestion analytical dataset provided by the laboratory is compiled under Appendix B3. Unless specifically noted, all solid phase elemental results (also interchangeably referred to as 'metals') presented for the remainder of this document represent aqua regia digestions.

4.2.3.1 Ore

The median contents of three (Cu, Mo, and Se) and the 90th percentile concentrations of four (Bi, Hg, Sb, and W) metals/metalloids in all ore samples are greater than 5x AUCCA (Table 4-4). The enrichment of these elements compared to the AUCCA is expected in ore-bearing zones that have experienced fluid alteration.

Ore is hosted in mineralized veins that have a high association with Cu, Mo, and Se. Mineralized zones at Upper Beaver contain Cu- and Mo-bearing sulphide minerals chalcopyrite ($CuFeS_2$) and molybdenite (MoS_2). Selenium is associated with sulphide deposits and is found in both sulphide minerals where it substitutes for S, and in Se minerals such as tetrahedrite.

The presence of some elevated contents of other metals/metalloids (*e.g.,* Hg, Sb) may be the result of antimony-bearing minerals in the tetrahedrite group ($Cu_6(Cu_4\mathbf{M}^{2+}{}_2)Sb_4S1_{12}S$ where M^{2+} is Fe^{2+}, Zn, Cd, Hg, or other species). These minerals are associated with Cu mineralized zones (see Section 2.1.2) and may incorporate transition metals (*e.g.,* W and Hg) in the M^{2+} site and column 15 elements (*e.g.,* Bi) in the Sb site. The presence of Hg in ore units is a potential cause for concern due to the adverse environmental impacts of Hg. Mercury leachability from tailings is discussed in Section 6.

Table 4-4:
Statistical Overview of Selected Solid Phase Composition Results for Upper Beaver Mine Rock and Ore Static Test Populations

Rock Type	As	Bi	Ca	Cd	Co	Cu	Fe	Hg	Mo	Sb	Se	W	Zn
	ppm	*ppm*	*%*	*ppm*	*ppm*	*ppm*	*%*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
AUCCA	4.8	0.16	2.6	0.09	17.3	28	3.9	0.05	1.1	0.4	0.09	1.9	67
Ore													
Minimum	0.50	0.02	0.56	0.010	4.3	1.7	0.85	0.01	1.1	0.050	0.1	0.1	7.7
Median	3.0	0.42	3.3	0.010	22	590	4.6	0.21	23	0.70	1.0	0.9	25
90th Percentile	19	6.5	6.8	0.29	51	5177	8.9	0.94	250	2.8	2.0	15	42
Maximum	72	32	10	5.6	213	62100	33	5.0	2000	27	28	100	60
Mine Rock Units													
Tisdale													
Minimum	1.0	0.020	0.78	0.010	3.0	1.5	0.66	0.010	0.18	0.020	0.10	0.10	4.0
Median	4.0	0.24	3.0	0.010	21	197	3.5	0.080	3.4	1.0	1.0	0.35	21
90th Percentile	20	3.5	4.8	0.065	48	4190	6.7	1.6	49	3.9	1.7	4.6	37
Maximum	135	26	5.9	0.33	171	31700	24	19	897	169	8.0	82	50
Blake River Mafic													
Minimum	1.0	0.020	0.92	0.010	11	1.2	1.97	0.010	0.22	0.12	0.10	0.10	11
Median	6.0	0.12	3.0	0.010	32	139	6.3	0.056	1.4	1.4	1.0	1.4	34
90th Percentile	22	1.3	5.9	0.040	52	1708	8.7	0.63	31	3.8	1.0	6.8	74
Maximum	122	14	7.9	0.79	705	10000	14	14	1014	62	7.0	104	117
Volcanoclastic													
Minimum	2.0	0.12	0.74	0.010	16	36	2.9	0.050	0.36	0.50	0.20	0.30	13
Median	14	0.47	2.2	0.010	38	352	4.2	0.14	1.2	1.6	1.0	0.75	37
90th Percentile	35	2.0	3.9	0.020	73	1656	7.3	0.63	5.6	4.1	2.6	3.5	56
Maximum	298	7.83	6.7	0.030	82	7033	8.3	0.95	50	13	3.0	31	58
Gabbro													
Minimum	2.0	0.020	0.86	0.010	20	27	2.4	0.010	0.12	0.39	1.0	0.40	18
Median	5.0	0.085	1.8	0.010	31	123	4.8	0.050	0.57	1.5	1.0	1.3	27
90th Percentile	13	0.39	4.8	0.020	53	330	6.8	0.21	2.0	2.7	1.0	8.2	42
Maximum	24	3.00	6.4	0.17	66	6512	8.4	0.65	534	4.26	2.0	43	50
Mafic Syenite													
Minimum	0.70	0.020	0.33	0.010	1.1	2.0	0.16	0.0080	2.3	0.050	0.10	0.10	2.4
Median	4.15	0.19	3.0	0.020	20	70	3.3	0.089	9.4	0.45	1.0	1.2	25
90th Percentile	12	1.3	6.0	0.15	45	505	6.0	0.85	107.17	0.74	1.1	19	40
Maximum	43	2.1	6.3	0.36	73	5124	6.4	1.5	236	3.1	2.4	47	58
Mafic Syenite Porphyritic													
Minimum	1.1	0.030	1.3	0.010	6.1	16	1.9	0.013	2.5	0.090	0.10	0.20	8.0
Median	4.0	0.22	2.6	0.010	20	363	4.1	0.18	10	0.34	1.0	1.0	17
90th Percentile	18	0.74	6.9	0.032	53	3462	9.9	2.3	22	1.2	1.0	56	35
Maximum	26	0.80	8.8	0.040	72	4006	17	3.1	29	1.8	1.0	100	45
Crowded Porphyry													
Minimum	0.90	0.020	1.4	0.010	3.4	1.6	0.94	0.010	0.27	0.14	0.10	0.10	4.7
Median	2.0	0.080	2.7	0.020	9.6	33	1.8	0.060	2.9	0.65	1.0	0.40	16
90th Percentile	5.6	1.4	4.3	0.064	21	639	3.1	0.31	24	1.7	1.0	1.5	29
Maximum	17	7.3	15	2.7	39	10000	5.6	1.9	1690	2.6	2.3	7.0	77
Late-Stage Dykes													
Minimum	0.60	0.090	1.7	0.010	7.0	6.1	1.4	0.020	0.51	0.15	0.10	0.20	26
Median	1.0	0.10	2.6	0.010	14	18	2.5	0.049	1.1	0.54	0.10	0.20	34
90th Percentile	3.4	0.13	3.5	0.034	23	211	5.5	0.071	1.2	1.1	0.82	1.3	66
Maximum	4.0	0.14	3.8	0.040	26	260	6.2	0.076	1.2	1.2	1.0	1.6	75

Notes: AUCCA = Average Upper Continental Crustal Abundance per Rudnick & Gao (2014). Values highlighted in orange are greater than 5x AUCCA.

4.2.3.2 Mine Rock

Similar to ore, the median solid phase contents of three metals/metalloids (Cu, Mo, and Se) are greater than 5x AUCCA in one or more mine rock units. Median Cu contents are above the screening threshold in the Tisdale, Volcanoclastic, and Mafic Syenite Porphyritic units, while the 90th percentile Cu contents are elevated in all mine rock units (Table 4-4). Enrichment of median Mo is limited to the Mafic Syenite and Mafic Syenite Porphyritic units. The 90th percentile Mo contents are above 5x AUCCA in most other units except for Gabbro and Late-Stage Dykes. When considering Se data, it should be noted that the method detection limit for some Se analyses (1 ppm) is itself greater than 5x AUCCA, such that median values above this threshold are an artifact of analytical limitations.

Elevated 90th percentile or maximum contents occur in one or more unit(s) for other metals/metalloids, including Hg in all units except Late-Stage Dykes; Ag, Bi, and Sb in all units except Gabbro and Late-Stage Dykes; W in all units except Crowded Porphyry and Late-Stage Dykes; As in all units except Gabbro, Crowded Porphyry, and Late-Stage Dykes; Cd in Blake River Mafic and Crowded Porphyry; Co in Tisdale and Blake River Mafic; P in Gabbro and Mafic Syenite; Fe in Tisdale; and Ca in Crowded Porphyry. Of all mine rock units, Late-Stage Dykes show the lowest number of elements present above the threshold, which is reflective of their formation after mineralization at Upper Beaver.

There are some broader lithological and spatial trends with respect to metal contents (Figure 4-6 through Figure 4-8). For example, Co, Ni, and As are relatively lower in the Crowded Porphyry samples suite than other lithologies. Zinc is somewhat enriched in the Blake River Mafic unit which also translates into the Northeast Deposit where this lithology dominates. Gabbro is relatively depleted in Mo but enriched in Ni.

Humidity cell sample solid phase data are presented in Table 4-5 and compared to the static test databases in Figure 4-6, Figure 4-7, and Figure 4-8. It should be noted that the 75th and 90th percentiles are indistinguishable at the scale shown on some plots due to the elevated contents in some outliers. For some elements (*e.g.,* Cd) the minimum and median values are equal to the method detection limit. In these instances, boxplots do not contain a median line. Minimum, median, 90th percentile, and maximum values are shown in Table 4-4 for additional context.

In general, the humidity cell samples are considered representative of their respective lithological units with the following notable exceptions. Cadmium contents in one Blake River Mafic and both Crowded Porphyry (HC8, FB-2) kinetic test samples are greater than the 90th percentiles. Copper contents in the Mafic Syenite field bin and one Blake River Mafic humidity cell (HC4) are greater than the 90th percentiles. The Zn content in the

Tisdale humidity cell (HC2) is greater than the corresponding 90th percentile while Zn contents in two Blake River Mafic humidity cells (HC3 and HC4) are approximately equal to the 10th percentile content. This is the only instance of kinetic test sample contents being on the low end of the reference database (except for Se where the 10th percentile and median values are equal to the detection limit). Cobalt contents in the Tisdale (HC2) and one Blake River Mafic humidity cell (HC4) are above the 90th percentile values.

Molybdenum contents in one Blake River Mafic humidity cell (HC3), both Crowded Porphyry kinetic tests (HC8, FB-2), and the Gabbro (FB-5) and NE Deposit (FB-8) field bin samples are greater than the 90th percentile. It should be noted that the NE Deposit field bin sample was generated as a composite of all available samples, including eight ore samples that have a higher average Mo content than the mine rock population shown in the boxplots.

Arsenic content of one Blake River Mafic sample falls above the 90th percentile but below the maximum. Mercury contents are greater than the 90th percentile for one Bake River Mafic humidity cell (HC4).

The variability described above is, in part, the result of sample reclassification and an increased static test dataset since the selection of some kinetic test samples. All kinetic test samples fall within the range of values measured for each unit and are generally considered representative to conservative and therefore suitable for the use in source term development.

Table 4-5:
Statistical Overview of Selected Solid Phase Composition Results for Upper Beaver Kinetic Test Samples

Sample ID	As	Ba	Bi	Ca	Cd	Co	Cu	Fe	Hg	Mo	Sb	Se	W	Zn
	ppm	*ppm*	*ppm*	*%*	*ppm*	*ppm*	*ppm*	*%*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
Tisdale														
HC2	10	46	0.31	1.3	<0.01	91	384	4.4	0.091	2.4	2.0	0.20	1.1	43
Blake River Mafic														
HC3	5.3	19	6.1	4.0	0.24	23	644	7.7	0.23	241	1.7	0.40	1.0	21
HC4	56	39	2.9	3.7	0.030	337	3650	8.1	0.85	11	2.2	2.2	4.0	21
HC7	8.0	16	0.10	1.6	<0.010	33	130	4.5	0.040	0.72	1.2	<1.0	1.2	32
FB-3	12	31	0.41	3.7	0.030	39	554	6.7	0.27	25	2.4	<1.0	2.1	33
Gabbro														
HC9	5.0	<5	0.060	2.1	<0.010	33	166	4.5	0.030	0.96	1.3	<1.0	0.60	32
FB-5	5.0	29	0.28	2.0	<0.010	33	259	4.9	0.11	3.6	1.4	<1.0	6.4	29
Mafic Syenite														
HC1	3.5	63	0.090	4.5	0.060	20	313	3.5	0.12	9.3	1.1	<1.0	1.0	34
FB-1	6.0	158	0.34	3.2	0.030	33	726	4.3	0.11	13	1.0	<1.0	1.1	27
Crowded Porphyry														
HC8	4.0	48	3.0	7.2	0.13	13	253	1.7	0.19	286	1.8	<1.0	0.40	16
FB-2	5.0	173	0.72	2.9	0.22	11	326	2.0	0.17	266	1.2	<1.0	0.80	21
PAG Mixed Lithologies														
HC10	10	42	5.3	1.4	0.020	45	464	5.0	0.11	7.0	2.1	<1.0	3.8	27
FB-4	9.0	171	0.38	2.8	0.040	34	775	4.1	0.19	25	1.1	<1.0	12	26
Northeast Deposit														
HC11	20	7.0	0.060	3.8	0.030	44	230	7.5	0.020	2.0	0.30	1.0	0.20	68
FB-8	2.0	31	0.11	3.9	<0.010	30	215	5.5	0.040	34	0.41	<1.0	0.60	43

Notes: HC = Humidity Cell; FB = Field Bin; PAG = Potentially Acid Generating.

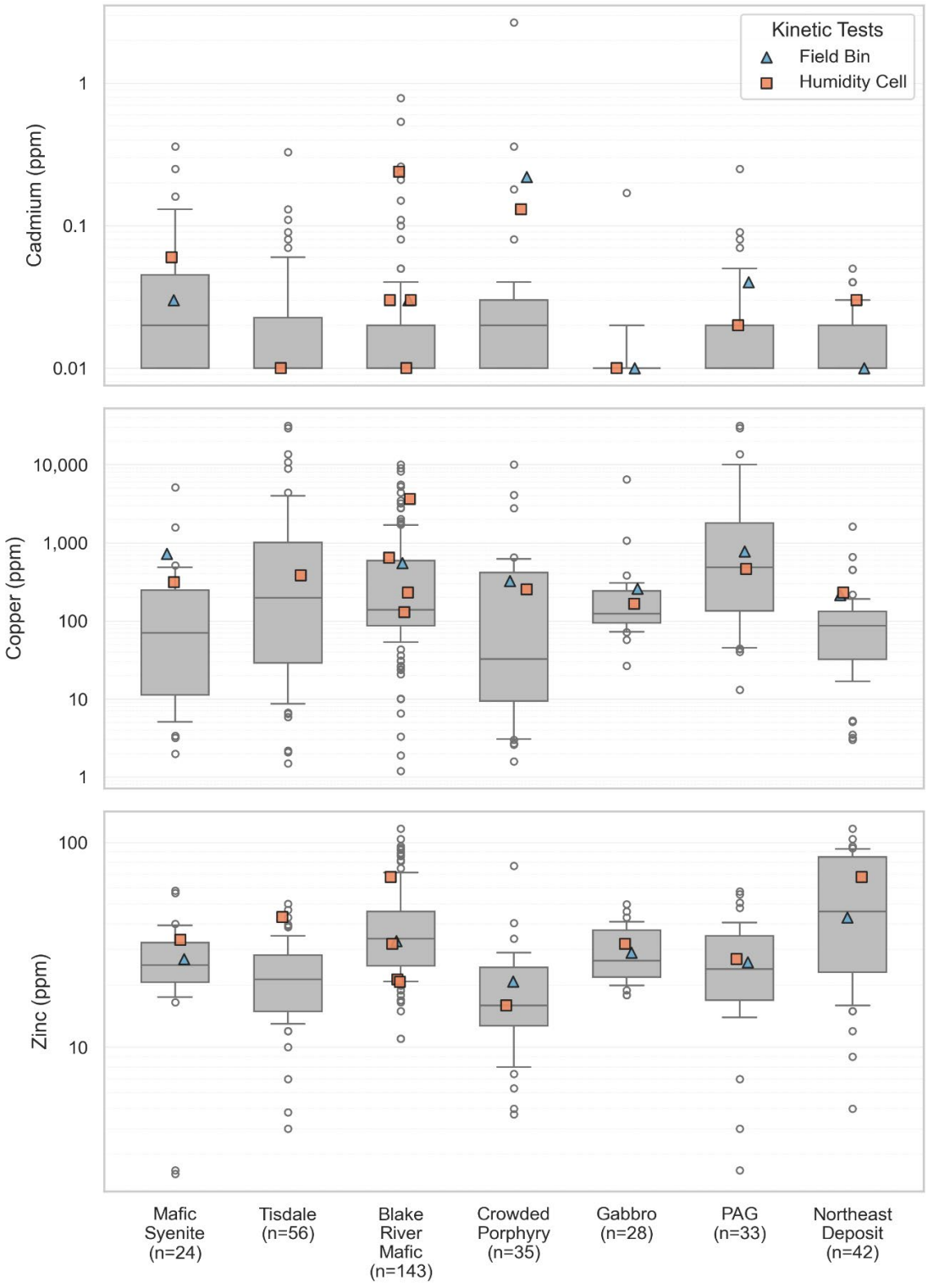


Figure 4-6: Solid phase contents of Cd, Cu, and Zn in kinetic test samples compared against the mine rock database. Box limits represent 25th and 75th percentiles, the horizontal bar represents the median, and the whiskers represent the 10th and 90th percentiles.

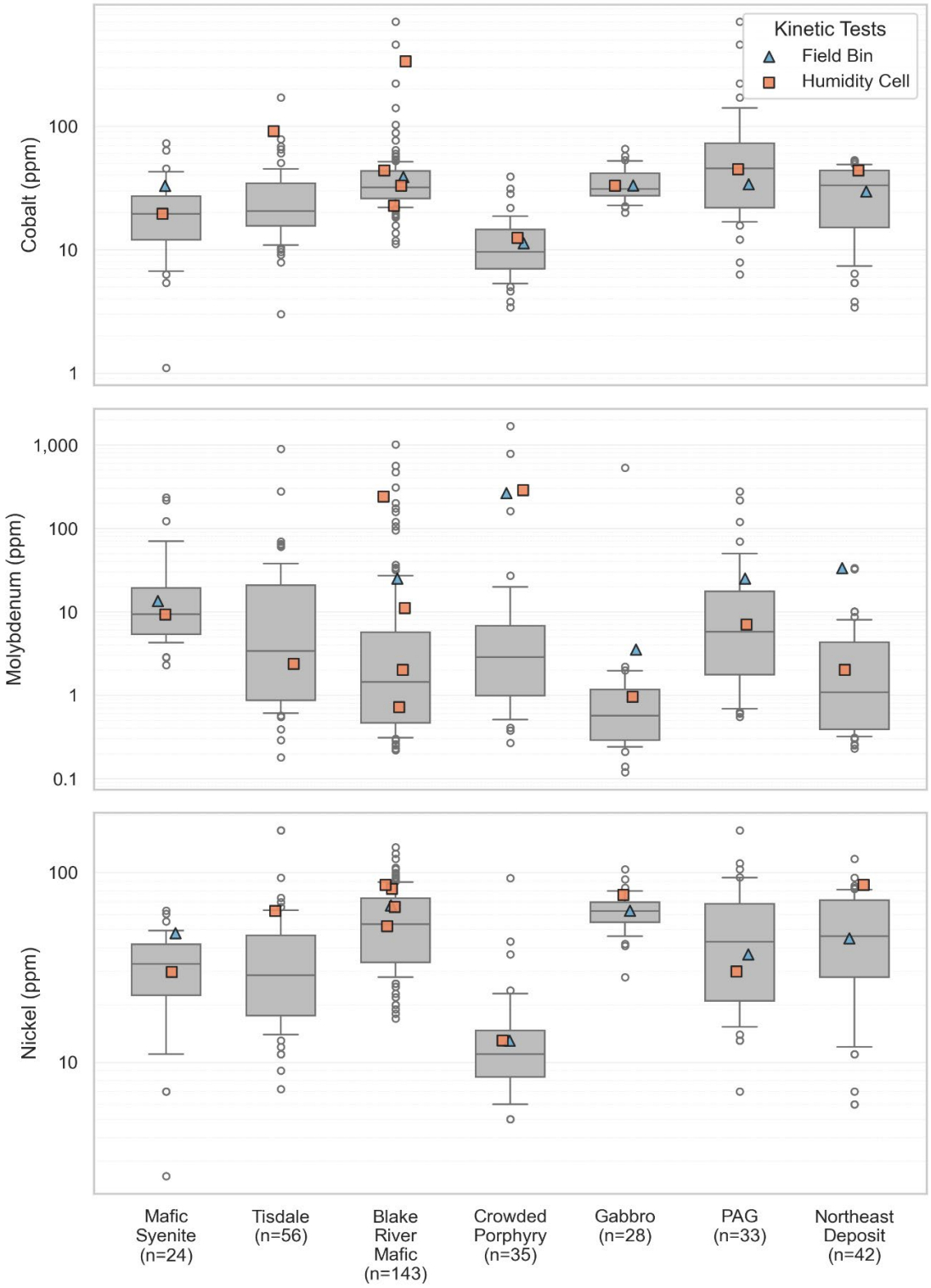


Figure 4-7: Solid phase contents of Co, Mo, and Ni in kinetic test samples compared against the mine rock database. Box limits represent 25th and 75th percentiles, the horizontal bar represents the median, and the whiskers represent the 10th and 90th percentiles.

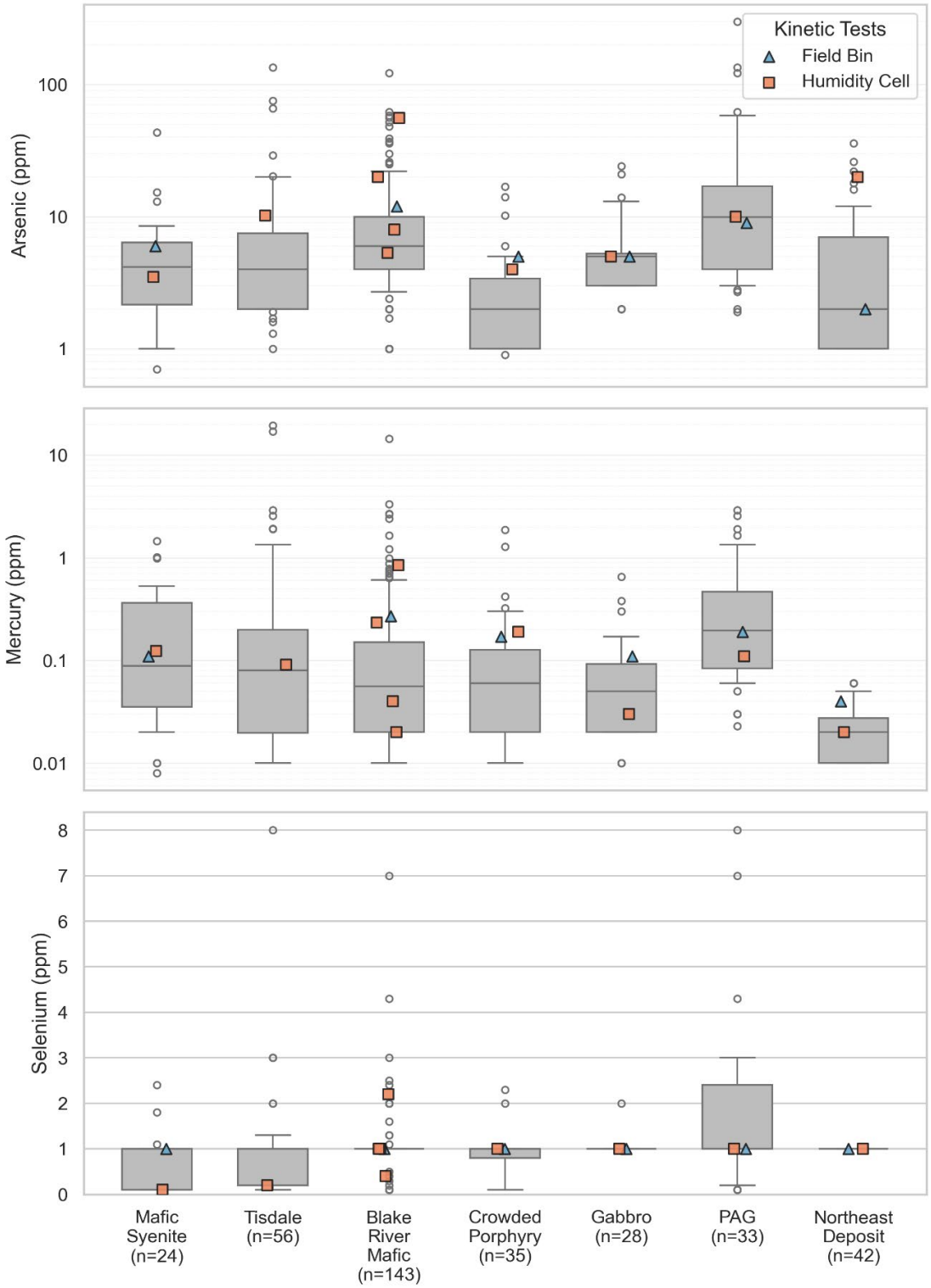


Figure 4-8: Solid phase contents of As, Hg, and Se in kinetic test samples compared against the mine rock database. Box limits represent 25th and 75th percentiles, the horizontal bar represents the median, and the whiskers represent the 10th and 90th percentiles.

4.2.3.3 Aqua Regia vs Four Acid Comparison

Four acid digestion was applied to a subset of mine rock samples to characterize their complete geochemistry and for comparative purposes to assay results (see Section 3.1.1.1). A comparison of results from the two methods can indicate which elements are found in silicate and other more refractory minerals that are only digested under four acid conditions.

The behaviour of an element in aqua regia and four acid digestion is determined by the element's chemical properties that lead to the presence in crystal lattices. Elements with similar properties frequently substitute for the same sites in crystal lattices and are associated with the same mineral phases.

There is a strong linear correlation between aqua regia and four acid techniques for Ag, Bi, Cu, La, Li, Mo, P, S, Te, and Th. A selection of elements with linear correlations is plotted on Figure 4-9 . Copper contents have the strongest linear correlation and the widest range (1.2 ppm to 62,100 ppm). This indicates that Cu in the Upper Beaver samples is near-fully dissolved from the solid phase, predominantly from sulphide minerals, during aqua regia digestion.

Sulphur contents are also strongly correlated between the two digestion techniques; thus, four acid sulphur contents from assay samples can be used as a proxy for total S and associated AP in aqua regia samples. However, Ca contents are poorly correlated (Figure 4-9); as a result, four acid Ca contents are a weak proxy for the calculation of CaNP or bulk NP more broadly. Calcium contents are distributed along and above the 1:1 line which is inferred to be due to the presence of Ca in aqua regia-insoluble or poorly-soluble silicate minerals, such as plagioclase.

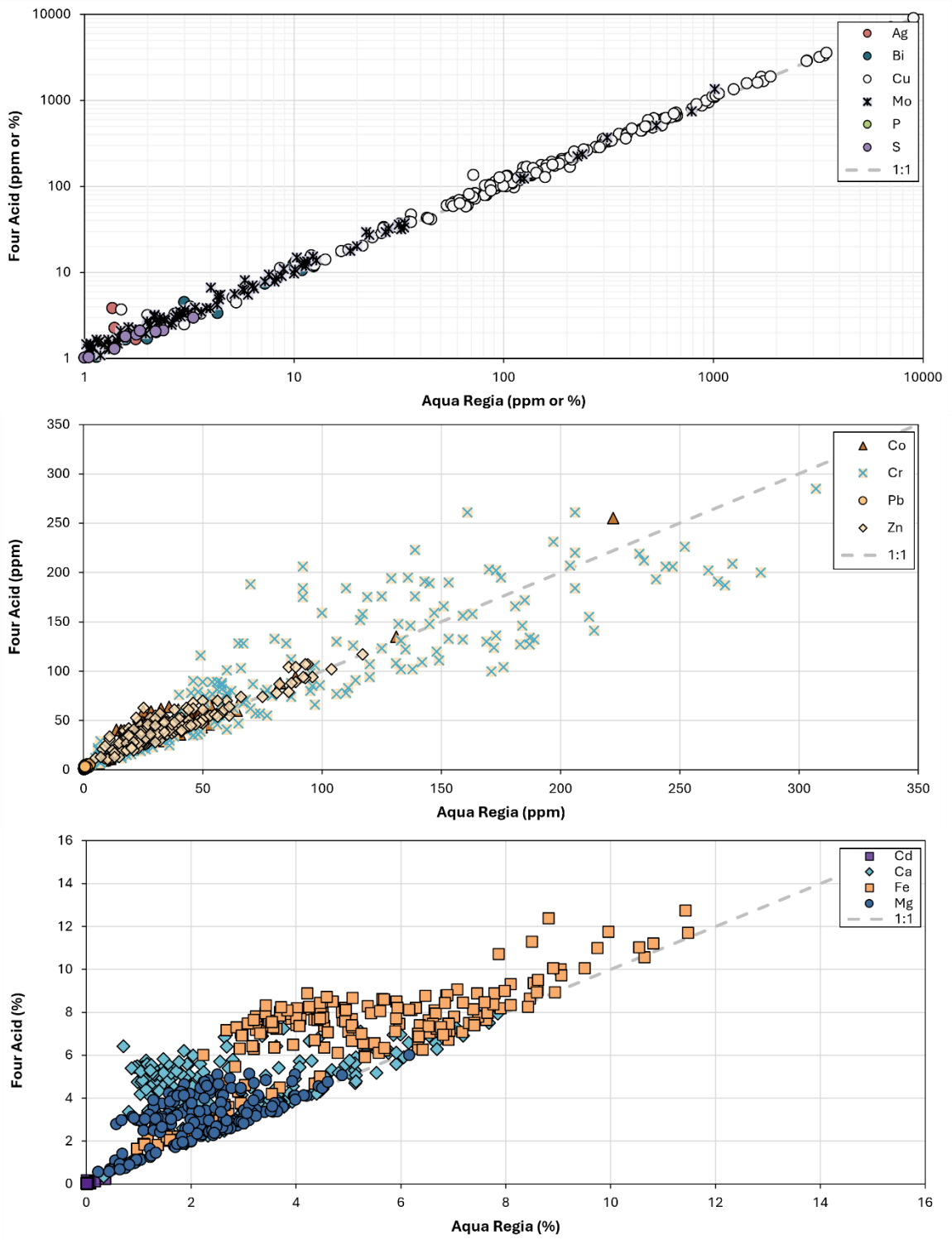


Figure 4-9: Selected aqua regia *versus* four acid digestion results for mine rock samples with (upper) strong linear correlations ($r^2 \geq 0.90$), (middle) moderate linear correlations ($0.71 \leq r^2 \leq 0.87$), and (lower) for Ca, Fe, and Mg ($r^2 \leq 0.65$)

4.2.4 Short-Term Leachability

The SFE test is used to assess the short-term leachability of a sample, and can form the basis for a preliminary assessment of elemental mobility and solubility limits. In support of the assessment herein, a select suite of samples was selected for SFE testing based on samples showing elevated concentrations of certain trace elements. It should be noted, however, that labile phases rinsed during the SFE test may not represent the long-term drainage chemistry of mine rock. In this regard, kinetic testing described in Section 5 provides a better estimate of the reaction behaviour of sulphide oxidation and associated metal release rates over extended periods of time. A full account of SFE test results generated to date is given in Appendix B4.

The median pH of SFE tests is 8.1 with a circum-neural range of 7.5 to 8.3. Dissolved SO_4 concentrations have a median of 5.0 mg/L and vary widely from 1.3 mg/L to 1724 mg/L. The highest SO_4 concentrations occur in a Crowded Porphyry sample (CAOND157957), followed by a high sulphur field bin (FB-3) and two Mafic Syenite samples (HC1 and FB-1). SO_4 and pH show a moderate linear correlation, with SO_4 concentrations increasing with declining pH. The four lowest pH values ($\leq$ 7.7) are associated with the four highest SO_4 concentrations ($\geq$ 186 mg/L).

There is a correlation between leached SO_4 and solid phase sulphate S in the four samples with the highest solid phase sulphate contents (samples CAOND157957, FB-3, HC1, and FB-1). This suggests that readily leachable sulphate phases may initially drive dissolved SO_4 concentrations in drainage from specific samples. These sulphate phases are likely a mix of primary hydrothermal minerals and secondary sulphide oxidation products that formed after core recovery during onsite storage.

To put the leachate concentrations into context, the SFE results were compared against Ontario Provincial Water Quality Objectives (PWQO) to highlight parameters of potential concern (Table 4-6). A threshold of 5x PWQOs was applied as a tool to screen such species preliminarily. This should be considered a screening exercise and is not intended to provide quantitative water quality predictions. Instead, quantitative predictions are presented as geochemical source terms under separate cover (Lorax, 2026a).

Molybdenum is the only species to exceed the screening threshold in three out of the 32 SFE tests and does so significantly (>10x PWQO; Table 4-6). Species that are below but relatively close to the screening threshold (i.e., 1-5x PWQO) include Al (n=22), As (n=7), Cd (n=2), Cu (n=2), and V (n=6). There is no clear association of elevated contents and sample lithology or location (*e.g.,* Main deposit *versus* Northeast deposit). Although both Crowded Porphyry kinetic tests samples (HC8, FB-4) show elevated ML potential for Mo, these samples also show unrepresentatively high Mo solid phase contents (Figure 4-7), and

therefore, the elevated SFE concentrations should be viewed with caution. Another noteworthy finding is that ML potential is not generally tied to PAG rock over NPAG material.

Aluminum concentrations in SFE tests increase with increasing pH. This trend in Al solubility is consistent with the element's amphoteric behaviour; Al solubility is very sensitive to pH, with a minimum solubility around pH 6.5 (Driscoll & Schecher, 1990). The solubility of Al increases much faster towards acidic pH *versus* alkaline pH; therefore, high Al concentrations would not be expected in a neutral-mildly basic solution. One explanation for the observed PWQOs exceedances may be that microcrystalline gibbsite or amorphous $Al(OH)_3$ phases are present in colloidal form and pass through the filter used for the determination of the dissolved fraction (*i.e.,* 0.45 µm). This may be further exacerbated by the analytical method (the flask is stirred for 24 hours) that has the potential to release higher amounts of colloidal Al than would be expected in the natural environment. This hypothesis is supported by the relatively low Al concentrations produced by humidity cell and field bin leachates (Section 5) which represent larger scales and lower liquid/solid ratios. Given the inferred methodological limitations with respect to Al leaching in SFE tests, this species is not carried forward as a POPC.

In an effort to provide guidance on the identification of suitable (NPAG) construction materials, a comprehensive trend analysis was carried out, juxtaposing solid phase metal contents with SFE leachate concentrations. The objective of this exercise is to provide, if possible, a reliable and cost-effective solid phase proxy for ML risk as it relates to parameters of potential concern. Ideally, the derived proxy criterion would be based on the lowest possible number of parameters to allow for practical operational implementation. To this end, both aqua regia and four acid solid phase contents were used in this assessment to provide flexibility with respect to operational monitoring.

The comparison of the solid phase content with corresponding leachable concentration for five species of interest (As, Cd, Cu, Mo, V) did not reveal notable positive correlations for As, Cu, and V (Figure 4-10). Conversely, for Mo and Cd, higher solid phase contents of these constituents tend to produce higher Mo and Cd leachate concentrations. There is evidence that these two species are also interrelated mineralogically. As such, avoiding materials with elevated Mo contents in the solid phase (*e.g.,* >100 ppm) is expected to concomitantly lower the risk for ML of Mo and Cd. Although much less reliable, elevated As leaching (> PWQO) of two samples is also associated with two of these high-Mo samples and therefore, it is possible that the risk for As leaching overall may be reduced in response to the exclusion of high-Mo rock for construction purposes. Since Mo is leached relatively equally during both aqua regia and four acid digestion, its identification across the deposit should be relatively straightforward.

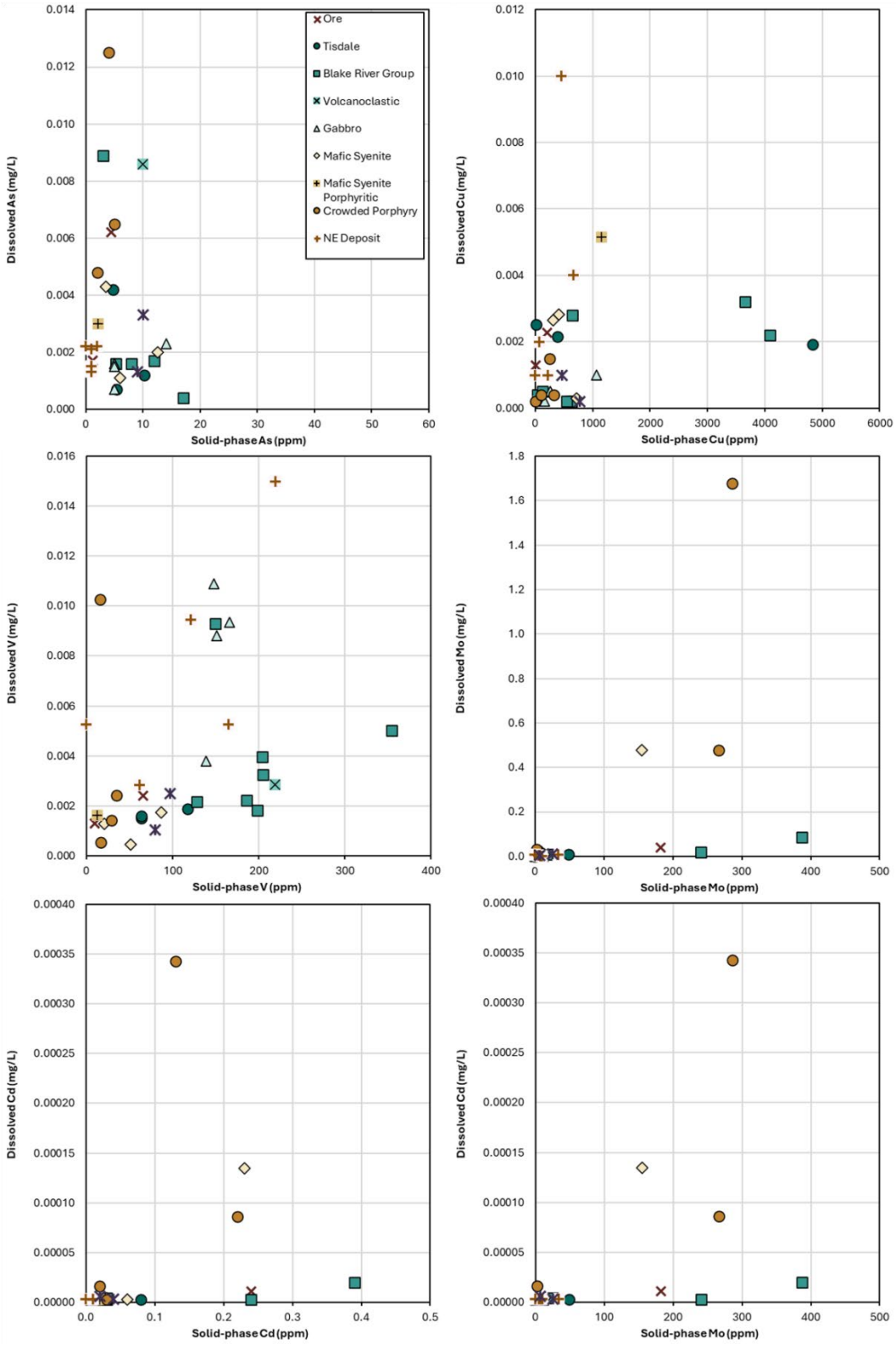


Figure 4-10: Solid phase composition *versus* SFE concentrations for selected species in Upper Beaver mine rock samples

Table 4-6:
Summary of Shake Flask Extraction Results for Upper Beaver Mine Rock Samples

Mine Rock Unit	pH	SO_4	Al	As	Cd	Co	Cu	Fe	Pb	Hg	Mo	Ni	P	K	Se	V	Zn
	-	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
PWQO	-	-	0.075	0.0050	0.00010	0.00090	0.0050	0.30	0.0030	0.00020	0.040	0.025	0.020	-	0.10	0.0060	0.020
Tisdale																	
Median	8.0	6.0	0.30	0.0012	0.0000030	0.000038	0.0022	0.0070	0.000010	0.000010	0.0088	0.00010	0.0030	1.3	0.00028	0.0016	0.0020
Maximum	8.0	7.0	0.32	0.0042	0.0000030	0.000082	0.0025	0.010	0.000010	0.000010	0.012	0.00030	0.0030	2.9	0.0013	0.0019	0.0020
Blake River Mafic																	
Median	8.1	2.7	0.32	0.0065	0.0000030	0.000021	0.00050	0.0070	0.000090	0.000010	0.0054	0.00010	0.0030	2.2	0.00053	0.0022	0.0020
Maximum	8.3	39	0.37	0.0089	0.000086	0.00037	0.0032	0.0070	0.000090	0.000010	0.48	0.00040	0.013	4.6	0.0015	0.0093	0.0020
Gabbro																	
Median	8.1	2.4	0.19	0.0016	0.0000030	0.0000045	0.00035	0.0070	0.000090	0.000010	0.0019	0.00010	0.0060	1.1	0.00027	0.0091	0.0020
Maximum	8.2	6.9	0.31	0.0023	0.0000030	0.000024	0.0010	0.017	0.000090	0.000010	0.013	0.00010	0.019	1.9	0.00042	0.011	0.0020
Mafic Syenite																	
Median	7.9	97	0.20	0.0032	0.0000075	0.00022	0.0025	0.0070	0.000010	0.000010	0.029	0.00085	0.0030	4.7	0.00060	0.0015	0.0020
Maximum	8.2	228	0.26	0.0062	0.00014	0.00029	0.0028	0.0080	0.000090	0.000010	0.48	0.0017	0.0030	5.4	0.0015	0.0024	0.0020
Crowded Porphyry																	
Median	8.1	9.2	0.32	0.0022	0.0000040	0.000015	0.00040	0.0070	0.000090	0.000010	0.0092	0.00020	0.0030	2.5	0.00039	0.0024	0.0020
Maximum	8.2	1724	0.35	0.013	0.00034	0.00013	0.0015	0.0070	0.000090	0.000010	1.7	0.00020	0.013	20	0.0057	0.010	0.0020
Northeast Deposit																	
Median	8.1	4.1	0.22	0.0020	0.0000030	0.000029	0.0040	0.013	0.000090	0.000010	0.0043	0.00020	0.0030	1.8	0.00016	0.0053	0.0020
Maximum	8.2	9.4	0.26	0.0022	0.0000090	0.000035	0.010	0.017	0.000090	0.000010	0.025	0.00040	0.0030	2.7	0.00034	0.015	0.0020
PAG (High-S) kinetic test samples																	
Median	7.9	329	0.18	0.0023	0.0000045	0.000091	0.00060	0.0070	0.000090	0.000010	0.0087	0.00035	0.0050	2.7	0.00094	0.0018	0.0020
Max	8.0	631	0.19	0.0033	0.0000060	0.00010	0.0010	0.0070	0.000090	0.000010	0.012	0.00040	0.0070	3.3	0.0016	0.0025	0.0020
Miscellaneous (individual samples only)																	
Volcanoclastic	7.8	16	0.19	0.0086	0.0000030	0.000020	0.00020	0.0070	0.00020	0.000010	0.0057	0.00010	0.0090	0.34	0.0030	0.0029	0.0020
Mafic Syenite Porphyritic	8.1	5.0	0.31	0.0030	0.0000030	0.00010	0.0052	0.0080	0.000010	0.000010	0.0098	0.00050	0.0030	4.0	0.00019	0.0016	0.0020

Notes: PWQO = Provincial Water Quality Objective (Ontario); values highlighted in orange exceed 5x the PWQO.
PAG = Potentially acid generating.
Where concentrations fall below the detection limit, the latter is reported.

4.2.5 Quality Assurance and Quality Control

Six reject samples were split and submitted for duplicate analysis for QA/QC purposes. In addition, 11 core and reject samples from the same drillhole intervals underwent duplicate geochemical analysis to assess the geochemical variability across sample types and storage conditions. The use and re-analysis of core material was required to generate appropriate particle sizing for SFE and humidity cell testing. The full comparison of reject duplicate geochemistry as well as core versus reject variability is given in Appendix B5. A summary of these QA/QC results is given in the following.

Splitting of reject samples generally resulted in good data reproducibility. In several instances with relative percent difference (RPD) between the original and duplicate sample of greater than 20%, relatively low absolute solid phase contents (*e.g.,* Bi, K, Se, Te) near the analytical detection limits were reported, thereby increasing the relative impact of variability. Other occurrences of elevated RPDs were observed on occasion for Cu, Ag, and Au indicative of sample heterogeneity (*e.g.,* nugget effects) for species in more mineralized samples.

Comparison of ABA results of core samples used for the SFE and mineralogical investigations with the corresponding reject samples yielded good agreement. Notable discrepancies (> 75% difference) were observed for the sulphide S content in HC1 (0.17% in reject *versus* 0.08% in core) and NPR in sample 179639 (0.9 in reject *versus* 2.6 in core). HC1 and HC3 were originally selected to represent the median to 75th percentile value for sulphide S content based on the reject analysis. The corresponding core samples that were composited to make up these humidity cells show sulphide S contents slightly below the median value (around 40th percentile for both samples). Differences in geochemical composition between the two sample suites are noted and will be scrutinized in the interpretation of the analytical data.

The solid phase metal content in the core samples used for QEMSCAN and SFE testing were compared with their equivalent reject samples to assess the impact of the sampling method on the data integrity. Notable discrepancies in the two datasets include Hg in sample R324155 (16,979 ppb in reject sample *versus* 541 ppb in core sample), Cu in HC1 (1,424 ppm *versus* 313 ppm), Cu in sample 179639 (40 ppm *versus* 13 ppm), and Pb in HC3 (0.83 ppm *versus* 2.23 ppm). Overall, however, it was found that the discrepancies in metal contents between the two sample sets are not large enough to compromise the data integrity considering the purpose of the static and humidity cell test programs.

4.3 Tailings

Eleven tailings samples were prepared and analyzed from 2019 to 2025 as the mine plan and metallurgical process evolved. Static tests results are presented for all tailings samples in the following sections. Refer to Section 3.1.2 for an overview of the different tailings streams and sample specifics. The complete tailings static test results are compiled in Appendix C.

4.3.1 Mineralogy

Two master composite tailings samples were submitted for mineralogical analysis, namely 18806-01 and 18806-03. The dominant minerals comprising these materials are quartz, feldspars (primarily plagioclase with some K-feldspar), chlorite, and carbonate (Figure 4-11). These results are generally consistent with the mineralogical composition of mine rock. Amphiboles/pyroxene are present in small (< 3%) quantities. Sample 18806-03 contains notable concentrations of micas (specifically muscovite and illite), which are negligible in abundance in 18806-01. Both samples host minor amounts of Fe-(hydr)oxides as well as other minor/trace minerals such as ilmenite, apatite, and rutile.

Sulphide minerals account for 0.62% and 0.23% of the mineral mass in samples 18806-01 and 18806-03, respectively. While pyrite is the dominant sulphide phase in 18806-01, detectable abundances of both pyrite and chalcopyrite are present in 18806-03. Interestingly, and unlike mineralogical trends observed in mine rock samples, significant amounts of gypsum or other sulphates were detected in both samples making up 50-60% of the sulphur mineral inventory. Based on these data alone, it is difficult to discern conclusively whether this sulphate S is primary/hydrothermal in nature or represents phases that have formed in response to oxidative weathering of sulphides during the metallurgical workflow and/or during SO_2/Air treatment. Given the relatively elevated sulphate S abundance, it is inferred that at least some primary sulphate minerals are represented.

Similar to mine rock, calcite is the dominant carbonate mineral in both tailings samples spanning from 5.6 to 7.6% in overall mineral abundance and making up >60% of the carbonate inventory (Figure 4-11). Carbonate minerals were reported at a higher resolution, and it was found that calcite is the dominant phase, contributing >80% to the carbonate abundance. Secondary carbonates in sample 18806-01 include ankerite and minor dolomite, while 18806-3 contains approximately equal amounts (~5-7%) of ankerite, dolomite, and siderite. Based on this mineralogical understanding it can be deduced that carbonate phases in tailings make up the vast majority of NP. Further discussion of CaNP and Modified NP is presented in the following subsection.

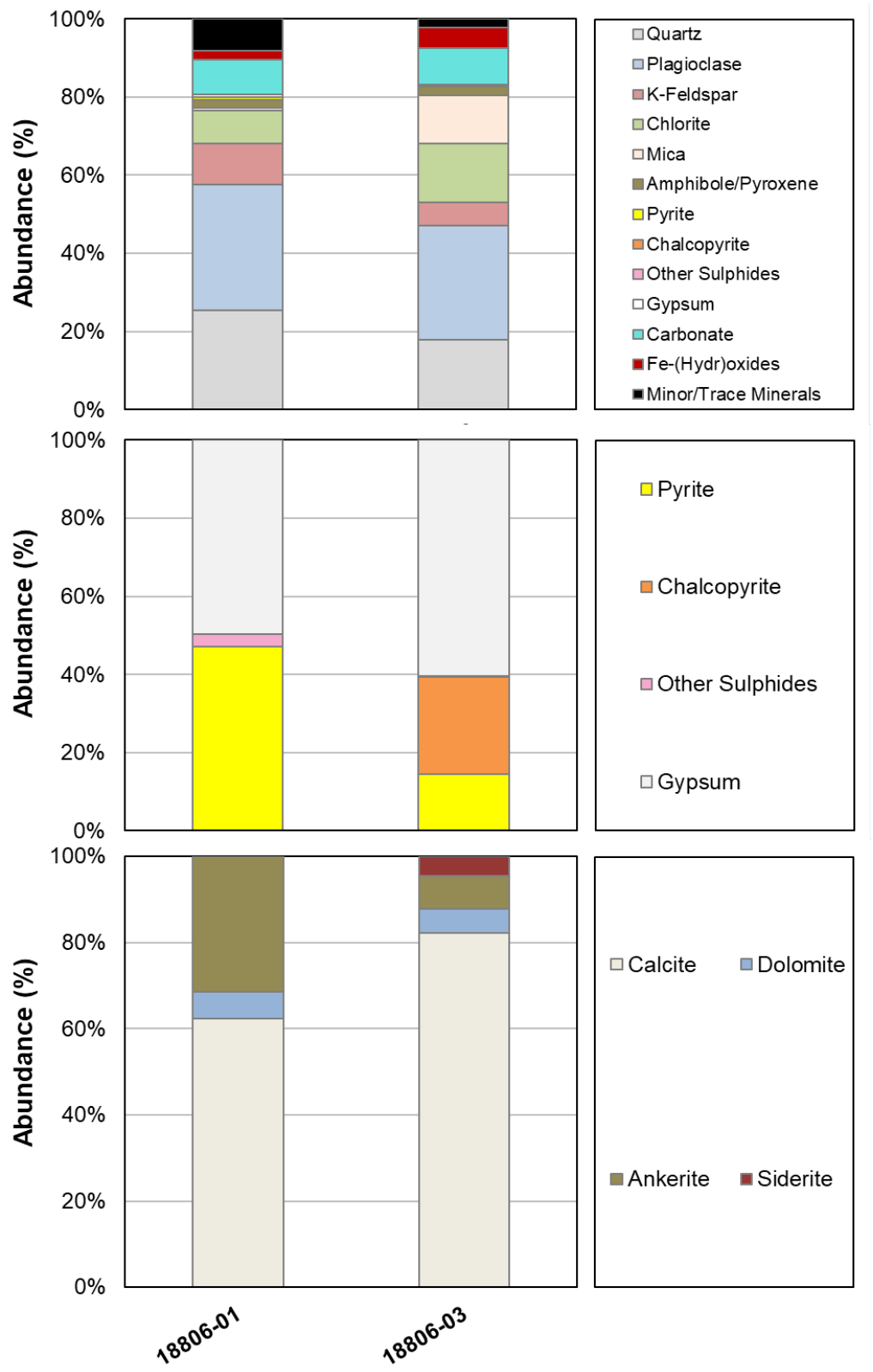


Figure 4-11: Mineralogical composition of two Upper Beaver tailings composite samples

4.3.2 Acid-Base Accounting

An overview of the ABA results for Upper Beaver tailings is presented in Table 4-7. The paste pH of tailings samples is mildly alkaline for all samples, with a median of 8.5 (range of 8.1 to 8.8). Total S contents of the full sample suite range from 0.10% to 1.7% in all tailings samples; however, the range of whole tailings only (*i.e.,* not considering rougher and cleaner tailings streams) is 0.10% to 0.30% with a median content of 0.10%. The highest total S contents were measured in BL1614-01 and BL1614-02 Cleaner samples, both of which exceed 1% total S, predominantly in the form of sulphide S. This trend is expected since the rejects (*i.e.,* tailings) of the cleaning process will be more concentrated in sulphide minerals.

Modified NP in tailings samples is high and ranges from 88 kg $CaCO_3$/t to 254 kg $CaCO_3$/t (Table 4-7). Modified NP and CaNP are well correlated, with their concentrations falling closely along the 1:1 equivalence line and therefore confirming mineralogical principles derived for mine rock. Neutralization potential ratio (NPR) values range from 3.3 to 62 and are negatively correlated with total S content (Figure 4-12). Whole tailings samples show NPR values of ≥ 9 and therefore fall well into the NPAG domain of the classification system. Since NPAG characteristics also apply to the 2024 cleaner tailings stream, it can be said with confidence that the emergence of ARD is not considered a risk in the Upper Beaver TSF.

Table 4-7:
Statistical Overview of Acid-Base Accounting Results for the Upper Beaver Tailings Samples

Sample ID	Paste pH	Total S	Sulphate S	Modified NP	CaNP	NPR
	-	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	-
BL416 De-S Rougher	8.5	0.21	0.18	108	111	17
BL465 De-S Rougher	8.8	0.058	0.03	113	112	62
BL 416 Recombined	8.3	0.37	0.19	104	107	9
BL 465 Recombined	8.7	0.18	0.02	114	112	20
18806-01	8.7	0.31	0.1	110	115	11
BL1614-01	8.7	0.069	0.03	100	97	46
BL1614-02	8.4	0.12	0.1	88	89	23
BL1614-01 Cleaner	8.1	1.1	0.03	254	247	7.5
BL1614-02 Cleaner	8.1	1.7	0.06	180	182	3.3
BL1614-01 Rougher	8.4	0.069	0.04	94	89	44
18806-03	8.6	0.168	0.09	97	90	40

Notes: NP = Neutralization Potential; CaNP = Carbonate NP, NPR = Neutralization Potential Ratio.

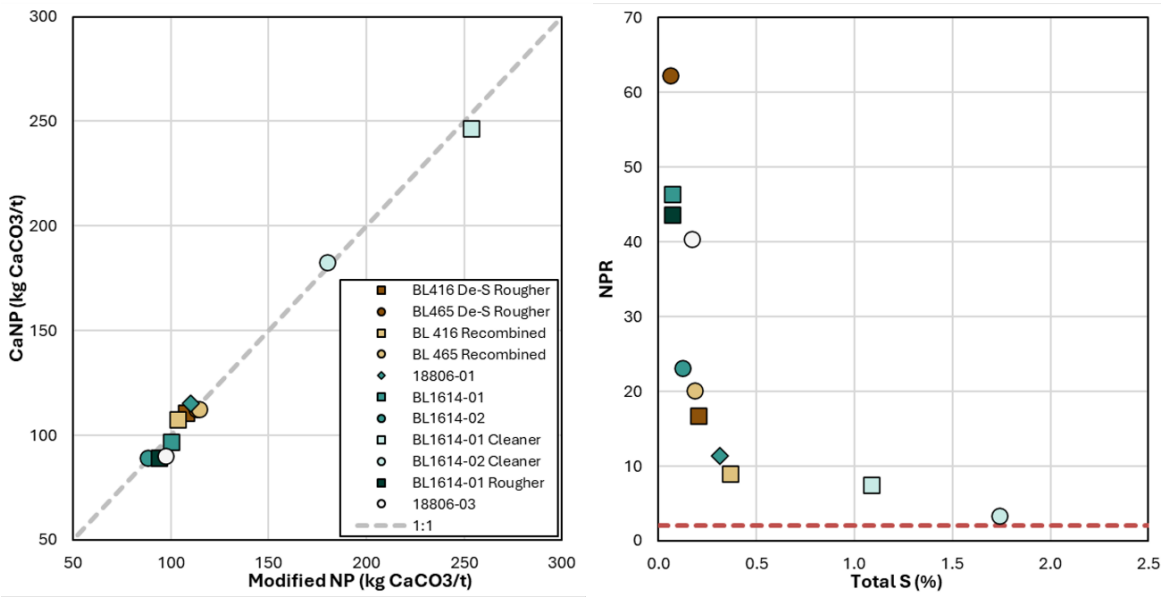


Figure 4-12: Key acid-base accounting data for the Upper Beaver tailings samples. Left: CaNP *versus* Modified NP; Right: NPR *versus* Total S

4.3.3 Elemental Abundance

Results of the aqua regia digestible metal contents for the Upper Beaver tailings samples are provided in Table 4-8. The same screening approach used for mine rock samples is applied to tailings; values greater than 5x the AUCCA are highlighted to assess metal enrichment.

Ten elements were found to be higher than the screening threshold in one or more tailings samples. Of these, the median content is greater than 5x the AUCCA for six elements: Bi, Cu, Hg, Mo, Se, and W (Table 4-8). A breakdown of specific metal enrichments is as follows.

Minimum contents of Cu, Mo, and W are greater than the screening threshold. These elements are notably concentrated in tailings and frequently display enrichments of >10x the AUCCA. The median Bi content is 6.3x AUCCA. Bismuth contents are strongly correlated with Hg contents in tailings, as are other group 15 elements As and Sb.

Mercury contents are greater than 5x AUCCA in all but two tailings samples. The highest content is in BL1614-02 Cleaner (2970 ppb) and the median content is 320 ppb. The Hg content of the 2025 sample (18806-03) is 5.8x the AUCCA (290 ppb), albeit lower than the previous 18806-01 composite (510 ppb), consistent with the objective of the 2025 metallurgical test sample selection. A separate assessment of solid phase Hg contents and leachable Hg is presented in Section 6.

Table 4-8:
Selected Solid Phase Composition Results for the Upper Beaver Tailings Samples

Sample ID	As	Bi	Ca	Cd	Co	Cu	Hg	Mo	Sb	Se	W
	ppm	*ppm*	*%*	*ppm*	*ppm*	*ppm*	*ppb*	*ppm*	*ppm*	*ppm*	*ppm*
AUCCA	4.8	0.16	2.57	0.09	17.3	28	50	1.1	0.4	0.09	1.9
BL416 De-S Rougher	2.9	0.21	3.72	0.1	10.8	211.9	324	61.32	0.87	0.1	11.6
BL465 De-S Rougher	5.2	1.15	3.96	0.06	26.4	285.82	234	48.08	1.65	0.4	16.3
BL 416 Recombined	6.4	0.41	4.05	0.18	19.1	564.83	430	98.53	1.1	0.1	12.4
BL 465 Recombined	9.8	1.86	4.33	0.14	35	442.28	277	73.61	1.36	0.1	16.7
18806-01	7	2.25	5.06	0.05	27	697	510	101	2.61	1	12.2
BL1614-01	5	1.52	3.75	0.04	24.6	367	320	46.42	3.26	1	19.1
BL1614-02	2	0.24	3.22	0.02	15	290	140	30.79	1.32	1	19.9
18806-03	4	1.13	3.74	0.01	27.8	369	290	47.34	1.08	2	43.2
BL1614-01 Rougher	4	1.1	3.52	0.01	24.2	249	270	42.78	2.35	1	20.5
BL1614-01 Cleaner	58	16.89	8.92	0.35	68.7	6582	2970	429	29.13	1	42.3
BL1614-02 Cleaner	14	3.02	6.36	0.09	56	7078	630	236	2.86	1	34.1

Notes: AUCCA = Average Upper Crustal Continental Abundance. Values highlighted in orange are greater than 5x AUCCA. Where concentrations fall below the detection limit, the latter is reported.

Screening of Se contents against AUCCA is influenced by the method detection limit which in itself is >10x AUCCA. While Se was found above the detection limit in BL1614-01 Cleaner, the finding of Se enrichment should be viewed with caution as a result of these method limitations.

High metal contents are frequently associated with cleaner tailings streams compared to the wider dataset. These samples have relatively elevated contents of Ag, As, Co, Cr, Cu, Hg, Mn, Mo, and Tl. The maximum content of 19 elements (including Bi, Pb, Sc, Se, and Zn) occurs in sample BL1614-01 Cleaner. The contrast between solid phase contents in the BL1614 Cleaner and the Master Composite/Rougher samples with the same ore feed sample (Table 4-8) indicates that differences in metal content can be linked to metallurgical fractionation.

4.3.4 Tailings Supernatant

Similar to SFE results for mine rock, metal concentrations in supernatant are screened here against 5x PWQOs as a first step in the identification of potential leachable parameters of concern from the tailings process. The screened results are presented in Table 4-9. The pH of supernatant samples is mildly alkaline with a median value of 8.2. Total cyanide ranges from 0.030 mg/L to 0.17 mg/L. The median concentrations of WAD and free cyanide are

0.010 mg/L and 0.013 mg/L, respectively. Note that the maximum concentrations of both species represent detection limit values (0.10 mg/L and 0.20 mg/L, respectively). Comparatively, cyanate (CNO) and thiocyanate (SCN) concentrations are elevated (Table 4-9). The median CNO concentration is 240 mg/L, with values as high as 610 mg/L and 426 mg/L reported in samples 18803-01 and 18806-03. Thiocyanate concentrations are only reported in three samples. Concentrations range from 49 mg/L to 90 mg/L (Table 4-9).

Nitrate concentrations were measured at or below 0.60 mg-N/L. The median nitrite concentration is also 0.60 mg-N/L; however, the maximum concentration (BL1614-02) was more than double the median at 1.4 mg-N/L. The maximum NH_3 concentration also occurred in sample BL1614-02 (41 mg-N/L). The minimum and median concentrations are 11 mg-N/L and 37 mg-N/L, respectively. Sulphate concentrations are high, ranging from 2525 mg/L to 5121 mg/L. Sulphide oxidation, sulphate mineral dissolution, and the addition of SO_4-containing reagents (SO_2/Air, $CuSO_4$) during the metallurgical tests likely all contribute to the sulphate mass balance in the supernatant.

The concentrations of seven elements (Sb, Cd, Cr, Co, Cu, Hg, Mo, and P) are greater than 5x PWQOs in at least one supernatant sample (Table 4-9). There is no strong correlation between elevated solid phase contents and elevated supernatant concentrations; however, elements with elevated solid phase contents relative to the AUCCA also show elevated supernatant concentrations relative to PWQOs. Two elements, Co and Mo, exceed the screening threshold in all supernatant samples. Antimony and Hg concentrations only exceed this benchmark in one sample (18806-01). While no PWQO exists for SO_4, the supernatant values greatly exceed aquatic life limits for other jurisdictions (*e.g.,* British Columbia). As such, SO_4 may also be viewed as a POPC.

Table 4-9:
Supernatant Chemistry Results of Upper Beaver Tailings Samples

Sample ID	pH	Total CN	WAD CN	Free CN	CNO	SCN	NO_3	NO_2	NH_3	DOC	SO_4
	-	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg N/L*	*mg N/L*	*mg N/L*	*mg/L*	*mg/L*
PWQO	6.5 - 8.5	-	-	0.005	-	-	-	-	*	-	-
BL416 De-S Rougher	7.99	0.070	0.030	<0.005	140	-	0.060	0.080	-	3.7	3063
BL465 De-S Rougher	7.96	0.11	0.010	<0.2	110	-	<0.6	0.48	-	51	2525
18806-01	8.3	<0.1	<0.1	<0.05	610	-	<0.6	0.60	37	12	5121
BL1614-01	8.16	0.03	<0.01	0.005	240	90	<0.6	0.75	32.5	47	3340
BL1614-02	8.2	0.17	0.01	0.013	290	49	<0.6	1.38	40.5	55	3651
18806-03	7.8	0.02	<0.01	0.006	426	66	-	-	11.3	62	4498
Sample ID	**Sb**	**As**	**Cd**	**Cr**	**Co**	**Cu**	**Hg**	**Mo**	**P**	**Se**	**Zn**
	mg/L	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*ug/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
PWQO	0.02	0.005	0.0001	0.001	0.0009	0.005	0.2	0.04	0.02	0.1	0.02
BL416 De-S Rougher	0.014	0.00080	0.00019	0.00017	0.039	0.13	0.18	0.37	0.22	0.0032	0.0030
BL465 De-S Rougher	0.021	0.0018	0.00023	<0.00008	0.054	0.014	0.020	0.70	0.076	0.0031	<0.002
18806-01	0.21	<0.002	0.00010	0.0062	0.054	2.5	1.4	2.0	0.15	0.032	<0.02
BL1614-01	0.063	0.0013	0.000418	0.00081	0.0587	0.016	0.06	0.883	0.52	0.00459	0.018
BL1614-02	0.0067	0.00060	0.0001440	0.00043	0.02010	0.0230	0.01	0.276	0.353	0.00244	0.02
18806-03	0.021	0.012	0.00029	0.0077	0.0343	0.33	<0.1	0.654	0.09	0.0059	<0.02

Notes: WAD = Weak Acid Dissociable; DOC = Dissolved Organic Carbon; PWQO = Provincial Water Quality Objective (Ontario).
* PWQO value for NH_3 depends on toxicity modifying factors such as temperature and pH.
Values highlighted in orange are greater than 5x the corresponding PWQO.
Where concentrations fall below the detection limit, the latter is reported.

4.3.5 Short-Term Leachability

A summary of tailings SFE results, including screening against 5x PWQOs, is presented in Table 4-10. The pH of SFE leachates ranges from 7.4 to 8.1 (Table 4-10), with a median of 7.9. The pH of tailings SFE tests is lower than supernatant samples as well as the corresponding solid phase paste pH values.

There are some detectable cyanide species in the SFE results. Cyanide concentrations are generally lower in more recent tailings samples (2021-2025) compared to older (2019) samples. Specifically, total cyanide is measured below the detection limit in three samples. Concentrations above detection limits range from 0.050 mg/L to 0.72 mg/L. However, the highest total CN concentrations were measured in SFE tests of 2019 tailings materials. Total cyanide concentrations are on average 7.7 times lower in newer (2021-2025) tailings samples.

Free CN is measured at or below the detection limit in all but two samples (18806-01 and BL1614-01). Weak acid dissociable CN is measured at or below the detection limit (0.010 mg/L) in all samples from 2021 onwards. Cyanate is measured below the detection limit in all but three samples. Unlike cyanide species, the second-highest CNO concentration was reported in 18806-03. This is indicative of a more intensive CN-destruction step. Thiocyanate is measured above the detection limit in one sample (BL1614-01) and 18806-03. This species was not reported for BL416 and BL465 samples.

Nitrate was reported below the detection limit (0.60 mg-N/L) in all but one sample, and nitrite was below the detection limit (0.30 mg-N/L) in all but two samples. Ammonia concentrations range from the detection limit (0.10 mg-N/L) to 2.1 mg-N/L (Table 4-10). Nitrate concentrations are comparable to those in the supernatant samples; however, nitrite concentrations are overall lower in SFE results than in the supernatant samples (median concentration of 0.30 mg-N/L in SFE *versus* 0.60 mg-N/L in supernatant samples).

Dissolved SO_4 concentrations span an order of magnitude from 111 mg/L in BL1614-01 Cleaner to 1229 mg/L in 18806-01. Leachable SO_4 concentrations are not well correlated with solid phase total S or sulphide S. A stronger correlation is observed between leachable and solid phase sulphate (Figure 4-13). SO_4 concentrations in SFE tests are consistently lower than supernatant concentrations. The median SFE SO_4 concentration (250 mg/L) is an order of magnitude lower than the median supernatant concentration (3340 mg/L). This indicates that SO_4 concentrations in the supernatant are the result of metallurgical processes and are not reflective of leachable SO_4 in the tailings materials (*e.g.,* SO_2-air treatment).

Table 4-10:
SFE Results of Upper Beaver Tailings Samples

Sample ID	pH	Total CN	WAD CN	Free CN	CNO	SCN	NO_3	NO_2	NH_3	DOC	SO_4
	-	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg N/L*	*mg N/L*	*mg N/L*	*mg/L*	*mg/L*
PWQO	6.5 - 8.5	-	-	0.005	-	-	-	-	*	-	-
BL416 De-S Rougher	7.6	0.36	0.050	<0.005	3.2		<0.06	0.050	0.70		949
BL465 De-S Rougher	7.9	0.72	0.030	<0.2	<1		0.60	<0.3	0.30		193
BL 416 Recombined	7.4										614
BL 465 Recombined	8.1										250
18806-01	7.8	0.13	<0.01	<0.005	1.7		<0.06	0.070	0.70	5.0	1229
BL1614-01	8.1	0.19	0.010	0.012	<1	4.8	<0.6	<0.3	2.1	3.0	187
BL1614-02	7.9	0.050	<0.01	0.0080	<1	<2	<0.6	<0.3	1.6	2.0	571
BL1614-01 Cleaner	8.0	<0.01	<0.01	<0.005	<1	<2	<0.6	<0.3	0.8	16	111
BL1614-02 Cleaner	8.0	<0.01	<0.01	<0.005	<1	<2	<0.6	<0.3	0.2	9.0	216
BL1614-01 Rougher	8.0	<0.01	<0.01	<0.005	<1	<2	<0.6	<0.3	<0.1	2.0	128
18806-03	7.8	0.09	<0.01	0.005	2	3	<0.3	<0.6	0.4	2.0	563
Sample ID	**Sb**	**As**	**Cd**	**Cr**	**Co**	**Cu**	**Hg**	**Mo**	**P**	**Se**	**Zn**
	mg/L	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*ug/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
PWQO	0.02	0.005	0.0001	0.001	0.0009	0.005	0.2	0.04	0.02	0.10	0.02
BL416 De-S Rougher	0.0095	0.00030	0.000021	0.00013	0.00079	0.0057	0.34	0.031	0.15	0.00044	<0.002
BL465 De-S Rougher	0.0083	0.0030	0.000014	<0.00008	0.0031	0.0080	0.010	0.054	0.0040	0.00046	<0.002
BL 416 Recombined	0.00090	0.00030	0.000019	0.00028	0.0014	0.0033	0.59	0.063	0.25	0.00059	<0.002
BL 465 Recombined	0.00090	0.0029	0.000036	0.00026	0.0040	0.043	0.030	0.11	0.011	0.00066	<0.002
18806-01	0.041	0.0026	0.000028	0.00021	0.0041	0.0033	1.1	0.085	0.016	0.0032	<0.002
BL1614-01	0.021	0.0017	0.000021	<0.00008	0.0026	0.010	<0.01	0.076	0.11	0.00065	<0.002
BL1614-02	0.0014	0.00040	0.0000050	0.00010	0.00018	0.0050	<0.01	0.017	0.036	0.00031	<0.002
BL1614-01 Cleaner	0.022	0.0033	0.00013	0.00063	0.00013	0.0040	0.38	0.38	1.6	0.0046	<0.002
BL1614-02 Cleaner	0.0021	0.00040	0.000018	0.0012	0.00013	0.0020	0.050	0.084	1.1	0.0016	<0.002
BL1614-01 Rougher	0.0039	0.00060	0.000010	0.00067	0.000011	<0.001	<0.01	0.036	0.16	0.00036	<0.002
18806-03	0.0043	0.00150	0.000027	0.00018	0.000678	0.0020	0.03	0.052	0.01	0.0014	<0.002

Notes: WAD = Weak Acid Dissociable; DOC = Dissolved Organic Carbon; PWQO = Provincial Water Quality Objective (Ontario).
* PWQO value depends on toxicity modifying factors such as temperature and pH.
Values highlighted in orange are greater than 5x the corresponding PWQO.
Where concentrations fall below the detection limit, the latter is reported.

Four elements (Cu, Hg, Mo, and P) exceed 5x PWQOs in at least one SFE test (Table 4-10). This is generally consistent with flagged solid phase contents in tailings samples (see Section 4.2.3). All four species exceeding the screening value also exhibit elevated concentrations in one or more supernatant samples (Table 4-9). The frequency of Cu and Mo exceedances of 5x PWQOs is higher in supernatant samples compared to SFE data. The flagged Hg concentration for SFE and supernatant tests occurs in the same sample, 18806-01. This sample is associated with elevated Hg concentrations as discussed further in Section 6. The three other elements showing concentration exceedances of the 5x PWQOs in supernatant samples (Sb, Cr, and Co) do not show exceedances in SFE tests.

Leached P concentrations are highest in cleaner samples (BL1614-01 and BL1614-02) and are >10x the PWQOs of 0.020 mg/L in three samples (Table 4-10). It should be noted that the PWQOs for P is an interim 'general guideline which should be supplemented by site-specific studies' (MEE, 2021). The value applied for screening in this report is the general guideline for 'avoidance of nuisance concentrations of algae' in ice-free lakes.

There are strong positive linear correlations ($r^2 \geq 0.89$) in whole tailings samples (rougher and cleaner samples are excluded) between solid phase contents and corresponding SFE concentrations of five elements (Ag, As, Cr, Na, and S). In addition, dissolved sulphate in the whole tailings SFE leachate is strongly correlated with solid phase total S content ($r^2 = 0.96$). Select correlations are shown on Figure 4-13 including rougher and cleaner tailings samples for context.

4.4 Overburden

Ninety-five overburden samples have been collected and analysed across the Upper Beaver Property. The samples are grouped into three categories by material type, mixed (n=77), soil (n=9), and till (n=9), for analysis of static test results. The full analytical inventory for overburden samples is compiled in Appendix D.

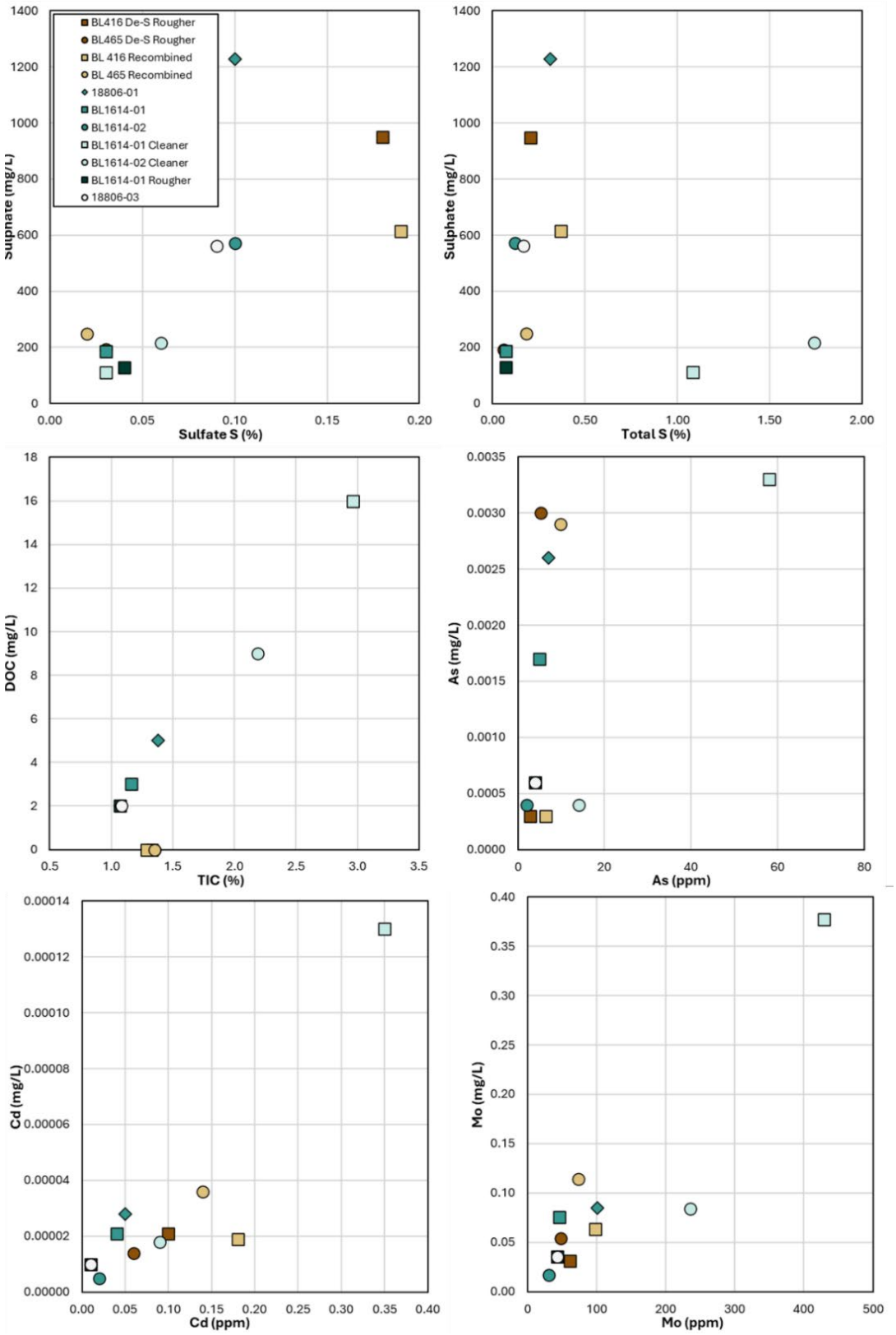


Figure 4-13: Correlation of solid phase and SFE concentrations in Upper Beaver tailings samples

4.4.1 Acid-Base Accounting

The paste pH of all overburden samples is typically neutral (median = 7.3) with a range from mildly acidic to alkaline values (range 5.0 to 8.6; Table 4-11). Paste pH is lower in soil samples (median 6.5) compared to till (median 7.6) and mixed samples (median 7.4). The paste pH range in overburden samples is larger than mine rock (see Section 4.2.2). The generally less basic paste pH values in the soil samples may be explained by the exhaustion of carbonate phases through extended periods of surface weathering/leaching in combination with the production and accumulation of organic acids via decaying organic matter and/or root respiration.

Modified NP in overburden is typically similar to CaNP (median of 9.1 and 10 kg $CaCO_3$/t, respectively). The median Modified NP is greater than CaNP in the largest sample category (mixed-horizon), approximately equal in till, and lower than CaNP in soil samples (Table 4-11). Higher Modified NP *versus* CaNP values in the mixed-horizon indicate that non-carbonate minerals are contributing to acid-buffering reactions. Organic matter and other weathering products (*e.g.,* oxides) that are commonly present in overburden can neutralize acidity. Soils have low NP values (both median Modified NP and median CaNP less than 1.0 kg $CaCO_3$/t) compared to mixed-horizon and till samples. Since soils represent the most heavily weathered/leached material, NP was likely consumed in these samples by previous chemical weathering processes.

Total organic carbon (TOC) is elevated in soil samples (range of 0.71% to 30% and median of 5.8%) compared to till (range of 0.24% to 5.2% and median of 0.60%) and mixed-horizon (range of 0.030% to 36% and median of 0.83%). This is reflective of the decomposition of organic matter occurring in soil horizons relative to more till-rich materials.

Nearly half (46%) of all overburden samples have total S below the analytical detection limit (0.0050%). The median total S in all overburden is lower than the detection limits for sulphate and sulphide S. The highest median (0.040%) and widest range (0.010% to 0.35%) of total S contents are observed in soil samples (Table 4-11).

Sulphur contents (total S, sulphate S, and sulphide S) are elevated in overburden samples from the pit compared to other locations at Upper Beaver. The highest total S contents (>0.10%) are reported in samples from the Pit (26% of pit samples). No samples with total S greater than 0.10% are reported from other locations. As a result, the median total S content in open pit samples (0.020%) is double the median in Building, RSF, and OBSF groups (0.010%). Similarly, sulphate S and sulphide S are measured only above method detection limits (0.010% to 0.040%) in open pit footprint samples (maximum contents of 0.10% and 0.25%, respectively).

Table 4-11:
Statistical Overview of Acid-Base Accounting Results for the Upper Beaver Overburden Test Populations

Material Type	Paste pH	Total S	Sulphate S	CaNP	Modified NP	NPR
	-	*%*	*%*	*kg CaCO3/t*	*kg CaCO3/t*	-
Mixed-horizon	n = 77					
Minimum	5.0	0.005	0.010	0.42	-16	-29
Median	7.4	0.005	0.040	13	17	53
90th Percentile	8.1	0.021	0.040	88	97	426
Maximum	8.6	0.13	0.060	447	364	730
Soil	n = 9					
Minimum	5.0	0.009	0.010	0.83	-13	-11
Median	6.5	0.040	0.030	0.83	-1.37	-1.6
90th Percentile	7.1	0.21	0.060	11	4.80	5.3
Maximum	7.2	0.35	0.10	21	8.08	9.7
Till	n = 9					
Minimum	5.8	0.005	0.010	0.83	-1.87	-5.6
Median	7.6	0.006	0.010	14	14	91
90th Percentile	8.5	0.023	0.010	96	93	297
Maximum	8.5	0.041	0.010	153	150	417

Notes: NP = Neutralization Potential; CaNP = Carbonate NP, NPR = Neutralization Potential Ratio.

When employing conventional ARD classification criteria based on an industry standard neutralization potential ratio (NPR) threshold of 2.0 (*e.g.,* Price 2009), approximately 67% of soil samples would be classified as PAG, while 19% of mixed-horizon and 22% of till samples would be PAG. However, this approach does not account for the presence of organic sulphur in the topsoil samples, which is not readily identified as part of routine static testing. Further, the low S contents (median of 0.010% in overburden) and strongly surface-weathered/oxidized nature of these materials make sulphide oxidation a negligible source of acidity in the long term.

To account for the unique geochemical properties of overburden materials, a slightly adjusted PAG classification method is proposed relative to mine rock and tailings. Specifically, a sample is considered NPAG if the NPR value (derived in the same fashion as for mine rock and tailings) is greater than 2.0 or if the total S content of a given sample falls below 0.05%. This approach accounts for the fact that the conventional ARD classification system relies on the presence of sulphides which are largely devoid in Upper Beaver overburden. To test the adjusted PAG classification approach for overburden,

13 samples were submitted for NAG testing. Of these, 11 samples were classified as PAG according to the conventional NPR method and NPAG using the proposed approach. In addition, two conclusively NPAG samples were also submitted for the same test as a QA/QC measure. The outcome of this supplemental testwork was that all samples returned pH values above 4.5, which deems them NPAG based on the test procedure (AMIRA, 2002). Therefore, the proposed method accounting for the low total S content in addition to NPR for the determination of overburden PAG materials is considered appropriate.

When applying this method to all overburden samples, the overall proportion of PAG amounts to 4%. While it is expected that runoff and drainage from the mixed overburden stockpile will show lower pH values than bedrock contact water, acidity and associated ML is not believed to be related to sulphide oxidation. Rather, chemical aspects affecting water quality will be driven to varying degrees by organic matter, ion exchange, and pH/redox conditions. Physical aspects of the stockpile, such as hydraulic properties and erosion, will represent additional controls on load transport to be considered during water quality modelling.

4.4.2 Elemental Abundance

In accordance with the "Rules for Soil Management and Excess Soil Quality Standards" prepared by the Ontario Ministry of Environment, Conservation and Parks (MECP, 2025), elemental concentrations were screened against applicable standard values to assess whether the overburden samples are classified as contaminated. Since varied soil uses and depositional conditions call for the application of different standards, the most stringent category ("Full Depth Background Site Condition Standards"; Table 1 of MECP, 2025) was used as the initial criterion to identify POPC.

As a secondary screening method, values from Table 2.1 of MECP (2025; "Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition") were used as a reference for a more detailed assessment of metal enrichment. Standards in Table 2.1 are equal to or higher than those stipulated in Table 1 for all parameters. In both the initial and secondary screening tiers, the prescribed standards for "Industrial/Commercial/ Community Property Use" contents were chosen. Similar to mine rock, these assessments serve as screening tools to identify parameters of potential concern that will be further scrutinized via leach testing.

The median contents of eight elements (Ag, Cr, Cu, Mo, Pb, Sb, U, and Zn) are greater than the Table 1 standards (Table 4-12). Of those, Cu, Pb, and Zn values in soil also exceed the Table 2.1 standards. The maximum contents of a further two elements (Co and Se) exceed the Table 1 standards while four elements (Ba, Cd, Hg, and V) show values that exceed the Table 2.1 standards.

Table 4-12:
Statistical Overview of Solid Phase Composition Results for the Upper Beaver Overburden Static Test Populations

Material Type	Ag	Ba	Cd	Co	Cr	Cu	Hg	Mo	Pb	Sb	Se	U	V	Zn
	ppm	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*	*ppm*
Table 1	0.50	220	1.2	21	70	92	0.27	2.0	120	1.3	1.5	2.5	86	290
Table 2.1	40	670	1.9	80	160	230	0.27	40	120	40	5.5	33	86	340
Mixed-horizon														
Minimum	0.010	14	0.020	2.4	13	3.7	0.010	0.12	1.2	0.05	<0.7	0.11	9.1	6.3
Median	<1.0	63	0.075	10	49	22	0.010	0.40	5.4	<6.0	<0.7	0.42	42	37
90th Percentile	<1.0	111	0.15	15	80	36	0.017	0.97	7.6	<6.0	<1.0	0.85	67	49
Maximum	<1.0	150	0.45	35	180	590	0.060	5.0	15	<6.0	1.7	4.6	170	76
Soil														
Minimum	0.030	12	0.040	2.7	17	3.4	0.01	0.24	2.3	0.05	<1.0	0.19	17	9
Median	0.18	96	0.24	7.2	38	57	0.12	1.8	9.1	0.27	<1.0	0.45	32	38
90th Percentile	0.63	384	0.81	9.0	73	430	0.20	11	584	3.0	<1.0	4.6	48	1830
Maximum	1.4	1383	2.7	11	82	456	0.42	15	2846	13	<1.0	5.9	51	8864
Till														
Minimum	0.010	30	<0.010	0.5	30	12	0.010	0.050	0.20	0.050	<1.0	<0.05	30	22
Median	0.050	57	0.050	7.7	40	24	0.010	0.37	4.5	0.050	<1.0	0.38	39	34
90th Percentile	0.29	97	0.076	9.0	57	33	0.028	2.3	13	0.17	<1.0	0.85	45	66
Maximum	0.70	104	0.10	9.2	67	51	0.060	4.1	40	0.23	<1.0	1.3	55	145

Notes: Values for Table 1 and Table 2.1 represent environmental standards set out in MECP (2025). Values highlighted in orange exceed the more stringent Table 1 standards.

The lowest frequency of enrichments occurs in the till unit where only the median content of Mo and the maximum content of Ag are greater than the Table 1 values. By contrast, the highest number of exceedances occurs in soil (Table 4-12).

Mercury contents were reported in 32 overburden samples. Of those, only one sample (UB21-OP-GTTP-003-TP) exceeded a standard. The soil sample in question contains elevated contents of other metals compared to the full dataset and is thought to represent an extreme outlier. Review of the sampling log provided for this sample (SEI, 2022) revealed that gravel and cobbles were included; hence, it is possible that bedrock fragments were crushed and entered the prepared sample used for analysis.

Solid phase Hg contents are greater in soil samples compared to till and mixed materials. The median content in soil is 120 ppb compared to a median of 10 ppb (the method detection limit) in till and mixed samples. The median Hg content in soil (120 ppb) is double the median Hg content in all mine rock (60 ppb) but lower than the median content in ore rock (210 ppb). The maximum content in soil (420 ppb) is significantly lower than the maximum content of mine rock and ore (46 times and 42 times, respectively).

4.4.3 Short-Term Leachability

Similar to the SFE results for mine rock (described in Section 4.2.4), SFE analyses of overburden samples are used to assess the short-term leachability of selected samples and for a preliminary assessment of elemental mobility and solubility limits. Thirteen overburden samples underwent SFE analyses. Specifically, four soil, four till, and five mixed-horizon samples were submitted. Screening of leachate results for regulated aqueous species was conducted in the same manner as for other leach tests (*i.e.,* threshold = 5x PWQO). A summary of SFE results is presented in Table 4-13.

pH values of overburden SFE leachates range from mildly acidic (5.5) to basic (8.3) and are positively correlated with paste pH (Figure 4-14). High SFE leachate pH is associated with high Modified NP in till samples. The lack of association between Modified NP (Figure 4-14) or Total S (not shown) and SFE pH in soil and mixed-horizon samples supports the hypothesis that other sources (*e.g.,* organic sulphur) contribute to acidity in these overburden materials. Dissolved SO_4 contents range from 111 mg/L to 1228 mg/L with a median of 250 mg/L (Table 4-13).

Table 4-13:
Summary of Shake Flask Extraction (SFE) Results for Upper Beaver Overburden Samples

Overburden	pH	SO_4	Al	Cd	Cr	Cu	Mo	P	V
		mg/L	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*	*mg/L*
PWQO	-	-	0.075	0.0001	0.001*	0.005	0.04	0.02	0.006
Mixed-horizon									
Median	6.7	25	0.27	0.000039	0.00089	0.0035	0.0036	-	0.0014
Maximum	8.3	310	0.48	0.000043	0.0014	0.034	0.0061	-	0.0030
Till									
Median	8.1	8.2	0.074	0.000051	0.00042	0.0099	0.018	0.030	0.015
Maximum	8.2	32	0.57	0.00025	0.0032	0.016	0.81	0.043	0.041
Soil									
Median	7.9	37	0.29	0.00048	0.0017	0.026	0.034	0.15	0.0048
Maximum	8.2	287	2.5	0.00063	0.0085	0.11	0.39	0.39	0.0062

Notes: PWQO = Provincial Water Quality Objective (Ontario); values highlighted in orange are greater 5x the PWQO.
Where concentrations fall below the detection limit, the latter is reported.
* PWQO applies to hexavalent chromium (Cr[VI]). A PWQO of 0.0089 mg/L applies to trivalent chromium (Cr[III]). Overburden values reported in the table represent total chromium.

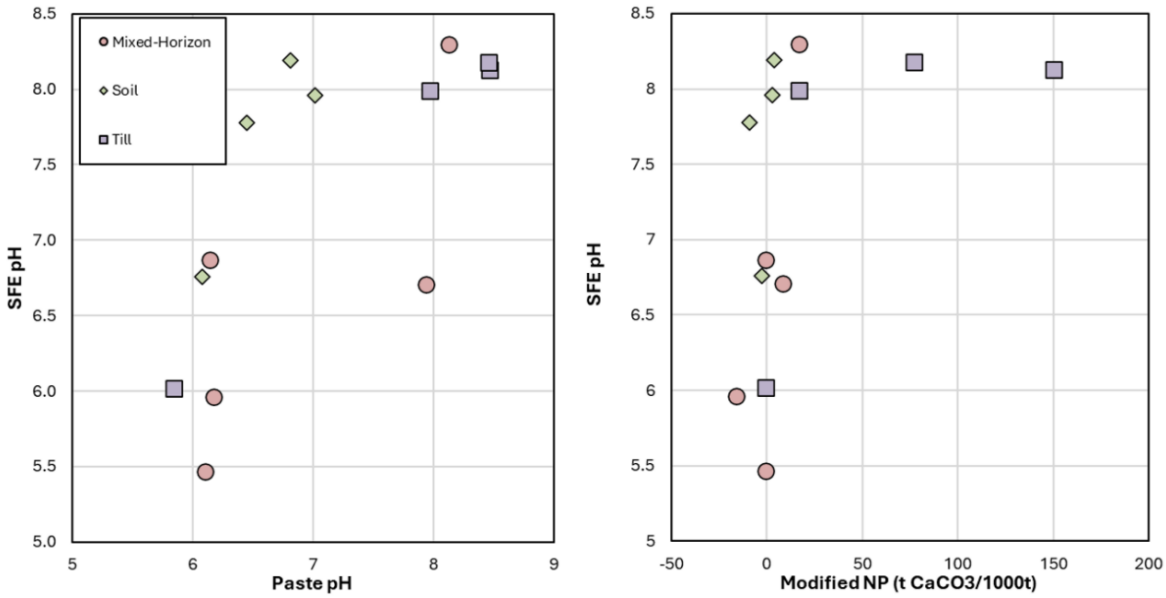


Figure 4-14: Comparison of overburden solid phase ABA data and SFE leachate pH

Seven elements (Al, Cd, Cr, Cu, Mo, P, and V) show concentration exceedances of 5x PWQOs in one or more SFE tests. Of these, Al, Cu, and P concentrations are elevated above 10x PWQOs in a one soil sample from the open pit footprint (UB21-OP-GTTP-001-TP). There is only one SFE leachate with elevated Cr and V. Concentrations greater than 5x PWQOs most frequently occur in soil samples which also produced lower pH; Concentrations for Cd, Cr, and P are above the screening thresholds exclusively in soil samples. The highest number of concentrations greater than 5x PWQOs (n=5) occur in a soil sample from the pit.

The highest dissolved SO_4 concentrations in SFE results are observed in samples with the highest solid phase sulphate contents, which do not always correlate with total S and sulphide S contents. This suggests that readily leachable sulphate phases may at least initially drive dissolved SO_4 concentrations in overburden runoff and drainage. These sulphate phases are likely secondary sulphide or organic S oxidation products that formed in overburden materials during long-term surface weathering.

5. Kinetic Testing

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5. Kinetic Testing

5.1 Mine Rock

5.1.1 Humidity Cells

Humidity cells are laboratory kinetic experiments that are designed to quantify weathering rates under standardized conditions. During the initial cycles of humidity cell testing, sulphate and metals often show highly variable release rates before stabilizing at a relatively constant rate (Sapsford *et al.,* 2009). This variability is a response to exposure of fresh surfaces of crushed material and the dissolution of stored oxidation products that may have accumulated during storage prior to testwork commencement. Once exposed mineral surfaces have equilibrated to this environment, stable reaction rates can be determined. Aside from insight into ML rates, the understanding of major ion mobility (*e.g.,* Ca, Mg, SO_4) can further be used to assess the depletion rates of neutralizing phases and estimate the timing to onset of ARD for PAG materials.

To provide a functional parameter which can be used to compare results between different humidity cells, sulphate and metal concentrations leachates are commonly normalized to the mass of sample in the humidity cell and the volume of leachate collected each week, producing weekly mass loading rates ($mg_{solute}/kg_{sample}/wk$). Loading rates form the basis for the development of geochemical source term predictions for different mine phases and facilities via scaling (*e.g*. Kempton, 2012; Kirchner & Mattson, 2015). This approach is discussed specifically for Upper Beaver source term model units in Lorax (2026a).

Humidity cell leachate concentrations are presented herein to identify geochemical trends and to support water quality screening consistently across experimental scales. Aqueous concentrations measured in leachates should not be considered direct predictions of full-scale site drainage chemistry due to the high water/solid ratio used in this type of testing (*e.g.,* Sapsford *et al.,* 2009). The full suite of laboratory leachate results is given in Appendix E.

5.1.1.1 Acid-Base Parameters

All humidity cell leachates have remained circum-neutral to date; however, decreasing trends with pH values consistently dropping below 7.0 developed in HC2 (Tisdale; PAG) after cycle 150 (Figure 5-1). After initial stabilization, pH values have ranged from around 7.0 to 8.5. Slightly depressed pH values just above 7.0 are also evident for HC10 (high-S, mixed-lithology PAG).

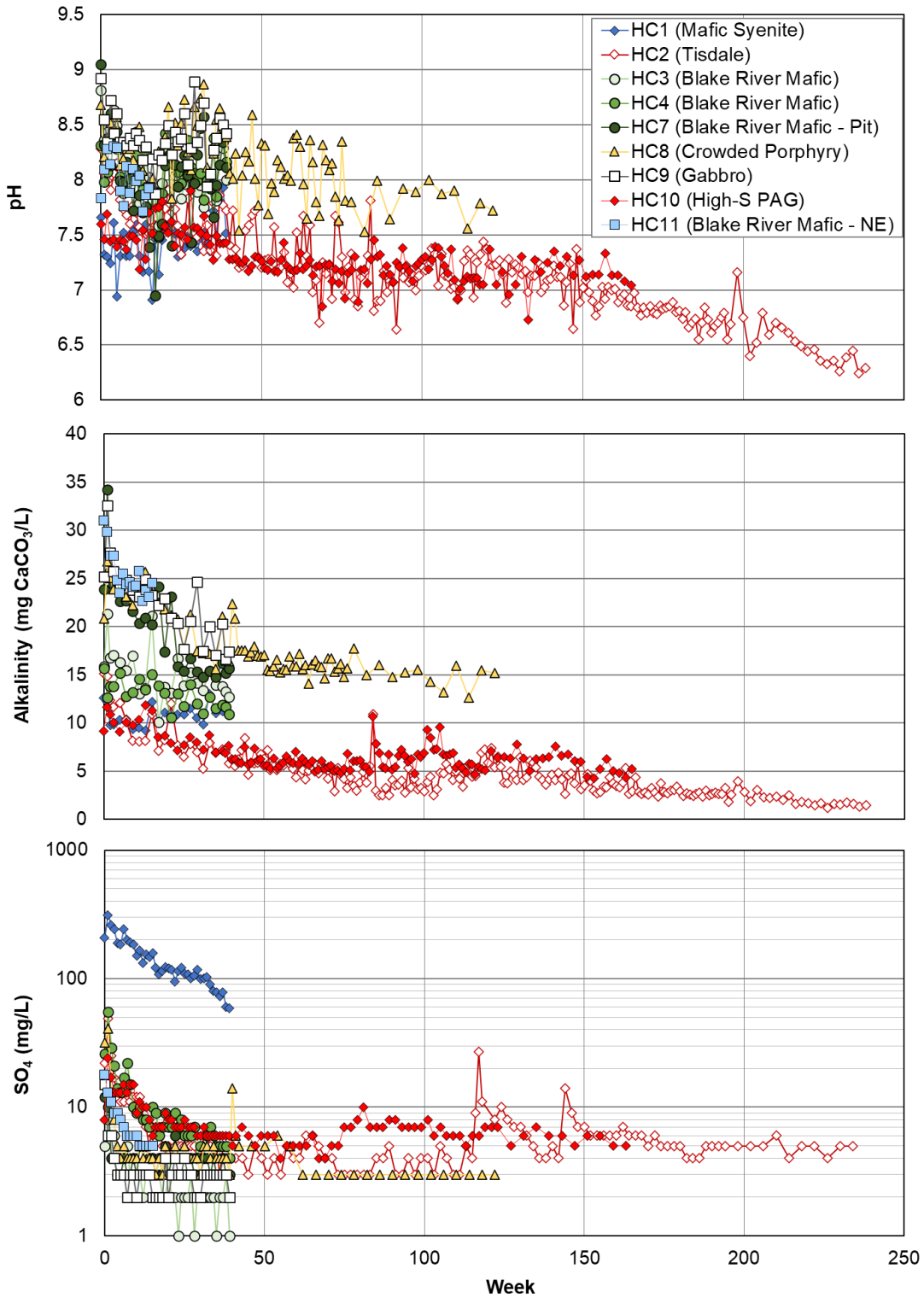

Figure 5-1: pH, alkalinity, and SO_4 concentrations in leachates from the Upper Beaver humidity cells

The observed pH trends are consistent with the alkalinity output from the different samples; HC2 and HC10 show decreasing alkalinity with values approaching or falling below 5 mg $CaCO_3$/L in the most recent sampling cycles (Figure 5-1). Conversely, all other humidity cells have produced alkalinities of ≥10 mg $CaCO_3$/L. SO_4 concentrations generated by all humidity cells (except HC1) initially range from 10 to 50 mg/L and rapidly drop to <10 mg/L within 10 weeks of testing (Figure 5-1). Sulphate concentrations in leachate from HC1 are notably higher, reaching up to 313 mg/L and dropping to 60 mg/L at the end of the experimental window. This sample shows the lowest solid phase sulphide S content but the highest sulphate S content (Table 4-3). It is therefore inferred that the measured SO_4 concentrations are primarily a result of the dissolution of sulphate minerals/phases rather than sulphide oxidation. Since no sulphate was identified during the mineralogical investigation, it cannot be deduced with certainty whether these sulphate phases are primary (*e.g.,* formed in-situ via hydrothermal alteration) or represent secondary sulphide oxidation products that have accumulated post-drilling due to the exposure of drill core to atmospheric conditions. In either case, elevated sulphate S in the solid phase is not typical of Upper Beaver mine rock, and therefore, SO_4 leaching from HC1 is not considered representative.

Omitting the results from HC1, the higher-S PAG samples (HC2, HC4, and HC10) generally also produce higher SO_4 concentrations than NPAG samples. There is a notable positive relationship between the total S content and the corresponding SO_4 leaching rate if HC1 is ignored (Figure 5-2). Since total S in these samples is dominantly hosted in sulphide minerals, this finding supports the concept of increasing SO_4 and acid generation as a function of sulphide abundance.

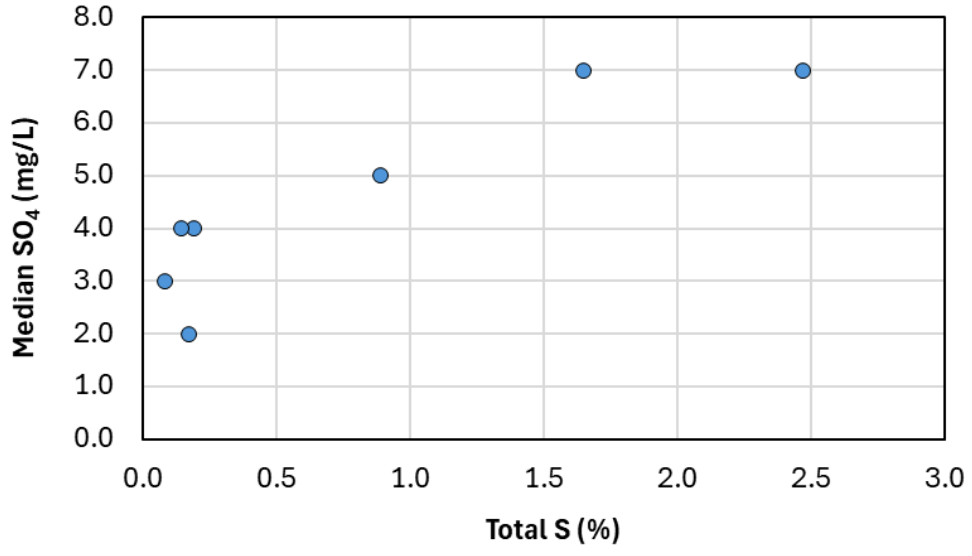

Figure 5-2: Humidity cell SO_4 concentrations (median; cycle 10-40) *versus* total S content

There is some variability in longer-term SO_4 release in HC2 and HC10; however, concentrations generally remain relatively low (≤10 mg/L) over the course of the experiment. The two spikes >10 mg/L in HC2 beyond week 100 are attributed to temporary pausing and subsequent restarting of the experiments, which resulted in the flushing of stored loads. This is in itself a valuable finding and promotes the understanding of the accumulation of stored loads during relatively dry or low-flow conditions.

Stable SO_4 leaching across the different mine rock samples can be considered relatively low in the context of the solid phase sulphide S contents, considering observations from other mine sites (*e.g.,* Barazzuol & Sexsmith, 2012). It is speculated that this is related to the texture of pyrite hosted in these samples, as it is known that grain size and shape (*i.e.,* euhedral *versus* framboidal) and their effects on reactive surface area are important controls on sulphide oxidation rates (Weisener & Weber, 2010). Further, it was shown by Chopard *et al.* (2017) that chalcopyrite oxidation typically produces lower SO_4 release rates relative to the oxidation of pyrite and most other common sulphides. This aspect likely plays a role in Upper Beaver mine rock weathering.

Where carbonate minerals control the acid-base balance of contact water, the molar release rates of Ca and Mg can provide insight into carbonate depletion from material types which is a key metric informing the understanding of when ARD onset will occur. Once carbonates are exhausted, the pH of contact water is expected to drop to a plateau below pH 7.0. Once this occurs, other minerals become responsible for acid neutralization.

The exact value of this pH plateau is dependent on the composition and reactivity of the residual mineral assemblage (Blowes *et al.,* 2003). In the presence of reactive mafic silicate (*e.g*. olivine, pyroxene) or aluminosilicate (*e.g.,* smectite, Ca-plagioclase) minerals, pH may be buffered around circum-neutral pH well past the exhaustion of carbonate phases (Jambor *et al.*, 2000; Weber *et al.,* 2005). Despite these mineralogical constraints, full carbonate (CaNP) depletion was conservatively equated to the onset of ARD for the high-level assessment below. In practical application, other factors, such as water-rock contact and grain liberation, are expected to play an important role with respect to ARD timing.

The CaNP depletion rate (CDR) was calculated as:

$$CDR\ (kg\ CaCO_3/t/wk) = (Ca + Mg) \times 100.09$$

Where Ca and Mg are expressed as release rates in moles/kg/wk and the factor 100.09 (in g/mol) converts the concentration from moles into $CaCO_3$ mass equivalents. When considering experimental cycles 10 to 40 for the three PAG humidity cells (HC2, HC4, HC10), CDRs range from 0.0059 to 0.0092 kg $CaCO_3$/t/wk with an average of 0.0072 kg $CaCO_3$/t/wk. The 95th percentile depletion rate was calculated to be 0.0089 kg $CaCO_3$/t/wk. These average and 95th percentile depletion rates were used for Base and Upper Case

source term predictions, respectively, for the derivation of PAG acidification timeframes as described in detail in Lorax (2026a). In brief, it was estimated that ~30% of PAG material would acidify after 50 years in the Base Case and after 25 years in the Upper Case if no ARD prevention methods (*e.g.,* blending, sub-aqueous disposal, etc.) were to be implemented for this mine rock class. Approximately 50% acidification is projected at the 95- and 65-year mark for Base and Upper Case, respectively. Given that this calculation reflects the depletion of CaNP (rather than the bulk Modified NP), this estimation of lag times to ARD is considered conservative.

5.1.1.2 Metal Leaching

Metal concentrations produced over the course of the various humidity cell tests are presented in the following. The primary focus is on species that were found to exceed the screening threshold of 5x Ontario's PWQOs. As discussed for SFE results, this screening exercise should be considered a preliminary definition of water quality POPCs for further evaluation and does not equate to water quality predictions at applicable compliance points.

Cadmium concentrations are commonly low and fall below 0.0001 mg/L across the different humidity cell samples. The single exception is HC8, which has produced Cd concentrations of up to ~0.001 mg/L in the early phases of the experiment. Longer-term concentrations are relatively stable around 0.0002 mg/L (Figure 5-3). The next highest Cd concentrations within the first 40 weeks of testing are leached from HC2. Both HC2 and HC8 show the highest abundance of solid phase Cd (Figure 4-6; Table 4-5) indicating a mineralogical control. Despite significant variability over time, the gradual drop in pH in HC2 appears to be associated with increasing Cd trends after cycle 150. Cadmium is known to be highly pH-sensitive and can be mobile under moderately acidic conditions.

Copper and Co show relatively similar leaching trends; the highest concentrations were initially released from HC4 which has the highest total S, Co, and Cu contents across all samples (Table 4-5). Aside from this sample, Cu concentrations are typically <0.003 mg/L and range over approximately one order of magnitude across the different humidity cell tests in the initial 40 weeks of testing. For Co, a wider concentration range of almost three orders of magnitude was observed. HC4 has produced the highest output at 0.001 mg/L followed by HC1 and PAG samples HC2 and HC10, which show concentrations between 0.0001 and 0.0008 mg/L initially.

In HC2, both Co and Cu concentrations have responded markedly to the gradual drop in pH over time and have recently reached concentrations consistently exceeding 0.01 mg/L for Cu and 0.001 mg/L for Co. The water quality screening thresholds for both species have been approached in recent sampling cycles and are expected to exceed the thresholds consistently in the near future. Similar trends have not yet been observed for HC10.

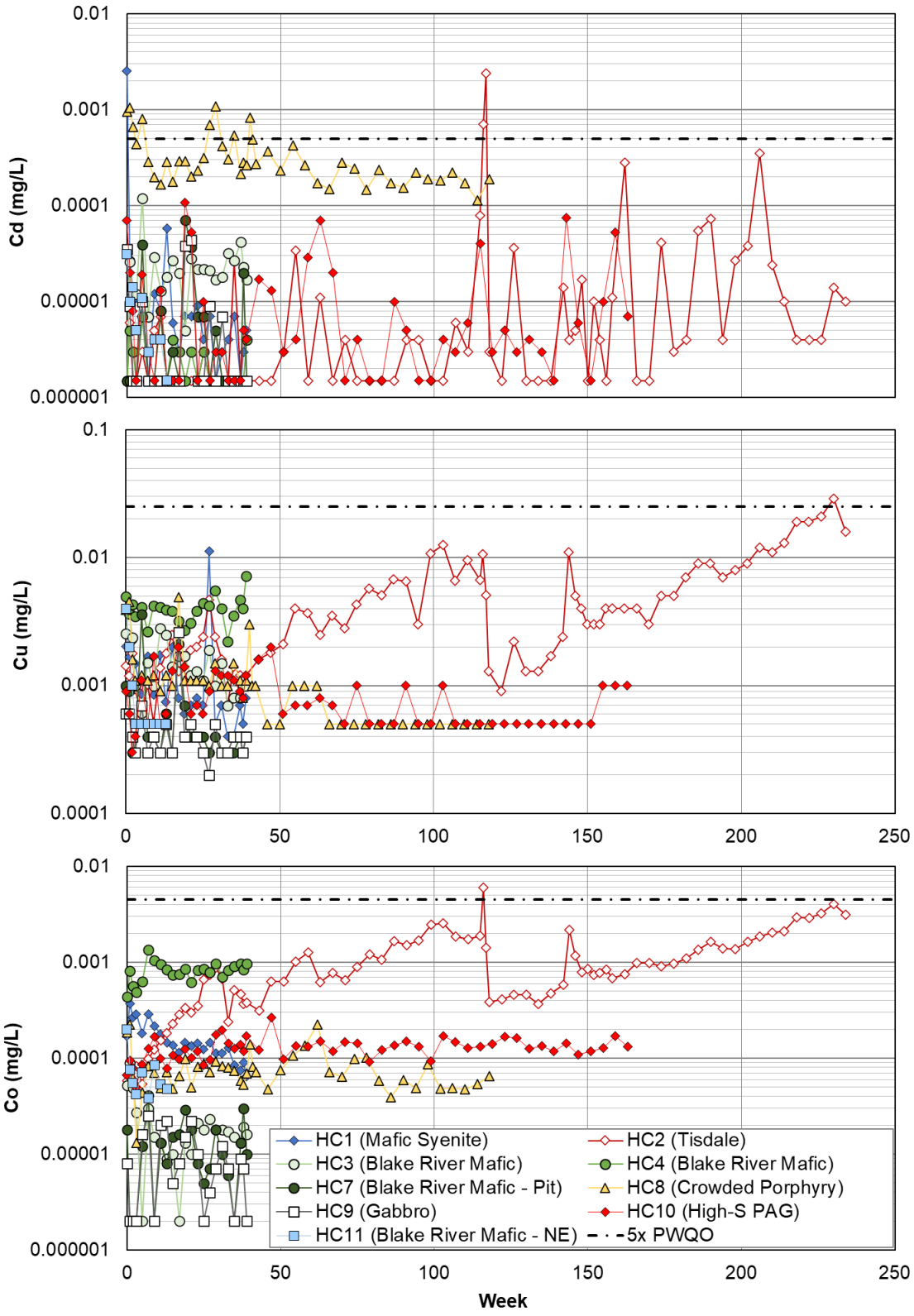

Figure 5-3: Cadmium, copper, and cobalt concentrations in leachates from the Upper Beaver humidity cells

Oxyanions with concentrations that were found elevated in at least one SFE test include Mo, As, and V. Humidity cell concentrations for these species are shown in Figure 5-4 and illustrate further that ML trends vary widely and across different lithologies. Specifically, HC8 is the only sample which releases Mo concentrations above the screening threshold and does so continuously throughout the experimental duration. The remaining humidity cell samples have produced Mo concentrations spanning four orders of magnitude at near or below 0.10 mg/L. Concentrations have generally declined after the first flush and remained relatively stable within the 40+ weeks of testing.

Arsenic is leached at elevated concentrations from HC4 near or above the screening threshold for most of the experiment. HC8 has produced the next highest As output with concentrations initially >0.010 mg/L but dropping to more stable levels 0.0035 mg/L in the most recent sampling cycles. Along with the elevated concentrations of Cd and Mo produced by the same sample, this could be an indication of a unique mineralogical control and weathering behaviour of this Crowded Porphyry sample. Arsenic concentrations from other tests are generally below 0.010 mg/L and show decreasing values with time, with the exception of HC11 which has not yet stabilized at the time of reporting.

Vanadium concentrations fall below the screening threshold in all humidity cell leachates and are characterized by consistently decreasing concentrations over time. The highest values were generated by HC7 and HC9 indicating that Blake River Mafic unit exposed in the open pit will have the highest leaching potential for this constituent. The remaining Blake River Mafic tests (HC3, HC11) also show higher V leaching than other samples, highlighting a broad lithological control.

Overall, the solid phase inventory of the six presented elements appears to have a moderate to strong influence on their respective leaching behaviours (Figure 5-5) where the clearest correlations are evident for Cd, Cu, and Mo. All three of these species are believed to be dominantly associated with sulphide minerals; however, different sulphide phases may be unique to specific lithologies or alteration and ore composition. Depending on which species are ultimately confirmed as POPCs via water quality modelling, source control measures considering the mineralogical specifics related to a given species may need to be considered.

Aluminum, which was found elevated in multiple SFE leachates, is not elevated in humidity cell leachates. This supports the hypothesis that the nature of the SFE test promotes the mobility of (potentially colloidal) Al and is not a true reflection of dissolved Al mobility in more typical flow regimes.

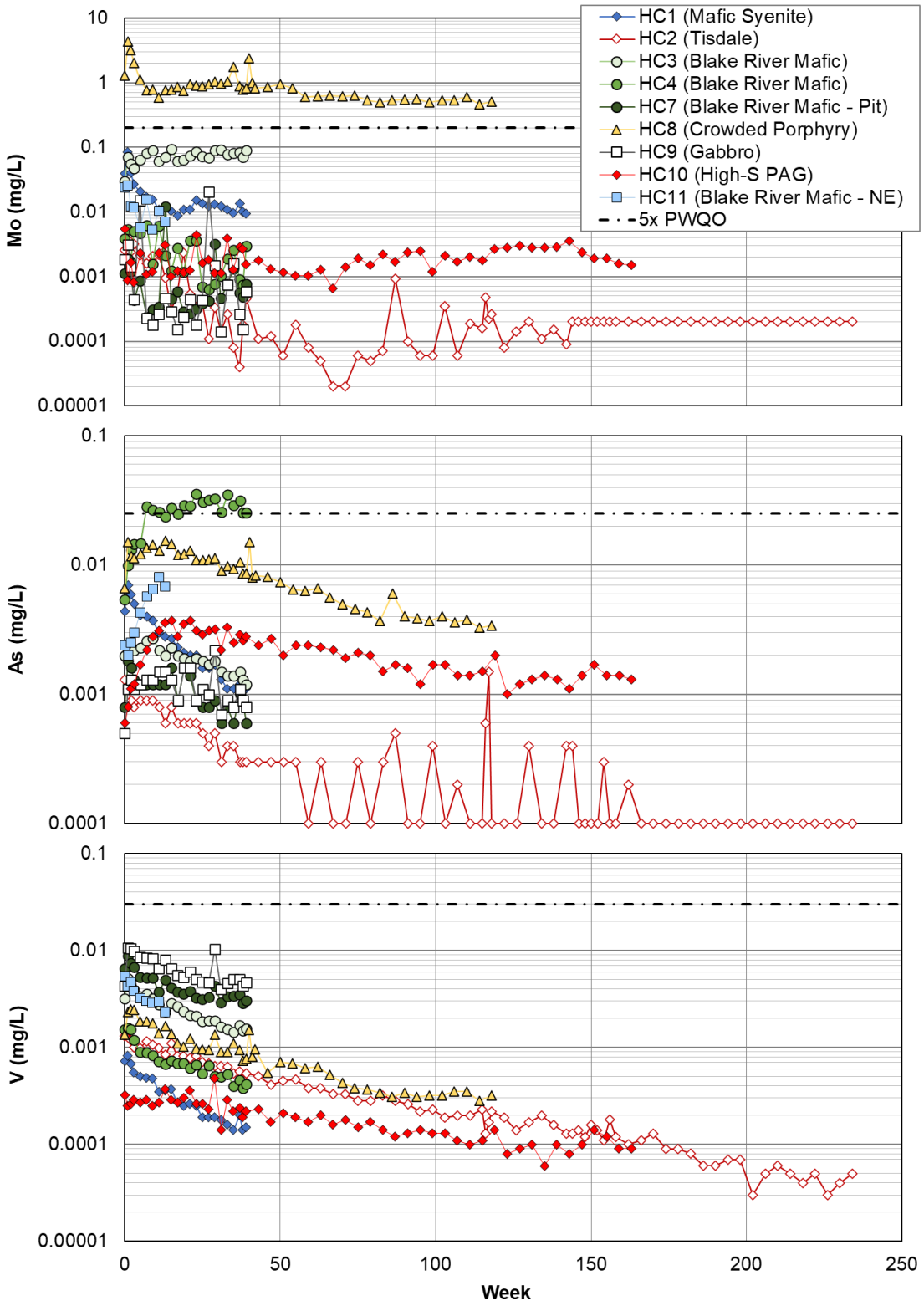

Figure 5-4: Molybdenum, arsenic, and vanadium concentrations produced by the Upper Beaver humidity cells

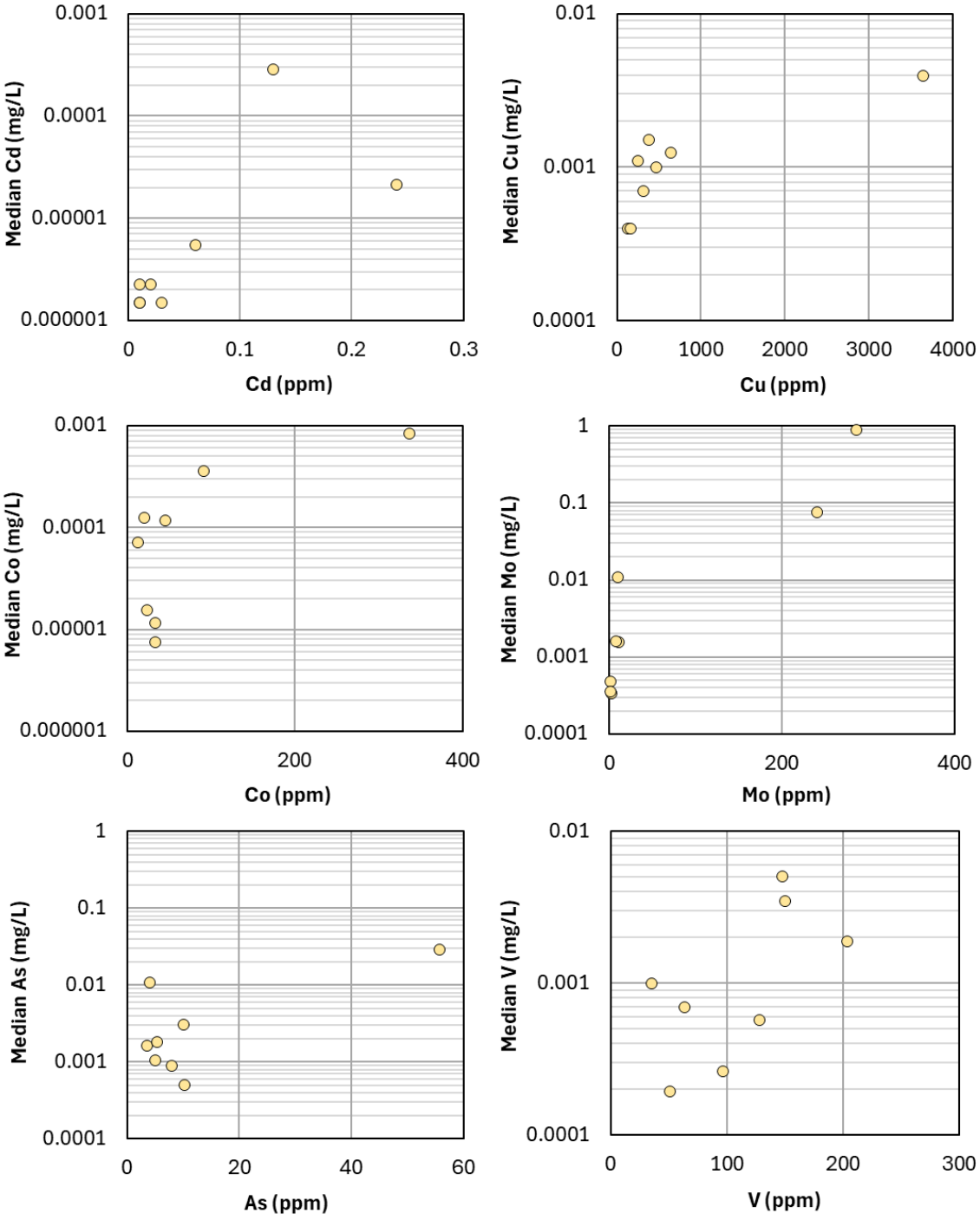

Figure 5-5: Median humidity cell concentrations (cycles 10-40) *versus* solid phase contents for selected parameters

5.1.1.3 QA/QC

A duplicate of HC1 (Mafic Syenite) and a blank humidity cell were operated in conjunction with the Phase 1 mine rock humidity cell program to assess data replicability, quality, and the potential for contamination from different humidity cell components. Selected geochemical loading rates for HC1 and its duplicate humidity cell are presented in Figure 5-6 showing that the experimental results are highly consistent and reproducible.

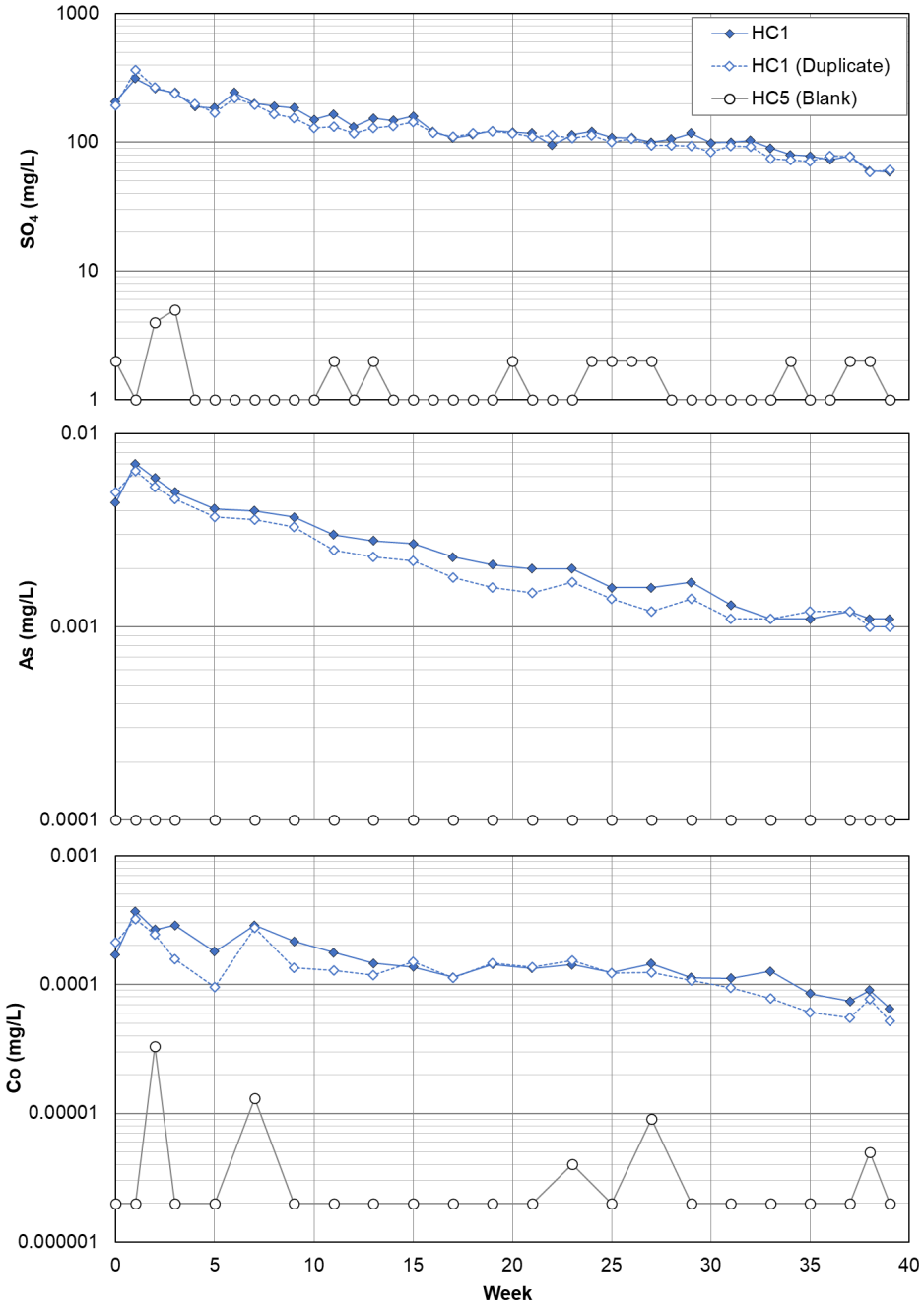

Figure 5-6: Comparison of HC1, HC1 (Duplicate), and HC5 (Blank) leachate concentrations for selected species

Species that show strongly elevated concentrations (*i.e.,* >5x detection limit) in the majority of leachates from the blank humidity cell include Pb and Mo. Of these, Pb is elevated in every humidity cell leachate sample collected to date, suggesting that severe Pb contamination is occurring in response to the leaching of a humidity cell component. It is important to note that the Pb concentrations from the humidity cells containing rock samples are significantly lower, generally falling below the analytical detection limit. This indicates that Pb contamination has occurred before reaction with the sample and that the mine rock surfaces tend to attenuate rather than release dissolved Pb.

Moderately elevated species (*i.e.,* >2x detection limit) in at least half of the blank humidity cell leachates include Ba, Cu, and Mn. Species that are less commonly elevated include Na, Sr, and K. It is inferred that supplies used in the construction of the humidity cell (*e.g.,* metal screws, plastics, and sealants) release a minor geochemical load to the system. These findings were considered in the calculation of loading rates for geochemical source terms.

5.1.2 Field Bins

The following discussion pertains to field bin experimental results for samples FB-1 through FB-5 which have been operating since October 2022. While sample FB-8, containing the Northeast Deposit composite mine rock sample, was set up in the fall of 2025, site staff were not able to collect leachate during the 2025 season prior to winterization of the experiments. Results of FB-6 (McBean composite) are discussed under separate cover (Lorax, 2026b) and are not applicable to this assessment. The full database comprising all laboratory raw files is given in Appendix F.

5.1.2.1 Acid-Base Parameters

Both field pH (Appendix F) and laboratory pH (Figure 5-7) values have remained circum-neutral over the course of the experiments to date. Laboratory pH values range from 5.7 to 7.9 and most commonly fall between 6.5 and 7.9, while field pH is generally slightly higher with values commonly exceeding 7.5 and occasionally 8.0. The cause for this discrepancy is undetermined and could be related to pH sensor calibration or solution equilibration following sampling; nevertheless, the overall conclusion of pH neutrality in leachates to date is not affected by this finding.

Due to technical issues with the pH probe at site, field data were not collected during the initial phases of the experiment. There is currently no indication that pH is trending towards more acidic values. FB-4, the only PAG sample of the suite, will likely not produce ARD in the foreseeable future due to its high Modified NP of >50 kg $CaCO_3$/t.

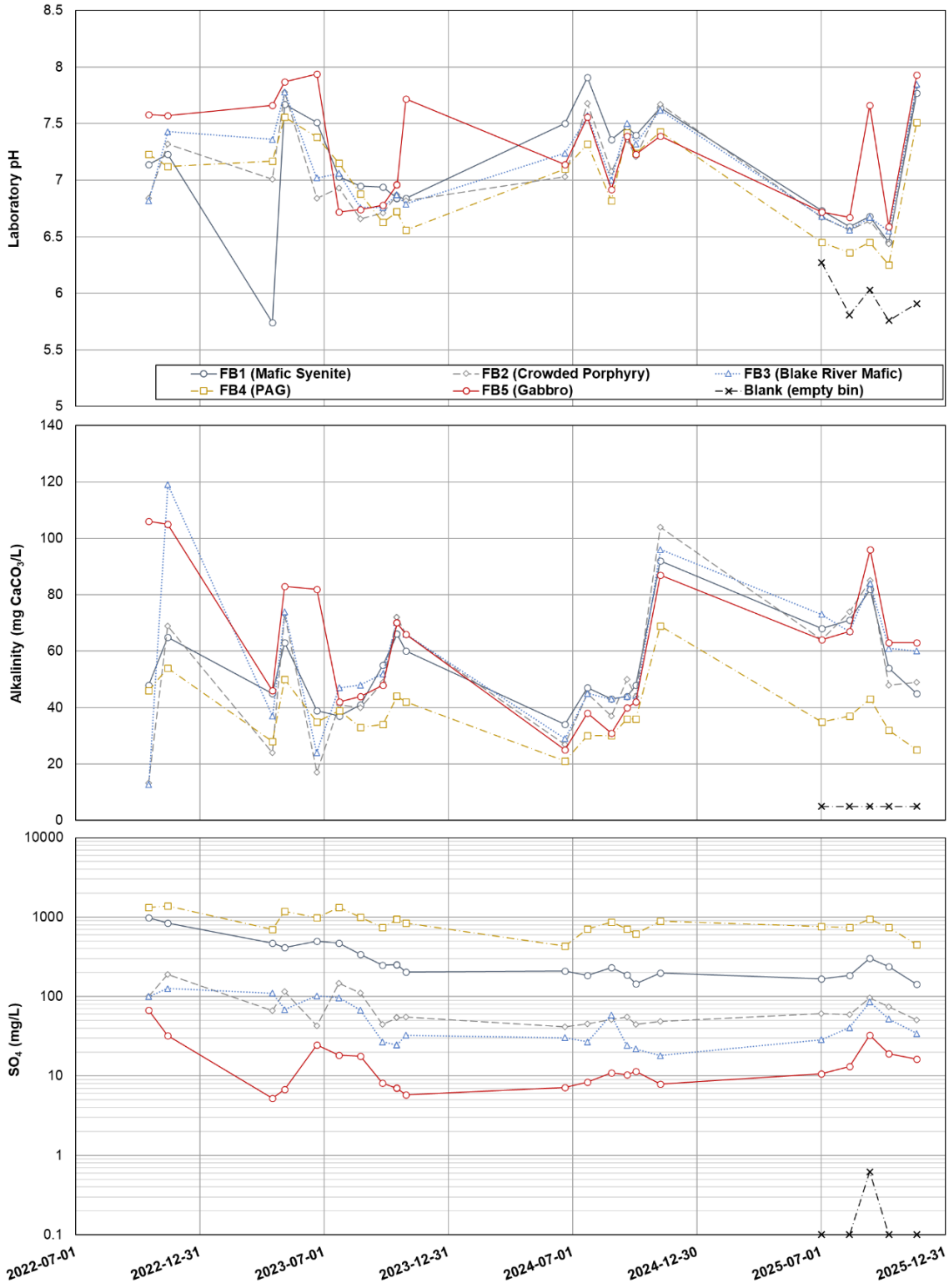

Figure 5-7: Laboratory pH, alkalinity, and SO_4 concentrations produced by Upper Beaver field bins

Leachates show variable alkalinity over time, ranging from slightly below 20 to 119 mg $CaCO_3$/L. More recently, alkalinity values between 40 and 100 mg $CaCO_3$/L were generally measured. Spikes and drops have been relatively consistent across the different field bin samples, suggesting that external factors such as water balance, more so than solid phase geochemistry, are driving variations in alkalinity production. For example, heavier rainfall events will promote the activation of faster flow paths and shorter residence times, therefore producing a more dilute leachate chemistry. Nevertheless, some trends can be discerned, most notably for FB-4 (PAG) which consistently produces the lowest alkalinity.

SO_4 concentrations are distinctly more variable across the different samples than alkalinity (Figure 5-7; note logarithmic scale). Overall, after an initial flushing period in which SO_4 concentrations tended to be somewhat elevated in all field bin leachates, later experimental cycles appear to have produced slightly lower and more stable concentrations in 2024 and 2025. The lowest SO_4 concentrations are evident for FB-5 (Gabbro) and are relatively stable between 5.0 to 30 mg/L. Conversely, FB-4 (PAG) has produced SO_4 concentrations above 1,000 mg/L in the first two years of the experiment and more recently, has continued to leach elevated concentrations between 400 and 1,000 mg/L. This sample is PAG and, by design, shows the highest total S content (Table 4-3). Other field bin samples produce intermediate SO_4 concentrations. Overall, there is a distinct positive correlation between the total S content of a sample and median leached SO_4 concentrations (Figure 5-8), confirming trends already described for SFE and humidity cell testing.

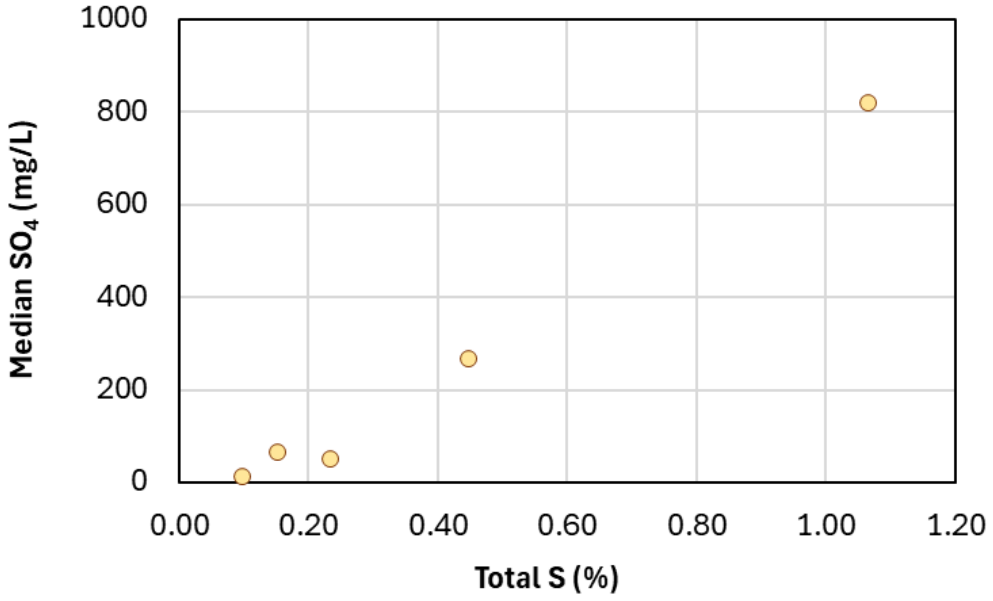

Figure 5-8: Total S content versus median leached SO_4 concentrations in Upper Beaver field bin samples

5.1.2.2 Metal Leaching

Concentrations of metals and metalloids discussed in the following relate only to species that were identified above a threshold of 5x PWQOs. As for other water quality screening presented as part of this study, this exercise only serves the identification of parameters of potential concern for further evaluation and should not be equated to water quality exceedance projections at applicable compliance monitoring stations. All concentrations discussed represent the dissolved fraction unless otherwise noted.

Dissolved Cu exceeds the screening threshold most consistently of any species across field bins. Concentrations are highest in FB-2 and FB-5 and have reached values of >1 mg/L in the summer of 2023 (Figure 5-9). Since then, there has been a relatively steady decline to less than 0.1 mg/L in all field bins by 2025. Generally, Cu is relatively insoluble in the observed pH range and the precise mechanism causing the mobilization of Cu at the field bin scale but not during SFE or humidity cell testing was investigated. A series of QA/QC steps was hence taken to investigate, in more detail, whether dissolved Cu is indeed mobile in Upper Beaver mine rock. The potential for analytical errors in field bin leachates was ruled out via the implementation of various measures involving (i) filtration of the leachate using a 0.2 µm filter (rather than the standard 0.45 µm), and (ii) submission of duplicate samples to a different laboratory.

In 2025, Lorax additionally recommended the initiation of field bin blank sampling (*i.e.,* the collection of water samples after contact with an empty field bin) to assess whether Cu leaching from field bin supplies (tubing, connectors, etc.) or another external solute source could be the cause for the observed Cu concentrations. The results of the field bin blank sampling revealed that relatively high dissolved Cu concentrations (>0.1 mg/L) were detected in four out of the five blank samples collected in 2025 (Figure 5-9). The one sample with low dissolved Cu (September 2025) was collected after prior rinsing of the bin, collection jug, and tubing with deionized water and still exhibited high <u>total</u> Cu (>0.5 mg/L; not shown). All blank samples show low major ion concentrations (<1 mg/L Ca, Mg, SO_4, Cl) with only DOC being present in concentrations >1 mg/L. This chemical signature is inconsistent with the weathering of carbonate-rich mine rock, and in combination with the evidence from other geochemical analyses, it is inferred that the field bin system is contaminated with an external source of Cu (*e.g.,* dust or experimental supplies). Therefore, field bin Cu concentrations presented herein should not be relied on when assessing ML potential for this species. Ongoing blank field bin operations is planned to trace the source of the elevated Cu concentrations.

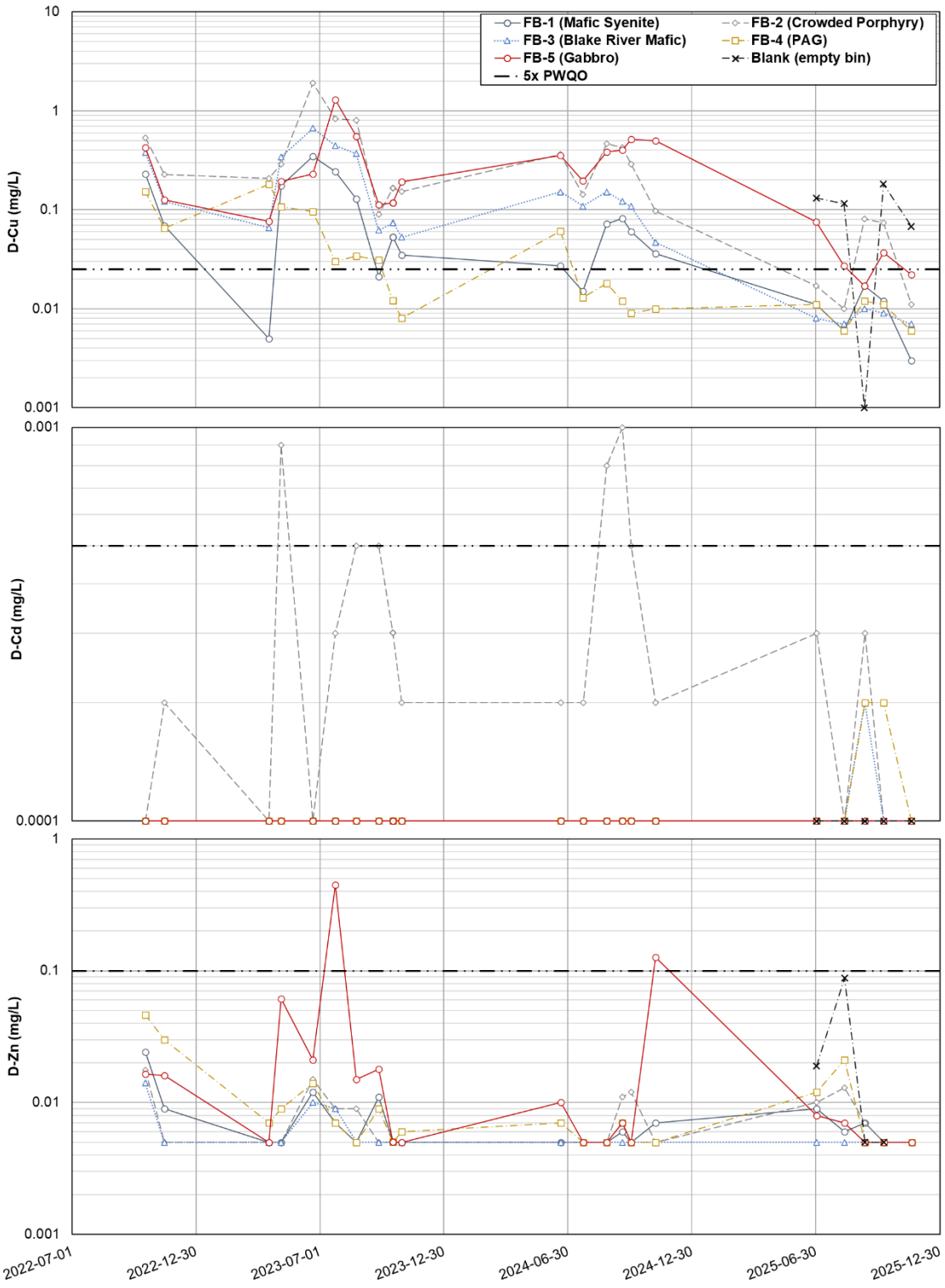

Figure 5-9: Copper, cadmium and zinc concentrations produced by the Upper Beaver field bins

Cadmium falls below or near the detection limit in most leachates produced by the field bin program with the exception of FB-2 (Crowded Porphyry) which has leached slightly elevated Cd, with values greater than the screening threshold of 0.00050 mg/L. Given the sporadic nature of measurable Cd in field bin leachates, no temporal trends can be discerned. A temporal trend is also absent for Zn concentrations which typically fall near or below 0.010 mg/L following the initial flush (Figure 5-9). Leachate concentrations from FB-5 are an exception to this trend and are occasionally higher than the screening threshold, reaching concentrations of up to 0.45 mg/L Zn in July 2023. It is noted that detectable Zn concentrations were produced by the blank field bin during the first two sampling cycles, casting doubt over the data quality for this species, albeit to a lesser extent than Cu.

Both Mo and As have shown slightly increasing trends over the course of the experiment (Figure 5-10). Seasonal trends and the overall magnitude of Mo leaching are relatively consistent for four of the five mine rock materials tested. Specifically, leachates from all samples except FB-2 have increased from around 0.10 mg/L early in the experiments to >0.10 mg/L. Seasonally, concentrations have fallen above the screening threshold of 0.20 mg/L. Concentrations of Mo emanating from FB-2 are distinctly higher and have consistently fallen between 2 and 6 mg/L since September 2023, well above the screening threshold. The static characterization of FB-2 does not provide evidence for an elevated Mo inventory in the solid phase. Arsenic leaching is variable across the different mine rock lithologies and has recently been highest in FB-2 and FB-3. Exceedances of the screening threshold have been reported in select samples from FB-3 reaching up to 0.031 mg/L in concentration.

Slightly and sporadically elevated P concentrations have been observed in later stages of the field bin experiments (Figure 5-10). Given the relatively high detection limit of this species relative to the PWQOs, it is not believed that P leaching from mine rock will be an environmental concern.

There is a positive correlation between average leachate concentrations and the samples' corresponding solid phase contents for Cd and Mo, but not As or Zn (Figure 5-11). This potential solid phase control is generally in agreement with findings from humidity cell and SFE tests. Due to the likely Cu contamination, its leachability as a function of solid phase abundance could not be established for field bins.

In summary, species identified as POPCs based on the ongoing field bin program include Cu, Cd, Zn, Mo, Zn, and P. With the exception of Zn, this suite is generally consistent with and expands on POPCs identified via SFE and humidity cell testing. Data quality issues for Cu and, to a lesser extent Zn, exist and call into question the reliability of the field bin results for these species.

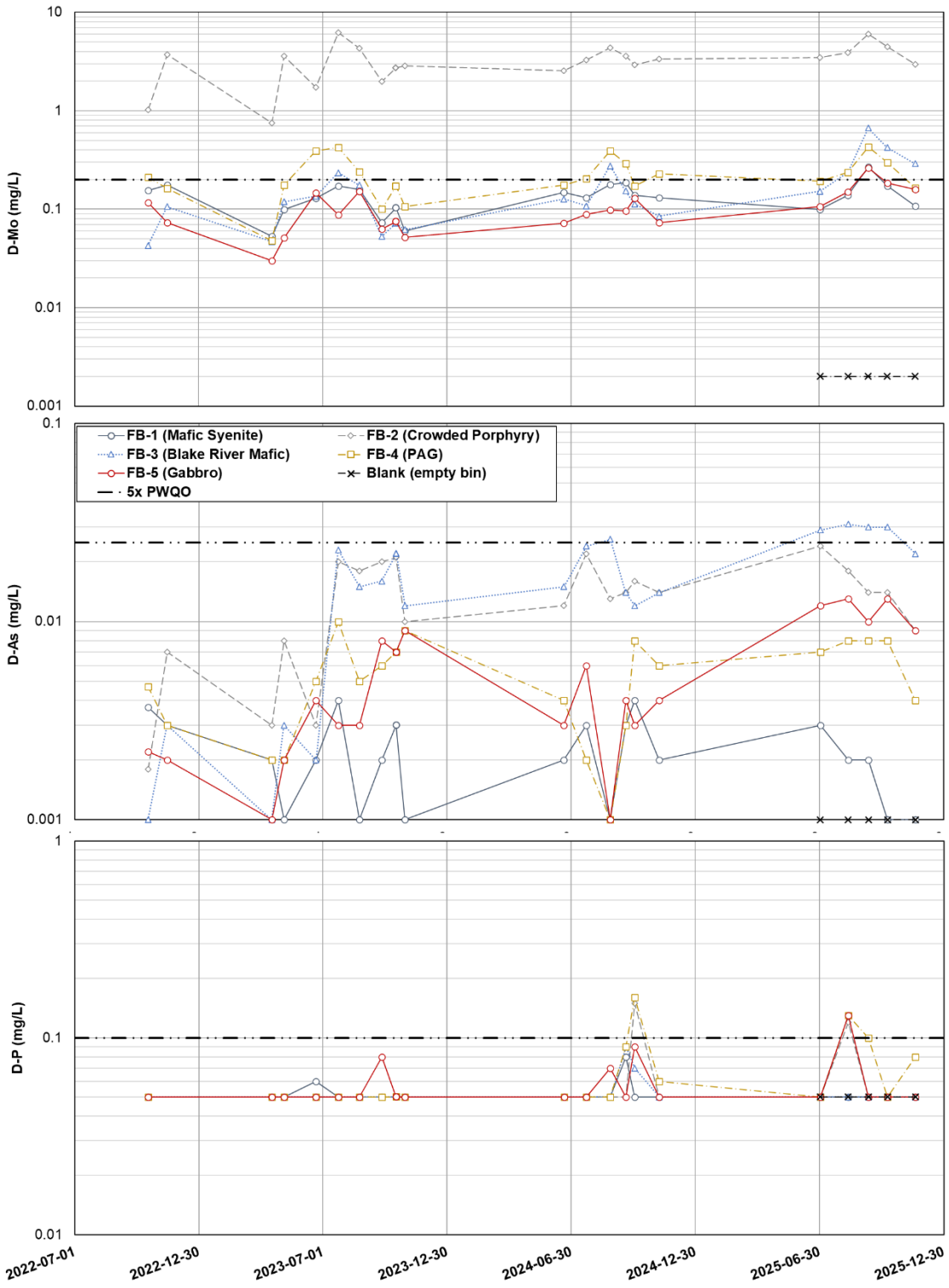

Figure 5-10: Molybdenum, arsenic, and phosphorous concentrations produced by the Upper Beaver field bins

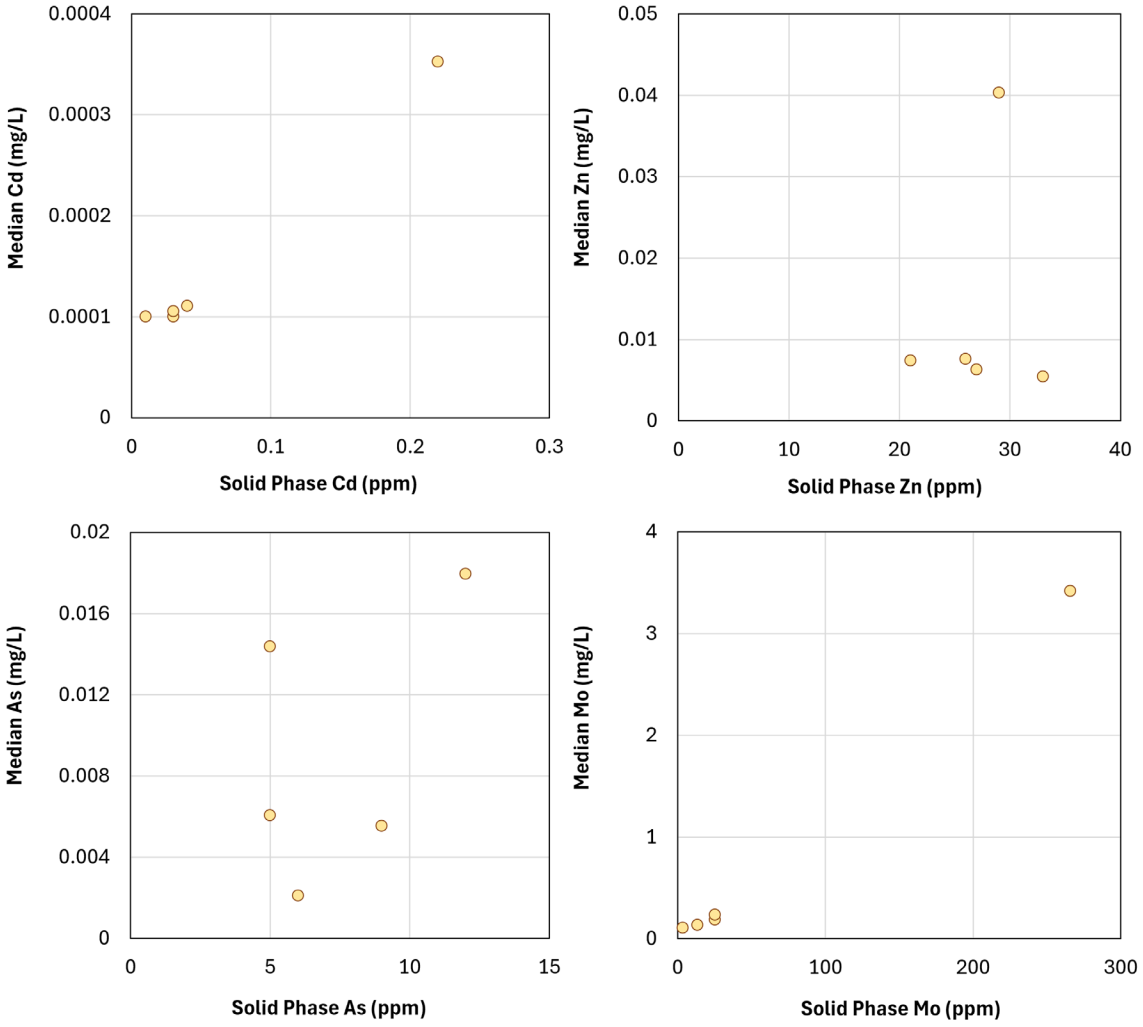

Figure 5-11: Solid phase contents *versus* median leached concentrations for selected species in Upper Beaver field bin samples

5.2 Tailings

Unsaturated column testing of whole tailings that underwent CN-detoxification constitutes the most representative experiments simulating geochemical conditions expected in the TSF dry stack environment. Results of these tests are presented in the following sections. To keep this section focused on the relevant aspects of the current mine plan, kinetic test results of experiments completed prior to 2021 (*i.e.,* humidity cell and saturated column with desulphurized rougher tailings BL416/BL465; Table 4-3) are not further discussed. Raw kinetic test data produced by all experiments are compiled in Appendix G.

5.2.1 Acid-Base Parameters

Unsaturated column leachates have remained circum-neutral over the course of the experiments to date (Figure 5-12). Overall increasing trends in pH are observed in column BL1614, with pH values generally falling between pH 7.8 and 8.2. Slightly higher pH values are observed in column BL1614-01 relative to BL1614-02.

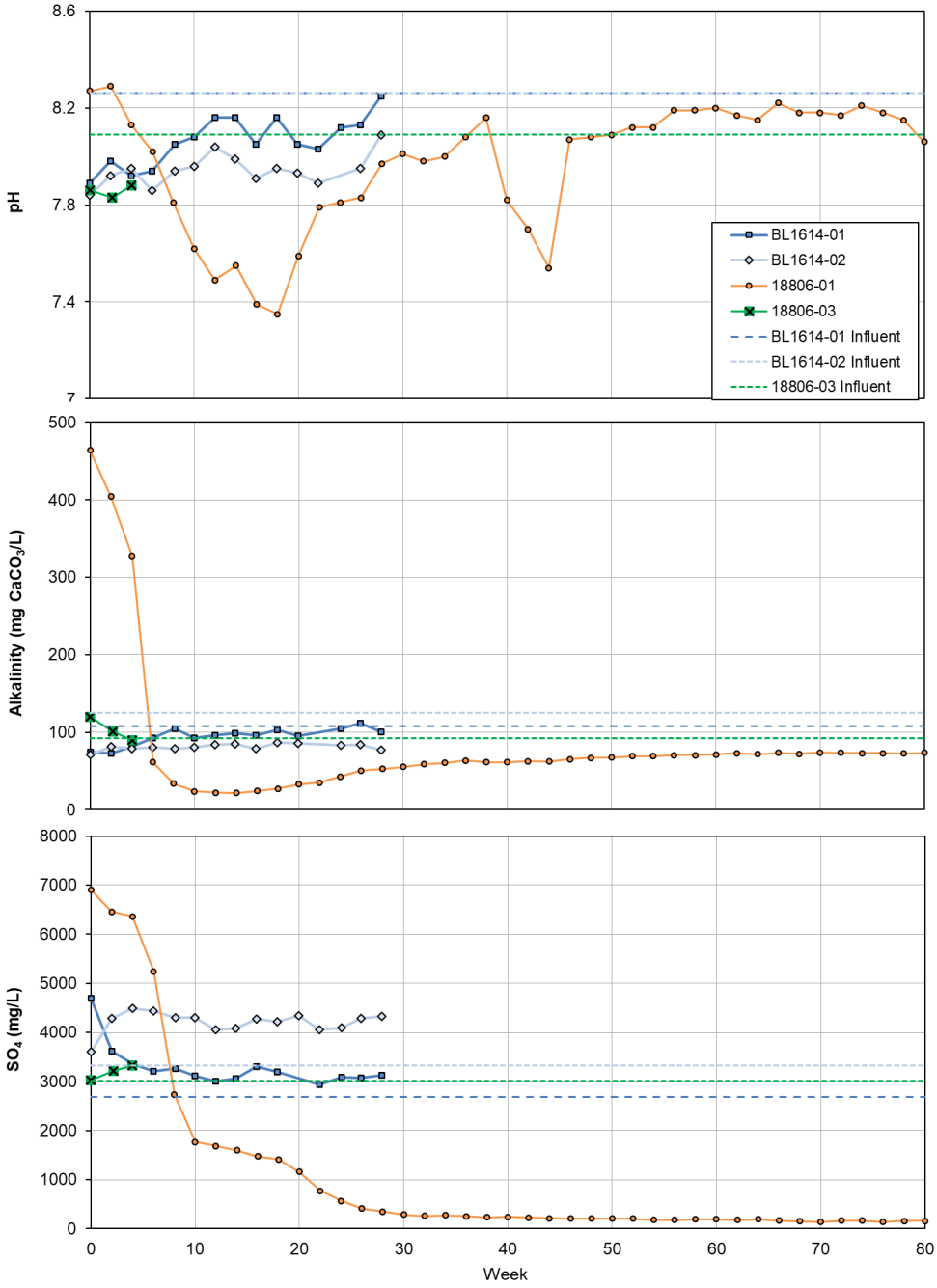

Figure 5-12: pH, alkalinity, and SO_4 concentrations produced by Upper Beaver unsaturated tailings columns

Following an initial decline in pH in column 18806-01, pH stabilized around pH 8.2 in the latter portion of testing. The observed pH trends are consistent with the alkalinity output from the different samples where column 18806-01 shows an initial decreasing trend in alkalinity that stabilizes in the latter portion of experiment at values around 75 mg $CaCO_3$/L. Similar to pH trends, slightly higher alkalinity is observed in column BL1614-01 relative to BL1614-02.

Sulphate concentrations are notably variable between columns. Column 18806-01 shows a decreasing trend in sulphate concentrations, stabilizing at around 160 mg/L. Conversely, SO_4 concentrations in the BL1614-01 and BL1614-02 columns are stable, with values slightly above 3000 mg/L and 4000 mg/L, respectively. These trends, along with those observed for alkalinity, are consistent with differences in influent chemistry. Specifically, deionized water serves as influent for 18806-01, while supernatant is currently being used in all other column experiments. In this regard, the initially high leachate sulphate concentrations in column 18806-01 may be attributed to the higher total S content of the sample in combination with higher SO_2/Air dosing used during CN-detox step.

Although limited data are available for column 18806-03 to date, pH values, as well as alkalinity and SO_4 concentrations, are comparable to those observed in BL1614 unsaturated column leachates.

5.2.2 Nitrogen Species

Concentrations of metals and metalloids discussed in the following relate only to species that were identified above a threshold of 5x PWQOs or are parameters of interest and/or byproducts of CN-detoxification processes.

Total CN concentrations in unsaturated column leachates are generally below 0.1 mg/L, with few exceptions (Figure 5-13) indicating that bench-scale CN-detoxification was generally successful. Decreasing trends in total CN concentrations are observed in BL1614-01 leachates, reaching as low as 0.03 mg/L, while BL1614-02 leachates show relatively stable values in total CN concentrations (~0.1 mg/L). Variable total CN concentrations in 18806-01 leachates are in part due to variable detection limits and are an artifact from the analytical laboratory. Total CN has remained below 0.03 mg/L in leachate from column 18806-03.

Cyanate (CNO) concentrations in unsaturated columns BL1614 and 18806-01 rapidly drop following the initial phase of testing and generally stabilize between 1.0 and 5.0 mg/L. This indicates that residual CNO present in the tailings pore water of sample 18806-01 is displaced relatively rapidly following the introduction of deionized water to the system.

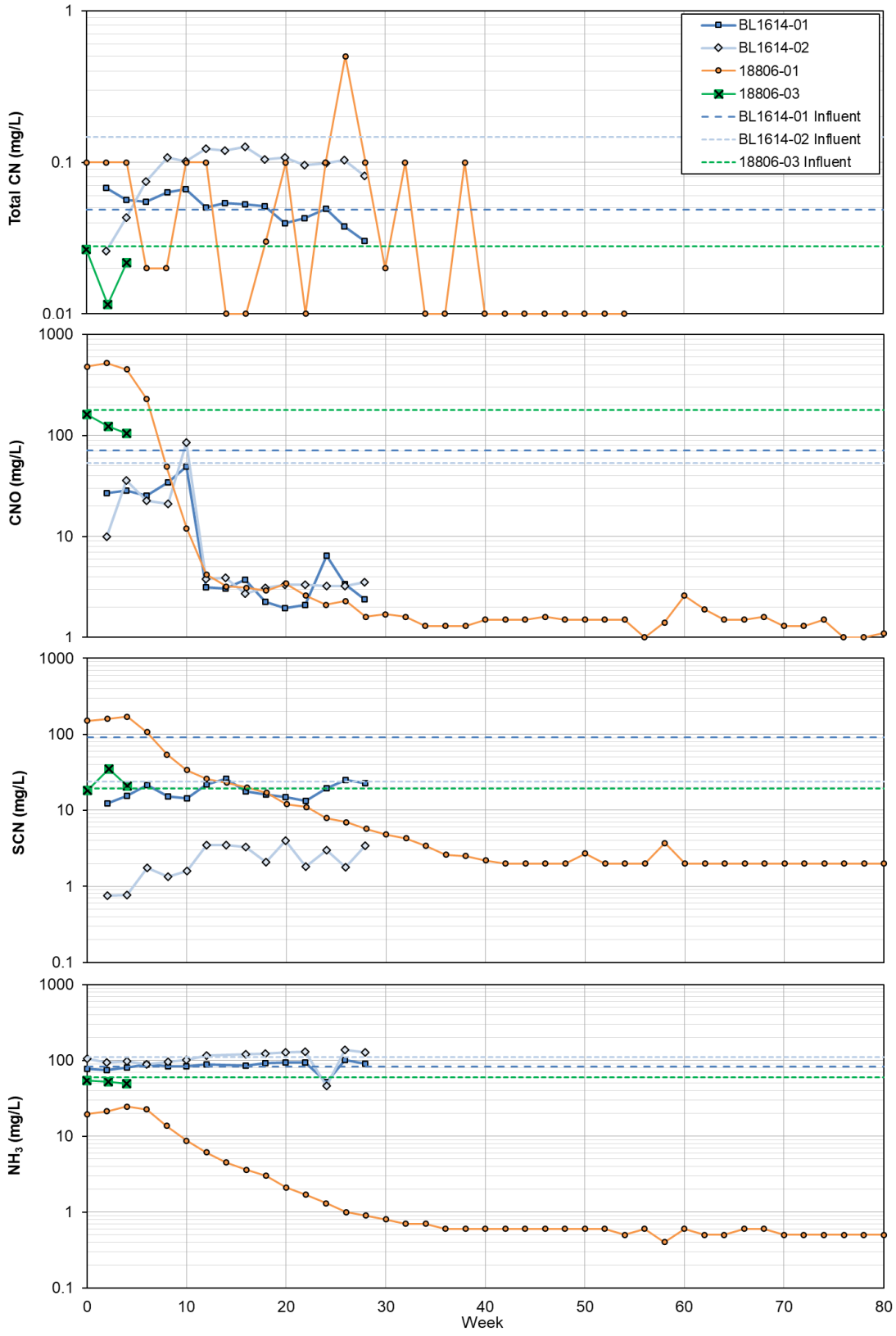

Figure 5-13: Nitrogen species produced by Upper Beaver unsaturated tailings columns

The slightly delayed drop in concentration of CNO in leachates from the two BL1614 tests may be explained by the natural degradation of CNO within the supernatant influent over time. Nevertheless, CNO appears to be consumed in the column environment relative to the inflow chemistry, a trend that is also evident in column 18806-03, which shows a gradual decrease of CNO concentrations from 165 mg/L to 105 mg/L in the early stages of the experiment.

The behaviour of SCN differs to that of CNO. While the data demonstrate that SCN is being flushed from column 18806-1, SCN maintains relatively stable concentrations in leachates from the remaining columns where supernatant is being used as the influent. This finding is in agreement with the persistence of SCN in solution relative to CNO. Interestingly, SCN concentrations are attenuated in the BL1614 tests relative to the supernatant, while leachates from 18806-3 are generally aligned with supernatant values. Overall, SCN maintains levels of >10 mg/L for extended periods of time in all columns where supernatant is being used as the influent except BL1614-02.

Concentrations of NH_3 have remained stable since the start of the experiment for the BL1614 and 18806-03 tests and generally fall relatively close to the respective influent chemistries (Figure 5-13). Slightly higher NH_3 concentrations are observed in BL1614-02 leachates, with concentrations up to 138 mg-N/L. The 18806-01 test shows a progressive decreasing trend in NH_3 values over the course of the experiment to values below detectable limits (0.5 mg/L).

5.2.3 Metal Leaching

Cobalt and Mo show comparable trends between all unsaturated column tests, where BL1614 and 18806-03 tests produce concentrations that consistently exceed the 5x PWQOs. While the 18806-01 test shows elevated concentrations above the screening criteria in the initial phase of testing, values rapidly decline below the screening criteria (Figure 5-14). Both Co and Mo concentrations are highest in BL1614-01 leachates, with concentrations up to 0.04 and 2.4 mg/L, respectively. While there is a net release of Mo from the unsaturated columns where supernatant is used as the influent, Co is partially attenuated during contact with the tailings solids.

High aqueous concentrations of Co in the tailings columns can be linked to strong complexation with CN or its degradation products (*e.g.*, Johnson *et al.*, 2008). While elevated concentrations of CN are not evident in BL1614-01 relative to BL1614-02, higher SCN concentrations have been leached from the former column, which may, in part, explain the increased Co concentrations. However, the lower Co levels produced by 18806-03 are not readily explained on the basis of residual CN or its degradation products.

Copper in tailings leachates may be associated with (i) weathering of primary or secondary Cu-minerals that formed during the petrogenesis of the ore feed and (ii) leaching of Cu introduced during the metallurgical testwork in the form of $CuSO_4$ (for CN-detoxification). Copper concentrations are most elevated in 18806-01 leachates, reaching values up to 0.9 mg/L (Figure 5-14) and consistently exceed the screening threshold (0.025 mg/L).

In the initial phase of testing, Cu values in 18806-03 leachate also consistently exceed the screening threshold with values up to 0.2 mg/L. Both BL1614 tests have produced Cu concentrations below the screening threshold. In all column tests where supernatant is being used as the influent, a net release of Cu during contact with the tailings solids is evident. A positive relationship between average leachate concentrations and the samples' corresponding solid phase contents for Cu exists in the BL1614 and 18806-01 tests. This correlation does not hold true for the 18806-03 test; however, this experiment is in its early stages and therefore, conclusive trends are lacking at present.

Mercury shows comparable concentrations in the initial phase of testing in the 18806-01 and 18806-03 unsaturated column leachates. In both cases, Hg concentrations are above the screening threshold of 0.001 mg/L. Mercury concentrations in 18806-01 leachates gradually decrease over the course of the experiment to below the screening threshold (Figure 5-14), reaching levels as low as 0.000020 mg/L. In contrast, Hg produced by both BL1614 columns fall below the screening threshold over the course of the experiment and is attenuated relative to the supernatant inflow chemistry. There is no correlation between the solid phase Hg content and corresponding leachate concentrations across the unsaturated column experiments. It is, however, notable that both samples from the 18806 metallurgical test series show significantly higher Hg leaching as compared to the two BL1614 samples. Given the sustained elevated Hg concentrations draining from column 18806-01, for which deionized water is used as column influent, CN complexation or other mill reagent effects are unlikely to be solely responsible for Hg leachability from these materials as these controls would be predicted to dimmish over time. Rather, it is inferred that mineralogical controls, potentially associated with particular ore/vein generation, drive Hg leachability in combination with chemical processes affecting remobilization during the mill process. An interesting finding is that Hg solid phase contents and leaching mirrors those observed for Cu.

Elevated P concentrations above the screening threshold (0.10 mg/L) are observed in both BL1614 tests and the 18806-03 test. Phosphorous concentrations are highest in BL1614-01 leachates relative to BL1614-02 and 18806-03 (Appendix G). In 18806-01 leachates, P rapidly drops to below 0.010 mg/L for most of the remaining portion of the experiment. No correlation of average P concentrations with the samples' corresponding solid phase contents is evident.

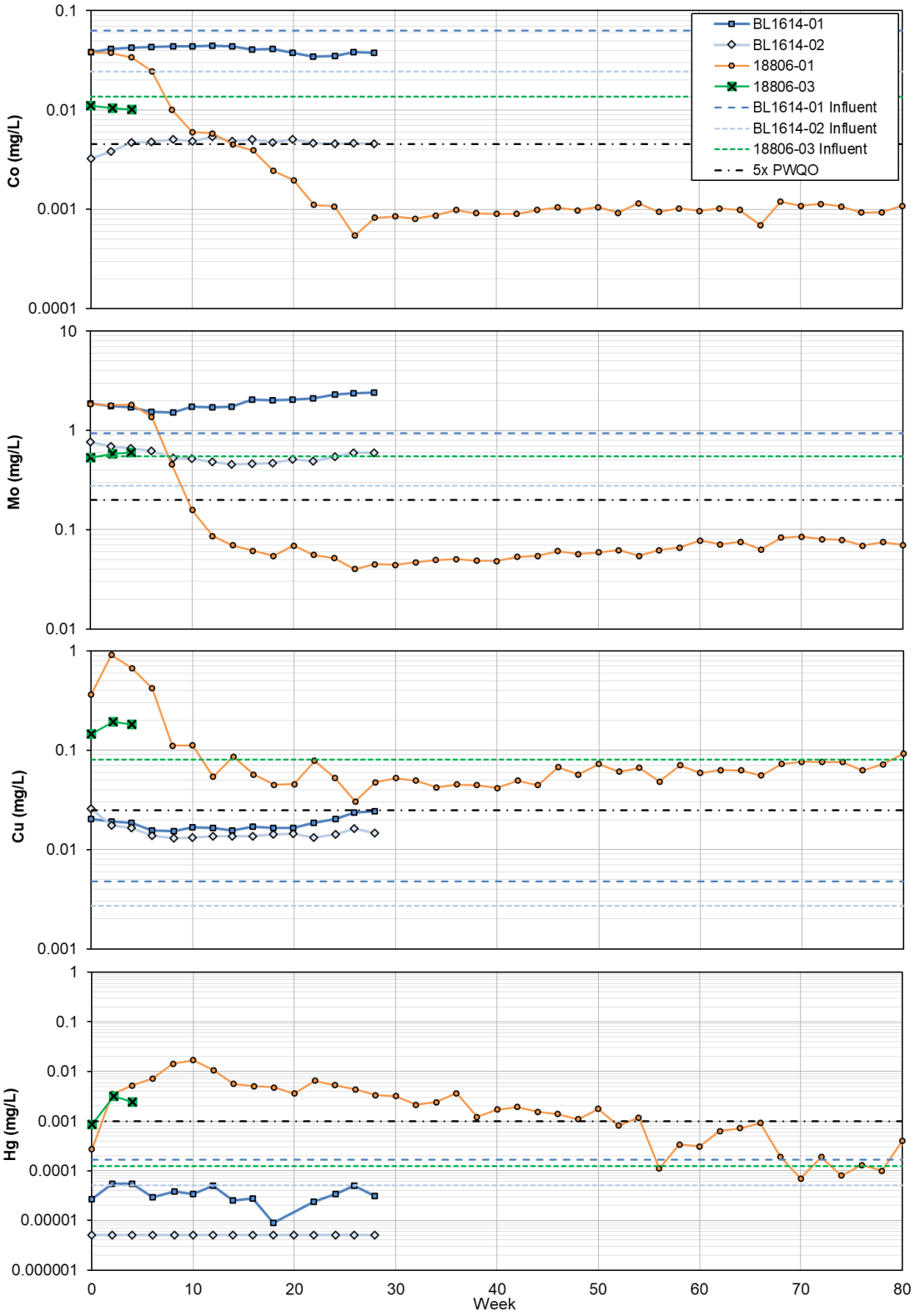

Figure 5-14: Selected trace element concentrations produced by Upper Beaver unsaturated tailings columns and above the screening criteria

6. Mercury Study

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6. Mercury Study

6.1 Overview

Elevated Hg concentrations were identified in supernatant, SFE, and kinetic test leachates of multiple tailings samples, and, most notably, in the unsaturated column leachate of sample 18806-01. As a result, Hg emerged as a POPC during water quality modelling for the TSF. Similar trends were not observed in static and kinetic test results for mine rock and overburden.

Mercury can be toxic to aquatic biota at very low concentrations, and inorganic mine-derived Hg may be transformed through abiotic and biotic processes to form highly toxic methylmercury (MeHg) compounds that readily accumulate and biomagnify in aquatic biota (CCME, 2003). Consequently, Hg is an element of interest with federal and provincial guidelines. The Canadian water quality guideline for the protection of aquatic life (WQG-PAL) in freshwater is 0.026 µg/L inorganic Hg and 0.004 µg/L MeHg (CCME, 2003). The Ontario Provincial Water Quality Objective (PWQO) for mercury is 0.2 µg/L.

A multi-pronged investigation into the controls governing Hg mobility was initiated by Agnico Eagle with guidance from Lorax. Key technical aspects considered and investigated as Hg leaching controls include geological and mineralogical distribution of Hg across the deposit (reported under separate cover); Hg solid phase abundance in ore and tailings; particle and grind size; and mill processing and reagent addition.

The key findings from this study are presented in the following subsections. Laboratory raw files specific to this Hg study are provided in Appendix H unless already reported elsewhere as part of the primary ML/ARD characterization.

6.2 Ore Samples

Twenty-six paired SFE tests were run on ore rejects (P_{80}=2 mm) and ground (P_{80}=105 µm or 150 mesh; approximately tailings particle size) samples from a range of resource horizons to evaluate Hg leaching effects as a function of particle size and solid phase Hg content. A subset of samples (n=6) from this study component was ground under both wet and dry conditions to gain additional insight into the potential effects of Hg mobilization during grinding.

There is a weak positive correlation between solid phase and SFE Hg concentrations for the tested ore samples (Figure 6-1) where high Hg leachability (>0.00010 mg/L) in SFE leachates is more commonly associated with samples exceeding 0.40 ppm in solid phase

Hg content. The two highest SFE concentrations (> 0.0010 mg/L) were produced by two reject samples with a solid phase content of >8.0 ppm.

Overall, the data do not support the hypothesis that particle size is a major driver for Hg leaching since both reject and ground ore samples show a relatively random distribution when plotted against solid phase content. In fact, Hg concentrations measured below the detection limit in SFE leachate occurred more frequently in samples with smaller particle size (ground; n=16) compared to samples with larger particle size (reject; n=8).

There is no correlation between the grinding procedure (wet versus dry) and the leached Hg concentrations (Figure 6-2). Mercury leachability is generally relatively similar between the two datasets. Thus, systematic Hg loss as a function of the grinding technique is not indicated.

Overall, the geochemical analysis of the 26 ore samples suggests that solid phase composition may be a secondary driver for Hg mobility from Upper Beaver materials, while particle size and grinding method do not appear to be relevant factors.

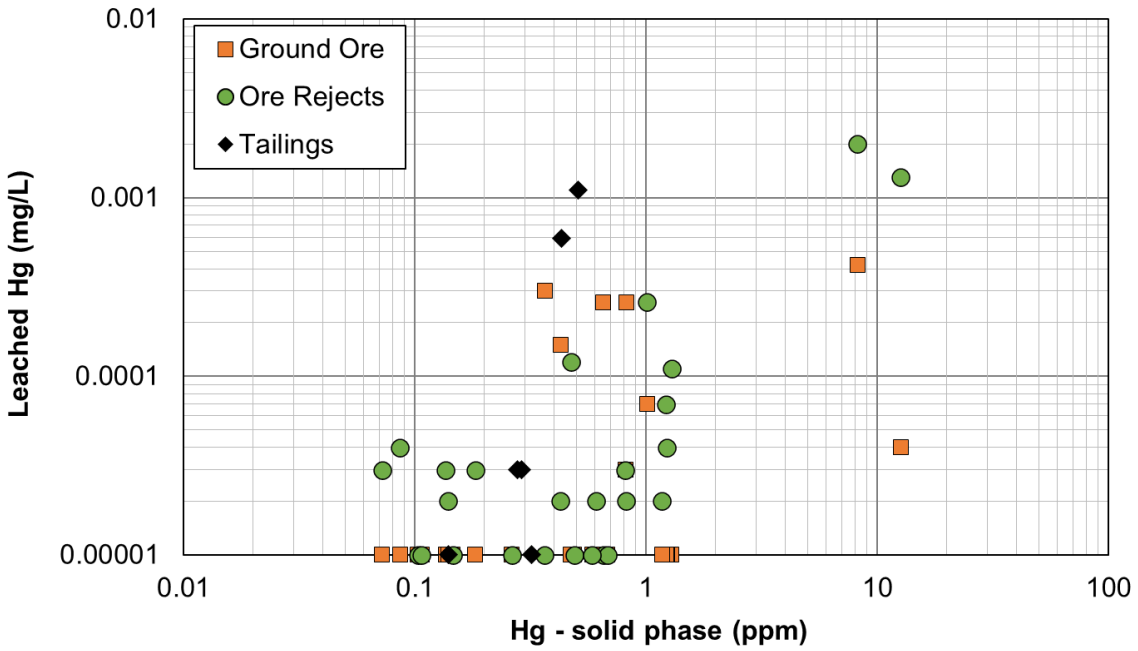

Figure 6-1: Shake flask extraction Hg concentrations *versus* solid phase Hg contents in ground ore, ore rejects, and tailings samples

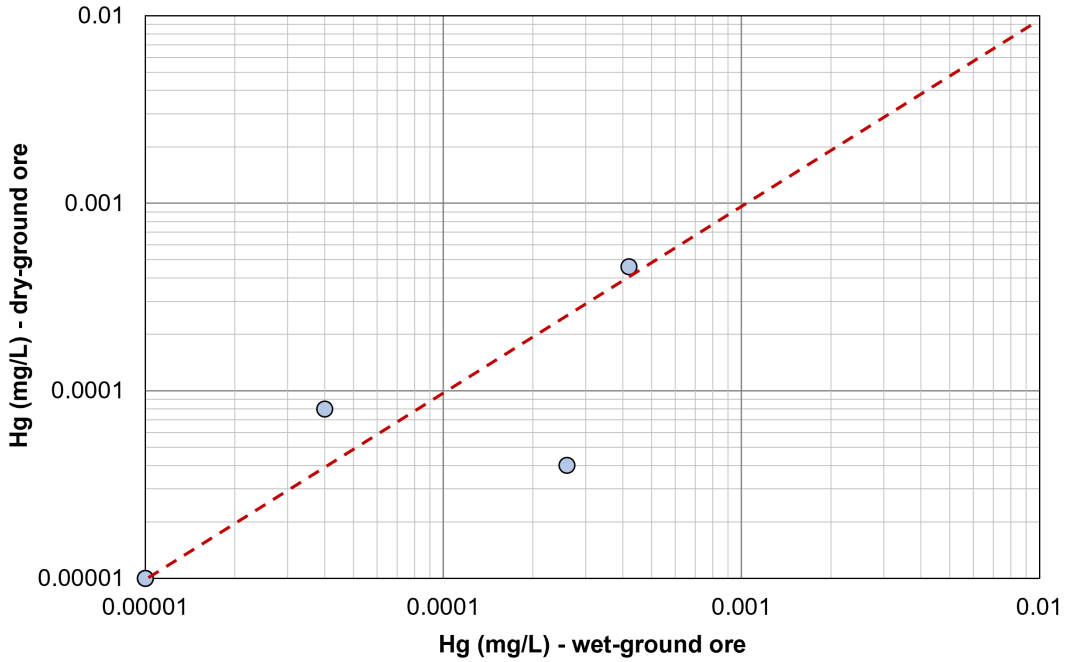

Figure 6-2: SFE Hg concentrations in wet-ground *versus* dry-ground ore samples. Three samples fall in the origin of 0.00001 mg/L

6.3 Tailings

Solid phase Hg contents in tailings samples range from 140 to 2970 ppb and fall within the range of those measured in ore samples (10 to 5,000 ppb) utilized for this study. The median Hg content in tailings (320 ppb) is only slightly higher than that of the ore population (206 ppb). Solid phase Hg contents are greater than 10x AUCCA in three tailings samples from 2021 and 2024: 18806-01, BL1614-01 Cleaner, and BL-1614-02 Cleaner. The enrichment in cleaner tailings samples is expected due to the association of Hg with sulphide and ore (Au, Cu) minerals. Sample 18806-03, which was composited to represent an updated mine plan, has a solid phase Hg content of 290 ppb, exceeding 5x the AUCCA (Table 4-8).

Solid phase Hg concentrations have a strong linear correlation ($r^2 > 0.8$) with eight other metals and metalloids (As, Bi, Ca, Mo, Pb, Sb, Tl, and Zn). However, after the exclusion of cleaner tailings which tend to bias the linear regression fit, only three samples have moderate to strong correlations ($r^2 > 0.6$) with Hg, namely Ca, Cu, and Mo.

Mercury concentrations SFE leachates vary from below the method detection limit (<0.010 µg/L) to 1.1 µg/L. Dissolved Hg concentrations in both supernatant and SFE leachates are broadly correlated with solid phase Hg content (Figure 6-3), especially when cleaner tailings are omitted from the analysis.

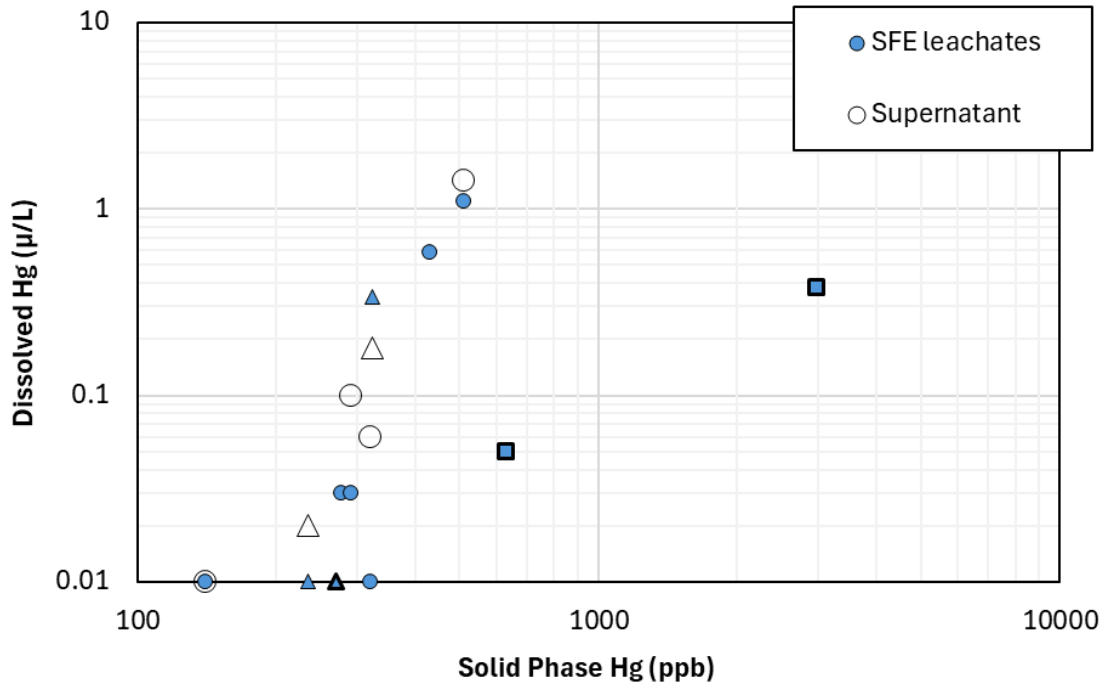

Figure 6-3: Solid phase Hg content *versus* dissolved Hg in SFE leachates and supernatant (where available). Circles: composite whole tailings, triangles: rougher tailings, squares: cleaner tailings. Datapoints with thicker boundaries did not undergo cyanidation and detoxification.

The sample with the highest leached Hg concentration (18806-01) also has the highest solid phase Hg content amongst whole tailings. SFE leachate concentrations for Hg tend to be lower (up to a factor of 6) than the corresponding supernatant values. BL416 De-S Rougher produced higher SFE Hg concentrations by a factor of ~2. Despite these differences, the relatively similar SFE and supernatant concentrations (Figure 6-3) suggest that SFE data reasonably approximate Hg concentrations in tailings process water.

The positive correlations between solid phase contents of Hg and other elements are not observed in SFE results. Leachable Hg concentrations are also not positively correlated with cyanide species (total, WAD, free, cyanate, thiocyanate). However, there is some evidence that CN-flotation and -detoxification mill processes drive Hg leachability along with solid phase Hg contents. For example, samples that underwent CN-flotation and detoxification produce higher Hg concentrations in supernatant and leachates compared to those that did not undergo these metallurgical steps (Figure 6-3). Additionally, Hg concentrations in the 18806-03 Leach Feed (pre-cyanidation) SFE test were below the analytical detection limit of 0.01 µg/L compared to 0.03 µg Hg/L in 18806-03 (post-leach and CN-detoxification (Table 6-1).

Table 6-1:
Selected Shake Flask Extraction Leachate Results for 18806-3 Prior to Leaching and Post-Cyanidation and -Detoxification

Sample ID		18806-3 Leach Feed	18806-3
Parameter	**Units**		
pH		7.9	7.8
Alkalinity	mg CaCO3/L	22	21
Nitrite	as N mg/L	<0.30	<0.30
Nitrate	as N mg/L	<0.60	<0.60
Fluoride	mg/L	0.10	0.060
Total CN	mg/L	<0.010	0.090
WAD CN	mg/L	<0.010	<0.010
Free CN	mg/L	<0.0050	0.0050
CNO	mg/L	<1.0	2.0
SCN	mg/L	<2.0	3.0
SO_4	mg/L	60	563
Dissolved Metals			
Sb	mg/L	0.0018	0.0043
As	mg/L	0.0015	0.0015
Cd	mg/L	0.00013	0.000027
Ca	mg/L	30	145
Co	mg/L	0.000026	0.00068
Cu	mg/L	<0.0010	0.0020
Fe	mg/L	0.044	0.053
Pb	mg/L	0.00043	0.00015
Mg	mg/L	2.2	1.6
Mn	mg/L	0.0029	0.0044
Hg	ug/L	<0.010	0.030
Mo	mg/L	0.022	0.052
P	mg/L	0.034	0.0060
Se	mg/L	0.00020	0.0014
Ag	mg/L	<0.000050	0.000060
Tl	mg/L	0.000016	0.000023
Zn	mg/L	0.023	<0.0020

Notes: WAD = Weak Acid Dissociable.

Three samples were submitted for Hg sequential extraction using CIEMAT procedures (Larios *et al.,* 2002) to evaluate the extractability of Hg. The three samples include (i) ore (sample 30107-MTCP-005) used in metallurgical test 18806-01; (ii) tailings sample 18806-01; (iii) pre-rinsed tailings sample 18806-01.

These specific samples were chosen to shed light on the effect of the mill process and washing of the tailings sample on the re-distribution and mobility of Hg.

In brief, five of six sequential extraction stages produced Hg concentrations below the detection limit; the only extraction step yielding measurable Hg was Stage 4 (Bound to Organics). No organics are expected in the ore samples, however, a readily oxidizable fraction, such as labile sulphides, could account for the leachable Hg in this step. The leachable Hg in Stage 4 ranged from 1.0 to 3.0 ppb and is a fraction of the Hg that remained bound in the residual phase mass. Specifically, the residual solid phase Hg content was measured to be 240 to 247 ppb in the two tailings samples and 654 ppb in the ore feed sample.

The ground ore sample (30107-MTCP-005) and tailings sample (18806-01) were further analyzed to quantify Hg speciation in the solid phase and SFE leachate (Table 6-2). The results of this supplemental testwork showed that (i) Hg is more leachable (SFE test) from the tailings sample than the ore feed with a higher solid phase Hg and (ii) the proportion of MeHg is higher in ore solid phase and SFE leachate compared to the tailings sample (Table 6-2). Since the proportion of MeHg is higher in the SFE leachate relative to the corresponding solid phase, it appears that this species is preferentially leached from the two materials, albeit still at relatively low concentrations.

In summary, data from the Hg assessment indicate that solid phase Hg contents are broadly correlated with Hg leachability in tailings samples. Particle size and ore grinding are not major controls; however, tailings that underwent cyanidation generally exhibit higher Hg leachability. Further, MeHg occurs preferentially in leachate compared to the corresponding solid phase, although MeHg accounts for ≤5.0% of total Hg in leachate samples.

Table 6-2:
MeHg Concentrations and Proportions in Ore and Tailings Solid Phase and Shake Flask Extraction Leachates

Parameter	Units	18806-01	30107-MTCP-005
Solid Phase			
Total Hg	µg/kg	418	1100
MeHg	µg/kg	<0.050	0.46
% MeHg of total	%	0.012%	0.042%
SFE Leachate			
Total Hg	µg/L	0.18	0.027
MeHg	µg/L	0.0031	0.0014
% MeHg of total	%	1.7%	5.0%

Notes: MeHg = Methylmercury; SFE = Shake Flask Extraction.

7. ML/ARD Management and Monitoring

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7. ML/ARD Management and Monitoring

7.1 ML/ARD Management

The purpose of this section is to recommend ML/ARD prevention and mitigation practices for the Upper Beaver operations phase to minimize geochemical impacts of mining operations on the receiving environment. To this end, source control (*i.e.,* material handling) measures have been incorporated into the preliminary mine plan by Agnico Eagle to proactively limit ML/ARD effects. At the time of preparation of this report, the mine plan and schedule had not yet been finalized. ML/ARD management strategies will be refined on an ongoing basis as mine planning activities become more concrete. A standalone ML/ARD Management and Monitoring Plan will ultimately be prepared to replace this chapter. This Plan is intended to be a living document that will be updated to reflect improvements in ML/ARD knowledge, mine plan resolution, and operational constraints as needed. Best practice mitigation strategies informed by this ML/ARD assessment include:

- Mine Plan Optimization
- Material Segregation and Strategic Placement

Quantitative effects of these mitigation strategies have been simulated as part of the Project's geochemical source term and water quality models. Modelling results have been used to inform the Project's Water Management Plan; all contact water from the mine site during Operations will be collected and treated.

7.1.1 Mine Plan Optimization

Mine plan optimization to avoid the disturbance of materials with high ML/ARD risk represents a proactive mitigation strategy. Mercury was found to be a POPC during water quality modelling which prompted Agnico Eagle to further study its sources and mobility across the different material types and processes (Section 6). Notable Hg leaching is largely restricted to tailings materials and likely linked to the mineralogy of spatially limited ore horizons and metallurgical processing (*e.g.,* cyanidation). Outcomes from this study were incorporated into the mine plan (*i.e.,* sequencing and/or avoidance of Hg-rich areas within the deposit).

7.1.2 Material Segregation and Strategic Placement

7.1.2.1 ARD Prevention

Although ML may occur under a range of conditions, the primary source control objective for rock that will be mined during operations is the identification, segregation, and management of PAG material to prevent the onset of ARD. There are several PAG handling methods typically employed in mining projects. The most common strategies aim to (i) limit oxygen ingress to inhibit sulphide oxidation, or to (ii) provide excess alkalinity that effectively buffers acidity generated during sulphide oxidation.

Submersion of PAG rock is considered industry best practice as an ARD prevention strategy. This management method relies on the geochemical principle that oxygen diffusion within mixed saturated media is slow enough to promote its depletion in pore water and largely inhibit sulphide oxidation. Various studies have shown the effectiveness of this principle at multiple scales (MEND, 1998, 2001, 2007; Romano *et al.,* 2003; INAP, 2009 and references therein). Limited oxygen concentrations in water compared to air (factor of 30), as well as significantly slower transport of oxygen to reaction sites via diffusion in water compared to in air (a factor of 10,000), represent the key mechanisms.

Preventing PAG rock acidification through the supply of excess alkalinity can also be achieved via in-situ (available NP) or external (borrow materials, chemical amendments) acid-buffering agents. If PAG rock volumes are relatively low, as is projected for the Upper Beaver project, blending or interlayering of PAG and NPAG rock and/or tailings at carefully designed ratios and layer thicknesses can be a cost-effective PAG management method.

At present, Agnico Eagle is considering multiple PAG management methods to maintain long-term circum-neutral mine drainage. These include:

- Limit oxygen ingress by:
    - Backfilling (or leaving) PAG mine rock into the underground working and subsequent flooding for subaqueous storage;
    - Co-deposition of PAG in the (tension) saturated zone of the TSF; and
- Provide excess alkalinity by:
    - Co-deposition of PAG rock in engineered layers within NPAG domains of the RSF (AEX Project); or
    - Co-deposition of PAG in the (tension) saturated zone of the TSF.

Although not currently built into the mine plan, it is understood that backfilling of PAG rock into the open pit below the final pit lake elevation is a possible contingency ARD mitigation strategy should future modelling results demand alternative storage.

For any of these strategies to be effectively implemented, it is crucial that PAG material is delineated to allow for effective segregation. Preliminary delineation of PAG materials across the deposit was led by Agnico Eagle Geology via block modelling of assay proxies which were developed by Lorax. Most of the assay exploration database is based on four acid digestion multi-element analysis, while a relatively small portion of the exploration drill core also underwent aqua regia digestion analysis.

The review of Ca/S as a proxy for NPR (*i.e.,* Modified NP/$AP_{total\ S}$) demonstrated variably strong correlations across lithological units and digestion methods (*note: other proxy elements and elemental ratios were considered but proved less reliable and are therefore not further discussed herein*). NPR was conservatively adjusted (NPR_{adj}) to account for the uncertainty of the various proxies as well as the potential for unavailable (*e.g.,* non-liberated) NP on a mining scale relative to the Modified NP test. The NPR_{adj} was calculated with the Modified NP sensitivity presented in Section 4.2.2 and involve a 25% reduction in Modified NP.

Figure 7-1 depicts the NPR_{adj} as a function of Ca/S (four acid), Ca/S (aqua regia), and total S (%), all of which represent proxies carried forward in this assessment. Overall, NPR_{adj} is moderately correlated to all three parameters. The weakest relationship is between NPR_{adj} and four acid Ca/S. Relationships were quantified for all lithological units for which at least five data points were available (Table 7-1). The following findings and associated recommendations resulted from this exercise:

- The best and most conservative data fit that links NPR to the Ca/S ratio is generally expressed by a power function (NPRadj = a * [Ca/S]b) rather than a linear fit.
- The strength of the Ca/S correlations is not necessarily tied to the type of digestion method utilized for the assessment (r2 values range from 0.28 to 0.99). Nevertheless, due to the known association of aqua regia digestible Ca with NP, it is recommended that the aqua regia Ca/S thresholds be prioritized for PAG model development where possible.
- To further address uncertainty and provide a secondary layer of conservatism, any material with a total S content of ≥0.74% should be classified as PAG across the deposit, regardless of the calculated Ca/S value. A negative relationship of NPR and total S with a trend line intersecting at NPR = 2.0 and total S ~ 0.74% is evident across lithological units and in the overall dataset (Figure 7-1).

The above relationships and proxy guidelines will be updated continuously as new data become available. The workflow for the integration of geochemical proxies into the block model and to delineate PAG volumes is given, in order of priority in Table 7-1.

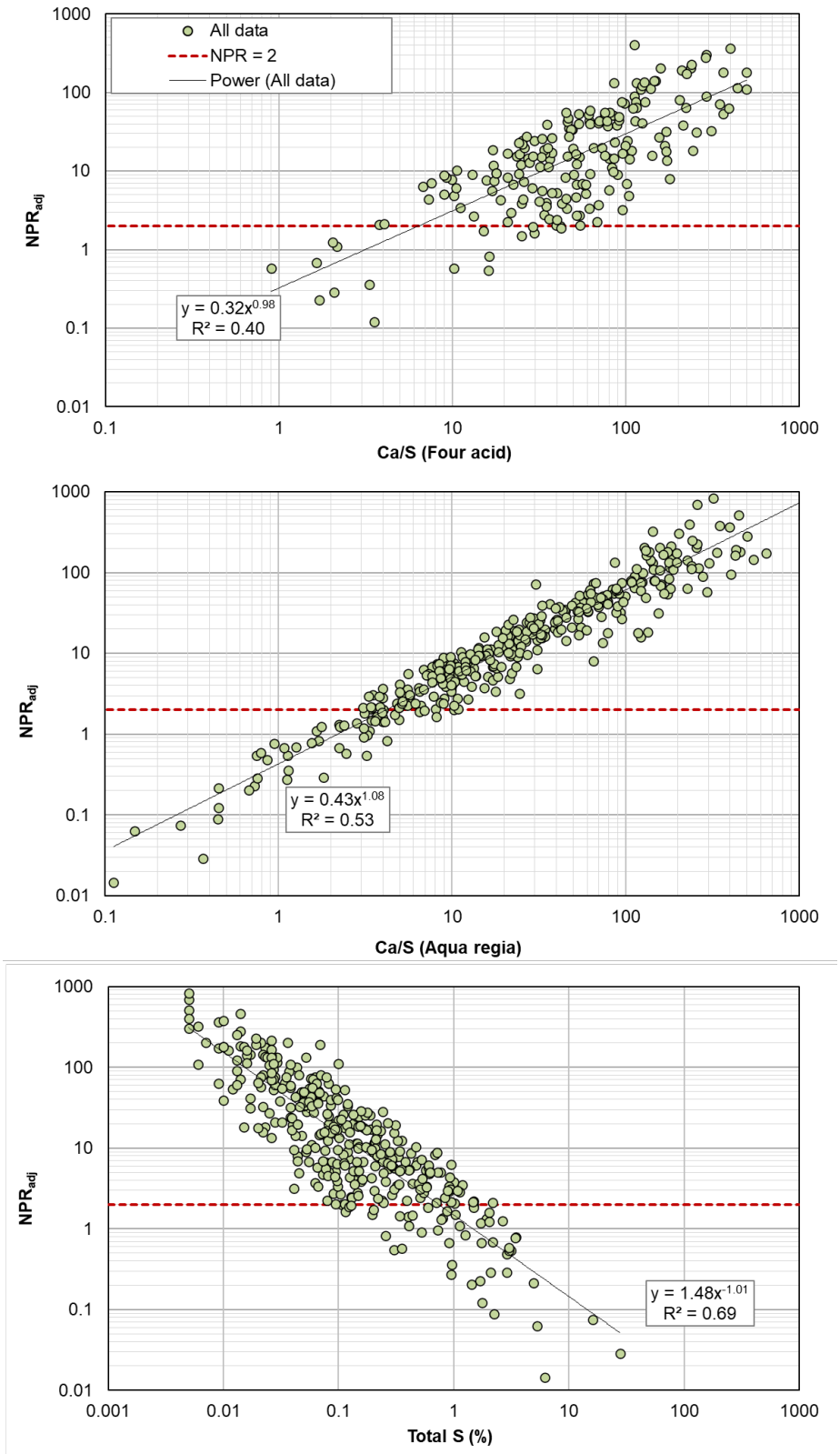

Figure 7-1: Relationships of NPR_{adj} *versus* four acid Ca/S (top), aqua regia Ca/S (middle), and total S contents (bottom) for the full static test dataset.

Table 7-1:
Overview of Geochemical Proxies (total S and Ca/S) for the Incorporation into the Deposit's PAG Delineation Model

Unit	1. Total S threshold for PAG rock	2. NPR_{adj} proxy - aqua regia			3. NPR_{adj} proxy - four acid		
		n	r^2	Ca/S	n	r^2	Ca/S
Blake River Mafic	0.74%	158	0.56	4.40	75	0.43	6.20
Crowded Porphyry		44	0.70	3.31	24	0.28	4.24
Gabbro		29	0.70	4.84	26	0.47	11.51
Mafic Syenite		52	0.60	4.35	9	0.81	11.25
Mafic Syenite Porphyritic		19	N/A	-	-	0.99	4.05
Tisdale		73	0.60	3.90	10	0.76	3.46
Volcanoclastic		15	0.92	4.30	7	0.69	3.50
Other Lithologies		3	N/A	N/A	1	N/A	N/A

Notes: The implementation of the proxy criteria should occur in order of priority from 1. - 3.
PAG = Potentially Acid Generating; PAG = total S ≥ 0.74% and Ca/S < proxy value.
r^2 values are for the power regression established for each lithological relationship.

Importantly, given the unique geochemical characteristics and low PAG proportion (<5%) of overburden materials, no special handling is currently proposed for these materials.

7.1.2.2 Definition of Construction Rock

Agnico Eagle will require significant amounts of mine rock for the construction of infrastructure across the site during the Project. Two key constraints are affecting the use of mine rock material for construction purposes:

- Construction rock must be NPAG;
- Construction material must be low-ML.

Segregation of PAG materials is achievable as discussed above. From an ML perspective, the exclusion of PAG rock from construction activities will implicitly limit ML potential via (i) maintenance of pH-neutral drainage conditions and (ii) the restriction of S contents and associated sulphide minerals. Further segregation based on the ML potential of NPAG rock is less straightforward.

As discussed in 4.2.4, there are few relationships between ML risk for POPCs and solid phase composition or lithology. Leach testing data from SFE and humidity cell testing indicate that solid phase Mo content is a predictor of dissolved Mo, Cd, and to a lesser extent As, concentrations from mine rock. While no correlation is evident between solid phase Cu content and Cu leachability in SFE tests, humidity cell data provide evidence for

a link. As a preliminary measure to minimize the neutral-pH ML, it is recommended that NPAG materials with solid phase Mo contents >100 ppm and Cu contents >1,000 ppm be eliminated from consideration for construction rock. These thresholds should be integrated, along with the PAG delineation criteria to aid the planning for operational segregation and mine scheduling to reduce the geochemical impacts.

7.2 ML/ARD Monitoring

The objective of the ML/ARD monitoring program is to build an operational mine rock, overburden, and tailings database to validate and refine current (pre-mining) geochemical relationships, ML/ARD classification systems (*i.e.,* PAG delineation, ML characteristics), source control measures, and source term assumptions. The mine rock and overburden monitoring program can be subdivided into two major components, namely (i) pre-blast/disturbance monitoring, and (ii) post-deposition verification monitoring.

Tailings monitoring should occur within the mill environment at a location as close to the discharge point as possible and specifically after filtration and CN-detoxification. An overview of the minimum sample frequency for the different material types is given in Table 7-2.

Table 7-2:
Recommended Sampling Frequency for the Different Material Types as Part of the ML/ARD Operational Monitoring Program

Program Component	Sample Type	Sampling Frequency
Pre-Blast/Disturbance Monitoring	Mine Rock	1 sample per 25,000 t
	Ore	1 sample per 50,000 t
	Overburden	1 sample per 50,000 t
Verification (Post-Deposition)	Mine Rock - Construction sites, Surface stockpiles	1 sample per 100,000 t
	Ore - Temporary stockpile(s)	1 sample per month
	Overburden - Temporary stockpile(s)	1 sample per 100,000 t
Other	Tailings/Supernatant	1 sample per month

Notes: The monthly tailings and supernatant sample will be a composite of multiple grab samples collected throughout the month.

7.2.1 Pre-Blast/Disturbance Monitoring

The pre-blast phase of the program is intended to improve confidence in the current PAG and construction rock volumes. Geochemical monitoring during this portion of the program is to be carried out well in advance of blasting to allow for the adjustment of geochemical block models and mine planning, as needed. For example, if uncertainty associated with the existing PAG model is found to have led to the misclassification of PAG rock volumes,

operational monitoring should be sufficiently proactive to allow an adjustment of the material handling and deposition schedule.

Mine rock and ore will be monitored by collecting grade control drill cuttings from within the mining domain, with subsequent analysis at an offsite and/or onsite laboratory. If grade control sampling does not adequately cover mine rock domains within the open pit, blast hole sampling may need to be conducted complementarily. To allow for material handling flexibility, grade control sampling is preferable since the relevant geochemical data would be produced well before material movement occurs allowing for the integration into the geological block model and increased operational flexibility.

The overall sampling frequency for mine rock will be a minimum of one sample per 25,000 t of material blasted. At an estimated total mine rock tonnage of 16 Mt, this frequency translates into approximately 640 samples over the life of mine. Materials falling within the ore domains will require a lower sampling frequency (*i.e.,* 1 sample per 50,000 t; Table 7-2) because ore will only be stored temporarily in the ROM stockpiles. Material in the ROM stockpiles is not expected to turn acidic during operations and will not be used as a source for construction.

Unconsolidated soil and till materials, collectively referred to as overburden, will be monitored by collecting composite samples from test pits or active excavation sites. One composite soil and till sample is to be collected for every 50,000 t of disturbance. The rationale for the lower frequency compared to mine rock is the lower geochemical variability (*e.g.,* sulphur contents) and overall lower risk with respect to ML/ARD.

All mine rock and overburden samples should be analyzed for ML/ARD parameters at an accredited external laboratory. At a minimum, all samples should undergo the following static testwork:

- Total S and total C;
- Modified NP; and
- Aqua regia and/or four acid digestible metals (depending on ongoing exploration and grade control digestion method).

NPAG rock considered for construction purposes should additionally be submitted for SFE testing at a frequency of approximately 20% of all routine mine rock ML/ARD monitoring samples to confirm and adjust the ML proxies proposed herein.

7.2.2 Tailings Monitoring

Filtered tailings should be sampled at a frequency of one composite sample per month. Supernatant (process water) associated with the tailings should undergo water analysis at

the same frequency if it can be extracted or decanted. Routine tailings monitoring should occur at a mill location immediately before transfer to the TSF so that the most representative material is being collected.

At the discretion of a QP, additional tailings and supernatant streams prior to this point (*e.g.,* rougher tailings, pre-detox) may be requested to improve the understanding of metal mobility and fractionation throughout the processing circuit. For example, should Agnico Eagle decide to incorporate a Hg treatment process within the mill circuit, its effectiveness will need to be validated.

7.2.3 Verification (Post-Deposition) Monitoring

A verification monitoring program will be initiated for selected facilities to confirm the geochemical character of deposited materials and the effectiveness of PAG segregation practices. This secondary monitoring program will also help validate assumptions made for geochemical source terms. Verification monitoring will apply to any mine rock and overburden facilities that will be permanently exposed to oxidizing weathering conditions. Managed PAG rock to be co-deposited in the TSF or backfilled into the open pit and underground workings will not require verification monitoring. As such, locations at which this component of the program would apply include:

- AEX Project rock storage facility (RSF), and
- Construction sites utilizing mine rock (*e.g.,* mine roads, pad areas).

The verification monitoring program samples will be collected *in situ* from the stockpiles and construction sites. A sampling frequency of one sample per 100,000 t of deposited mine rock and overburden is proposed. Since the ROM ore stockpiles feeding the mill are likely highly transient in nature, one composite sample should be collected from these facilities per month. All verification monitoring samples should represent relatively large (>5 kg) and field-screened (-1/4") test pit composite samples collected along ~10 to 20 m transects in the respective facilities so that a given lift or construction site is adequately captured.

7.2.4 QA/QC Sampling

In order to maintain quality assurance and quality control (QA/QC) of the monitoring data, duplicate samples should be collected and submitted to an accredited external laboratory. One in every 10 samples analyzed for a limited parameter suite by the onsite laboratory should be submitted to an external laboratory for full ABA testwork and solid phase metals. These results can be compared to the onsite analyses to evaluate if the results are in good

agreement and will provide ongoing support for updates of ML/ARD proxies and other modelling refinements as needed.

7.2.5 Seep Surveys

Along with the operational water quality monitoring program, a contact water seep survey should be carried out on an opportunistic basis. Monitoring seep water quality can provide an early indication of increasing metal leaching or the acidification of porewater. Full-scale seep monitoring is also crucial to validate and refine geochemical source terms assumptions feeding into the site-wide water quality model. Where possible, seep monitoring should occur as close to the contact zone (*e.g.,* toe of a stockpile) as possible to minimize dilution and attenuation effects. Potential monitoring locations include the following:

- Pit sumps and underground sumps;
- Construction site ditch systems;
- Overburden stockpile; and
- Runoff within or seepage at the toe of the TSF.

Seep water quality monitoring is expected to be more irregular than other contact water quality monitoring due to changes in site hydrology, but should be conducted opportunistically and at a minimum once a quarter across the site during spring, summer and fall. The analytical suite should mirror the suite of parameters of the regular water quality monitoring program. Where possible, flow rates should be measured, or at a minimum, qualified during each sampling event.

7.3 Contingency Measures

The ML/ARD management strategies and monitoring program described in the previous sections are, in combination with mine water management and treatment, intended to minimize and monitor the geochemical impacts of all mine materials on the downstream water quality. However, should operational monitoring indicate that PAG classification, segregation, and other geochemical conditions (*i.e.,* metal leaching) are significantly different from the targeted outcomes, or that portions of the ML/ARD management program cannot be effectively achieved, contingency measures will be triggered to further mitigate potential ML/ARD risk of the Project. These are summarized in Table 7-3. Within each condition described, the corresponding actions are sorted from more proactive to more reactive. Due to the proactive nature of the primary ML/ARD management strategies (Section 7.1), such corrective measures are not generally anticipated.

Table 7-3:
Overview of Potential ML/ARD Contingency Measures

Condition	Contingency Measure
Higher than expected PAG proportions	Adjustment of material handling practices for affected mining domain
	Adjustment of assay proxies and redefinition of predictive block model
	Redesign of PAG storage facilities/capacity (*e.g.,* backfill)
	Revisit source term assumptions and water quality models
Misplaced PAG or high-ML material in NPAG/construction sites	Delineation of misplaced rock zones via additional sampling
	Quantification of effects on source term and water quality models
	Rehandling of misplaced material as necessary
	Adjustment of water management and/or treatment capacities

Notes: PAG = Potentially Acid Generating; NPAG = Non-Potentially Acid Generating; ML = Metal Leaching

8. Conclusions & Recommendations

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8. Conclusions & Recommendations

8.1 Conclusions

A total of 374 Upper Beaver samples, including 310 mine rock and 64 ore samples, were collected as part of the static characterization program comprising ABA and metals analysis. The following key conclusions can be drawn from the static test results:

- The sulphide mineralogy is dominated by pyrite and chalcopyrite, where pyrite is more common overall. The abundance of chalcopyrite shows a positive relationship with aqua regia digestible Cu, indicating that chalcopyrite is the dominant host for this species.
- Comparison of mineralogy, ABA, and metal compositions suggest that (i) carbonate phases are the primary source of NP across Upper Beaver lithologies, and (ii) ankerite is a strong contributor to overall NP. Mineralogical analysis was incorporated into the comparison of NP metrics best suited for Upper Beaver mine materials.
- Sulphide S represents the dominant form of S and makes up >90% of total S in more than 83% of all the samples. Where sulphate phases are present, it is unclear whether they are hydrothermal in origin or have formed during sample storage. Therefore, the total S content of the sample is conservatively used as the basis for the calculation of AP in this ML/ARD study.
- At higher NP contents, CaNP tends to overestimate Modified NP while the opposite is true in the low-NP range. Mineralogical analysis revealed that these discrepancies are likely due to the presence of ankerite, siderite, and reactive aluminosilicates. Given the mineralogical understanding of the deposit, Modified NP was chosen as the more reliable NP metric to support the classification of Upper Beaver mine materials.
- A total of 11% of all Upper Beaver mine rock samples analyzed are classified as PAG based on an NPR threshold of 2.0. The same proportion was calculated for ore. The highest proportion of PAG mine rock occurs in the Volcanoclastic (33%) and Tisdale (23%) units. Three mine rock units (Gabbro, Mafic Syenite Porphyritic, and Late-Stage Dykes) were deemed exclusively NPAG.
- Spatial trends with respect to PAG rock distribution across the deposit include the following:

  - The highest PAG proportion overall is found in the underground domain of the Main Deposit (16%) which shows the highest lithological variability.
  - The open pit of the Main Deposit shows a relatively lower PAG proportion at 5%.
  - Samples from the Northeast Deposit, comprising the smaller pit (Retention Pond 2) and associated underground workings, are characterized as entirely NPAG.

- A sensitivity analysis was undertaken to evaluate the PAG rock volumes assuming that 25% of the Modified NP value for a given sample is mineralogically locked and unavailable for reaction. The total PAG volume showed limited sensitivity to this assumption, providing confidence in the PAG volume estimates.
- Elevated solid phase metal contents were observed in both ore and mine rock, with Cu and Mo contents consistently greater than 5x the AUCCA in multiple units. Cu is notably enriched in the Tisdale, Volcanoclastic, and Mafic Syenite Porphyritic units, while Late-Stage Dykes show the fewest elements above this threshold.
- All SFE and kinetic test leachates have remained circum-neutral to date; however, decreasing pH trends with values consistently dropping below 7.0 appear to be developing in one PAG Tisdale humidity cell (HC2) after cycle 150.
- SO_4 concentrations generated by all humidity cells except HC1 initially range from 10 to 50 mg/L and rapidly drop to <10 mg/L within 10 weeks of testing. Sulphate concentrations are highest in leachate from Mafic Syenite sample HC1 which has the lowest solid phase sulphide S content but the highest sulphate S content. It is therefore inferred that the measured SO_4 concentrations in this cell are primarily a result of the dissolution of sulphate minerals/phases rather than sulphide oxidation. Field bins have generally produced more variable and higher SO4 concentrations in leachate than humidity cells, ranging from 5.0 to ~1,000 mg/L.
- POPCs were identified via screening of SFE and kinetic test results against 5x PWQOs as a screening tool to inform water quality modelling. It was found that many of the same species were flagged across the different test scales providing confidence ML potential overall. Specific POPCs for circumneutral pH conditions are as follows:
  - SFE: Mo
  - Humidity cells: Mo, Cd, As

  - Field bins: Mo, Cd, As, P (Cu and Zn were also found to be greater than the screening threshold; however, data quality issues has called these results into question).

- There is no clear association of POPC leaching with specific lithologies, deposit location, or PAG/NPAG designation. However, it is presumed that vein types and associated unique mineralization characteristics (*e.g.*, molybdenite formation) broadly increase the risk for ML.
- The solid phase inventory of Cd, Cu, and Mo has a moderate to strong influence on their respective leaching behaviour. All three of these species are believed to be dominantly associated with sulphide minerals. Different sulphide phases may be unique to specific lithologies, alteration styles, and vein generations.
- Higher solid phase Mo is linked to elevated leachate concentrations for both Mo Cd, and to a lesser extent As. This suggests that limiting the use of materials with elevated Mo content could help reduce the potential for ML of all three elements.
- Whole tailings samples show NPR values of ≥ 9 and therefore can be confidently classified as NPAG.
- The suite of POPCs established for tailings overlaps with that of mine rock and ore, and includes Co, Cu, Hg, Mo and P. Of these, elevated Co and Hg concentrations are believed to be primarily caused by the mill process and reagent addition such as cyanidation and CN-detoxification. $CuSO_4$ is also added as a catalyst during the latter process and may therefore leach at an increased rate (relative to chalcopyrite oxidation alone) until process water and associated labile phases are displaced.
- Concentrations of sulphate and CN/N-species in tailings supernatant and leachates are generally high and attributed largely to the mill process.
- A separate investigation addressing the leachability of Hg from tailings yielded the following results:
  - The solid phase Hg content of ore samples is a notable, albeit weak control on the leached Hg from ore samples. Particle size and grinding technique (wet versus dry) do not appear to affect Hg leachability from ore materials.
  - Dissolved Hg concentrations in both supernatant and SFE leachates are broadly correlated with solid phase Hg content, especially when cleaner tailings are omitted from the analysis.
  - The metallurgical process increases Hg leaching from tailings compared to Hg leaching from ore samples. Specifically, tailings processed with cyanidation

(CN-floatation and CN-detoxification) have equal or higher leached Hg than ore samples with the same solid phase Hg contents.

- A readily oxidized fraction, such as labile sulphides, could account for the detectable leachable Hg. MeHg is preferentially leached from both ore and tailings compared to the solid phase, although MeHg accounts for a relatively small proportion (<5.0%) of total leached Hg.

- The overwhelming fraction of overburden samples is considered NPAG (4% PAG) based on an adjusted PAG classification method that considers total S contents and the unique geochemical characteristics of till and soil materials relative to bedrock. Overall, till materials appear to have lower ML/ARD risk than organic rich topsoils.
- Metals/metalloids identified as POPCs in overburden via SFE testing include Al, Cd, Cu, Mo, P, and V. These parameters are generally consistent with mine rock POPCs. It is noted that unconsolidated bedrock fragments were identified in multiple of the collected overburden samples. While crushing of such fragments would likely be relatively minimal during overburden stripping, a chemical influence of unconsolidated bedrock on overburden seepage cannot be ruled out.

8.2 Recommendations for Management and Monitoring

High-level ML/ARD management and monitoring strategies are described in this report. A standalone ML/ARD Management Plan will need to be developed as detailed engineering designs are formalized for provincial permitting. The following key conclusions can be drawn with respect to ML/ARD management and monitoring:

- All PAG material produced during operations will be managed via co-deposition with tailings in the TSF or as underground backfill. Due to the generally high NP of Upper Beaver mine materials, no ARD is expected to develop anywhere on site during operations and in closure.
- Several relationships identified to link the ML/ARD results from this study with the exploration assay database for PAG and NPAG determination. It is recommended that (total) S thresholds and Ca/S ratios be incorporated into the geo-environmental (PAG delineation) model. While Ca/S proxies vary by lithology and digestion method, a total S cutoff of 0.74% is currently proposed to discriminate between PAG (>0.74%) and NPAG (≤0.74%) mine rock.
- All mine rock used for construction should be NPAG. The exclusion of PAG rock from construction material will limit ML potential. In addition, it is recommended preliminarily that materials with solid phase Mo contents of >100 ppm and/or a Cu

content of >1,000 ppm be eliminated from consideration for construction rock. These restrictions will act to limit ML from several identified POPCs.

- Since tailings are consistently NPAG and overburden is predominantly NPAG, no special handling is recommended for these material types. Operational ML/ARD monitoring should nevertheless be carried out to confirm the geochemical findings of this assessment.

9. Closure

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9. Closure

This report was prepared for the exclusive use of Agnico Eagle in support of the Upper Beaver Gold Project. Please contact the Lorax staff below with any questions regarding this report.

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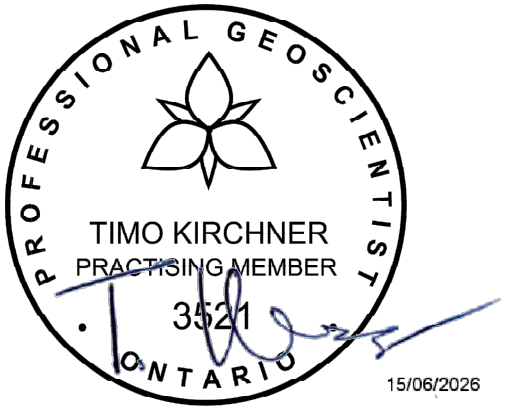

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References

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References

Agnico Eagle, personal communication (2026). Email by Jason Plamondon on May 28, 2025.

AMIRA (2002). ARD Test Handbook - Project P387A Prediction and Kinetic Control of Acid Mine Drainage, AMIRA International Limited, Melbourne, Australia.

ASTM International E2492-02 (2002). Standard Test Method for Forms of Sulfur in Coal (ASTM D2492-02). https://doi.org/10.1520/E2492-02.

ASTM International D6316-17 (2017). Standard Test Method for Determination of Total, Combustible and Carbonate Carbon in Solid Residues from Coal and Coke (ASTM D6316-17). https://doi.org/10.1520/D6316-17.

ASTM International D6913 and D6913M (2017). Standard Test Methods for Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis (ASTM D6913 & D6913M). https://doi.org/10.1520/D6913_D6913M-17.

ASTM International E1915-20 (2020). Standard Test Methods for Analysis of Metal Bearing Ores and Related Materials for Carbon, Sulfur, and Acid-Base Characteristics (ASTM E1915-20). https://doi.org/10.1520/E1915-20.

Barazzuol, L., & Sexsmith, K. (2012). Application of an advanced mineralogical technique: sulphide mineral availability and humidity cell interpretations based on MLA analysis. Proceedings of the 9th International Conference on Acid Rock Drainage, Ottawa, Canada.

Blowes, D. W., Ptacek, C. J., Jambor, J. L., & Weisener, C. G. (2003). The geochemistry of acid mine drainage. In Mineralogy of Ore Deposits, 149–204.

Bouzahzah, H., Benzaazoua, M., Bussière, B., & Plante, B. (2013). Acid-generating potential calculation using mineralogical static test: Modification of Paktunc equation. Mise en garde, 65.

Chopard, A., Benzaazoua, M., Bouzahzah, H., Plante, B., & Marion, P. (2017). A contribution to improve the calculation of the acid generating potential of mining wastes. Chemosphere, 175, 97-107.

Driscoll, C. T., & Schecher, W. D. (1990). The chemistry of aluminum in the environment. Environmental Geochemistry and Health, *12*(1-2), 28-49.

Eary, L. E., & Williamson, M. A. (2006). Simulations of the neutralizing capacity of silicate rocks in acid mine drainage environments. J. Am. Soc. Min. Reclam, 2, 564-577.

Golder Associates Ltd. (Golder) (2021). Upper Beaver Project – 2020 Geotechnical Investigation Factual Report. Prepared in October 2021.

The International Network for Acid Prevention (INAP) (2009). Global Acid Rock Drainage Guide (GARD Guide). http://www.gardguide.com.

Jambor, J. L., Dutrizac, J. E., & Chen, T. T. (2000). Contribution of specific minerals to the neutralization potential in static tests. In Proceedings of Fifth International Conference on Acid Rock Drainage; Society for Mining, Metallurgy, and Exploration, Littleton, CO, USA (pp. 551-565).

Johnson, C. A., Grimes, D. J., Leinz, R. W., & Rye, R. O. (2008). Cyanide speciation at four gold leach operations undergoing remediation. Environmental science & technology, 42(4), 1038-1044.

Kempton, H. (2012). A Review of Scale Factors for Estimating Waste Rock Weathering from Laboratory Tests. In 9th International Conference on Acid Rock Drainage. Ottawa, Canada.

Kirchner, T. & Mattson, B. (2015). Scaling geochemical loads in mine drainage chemistry modelling - an empirical derivation of bulk scaling factors, submitted to 10th International Conference on Acid Rock Drainage, Santiago, Chile.

Lapakko, K. A. (2003). Developments in humidity cell tests and their application, in: Jambor, J. L.; Blowes, D. W.; Ritchie, A. I. M., (Eds.), Environmental aspects of mine wastes, Minerals Association of Canada 147-164.

Larios, R., Fernández-Martínez, R., & Rucandio, I. (2012). Comparison of three sequential extraction procedures for fractionation of arsenic from highly polluted mining sediments. Analytical and Bioanalytical Chemistry, 402(9), 2909–2921.

Lorax (2026a). Upper Beaver Mine – Geochemical Source Term Model Approach and Results. Draft technical memorandum submitted in May 2025.

Lorax (2026b). Upper Beaver Project: Geochemical Characterization of McBean Waste Rock. Draft technical memorandum submitted in May 2025.

Malmström, M. E., Destouni, G., Banwart, S. A., & Strömberg, B. H. (2000). Resolving the scale-dependence of mineral weathering rates. Environmental science & technology, 34(7), 1375-1378.

Mine Environment Neutral Drainage Program (MEND). 1998. Design Guide for the Subaqueous Disposal of Reactive Tailings in Constructed Impoundments. Report 2.11.9, CANMET.

Mine Environment Neutral Drainage Program (MEND). 2001. Prevention and Control. Volume 4. Manual 5.4.2d. G.A. Tremblay and C.M. Hogan (Eds.), CANMET.

Mine Environment Neutral Drainage Program (MEND). 2007. Assessing the Long Term Performance of a Shallow Water Cover to Limit Oxidation of Reactive Tailings at Louvicourt Mine. Report 2.12.2, Natural Resources Canada.

Moncur, M.C., Ptacek, C.J., Lindsay, M.B., Blowes, D.W. and Jambor, J.L. 2015. Long-term mineralogical and geochemical evolution of sulphide mine tailings under a shallow water cover. Applied Geochemistry, 57, pp.178-193.

Ontario Ministry of Environment, Conservation and Parks (MECP). 2025. Rules for Soil Management and Excess Soil Quality Standards. Prepared February 19, 2024.

Ontario Ministry of Environment and Energy (MEE) (2021). Water management: policies, guidelines, provincial water quality objectives. Retrieved from www.ontario.ca/page/water-management-policies-guidelines-provincial-water-quality-objectives#section-2 . Updated August 16, 2021.

Orlóci-Goodison, R. A., Lafrance, B., Beaudoin, G., & Côté-Mantha, O. (2025). The structural setting and evolution of the Upper Beaver gold–copper deposit, Ontario, Canada. Canadian Journal of Earth Sciences, 62(2), 401-425.

Pirrie, D., Butcher, A. R., Power, M. R., Gottlieb, P., & Miller, G. L. (2004). Rapid quantitative mineral and phase analysis using automated scanning electron microscopy (QemSCAN); potential applications in forensic geoscience. *Geological Society, London, Special Publications*, *232*(1), 123-136.

Price, W.A. (2009). Prediction Manual of Drainage Chemistry from Sulphidic Geologic Materials. Canadian Mine Environment Neutral Drainage (MEND). Report 1.20.1.

Romano, C.G., Mayer, K.U., Jones, D.R., Ellerbroek, D.A. and Blowes, D.W. 2003. Effectiveness of various cover scenarios on the rate of sulphide oxidation of mine tailings. Journal of Hydrology, 271(1-4), pp.171-187.

Sapsford, D. J., Bowell, R. J., Dey, M., & Williams, K. P. (2009). Humidity cell tests for the prediction of acid rock drainage. *Minerals Engineering*, *22*(1), 25–36.

SGS Canada Inc. (2019). TIMA-X TESCAN - Enhancing SGS‘ Automated Mineralogy with TIMA-X Technology. Retrieved from https://www.sgs.ca/media/local/canada/documents/brochures/sgs-canada-inc-minerals-tima-x.pdf.

Smith, K. S. (2007). Strategies to predict metal mobility in surficial mining environments. Reviews in engineering geology, 17, 25-45.

Story Environmental (2013). Upper Beaver Project: Geochemical testing results. Draft technical report submitted to Osisko Mining Ltd. in April 2013.

Story Environmental (Story) (2022).

U.S. Environmental Protection Agency [EPA] (1996). EPA Method 3052: Microwave Assisted Acid Digestion of Siliceous and Organically Based Matrices (Revision 0).

Van Loon, J. C., & Barefoot, R. R. (1989). Analytical methods for geochemical exploration. San Diego, CA: Academic Press Inc.

Weber, P., Thomas, J. E., Skinner, W. M., & Smart, R. S. C. (2005). A methodology to determine the acid-neutralisation capacity of rock samples. *Canadian Mineralogist*, *43*, 1193–1203.

Weisener, C. G., & Weber, P. A. (2010). Preferential oxidation of pyrite as a function of morphology and relict texture. New Zealand Journal of Geology and Geophysics, 53(2–3), 167–176.

Appendix A: Complete Inventory of Upper Beaver ML/ARD Samples

Appendix A1: Ore and Mine Rock Sample Database

Appendix A2: Visual Overview of ML/ARD Sample Distribution

Appendix A3: ML/ARD Sample Selection for Field Testing

AGNICO EAGLE

Appendix A1: Ore and Mine Rock Sample Database

Sample ID	Stratigraphic Group	Lithology (model)	Simplified Unit (Study)	Grade	Deposit	Drill Hole	Drill Hole Year	FROM	TO	LENGTH
Mine Rock										
Q303597	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB14_329	14	243	244	1
Q547824	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_329	14	140	142	2
224099	Blake River Group	Volcanoclastic	Volcanoclastic	Ore	Main Zone	KLUB11_192	11	320	321	1
CAOND143739	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-520	19	15	16.5	1.5
CAOND143752	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-520	19	30	31.5	1.5
CAOND143769	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-520	19	47	48	1
CAOND135432	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-525	19	18	19	1
CAOND135447	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-525	19	33	34	1
CAOND135493	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-525	19	73.5	75	1.5
324659	Blake River Group	Volcanoclastic	Volcanoclastic	Ore	Main Zone	KLUB13_286W1	13	542	543	1
CAOND144162	Blake River Group	Volcanoclastic	Volcanoclastic	Ore	Main Zone	KLUB19-514	19	461	462.3	1.3
CAOND147295	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	6	7.5	1.5
CAOND147309	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	22.5	24	1.5
CAOND147365	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	81.5	83	1.5
CAOND147376	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	93	94.5	1.5
CAOND147387	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	106.5	108	1.5
CAOND147404	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-533	19	129	130.5	1.5
215648	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_186	11	134	135	1
215678	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_186	11	160	161	1
1246238	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_202	11	101	102	1
1246865	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_204	11	91	92	1
1246899	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_204	11	123	124	1
1247138	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB11_205	11	147	148	1
P131723	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB14_342	14	144	145	1
Q547956	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Main Zone	KLUB14_331	14	86	87	1
CAOND270687	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB06_51	6	240	245	5
CAOND270692	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB13_279	13	67	72	5
CAOND270697	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB13_287	13	184	187	3
CAOND270707	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB13_303	13	100	104	4
CAOND270713	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB13_315	13	192	197	5
CAOND270703	Blake River Group	Blake River Mafic	Blake River Mafic	Ore	Northeast Zone	KLUB13_322	13	80	84	4
CAOND135669	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-541	19	17	18	1
CAOND128083	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-549	19	5.5	7	1.5
CAOND128098	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-549	19	23	24	1
CAOND128133	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-549	19	57	58.5	1.5
CAOND130898	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-559	19	14.5	16	1.5
CAOND130922	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-559	19	33	34	1
CAOND130939	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-559	19	47	48	1
CAOND160691	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-601	20	6	6.9	0.9
CAOND160704	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-601	20	19	20.5	1.5
CAOND160721	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-601	20	38	39.5	1.5
CAOND162504	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-604	20	7	8.5	1.5
CAOND162513	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-604	20	18	19.5	1.5
CAOND162549	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-604	20	51.7	53	1.3
CAOND159634	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-616	20	31.5	33	1.5
CAOND159652	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-616	20	55.5	57	1.5
CAOND163334	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-621A	20	6	7.5	1.5
CAOND163343	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-621A	20	19.5	21	1.5
CAOND163353	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-621A	20	30	31.5	1.5
CAOND152411	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-622	20	13.5	15	1.5
CAOND152417	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-622	20	20	21.5	1.5
CAOND152437	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-622	20	42	43.5	1.5
CAOND163396	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-623	20	9	10.5	1.5
CAOND163405	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-623	20	19	20.5	1.5
CAOND163421	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-623	20	39	40.5	1.5
CAOND163433	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-623	20	53	54	1
CAOND163446	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-623	20	70.5	72	1.5
CAOND165558	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-628A	20	15	16.5	1.5
CAOND164779	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-628A	20	49	50	1
CAOND165612	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-628A	20	76.5	77.5	1
CAOND165224	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-629	20	38.5	39	0.5
CAOND165226	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-629	20	39	39.5	0.5
CAOND165262	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-629	20	75.5	77	1.5
CAOND163796	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	26	27.5	1.5
CAOND163810	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	42	43	1
CAOND163824	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	53.5	55	1.5
CAOND163834	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	61.3	62.8	1.5
CAOND163856	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	83	84	1
CAOND167536	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-635	20	9	10.5	1.5
CAOND169332	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-637	20	12	13.5	1.5
CAOND168748	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-642	20	12.6	14	1.4
CAOND168764	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-642	20	30.6	32	1.4
CAOND168782	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-642	20	51	52	1
CAOND166348	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-651	20	8	9	1
CAOND183467	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-713A	21	10.5	12	1.5
CAOND186035	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-717	21	19.5	21	1.5
CAOND186041	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-717	21	28.5	30	1.5
CAOND187628	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-720	21	6	7.5	1.5
CAOND186541	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-721	21	7.1	8	0.9
CAOND186548	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-721	21	15.5	17	1.5
CAOND186416	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-723	21	29	30.5	1.5
CAOND186418	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-723	21	32.4	33	0.6
CAOND186426	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-723	21	37	38.5	1.5
CAOND191005	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-724	21	10	11.5	1.5
CAOND191008	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-724	21	14.5	15.9	1.4
Q547757	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_329	14	77	78	1
CAOND135691	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-541	19	36	37.5	1.5
CAOND135702	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-541	19	48	49.5	1.5
CAOND135719	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-541	19	66	67.5	1.5
CAOND160774	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-601	20	91.5	93	1.5
CAOND152424	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-622	20	29.1	30.6	1.5
CAOND165195	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-629	20	3.5	5	1.5
CAOND165203	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-629	20	14	15.5	1.5
CAOND163777	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	4	5.5	1.5
CAOND163784	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-633	20	12	13.5	1.5
CAOND185519	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-712B	21	29	30.5	1.5
CAOND191002	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-724	21	6	7.5	1.5
Q547738	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_329	14	59	60	1
CAOND130912	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-559	19	26	27	1
CAOND186553	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-721	21	21.5	23	1.5
CAOND167706	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-636	20	7.5	9	1.5
CAOND128183	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB19-549	19	110	111	1
CAOND128192	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB19-549	19	120	121.5	1.5
CAOND130973	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB19-559	19	72	73.5	1.5
CAOND162569	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-604	20	69	70.5	1.5
CAOND165292	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-629	20	104	105.5	1.5
CAOND163908	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-633	20	133	134.5	1.5
CAOND163918	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-633	20	144.5	146	1.5
CAOND187636	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB21-720	21	14	15	1
CAOND188908	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB21-735	21	45.5	47	1.5
CAOND188916	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB21-735	21	53	54.3	1.3
CAOND164896	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	9.3	10.5	1.2
CAOND164897	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	10.5	12	1.5
CAOND164932	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	46.5	48	1.5
CAOND164938	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	55.5	57	1.5
CAOND164955	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	71	72	1
CAOND143779	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB19-520	19	55.5	57	1.5
CAOND128147	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB19-549	19	75.5	77	1.5
CAOND128163	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB19-549	19	91.1	92.4	1.3
CAOND160761	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-601	20	78.5	80	1.5
CAOND160788	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-601	20	108.5	110	1.5
CAOND163898	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-633	20	122	123.5	1.5
CAOND188616	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-727	21	5	6.5	1.5
CAOND188623	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-727	21	14	15.5	1.5
CAOND188631	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-727	21	23	24.5	1.5
CAOND188640	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-727	21	34.7	35.8	1.1
CAOND187492	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-734	21	4	5.2	1.2
CAOND187498	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-734	21	8.4	9.5	1.1

Appendix A1: Ore and Mine Rock Sample Database

Sample ID	Stratigraphic Group	Lithology (model)	Simplified Unit (Study)	Grade	Deposit	Drill Hole	Drill Hole Year	FROM	TO	LENGTH
Mine Rock										
CAOND189446	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-734	21	30.6	32	1.4
CAOND188887	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-735	21	23.6	24.7	1.1
CAOND188895	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-735	21	31.8	33.2	1.4
CAOND164912	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	29	30	1
CAOND164923	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-632	20	36.5	38	1.5
CAOND167723	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB20-636	20	28.75	29.25	0.5
CAOND188865	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-735	21	3.5	5	1.5
CAOND270695	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_279	13	25	30	5
CAOND245050	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_279	13	55.3	59	3.7
CAOND270693	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_279	13	74	78	4
CAOND245047	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_281	13	43	47	4
CAOND245048	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_281	13	60	64	4
CAOND270696	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_287	13	13	18	5
CAOND270711	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_303	13	10	14	4
CAOND270710	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_303	13	36	40	4
CAOND270709	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_303	13	81	86	5
CAOND270718	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_320	13	10	13.5	3.5
CAOND270719	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_320	13	38.5	42	3.5
CAOND270706	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_322	13	19	23	4
CAOND270705	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_322	13	30	34	4
CAOND270704	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_322	13	60	65	5
CAOND270715	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_325	13	37	41	4
CAOND270677	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB20-617	20	28	31.5	3.5
CAOND270678	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB20-619	20	18	22	4
CAOND270680	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB20-619	20	38.5	43	4.5
CAOND270682	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB20-619	20	76.5	81	4.5
CAOND270679	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB20-619	20	90	94.5	4.5
CAOND270698	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB12_275	12	62	65	3
CAOND270708	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB13_303	13	89	93	4
CAOND270699	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB12_275	12	32	35	3
CAOND270701	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB13_322	13	162	167	5
CAOND270702	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB13_322	13	194	199	5
CAOND270676	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB20-617	20	68	73	5
R223828	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_361	14	251	252	1
CAOND136961	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB19-498	19	250.6	252	1.4
pH	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB21-721	21	334	335.4	1.4
CAOND186840	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB21-721	21	342	343.5	1.5
CAOND128338	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB19-549	19	274	275.5	1.5
Q303652	Blake River Group	Dogs BF	Volcanoclastic	Waste	Main Zone	KLUB14_329	14	292	293	1
CAOND125656	Blake River Group	Dogs BF	Volcanoclastic	Waste	Main Zone	KLUB19-525	19	219.5	220.5	1
176531	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB11_177	11	432	433	1
KLUB12_223_251189	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB12_223	12	434	435	1
KLUB12_223_251197	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB12_223	12	442	443	1
251779	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB12_227	12	462	463	1
CAOND194796	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB21-741A	21	419.5	421	1.5
175399	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB11_175W3	11	1040	1041	1
223166	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB11_185	11	353	354	1
223628	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB11_188	11	334	335	1
223634	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB11_188	11	340	341	1
1242982	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB11_200W1	11	1539	1540	1
Q547884	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB14_329	14	195	196	1
CAOND105663	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Main Zone	KLUB19-491	19	423	424.5	1.5
CAOND270717	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Northeast Zone	KLUB13_325	13	166	171	5
CAOND270684	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Ore	Northeast Zone	KLUB14_412	14	459	464	5
CAOND198933	Blake River Group	Volcanoclastic	Volcanoclastic	Waste	Main Zone	KLUB21-756	21	407.5	409	1.5
223687	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_188	11	388	389	1
1241053	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_195	11	167	168	1
1246413	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_202	11	262	263	1
1246971	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_204	11	189	190	1
255156	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_221	12	103	104	1
255199	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_221	12	144	145	1
255799	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_223	12	76	77	1
251005	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_223	12	264	265	1
251737	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_227	12	424	425	1
268294	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_230	12	414	415	1
271228	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_240	12	257	258	1
271241	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB12_240	12	270	271	1
Q547838	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_329	14	153	154	1
Q547969	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_331	14	99	100	1
L750071	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_331	14	184	185	1
L767906	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_333	14	345	346	1
R225293	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_364	14	103	104	1
CAOND105122	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-489	19	211.5	213	1.5
CAOND139371	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-507	19	218.5	220	1.5
CAOND144756	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-517	19	199	200.5	1.5
CAOND169343	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-637	20	25	26.5	1.5
CAOND169457	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-637	20	141	142.5	1.5
CAOND183477	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-713A	21	22.5	24	1.5
CAOND189719	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB21-729	21	96.5	98	1.5
CAOND167549	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB20-635	20	25.5	27	1.5
223884	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_191	11	189	190	1
1242042	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB11_191	11	350	351	1
Q324939	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB13_286W2	13	447	448	1
CAOND128009	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB19-547	19	86	87.5	1.5
R350285	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Main Zone	KLUB14_394	14	235	236	1
CAOND168893	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-642	20	175	176.5	1.5
8018	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB09_146	9	324	324.45	0.45
176455	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB11_177	11	365	366	1
217097	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB11_189	11	126	127	1
R353407	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB14_327W1	14	1796	1797	1
CAOND125609	Blake River Group	Gabbro	Gabbro	Ore	Main Zone	KLUB19-525	19	178	179	1
R353465	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB14_327W1	14	1843	1844	1
R324577	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB14_328W2	14	1687	1688	1
CAOND157956	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-200W13	20	1404	1404.5	0.5
CAOND157957	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB20-200W13	20	1404.5	1405.6	1.1
CAOND191089	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB21-724	21	88.5	90	1.5
KLUB12_207W1_256548	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB12_207W1	12	853	854	1
277231	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB12_254	12	651	652	1
277236	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB12_254	12	656	657	1
CAOND175906	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB21-638W1	21	1222.5	1224	1.5
257465	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB12_222	12	74	75	1
R324036	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB14_328W1	14	1647	1648	1
Q303557	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Main Zone	KLUB14_329	14	202	203	1
N431810	Post-UBIC	Diabase Dyke	Late-stage Dykes	Waste	Main Zone	KLUB14_331	14	248.6	249	0.4
CAOND143812	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB19-520	19	96	97.5	1.5
CAOND127496	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB19-547	19	69	70.5	1.5
CAOND184563	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-708	21	69	70.5	1.5
CAOND191157	Blake River Group	Gabbro	Gabbro	Waste	Main Zone	KLUB21-724	21	144	145.5	1.5
265804	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_246	12	67	68	1
251339	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_223	12	572	573	1
8086	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB09_146	9	394	394.8	0.8
9438	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB09_153	9	263	264	1
9465	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB09_153	9	334	334.7	0.7
176396	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB11_177	11	314	315	1
KLUB12_207_256263	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_207	12	829	830	1
KLUB12_207_256280	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_207	12	842	843	1
KLUB12_207W1_256537	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_207W1	12	842	843	1
257809	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_222	12	834.5	835.5	1
KLUB12_222_257822	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_222	12	847.5	848.5	1
9452	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB09_153	9	274	275	1
259622	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB12_222W3	12	824	825	1
265142	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB12_243	12	38	39	1
L767928	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB14_333	14	365	366	1
L767967	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB14_333	14	402	403	1
L767971	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB14_333	14	406	407	1
176414	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB11_177	11	330.1	331	0.9
268448	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB12_230	12	556	557	1
KLUB12_222_257834	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_222	12	857.5	858.5	1

Appendix A1: Ore and Mine Rock Sample Database

Sample ID	Stratigraphic Group	Lithology (model)	Simplified Unit (Study)	Grade	Deposit	Drill Hole	Drill Hole Year	FROM	TO	LENGTH
Mine Rock										
268332	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_230	12	448	449	1
265271	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_243	12	156	157	1
265848	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_246	12	109	110	1
277486	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_254W1	12	599	600	1
277774	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_262	12	605	606	1
293830	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_267	12	474	475	1
293840	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB12_267	12	484	485	1
R324457	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Main Zone	KLUB14_328W2	14	1583	1584	1
88259	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_163W6	10	1273.3	1274.3	1
88262	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_163W6	10	1274.3	1275	0.7
39897	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_161W2	10	1070	1071	1
92861	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_163W4	10	1232	1232.5	0.5
92862	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_163W4	10	1232.5	1233	0.5
93713	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB10_170W1	10	1001.3	1002	0.7
89463	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_170W4	11	1033.2	1034.2	1
90505	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_171W2	11	1076	1077	1
90555	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_171W2	11	1182	1183	1
90558	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_171W2	11	1185	1186	1
88732	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_174W1	11	1211	1212	1
178947	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_174W7	11	1165	1166	1
175707	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_175W4	11	1004.7	1005.7	1
179112	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180	11	1017	1018	1
KLUB11_180W2_179564	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180W2	11	933	934	1
R353890	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB14_327W3	14	1832	1833	1
178961	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB11_174W7	11	1174	1175	1
88256	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB10_163W6	10	1271	1272	1
88258	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB10_163W6	10	1272.5	1273.3	0.8
1242977	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB11_200W1	11	1534.5	1534.8	0.3
6168	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB09_100W1	9	860.8	861.3	0.5
6196	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB09_100W1	9	876.8	877.3	0.5
27192	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB09_148W2	9	1194	1195	1
27431	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB10_148W3	10	1175	1176	1
39893	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB10_161W2	10	1067	1068	1
41711	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB10_161W4	10	1096	1097	1
95865	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB11_171	11	1091	1092	1
218549	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB11_174W10	11	1197	1197.5	0.5
313324	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB12_262W2	12	767	768	1
R353493	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB14_327W1	14	1866	1867	1
CAOND154411	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB20-200W10	20	1509	1510.5	1.5
CAOND154037	Tisdale	Mafic Syenite Breccia	Tisdale	Ore	Main Zone	KLUB20-200W9	20	1487.4	1488.2	0.8
KLUB11_180W2_179592	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180W2	11	959	960	1
KLUB11_180W2_179597	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180W2	11	1002	1003	1
KLUB12_210W1_248885	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_210W1	12	1019	1020	1
KLUB12_210W1_248895	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_210W1	12	1029	1030	1
250983	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_225W3	12	944	945	1
250988	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_225W3	12	947	948	1
284023	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_225W3	12	977	978	1
279946	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W1	12	703	704	1
314036	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W1	12	783.7	784.7	1
313377	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W2	12	806	807	1
313379	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W2	12	808	809	1
315014	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W3	12	743	744	1
315444	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB12_262W4	12	812	813	1
R353389	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_327W1	14	1782	1783	1
R353737	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_327W3	14	1694	1695	1
R324155	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W1	14	1755	1756	1
R324165	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W1	14	1763	1764	1
R324199	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W1	14	1795	1796	1
R324469	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W2	14	1595	1596	1
R324581	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W2	14	1691	1692	1
R324589	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB14_328W2	14	1699	1700	1
CAOND152062	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-200W11	20	1518.5	1520	1.5
CAOND152076	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-200W11	20	1529.5	1531	1.5
CAOND152203	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-200W11	20	1640.5	1642	1.5
CAOND152218	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-200W11	20	1656	1657.2	1.2
CAOND158905	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-200W13	20	1517	1518	1
CAOND155877	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-310AW1	20	1485.5	1487	1.5
CAOND161540	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-561	20	1276	1277.5	1.5
CAOND161712	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB20-561W2	20	1420	1421.2	1.2
CAOND179977	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB21-307W7	21	1673	1674	1
CAOND181514	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB21-307W7	21	1714.5	1716	1.5
CAOND175938	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB21-638W1	21	1254.1	1255.6	1.5
179639	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180W2	11	1088	1089	1
179644	Tisdale	Mafic Syenite Breccia	Tisdale	Waste	Main Zone	KLUB11_180W2	11	1118	1119	1
95982	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB11_171	11	1236	1237	1
177513	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB11_177	11	583.6	584.4	0.8
223352	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB11_185	11	597	598	1
255063	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB12_220	12	480	481	1
251366	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB12_223	12	597	598	1
262423	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB12_244	12	712	713	1
281591	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB12_247W1	12	664	665	1
325313	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB13_291	13	758	759	1
CAOND147054	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Waste	Main Zone	KLUB19-523	19	475	476	1
217472	Tisdale	Sediment	Tisdale	Waste	Main Zone	KLUB11_190	11	409	410	1
CAOND200894	Tisdale	Sediment	Tisdale	Waste	Main Zone	KLUB21-758	21	481	482.5	1.5
CAOND200903	Tisdale	Sediment	Tisdale	Waste	Main Zone	KLUB21-758	21	491.5	493	1.5
288461	Post-UBIC	Spotted Porphyry	Late-stage Dykes	Waste	Main Zone	KLUB12_256	12	64	65	1
88069	Tisdale	Tisdale	Tisdale	Waste	Main Zone	KLUB10_163W5	10	1256	1257	1
176216	Tisdale	Tisdale	Tisdale	Waste	Main Zone	KLUB11_176	11	1156	1157	1
284960	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB12_250W1	12	899	900	1
95535	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB10_165W2	10	1086	1087	1
175984	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB11_180	11	901	902	1
179323	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB11_180W1	11	871	872	1
179362	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB11_180W1	11	906	907	1
223363	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB11_185	11	606	607	1
262374	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB12_244	12	667	668	1
262393	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB12_244	12	684	685	1
293708	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB12_263	12	561	562	1
325304	Upper Beaver Intrusive Complex	Mafic Syenite Porphyritic	Mafic Syenite Porphyritic	Ore	Main Zone	KLUB13_291	13	750	751	1
176230	Tisdale	Tisdale	Tisdale	Waste	Main Zone	KLUB11_176	11	1168	1169	1
R324732	Tisdale	Tisdale	Tisdale	Waste	Main Zone	KLUB14_328W2	14	1827	1828	1
CAOND245049	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_280	13	440	444	4
CAOND270688	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB06_51	6	445	450	5
CAOND270694	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_279	13	147	151	4
CAOND245042	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_290	13	222	227	5
CAOND245045	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_292	13	195	200	5
CAOND245041	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_296	13	190	195	5
CAOND270714	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_300	13	29	34	5
CAOND270712	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_304	13	334	339	5
CAOND270716	Blake River Group	Blake River Mafic	Blake River Mafic	Waste	Northeast Zone	KLUB13_325	13	133	138	5
CAOND270689	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB24-796GT	24	5	10	5
259341	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Ore	Main Zone	KLUB12_222W2	12	958	958.9	0.9
CAOND270691	Upper Beaver Intrusive Complex	Crowded Porphyry	Crowded Porphyry	Waste	Northeast Zone	KLUB24-798GT	24	210	214	4
CAOND270700	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Northeast Zone	KLUB08_136	8	392.7	396.5	3.8
CAOND245043	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Northeast Zone	KLUB12_255	12	303	308	5
CAOND245044	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Northeast Zone	KLUB12_271	12	478	483	5
CAOND245046	Upper Beaver Intrusive Complex	Mafic Syenite	Mafic Syenite	Waste	Northeast Zone	KLUB13_281	13	145	149	4
CAOND270690	Post-UBIC	Spotted Porphyry	Late-stage Dykes	Waste	Northeast Zone	KLUB24-796GT	24	153	156	3

Appendix A1: Ore and Mine Rock Sample Database

Sample ID	X (coord)	Y (coord)	Z (coord)	PHASE	UG_OPEN PIT	Devpt_5m buffer	ABA Tests	Aqua Regia Acid	Four Acid	SFE	Mineralogy
Mine Rock											
Q303597	10162.41723	9967.841896	114.7605923	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
Q547824	10159.1533	10038.52089	189.8809345	PHASE 1	OP	Outside	☑	☑	☐	☐	☐
224099	10159.59166	9949.324481	58.74574948	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND143739	10020.69121	9998.734537	274.6517139	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND143752	10021.32995	9990.792093	261.9431476	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND143769	10022.00669	9981.918347	247.7529755	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND135432	10131.33627	10023.09438	268.2615286	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND135447	10130.983	10013.65692	256.6078034	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND135493	10130.18798	9988.051599	224.917726	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
324659	10246.94213	10265.71519	-122.6492048	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND144162	10355.17474	10041.7975	-11.50812292	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND147295	10153.51932	10143.85166	283.2539064	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND147309	10157.45118	10133.29584	271.1973828	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND147365	10170.94217	10095.25342	228.1659389	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND147376	10173.51947	10087.81303	219.784622	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND147387	10176.46156	10079.04889	209.946772	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND147404	10181.35507	10064.43379	193.5546592	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
215648	10202.5133	10168.783	204.5390432	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
215678	10204.15984	10150.76434	185.8677594	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
1246238	10032.1052	10296.94277	230.083273	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
1246865	10078.15382	10287.0821	226.8099301	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
1246899	10081.54918	10268.32172	201.1392793	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
1247138	10083.25539	10272.87798	170.6942336	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
P131723	10355.1283	10056.22509	202.3731207	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
Q547956	10213.67924	10157.84234	236.4243453	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND270687	10834.84884	10795.32019	89.5360308	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270692	11100.493	10551.36045	259.2449629	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270697	11105.61169	10562.68834	128.395748	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270707	11210.34104	10528.45356	243.6833718	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270713	10998.64531	10582.33191	156.623188	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270703	11053.23971	10553.56367	240.8939792	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND135669	10102.97234	10175.01588	276.460918	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128083	10070.29073	9982.264278	288.6967988	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128098	10072.26026	9975.199933	273.083456	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128133	10076.06302	9961.558677	241.8986335	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND130898	10144.33733	10077.35098	271.3079305	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND130922	10149.06905	10089.56826	258.6033248	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND130939	10152.62846	10098.97949	248.8688857	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND160691	10055.2724	9914.827547	295.8085445	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND160704	10054.36921	9923.948505	286.1713938	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND160721	10053.22727	9937.089746	272.4968095	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND162504	10066.81066	9921.427435	294.2244422	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND162513	10071.09486	9914.799419	286.5618857	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND162549	10084.40582	9894.730829	263.1305935	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND159634	10175.97216	10035.76232	260.0989092	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND159652	10193.1194	10037.51499	243.4021754	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163334	10062.8418	9924.100252	293.5342515	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163343	10065.79348	9920.418531	280.8858599	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163353	10067.94545	9917.562888	271.0134585	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND152411	10138.12775	10053.68894	272.8989323	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND152417	10142.12377	10051.40513	268.3091602	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND152437	10155.48338	10043.24661	252.8517247	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163396	10034.69581	10062.7979	276.7324762	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163405	10037.15815	10057.6438	268.5245511	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163421	10041.81028	10047.18186	252.1268389	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163433	10045.00381	10039.99503	240.8480077	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163446	10049.12314	10030.70692	226.2938582	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165558	10096.33534	9975.943694	285.6524002	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164779	10096.69384	9952.0538	261.8170919	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165612	10097.22475	9932.654847	242.3329523	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165224	10107.30828	9971.933219	265.0208204	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165226	10107.44358	9971.677043	264.613307	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165262	10117.60144	9952.838637	234.4323229	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163796	10076.03704	10024.83516	273.0848321	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163810	10080.32277	10014.82806	261.7027157	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163824	10083.41901	10007.33965	253.1955371	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163834	10085.33632	10002.32138	247.5403751	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163856	10090.54262	9988.532251	231.9565274	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND167536	9977.046501	10228.03613	290.1793847	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND169332	10000.58092	10293.01991	293.0818467	PHASE 2b	OP	Outside	☑	☑	☑	☑	☑
CAOND168748	10042.4574	10025.41054	278.0930547	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND168764	10033.35609	10029.28592	263.0549113	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND168782	10023.13423	10033.82046	246.2335073	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND166348	10272.62266	10101.2277	279.7454591	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND183467	10257.71805	10110.78248	277.5971565	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186035	9978.979469	10053.30462	271.0592286	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186041	9979.780328	10047.02897	264.6581379	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND187628	9988.306962	10145.08734	281.5392882	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186541	9983.639027	10264.83257	295.5383244	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186548	9985.023313	10259.32604	288.946518	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186416	10013.75859	10104.38567	264.9962588	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186418	10013.3646	10102.32984	262.9175879	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186426	10012.69016	10098.81056	259.3591852	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND191005	9965.521846	10203.69827	291.4161719	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND191008	9966.259446	10200.71162	288.20085	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
Q547757	10155.70313	10083.14418	233.8629909	PHASE 1	OP	Outside	☑	☑	☐	☐	☐
CAOND135691	10106.8422	10163.50441	261.5253027	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND135702	10109.21601	10156.31247	252.2172055	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND135719	10112.65685	10145.48462	238.2559689	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND160774	10050.53899	9974.491527	234.3418197	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND152424	10147.66463	10048.07091	261.9072406	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165195	10097.54711	9989.36942	293.1435977	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165203	10100.47665	9984.057591	284.5734774	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163777	10069.46521	10038.57821	288.9561831	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163784	10071.92439	10033.60925	283.1888704	PHASE 2b	OP	Outside	☑	☑	☑	☑	☑
CAOND185519	10025.80051	10124.33371	260.0137543	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND191002	9964.880416	10206.39255	294.3022462	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
Q547738	10154.99067	10095.98211	246.4594228	PHASE 2a	OP	Outside	☑	☑	☐	☐	☐
CAOND130912	10147.26321	10084.87703	263.4747141	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND186553	9985.97262	10255.5228	284.4040348	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND167706	9978.434285	9982.845382	279.0776421	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128183	10081.64322	9940.354341	193.9219882	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128192	10082.65041	9936.204208	184.6040264	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND130973	10159.19311	10115.88247	231.2978478	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND162569	10091.33861	9884.325735	251.029788	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND165292	10125.24921	9938.231807	211.1860497	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163908	10102.16876	9955.8362	195.6170929	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163918	10104.45449	9948.19133	187.3358102	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND187636	9987.727435	10140.22556	275.5320684	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188908	10050.58066	9857.651356	267.6399453	PHASE 2b	OP	Outside	☑	☑	☑	☑	☑
CAOND188916	10054.31542	9853.989052	262.4055289	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164896	10001.03843	9958.654052	278.3547851	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164897	10001.5827	9957.934423	277.3505942	PHASE 2b	OP	Outside	☑	☑	☑	☑	☑
CAOND164932	10016.11681	9938.64775	250.6535321	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164938	10019.62396	9933.696469	244.0063749	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164955	10025.43943	9925.202397	232.7552707	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND143779	10022.35189	9977.274032	240.3452999	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128147	10078.04483	9954.136115	225.0693154	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND128163	10079.72745	9947.913559	210.9733417	PHASE 2b	OP	Outside	☑	☑	☑	☑	☑
CAOND160761	10051.32549	9965.411071	243.6108417	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND160788	10049.84456	9986.463707	222.2934671	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND163898	10099.73271	9963.045144	203.5604408	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188616	9990.70482	9928.739084	282.1225865	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188623	9992.035652	9923.368303	275.0244519	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188631	9993.371327	9917.992028	267.9313881	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188640	9995.038949	9911.112427	258.8682708	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND187492	10024.83049	9876.455865	297.0604597	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND187498	10024.33537	9873.395142	294.0093391	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐

Appendix A1: Ore and Mine Rock Sample Database

Sample ID	X (coord)	Y (coord)	Z (coord)	PHASE	UG_OPEN PIT	Devpt_5m buffer	ABA Tests	Aqua Regia Acid	Four Acid	SFE	Mineralogy
Mine Rock											
CAOND189446	10021.40947	9857.705313	278.3640415	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188887	10039.34799	9868.515358	283.2660793	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188895	10043.65097	9864.472457	277.3617994	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164912	10008.97454	9948.214044	263.7883316	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND164923	10012.12051	9944.069506	258.0449957	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND167723	9979.746723	9969.828532	262.9716875	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND188865	10029.13605	9878.192943	297.3394342	PHASE 2b	OP	Outside	☑	☑	☑	☐	☐
CAOND270695	11099.83425	10579.92552	290.0261608	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND245050	11100.41488	10559.79675	268.2640775	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270693	11100.49534	10546.90824	254.5091691	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND245047	11100.89064	10576.69776	270.9618385	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND245048	11101.5034	10568.3715	256.1531575	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270696	11099.70512	10595.55201	295.0747903	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270711	11201.28418	10591.43784	307.3268844	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270710	11204.09169	10573.30143	288.9098349	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270709	11208.67711	10541.48012	256.7136628	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270718	10999.46062	10594.3986	294.4445607	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270719	11000.32875	10583.5649	268.098286	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270706	11050.44112	10588.55573	290.7778367	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270705	11051.08282	10582.28371	281.7639754	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270704	11052.55091	10564.80524	256.8124467	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270715	11051.45415	10586.97816	271.495169	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270677	10962.73411	10586.68644	285.3313919	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270678	11150.2237	10608.17682	303.3490445	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270680	11151.15338	10593.19688	289.0210836	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270682	11152.38316	10565.56424	262.9693917	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270679	11152.54944	10555.69891	253.755442	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270698	10899.67748	10555.54189	259.4527402	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270708	11209.36707	10536.20618	251.4259922	PHASE NEB	OP	Outside	☑	☑	☑	☑	☐
CAOND270699	10899.42341	10576.82768	280.5915407	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270701	11053.14019	10505.41625	173.9116013	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270702	11053.69121	10486.583	148.0479398	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
CAOND270676	10962.57041	10557.7289	256.6640652	PHASE NEB	OP	Outside	☑	☑	☑	☐	☐
R223828	10085.14546	10020.38988	108.2245289	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND136961	10063.89844	10154.03953	83.58594583	PHASE 2b	UG	Inside	☑	☑	☑	☑	☑
pH	10020.69294	10055.46717	47.03099652	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
CAOND186840	10021.27831	10050.2782	40.90457419	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
CAOND128338	10097.45579	9876.472929	43.44637813	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
Q303652	10163.34662	9935.004141	78.40377613	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND125656	10124.93562	9896.024604	112.0298812	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
176531	10385.85085	10141.93868	-72.78850408	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
KLUB12_223_251189	10162.47506	10230.32854	-96.38109085	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_223_251197	10164.94567	10228.4136	-103.7451297	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
251779	10241.52417	10216.43156	-94.85186558	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
CAOND194796	10074.18302	10126.23383	-10.5384883	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
175399	10509.32056	10391.69766	-670.005882	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
223166	10355.23403	10180.1523	-3.265303736	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
223628	10368.86464	10166.26517	27.8919774	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
223634	10369.15887	10162.82693	22.98363209	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
1242982	10792.45374	10531.93738	-1064.851646	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
Q547884	10161.5068	10000.00949	150.3754327	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
CAOND105663	10168.11059	10260.70474	-13.76754939	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND270717	11057.55996	10540.95745	150.6075827	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270684	10826.47986	10839.91149	-56.89479062	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND198933	10460.55196	10082.81183	-47.95481162	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
223687	10371.35755	10135.20073	-16.2073278	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
1241053	10381.9735	10171.05317	171.4419691	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
1246413	10053.77574	10185.92409	115.5165154	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
1246971	10086.4309	10229.5448	148.3493654	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
255156	10075.98047	10281.72988	228.282947	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
255199	10099.3821	10265.05071	199.0396786	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
255799	10044.6849	10310.96795	231.7847696	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
251005	10108.92089	10271.55401	59.6002029	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
251737	10243.52224	10235.88896	-62.27262223	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
268294	10252.88101	10215.15221	-37.45069776	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
271228	10162.31538	10300.63267	95.1524331	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
271241	10163.31657	10293.15021	84.56893136	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
Q547838	10159.88183	10029.09844	180.5938868	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
Q547969	10215.01479	10148.24362	227.7594232	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
L750071	10223.10948	10085.22699	171.29442	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
L767906	10417.89877	10104.89827	62.84983857	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R225293	10305.91224	10228.43125	228.0036727	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND105122	10273.56321	10208.82524	142.4397038	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND139371	10247.62832	10219.21553	143.0775631	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND144756	10047.75287	10250.66054	143.4230973	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND169343	9999.574496	10283.81692	283.9554117	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND169457	9985.867491	10201.5137	203.3861704	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND183477	10258.46743	10102.14729	269.2982792	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND189719	10431.22841	10096.45251	232.9563045	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
CAOND167549	9977.137062	10217.7531	277.2759	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
223884	10351.88596	10163.28797	169.341675	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
1242042	10354.163	10050.78424	54.22072295	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
Q324939	10248.51873	10323.84777	-47.456391	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND128009	9947.978148	9983.778499	223.5084155	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
R350285	10410.48144	10035.07409	138.1049476	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND168893	9958.189807	10063.68815	144.6235362	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
8018	10455.17807	10146.91631	23.80939023	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
176455	10385.14835	10175.65095	-14.8923499	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
217097	10093.66084	10207.96247	211.6920906	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R353407	10970.23756	10615.94522	-1266.564926	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND125609	10126.98908	9922.122247	144.2305511	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
R353465	10944.28995	10594.24299	-1299.191002	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324577	10897.40559	10568.11019	-1167.890064	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND157956	10737.22286	10582.94788	-936.0227616	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND157957	10737.08143	10582.46639	-936.6457943	PHASE 2a	UG	Outside	☑	☑	☐	☑	☑
CAOND191089	9978.661446	10150.83451	234.8936171	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_207W1_256548	10457.84825	10225.38726	-399.8009426	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
277231	10397.56782	10230.19212	-301.975107	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
277236	10397.42398	10228.23065	-306.5720529	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
CAOND175906	10470.91247	10439.20089	-842.812967	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
257465	10503.72106	10659.65665	239.5515557	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324036	10963.05903	10567.73798	-1151.81236	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
Q303557	10161.63957	9995.318385	145.1816018	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
N431810	10229.42042	10038.00262	128.1144777	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND143812	10023.96593	9955.771602	206.0632517	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND127496	9948.315127	9995.707376	235.6150025	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND184563	9969.533568	10011.89449	233.6018716	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
CAOND191157	9987.616268	10113.22639	195.0748965	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
265804	10603.96672	9901.892311	244.2236247	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
251339	10202.06477	10194.13977	-223.46713	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
8086	10453.74766	10110.99965	-36.46034247	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
9438	10407.48418	10174.34142	57.48046218	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
9465	10405.17847	10148.12256	-8.298338043	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
176396	10384.3348	10201.09037	29.29930638	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
KLUB12_207_256263	10501.63051	10243.54854	-389.3434186	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_207_256280	10500.73375	10235.35559	-399.396801	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_207W1_256537	10461.03432	10232.29464	-391.8551817	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
257809	10496.59662	10219.98793	-380.3034768	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
KLUB12_222_257822	10495.40821	10212.12536	-390.5877809	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
9452	10407.18137	10170.31854	47.24695703	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
259622	10503.77559	10219.16231	-366.6111789	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
265142	10502.12962	10007.40356	260.7099933	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
L767928	10429.15365	10094.77186	49.78142649	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
L767967	10449.11069	10074.67297	25.99088037	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
L767971	10451.24242	10072.4594	23.43044157	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
176414	10384.80642	10193.1226	15.37523796	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
268448	10250.30869	10133.85529	-153.8449775	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
KLUB12_222_257834	10494.44475	10206.07112	-398.4882511	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐

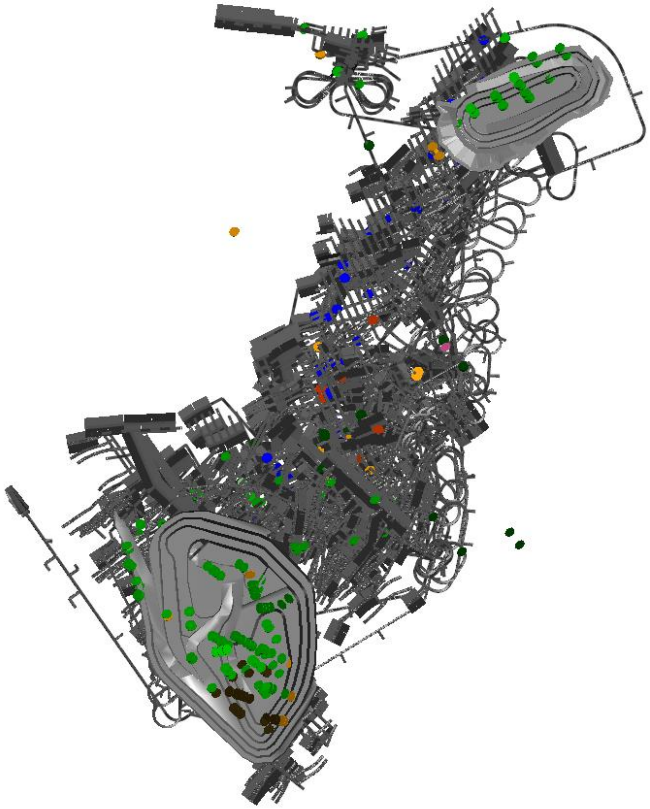
Appendix A1: Ore and Mine Rock Sample Database

Sample ID	X (coord)	Y (coord)	Z (coord)	PHASE	UG_OPEN PIT	Devpt_5m buffer	ABA Tests	Aqua Regia Acid	Four Acid	SFE	Mineralogy
Mine Rock											
268332	10252.48291	10195.77976	-65.38895055	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
265271	10509.6596	9923.197121	178.3951736	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
265848	10605.4585	9871.923498	214.8358955	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
277486	10391.20809	10243.41786	-250.9987364	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
277774	10309.31156	10312.16053	-229.9923935	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
293830	10423.64328	10252.64211	-102.5914959	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
293840	10423.02943	10247.34028	-111.0480754	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324457	10955.7856	10611.92621	-1093.8422	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
88259	10705.55241	10448.20755	-877.5172434	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
88262	10705.5437	10447.998	-878.0424121	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
39897	10352.4909	10305.84251	-634.332309	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
92861	10623.61153	10469.80854	-834.2364805	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
92862	10623.47614	10469.64211	-834.6881107	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
93713	10306.9215	10302.03917	-546.9691651	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
89463	10376.27154	10279.74056	-577.3864953	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
90505	10535.30221	10342.25351	-636.4857534	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
90555	10509.3211	10286.31582	-722.6858838	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
90558	10508.52697	10284.70693	-725.0902195	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
88732	10536.87141	10444.45364	-810.3814668	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
178947	10556.13961	10426.63739	-752.4780391	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
175707	10509.47067	10354.07471	-612.0985657	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
179112	10510.68941	10263.31846	-616.776866	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
KLUB11_180W2_179564	10477.75624	10318.25518	-548.3534168	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
R353890	11051.12677	10621.84908	-1343.807978	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
178961	10554.1909	10421.91152	-759.8853743	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
88256	10705.58781	10449.05984	-875.3812791	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
88258	10705.56626	10448.54106	-876.6814313	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
1242977	10793.02714	10534.21396	-1061.051322	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
6168	10313.2229	10249.62848	-481.9407948	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
6196	10308.28512	10241.85968	-494.9930245	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
27192	10421.35204	10362.05288	-752.258808	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
27431	10426.10164	10357.20332	-725.9299742	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
39893	10352.80412	10307.60653	-631.9260436	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
41711	10387.0543	10311.52286	-667.6108067	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
95865	10575.39316	10358.7525	-667.7379635	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
218549	10578.57899	10430.14918	-792.4575171	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
313324	10320.55058	10223.22167	-365.1245044	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
R353493	10931.1034	10583.93215	-1314.963616	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND154411	10782.87448	10519.70475	-1021.872824	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND154037	10754.82736	10515.19999	-993.384292	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
KLUB11_180W2_179592	10475.04782	10307.97638	-572.0812184	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB11_180W2_179597	10470.30234	10290.77097	-611.2018057	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_210W1_248885	10487.01041	10356.03185	-630.0657307	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
KLUB12_210W1_248895	10484.56135	10352.88057	-639.234764	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
250983	10451.82419	10233.39366	-543.9781953	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
250988	10451.48361	10231.88471	-546.5486179	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
284023	10448.07783	10216.7952	-572.2528437	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
279946	10316.20903	10250.47922	-307.1498783	PHASE 1	UG	Inside	☑	☑	☐	☐	☐
314036	10307.87723	10201.32937	-370.5840661	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
313377	10317.49375	10199.78641	-396.384638	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
313379	10317.31718	10198.55176	-397.9481144	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
315014	10310.87483	10276.84852	-365.6947732	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
315444	10289.53146	10252.74303	-428.0348205	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
R353389	10977.69191	10622.54667	-1256.723704	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R353737	11093.01437	10685.74676	-1228.95803	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324155	10918.62535	10518.11451	-1236.810384	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
R324165	10915.18564	10514.52371	-1243.077329	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324199	10901.47524	10500.07486	-1268.122386	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324469	10949.37348	10606.69656	-1102.533284	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324581	10895.04244	10566.50473	-1170.689715	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324589	10890.29871	10563.31184	-1176.284526	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND152062	10807.91012	10502.69575	-1020.515578	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND152076	10807.95899	10495.39108	-1028.73953	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND152203	10804.6776	10419.26214	-1109.418391	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND152218	10803.58315	10408.52256	-1120.331048	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND158905	10712.33314	10514.91558	-1023.028252	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND155877	10746.49274	10389.26819	-1019.104044	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND161540	10635.26387	10492.12971	-902.1595052	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND161712	10734.01179	10423.58987	-1030.576243	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND179977	10863.60313	10478.55705	-1115.489628	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND181514	10851.71884	10455.17952	-1147.974098	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND175938	10472.37545	10426.84798	-871.8601509	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
179639	10456.72545	10253.89274	-687.6649465	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
179644	10451.22792	10240.55679	-713.9692581	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
95982	10561.82982	10293.95549	-796.8363283	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
177513	10382.99616	10064.42847	-202.8918411	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
223352	10327.00614	10055.00548	-210.6421015	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
255063	10274.04747	9996.931181	-31.6242541	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
251366	10208.42145	10186.84321	-246.5180959	PHASE 1	UG	Outside	☑	☑	☐	☑	☑
262423	10510.95665	10180.09691	-334.9103237	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
281591	10167.88466	10192.26825	-306.1784673	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
325313	10286.71396	10194.33974	-336.3483427	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
CAOND147054	10385.13461	10162.17901	-130.781792	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
217472	10126.41186	9950.380208	-0.65497968	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND200894	10386.24168	10071.43364	-46.65741984	PHASE 2b	UG	Outside	☑	☑	☑	☐	☐
CAOND200903	10385.9801	10063.00601	-52.91441477	PHASE 2b	UG	Inside	☑	☑	☑	☐	☐
288461	10704.17611	10255.27426	254.3594259	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
88069	10643.08066	10419.16941	-842.6127711	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
176216	10225.37611	10208.10122	-688.7660556	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
284960	10477.00959	10212.59527	-485.2323316	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
95535	10622.1393	10374.5004	-667.0939771	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
175984	10509.408	10317.02017	-513.5037962	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
179323	10467.32086	10325.66993	-480.839125	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
179362	10460.10748	10308.47579	-510.458612	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
223363	10325.48667	10050.08909	-218.025834	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
262374	10511.60165	10200.86559	-294.9948363	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
262393	10511.35798	10193.01964	-310.0740204	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
293708	10454.79249	10174.39702	-154.0433854	PHASE 2a	UG	Inside	☑	☑	☐	☐	☐
325304	10287.93121	10198.80454	-329.8227236	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
176230	10223.92274	10201.47923	-698.6674176	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
R324732	10809.66767	10514.95665	-1263.070164	PHASE 2a	UG	Outside	☑	☑	☐	☐	☐
CAOND245049	10911.32044	10822.51769	-87.22636323	PHASE NEB	UG	Inside	☑	☑	☑	☑	☐
CAOND270688	10829.4035	10896.60715	-88.45992661	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270694	11099.92512	10496.57127	201.6431281	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND245042	11088.65057	10520.63803	152.3834264	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND245045	11080.99097	10563.34778	151.8615721	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND245041	11131.99152	10533.10504	186.2826526	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270714	11127.51408	10666.57323	285.2813827	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270712	10853.75697	10751.57475	88.6358647	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270716	11056.34536	10552.84538	181.3678755	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270689	10635.74251	10246.40226	305.683	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
259341	10413.2664	10116.51355	-442.2403544	PHASE 1	UG	Outside	☑	☑	☐	☐	☐
CAOND270691	10629.33718	10242.24424	510.341	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND270700	10803.46597	10647.61825	-43.37993519	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND245043	10711.25345	10206.16062	64.69402744	PHASE NEB	UG	Outside	☑	☑	☑	☐	☐
CAOND245044	10708.82446	10268.44931	-87.34669217	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐
CAOND245046	11102.42356	10525.5447	182.7449484	PHASE NEB	UG	Inside	☑	☑	☑	☑	☐
CAOND270690	10635.74251	10246.40226	452.683	PHASE NEB	UG	Inside	☑	☑	☑	☐	☐

Appendix A1: Ore and Mine Rock Sample Database Continued

Sample ID	Lead Consultant	Easting	Northing	Facility Footprint	Material Type	NB Sample Depth
				(pit, TSF, etc.)	(soil, till, etc.)	
UB20-GTTP-054	Golder	591350.00	5334925.00	OBSF	See Log	2
UB20-GTTP-055	Golder	591454.00	5334928.00	OBSF	See Log	2
UB20-GTTP-060	Golder	591249.00	5335027.00	OBSF	See Log	4
UB20-GTTP-061	Golder	591146.00	5335042.00	OBSF	See Log	3
UB20-GTTP-066	Golder	590736.00	5335141.00	OBSF	See Log	3
UB20-GTTP-070	Golder	591162.00	5335127.00	OBSF	See Log	3
UB20-GTTP-074	Golder	591461.00	5335220.00	OBSF	See Log	4
UB20-GTTP-077	Golder	591140.00	5335234.00	OBSF	See Log	1
UB20-GTTP-078	Golder	591054.00	5335230.00	OBSF	See Log	2
UB20-GTTP-081	Golder	590760.00	5335229.00	OBSF	See Log	4
UB20-GTTP-083	Golder	590867.00	5335325.00	OBSF	See Log	4
UB20-GTTP-084	Golder	590939.00	5335317.00	OBSF	See Log	3
UB20-GTTP-086	Golder	591163.00	5335301.00	OBSF	See Log	2
UB20-GTTP-090	Golder	590850.00	5335422.00	OBSF	See Log	4
UB20-GTTP-091	Golder	590803.00	5335433.00	OBSF	See Log	3
UB20-GTTP-094	Golder	591251.00	5336460.00	RSF	See Log	3
UB20-GTTP-095	Golder	591369.00	5336464.00	RSF	See Log	3
UB20-GTTP-100	Golder	591234.00	5336653.00	RSF	See Log	4
UB20-GTTP-101	Golder	591343.00	5336673.00	RSF	See Log	3
UB20-GTTP-103	Golder	591228.00	5336746.00	RSF	See Log	4
UB20-GTTP-104	Golder	591338.00	5336765.00	RSF	See Log	3
UB20-GTTP-106	Golder	591596.00	5336270.00	RSF	See Log	4
UB20-GTTP-108	Golder	591593.00	5336376.00	RSF	See Log	3
UB20-GTTP-109	Golder	591705.00	5336373.00	RSF	See Log	4
UB20-GTTP-110	Golder	591806.00	5336377.00	BUILDING	See Log	2
UB20-GTTP-111	Golder	591603.00	5336462.00	RSF	See Log	3
UB20-GTTP-112	Golder	591689.00	5336471.00	RSF	See Log	5
UB20-GTTP-114	Golder	591592.00	5336571.00	RSF	See Log	3
UB20-GTTP-115	Golder	591706.00	5336567.00	RSF	See Log	3
UB20-GTTP-118	Golder	591700.00	5336678.00	RSF	See Log	3
UB20-GTTP-119	Golder	592152.00	5336675.00	TSF	See Log	3
UB20-GTTP-120	Golder	591590.00	5336762.00	RSF	See Log	4
UB20-GTTP-121	Golder	591690.00	5336771.00	RSF	See Log	3
UB20-GTTP-135	Golder	592184.00	5336282.00	BUILDING	See Log	2
UB20-GTTP-136	Golder	592382.00	5336239.00	BUILDING	See Log	4
UB20-GTTP-137	Golder	592794.00	5336526.00	TSF	See Log	3
UB20-GTTP-138	Golder	592913.00	5336739.00	TSF	See Log	4
UB20-GTTP-139	Golder	592353.00	5336777.00	TSF	See Log	4
UB20-GTTP-140	Golder	592888.00	5336865.00	TSF	See Log	4
UB20-GTTP-141	Golder	592766.00	5337203.00	TSF	See Log	4
UB20-GTTP-142	Golder	592698.00	5337316.00	TSF	See Log	4
UB20-GTTP-143	Golder	592442.00	5337396.00	TSF	See Log	3
UB20-GTTP-144	Golder	592202.00	5337311.00	TSF	See Log	5
UB20-GTTP-145	Golder	592004.00	5337234.00	TSF	See Log	2
UB20-GTTP-146	Golder	591924.00	5337025.00	TSF	See Log	3
UB20-GTTP-147	Golder	591906.00	5336908.00	TSF	See Log	3
UB20-GTTP-148	Golder	592370.00	5336950.00	TSF	See Log	3
UB20-GTTP-149	Golder	592470.00	5336672.00	TSF	See Log	5
UB20-GTTP-150	Golder	592520.00	5336457.00	TSF	See Log	3
UB20-GTTP-151	Golder	591402.00	5336801.00	RSF	See Log	4
UB20-GTTP-152	Golder	591997.00	5336341.00	BUILDING	See Log	3
UB20-GTTP-P003	Golder	591840.00	5335801.00	PIT	See Log	4
UB20-GTTP-P005	Golder	591739.00	5335744.00	PIT	See Log	3
UB20-GTTP-P008	Golder	591902.00	5335732.00	PIT	See Log	4
UB20-GTTP-P016	Golder	591688.00	5335658.00	PIT	See Log	4
UB20-GTTP-P019	Golder	591860.00	5335672.00	PIT	See Log	4
UB20-GTTP-P021	Golder	591947.00	5335675.00	PIT	See Log	3
UB20-GTTP-P030	Golder	591646.00	5335552.00	PIT	See Log	3
UB20-GTTP-P034	Golder	591824.00	5335610.00	PIT	See Log	2
UB20-GTTP-P047	Golder	591688.00	5335453.00	PIT	See Log	3
UB20-GTTP-P050	Golder	591762.00	5335386.00	PIT	See Log	3
UB20-GTTP-P060	Golder	591706.00	5335400.00	PIT	See Log	2
UB20-GTTP-P068	Golder	591837.00	5335297.00	PIT	See Log	2
UB21-INFRA-GTTP-001	Story	591763.83	5335939.11	BUILDING	See Log	4
UB21-INFRA-GTTP-001-OB	Story	591763.83	5335939.11	BUILDING	See Log	4
UB21-INFRA-GTTP-002	Story	591707.15	5336065.32	BUILDING	See Log	4
UB21-INFRA-GTTP-002-OB	Story	591707.15	5336065.32	BUILDING	See Log	4
UB21-INFRA-GTTP-003	Story	591902.30	5336062.99	BUILDING	See Log	4
UB21-INFRA-GTTP-004	Story	592009.48	5336159.25	BUILDING	See Log	6
UB21-INFRA-GTTP-005	Story	591912.53	5336249.47	BUILDING	See Log	5
UB21-INFRA-GTTP-006	Story	591815.17	5336432.86	BUILDING	See Log	4
UB21-OBSF-GTTP-001	Story	591433.98	5336227.45	RSF	See Log	4
UB21-OBSF-GTTP-002	Story	591452.34	5336473.68	RSF	See Log	5
UB21-OP-GTTP-001	Story	591543.89	5335692.00	PIT	See Log	4
UB21-OP-GTTP-001-OB	Story	591543.89	5335692.00	PIT	See Log	4
UB21-OP-GTTP-002	Story	591757.76	5335662.38	PIT	See Log	4
UB21-OP-GTTP-002-OB	Story	591757.76	5335662.38	PIT	See Log	4
UB21-OP-GTTP-003	Story	591900.86	5335669.57	PIT	See Log	3
UB21-OP-GTTP-003-OB	Story	591900.86	5335669.57	PIT	See Log	3
UB21-OP-GTTP-006	Story	591718.24	5335598.93	PIT	See Log	4
UB21-OP-GTTP-006-OB	Story	591718.24	5335598.93	PIT	See Log	4
UB21-OP-GTTP-007	Story	591633.85	5335502.25	PIT	See Log	2
UB21-OP-GTTP-007-OB	Story	591633.85	5335502.25	PIT	See Log	2
UB21-OP-GTTP-008	Story	591725.30	5335539.11	PIT	See Log	3
UB21-OP-GTTP-008-OB	Story	591725.30	5335539.11	PIT	See Log	3
UB21-OP-GTTP-010	Story	591790.97	5335487.49	PIT	See Log	1
UB21-OP-GTTP-012	Story	591731.34	5335416.87	PIT	See Log	3
UB21-OP-GTTP-012-OB	Story	591731.34	5335416.87	PIT	See Log	3
UB21-TSF-GTTP-001	Story	591863.11	5336650.39	TSF	See Log	5
UB21-TSF-GTTP-002	Story	592091.50	5336929.06	TSF	See Log	5
UB21-TSF-GTTP-004	Story	592420.28	5337206.00	TSF	See Log	3
UB21-TSF-GTTP-005	Story	593418.91	5337638.11	TSF	See Log	3
UB21-TSF-GTTP-006	Story	593434.01	5337485.36	TSF	See Log	2
UB21-TSF-GTTP-007	Story	593452.42	5337254.91	TSF	See Log	4
UB21-TSF-GTTP-008	Story	593577.79	5336877.56	TSF	See Log	6

Appendix A2: Visual Overview of ML/ARD Sample Distribution



Blake River Mafic
Volcaniclastic
Gabbro
Sediment
Mafic Syenite
Mafic Syenite Porphyry
Tisdale
Crowded Porphyry
Late-Stage Dykes

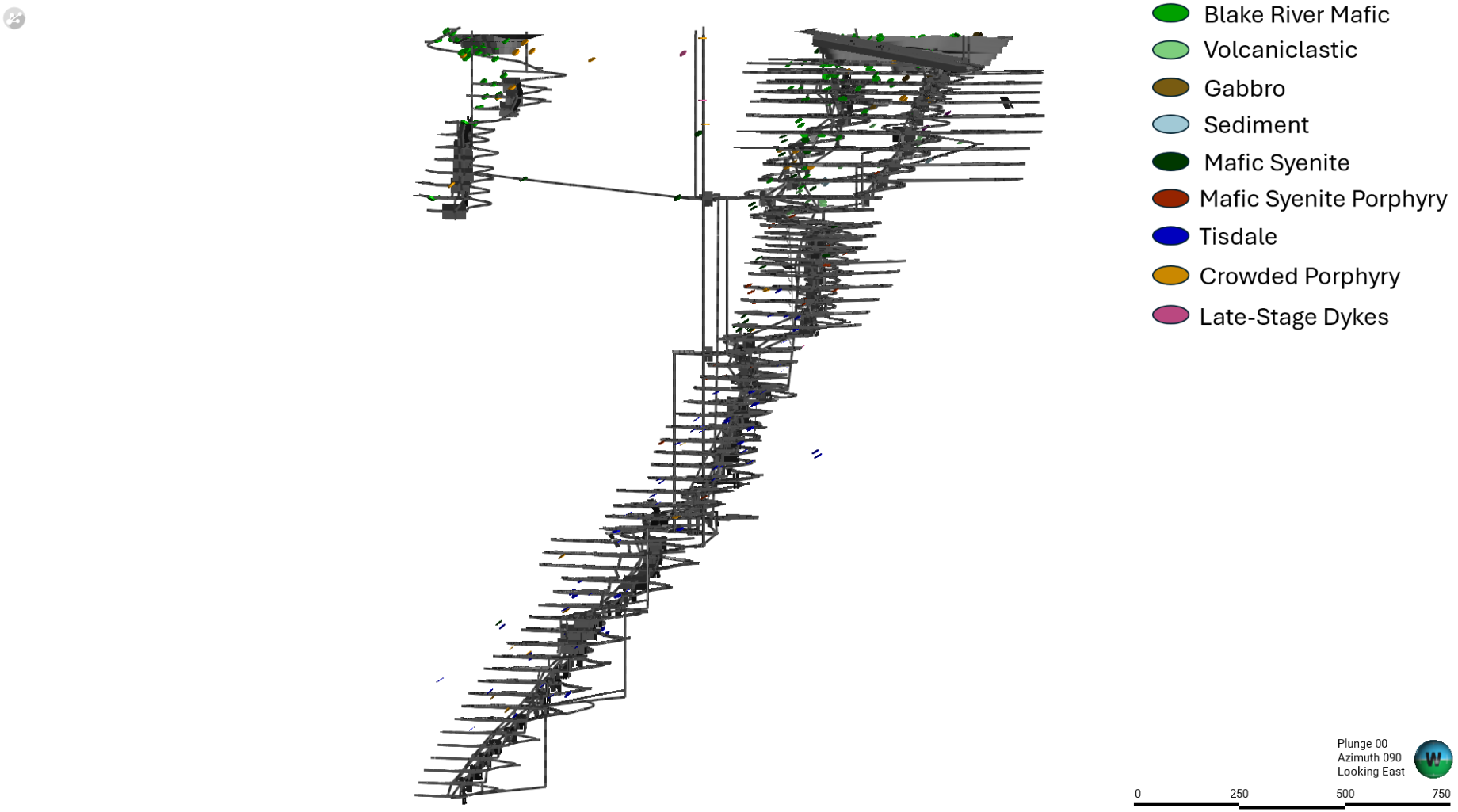
Plunge +90
Azimuth 000
Looking down

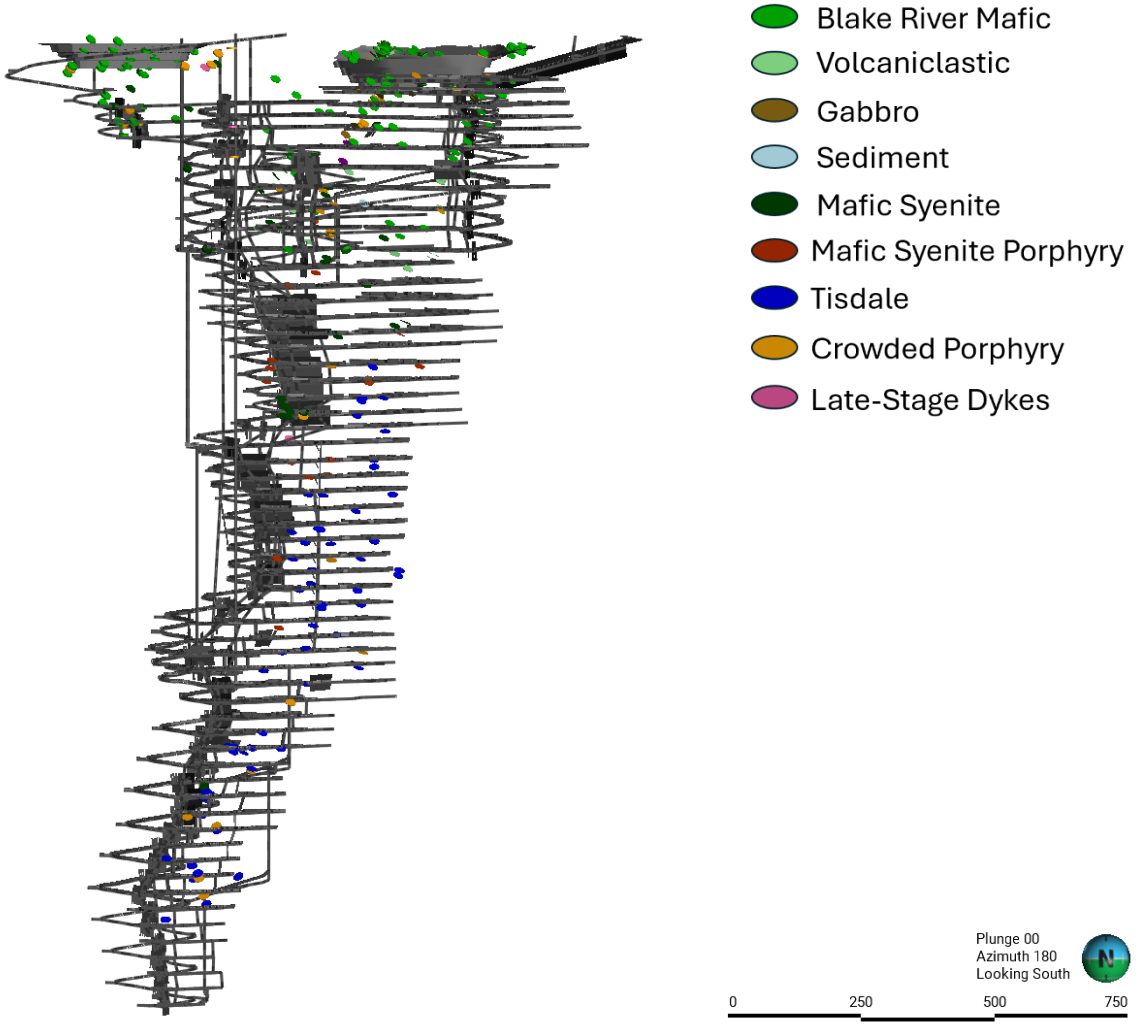
0 250 500 750

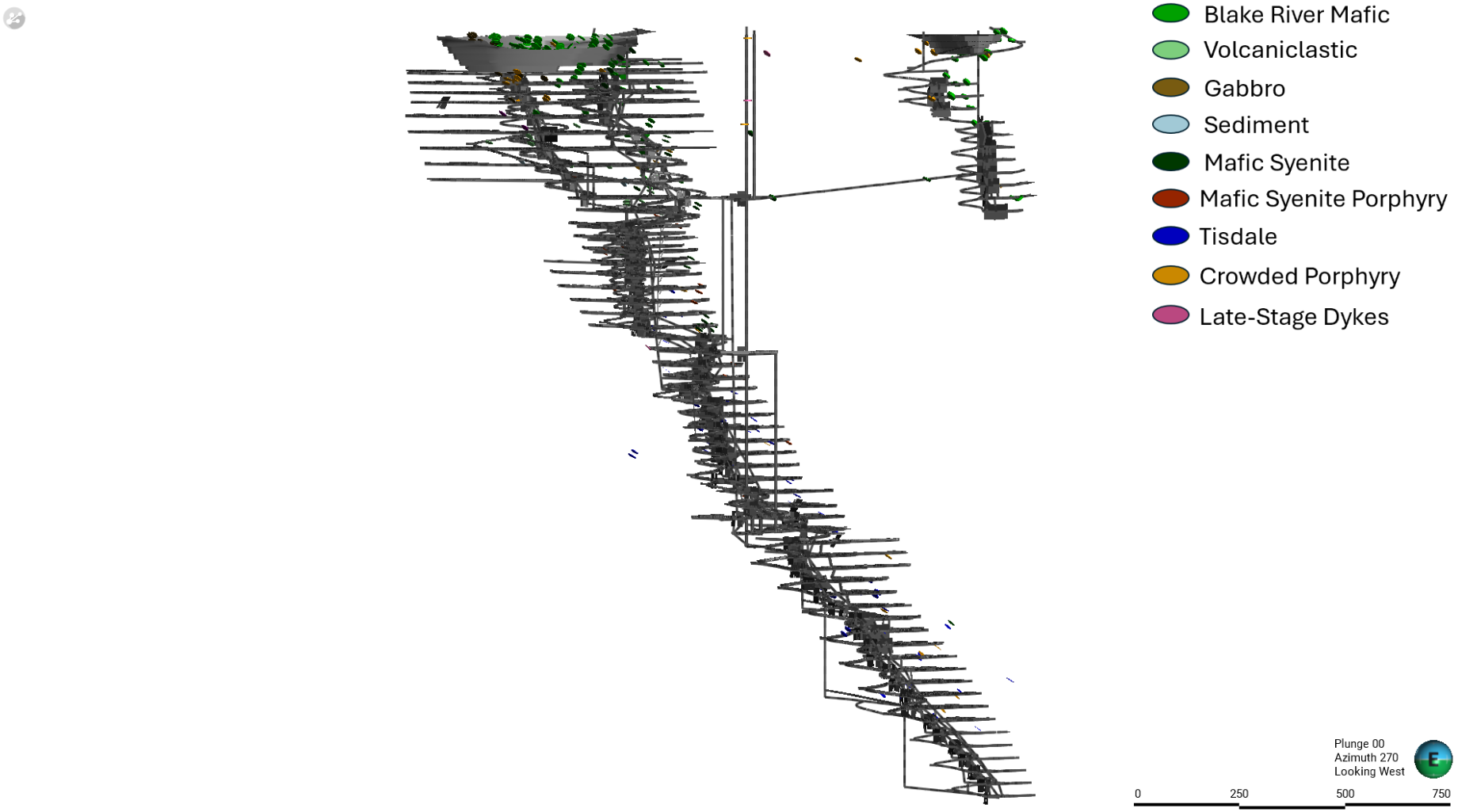
Blake River Mafic
Volcaniclastic
Gabbro
Sediment
Mafic Syenite
Mafic Syenite Porphyry
Tisdale
Crowded Porphyry
Late-Stage Dykes

Plunge 00
Azimuth 000
Looking North

0 250 500 750


Blake River Mafic
Volcaniclastic
Gabbro
Sediment
Mafic Syenite
Mafic Syenite Porphyry
Tisdale
Crowded Porphyry
Late-Stage Dykes
Plunge 00
Azimuth 090
Looking East
0
250
500
750


Blake River Mafic
Volcaniclastic
Gabbro
Sediment
Mafic Syenite
Mafic Syenite Porphyry
Tisdale
Crowded Porphyry
Late-Stage Dykes
Plunge 00
Azimuth 180
Looking South
0
250
500
750


Blake River Mafic
Volcaniclastic
Gabbro
Sediment
Mafic Syenite
Mafic Syenite Porphyry
Tisdale
Crowded Porphyry
Late-Stage Dykes
Plunge 00
Azimuth 270
Looking West
0
250
500
750

Technical Memo

Date: July 15th, 2022

From: Olivier Brisebois

To: Aurélie Chopard

Copy: Timo Kirchner, Sarah Morin, Pascal Delisle

Subject: Sample Selection for Field Testing – Environmental Geochemistry

1. Context

To understand how the waste rock that will be extracted from the future underground (UG) development and open pit of the Upper Beaver deposit will react and to manage this waste rock adequately, it is necessary to perform field kinetic tests. Field kinetic tests are required to complete the geochemical characterization work of the waste rock at Upper Beaver to understand and evaluate the scaling effects compared to the standardized humidity cell, and to be closer to in situ environmental conditions and geochemical reactions. The first step to do to prepare this test is the selection of representative samples of the main lithologies from which waste rock material will be extracted. In a buffer of 5 m around the UG development, three composites will be selected by the department of Geology to represent the three main lithologies present in this waste rock, and one other to represent the worst-case scenario, that is to say a composite made of samples with a very high sulfur content. The three main lithologies in the Upper Beaver UG development are basalt (V7), crowded porphyry (I2Dp), and mafic syenite (I2Dm). Because mafic syenite is an ensemble of many similar rock types from the mafic syenite family, the three main sublithologies (mafic syenite I2Dm, mafic syenite breccia I2DmBx, mafic syenite porphyry I2Dmp) will be chosen for the composite given that their sulfur content is similar. The three composites should have a sulfur content average around the P70 of the sulfur distribution in the respective lithology in the UG development while the high sulfur composite will have a sulfur content average that is at least equal to the P90 of the sulfur distribution in the overall UG development. A fifth composite should represent the main lithology in the open pit, which is gabbro (I3A). Its sulfur content will be around the P70 of the sulfur distribution in the gabbro samples in the open pit outside the MSO shapes,

to represent the waste rock material. Each of the 5 composites will require at least 200 kg of material until 300 kg of material to fill in the barrels, which represents approximately 160 m of quarter of cores (for 200 kg). Because sawing more than 900 m of cores would take too much time, it was decided that the half cores will be sent to the lab and the materials would be split in two after crushing except for the samples in the high sulfur composite and other samples that are too close to the high-grade zones. A few cores have already been sawed in quarters during another sample selection campaign, so they will need to be properly identified. To simplify the recovery process, continuous intervals will be favored and the quantity of different DDH chosen will be limited while respecting the spatial distribution. Furthermore, the cores to be sampled will be chosen from drill holes between 2018 and 2022 in priority as they are easier to pull out. Each sample can only be part of one composite, which is only a concern for the high sulfur composite given that this composite will take samples from different lithologies that could also be chosen for their respective composites. This fact reduces the variety of samples to be selected by composite. Appendix 5.1 presents the Samples Selection Request Form submitted for this selection.

2. Samples Selection Procedure

The main steps of the selection were made with Datamine. The first step of the procedure was to join the Elements and the Lithholes files coming from the desurvey made on May 31^{rst}, 2022. The wireframe of the most recent version of the UG development was processed to add a buffer of 5m. After those two files were created, a selection wireframe was made to take only the samples that were inside the UG development and its 5m-buffer. A filter was finally applied to show only the 2018 to 2022 drill holes. Figures 1 and 2 below present the samples that were available for selection before and after the year filter is applied.

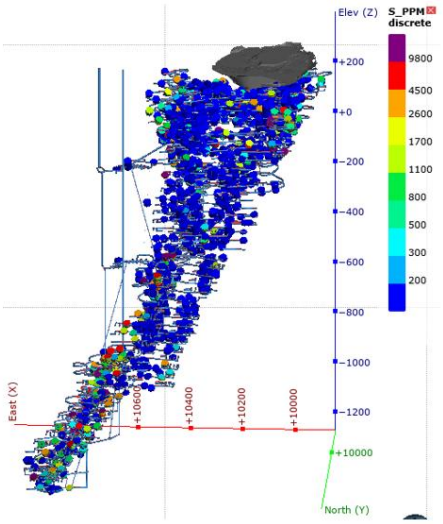


Figure 1. All drillholes inside the UG development 5m-buffer looking south – isometric view

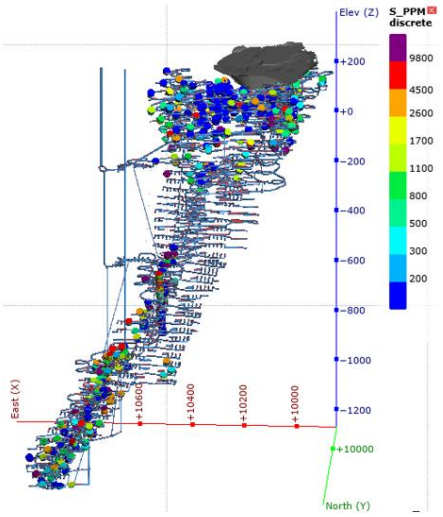


Figure 2. Drillholes inside the UG development 5m-buffer drilled between 2018 and 2022 looking south – isometric view

The first scale used for identifying the P70 and the P90 in the sulfur distribution was made by creating a legend in Datamine that separated each interval while accounting for the size of the population. Other scales were created with Supervisor at the end of the selection to verify if the P70 and the P90 in the sulfur distribution of each composite separately was significantly different from the colourmap to see if an adjustment had to be made to reach a good sulfur content average specific to each composite. Table 1 below shows the values for each decile and the data percentage that is in each interval for the colourmap legend. It is important to note that the first interval is very high because it also includes all intervals that were not evaluated for their sulfur content that the legend tool of DataMine considers as 0. That is why it was only used as an approximation to help visually to select samples. With the year filter, it is clear that the sulfur content was not measured for a large quantity of the cores older than 2018, which is second justification to select cores only in the 2018 to 2022 drillholes.

Table 1. Data distribution for the colourmap

Deciles	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
S values in PPM	0	200	300	500	800	1100	1700	2600	4500	9800	97600
Data in each interval (2018-2022)	41.14%	3.68%	6.26%	8.39%	5.62%	7.54%	6.53%	6.94%	7.05%	6.86%	
Data in each interval (all)	80.85%	1.20%	2.13%	2.74%	1.84%	2.41%	2.09%	2.16%	2.30%	2.27%	

As mentioned previously, the mafic syenite lithology is a general term to represent several sublithologies. The three main rock types of this group in the Upper Beaver deposit are the samples logged as mafic syenite (I2Dm), mafic syenite breccia (I2DmBx), and mafic syenite porphyry (I2Dmp). Figure 3 below presents the variance of those three rock types for all elements evaluated.

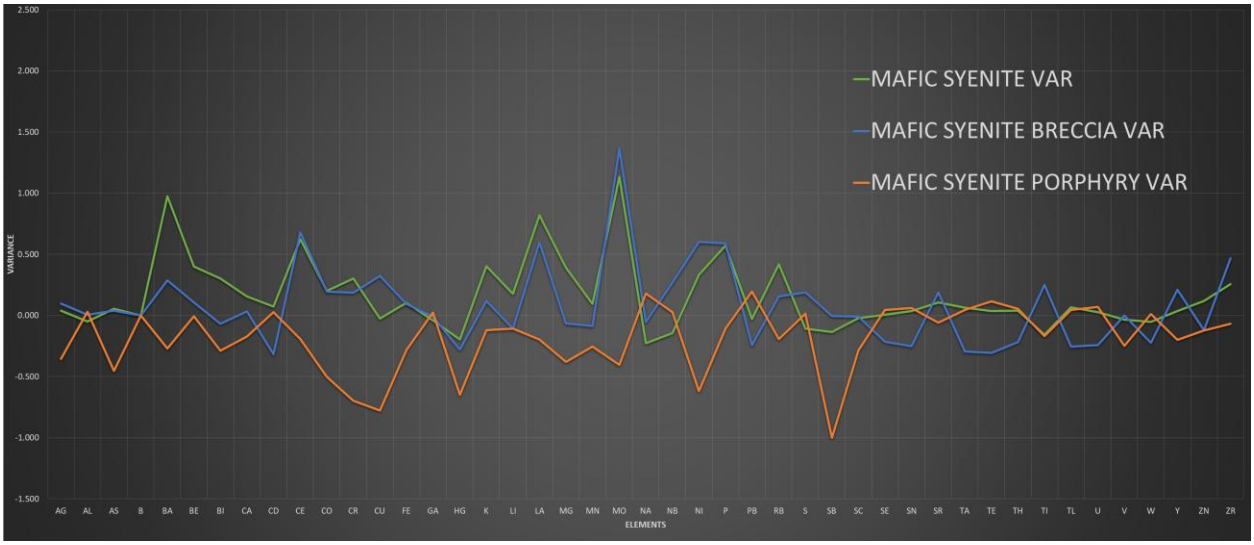


Figure 3. Variance of all the analyzed elements for the three types of mafic syenite

The variance of the sulfur data for the three rock types is similar enough to consider them as part of the same lithology, therefore part of the same composite for the environmental needs.

As for the gabbro composite, the procedure was also made with Datamine. Two selection wireframes were made to firstly select all samples in the open pit and secondly to deselect all samples in the MSO shapes to only have samples from the waste rock (outside the MSO). Figure 4 and 5 below shows all the samples available for selection (Figure 5).

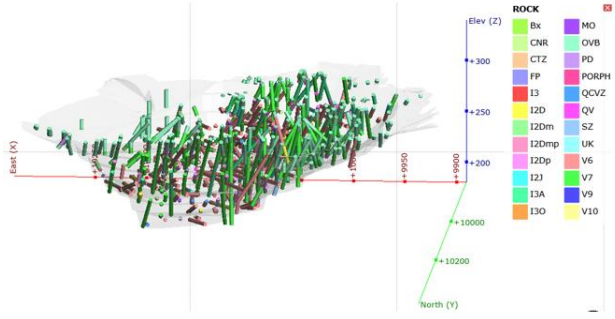


Figure 4. All drillholes inside the open pit outside the MSO shapes looking south – isometric view

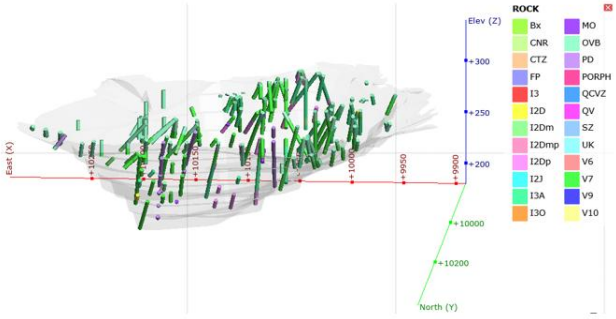


Figure 5. Drillholes inside the open pit drilled between 2018 and 2022 outside the MSO shapes looking south – isometric view

3. Results

Figure 6 to Figure 10 represent the spatial distribution of all samples selected to create the five composites needed.

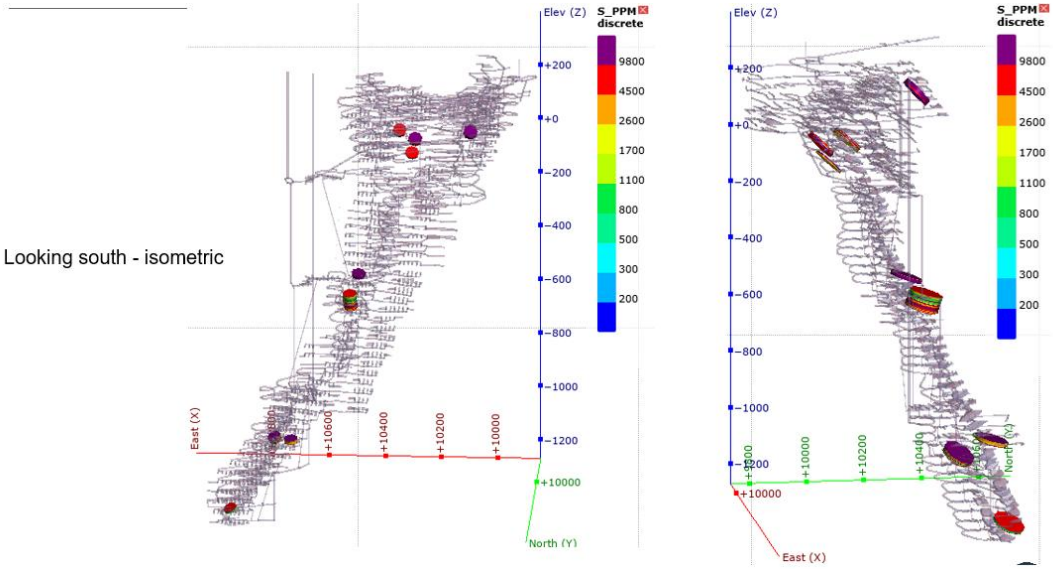


Figure 6. High sulfur composite – Samples selected

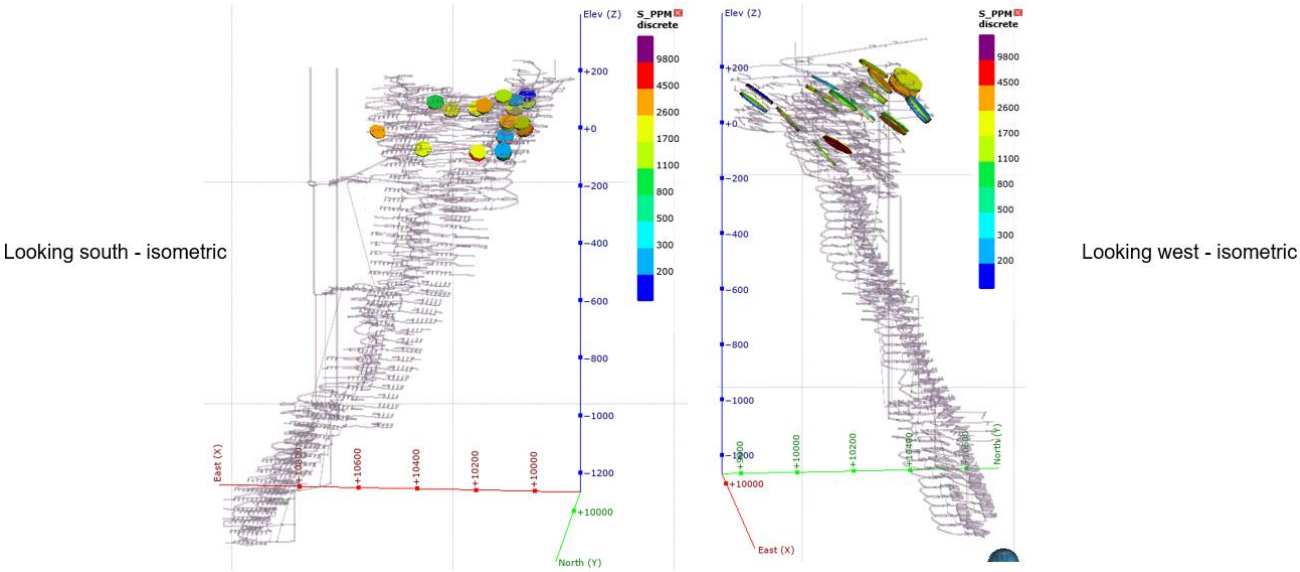


Figure 7. Basalt composite- Samples selected

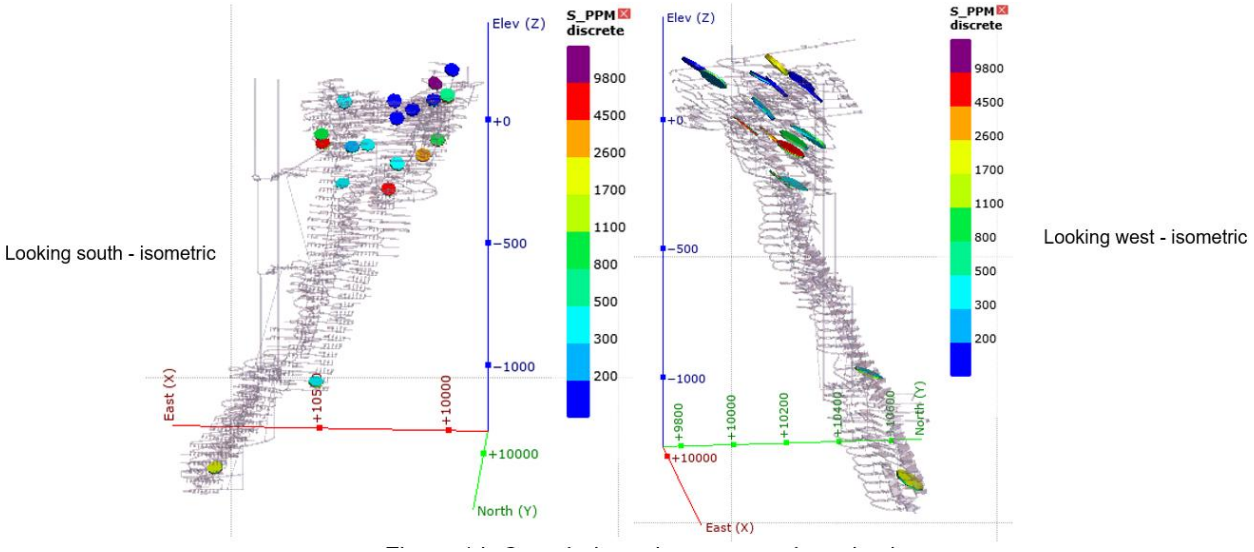


Figure 8. Crowded porphyry composite - Samples selected

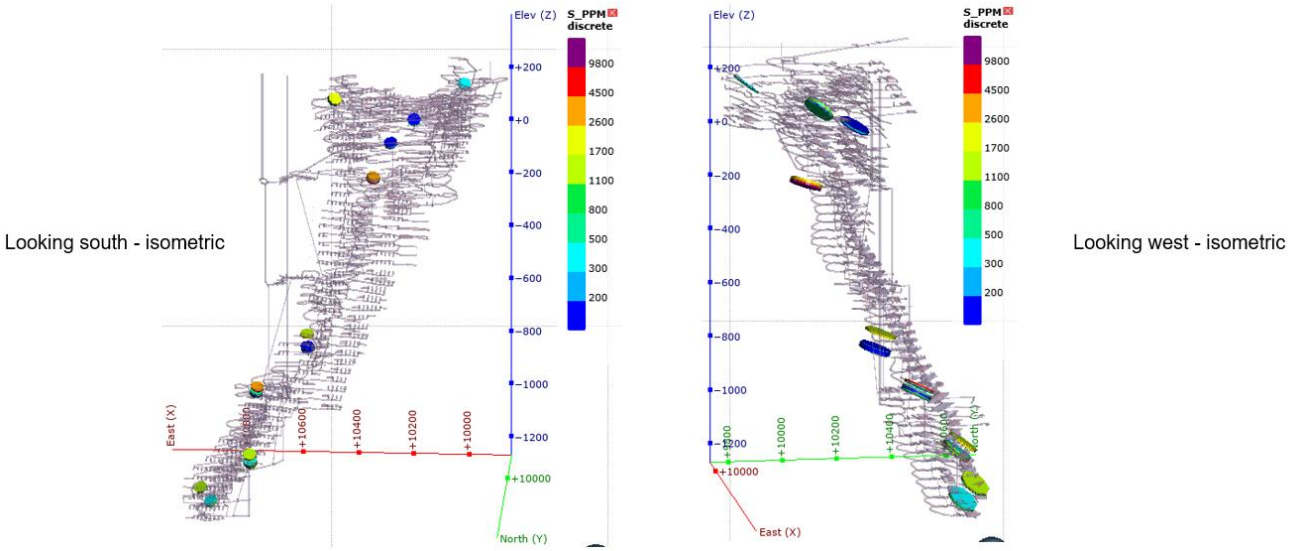


Figure 9. Mafic syenite composite - Samples selected

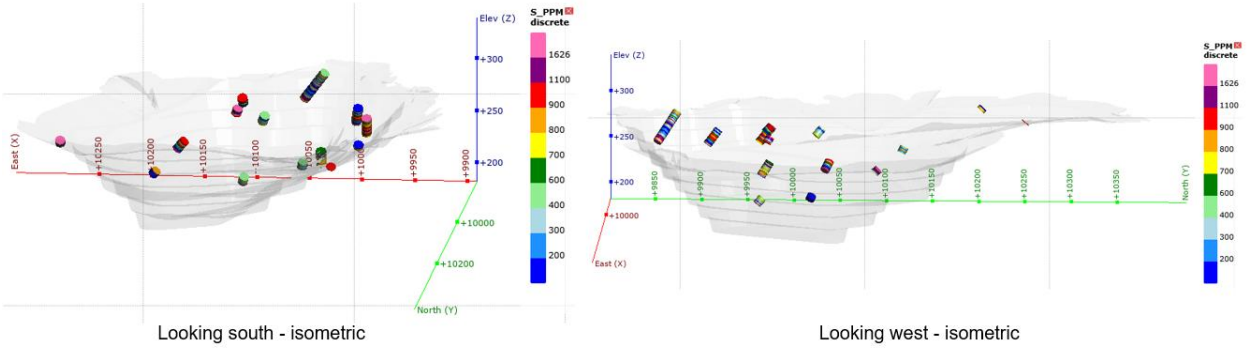


Figure 10. Gabbro composite - Samples selected

Table 2 shows the results of the sample selection based on the length and the sulfur content average. The deciles are those from Supervisor for each lithology individually.

Table 2. Length and sulfur content average of each composite selected

	High sulfur	Basalt	Crowded porphyry	Mafic syenite	Gabbro
Length to sample (m)	180.18	185.58	174.92	185.16	176.36
Length with sulfur data (m)	179.18	185.58	143.64	185.16	176.36
Sulfur mean (PPM)	11222	2564	1858	2702	930
P60	1900	1400	1200	2000	800
P70	3100	2000	1900	3500	900
P80	4700	3400	2900	4735	1100
P90	9800	9611	4013	9577	1626

To ensure that there will be enough material in case of missing samples, the total length of each composite has been chosen to be around 10 to 15% more than the 160 m that was estimated at the beginning. This problem is also solved by the choice to take the whole half core because there will be a surplus of material if necessary. The high sulfur composite exceeds its P90 of 9800 as it should to have more than 1% of sulfur content in the composite. It is not problematic as the objective for this composite is to be sure that it will generate ARD. As for the basalt composite, its sulfur content average is close to the P75 of all the basalt samples in the UG development. However, the crowded porphyry is closer to the P70 of its rock type since there was a lack of

samples that had been analyzed for sulfur, therefore a bit less than 20% of the composite has an unknown sulfur content. Those unknown samples may have an impact on the final sulfur content of the composite, so this composite is a little less trustworthy than the others. To choose the last samples for this composite, the mineralization file from the desurvey was studied to see which samples with no sulfur content contained pyrite or chalcopyrite, the two main sulfides encountered at Upper Beaver. When a mention of pyrite or chalcopyrite was found in a sample available for selection, this sample was prioritized. The mafic syenite composite has a sulfur content average closer to its P65, yet it was judged to be sufficient to accomplish the goal of the field test. Table 3 presents the distribution of the three rock types inside the mafic syenite composite. Finally, the gabbro composite has a sulfur content average a bit higher than its P70.

Table 3. Length of the three types of mafic syenite

	Mafic syenite	Mafic syenite breccia	Mafic syenite porphyry
Length (m)	43.90	110.36	30.91
Length (%)	23.71%	59.60%	16.69%

While the distribution is not equal, there is at least 30 m of each rock type in the composite, which is considered enough material from each rock type in the composite.

4. Samples Collection and Final Samples Received for Compositing for Environmental Testing

Here is the list of all modifications made between the selection and the collection of the samples (final list) :

- Some samples that had been divided in two for testing have been joined together for the sampling (e.g. KLUB19-491 from 331.6 to 332.0182 and from 332.0182 to 332.5 became 331.6 to 332.5 because it was the same sample number);
- The beginning and the end of some intervals changed to take the entire length of the sample and not just the part that was analyzed (e.g. KLUB20-632 from 112 to 120.3 became 111.7 to 121 because that is the real length of all the samples selected);
- Some samples from KLUB20-200W14 and KLUB21-137W4 were removed because even though they were identified as mafic syenite breccia initially, another assessment found that their lithology was closer to the Tisdale group;

- Even though some samples should still have a quarter left after an older selection, at this time, it had been decided that the entire half core had to be taken, thus those samples were missing in the core boxes;
- Two samples that should have been cut in quarters were forgotten, therefore they were not sampled to let them in the boxes for QAQC purposes;
- Some samples were already cut in quarters, so their bags were identified like the other quarters for the lab;
- Finally, a few samples were missing from their boxes, they were identified as missing in the list.

Figures 11 to 15 present the spatial distribution of the samples collected.

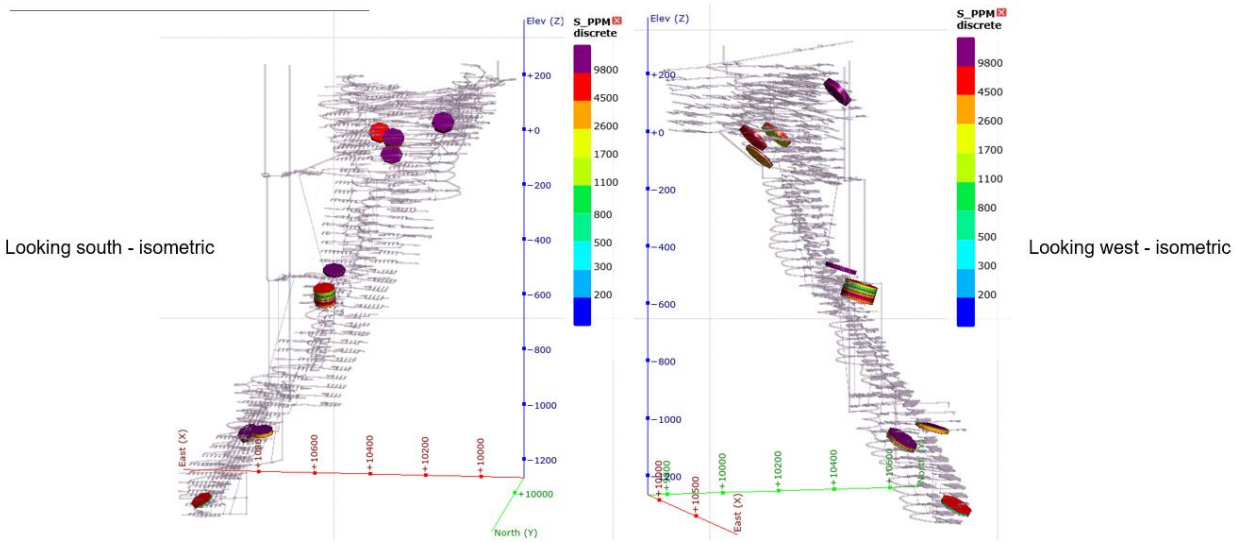


Figure 11. High sulfur composite - Samples collected

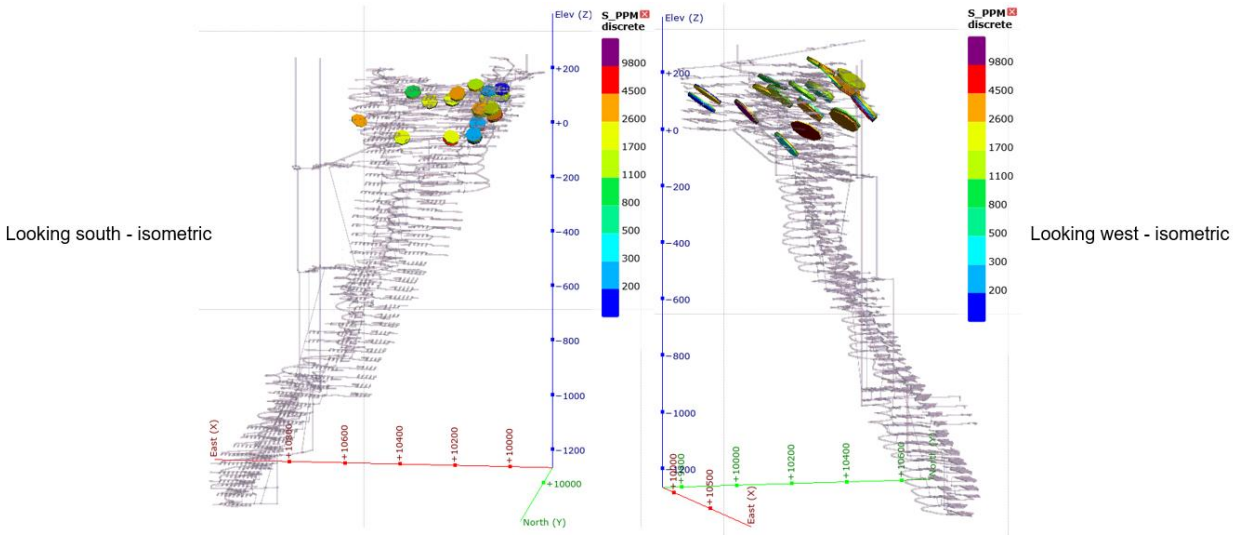


Figure 12. Basalt composite - Samples collected

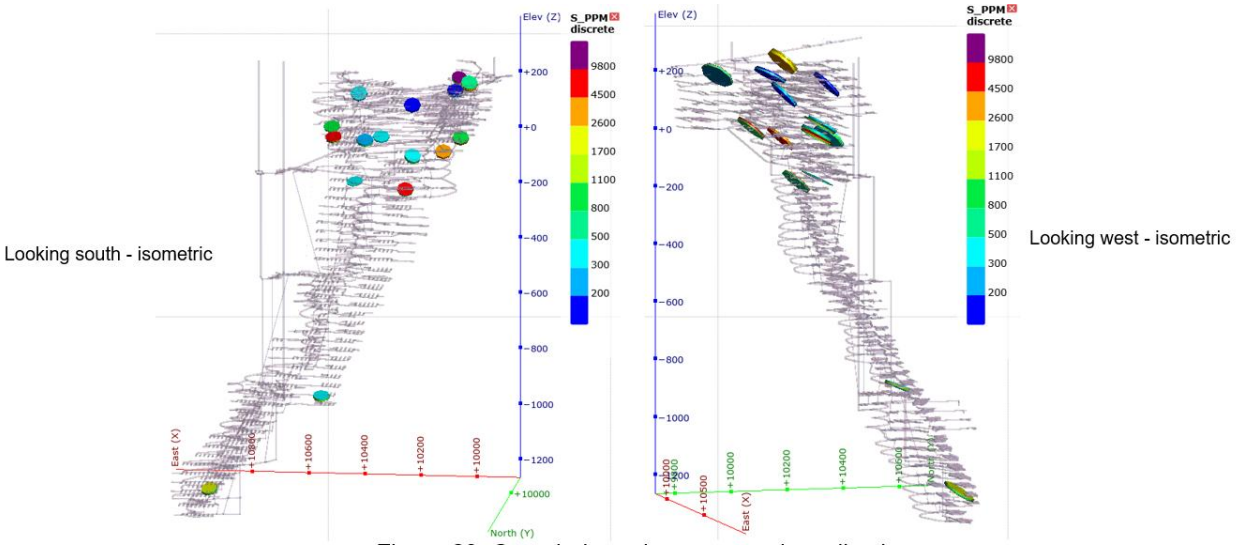


Figure 13. Crowded porphyry composite - Samples collected

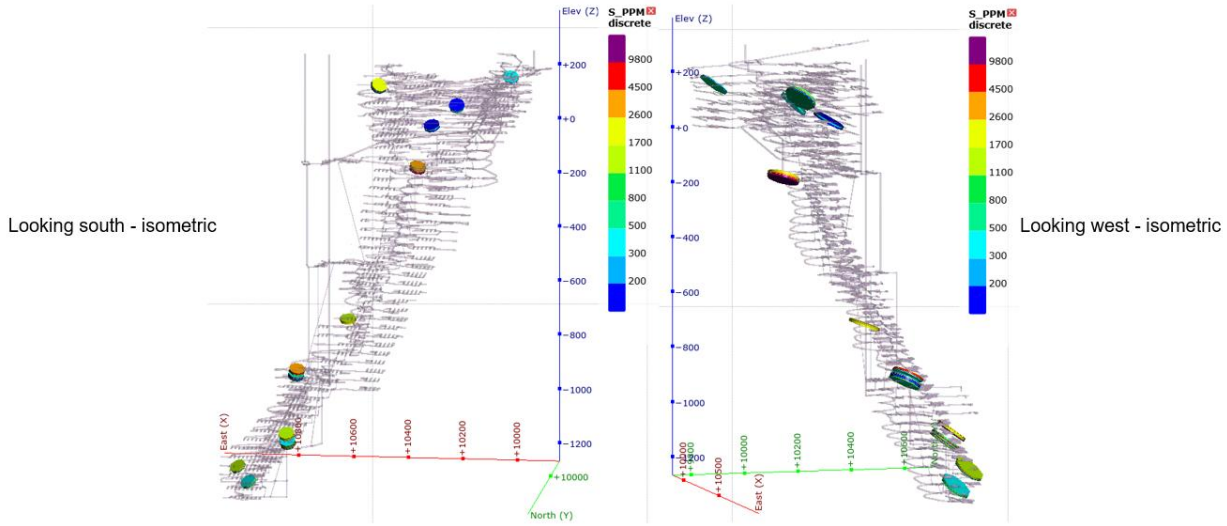


Figure 14. Mafic syenite composite - Samples collected

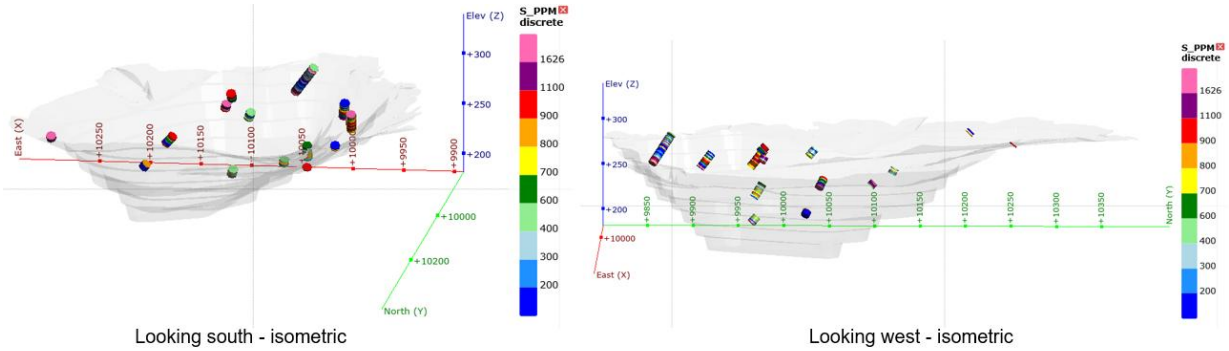


Figure 15. Gabbro composite - Samples collected

Table 4 presents the results of the sample collection and then the final sample selection based on the length and the sulfur content average. The deciles are those from Supervisor for each lithology individually.

Table 4. Length and sulfur content average of each composite collected

	High sulfur	Basalt	Crowded porphyry	Mafic syenite	Gabbro composite
Length sampled (m)	179.75	198.15	183	167.35	160.65
Sulfur mean (PPM)	11188	2561	1866	3075	904
P60	1900	1400	1200	2000	800
P70	3100	2000	1900	3500	900
P80	4700	3400	2900	4735	1100
P90	9800	9611	4013	9577	1626

The length sampled for each composite is above 160 m, therefore there are enough materials collected to reach the 200 kg for the field tests. Because the limits of some intervals were changed to fit those of the sample numbers, some composites gained a few meters of length. The basalt composite increased in length by 12.57 m and the crowded porphyry composite by 8.08 m. As for the high sulfur composite, the gabbro composite, and the mafic syenite composite, they lost respectively 0.43 m, 15.72 m, and 17.81 m because of missing samples and changes in the selection. Thus, the buffer of 10 to 15% has been useful, especially for the mafic syenite composite and the gabbro composite. The sulfur mean of the high sulfur composite is still above the P90 and above 10000 ppm, this way the slight difference with the initial selection is negligible. The basalt composite has almost the same sulfur content for the samples selected and collected, which is around the P75 of the lithology. As for the crowded porphyry composite, the selection and the collection are also close, just below the P70 of the lithology. The mafic syenite collection has a sulfur content 373 ppm higher than the initial selection since a long interval of the hole KLUB21-137W4 that had a low sulfur content was removed due to a misidentification of the lithology. Nevertheless, its sulfur content is still between the P65 and the P70 of its lithology, that is even better for the filed test. Finally, the sulfur content average of the gabbro composite collection diminished slightly with the changes, but it is still near the P70 of its lithology. Finally, Table 5 below presents the length collected for the three types of mafic syenite.

Table 5. Length of the three types of mafic syenite collected

	Mafic syenite	Mafic syenite breccia	Mafic syenite porphyry	Total
Length (m)	43.90	91.35	32.10	167.35
Length (%)	26.23%	54.59%	19.18%	100%

Because all the samples removed from the mafic syenite selection were from the mafic syenite breccia lithology, there is still more than 30 m of each sublithology for the composite.

The sample collection lists are presented in Appendices 5.2 to 5.6.

5. Appendices

5.1. Samples Selection Request Form

Environment - Testing: Sampling Request Form

Project Name:	Upper Beaver	**Requested By:**	Timo Kirchner
Project Phase:	PFS	**Date:**	2022-06-22
Geomet Domain:	Geoenvironmental units		

A. Business Case

To complete the geochemical characterization work ongoing at Upper Beaver, field kinetic tests are now required. These tests aim in evaluating scale effects compared to the standardized humidity cell.

Approved By: Sarah Morin
Date: 2022-06-22

B. Sampling Requirements

Tests Type	*Nbr. Samples*	*Sample Unit*	*Material Type*
Field Tests	5	200 kg	Half Core

Approved By: Pascal Delisle
Date: YYYY-MM-DD

C. Selection Criteria (Based on Evaluations):

Waste Rock	Yes	Dvpt 5m buffer	YYYY-MM-DD	**Approved By:** Aurélie Chopard
Other (to be precised)	Yes	UG	YYYY-MM-DD	**Date:** YYYY-MM-DD
Open Pits	Yes		YYYY-MM-DD	
Barrow Source Materials	No		YYYY-MM-DD	**Verified By:** Exploration
Litho. Units Proportion	Yes		YYYY-MM-DD	**Date:** YYYY-MM-DD
Grade	Yes	Sulfur P70	YYYY-MM-DD	

Observation(s):

Around 160 meters of quarter of core will be selected to create 5 composites. One composite from the development buffer will represent a high sulfur content to be sure to generate acidity. 3 other composites will be made from samples of the 3 main lithologies underground, e.g. basalt, mafic syenite and crowded porphyry with a sulfur content around the P70 of the entire waste rock underground. One composite will be made from samples of the main lithology in the open pit, e.g. gabbro with a sulfur content around the P70 of its lithology. Only the drilling from 2018 to 2022 will be taken.

D. Sample Recovery / Drilling Completion

Verified By: Exploration
Date: YYYY-MM-DD

5.2. Sample Collection List for High Sulfur Composite

BHID	FROM	TO	SAMPLE	Type of sample	Actual Shipped Weight (kg)

KLUB19-496	395.5	397	CAOND136762	Quarter of core	1.483kg
KLUB19-496	397	398	CAOND136763	Quarter of core	1.230kg
KLUB19-496	398	399	CAOND136764	Quarter of core	1.187kg
KLUB19-496	399	400	CAOND136765	Quarter of core	1.161kg
KLUB19-496	400	401	CAOND136766	Quarter of core	1.108kg
KLUB19-496	401	401.6	CAOND136767	Quarter of core	.475kg
KLUB19-496	401.6	402.1	CAOND136768	Quarter of core	.691kg
KLUB19-496	402.1	402.9	CAOND136769	Quarter of core	.778kg
KLUB19-496	402.9	404	CAOND136771	Quarter of core	1.139kg
KLUB19-496	404	405	CAOND136772	Quarter of core	1.145kg
KLUB19-496	405	406	CAOND136773	Quarter of core	1.158kg
KLUB19-496	406	407	CAOND136774	Quarter of core	1.229kg
KLUB19-496	407	408	CAOND136776	Quarter of core	1.176kg
KLUB19-496	408	409	CAOND136777	Quarter of core	1.145kg
KLUB20-310AW1	1446	1447.5	CAOND155831	Quarter of core	1.869kg
KLUB20-310AW1	1447.5	1448	CAOND155832	Quarter of core	.862kg
KLUB20-310AW1	1448	1449.1	CAOND155833	Quarter of core	1.652kg
KLUB20-310AW1	1449.1	1449.6	CAOND155834	Quarter of core	.704kg
KLUB20-310AW1	1449.6	1450.2	CAOND155835	Quarter of core	.869kg
KLUB20-310AW1	1450.2	1451.5	CAOND155836	Quarter of core	1.644kg
KLUB20-310AW1	1451.5	1453	CAOND155837	Quarter of core	1.997kg
KLUB20-310AW1	1453	1454	CAOND155838	Quarter of core	1.414kg
KLUB20-310AW1	1454	1454.8	CAOND155839	Quarter of core	.839kg
KLUB20-310AW1	1454.8	1455.8	CAOND155840	Quarter of core	1.253kg
KLUB20-310AW1	1455.8	1457	CAOND155841	Quarter of core	1.296kg
KLUB20-310AW1	1457	1458	CAOND155842	Quarter of core	1.181kg
KLUB20-310AW1	1458	1459.5	CAOND155843	Quarter of core	1.857kg
KLUB20-310AW1	1459.5	1461	CAOND155844	Quarter of core	1.952kg
KLUB20-310AW1	1461	1462.5	CAOND155846	Quarter of core	1.647kg
KLUB20-310AW1	1462.5	1463.4	CAOND155847	Quarter of core	.734kg
KLUB20-310AW1	1463.4	1464	CAOND155848	Quarter of core	.808kg
KLUB20-310AW1	1464	1465.3	CAOND155849	Quarter of core	1.528kg
KLUB20-310AW1	1465.3	1466	CAOND155851	Quarter of core	.895kg
KLUB20-561W5	1308.8	1309.25	CAOND155558	Quarter of core	.509kg
KLUB20-561W5	1309.3	1310.5	CAOND155559	Quarter of core	1.650kg
KLUB20-561W5	1310.5	1311.4	CAOND155561	Quarter of core	1.172kg
KLUB20-561W5	1311.4	1312.5	CAOND155562	Quarter of core	1.369kg
KLUB20-561W5	1312.5	1313.5	CAOND155563	Quarter of core	1.108kg
KLUB20-561W5	1313.5	1315	CAOND155564	Quarter of core	1.816kg
KLUB20-561W5	1315	1316.45	CAOND155565	Quarter of core	1.907kg
KLUB20-561W5	1316.5	1317.5	CAOND155566	Quarter of core	1.493kg
KLUB20-561W5	1317.5	1318	CAOND155567	Quarter of core	.650kg
KLUB20-561W5	1318	1319.5	CAOND155568	Quarter of core	1.744kg
KLUB20-561W5	1319.5	1320	CAOND155569	Quarter of core	.590kg

KLUB20-561W5	1320	1321	CAOND155571	Quarter of core	1.392kg
KLUB20-561W5	1321	1321.5	CAOND155572	Quarter of core	.681kg
KLUB20-561W5	1321.5	1322.1	CAOND155573	Quarter of core	.577kg
KLUB20-561W5	1322.1	1322.6	CAOND155574	Quarter of core	.721kg
KLUB20-561W5	1322.6	1323.7	CAOND155576	Quarter of core	1.303kg
KLUB21-138W1	811.3	812.5	CAOND222573	Quarter of core	1.063kg
KLUB21-138W1	812.5	814	CAOND222576	Quarter of core	1.341kg
KLUB21-138W1	814	815.5	CAOND222577	Quarter of core	1.276kg
KLUB21-138W1	815.5	817	CAOND222578	Quarter of core	1.243kg
KLUB21-138W1	817	818.5	CAOND222579	Quarter of core	1.329kg
KLUB21-138W1	818.5	819	CAOND222581	Quarter of core	0.353kg
KLUB21-138W1	819	819.5	CAOND222582	Quarter of core	0.391kg
KLUB21-138W1	819.5	820	CAOND222583	Quarter of core	.465kg
KLUB21-138W1	820	821.5	CAOND222584	Quarter of core	1.369kg
KLUB21-138W1	821.5	823	CAOND222585	Quarter of core	1.301kg
KLUB21-138W1	823	824.5	CAOND222586	Quarter of core	1.286kg
KLUB21-138W1	824.5	826	CAOND222587	Quarter of core	1.351kg
KLUB21-138W1	826	827.3	CAOND222588	Quarter of core	1.381kg
KLUB21-138W1	827.3	827.8	CAOND222589	Quarter of core	.490kg
KLUB21-138W1	827.8	829.3	CAOND222591	Quarter of core	1.372kg
KLUB21-138W1	829.3	830.8	CAOND222592	Quarter of core	1.162kg
KLUB21-138W1	830.8	832.3	CAOND222593	Quarter of core	1.301kg
KLUB21-138W1	832.3	833.8	CAOND222594	Quarter of core	1.225kg
KLUB21-138W1	833.8	834.3	CAOND222595	Quarter of core	.447kg
KLUB21-138W1	834.3	835.5	CAOND222596	Quarter of core	.897kg
KLUB21-138W1	835.5	837	CAOND222597	Quarter of core	1.126kg
KLUB21-138W1	837	838.5	CAOND222598	Quarter of core	1.233kg
KLUB21-138W1	838.5	840	CAOND222599	Quarter of core	1.306kg
KLUB21-138W1	840	841.5	CAOND222601	Quarter of core	1.250kg
KLUB21-138W1	841.5	843	CAOND222602	Quarter of core	1.422kg
KLUB21-138W1	843	844.5	CAOND222603	Quarter of core	1.413kg
KLUB21-138W1	844.5	845.5	CAOND222604	Quarter of core	0.961kg
KLUB21-138W1	845.5	847	CAOND222605	Quarter of core	1.356kg
KLUB21-138W1	847	848.5	CAOND222606	Quarter of core	1.447kg
KLUB21-138W1	848.5	850	CAOND222607	Quarter of core	1.317kg
KLUB21-138W1	850	851.5	CAOND222608	Quarter of core	1.412kg
KLUB21-138W1	851.5	853	CAOND222609	Quarter of core	1.471kg
KLUB21-138W1	853	854.5	CAOND222610	Quarter of core	1.696kg
KLUB21-138W1	854.5	856	CAOND222611	Quarter of core	1.940kg
KLUB21-138W1	856	857.5	CAOND222612	Quarter of core	1.660kg
KLUB21-138W1	857.5	858	CAOND222613	Quarter of core	.697kg
KLUB21-138W1	858	859.5	CAOND222614	Quarter of core	1.971kg
KLUB21-138W1	859.5	861	CAOND222616	Quarter of core	1.810kg
KLUB21-138W1	861	862	CAOND222617	Quarter of core	1.233kg

KLUB21-138W1	862	863.5	CAOND222618	Quarter of core	1.907kg
KLUB21-138W1	863.5	865	CAOND222619	Quarter of core	2.001kg
KLUB21-138W1	865	866.5	CAOND222621	Quarter of core	1.857kg
KLUB21-138W1	866.5	868	CAOND222622	Quarter of core	1.717kg
KLUB21-138W1	868	869.5	CAOND222623	Quarter of core	1.446kg
KLUB21-138W1	869.5	871	CAOND222624	Quarter of core	1.638kg
KLUB21-138W1	871	872.5	CAOND222626	Quarter of core	1.439kg
KLUB21-328W7	1713.9	1715.4	CAOND210342	Quarter of core	1.546kg
KLUB21-328W7	1715.4	1716.5	CAOND210343	Quarter of core	1.148kg
KLUB21-328W7	1716.5	1718	CAOND210344	Quarter of core	1.410kg
KLUB21-328W7	1718	1719.5	CAOND210346	Quarter of core	1.555kg
KLUB21-328W7	1719.5	1721	CAOND210347	Quarter of core	1.599kg
KLUB21-328W7	1721	1722.4	CAOND210348	Quarter of core	1.624kg
KLUB21-328W7	1722.4	1723.3	CAOND210349	Quarter of core	1.100kg
KLUB21-701A	225.5	227	CAOND181099	Quarter of core	1.311kg
KLUB21-701A	227	228.5	CAOND181101	Quarter of core	1.247kg
KLUB21-701A	228.5	230	CAOND181102	Quarter of core	1.315kg
KLUB21-701A	230	231.5	CAOND181103	Quarter of core	1.398kg
KLUB21-701A	231.5	233	CAOND181104	Quarter of core	1.488kg
KLUB21-701A	233	234.5	CAOND181105	Quarter of core	1.255kg
KLUB21-701A	234.5	236	CAOND181106	Quarter of core	1.381kg
KLUB21-701A	236	237.5	CAOND181107	Quarter of core	1.527kg
KLUB21-701A	237.5	239	CAOND181108	Quarter of core	1.581kg
KLUB21-701A	239	240	CAOND181109	Quarter of core	1.041kg
KLUB21-701A	240	241	CAOND181110	Quarter of core	1.084kg
KLUB21-701A	241	242	CAOND181111	Quarter of core	.859kg
KLUB21-701A	242	243.5	CAOND181112	Quarter of core	1.450kg
KLUB21-701A	243.5	245	CAOND181113	Quarter of core	1.397kg
KLUB21-701A	245	245.5	CAOND181114	Quarter of core	.400kg
KLUB21-751W1	761.6	762.2	CAOND220458	Quarter of core	.707kg
KLUB21-751W1	762.2	763.3	CAOND220459	Quarter of core	1.302kg
KLUB21-751W1	763.3	764.6	CAOND220461	Quarter of core	1.564kg
KLUB21-751W1	764.6	766	CAOND220462	Quarter of core	1.705kg
KLUB21-751W1	766	767	CAOND220463	Quarter of core	1.245kg
KLUB21-751W1	767	768	CAOND220464	Quarter of core	1.247kg
KLUB21-751W1	768	769	CAOND220465	Quarter of core	1.160kg
KLUB21-751W1	769	770	CAOND220466	Quarter of core	1.337kg
KLUB21-751W1	770	771	CAOND220467	Quarter of core	1.278kg
KLUB21-751W1	771	772	CAOND220468	Quarter of core	1.251kg
KLUB21-751W1	772	773	CAOND220469	Quarter of core	1.236kg
KLUB21-751W1	773	774	CAOND220471	Quarter of core	1.245kg
KLUB21-751W1	774	775	CAOND220472	Quarter of core	1.210kg
KLUB21-751W1	775	776.1	CAOND220473	Quarter of core	1.332kg
KLUB21-757	365.8	367	CAOND201183	Quarter of core	1.173kg

KLUB21-757	367	368	CAOND201184	Quarter of core	.954kg
KLUB21-757	368	369	CAOND201185	Quarter of core	1.088kg
KLUB21-757	369	370	CAOND201186	Quarter of core	.910kg
KLUB21-757	370	370.9	CAOND201187	Quarter of core	.933kg
KLUB21-757	370.9	371.5	CAOND201188	Quarter of core	.593kg
KLUB21-757	371.5	372	CAOND201189	Quarter of core	.663kg
KLUB21-757	372	372.5	CAOND201191	Quarter of core	.462kg
KLUB21-757	372.5	373	CAOND201192	Quarter of core	.663kg
KLUB21-757	373	373.5	CAOND201193	Quarter of core	.609kg
KLUB21-757	373.5	374	CAOND201194	Quarter of core	.538kg
KLUB21-757	374	374.6	CAOND201195	Quarter of core	.623kg
KLUB21-757	374.6	375.2	CAOND201196	Quarter of core	.622kg
KLUB21-757	375.2	376	CAOND201197	Quarter of core	.834kg
KLUB21-757	376	377	CAOND201198	Quarter of core	1.165kg
KLUB21-757	377	378	CAOND201199	Quarter of core	.828kg
KLUB21-757	378	379	CAOND201201	Quarter of core	1.098kg
KLUB21-757	379	380	CAOND201202	Quarter of core	1.127kg
KLUB21-757	380	381.1	CAOND201203	Quarter of core	1.145kg
KLUB21-757	381.1	382	CAOND201204	Quarter of core	.905kg
KLUB21-757	382	383	CAOND201205	Quarter of core	1.089kg
KLUB21-757	383	384	CAOND201206	Quarter of core	1.047kg
KLUB21-757	469.5	471	CAOND201281	Quarter of core	1.352kg
KLUB21-757	471	472.5	CAOND201282	Quarter of core	1.287kg
KLUB21-757	472.5	473.8	CAOND201283	Quarter of core	1.207kg
KLUB21-757	473.8	474.3	CAOND201284	Quarter of core	.576kg
KLUB21-757	474.3	475.5	CAOND201285	Quarter of core	1.081kg
KLUB21-757	475.5	476.9	CAOND201286	Quarter of core	1.160kg
KLUB21-757	476.9	477.5	CAOND201287	Quarter of core	.430kg

5.3. Sample Collection List for Basalt Composite

BHID	FROM	TO	SAMPLE	Type of sample	Actual Shipped Weight (kg)
KLUB19-491	329	330.1	CAOND105559	Half core	2.666kg
KLUB19-491	330.1	331.1	CAOND105561	Half core	2.729kg
KLUB19-491	331.1	331.6	CAOND105562	Half core	1.383kg
KLUB19-491	331.6	332.5	CAOND105563	Half core	1.914kg
KLUB19-491	332.5	333.2	CAOND105564	Half core	1.789kg
KLUB19-491	333.2	334	CAOND105565	Half core	1.712kg
KLUB19-491	334	335	CAOND105566	Half core	2.502kg
KLUB19-491	335	336	CAOND105567	Half core	2.405kg
KLUB19-491	343.4	344.2	CAOND105577	Half core	1.873kg
KLUB19-491	344.2	344.8	CAOND105578	Half core	1.283kg

KLUB19-491	344.8	346	CAOND105579	Half core	2.653kg
KLUB19-491	346	346.7	CAOND105581	Half core	1.532kg
KLUB19-491	346.7	348	CAOND105582	Half core	3.365kg
KLUB19-493	180	181.5	CAOND106324	Half core	3.954kg
KLUB19-493	181.5	183	CAOND106326	Half core	3.719kg
KLUB19-493	183	184.5	CAOND106327	Half core	3.598kg
KLUB19-493	184.5	185.1	CAOND106328	Half core	1.138kg
KLUB19-493	185.1	186	CAOND106329	Half core	2.143kg
KLUB19-493	186	187.5	CAOND106331	Half core	3.741kg
KLUB19-493	187.5	189	CAOND106332	Half core	3.716kg
KLUB19-493	214.5	216	CAOND106356	Half core	3.760kg
KLUB19-493	216	217.5	CAOND106357	Half core	3.669kg
KLUB19-493	217.5	219	CAOND106358	Half core	3.632kg
KLUB19-493	219	220.5	CAOND106359	Half core	3.828kg
KLUB19-493	220.5	222	CAOND106361	Half core	3.908kg
KLUB19-493	222	223.5	CAOND106362	Half core	3.765kg
KLUB19-493	223.5	225	CAOND106363	Half core	3.453kg
KLUB19-498	70	71	CAOND136831	Half core	2.461kg
KLUB19-498	72	73	CAOND136833	Half core	2.395kg
KLUB19-498	73	74	CAOND136834	Half core	2.253kg
KLUB19-498	74	75	CAOND136835	Half core	2.438kg
KLUB19-498	75	76.5	CAOND136836	Half core	3.412kg
KLUB19-498	76.5	77.5	CAOND136837	Half core	2.534kg
KLUB19-498	77.5	78.4	CAOND136838	Half core	2.205kg
KLUB19-498	78.4	79.4	CAOND136839	Half core	2.301kg
KLUB19-498	79.4	80	CAOND136840	Half core	1.562kg
KLUB19-498	80	81	CAOND136841	Half core	2.372kg
KLUB19-498	81	82	CAOND136842	Half core	2.326kg
KLUB19-514	450.4	451.4	CAOND144149	Quarter of core	.987kg
KLUB19-514	451.4	452.3	CAOND144151	Half core	1.656kg
KLUB19-514	453.8	455.1	CAOND144153	Half core	2.605kg
KLUB19-514	455.1	456.3	CAOND144154	Half core	2.571kg
KLUB19-514	456.3	457	CAOND144155	Half core	1.165kg
KLUB19-514	457	458	CAOND144156	Half core	2.330kg
KLUB19-514	458	459.5	CAOND144157	Half core	2.725kg
KLUB19-517	193	194.5	CAOND144752	Half core	3.036kg
KLUB19-517	194.5	196	CAOND144753	Half core	2.500kg
KLUB19-517	196	197.5	CAOND144754	Half core	2.917kg
KLUB19-517	197.5	199	CAOND144755	Half core	3.279kg
KLUB19-517	199	200.5	CAOND144756	Quarter of core	3.034kg
KLUB19-517	200.5	202	CAOND144757	Half core	3.269kg
KLUB19-517	202	203.5	CAOND144758	Half core	3.185kg
KLUB19-517	203.5	205	CAOND144759	Half core	3.176kg
KLUB19-517	205	206	CAOND144761	Half core	2.304kg

KLUB19-517	206	207	CAOND144762	Half core	2.108kg
KLUB19-517	207	208.25	CAOND144763	Half core	2.669kg
KLUB19-517	209.55	211	CAOND144765	Half core	3.012kg
KLUB19-517	211	212.5	CAOND144766	Half core	3.077kg
KLUB19-517	212.5	214	CAOND144767	Half core	3.235kg
KLUB19-534	211.65	212.65	CAOND146955	Half core	1.893kg
KLUB19-534	212.65	213.4	CAOND146956	Half core	1.383kg
KLUB19-534	213.4	214.3	CAOND146957	Half core	2.146kg
KLUB19-534	214.3	214.9	CAOND146958	Half core	1.396kg
KLUB19-534	214.9	215.5	CAOND146959	Half core	1.328kg
KLUB19-534	215.5	216.4	CAOND146961	Half core	2.310kg
KLUB19-534	216.4	217.9	CAOND146962	Half core	3.272kg
KLUB19-534	217.9	219.4	CAOND146963	Half core	3.187kg
KLUB19-534	219.4	220.9	CAOND146964	Half core	3.590kg
KLUB19-534	220.9	221.8	CAOND146965	Half core	1.926kg
KLUB19-534	221.8	222.3	CAOND146966	Half core	1.038kg
KLUB21-690	318.7	319.6	CAOND178039	Half core	1.781kg
KLUB21-690	319.6	320.1	CAOND178040	Half core	1.238kg
KLUB21-690	320.1	321.1	CAOND178041	Half core	2.170kg
KLUB21-690	321.1	322.6	CAOND178042	Half core	3.316kg
KLUB21-690	322.6	324	CAOND178043	Half core	3.010kg
KLUB21-690	324	325.5	CAOND178044	Half core	3.122kg
KLUB21-690	325.5	327	CAOND178046	Half core	3.159kg
KLUB21-690	327	328.5	CAOND178047	Half core	3.591kg
KLUB21-690	328.5	330	CAOND178048	Half core	3.284kg
KLUB21-690	330	331.5	CAOND178049	Quarter of core	1.210kg
KLUB21-690	331.5	333	CAOND178051	Half core	3.133kg
KLUB21-690	333	334.5	CAOND178052	Half core	3.055kg
KLUB21-690	334.5	336	CAOND178053	Half core	3.144kg
KLUB21-690	336	337.5	CAOND178054	Half core	3.258kg
KLUB21-690	337.5	339	CAOND178055	Half core	3.193kg
KLUB21-690	339	340.5	CAOND178056	Half core	3.184kg
KLUB21-690	340.5	342	CAOND178057	Half core	3.069kg
KLUB21-690	342	342.675	CAOND178058	Half core	2.059kg
KLUB21-695	307.5	308.4	CAOND178435	Half core	1.976kg
KLUB21-695	308.4	309.5	CAOND178436	Half core	1.845kg
KLUB21-695	309.5	310.5	CAOND178437	Half core	2.230kg
KLUB21-695	310.5	311.5	CAOND178438	Half core	2.363kg
KLUB21-712B	120.9	122.4	CAOND185607	Half core	3.660kg
KLUB21-712B	122.4	123.1	CAOND185608	Half core	1.764kg
KLUB21-712B	123.1	124.6	CAOND185609	Half core	3.858kg
KLUB21-712B	127	128	CAOND185612	Half core	2.643kg
KLUB21-712B	128	128.6	CAOND185613	Half core	1.352kg
KLUB21-712B	160	161.5	CAOND185641	Half core	3.037kg

KLUB21-712B	161.5	162.3	CAOND185642	Half core	1.691kg
KLUB21-712B	163.1	164.6	CAOND185644	Half core	2.625kg
KLUB21-712B	164.6	166.1	CAOND185646	Half core	3.475kg
KLUB21-712B	166.1	167.6	CAOND185647	Half core	3.338kg
KLUB21-712B	167.6	169.1	CAOND185648	Half core	3.191kg
KLUB21-712B	169.1	170.6	CAOND185649	Half core	1.242kg
KLUB21-712B	170.6	171.5	CAOND185651	Half core	1.880kg
KLUB21-713A	261.5	262.5	CAOND185189	Half core	2.670kg
KLUB21-713A	262.5	263.5	CAOND185191	Half core	2.274kg
KLUB21-713A	263.5	264.5	CAOND185192	Half core	2.428kg
KLUB21-713A	264.5	265.5	CAOND185193	Half core	2.363kg
KLUB21-713A	265.5	266.5	CAOND185194	Half core	2.989kg
KLUB21-713A	266.5	267.5	CAOND185195	Half core	2.807kg
KLUB21-713A	267.5	268.5	CAOND185196	Quarter of core	1.200kg
KLUB21-713A	268.5	269.2	CAOND185197	Half core	1.271kg
KLUB21-713A	269.2	270.1	CAOND185198	Half core	2.291kg
KLUB21-713A	270.1	270.6	CAOND185199	Quarter of core	.558kg
KLUB21-713A	270.6	271.1	CAOND185201	Half core	1.406kg
KLUB21-713A	271.1	272	CAOND185202	Half core	2.531kg
KLUB21-718	150	151.5	CAOND185298	Half core	3.649kg
KLUB21-718	151.5	153	CAOND185299	Quarter of core	1.827kg
KLUB21-718	153	154.5	CAOND185301	Half core	3.328kg
KLUB21-718	154.5	156	CAOND185302	Half core	3.426kg
KLUB21-718	156	157.5	CAOND185303	Half core	3.511kg
KLUB21-718	157.5	159	CAOND185304	Half core	3.522kg
KLUB21-718	159	160.5	CAOND185305	Half core	3.454kg
KLUB21-718	160.5	161.5	CAOND185306	Half core	2.493kg
KLUB21-726	136.5	138	CAOND190844	Half core	3.488kg
KLUB21-726	138	139.5	CAOND190846	Half core	3.758kg
KLUB21-726	139.5	140	CAOND190847	Half core	1.223kg
KLUB21-726	140	141.5	CAOND190848	Half core	3.607kg
KLUB21-726	141.5	143	CAOND190849	Quarter of core	1.743kg
KLUB21-726	143	144	CAOND190851	Half core	2.224kg
KLUB21-726	144	145.5	CAOND190852	Half core	3.010k
KLUB21-726	145.5	147	CAOND190853	Half core	3.548kg
KLUB21-726	147	147.9	CAOND190854	Half core	2.286kg
KLUB21-726	147.9	149	CAOND190855	Half core	3.130kg
KLUB21-732	152.8	154.4	CAOND190467	Half core	3.624kg
KLUB21-732	154.4	155.6	CAOND190468	Half core	2.480kg
KLUB21-732	155.6	157	CAOND190469	Half core	3.217kg
KLUB21-732	157	158.5	CAOND190471	Half core	3.410kg
KLUB21-732	158.5	160	CAOND190472	Half core	3.527kg
KLUB21-732	160	161.5	CAOND190473	Half core	3.417kg
KLUB21-732	161.5	163	CAOND190474	Half core	3.241kg

KLUB21-732	163	164.5	CAOND190476	Half core	3.453kg
KLUB21-732	164.5	165.5	CAOND190477	Half core	2.280kg
KLUB21-732	186	187.5	CAOND190496	Half core	2.318kg
KLUB21-732	187.5	188.5	CAOND190497	Half core	2.122kg
KLUB21-732	188.5	189.5	CAOND190498	Half core	1.957kg
KLUB21-732	189.5	190.5	CAOND190499	Quarter of core	.981kg
KLUB21-732	190.5	191	CAOND191607	Half core	1.339kg
KLUB21-732	191	192	CAOND191608	Half core	1.871kg
KLUB21-732	192	193.5	CAOND191609	Half core	3.227kg
KLUB21-732	193.5	195	CAOND191610	Half core	3.298kg
KLUB21-732	195	196.5	CAOND191611	Half core	3.338kg
KLUB21-732	196.5	198	CAOND191612	Half core	2.925kg
KLUB21-732	198	199.5	CAOND191613	Half core	3.270kg
KLUB21-741A	288.4	289.5	CAOND194683	Half core	2.458kg
KLUB21-741A	289.5	291	CAOND194684	Half core	3.453kg
KLUB21-741A	291	292.5	CAOND194685	Half core	3.532kg
KLUB21-741A	292.5	294	CAOND194686	Half core	3.409kg
KLUB21-741A	294	295.5	CAOND194687	Half core	3.371kg
KLUB21-741A	295.5	297	CAOND194688	Half core	3.263kg
KLUB21-741A	297	297.5	CAOND194689	Half core	.986kg
KLUB21-741A	297.5	298.5	CAOND194691	Half core	2.386kg
KLUB21-741A	304	304.7	CAOND194696	Half core	1.418kg
KLUB21-741A	304.7	305.9	CAOND194697	Half core	2.583kg
KLUB21-741A	305.9	306.5	CAOND194698	Half core	1.340kg

5.4. Sample Collection List for Crowded Porphyry Composite

BHID	FROM	TO	SAMPLE	Type of sample	Actual Shipped Weight (kg)
KLUB19-485	134.2	135.5	CAOND103379	Half core	3.334kg
KLUB19-485	135.5	137	CAOND103381	Half core	3.907kg
KLUB19-485	137	138.5	CAOND103382	Half core	3.732kg
KLUB19-485	138.5	140	CAOND103383	Half core	3.721kg
KLUB19-485	140	141.5	CAOND103384	Half core	3.592kg
KLUB19-485	141.5	143	CAOND103385	Half core	3.761kg
KLUB19-485	143	144	CAOND103386	Half core	2.311kg
KLUB19-485	144	145.1	CAOND103387	Half core	2.833kg
KLUB19-491	414	415.5	CAOND105656	Half core	3.377kg
KLUB19-491	415.5	417	CAOND105657	Half core	3.539kg
KLUB19-491	417	418.5	CAOND105658	Half core	3.596kg
KLUB19-491	418.5	420	CAOND105659	Half core	3.575kg
KLUB19-491	420	421.5	CAOND105661	Half core	3.636kg
KLUB19-491	421.5	423	CAOND105662	Half core	3.749kg

KLUB19-491	423	424.5	CAOND105663	Quarter of core	3.542kg
KLUB19-491	424.5	426	CAOND105664	Half core	3.297kg
KLUB19-491	613.8	615.3	CAOND105868	Quarter of core	1.841kg
KLUB19-491	615.3	616.1	CAOND105869	Quarter of core	.974kg
KLUB19-491	616.1	616.8	CAOND105871	Quarter of core	.973kg
KLUB19-491	616.8	617.5	CAOND105872	Quarter of core	.968kg
KLUB19-491	618.2	619.1	CAOND105874	Quarter of core	1.184kg
KLUB19-491	619.1	619.9	CAOND105876	Quarter of core	.999kg
KLUB19-491	619.9	620.7	CAOND105877	Quarter of core	1.453kg
KLUB19-508	116.9	118	CAOND140241	Half core	3.324kg
KLUB19-508	118	119	CAOND140242	Half core	1.971kg
KLUB19-508	119	120	CAOND140243	Half core	2.034g
KLUB19-508	120	120.5	CAOND140244	Half core	0.895kg
KLUB19-508	120.5	121.5	CAOND140246	Half core	1.812kg
KLUB19-508	121.5	122.6	CAOND140247	Half core	2.229kg
KLUB19-508	122.6	123.3	CAOND140248	Half core	2.015kg
KLUB19-508	123.3	124.5	CAOND140249	Quarter of core	0.903kg
KLUB19-508	124.5	126	CAOND140251	Half core	2.565kg
KLUB19-508	126	127.5	CAOND140252	Half core	2.840kg
KLUB19-523	469.6	470.5	CAOND147047	Half core	2.009kg
KLUB19-523	470.5	471	CAOND147048	Half core	1.058kg
KLUB19-523	471	471.8	CAOND147049	Quarter of core	0.752kg
KLUB19-544	182	183.5	CAOND126451	Half core	3.018kg
KLUB19-544	183.5	185	CAOND126452	Half core	2.907kg
KLUB19-544	185	186.5	CAOND126453	Half core	3.533kg
KLUB19-544	186.5	188	CAOND126454	Half core	2.976kg
KLUB19-544	188	189.5	CAOND126455	Half core	3.431kg
KLUB19-544	189.5	191	CAOND126456	Half core	3.543kg
KLUB20-596	60	61.5	CAOND160140	Half core	2.904kg
KLUB20-596	61.5	63	CAOND160141	Half core	3.484kg
KLUB20-596	63	64.5	CAOND160142	Half core	2.922kg
KLUB20-596	64.5	66	CAOND160143	Half core	2.982kg
KLUB20-596	66	67.5	CAOND160144	Half core	2.827kg
KLUB20-596	67.5	69	CAOND160146	Half core	3.201kg
KLUB20-596	69	70.5	CAOND160147	Half core	2.743kg
KLUB20-596	70.5	71.4	CAOND160148	Half core	1.994kg
KLUB20-632	111.7	112.5	CAOND168506	Half core	1.837kg
KLUB20-632	112.5	113	CAOND168507	Half core	0.857kg
KLUB20-632	113	114	CAOND168508	Half core	2.057kg
KLUB20-632	114	115	CAOND168509	Half core	2.068kg
KLUB20-632	115	116	CAOND168510	Half core	2.007kg
KLUB20-632	116	117	CAOND168511	Half core	1.980kg
KLUB20-632	117	118	CAOND168512	Half core	2.047kg
KLUB20-632	118	119	CAOND168513	Half core	2.082kg

KLUB20-632	119	120	CAOND168514	Half core	1.961kg
KLUB20-632	120	121	CAOND168516	Half core	2.066kg
KLUB20-659	189.8	191	CAOND174499	Quarter of core	.889kg
KLUB20-659	191	191.5	CAOND176001	Half core	.807kg
KLUB20-659	191.5	192.5	CAOND176002	Half core	1.878kg
KLUB20-659	192.5	193	CAOND176003	Half core	1.035kg
KLUB20-659	193	194	CAOND176004	Half core	2.073kg
KLUB20-659	194	195	CAOND176005	Half core	1.786kg
KLUB20-659	195	196	CAOND176006	Half core	1.951kg
KLUB20-659	196	197	CAOND176007	Half core	1.952kg
KLUB20-659	197	198	CAOND176008	Half core	1.879kg
KLUB20-659	198	199	CAOND176009	Half core	1.909kg
KLUB20-659	199	200	CAOND176010	Half core	1.942kg
KLUB20-659	200	201	CAOND176011	Half core	1.975kg
KLUB21-307W13	1678.5	1679.8	CAOND202228	Half core	2.600kg
KLUB21-307W13	1679.8	1681.3	CAOND202229	Half core	2.994kg
KLUB21-307W13	1681.3	1682.8	CAOND202231	Half core	3.063kg
KLUB21-307W13	1682.8	1683.7	CAOND202232	Half core	1.793kg
KLUB21-307W13	1683.7	1684.8	CAOND202233	Half core	2.183kg
KLUB21-307W13	1684.8	1685.8	CAOND202234	Half core	1.979kg
KLUB21-307W13	1685.8	1686.3	CAOND202235	Half core	1.972kg
KLUB21-307W13	1686.3	1687.2	CAOND202236	Half core	1.859kg
KLUB21-307W13	1687.2	1688	CAOND202237	Half core	2.090kg
KLUB21-307W13	1688	1689.1	CAOND202238	Half core	1.504kg
KLUB21-638W1	1224	1225.5	CAOND175907	Half core	3.414kg
KLUB21-638W1	1225.5	1227	CAOND175908	Half core	3.325kg
KLUB21-638W1	1227	1228.5	CAOND175909	Half core	3.375kg
KLUB21-638W1	1228.5	1230	CAOND175910	Half core	3.678kg
KLUB21-638W1	1230	1231.5	CAOND175911	Half core	3.868kg
KLUB21-638W1	1231.5	1233	CAOND175912	Half core	3.204kg
KLUB21-638W1	1233	1233.33	CAOND175913	Half core	3.486kg
KLUB21-712B	99.7	101.2	CAOND185587	Half core	3.462kg
KLUB21-712B	101.2	102.7	CAOND185588	Half core	3.329kg
KLUB21-712B	102.7	104.2	CAOND185589	Half core	3.281kg
KLUB21-712B	104.2	104.9	CAOND185591	Half core	1.622kg
KLUB21-712B	104.9	105.4	CAOND185592	Half core	.955kg
KLUB21-712B	105.4	106.9	CAOND185593	Half core	3.103kg
KLUB21-712B	106.9	108.4	CAOND185594	Half core	3.190kg
KLUB21-712B	108.4	109.9	CAOND185595	Half core	3.735kg
KLUB21-712B	109.9	111.4	CAOND185596	Half core	3.469kg
KLUB21-712B	111.4	112.4	CAOND185597	Half core	2.445kg
KLUB21-721	378	379	CAOND186874	Half core	2.313kg
KLUB21-721	379	380.5	CAOND186876	Half core	3.369kg
KLUB21-721	380.5	382	CAOND186877	Half core	3.360kg

KLUB21-721	382	383.5	CAOND186878	Half core	3.316kg
KLUB21-721	383.5	385	CAOND186879	Half core	3.427kg
KLUB21-721	385	386.5	CAOND186881	Half core	3.543kg
KLUB21-721	386.5	388	CAOND186882	Half core	3.356kg
KLUB21-724	83.5	84.3	CAOND191084	Half core	1.709kg
KLUB21-724	84.3	85	CAOND191085	Half core	1.707kg
KLUB21-724	85	86	CAOND191086	Half core	1.915kg
KLUB21-724	86	87	CAOND191087	Half core	2.730kg
KLUB21-724	87	88.5	CAOND191088	Half core	3.214kg
KLUB21-724	90	91.5	CAOND191091	Half core	3.045kg
KLUB21-724	91.5	93	CAOND191092	Half core	3.481kg
KLUB21-724	93	94.5	CAOND191093	Half core	3.286kg
KLUB21-724	94.5	96	CAOND191094	Half core	3.093kg
KLUB21-724	96	97.5	CAOND191095	Half core	2.673kg
KLUB21-724	97.5	98.5	CAOND191096	Half core	2.224kg
KLUB21-724	98.5	99.5	CAOND191097	Half core	2.376kg
KLUB21-724	99.5	100.5	CAOND191098	Half core	2.133kg
KLUB21-741A	430.7	431.4	CAOND194807	Half core	1.511kg
KLUB21-741A	431.4	431.9	CAOND194808	Half core	1.245kg
KLUB21-741A	431.9	433	CAOND194810	Half core	2.219kg
KLUB21-741A	433	434.3	CAOND194811	Half core	2.895kg
KLUB21-741A	434.3	435	CAOND194812	Half core	1.661kg
KLUB21-741A	435	436	CAOND194813	Half core	2.241kg
KLUB21-741A	436	437	CAOND194814	Half core	2.264kg
KLUB21-741A	437	438.4	CAOND194816	Half core	3.110kg
KLUB21-741A	438.4	439.6	CAOND194817	Half core	2.828kg
KLUB21-750	309.5	310.5	CAOND203859	Half core	2.366kg
KLUB21-750	310.5	311.5	CAOND203861	Half core	2.560kg
KLUB21-750	311.5	312.5	CAOND203862	Half core	1.667kg
KLUB21-750	312.5	314	CAOND203863	Half core	3.562kg
KLUB21-750	314	315.5	CAOND203864	Half core	3.534kg
KLUB21-750	315.5	316.5	CAOND203865	Half core	2.276kg
KLUB21-750	316.5	317.5	CAOND203866	Half core	2.123kg
KLUB21-750	317.5	318.2	CAOND203867	Half core	1.755kg
KLUB21-756	271.1	272.6	CAOND198806	Half core	2.132kg
KLUB21-756	272.6	274.1	CAOND198807	Half core	2.854kg
KLUB21-756	274.1	275.6	CAOND198808	Half core	3.535kg
KLUB21-756	275.6	277	CAOND198809	Half core	2.845kg
KLUB21-761A	316.5	318	CAOND201974	Half core	3.345kg
KLUB21-761A	318	319.5	CAOND201976	Half core	3.642kg
KLUB21-761A	319.5	321	CAOND201977	Half core	3.503kg
KLUB21-761A	321	322.5	CAOND201978	Half core	3.637kg
KLUB21-761A	322.5	324	CAOND201979	Half core	3.443kg
KLUB21-761A	324	325.5	CAOND201981	Half core	3.621kg

KLUB21-761A	325.5	327	CAOND201982	Half core	3.103kg
KLUB21-763	298.7	300	CAOND207147	Half core	2.644kg
KLUB21-763	300	301	CAOND207148	Half core	2.190kg
KLUB21-763	301	302	CAOND207149	Quarter of core	1.218kg
KLUB21-763	302	303	CAOND207151	Half core	2.020kg
KLUB21-763	303	304.5	CAOND207152	Half core	2.447kg
KLUB21-763	304.5	305.6	CAOND207153	Half core	3.078kg

5.5. Sample Collection List for Mafic Syenite Composite

BHID	FROM	TO	SAMPLE	Type of sample	Actual Shipped Weight (kg)
KLUB19-494	262.1	263	CAOND106814	Half core	2.235kg
KLUB19-494	263	264	CAOND106816	Half core	2.324kg
KLUB19-494	264	265.5	CAOND106817	Half core	3.630kg
KLUB19-494	267	268.5	CAOND106819	Half core	3.893kg
KLUB19-494	268.5	270	CAOND106821	Half core	3.798kg
KLUB19-494	270	271.5	CAOND106822	Half core	4.043kg
KLUB19-494	271.5	273	CAOND106823	Half core	3.648kg
KLUB19-552	276.9	278	CAOND128862	Half core	2.566kg
KLUB19-552	278	279.5	CAOND128863	Half core	3.582kg
KLUB19-552	279.5	280.5	CAOND128864	Half core	3.551kg
KLUB19-552	280.5	281.5	CAOND128865	Half core	2.760kg
KLUB19-552	281.5	282.3	CAOND128866	Half core	1.916kg
KLUB19-552	282.3	283.3	CAOND128867	Half core	2.809kg
KLUB19-552	283.3	284	CAOND128868	Half core	1.691kg
KLUB19-552	284	285.5	CAOND128869	Half core	3.615kg
KLUB19-552	285.5	287	CAOND128871	Half core	3.374kg
KLUB19-552	287	288.5	CAOND128872	Half core	3.564kg
KLUB19-552	288.5	290	CAOND128873	Half core	3.639kg
KLUB19-552	290	290.9	CAOND128874	Half core	2.100kg
KLUB20-200W14	1500	1501	CAOND158984	Quarter of core	1.122kg
KLUB20-200W14	1501	1502	CAOND158985	Quarter of core	1.097kg
KLUB20-200W14	1502	1503.3	CAOND158986	Quarter of core	1.505kg
KLUB20-200W14	1503.3	1504	CAOND158987	Quarter of core	.867kg
KLUB20-200W14	1504	1505	CAOND158988	Quarter of core	1.137kg
KLUB20-200W14	1505	1506	CAOND158989	Quarter of core	1.168kg
KLUB20-200W14	1506	1507	CAOND158991	Quarter of core	1.004kg
KLUB20-200W14	1507	1508	CAOND158992	Quarter of core	1.121kg1
KLUB20-200W14	1508	1509	CAOND158993	Quarter of core	1.065kg
KLUB20-200W14	1509	1510	CAOND158994	Quarter of core	1.160kg
KLUB20-200W14	1510	1511.3	CAOND158995	Quarter of core	1.555kg
KLUB20-200W14	1511.3	1512.6	CAOND158996	Quarter of core	1.480kg

KLUB20-200W14	1537.9	1539	CAOND164523	Half core	2.307kg
KLUB20-200W14	1539	1540.4	CAOND164524	Half core	2.996kg
KLUB20-200W14	1540.4	1541.9	CAOND164526	Half core	2.763kg
KLUB20-200W14	1541.9	1543	CAOND164527	Half core	2.414kg
KLUB20-200W14	1543	1544	CAOND164528	Half core	2.165kg
KLUB20-200W14	1544	1545.2	CAOND164529	Half core	2.511kg
KLUB20-200W14	1545.2	1546.7	CAOND164531	Half core	3.144kg
KLUB20-200W14	1546.7	1548	CAOND164532	Half core	2.741kg
KLUB20-200W14	1548	1549.5	CAOND164533	Half core	3.027kg
KLUB20-200W14	1549.5	1551	CAOND164534	Half core	2.959kg
KLUB20-200W14	1551	1552	CAOND164535	Half core	2.157kg
KLUB20-200W14	1552	1553	CAOND164536	Half core	1.754kg
KLUB20-200W14	1553	1554.5	CAOND164537	Half core	3.198kg
KLUB20-200W14	1554.5	1556	CAOND164538	Half core	2.860kg
KLUB20-200W14	1556	1557.4	CAOND164539	Half core	2.476kg
KLUB20-200W14	1557.4	1558.9	CAOND164540	Half core	2.496kg
KLUB20-200W14	1558.9	1560	CAOND164541	Half core	1.925kg
KLUB20-200W14	1560	1561	CAOND164542	Half core	1.989kg
KLUB21-137W4	990	991.5	CAOND214265	Half core	3.374kg
KLUB21-137W4	991.5	993	CAOND214266	Half core	3.003kg
KLUB21-137W4	993	994	CAOND214267	Half core	2.248kg
KLUB21-137W4	994	995	CAOND214268	Half core	2.149kg
KLUB21-137W4	995	996	CAOND214269	Half core	2.096kg
KLUB21-137W4	996	997.5	CAOND214271	Half core	3.116kg
KLUB21-137W4	997.5	999	CAOND214272	Half core	3.086kg
KLUB21-137W4	999	1000.5	CAOND214273	Half core	3.290kg
KLUB21-137W4	1000.5	1002	CAOND214274	Half core	3.643kg
KLUB21-163W20	1249.9	1251.4	CAOND212582	Half core	3.628kg
KLUB21-163W20	1251.4	1252.9	CAOND212583	Half core	3.183kg
KLUB21-163W20	1252.9	1254.4	CAOND212584	Half core	3.361kg
KLUB21-163W20	1254.4	1255.9	CAOND212585	Half core	3.242kg
KLUB21-163W20	1255.9	1257.3	CAOND212586	Half core	3.556kg
KLUB21-163W20	1257.3	1258.8	CAOND212588	Half core	2.867kg
KLUB21-163W20	1258.8	1260	CAOND212589	Half core	3.698kg
KLUB21-163W20	1269.9	1271	CAOND212598	Half core	2.361kg
KLUB21-163W20	1271	1272.5	CAOND212599	Quarter of core	1.556kg
KLUB21-163W20	1272.5	1274	CAOND212601	Half core	3.264kg
KLUB21-163W20	1274	1275.5	CAOND212602	Half core	2.973kg
KLUB21-163W20	1275.5	1277	CAOND212603	Half core	3.704kg
KLUB21-163W20	1277	1278.5	CAOND212604	Half core	3.214kg
KLUB21-163W20	1278.5	1280	CAOND212605	Half core	3.630kg
KLUB21-163W20	1280	1281.5	CAOND212606	Half core	2.910kg
KLUB21-163W20	1281.5	1283	CAOND212607	Half core	3.405kg
KLUB21-163W20	1283	1284.5	CAOND212608	Half core	3.111kg

KLUB21-163W20	1284.5	1286	CAOND212609	Half core	3.164kg
KLUB21-163W20	1286	1287.4	CAOND212610	Half core	2.904kg
KLUB21-163W20	1287.4	1288.8	CAOND212611	Half core	2.966kg
KLUB21-163W20	1288.8	1290	CAOND212612	Half core	2.613kg
KLUB21-328W9	1655	1656	CAOND202840	Quarter of core	1.284kg
KLUB21-328W9	1656	1657	CAOND202841	Quarter of core	1.046kg
KLUB21-328W9	1657	1658	CAOND202842	Quarter of core	1.120kg
KLUB21-328W9	1658	1658.8	CAOND202843	Quarter of core	.972kg
KLUB21-328W9	1658.8	1659.4	CAOND202844	Quarter of core	.775kg
KLUB21-328W9	1659.4	1660	CAOND202846	Quarter of core	.643kg
KLUB21-328W9	1660	1660.8	CAOND202847	Quarter of core	.986kg
KLUB21-328W9	1660.8	1661.5	CAOND202848	Quarter of core	.801kg
KLUB21-328W9	1661.5	1662.3	CAOND202849	Quarter of core	.924kg
KLUB21-328W9	1662.3	1663	CAOND202851	Quarter of core	.951kg
KLUB21-328W9	1663	1663.7	CAOND202852	Quarter of core	.847kg
KLUB21-328W9	1664.6	1665.5	CAOND202853	Quarter of core	1.067kg
KLUB21-328W9	1665.5	1666.4	CAOND202854	Quarter of core	.913kg
KLUB21-328W9	1666.4	1666.9	CAOND202855	Quarter of core	.641kg
KLUB21-328W9	1737.5	1738	CAOND202951	Half core	1.294kg
KLUB21-328W9	1738	1739	CAOND202952	Half core	2.396kg
KLUB21-328W9	1739	1739.6	CAOND202953	Half core	1.539kg
KLUB21-328W9	1739.6	1740.1	CAOND202954	Half core	1.153kg
KLUB21-328W9	1740.1	1741	CAOND202955	Half core	2.274kg
KLUB21-328W9	1741	1742	CAOND202956	Half core	2.700kg
KLUB21-328W9	1742	1743	CAOND202957	Half core	2.436kg
KLUB21-328W9	1743	1744	CAOND202958	Half core	2.381kg
KLUB21-328W9	1744	1744.6	CAOND202959	Half core	1.350kg
KLUB21-328W9	1744.6	1745.2	CAOND202961	Half core	1.376kg
KLUB21-328W9	1745.2	1746	CAOND202962	Half core	1.668kg
KLUB21-328W9	1746	1747	CAOND202963	Half core	2.484kg
KLUB21-328W9	1747	1748	CAOND202964	Half core	2.383kg
KLUB21-328W9	1748	1749	CAOND202965	Half core	2.492kg
KLUB21-328W9	1749	1750	CAOND202966	Half core	2.490kg
KLUB21-693	187	187.7	CAOND176478	Half core	1.145kg
KLUB21-693	187.7	188.7	CAOND176479	Half core	2.330kg
KLUB21-693	188.7	190	CAOND176481	Half core	2.613kg
KLUB21-693	190	191.3	CAOND176482	Half core	2.290kg
KLUB21-693	191.3	192.5	CAOND176483	Half core	2.307kg
KLUB21-693	192.5	193.8	CAOND176484	Half core	2.573kg
KLUB21-693	193.8	194.3	CAOND176485	Half core	1.193kg
KLUB21-693	194.3	195.2	CAOND176486	Half core	1.681kg
KLUB21-693	195.2	195.8	CAOND176487	Half core	1.392kg
KLUB21-693	195.8	197	CAOND176488	Half core	2.494kg
KLUB21-693	197	198.2	CAOND176489	Half core	2.604kg

KLUB21-693	198.2	199.5	CAOND176491	Half core	2.434kg
KLUB21-693	199.5	201	CAOND176492	Half core	3.335kg
KLUB21-693	201	202	CAOND176493	Half core	2.148kg
KLUB21-693	202	203	CAOND176494	Half core	1.118kg
KLUB21-727	148.7	150.2	CAOND188744	Half core	3.398kg
KLUB21-727	150.2	151.7	CAOND188746	Half core	3.371kg
KLUB21-727	151.7	153.2	CAOND188747	Half core	3.387kg
KLUB21-745W1	484.5	486	CAOND199065	Half core	2.732kg
KLUB21-745W1	486	487.5	CAOND199066	Half core	3.783kg
KLUB21-745W1	487.5	489	CAOND199067	Half core	3.616kg
KLUB21-745W1	489	490.5	CAOND199068	Half core	3.665kg
KLUB21-745W1	490.5	492	CAOND199069	Half core	3.567kg
KLUB21-745W1	492	493.5	CAOND199071	Half core	3.690kg
KLUB21-745W1	493.5	495	CAOND199072	Half core	3.735kg
KLUB21-745W1	495	496.5	CAOND199073	Half core	3.673kg
KLUB21-745W1	496.5	498	CAOND199074	Half core	3.729kg
KLUB21-745W1	498	499.5	CAOND199076	Half core	3.868kg
KLUB21-745W1	499.5	501	CAOND199077	Half core	3.690kg
KLUB21-745W1	501	502	CAOND199078	Half core	2.422kg
KLUB21-745W1	502	503	CAOND199079	Half core	2.726kg
KLUB21-745W1	503	504	CAOND199081	Half core	2.545kg
KLUB21-745W1	504	505.5	CAOND199082	Half core	2.603kg
KLUB21-745W1	505.5	506.5	CAOND199083	Half core	2.287kg

5.6. Sample Collection List for Gabbro Composite

BHID	FROM	TO	SAMPLE	Type of sample	Actual Shipped Weight (kg)
KLUB19-520	52	53	CAOND143776	Half core	2.284kg
KLUB19-520	53	54	CAOND143777	Half core	2.432kg
KLUB19-520	54	55.5	CAOND143778	Half core	3.506kg
KLUB19-520	57	58.5	CAOND143781	Half core	3.404kg
KLUB19-520	58.5	60	CAOND143782	Half core	3.715kg
KLUB19-520	60	61.5	CAOND143783	Half core	3.588kg
KLUB19-520	61.5	63	CAOND143784	Half core	3.656kg
KLUB19-520	64.5	66	CAOND143786	Half core	3.275kg
KLUB19-520	66	67.5	CAOND143787	Half core	3.211kg
KLUB19-520	69	70	CAOND143789	Half core	3.596kg
KLUB20-622	25.5	27	CAOND152421	Half core	3.300kg
KLUB20-622	27	27.7	CAOND152422	Half core	1.837kg
KLUB20-622	27.7	29.1	CAOND152423	Half core	3.186kg
KLUB20-622	30.6	32	CAOND152426	Half core	3.864kg
KLUB20-622	32	33	CAOND152427	Half core	2.501kg

KLUB20-622	34.5	35.8	CAOND152429	Half core	3.199kg
KLUB20-622	35.8	37.1	CAOND152431	Half core	3.341kg
KLUB20-622	37.1	37.7	CAOND152432	Half core	1.442kg
KLUB20-622	37.7	38.4	CAOND152433	Half core	2.053kg
KLUB20-622	38.4	39	CAOND152434	Half core	1.363km
KLUB20-622	72	72.6	CAOND152468	Half core	1.239kg
KLUB20-622	72.6	73.5	CAOND152469	Half core	1.966kg
KLUB20-622	73.5	75	CAOND152471	Half core	3.249kg
KLUB20-622	75	76.5	CAOND152472	Half core	3.978kg
KLUB20-622	76.5	78	CAOND152473	Half core	3.183kg
KLUB20-622	78	78.8	CAOND152474	Half core	1.656kg
KLUB20-628A	3	4.5	CAOND165549	Quarter of core	.815kg
KLUB20-628A	4.5	6	CAOND165551	Half core	2.832kg
KLUB20-628A	6	7	CAOND165552	Half core	1.955kg
KLUB20-628A	8.5	10	CAOND165554	Half core	3.214kg
KLUB20-628A	10	11.5	CAOND165555	Half core	2.275kg
KLUB20-628A	11.5	13	CAOND165556	Half core	2.766kg
KLUB20-629	15.5	16	CAOND165204	Half core	1.107kg
KLUB20-629	16	17	CAOND165205	Half core	2.260kg
KLUB20-629	17	18	CAOND165206	Half core	2.237kg
KLUB20-629	18	19.5	CAOND165207	Half core	3.201kg
KLUB20-629	19.5	21	CAOND165208	Half core	3.072kg
KLUB20-629	22	23	CAOND165209	Half core	2.606kg
KLUB20-633	5.5	7	CAOND163778	Half core	2.954KG
KLUB20-633	7	8	CAOND163779	Half core	1.377KG
KLUB20-633	8	9.1	CAOND163781	Half core	1.520KG
KLUB20-633	9.1	10.5	CAOND163782	Half core	3.125KG
KLUB20-633	10.5	12	CAOND163783	Half core	3.458KG
KLUB20-633	13.5	15	CAOND163785	Half core	3.413KG
KLUB20-633	15	16	CAOND163786	Half core	2.365KG
KLUB20-633	104.5	106	CAOND163879	Half core	3.092kg
KLUB20-633	106	107.5	CAOND163881	Half core	3.375kg
KLUB20-633	107.5	109	CAOND163882	Half core	3.238kg
KLUB20-633	109	110	CAOND163883	Half core	2.228kg
KLUB20-633	110	110.8	CAOND163884	Half core	1.741kg
KLUB20-633	110.8	111.3	CAOND163885	Half core	1.148kg
KLUB20-633	111.3	112	CAOND163886	Half core	1.737kg
KLUB20-633	112	113	CAOND163887	Half core	2.104kg
KLUB20-633	113	114	CAOND163888	Half core	2.300kg
KLUB20-636	12	13	CAOND167709	Half core	2.470kg
KLUB20-636	13	14	CAOND167710	Half core	2.226kg
KLUB20-636	14	15.5	CAOND167711	Half core	3.669kg
KLUB20-636	15.5	17	CAOND167712	Half core	3.443kg
KLUB20-636	17	18.5	CAOND167713	Half core	3.229kg

KLUB20-636	18.5	20	CAOND167714	Half core	3.585kg
KLUB20-636	20	21.5	CAOND167716	Half core	3.490kg
KLUB20-636	21.5	23	CAOND167717	Half core	3.647kg
KLUB20-636	23	24.5	CAOND167718	Half core	3.560kg
KLUB20-636	24.5	26	CAOND167719	Half core	3.460kg
KLUB20-636	26	27.5	CAOND167721	Half core	3.379kg
KLUB20-636	27.5	28.75	CAOND167722	Half core	2.906kg
KLUB20-636	29.25	30.5	CAOND167724	Half core	2.582kg
KLUB20-636	30.5	32	CAOND167726	Half core	3.620kg
KLUB20-636	32	33.5	CAOND167727	Half core	3.320kg
KLUB20-636	33.5	35	CAOND167728	Half core	3.988kg
KLUB20-636	35	36.5	CAOND167729	Half core	3.521kg
KLUB21-712B	27.5	29	CAOND185518	Half core	3.660kg
KLUB21-712B	30.5	32	CAOND185521	Half core	3.437kg
KLUB21-712B	32	33.5	CAOND185522	Half core	3.321kg
KLUB21-712B	33.5	34.7	CAOND185523	Half core	2.895kg
KLUB21-713A	15.15	16.5	CAOND183471	Half core	3.447kg
KLUB21-713A	16.5	18	CAOND183472	Half core	2.787kg
KLUB21-713A	18	19.5	CAOND183473	Half core	3.415kg
KLUB21-713A	19.5	21	CAOND183474	Half core	3.023kg
KLUB21-721	23	24.2	CAOND186554	Half core	3.100kg
KLUB21-724	4.5	6	CAOND191001	Half core	3.657kg
KLUB21-724	7.5	8.5	CAOND191003	Half core	2.272kg
KLUB21-727	15.5	17	CAOND188624	Half core	3.771kg
KLUB21-727	17	18.5	CAOND188626	Half core	3.319kg
KLUB21-727	18.5	20	CAOND188627	Half core	3.505kg
KLUB21-727	20	21.5	CAOND188628	Half core	3.274kg
KLUB21-727	21.5	23	CAOND188629	Half core	3.586kg
KLUB21-727	24.5	26	CAOND188632	Half core	3.672kg
KLUB21-727	26	27.5	CAOND188633	Half core	2.897kg
KLUB21-727	27.5	29	CAOND188634	Half core	3.538kg
KLUB21-727	29	30.5	CAOND188635	Half core	3.274kg
KLUB21-727	30.5	32	CAOND188636	Half core	3.384kg
KLUB21-727	32	33	CAOND188637	Half core	1.600kg
KLUB21-727	33	34	CAOND188638	Half core	2.090kg
KLUB21-727	34	34.7	CAOND188639	Half core	1.249kg
KLUB21-727	35.8	36.8	CAOND188641	Half core	2.234kg
KLUB21-735	2	3.5	CAOND188864	Half core	3.699kg
KLUB21-735	6	6.6	CAOND188867	Half core	1.590kg
KLUB21-735	6.6	8	CAOND188868	Half core	3.789kg
KLUB21-735	8	9.5	CAOND188869	Half core	3.584kg
KLUB21-735	9.5	10	CAOND188871	Half core	1.338kg
KLUB21-735	10	11	CAOND188872	Half core	2.572kg
KLUB21-735	11	12	CAOND188873	Half core	2.472kg

KLUB21-735	12	12.9	CAOND188874	Half core	2.189kg
KLUB21-735	12.9	14.3	CAOND188876	Half core	3.589kg
KLUB21-735	14.3	15.3	CAOND188877	Half core	2.603kg
KLUB21-735	15.3	16.8	CAOND188878	Half core	3.940kg
KLUB21-735	16.8	17.3	CAOND188879	Half core	1.372kg
KLUB21-735	17.3	18.4	CAOND188881	Half core	2.584kg
KLUB21-735	18.4	19.4	CAOND188882	Half core	2.653kg
KLUB21-735	19.4	20.6	CAOND188883	Half core	2.795kg
KLUB21-735	20.6	21.6	CAOND188884	Half core	2.468kg
KLUB21-735	21.6	22.4	CAOND188885	Half core	1.978kg
KLUB21-735	22.4	23.6	CAOND188886	Half core	3.251kg
KLUB21-735	24.7	26.1	CAOND188888	Half core	3.672kg
KLUB21-735	26.1	27.6	CAOND188889	Half core	2.933kg
KLUB21-735	27.6	28.7	CAOND188891	Half core	3.243kg
KLUB21-735	28.7	30	CAOND188892	Half core	3.325kg
KLUB21-735	30	31	CAOND188893	Half core	2.397kg
KLUB21-735	31	31.8	CAOND188894	Half core	2.401kg
KLUB21-735	31.8	33.2	CAOND188895	Quarter of core	1.763kg
KLUB21-735	33.2	34.2	CAOND188896	Half core	2.504kg
KLUB21-735	34.2	35.3	CAOND188897	Half core	2.601kg
KLUB21-735	35.3	36.8	CAOND188898	Half core	3.238kg
KLUB21-735	36.8	38	CAOND188899	Quarter of core	1.422kg
KLUB21-735	38	39.1	CAOND188901	Half core	2.687kg
KLUB21-735	39.1	39.8	CAOND188902	Half core	1.645kg
KLUB21-735	39.8	40.8	CAOND188903	Half core	2.482kg
KLUB21-735	40.8	42.1	CAOND188904	Half core	2.877kg
KLUB21-735	42.1	43	CAOND188905	Half core	2.310kg
KLUB21-735	43	44	CAOND188906	Half core	2.242kg

Appendix B: Mine Rock Static Test Data

Appendix B1: Mineralogy Laboratory Files

Appendix B2: Acid Base Accounting and Metal Concentration Laboratory Files

Appendix B3: Four Acid Digestion Laboratory Files

Appendix B4: Shake Flask Extraction Laboratory Files

Appendix B5: Reject Duplicate and Core Variability Laboratory Files

AGNICO EAGLE

TIMA DATA

prepared for:

2138 Upper Beaver

Custom MIN
MI7016-MAR23
June 10, 2026

Prepared by:

Logan Jameson
Senior Mineralogist

SGS Canada
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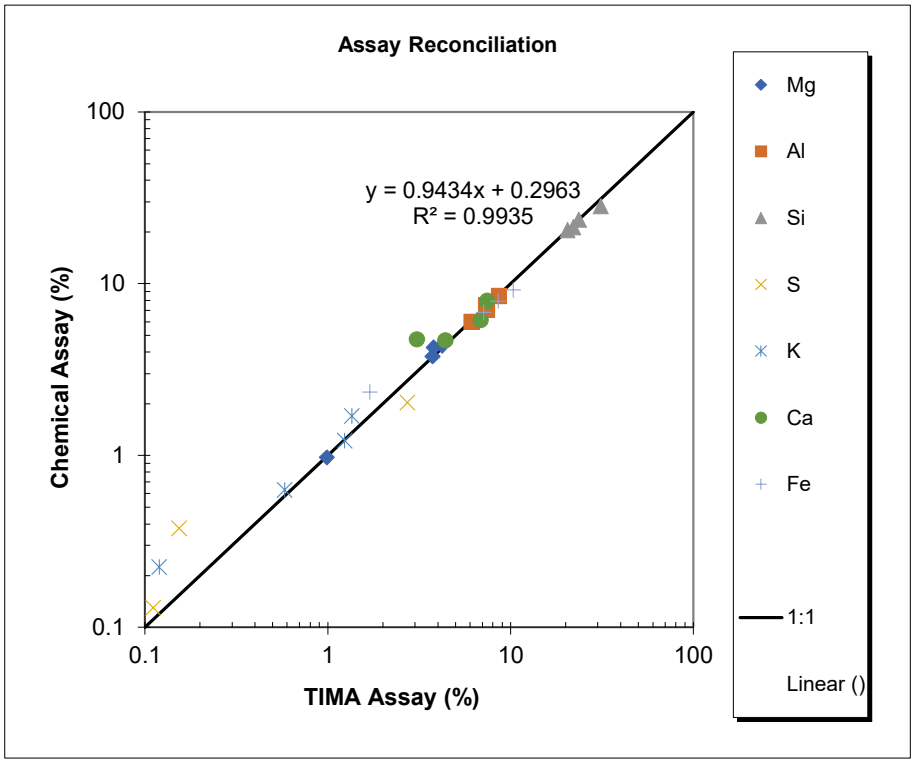
Member of the SGS Group (SGS SA)

SGS Canada Inc.
2138 Upper Beaver
Custom MIN
MI7016-MAR23

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Assay Reconciliation



Sample	CAOND 136961	CAOND 164897	CAOND 128163	CAOND 157957
Element	**80%P150**	**80%P150**	**80%P150**	**80%P150**
Mg TIMA Calculated	3.73	4.21	3.79	0.99
Mg Chemical Assay	3.78	4.36	4.25	0.98
Al TIMA Calculated	8.61	7.42	6.11	7.32
Al Chemical Assay	8.49	7.06	6.00	7.46
Si TIMA Calculated	20.4	23.5	22.0	31.1
Si Chemical Assay	20.5	23.6	21.3	28.3
S TIMA Calculated	2.73	0.11	0.09	0.15
S Chemical Assay	2.04	0.13	0.10	0.38
K TIMA Calculated	0.12	0.58	1.23	1.35
K Chemical Assay	0.22	0.63	1.22	1.70
Ca TIMA Calculated	4.40	6.84	7.43	3.07
Ca Chemical Assay	4.69	6.14	7.98	4.75
Fe TIMA Calculated	8.55	10.3	7.12	1.70
Fe Chemical Assay	7.94	9.20	6.81	2.34

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Modals

Survey		Custom MIN / MI7016-MAR23			
Project		2138 Upper Beaver			
Sample		CAOND 136961	CAOND 164897	CAOND 128163	CAOND 157957
Fraction		80%P150	80%P150	80%P150	80%P150
Mass % of Size Fraction [%]		100.0	100.0	100.0	100.0
Median Particle Size (µm)		109	133	119	151
		Sample	Sample	Sample	Sample
Mineral Mass (%)	Pyrite	5.20	0.20	0.00	0.00
	Other Sulphides	0.06	0.03	0.26	0.00
	Quartz	1.90	10.7	11.7	30.4
	Plagiocase	44.1	15.5	25.4	38.7
	K-Feldspar	0.05	0.92	3.93	0.93
	Illite/Mica	1.37	5.78	8.52	13.8
	Chlorite	30.7	19.3	20.3	5.88
	Amphibole/Pyroxene	0.60	23.5	8.82	0.13
	Clays	5.07	2.76	0.96	1.97
	Garnet	0.00	0.00	0.00	0.00
	Pumpellyite	0.07	15.7	0.073	0.09
	Tourmaline	0.03	0.01	0.024	0.00
	Other Silicates	0.29	0.40	0.39	0.15
	Iron Oxide/Hydroxide	0.35	1.37	3.32	0.19
	Other Oxides	1.56	2.24	0.84	0.44
	Calcite	8.07	0.81	14.4	5.70
	Dolomite	0.12	0.07	0.35	0.03
	Ankerite	0.20	0.39	0.40	0.07
	Siderite	0.00	0.00	0.05	0.00
	Alunite	0.00	0.00	0.00	0.01
	Gypsum	0.01	0.00	0.01	0.81
	Jarosite	0.00	0.00	0.00	0.00
	Other Sulphates	0.00	0.00	0.00	0.00
	Phosphates	0.22	0.18	0.11	0.36
	Other	0.08	0.16	0.12	0.39
	Total	100.0	100.0	100.0	100.0
Mean Line Intercept Length (µm)	Pyrite	28	11	5	11
	Other Sulphides	5	7	12	5
	Quartz	7	11	12	16
	Plagiocase	13	9	14	17
	K-Feldspar	5	7	9	5
	Illite/Mica	5	6	6	7
	Chlorite	9	8	9	8
	Amphibole/Pyroxene	4	12	11	4
	Clays	5	5	4	4
	Garnet	4	4	4	4
	Pumpellyite	5	12	5	4
	Tourmaline	4	4	4	4
	Other Silicates	4	4	4	5
	Iron Oxide/Hydroxide	4	4	9	4
	Other Oxides	7	9	7	7
	Ankerite	4	4	4	4
	Calcite	10	6	11	9
	Dolomite	4	4	4	4
	Siderite	4	4	4	4
	Alunite	4	4	4	4
	Gypsum	6	5	7	9
	Jarosite	4	4	4	0
	Other Sulphates	4	4	0	4
	Phosphates	6	6	6	12
	Other	4	4	4	9

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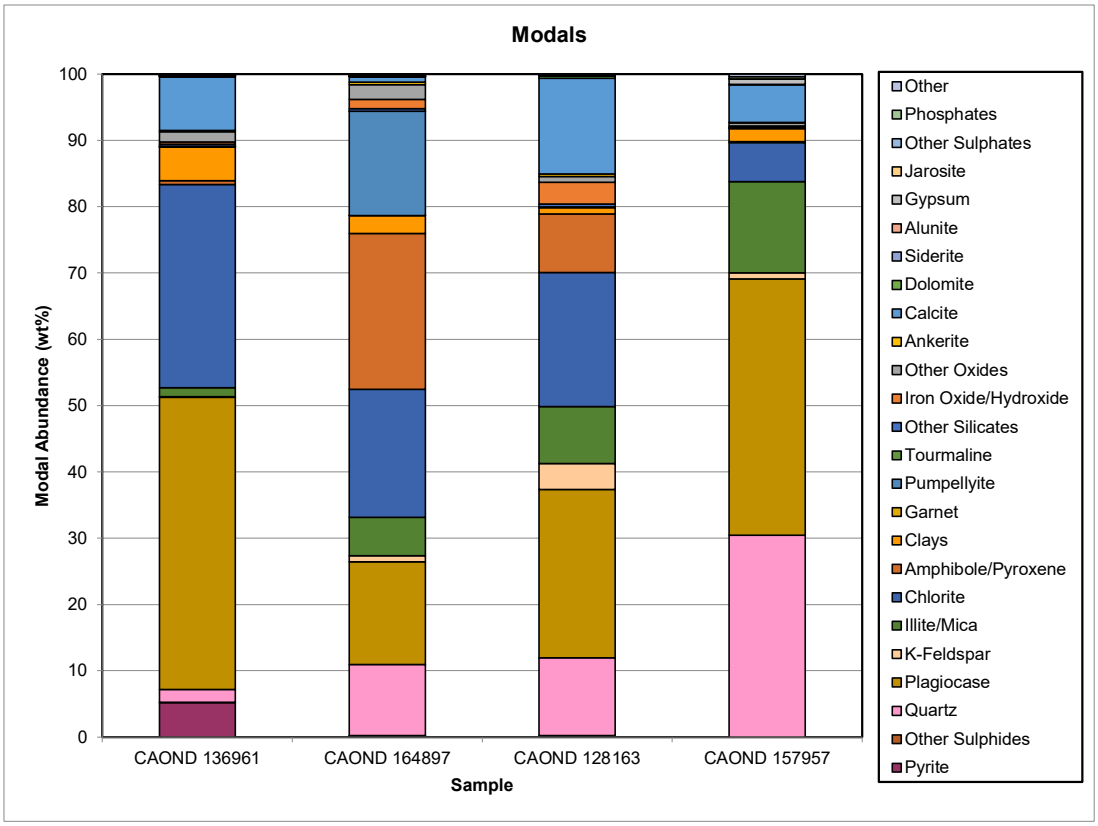

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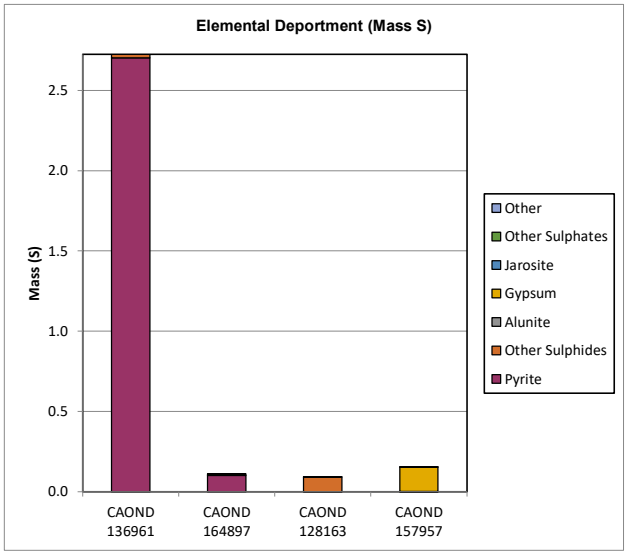
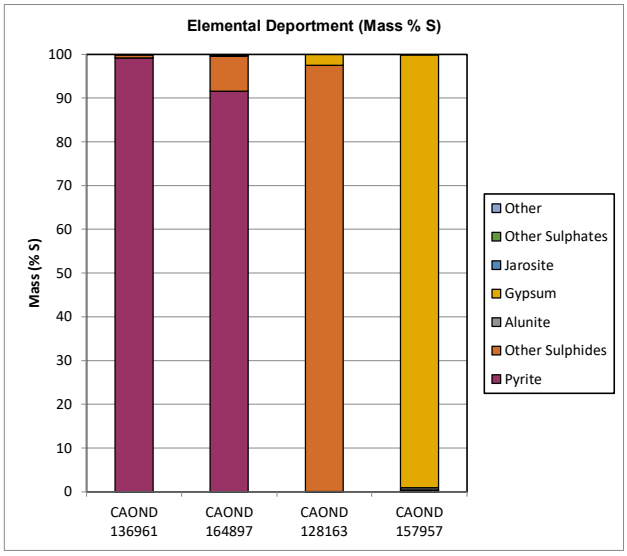
S Deportment - Absolute



JoseMaria / Sample	CAOND 136961	CAOND 164897	CAOND 128163	CAOND 157957
Pyrite	2.70	0.10	0.00	0.00
Other Sulphides	0.02	0.01	0.09	0.00
Alunite	0.00	0.00	0.00	0.00
Gypsum	0.00	0.00	0.00	0.15
Jarosite	0.00	0.00	0.00	0.00
Other Sulphates	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00
Total	2.73	0.11	0.09	0.15

S Deportment - Normalized



Modal / Sample	CAOND 136961	CAOND 164897	CAOND 128163	CAOND 157957
Pyrite	99.2	91.5	0.06	0.26
Other Sulphides	0.78	8.10	97.4	0.20
Alunite	0.00	0.02	0.00	0.51
Gypsum	0.04	0.27	2.50	98.9
Jarosite	0.01	0.05	0.02	0.00
Other Sulphates	0.00	0.01	0.00	0.01
Other	0.00	0.00	0.02	0.08
Total	100.0	100.0	100.0	100.0

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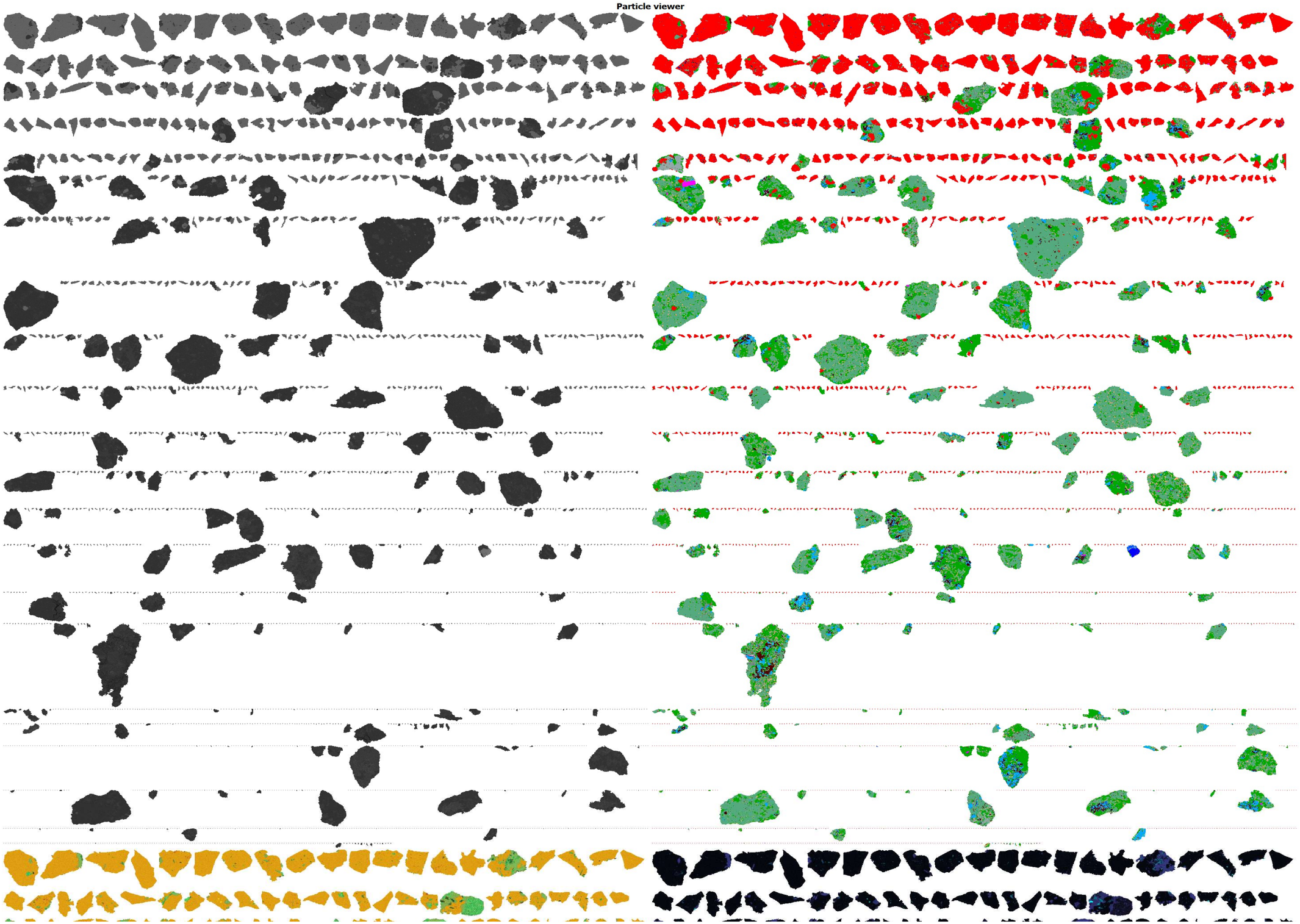
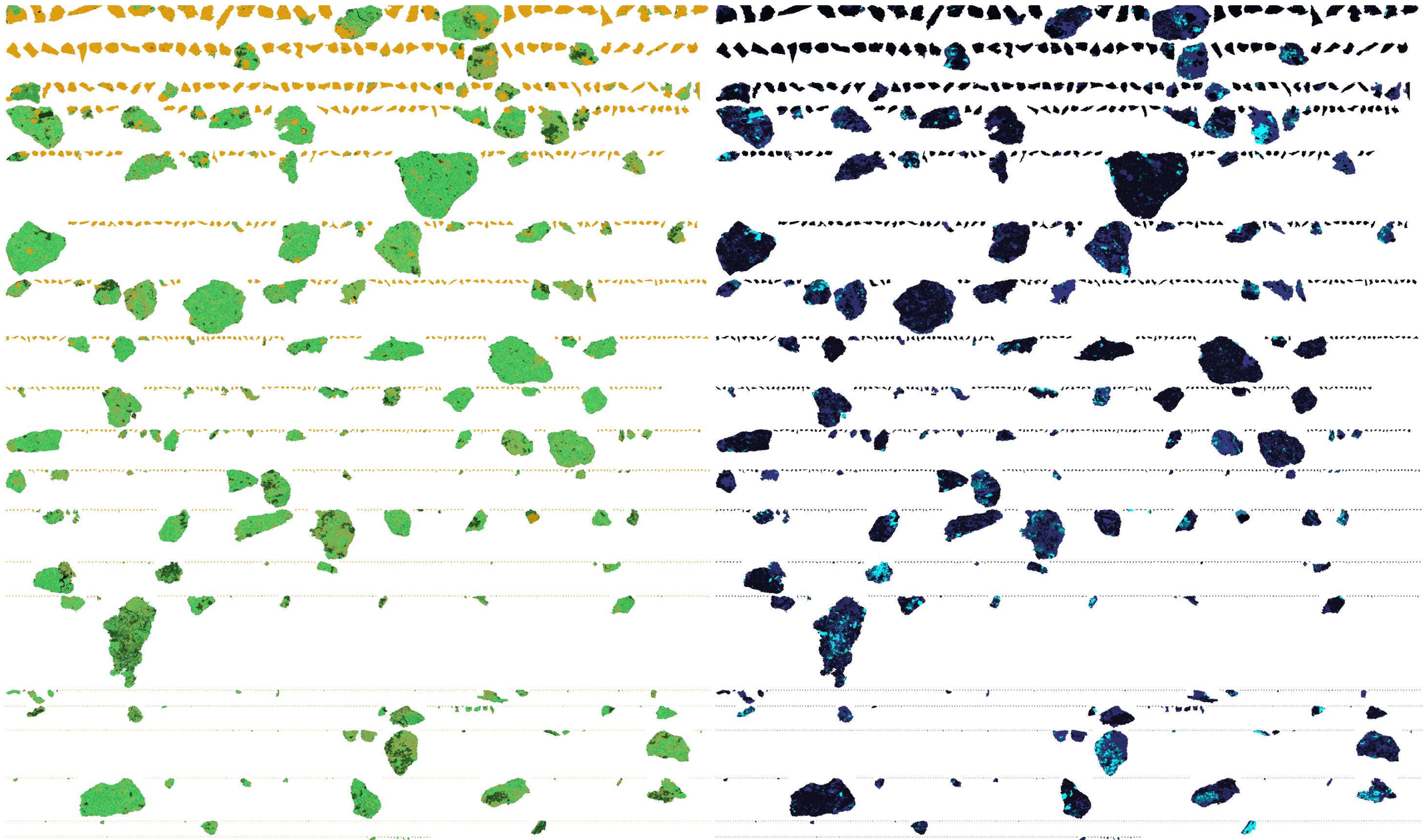
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

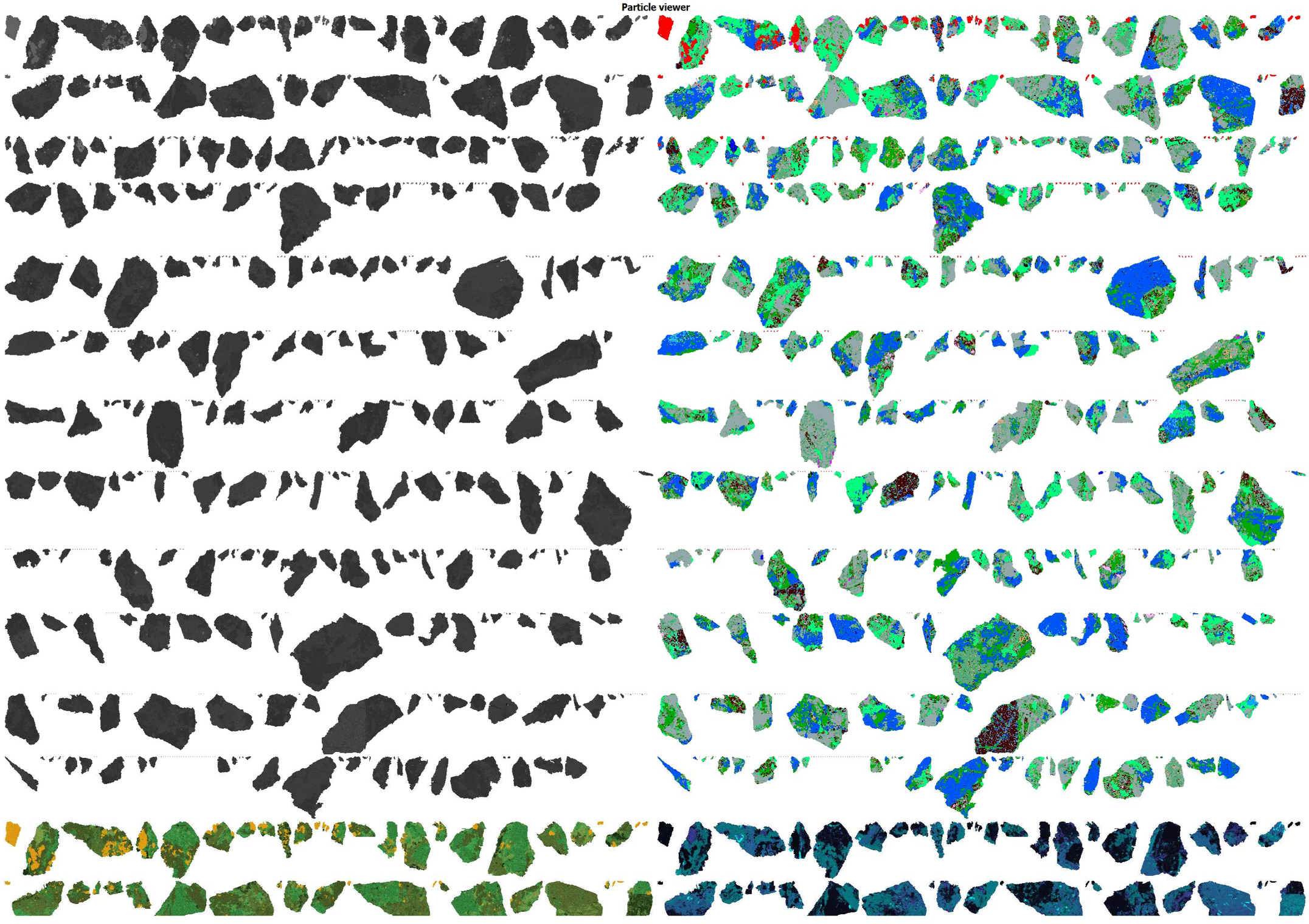
Particle viewer

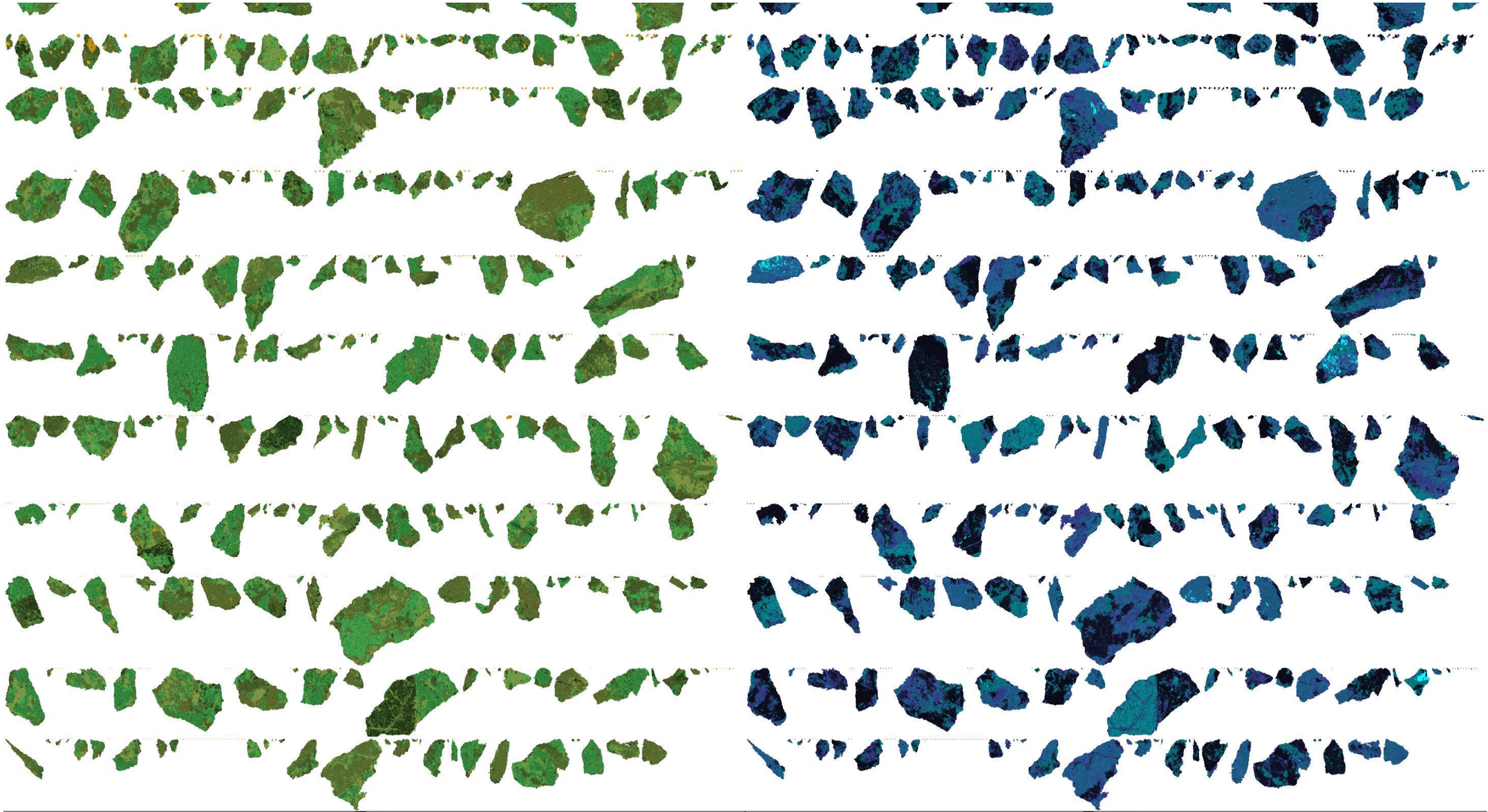



BSE
0
0 %
Elements
Iron K-family
Sulphur K-family
Oxygen K-family
JoseMaria
Pyrite
Plagiocase
Chlorite
Calcite
Clays
Quartz
Other Oxides
Illite/Mica
Amphibole/Pyroxene
Other Sulphides
Iron Oxide/Hydroxide
Other Carbonates
Other Silicates
Phosphates
Other
Pumpellyite
K-Feldspar
Gypsum
Tourmaline
Jarosite
Holes
Elements
Carbon K-family
Calcium K-family
Magnesium K-family

SGS Canada Inc.
2138 Upper Beaver
Custom MIN
MI7016-MAR23
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral

Particle viewer




BSE
0
0 %
Elements
Iron K-family
Sulphur K-family
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JoseMaria
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Chlorite
Plagiocase
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Illite/Mica
Clays
Other Oxides
Pyrite
Iron Oxide/Hydroxide
Calcite
K-Feldspar
Other Carbonates
Other Silicates
Phosphates
Other
Other Sulphides
Holes
Elements
Carbon K-family
Calcium K-family
Magnesium K-family

TIMA DATA

prepared for:

2138 Upper Beaver (Agnico)

Custom MIN
MI7009-AUG25
September 29, 2025

Prepared by:

Logan Jameson
Senior Mineralogist

Reviewed by:

Lain Glossop
Senior Mineralogist

QT-CA-MIN-MET-MN-I01 rev 0.1

SGS Canada Inc.
3260 Production Way, Burnaby, BC V5A 4W4
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Member of the SGS Group (SGS SA)

Method Summary

Quantitative TIMA Analysis:

The mineralogical analysis was conducted with the TIMA-X technology. TIMA-X is an acronym for TESCAN Integrated Mineral Analyzer, which is one of the newest Automated Scanning Electron Microscopy (ASEM) instruments on the market. It is based on four Energy Dispersive X-Ray (EDX) silicon drift detectors (SDD) attached to a TESCAN MIRA (field-emission gun – FEG) platform, which also includes backscattered electron (BSE) and secondary electron (SE) detectors. The TIMA system utilizes both the EDX and BSE signals to identify minerals at each measurement point (or each homogenous segment of a grain, depending upon the analysis mode). It is optimized to deal with rapidly acquired low-count spectra. These EDX (and BSE) spectra (and BSE data) are compared to entries in a mineral library on a first match principle to identify the mineral phase, where this mineral library is based on theoretical mineral/phase composition or created by the user based on BSE, X-ray spectral windows counts, and/or ratios.

It must be noted, that due to the difference in grain size, all size fractions contain particles that are close to the measurement area (~3 µm) and the spacing of the measurement points and therefore can encounter less precision in the measurements. In addition, the X-ray beam can scatter at the edges of particles and can lead to inaccurate analytical results. As the particles become smaller, the edges constitute a more significant percentage of the total particle mass. Therefore, some bias might be introduced, especially in the fine fraction, and caution is advised in interpreting the results in this particular fraction.

The limit of detection for any element within a phase is >1-2 wt% or 10,000 - 20,000 ppm by automated SEM-based EDS methods. Any elements that are present below this level are likely not to be detected. Accurate element reconciliation between TIMA calculated values and geochemical assay values is not possible for elements that are distributed in phases where the level of the element does not exceed 10,000 - 20,000 PPM. Many minerals display compositional variation with solid solutions between end members. Therefore, in order to balance the TIMA calculated assay to direct chemical assay more accurately, EMPA is recommended to quantify the mineral chemistries in the sample.

If geochemical assays have not been conducted by SGS, we cannot guarantee that values provided by another lab are representative of the material that was analyzed by SGS.

It is not possible to distinguish chemically similar phases by any EDS-based SEM system (eg. magnetite and hematite). X-ray diffraction is required to speciate chemically similar minerals, or polymorphs properly.

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WARNING: The sample(s) to which the findings recorded herein (the "Findings") relate was(were) drawn and / or provided by the Client or by a third party acting at the Client's direction. The Findings constitute no warranty of the sample's representativeness of any goods and strictly relate to the sample(s). The Company accepts no liability with regard to the origin or source from which the sample(s) is/are said to be extracted.

TIMA Analysis Definitions

Liberation and Associations

Pure – A particle that has 100% volume of mineral of interest.
Free- A particle that has ≥ 95% volume of mineral of interest or ≥ 90% volume of mineral of interest, depending on project.
Liberated - A particle that has ≤ 95% - ≥80% volume of mineral of interest or ≤ 90% - ≥80%, depending on project.
Binary Associations- A particle that has ≥ 90 area% of the two minerals of interest or ≥ 95 area% of the two minerals of interest, depending on project.
Binary/Ternary Associations- A particle that has ≥ 90% volume of three minerals of interest or ≥ 95% volume of three minerals of interest (depending on project) either individually or grouped.
Complex - Particles that do not fall into the above categories

Exposure

Exposure values are calculated as the free surface % (% of the grain surface that is exposed to atmosphere) of each grain of the mineral of interest.

The 30% exposure value is considered an empirical threshold above which minerals may float. Minerals with less than 30% exposure might not float, but if they are recovered, then they will dilute the grade of the sulphide concentrate.

Grain Size

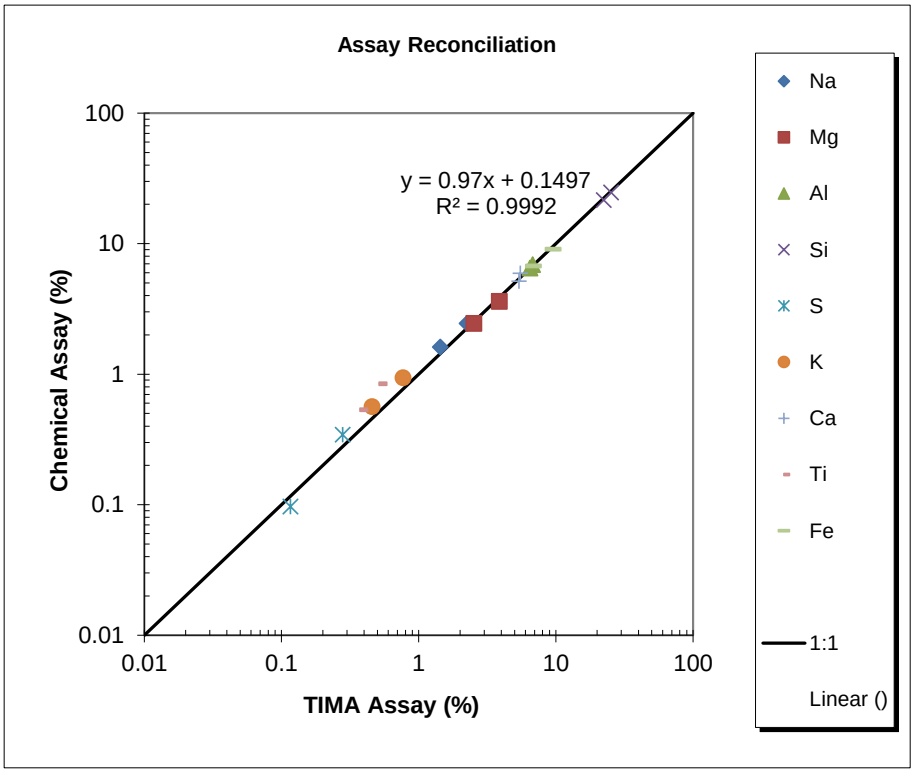
The grain size report serves to study the distribution of the grain size of a specific phase; within the TIMA software, it is defined as equivalent circle diameter (d). It is the diameter of a circle that has the same area (A) as the particle (or grain). The diameter is defined in pixels and then multiplied by pixel spacing (Ps) to obtain size in micrometres. The precise definition is described in the following formula: $d=2\cdot\sqrt{(A/\pi)}\cdot Ps$.

Mean Line Intercept

The value is calculated as weighted average of mean linear intercept lengths across the particle in four directions (horizontal – IH, vertical IV, Primary diagonal IPD and Counter-diagonal ICD). The weight for both IPD and ICD is 1/3 and for IH and IV is 1/6.

The mean line intercept length is calculated as area (A) of the particle (in pixels) divided by multiplication of number of linear intercepts (I) and distance between intercepts, which is 1 pixel for horizontal and vertical intercepts and $1/(\sqrt{2})$ pixels for diagonal and counter-diagonal intercepts, respectively.

Assay Reconciliation



Sample	HC - 11	FB - 7 Comp
Element	**P80 150 µm**	**P80 150 µm**
Na TIMA Calculated	1.44	2.25
Na Chemical Assay	1.62	2.46
Mg TIMA Calculated	3.87	2.52
Mg Chemical Assay	3.62	2.45
Al TIMA Calculated	6.75	6.47
Al Chemical Assay	6.93	6.52
Si TIMA Calculated	22.3	25.2
Si Chemical Assay	21.6	24.7
S TIMA Calculated	0.28	0.12
S Chemical Assay	0.34	0.10
K TIMA Calculated	0.46	0.77
K Chemical Assay	0.56	0.94
Ca TIMA Calculated	5.50	5.36
Ca Chemical Assay	5.92	5.17
Ti TIMA Calculated	0.51	0.37
Ti Chemical Assay	0.85	0.53
Fe TIMA Calculated	9.54	6.85
Fe Chemical Assay	9.09	6.75

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7009-AUG25

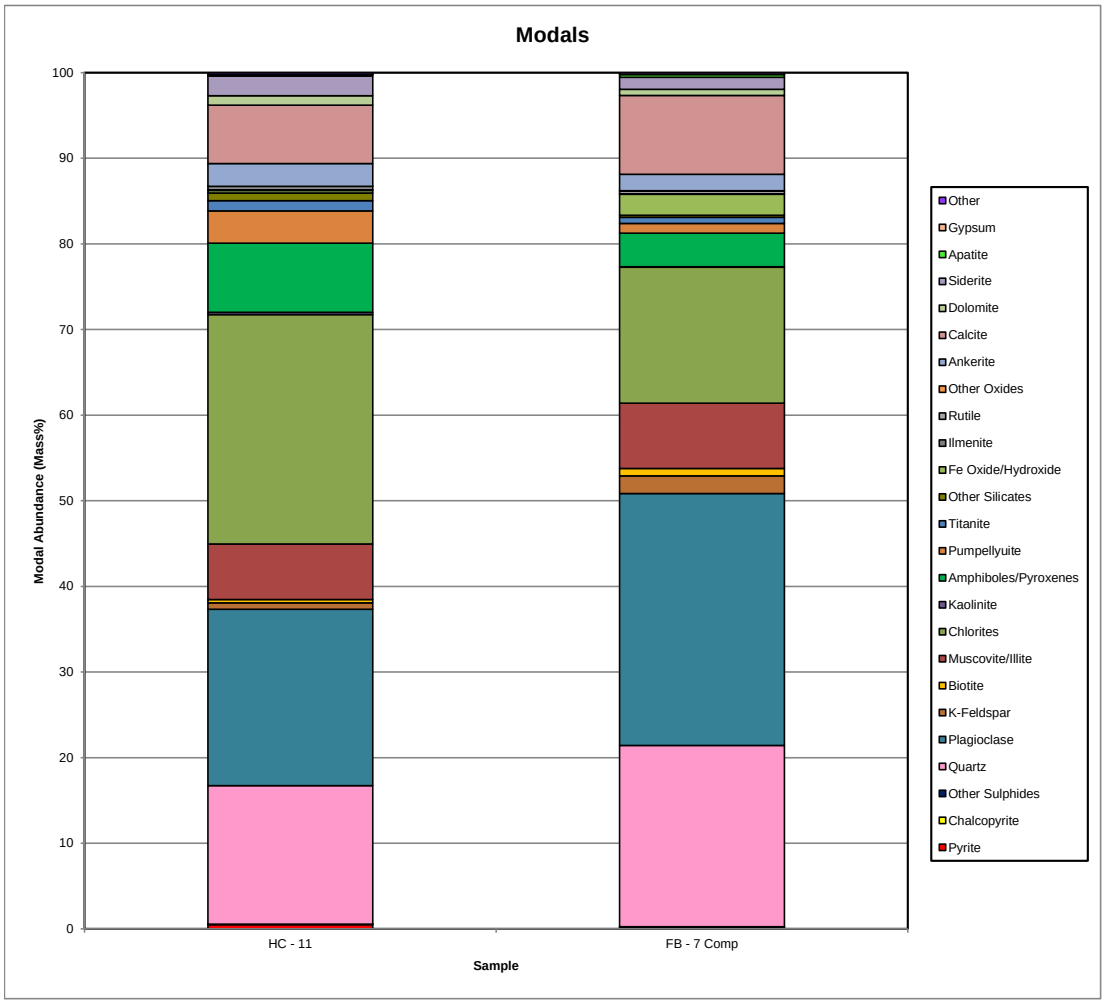
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1

Modals

Survey		**Custom MIN / MI7009-AUG25**	
Project		**2138 Upper Beaver (Agnico)**	
Sample		**HC - 11**	**FB - 7 Comp**
Fraction		**P80 150 µm**	**P80 150 µm**
Mass % of Size Fraction [%]		100.0	100.0
Median Particle Size (µm)		53	57
		Sample	**Sample**
Mineral Mass (%)	Pyrite	0.48	0.18
	Chalcopyrite	0.07	0.05
	Other Sulphides	0.00	0.01
	Quartz	16.2	21.2
	Plagioclase	20.6	29.4
	K-Feldspar	0.72	2.06
	Biotite	0.39	0.86
	Muscovite/Illite	6.50	7.65
	Chlorites	26.8	15.9
	Kaolinite	0.28	0.05
	Amphiboles/Pyroxenes	8.06	3.94
	Pumpellyuite	3.77	1.14
	Titanite	1.20	0.71
	Other Silicates	0.90	0.23
	Fe Oxide/Hydroxide	0.29	2.44
	Ilmenite	0.11	0.09
	Rutile	0.37	0.31
	Other Oxides	0.02	0.03
	Ankerite	2.67	1.93
	Calcite	6.81	9.19
	Dolomite	1.09	0.72
	Siderite	2.30	1.41
	Apatite	0.19	0.33
	Gypsum	0.01	0.01
	Other	0.20	0.21
	Total	100.0	100.0
Mean Line Intercept Length (µm)	Pyrite	14	16
	Chalcopyrite	8	8
	Other Sulphides	6	6
	Quartz	9	11
	Plagioclase	10	12
	K-Feldspar	7	8
	Biotite	6	7
	Muscovite/Illite	8	7
	Chlorites	7	7
	Kaolinite	10	6
	Amphiboles/Pyroxenes	12	10
	Pumpellyuite	12	10
	Titanite	10	9
	Other Silicates	7	6
	Fe Oxide/Hydroxide	6	10
	Ilmenite	6	6
	Rutile	6	6
	Other Oxides	5	6
	Ankerite	9	9
	Calcite	9	9
	Dolomite	11	11
	Siderite	7	7
	Apatite	5	9
	Gypsum	8	7
	Other	6	6

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7009-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1



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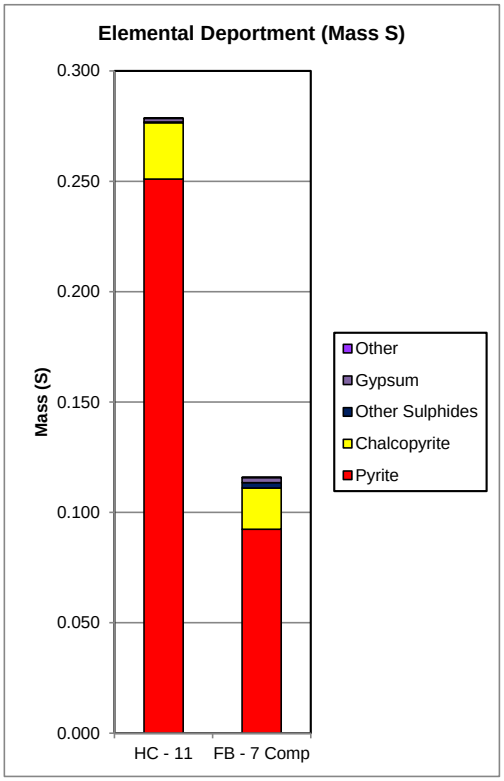
2138 Upper Beaver (Agnico)
Custom MIN
MI7009-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1

S Deportment - Absolute

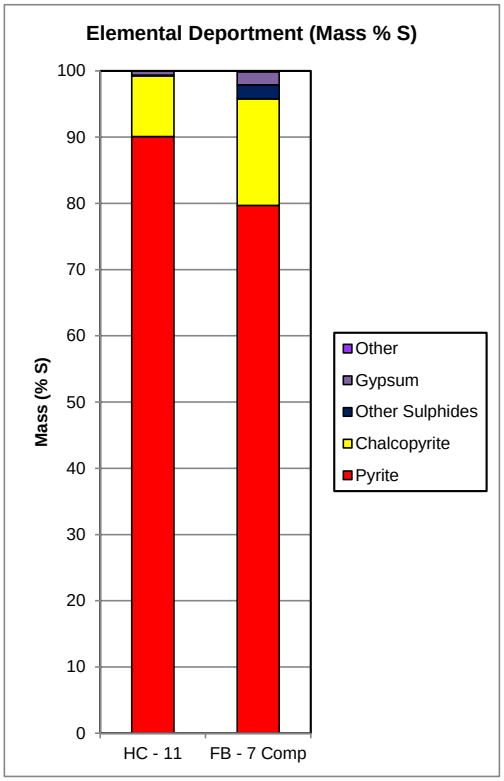


Mineral Name	HC - 11	FB - 7 Comp
Pyrite	0.25	0.09
Chalcopyrite	0.03	0.02
Other Sulphides	0.0003	0.0025
Gypsum	0.002	0.002
Other	0.0001	0.0002
Total	0.28	0.12

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7009-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1

S Deportment - Normalized



Mineral Name	HC - 11	FB - 7 Comp
Pyrite	90.1	79.7
Chalcopyrite	9.18	16.1
Other Sulphides	0.11	2.12
Gypsum	0.60	1.96
Other	0.03	0.14
Total	100	100

MINERALOGY DATA

prepared for:

Custom-MIN

2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

November 18, 2022

Prepared by:

Hanna Horsch/Lain Glossop
Senior Mineralogist/Senior Mineralogist

Edited on January 15, 2024 by Logan Jameson

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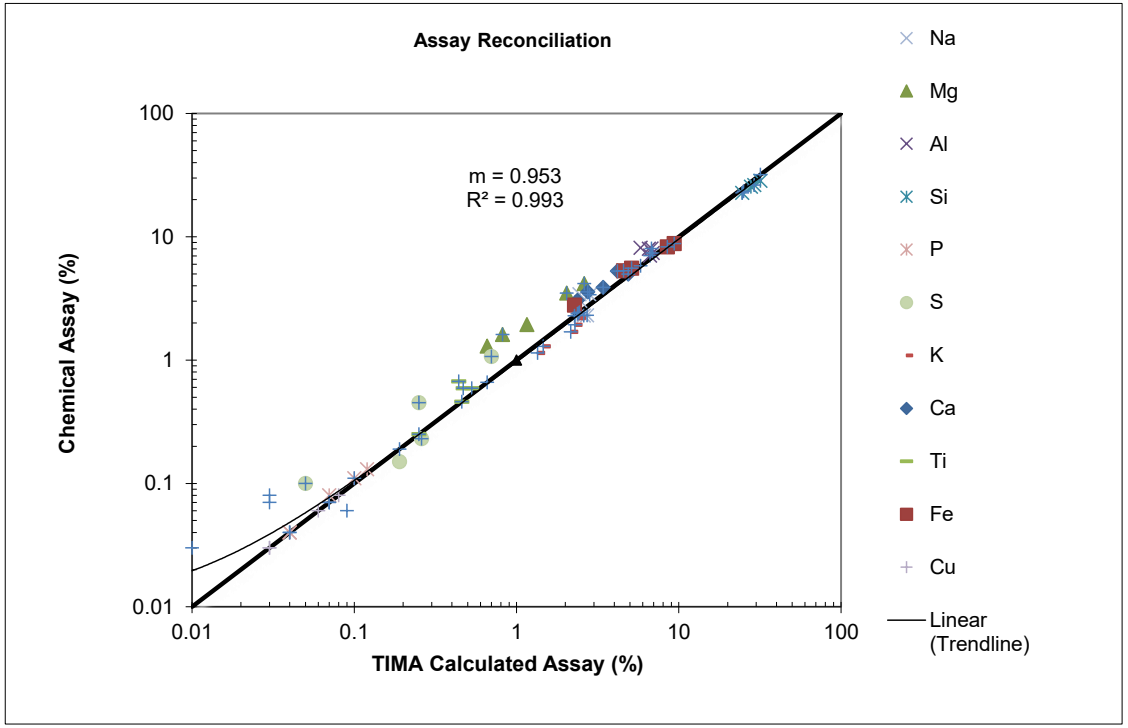
Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Elemental Mass (%)



Elemental Mass (%) Absolute

	Sodium		Magnesium		Aluminum		Silicon		Phosphorus	
Mineral Name	Na (Calculated)	Na (Assay)	Mg (Calculated)	Mg (Assay)	Al (Calculated)	Al (Assay)	Si (Calculated)	Si (Assay)	P (Calculated)	P (Assay)
Mafic Syenite	2.51	2.95	1.16	1.94	6.55	7.97	27.9	25.4	0.12	0.13
Crowded Porphyry	2.44	3.41	0.66	1.30	5.81	8.13	31.9	28.4	0.07	0.08
High Sulfur	2.82	3.38	0.82	1.61	6.78	8.02	29.2	26.3	0.10	0.11
Basalt	2.72	2.31	2.04	3.49	6.66	7.01	24.6	22.7	0.04	0.04
Gabbro	2.60	2.29	2.61	4.16	6.90	7.36	25.1	23.4	0.04	0.04

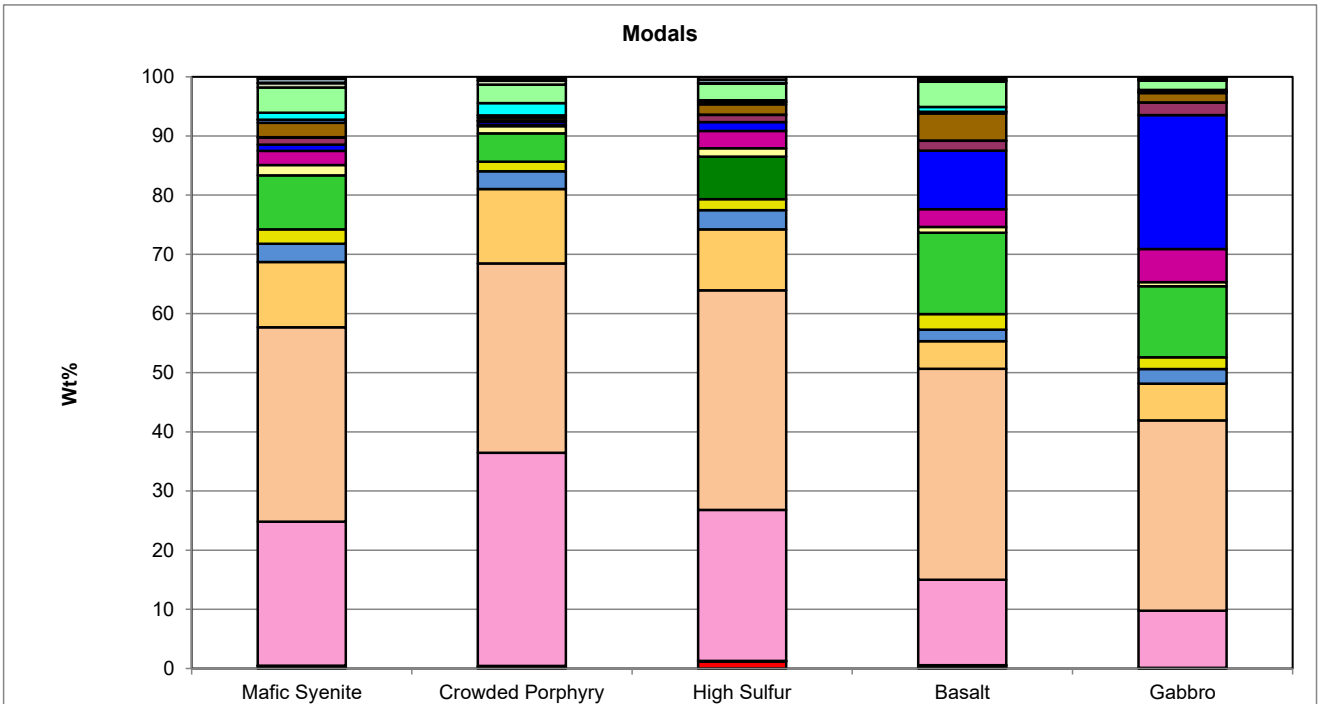
Sulphur		Potassium		Calcium		Titanium		Iron		Copper	
S (Calculated)	S (Assay)	K (Calculated)	K (Assay)	Ca (Calculated)	Ca (Assay)	Ti (Calculated)	Ti (Assay)	Fe (Calculated)	Fe (Assay)	Cu (Calculated)	Cu (Assay)
0.25	0.45	2.29	1.93	3.42	3.89	0.53	0.59	5.11	5.55	0.03	0.07
0.19	0.15	2.40	2.19	2.37	3.05	0.25	0.25	2.28	2.79	0.07	0.03
0.70	1.07	2.16	1.69	2.75	3.57	0.46	0.46	4.57	5.29	0.03	0.08
0.26	0.23	1.35	1.14	4.18	5.28	0.44	0.67	9.36	8.79	0.09	0.06
0.05	0.10	1.46	1.29	4.88	4.97	0.47	0.59	8.51	8.28	0.01	0.03

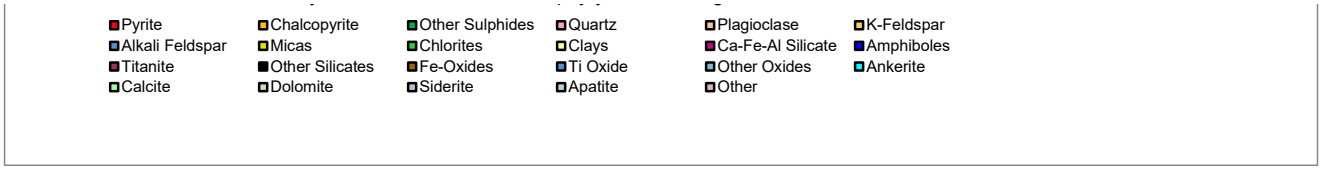
Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Samples: P_{80} 150 µm

Modals

Mineral (%)	Mafic Syenite	Crowded Porphyry	High Sulfur	Basalt	Gabbro
Pyrite	0.392710	0.165440	1.183390	0.320390	0.071410
Chalcopyrite	0.070570	0.184880	0.085570	0.250670	0.041350
Other Sulphides	0.007920	0.076220	0.023390	0.007380	0.001870
Quartz	24.35380	36.04594	25.49259	14.42509	9.637880
Plagioclase	32.84629	31.96991	37.12258	35.64293	32.17652
K-Feldspar	11.05118	12.58652	10.32545	4.668790	6.192450
Alkali Feldspar	3.073180	3.006150	3.214310	1.933760	2.477920
Micas	2.442150	1.631490	1.873790	2.640670	1.981780
Chlorites	9.112330	4.774560	7.199990	13.77799	12.01017
Clays	1.722800	1.202810	1.387870	0.968130	0.721530
Ca-Fe-Al Silicate	2.393550	0.199510	2.932180	2.969840	5.586080
Amphiboles	1.056370	0.527500	1.516700	9.898210	22.63377
Titanite	1.216400	0.233630	1.227640	1.691210	2.148830
Other Silicates	0.035750	0.017920	0.017480	0.037810	0.008010
Fe-Oxides	2.464830	0.488280	1.738760	4.596320	1.580030
Ti Oxide	0.507630	0.340520	0.382170	0.252180	0.200270
Other Oxides	0.025120	0.020280	0.013410	0.013500	0.016310
Ankerite	1.141400	2.082260	0.317540	0.825420	0.285380
Calcite	4.270370	3.118670	2.829700	4.243010	1.586130
Dolomite	0.754250	0.674360	0.065080	0.167610	0.049510
Siderite	0.047930	0.006220	0.024470	0.090840	0.179060
Apatite	0.658950	0.371030	0.552990	0.218740	0.232750
Other	0.354530	0.275900	0.472960	0.359500	0.180990
Total	100.00	100.00	100.00	100.00	100.00




Pyrite
Chalcopyrite
Other Sulphides
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Other Silicates
Fe-Oxides
Ti Oxide
Other Oxides
Ankerite
Calcite
Dolomite
Siderite
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

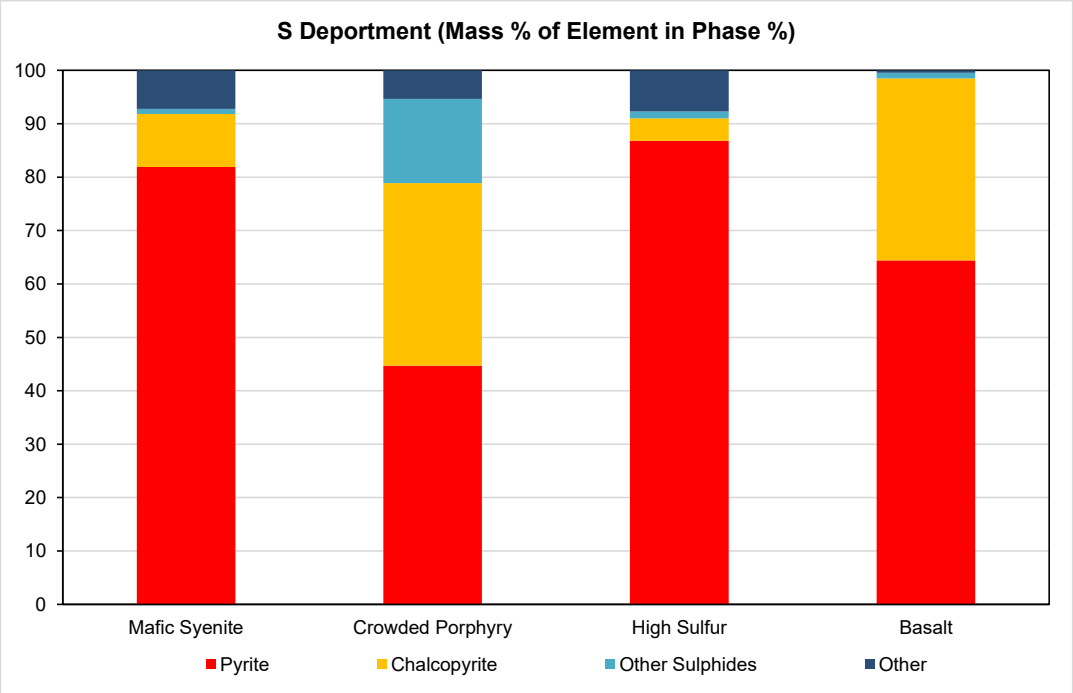
S Deportment

Sulphur Mass %

Mineral Mass	Mafic Syenite	Crowded Porphyry	High Sulfur	Basalt	Gabbro
Pyrite	0.20	0.08	0.61	0.17	0.04
Chalcopyrite	0.02	0.06	0.03	0.09	0.01
Other Sulphides	0.00	0.03	0.01	0.00	0.00
Other	0.02	0.01	0.05	0.00	0.00
Total	0.25	0.19	0.70	0.26	0.05

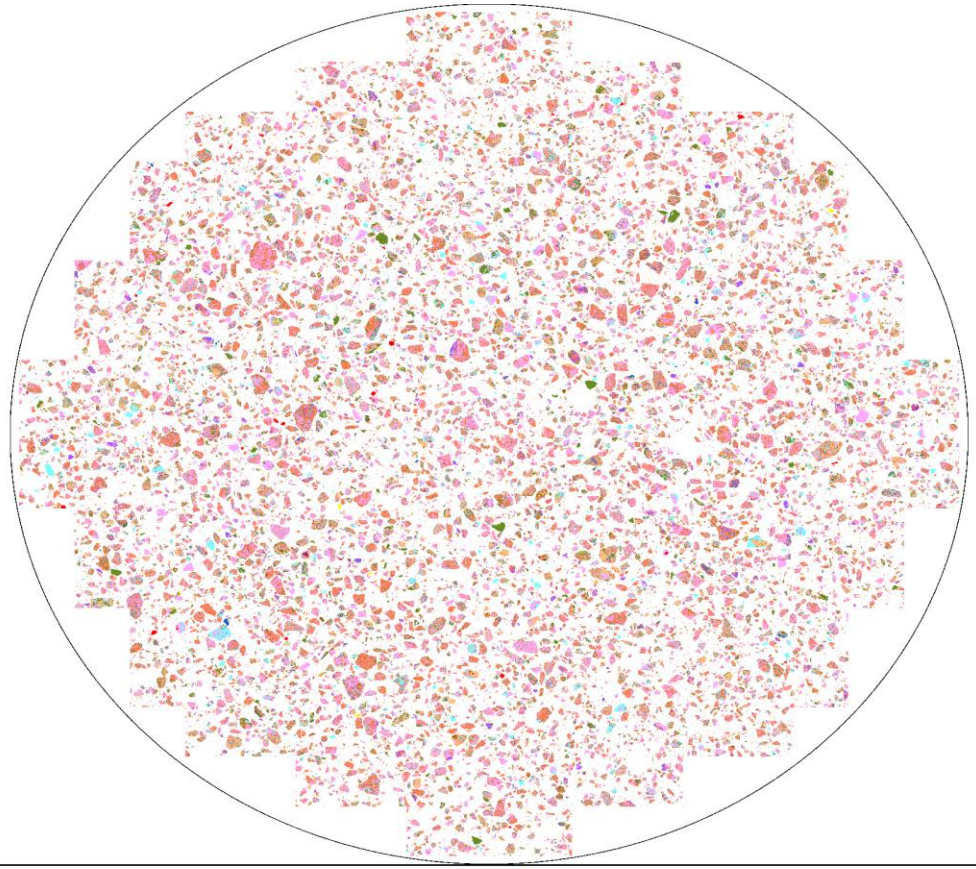
Sulphur Phases Normalized

Mineral Mass	Mafic Syenite	Crowded Porphyry	High Sulfur	Basalt	Gabbro
Pyrite	81.9	44.7	86.8	64.4	68.6
Chalcopyrite	9.91	34.2	4.22	34.1	27.9
Other Sulphides	0.97	15.8	1.27	1.05	1.17
Other	7.21	5.36	7.72	0.47	2.34
Total	100	100	100	100	100



Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

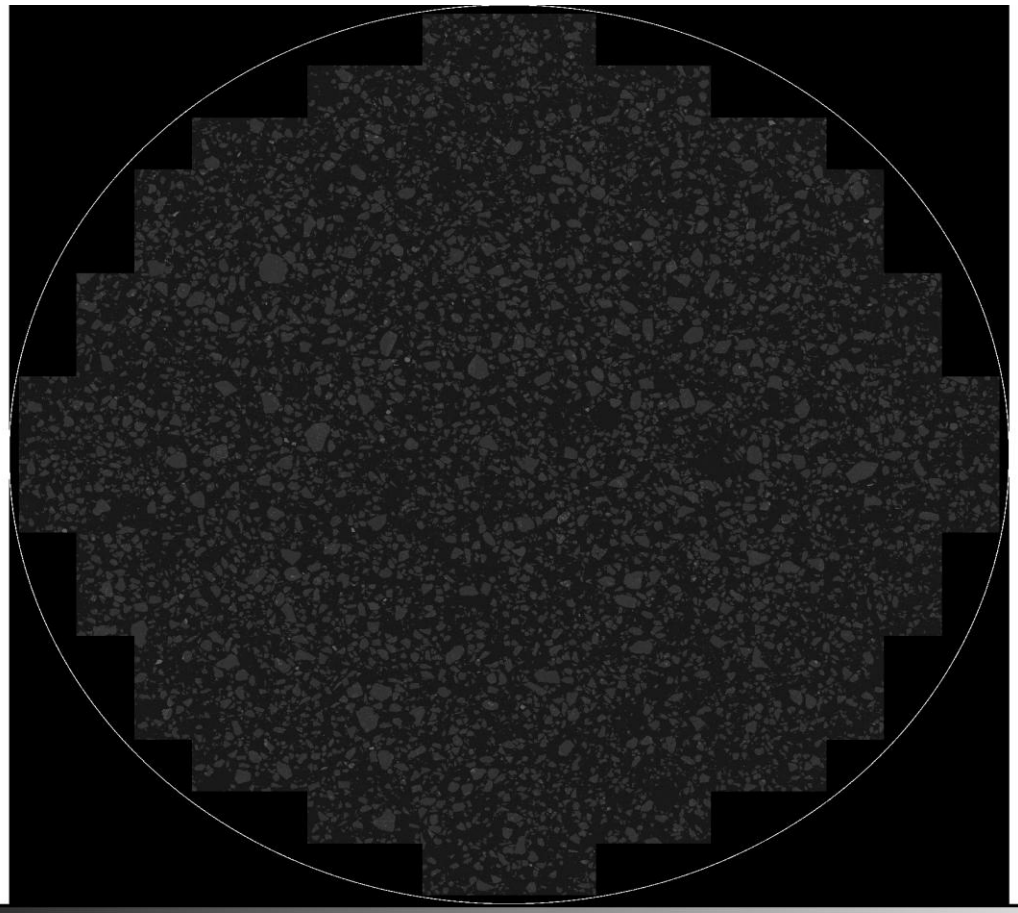
Panorama - Overview - Mafic Svenite



Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Other Silicates	Fe-Oxides	Ti Oxide	Other Oxides	Carbonates	Apatite
Other					

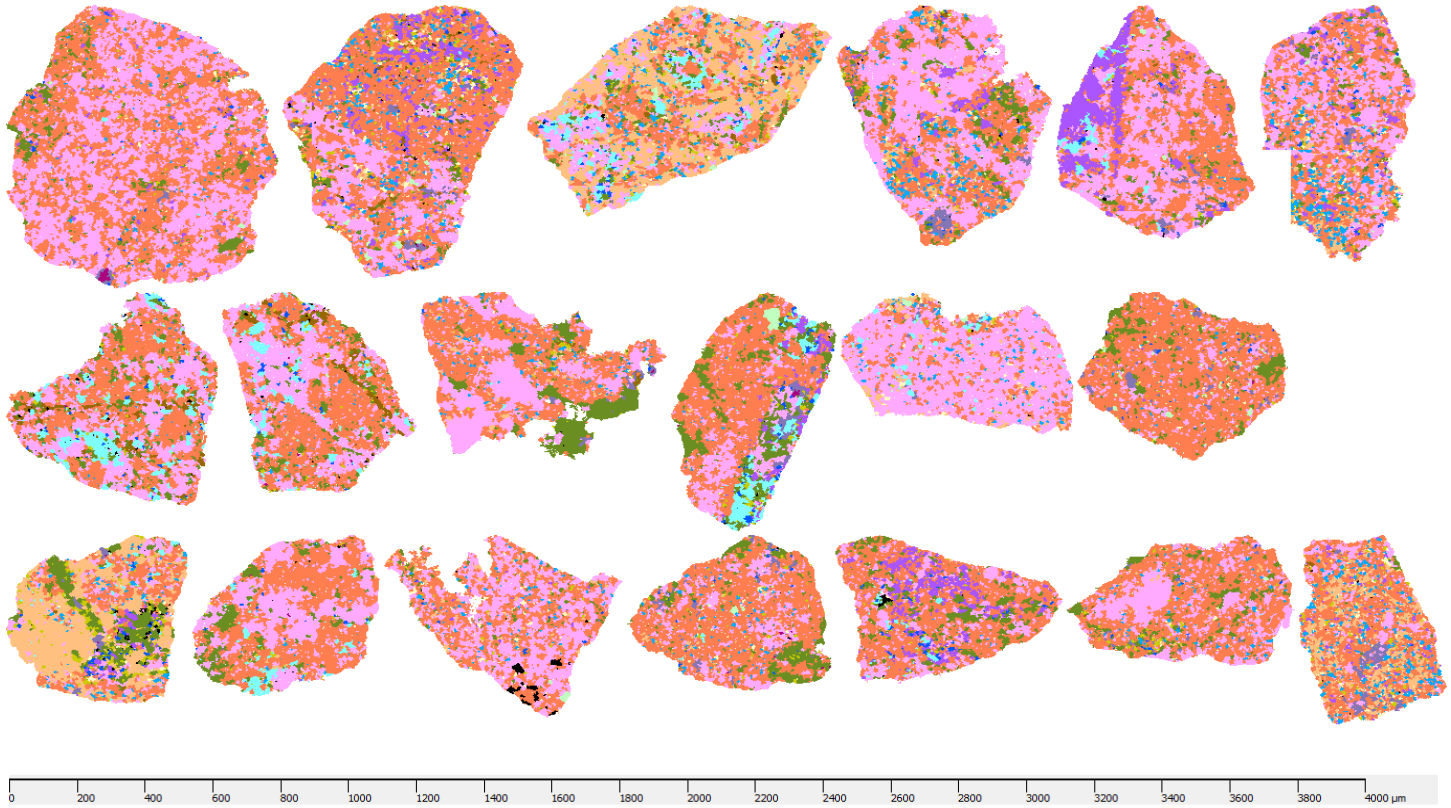
Panorama - Backscattered Electron Image - Mafic Syenite



Mosaic	BSE		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 11/04/22	10 mm	
MI7000-OCT22-11A	Liberation analysis #1		

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Particle Images - Mafic Syenite - sorted by size



0
200
400
600
800
1000
1200
1400
1600
1800
2000
2200
2400
2600
2800
3000
3200
3400
3600
3800
4000 µm
Modal
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
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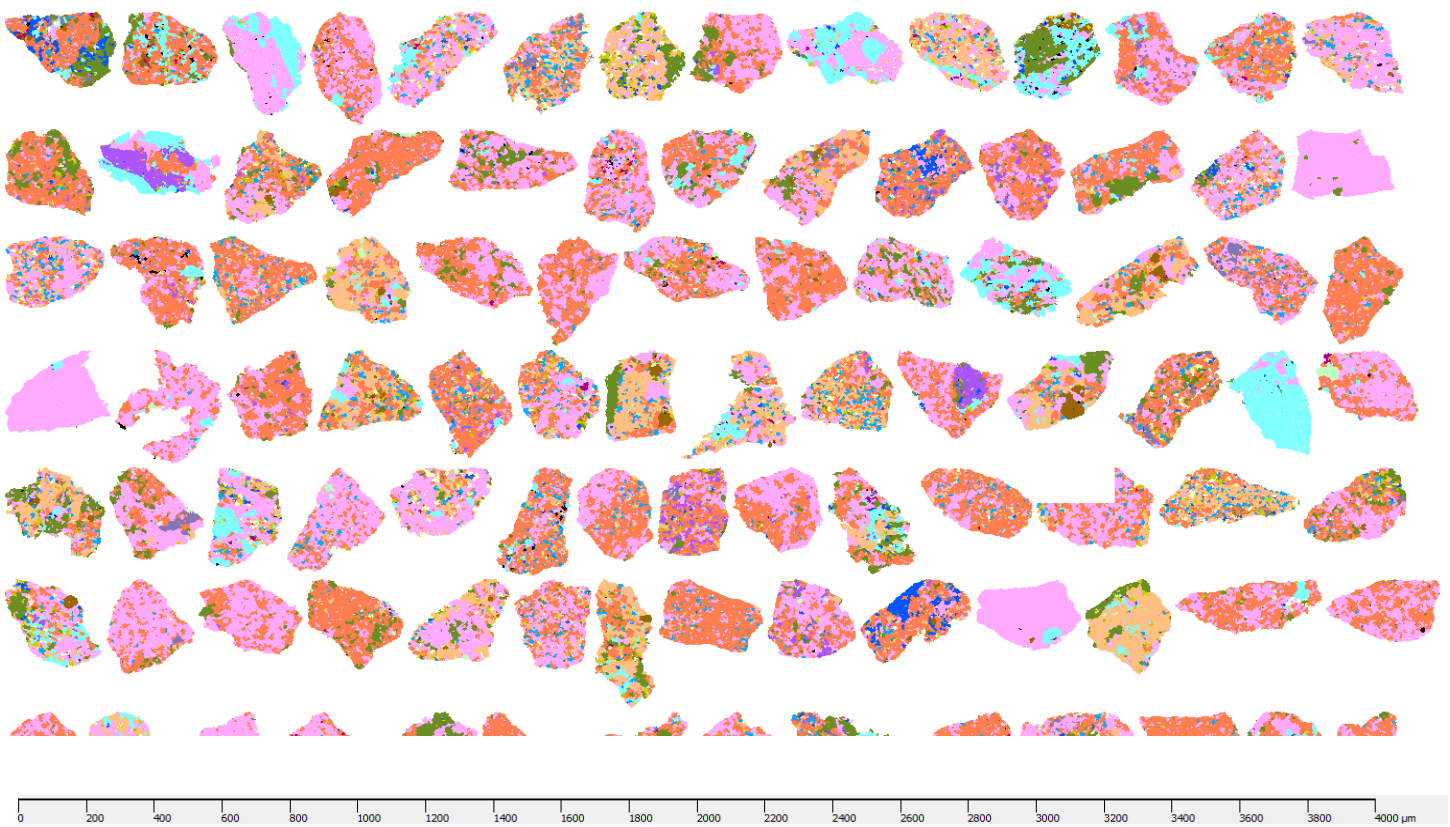
Other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Chalcopyrite
Quartz
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Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
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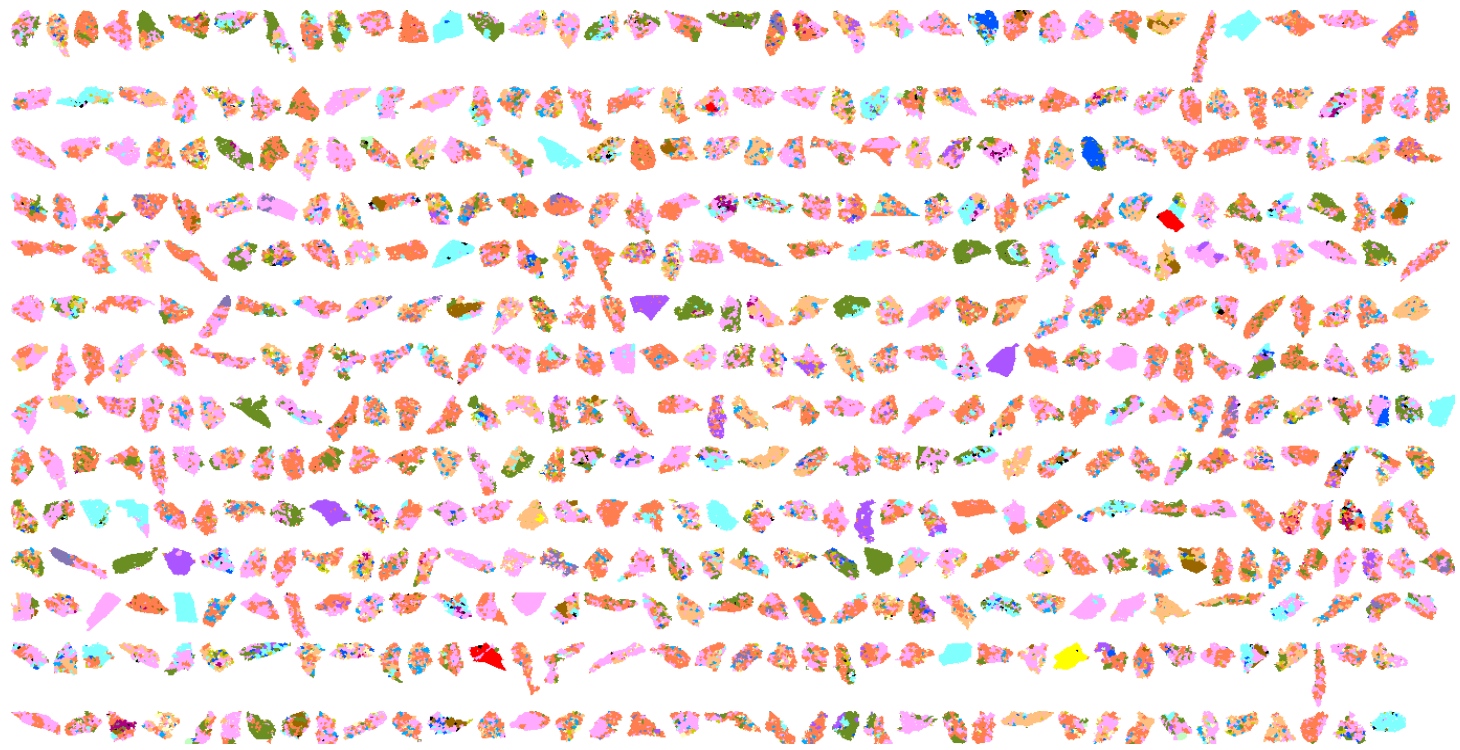
Carbonates
Apatite
Other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Clays
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Amphiboles
Titanite
Fe-Oxides
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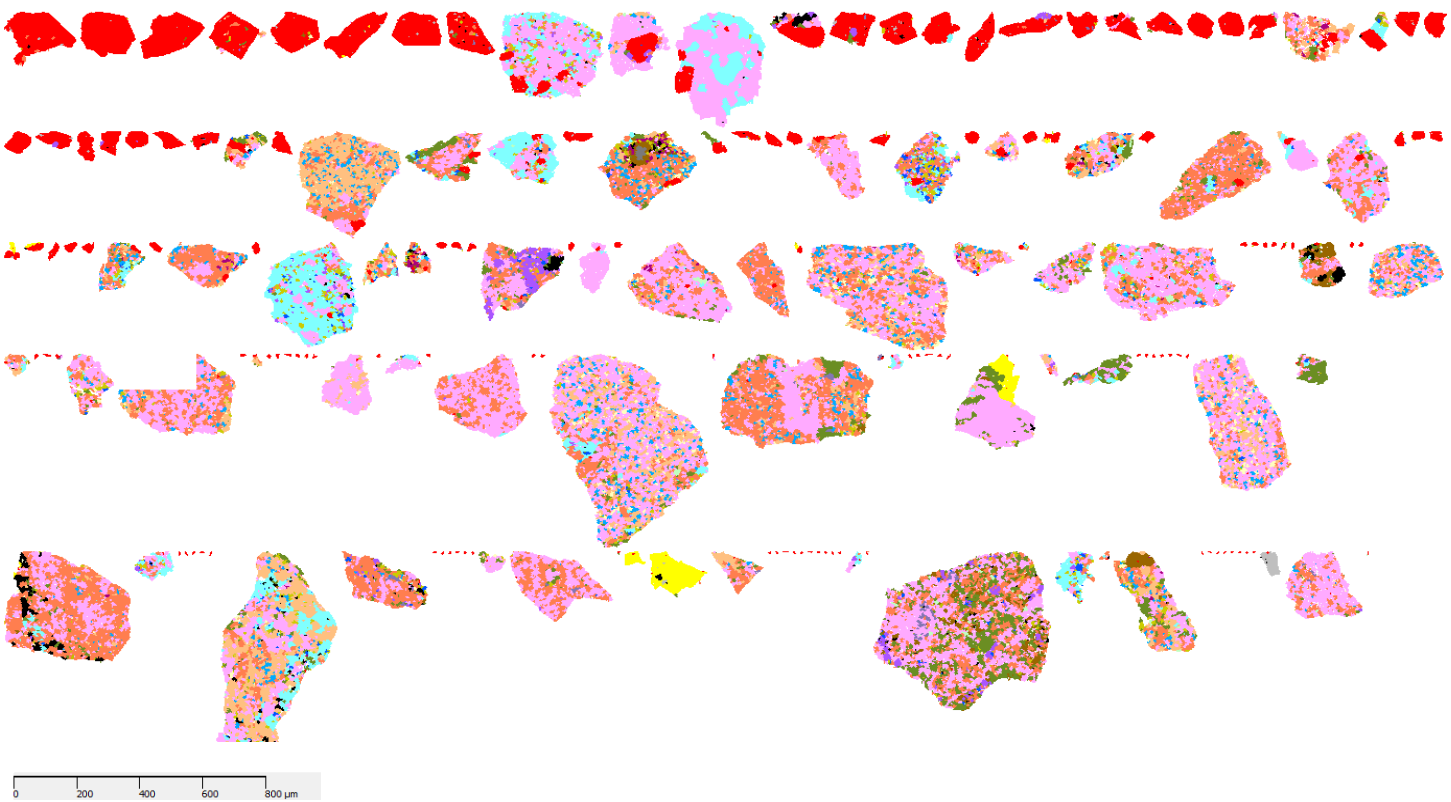
Carbonates
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Pyrite Particle Images - Mafic Syenite



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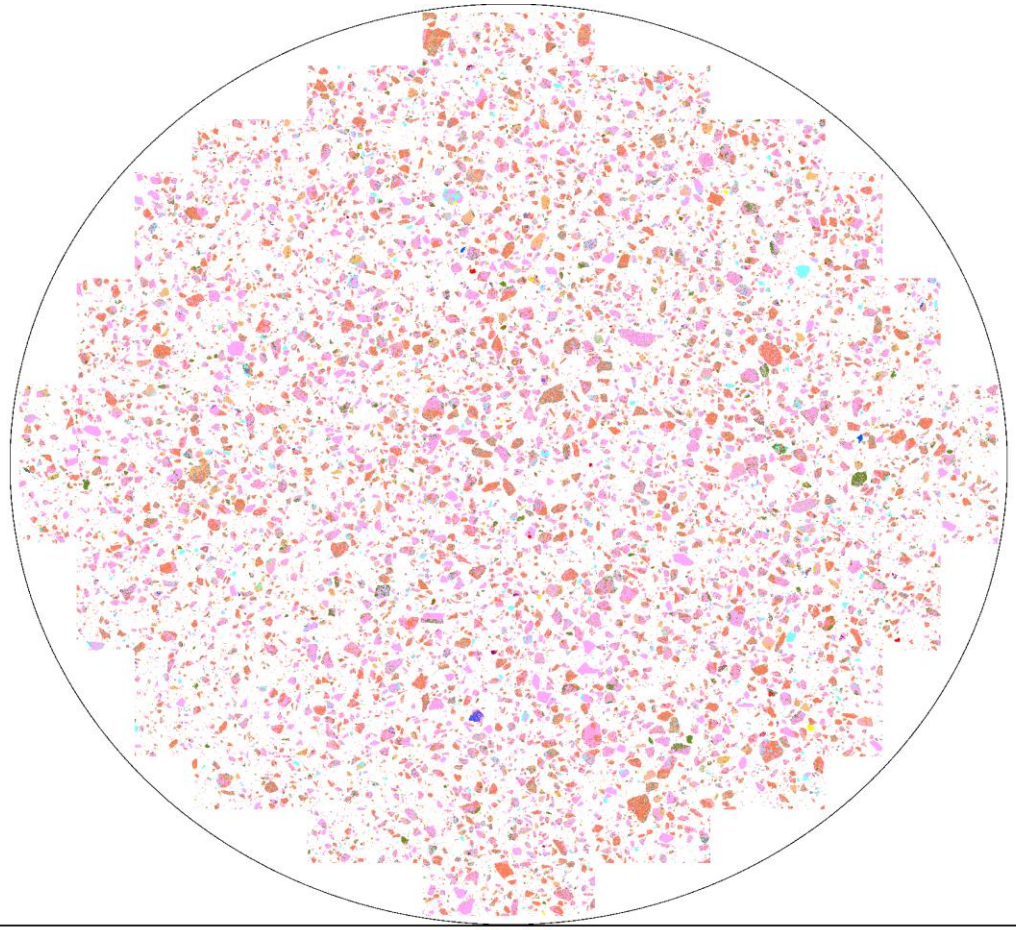
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Pyrite Particle Images - Mafic Syenite - Pyrite only

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Panorama - Overview - Crowded Porphyry



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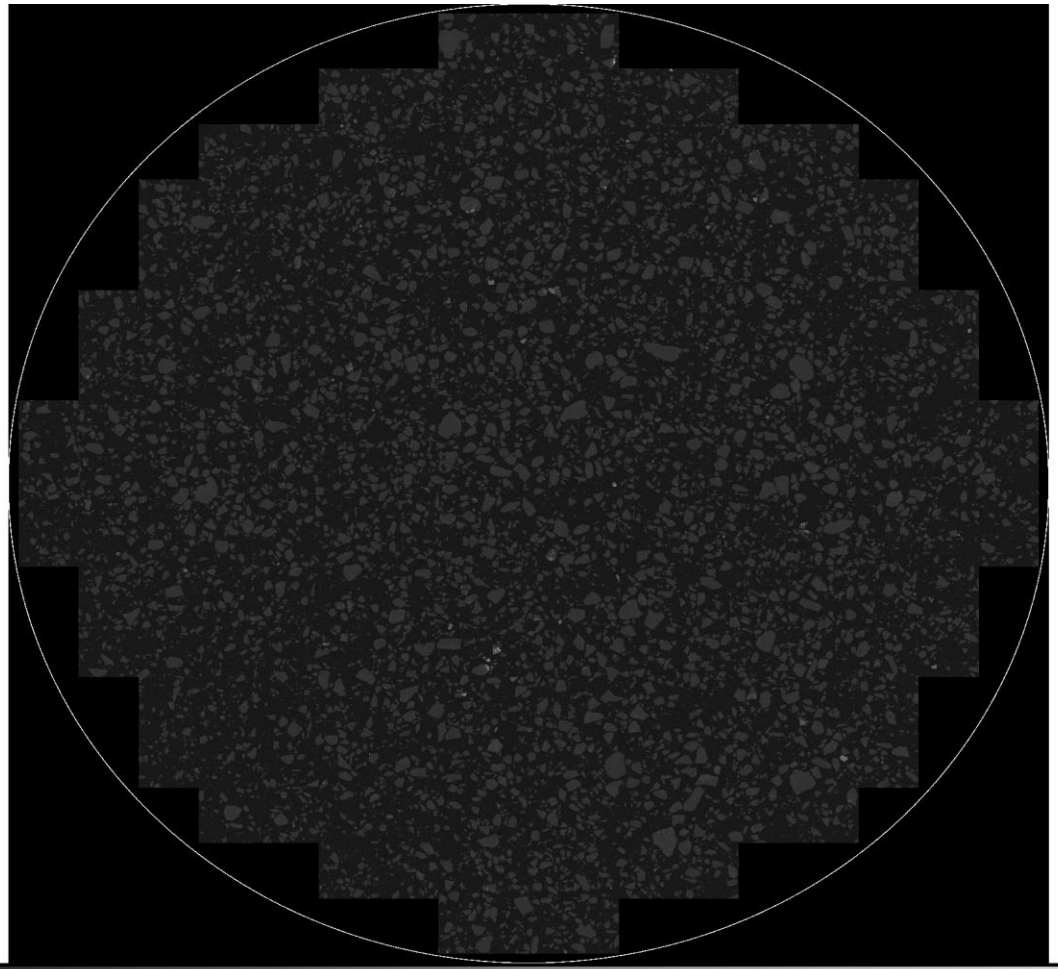
Pyrite	Chalcopyrite	Other Sulphides	Quartz	Plagioclase	K-Feldspar
Alkali Feldspar	Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles
Titanite	Fe-Oxides	Ti Oxide	Other Oxides	Carbonates	Apatite
Other					

Panorama - Backscattered Electron Image - Crowded Porphyry



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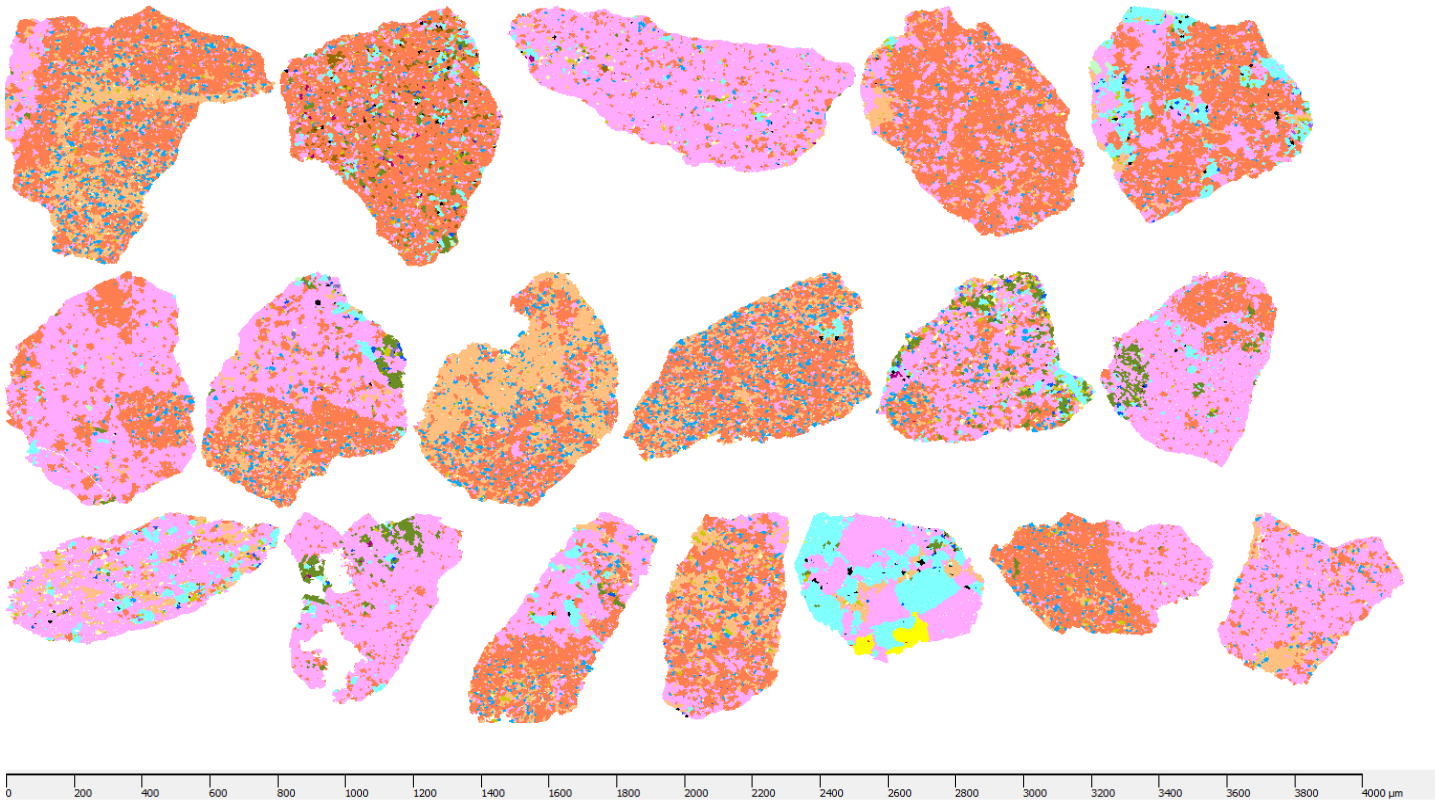
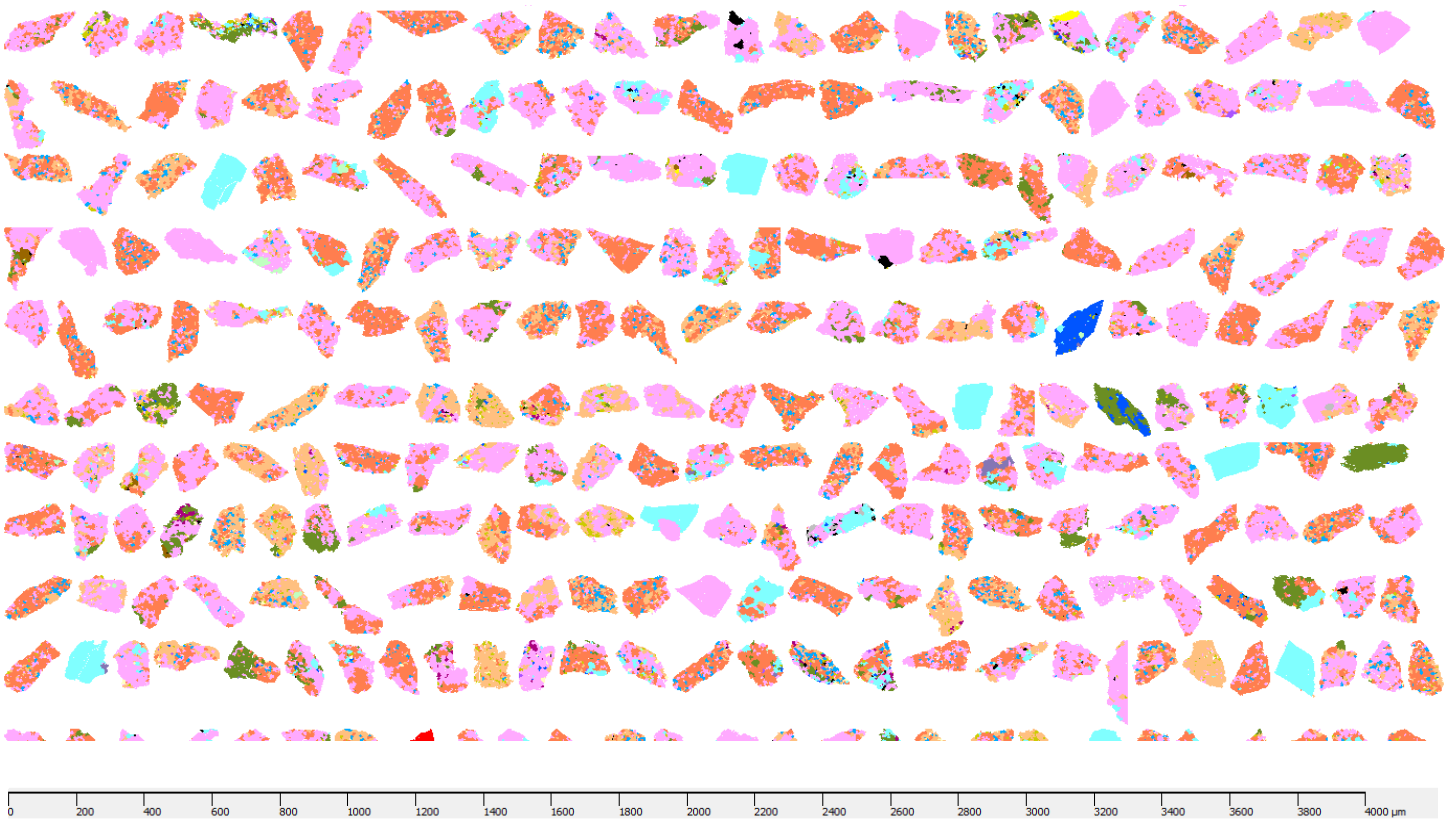
MI7000-OCT22-21A	Liberation analysis #1		

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Particle Images - Crowded Porphyry - sorted by size

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Plagioclase
K-Feldspar
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Clays
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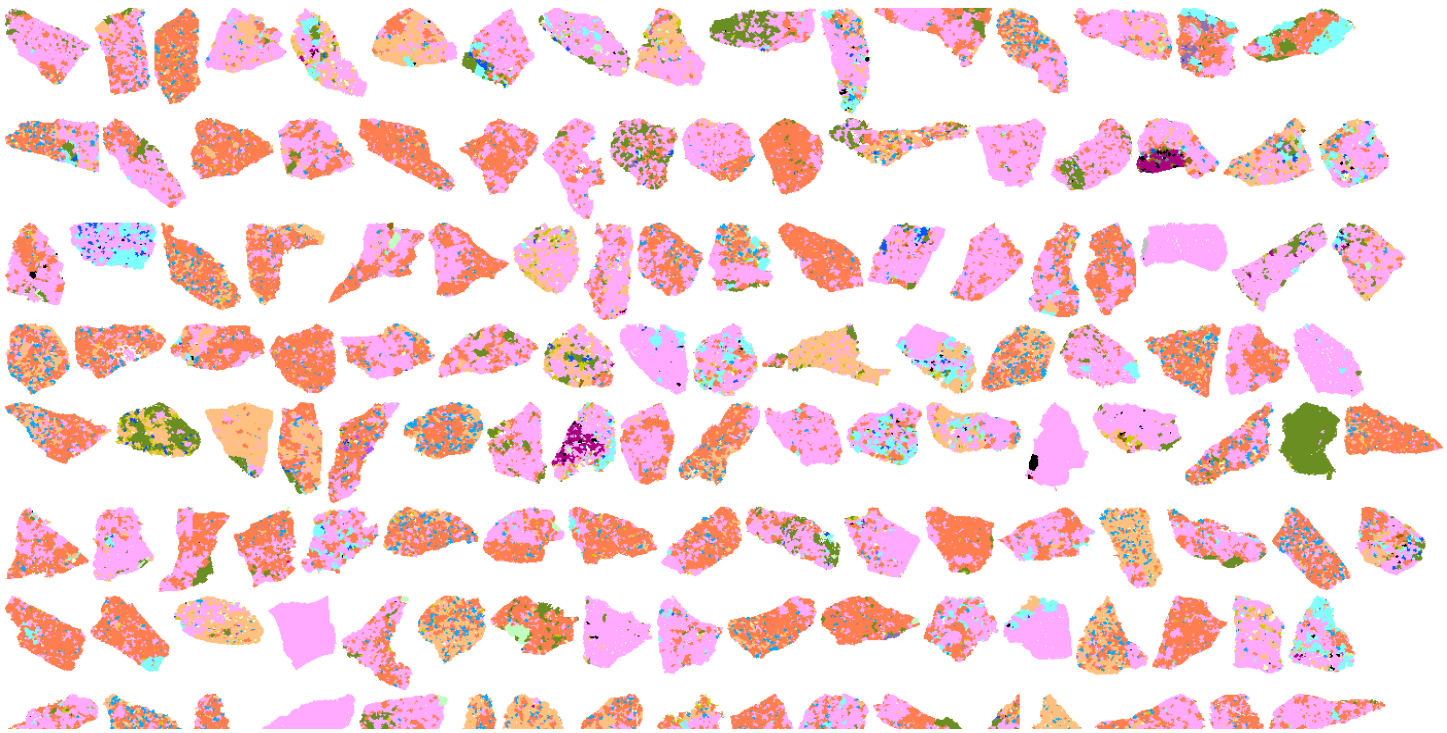
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other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Titanite
Fe-Oxides
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Carbonates
Apatite
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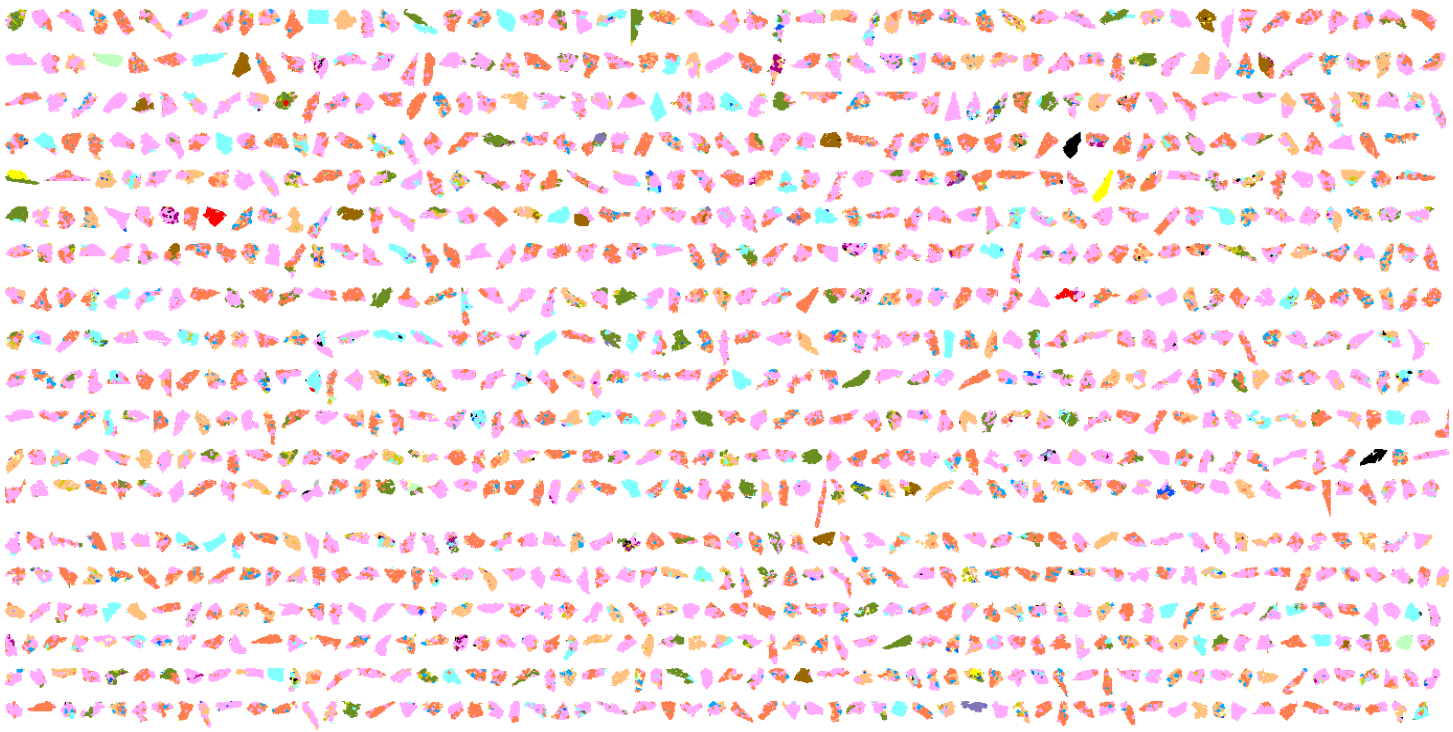
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Amphiboles
Titanite
Fe-Oxides
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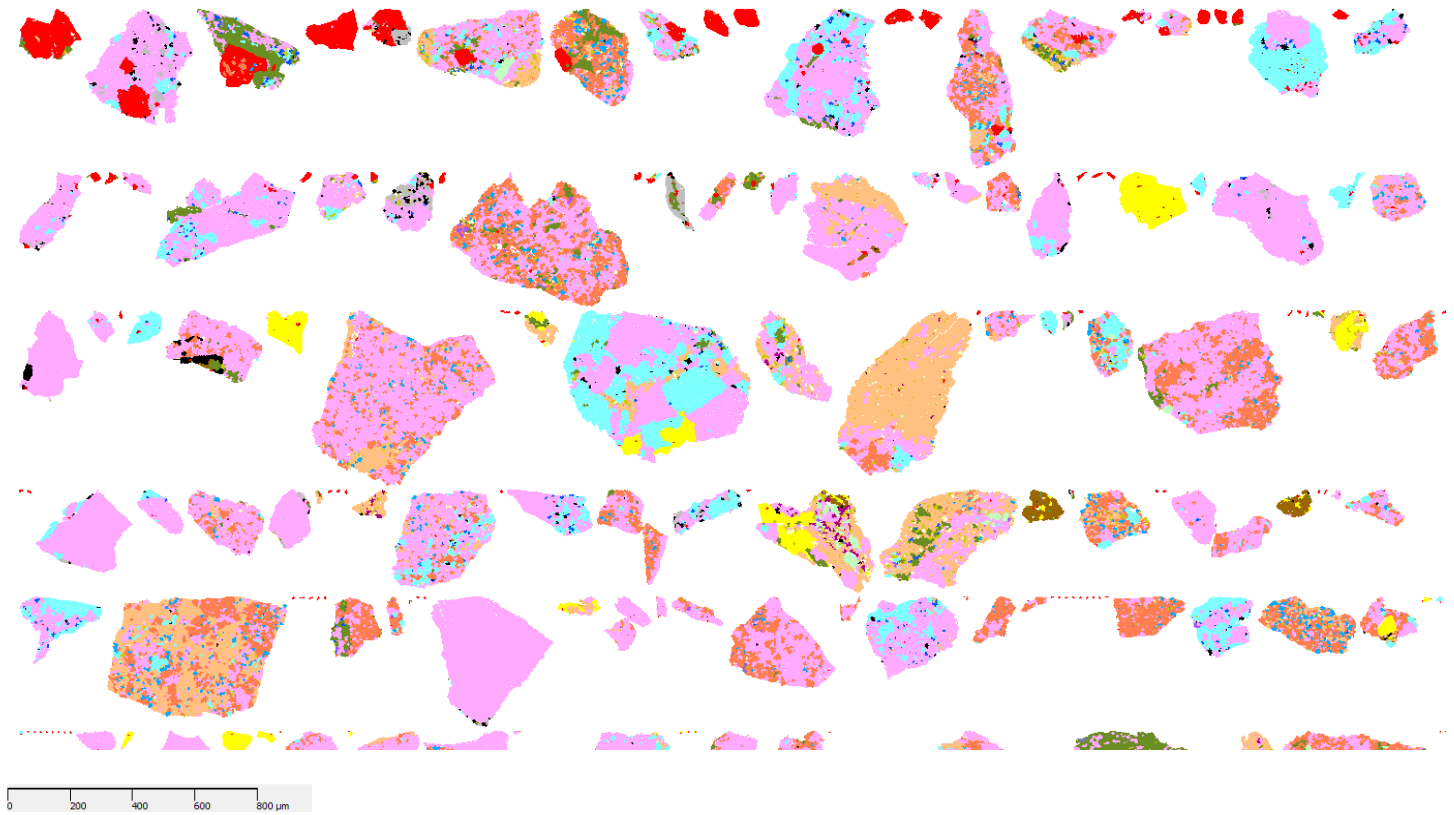
Carbonates
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

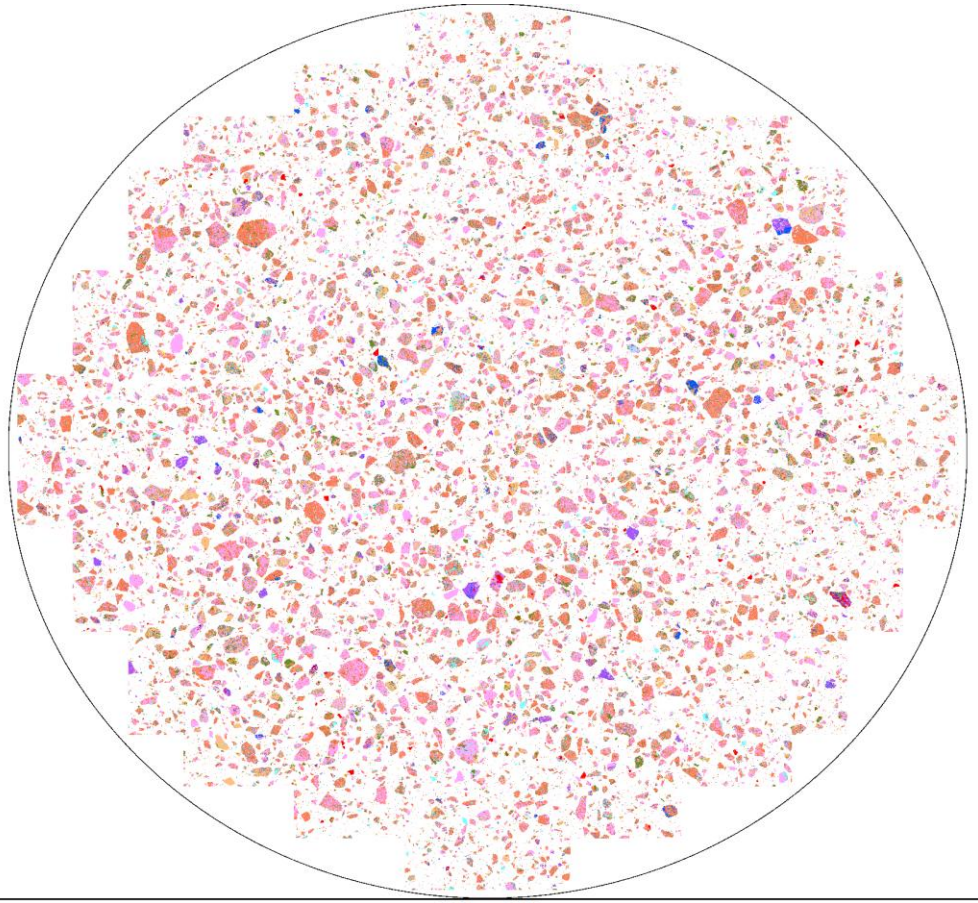
Pyrite Particle Images - Crowded Porphyry



Pyrite Particle Images - Crowded Porphyry - Pyrite only

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Panorama - Overview - High Sulfur



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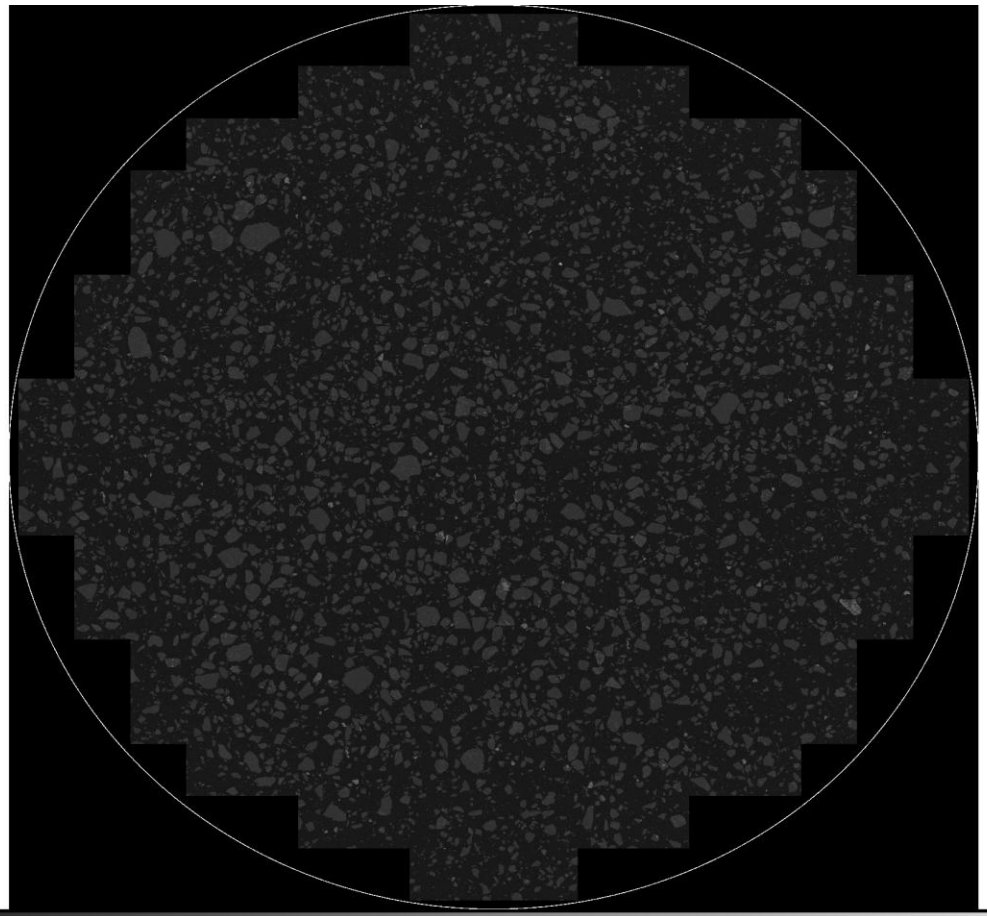
Pyrite	Chalcopyrite	Other Sulphides	Quartz	Plagioclase	K-Feldspar
Alkali Feldspar	Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles
Titanite	Other Silicates	Fe-Oxides	Ti Oxide	Carbonates	Apatite
Other					

Panorama - Backscattered Electron Image - High Sulfur



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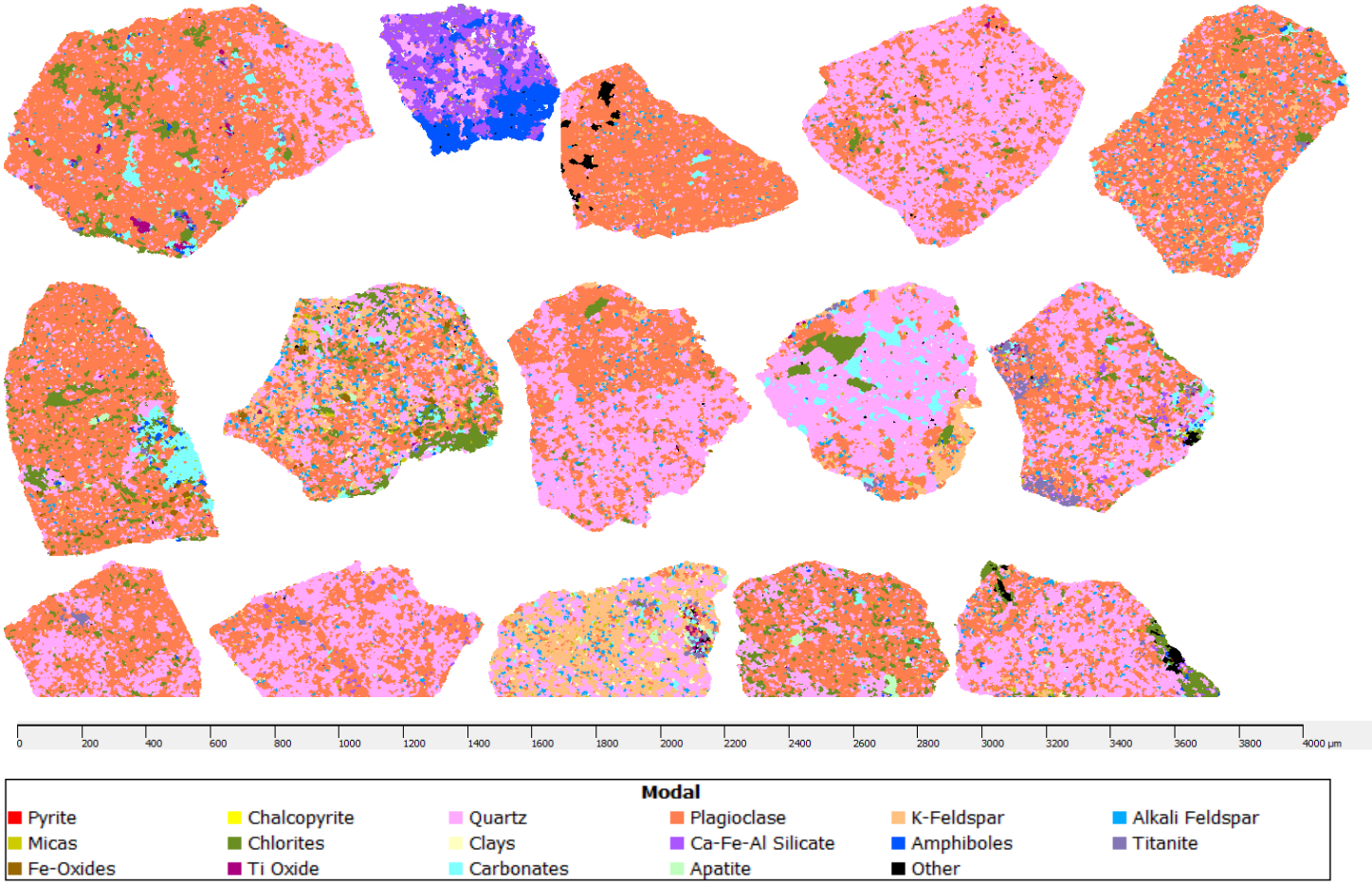
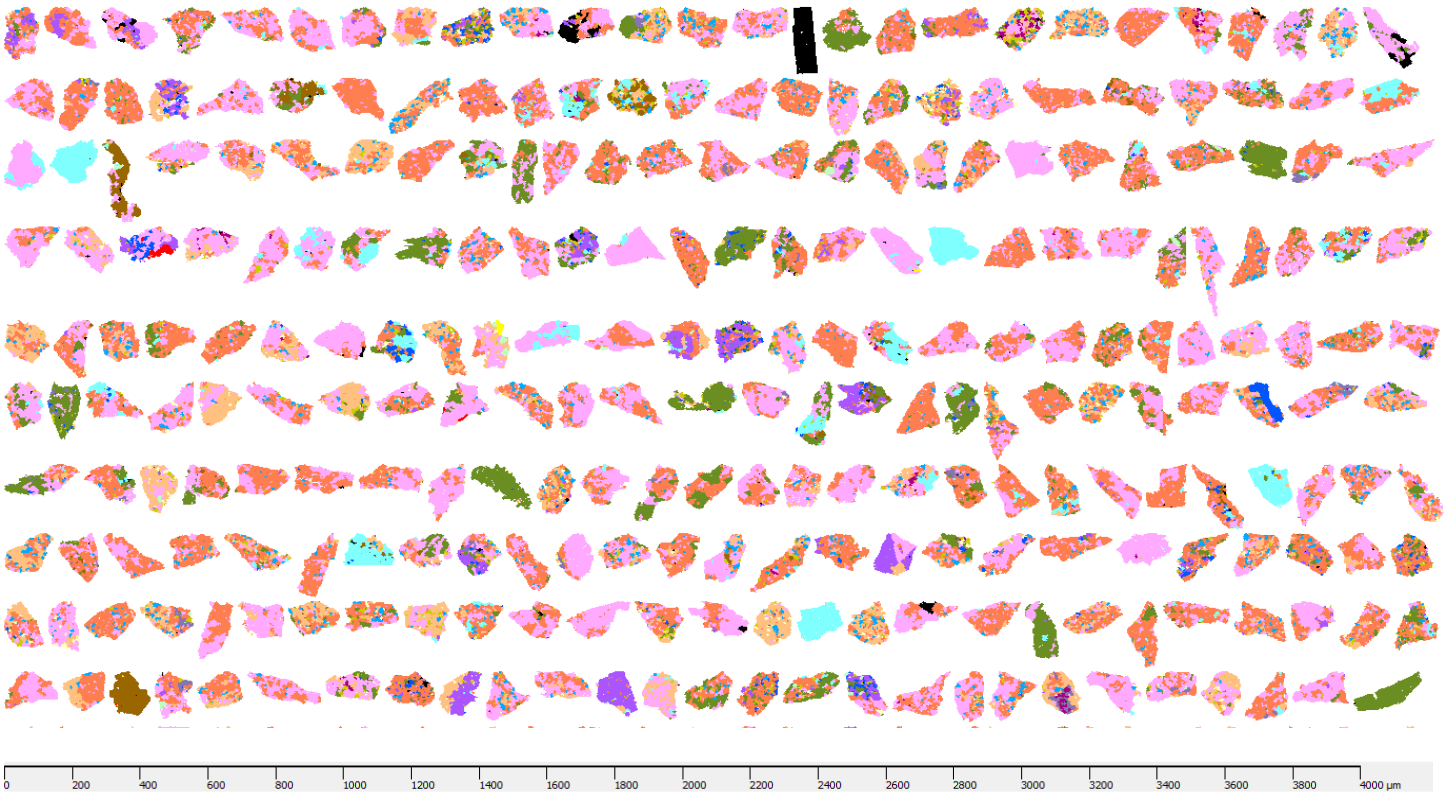
MI7000-OCT22-31A	Liberation analysis #1		

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Particle Images - High Sulfur - sorted by size





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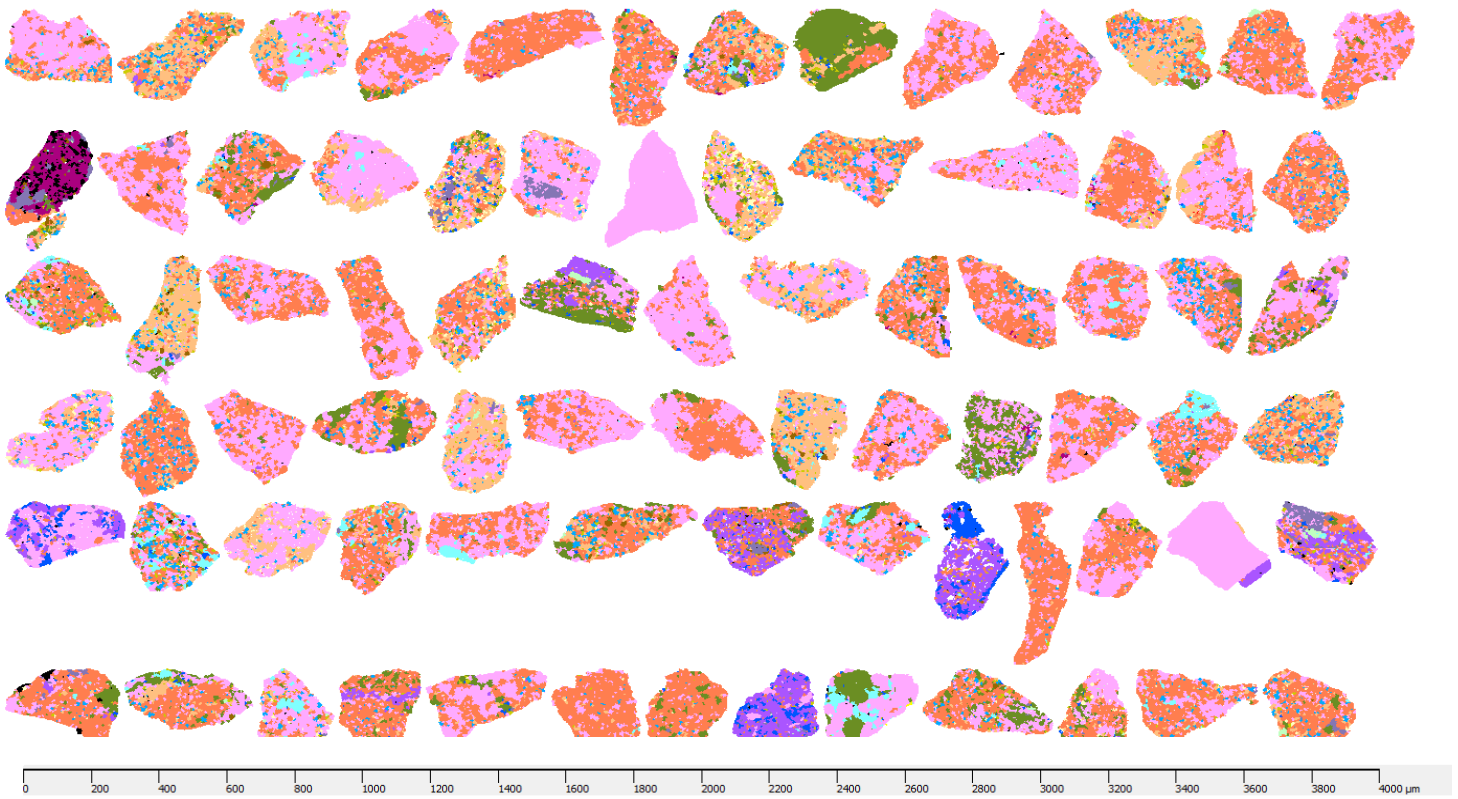
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	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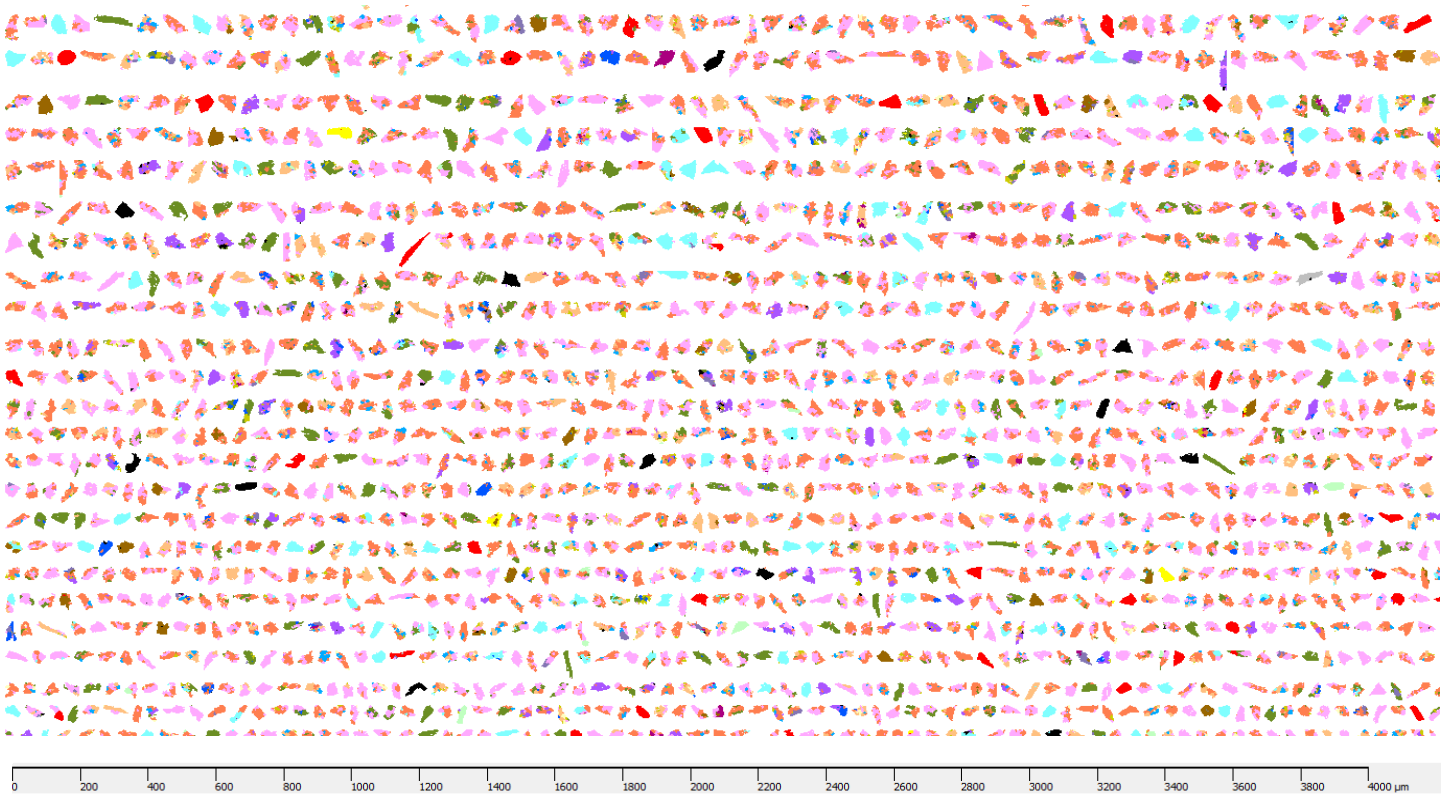
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other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Amphiboles
Titanite
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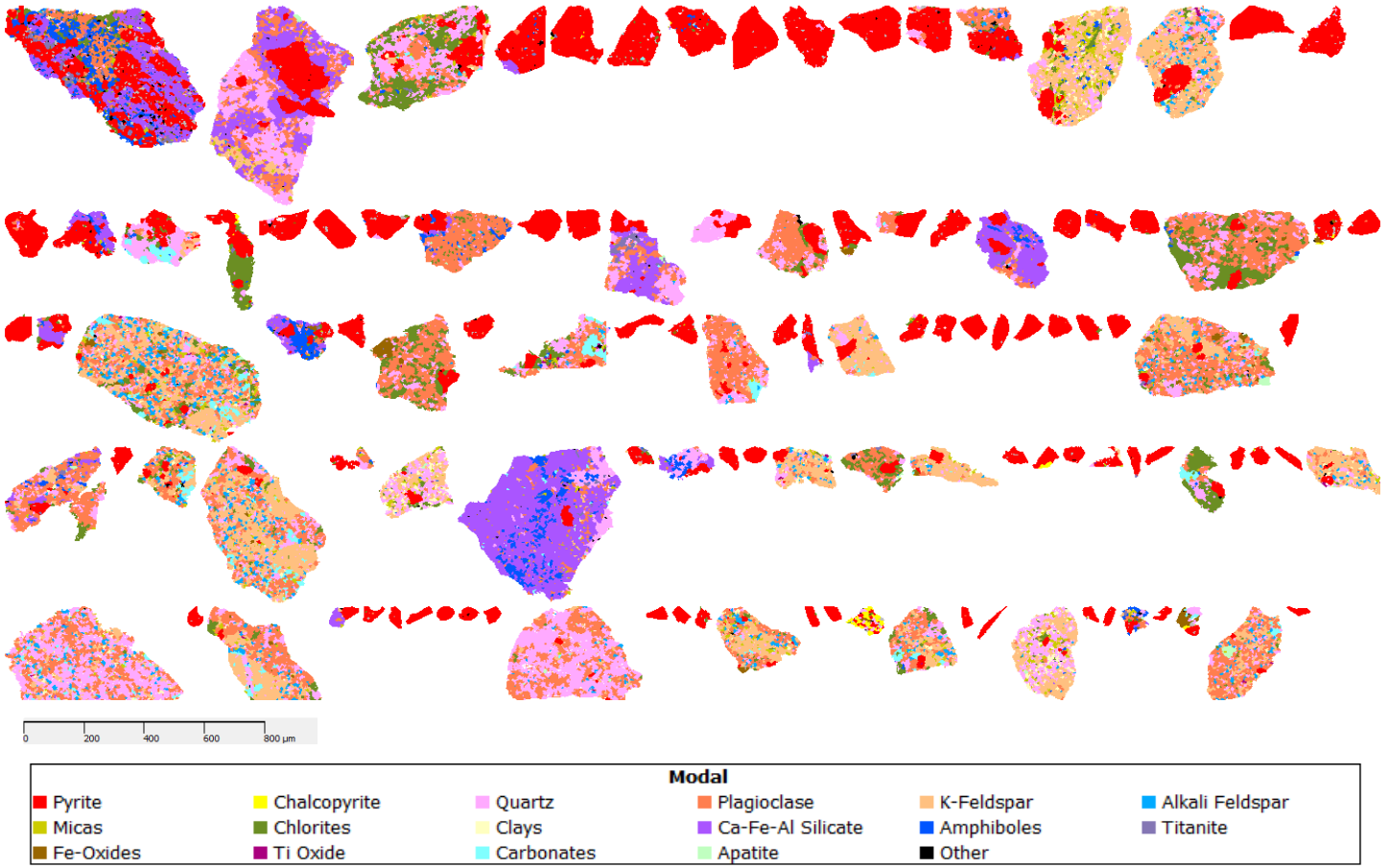
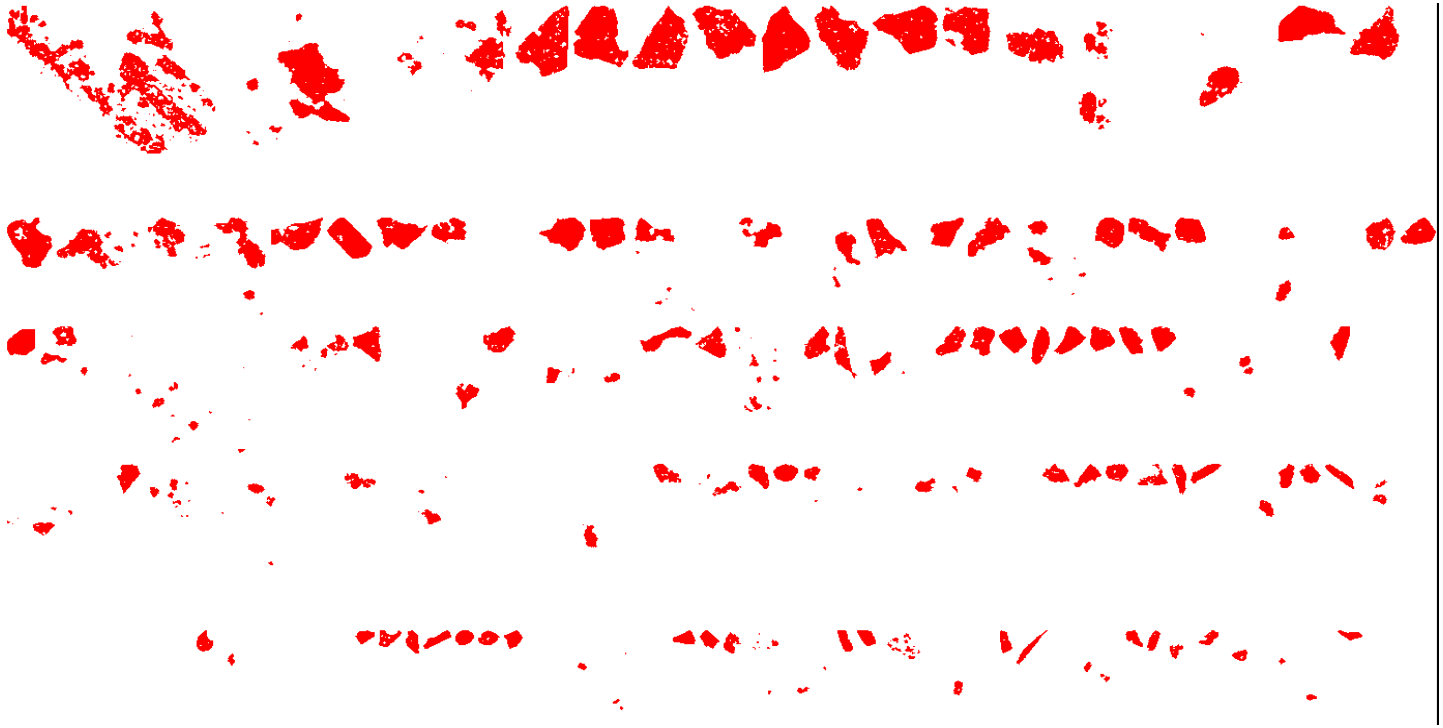
Carbonates
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Pyrite Particle Images - High Sulfur



Pyrite Particle Images - High Sulfur - Pyrite only



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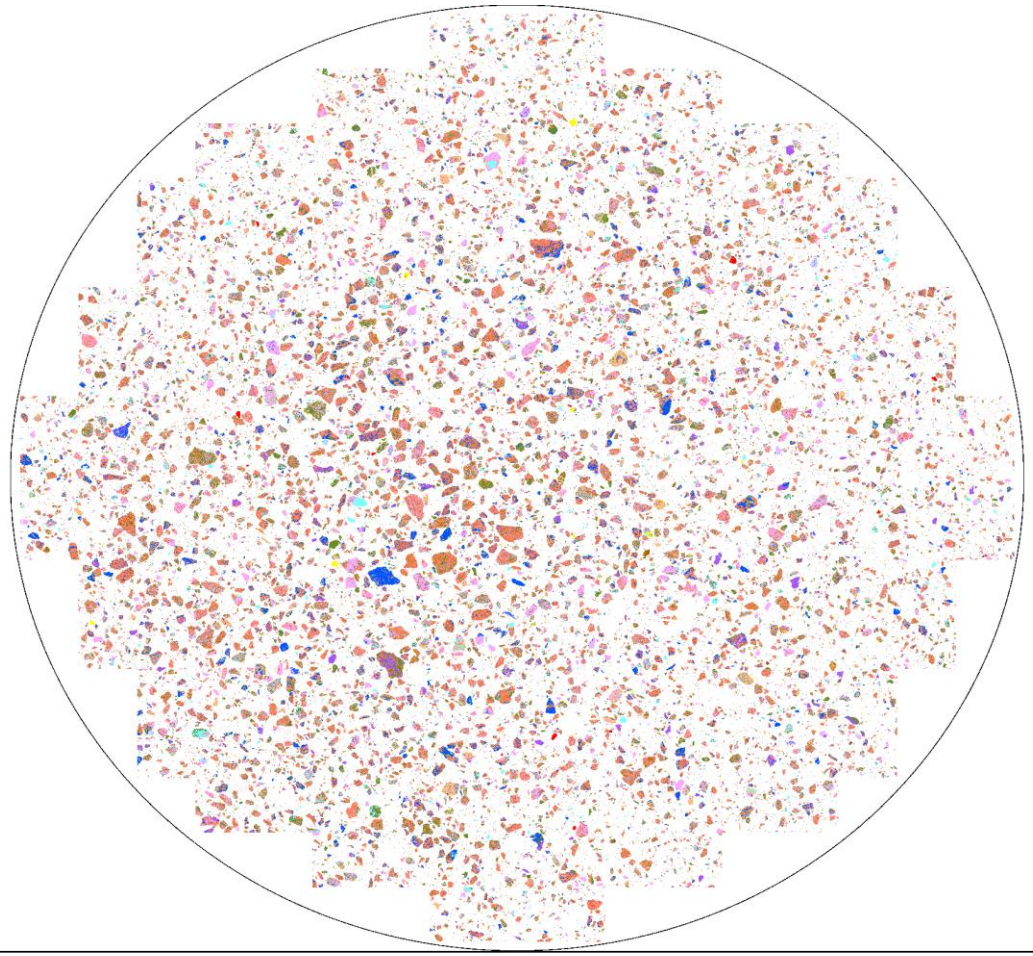
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Panorama - Overview - Basalt



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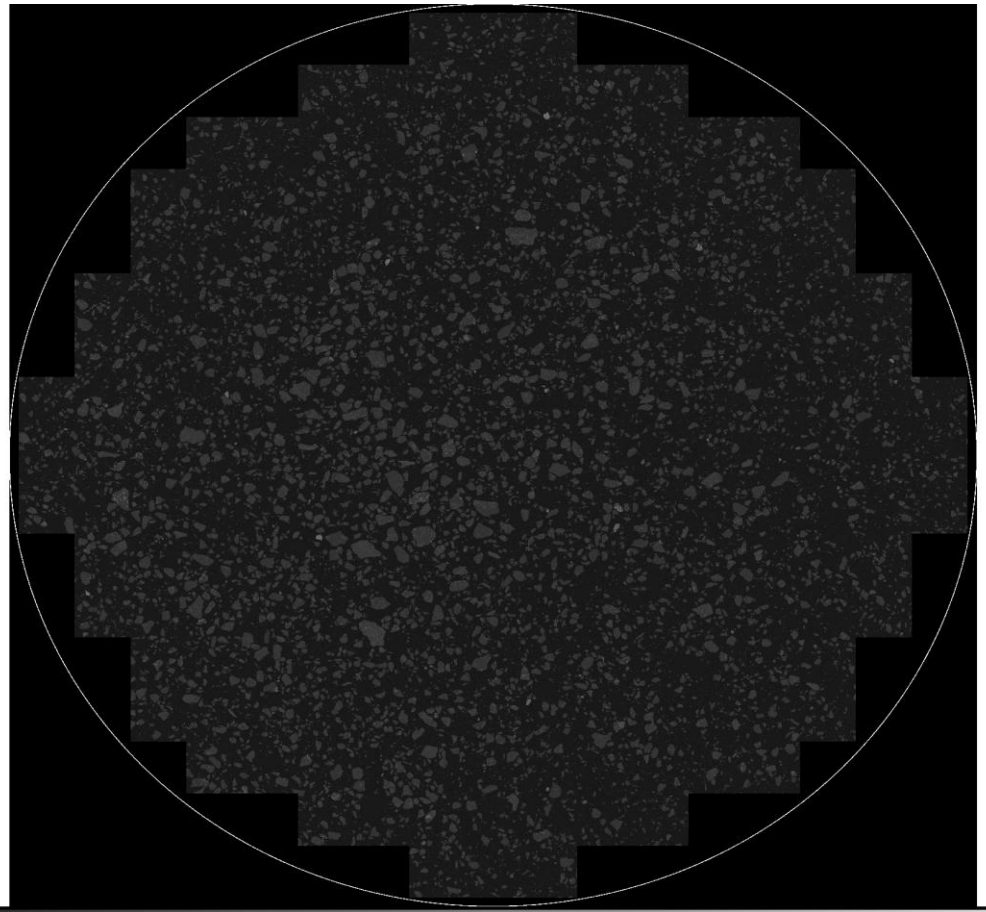
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Other Silicates	Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other

Panorama - Backscattered Electron Image - Basalt



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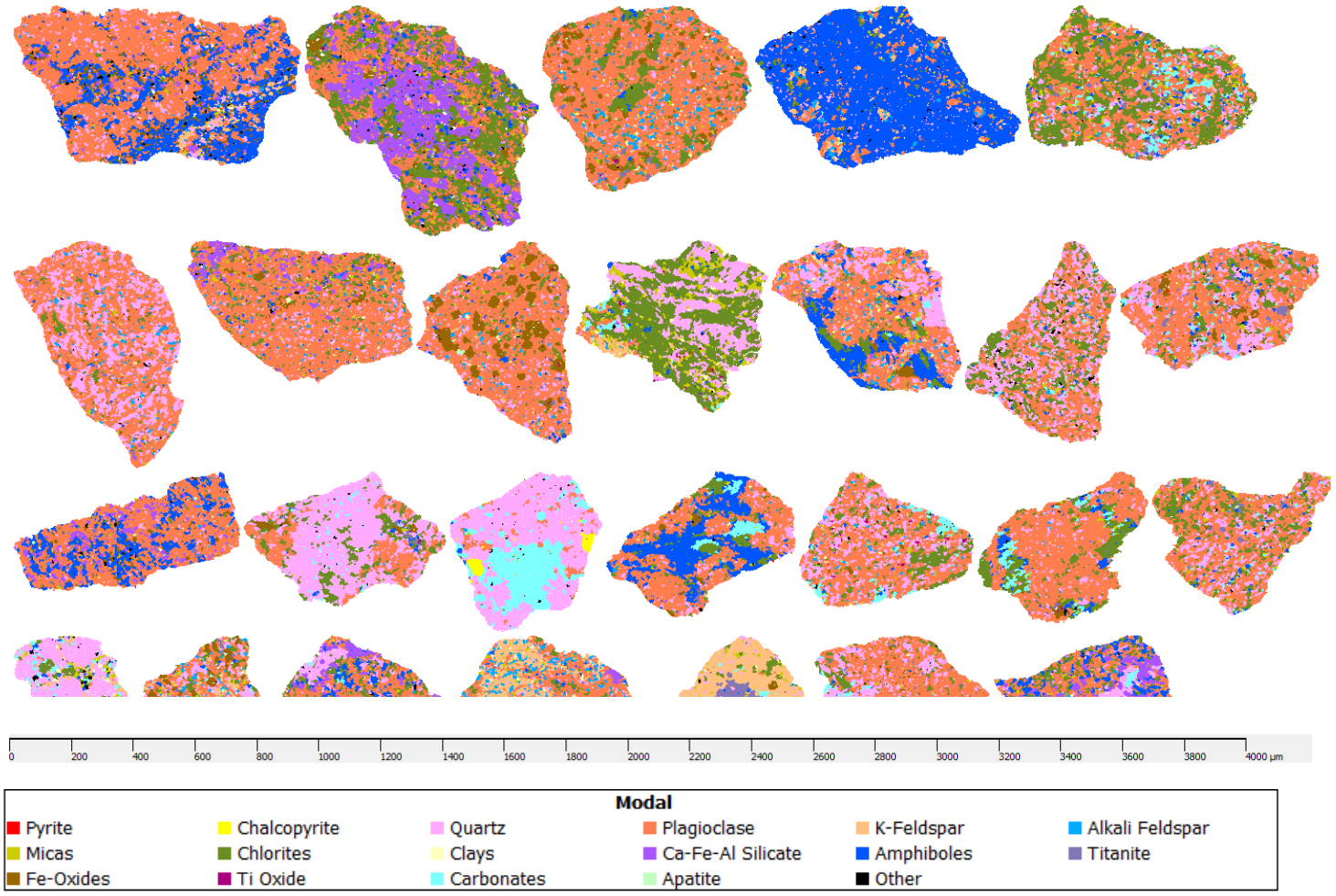
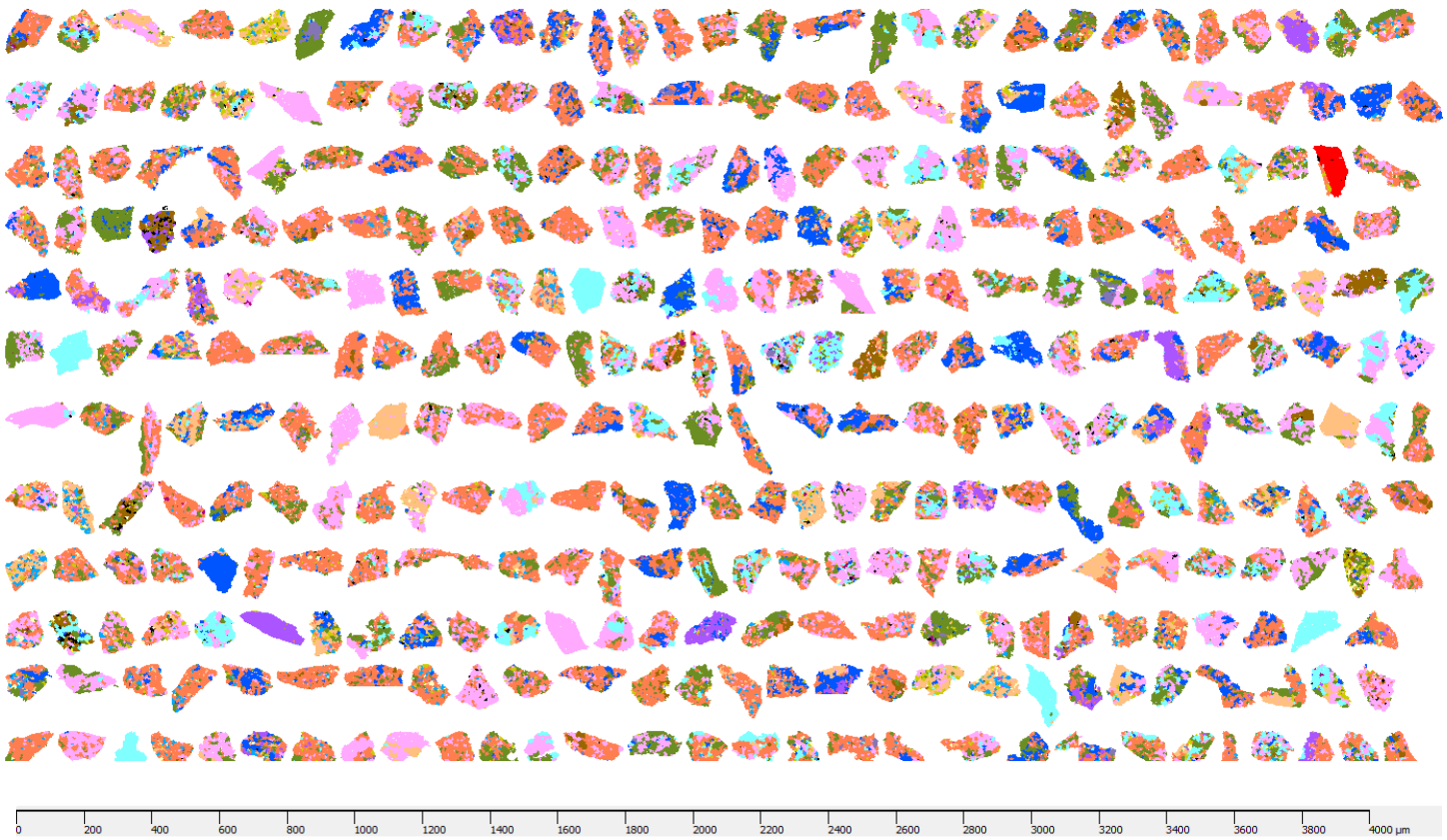
MI7000-OCT22-41A	Liberation analysis #1		

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Particle Images - Basalt - sorted by size

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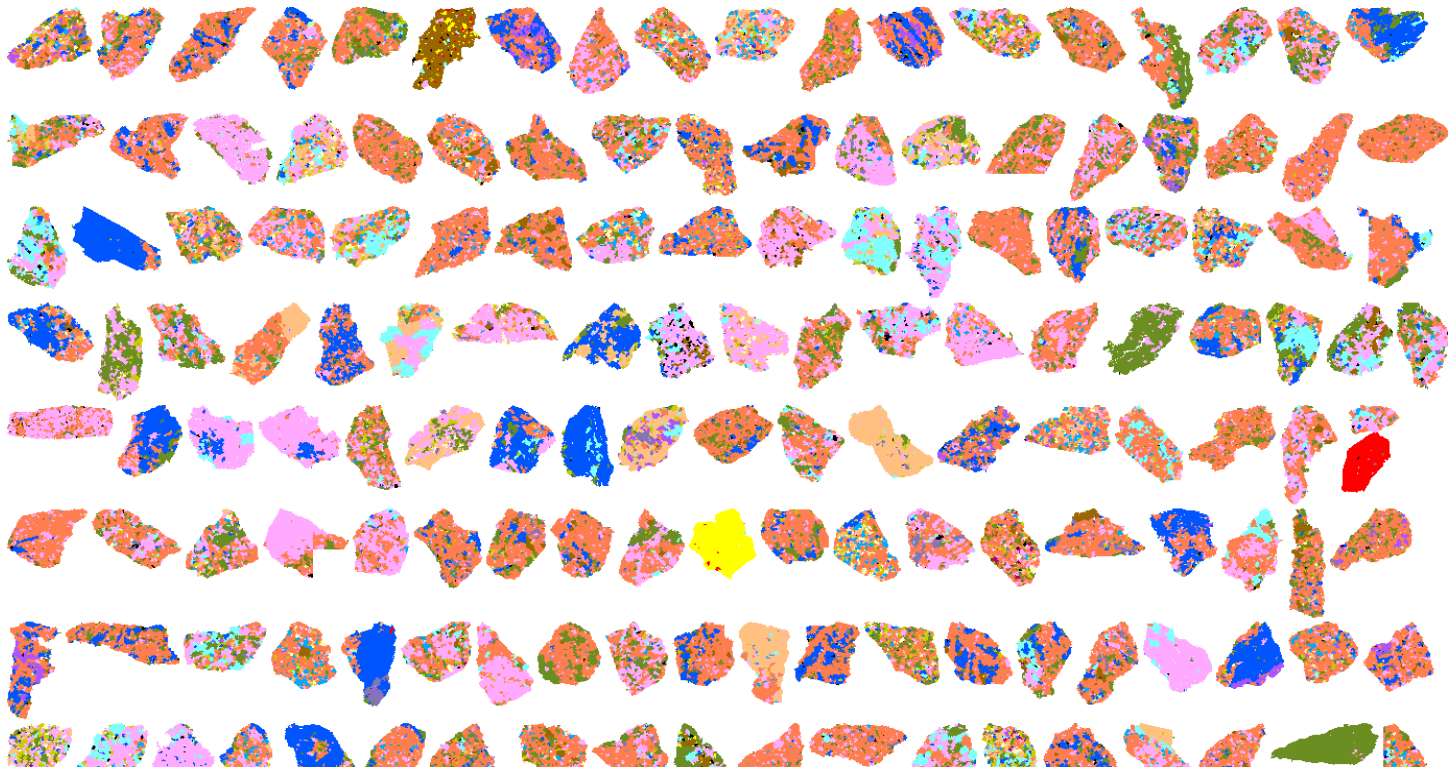
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other



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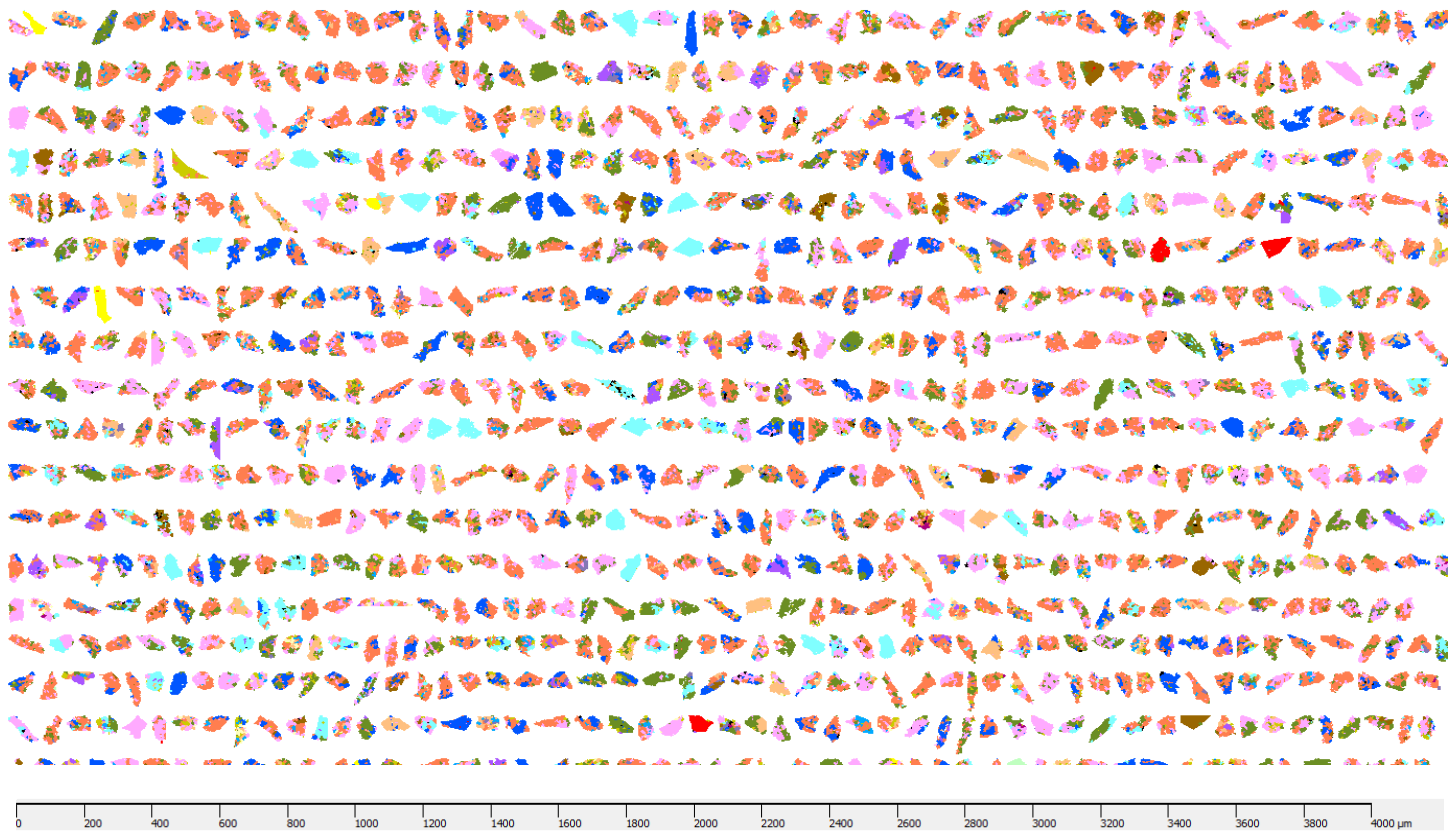
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	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Clays
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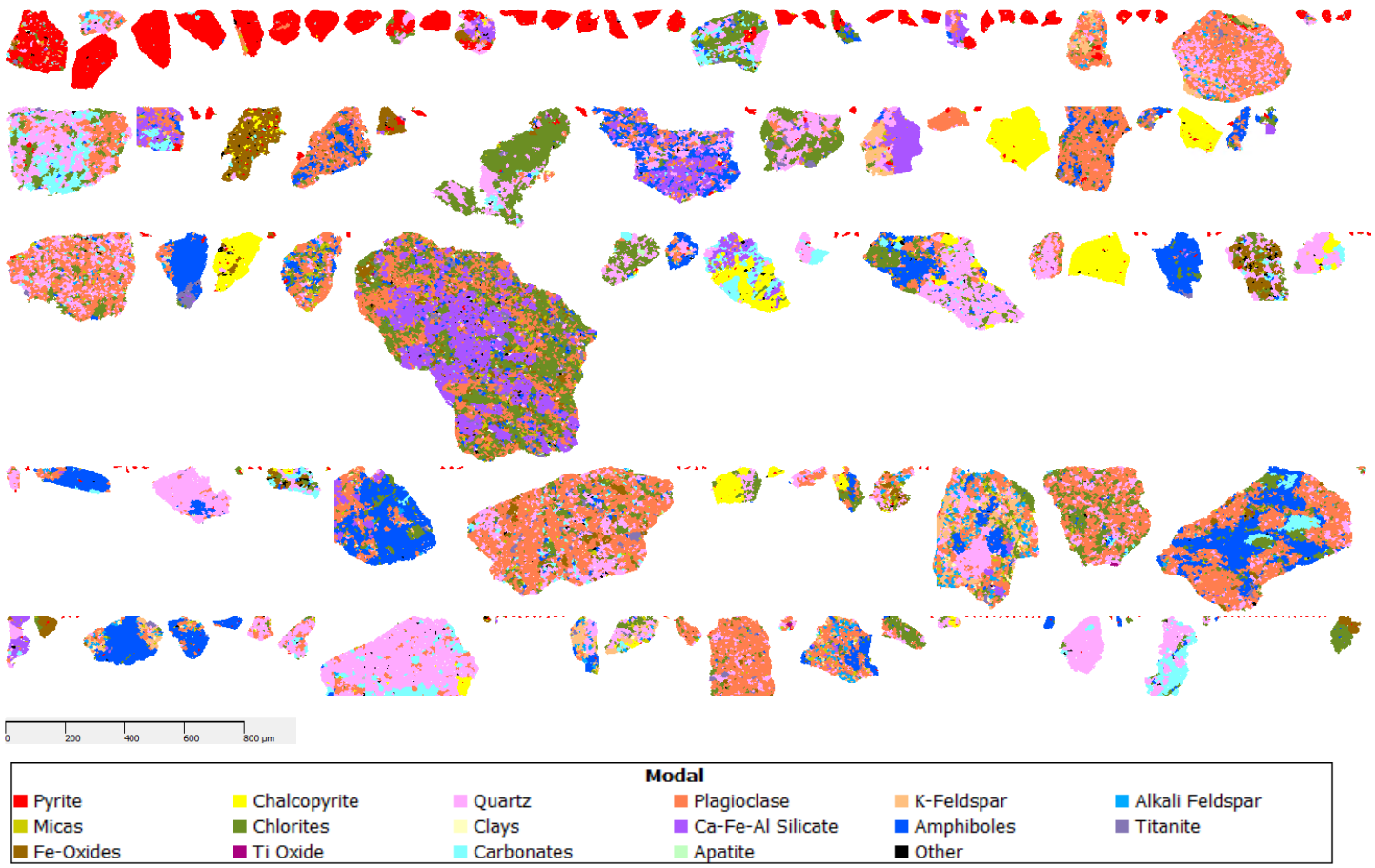
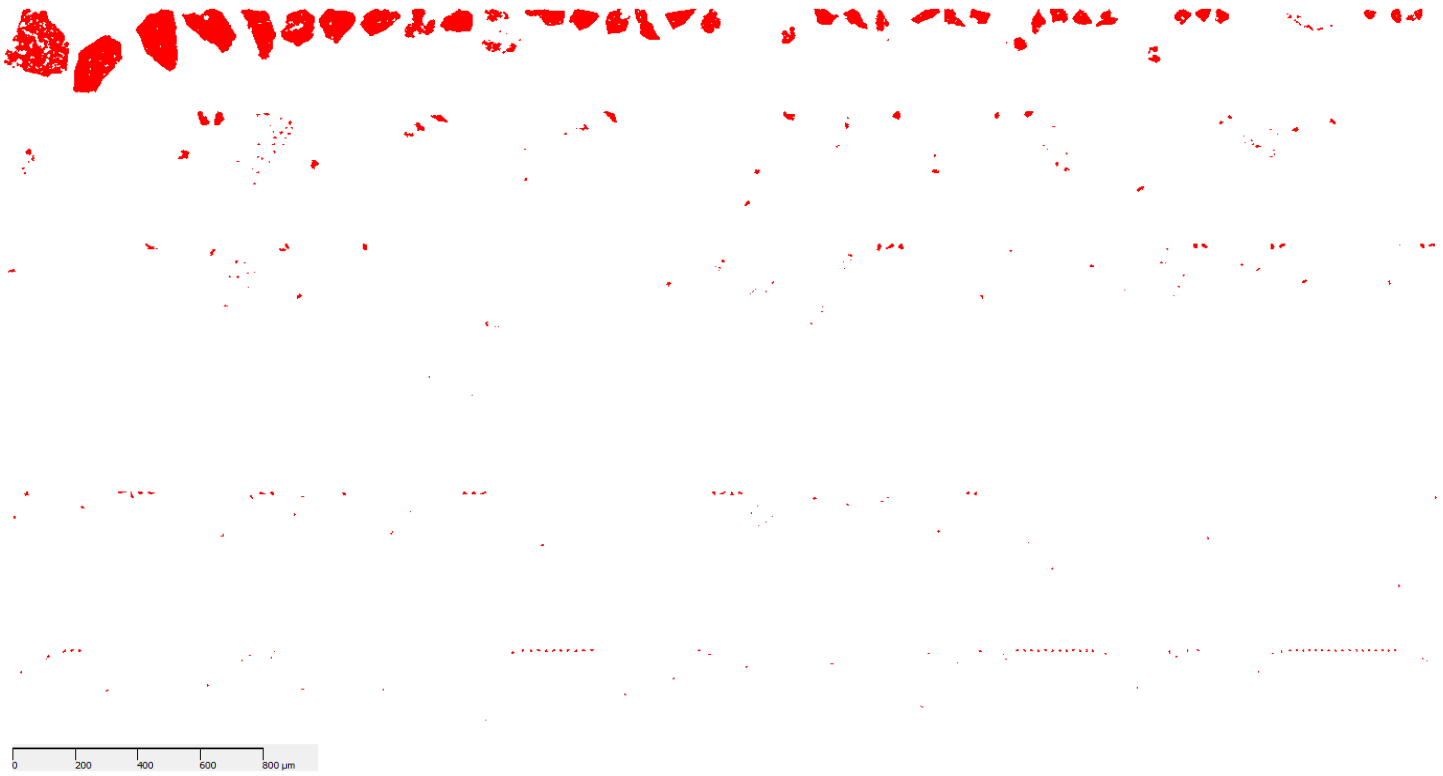
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Pyrite Particle Images - Basalt



Pyrite Particle Images - Basalt - Pyrite only



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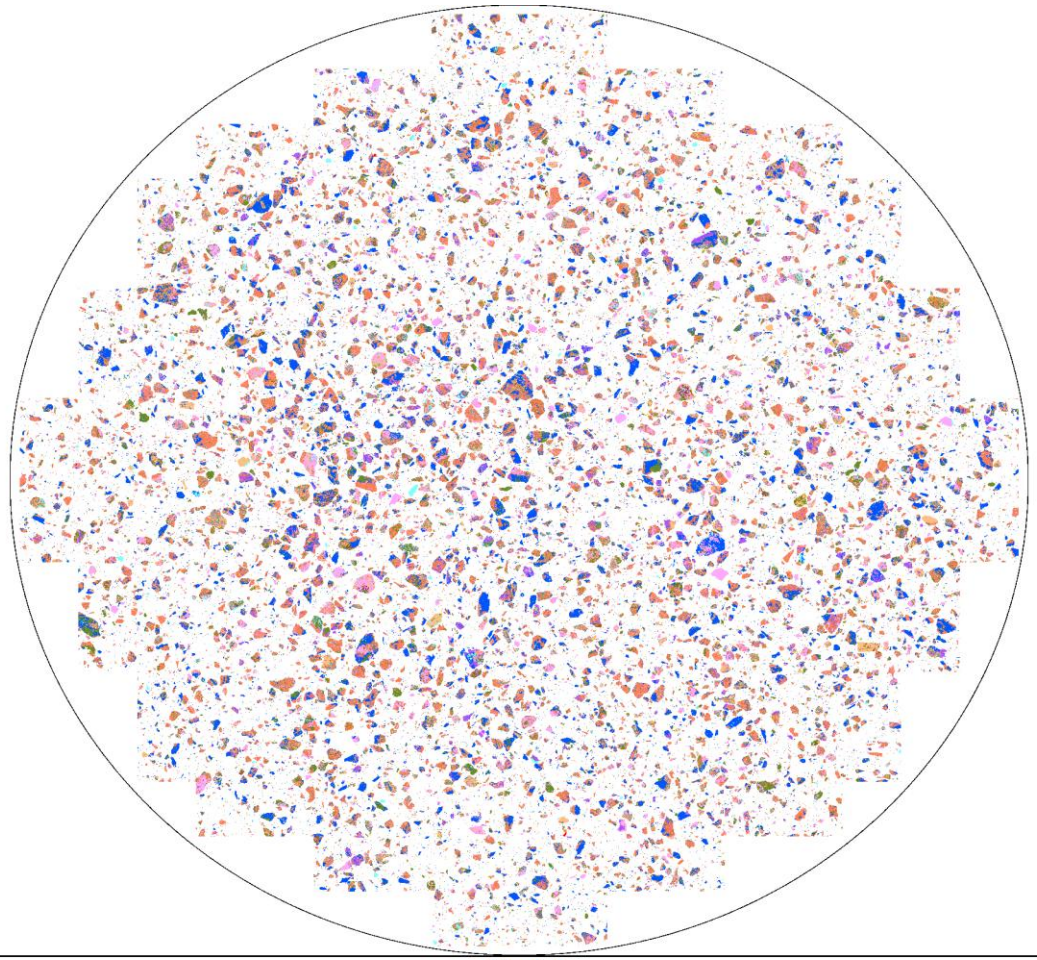
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

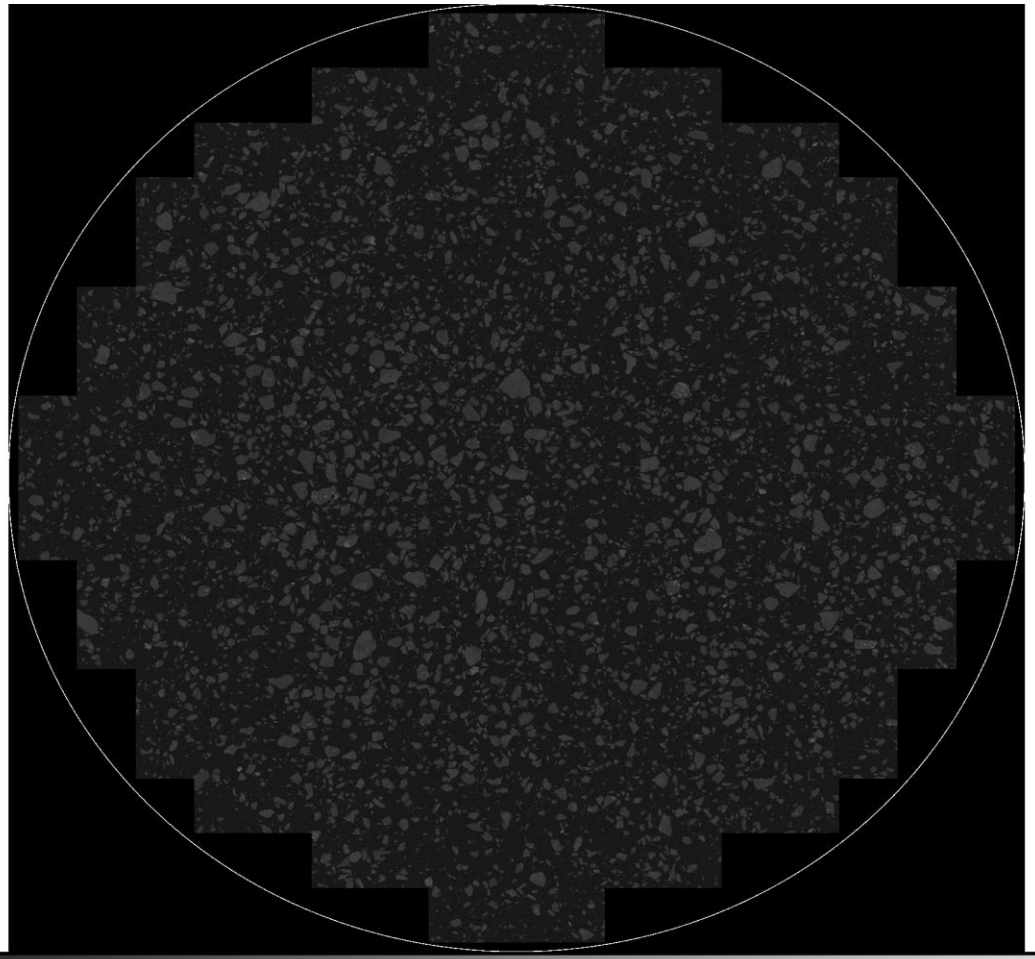
Panorama - Overview - Gabbro



Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Other Oxides	Carbonates	Apatite	Other

Panorama - Backscattered Electron Image - Gabbro



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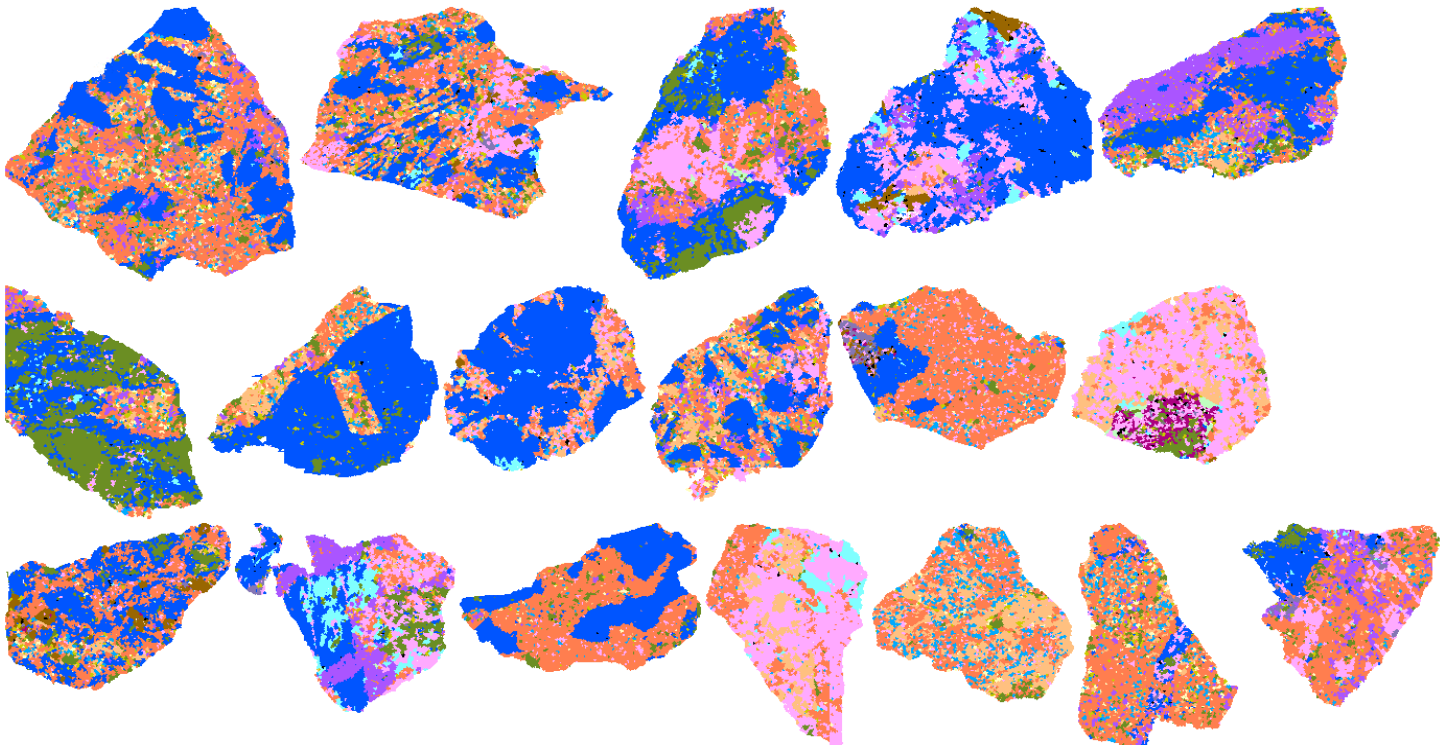
MI7000-OCT22-51A	Liberation analysis #1		

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Particle Images - Gabbro - sorted by size



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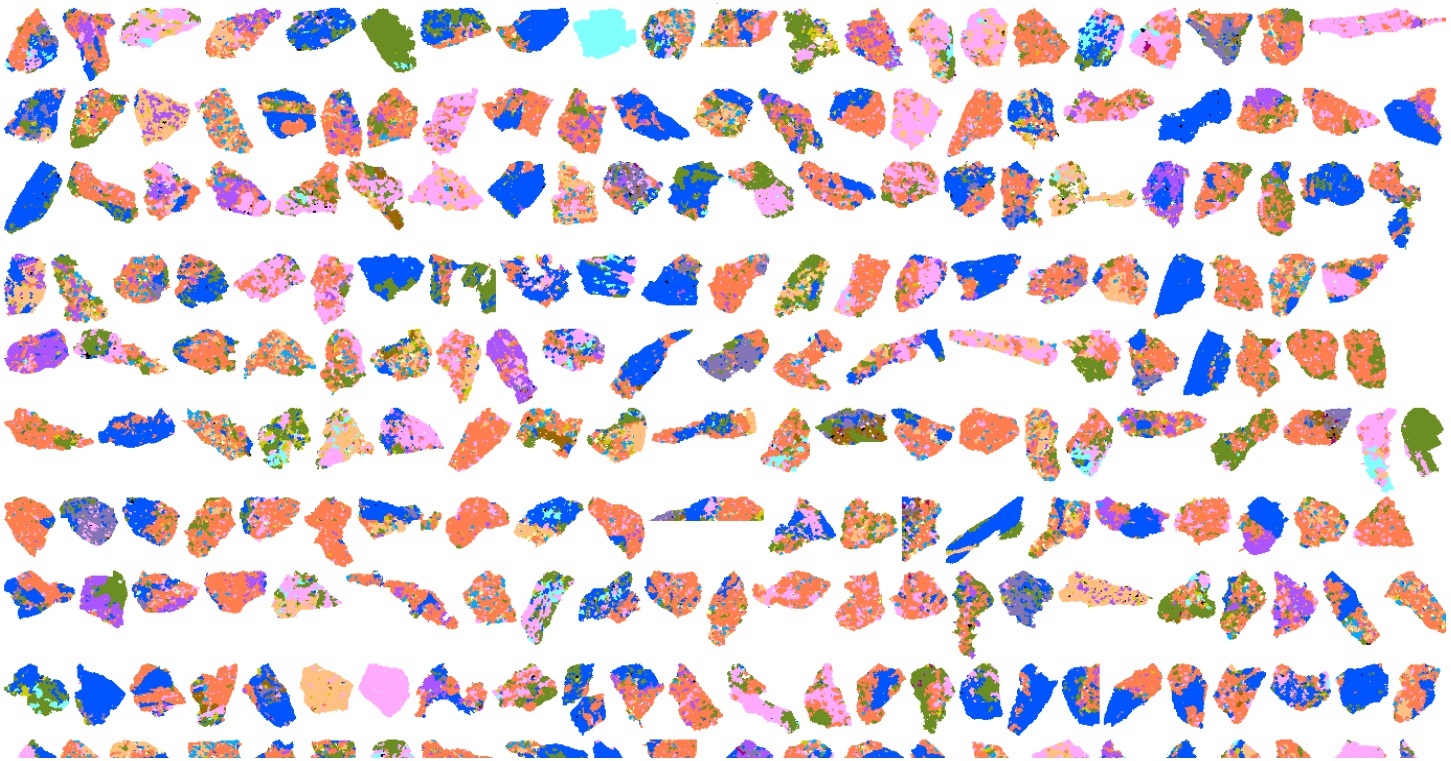
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	



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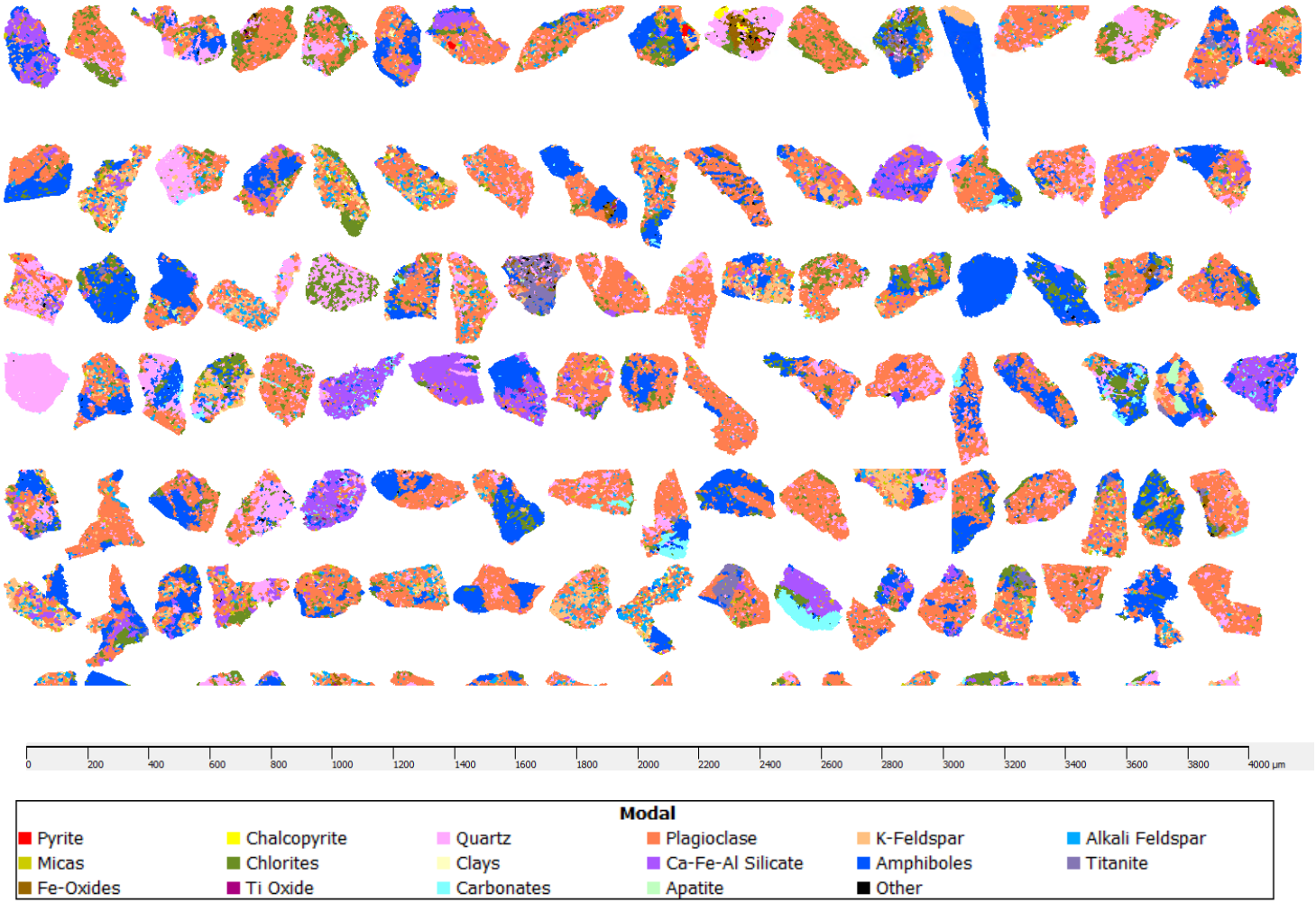
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	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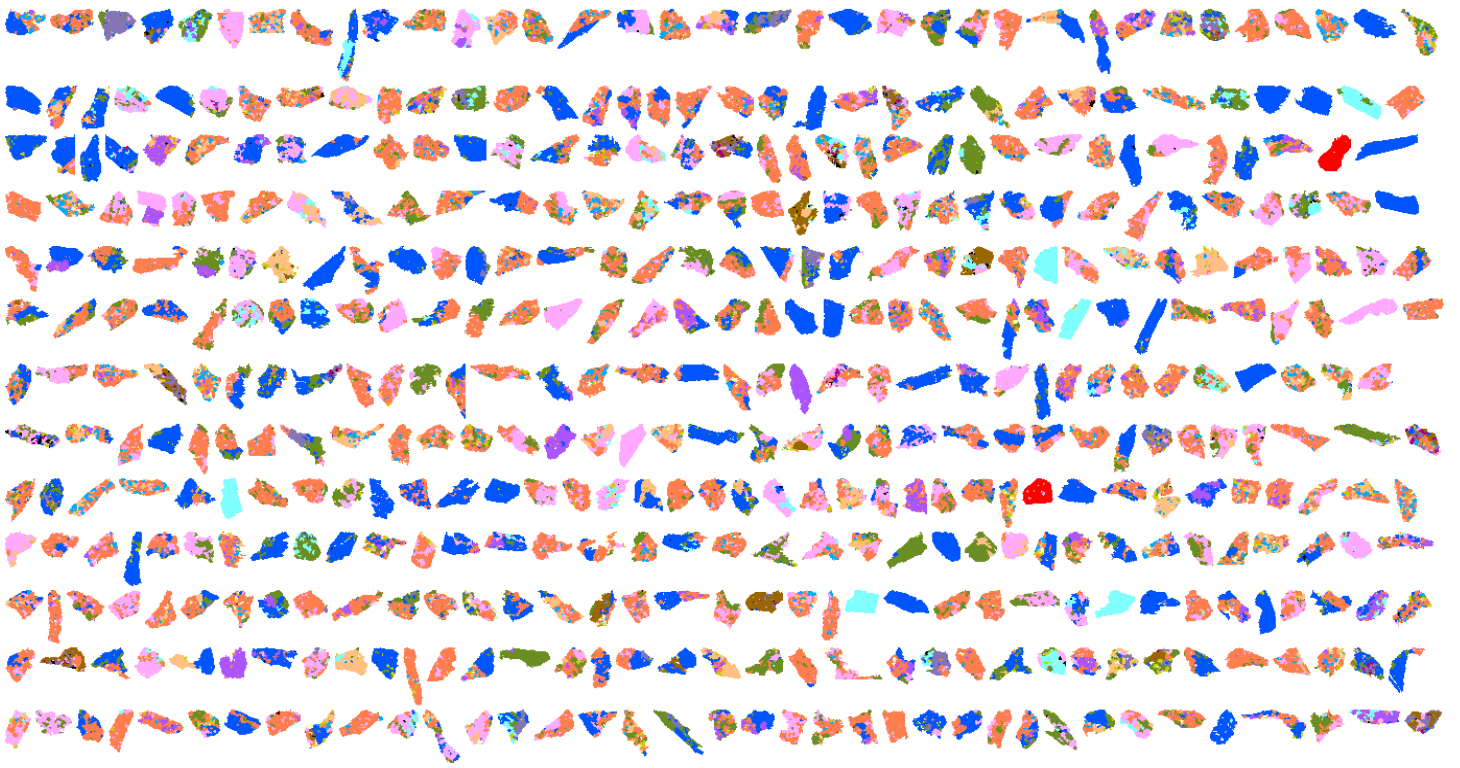
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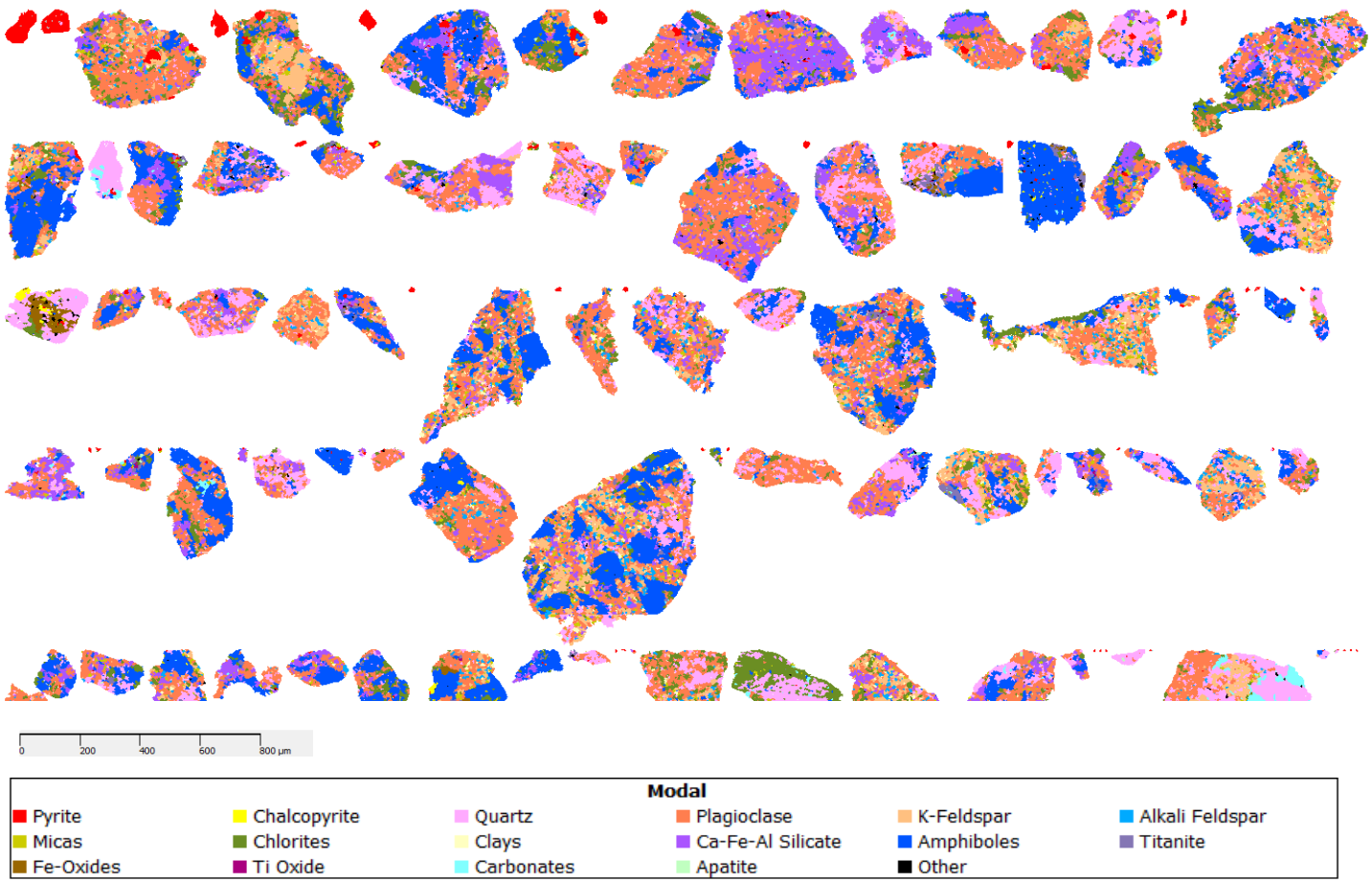
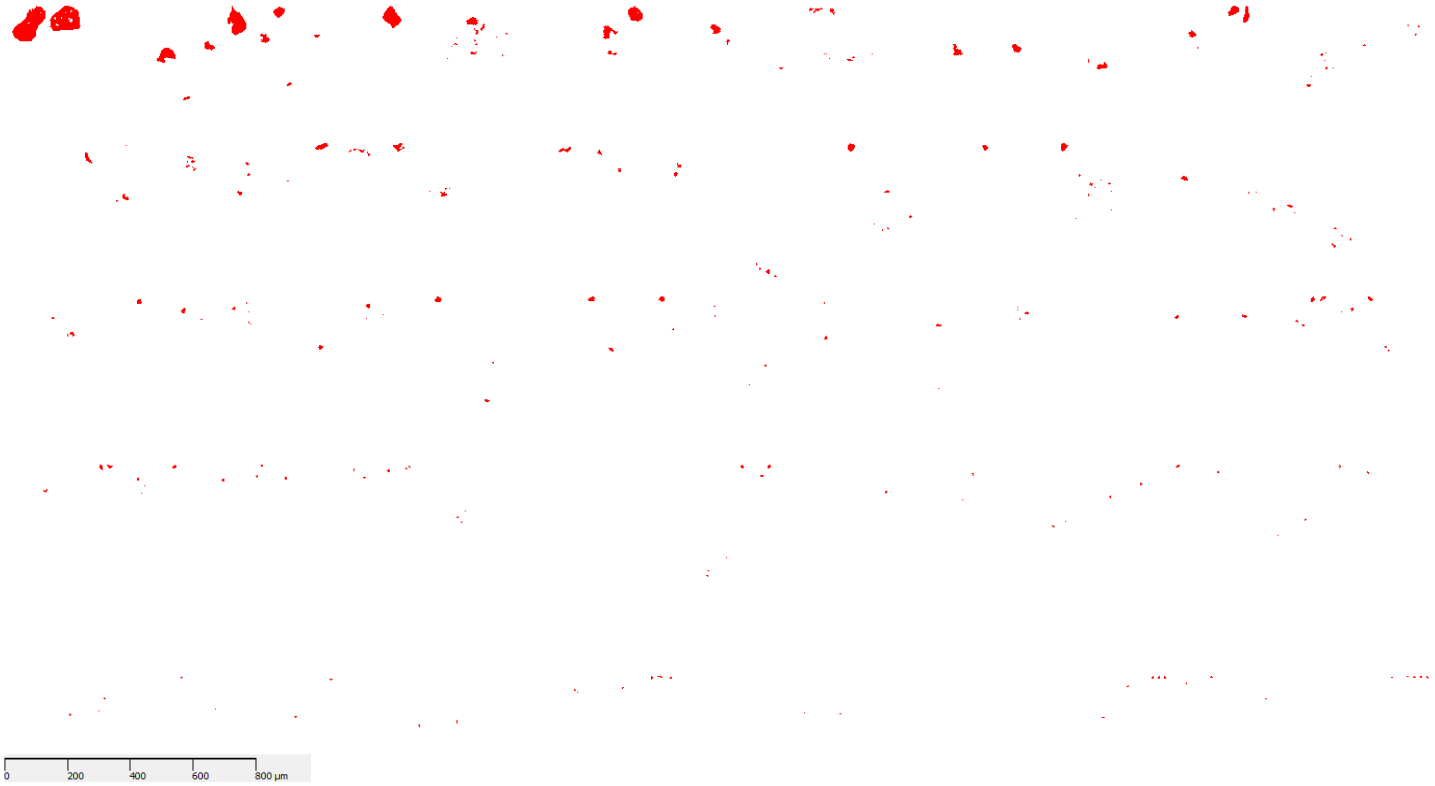
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7000-OCT22

Pyrite Particle Images - Gabbro



Pyrite Particle Images - Gabbro - Pyrite only



Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Mineral List	Sample ID	Data Values
Pyrite	1A	Native Copper Association
Chalcopyrite	1B	Cu Sulphides Association
Bornite	2A	Pyrite Association
Tetrahedrite/Tennantite/Enargite	2B	Cu Sulphides Exposure
Other Cu Minerals	2C	Pyrite Exposure
Other Sulphides	3A	Native Copper Exposure
Native Cu	3B	Chalcopyrite Exposure
Gold		Bornite Exposure
Clays		
Carbonates		
Other NSG		

MINERALOGY DATA

prepared for:

Custom Min

Revision 1

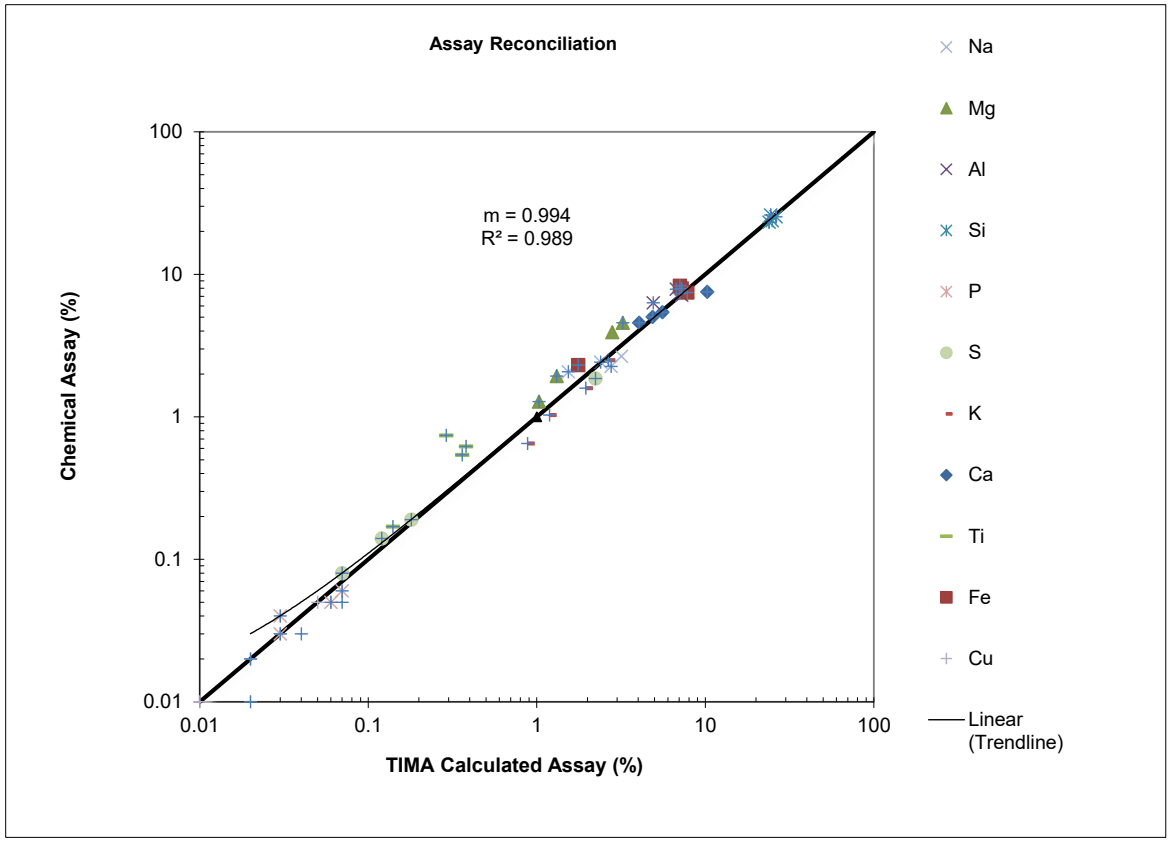
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22
December 12, 2025

Prepared by:

Hanna Horsch/Lain Glossop
Senior Mineralogist/Senior Mineralogist

Custom-MIN
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Elemental Mass (%)



Elemental Mass (%) Absolute

	Sodium		Magnesium		Aluminum		Silicon		Phosphorus	
Mineral Name	Na (Calculated)	Na (Assay)	Mg (Calculated)	Mg (Assay)	Al (Calculated)	Al (Assay)	Si (Calculated)	Si (Assay)	P (Calculated)	P (Assay)
HC-7 Basalt (Open Pit)	3.18	2.66	2.80	3.93	7.23	7.15	24.9	23.8	0.03	0.04
HC-8 Crowded Porphyry	1.54	2.07	1.03	1.28	4.90	6.32	24.4	26.1	0.07	0.06
HC-9 Mafic Intrusive Rock	2.76	2.26	3.24	4.58	7.05	7.33	23.8	23.3	0.03	0.03
HC-10 Mixed PAG	2.39	2.42	1.31	1.93	6.72	7.88	26.3	25.4	0.06	0.05

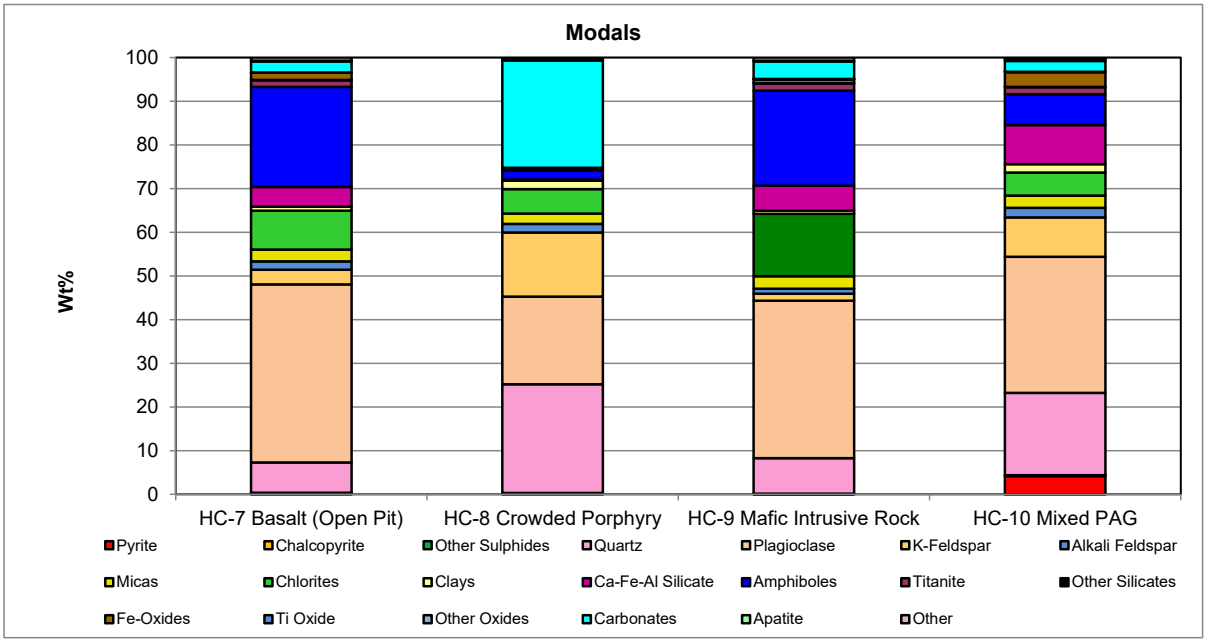
Sulphur		Potassium		Calcium		Titanium		Iron		Copper	
S (Calculated)	S (Assay)	K (Calculated)	K (Assay)	Ca (Calculated)	Ca (Assay)	Ti (Calculated)	Ti (Assay)	Fe (Calculated)	Fe (Assay)	Cu (Calculated)	Cu (Assay)
0.18	0.19	1.19	1.03	4.86	5.03	0.29	0.74	7.07	8.31	0.02	0.01
0.12	0.14	2.65	2.50	10.3	7.54	0.14	0.17	1.76	2.31	0.04	0.03
0.07	0.08	0.88	0.65	5.56	5.43	0.38	0.62	7.24	7.96	0.02	0.02
2.23	1.86	1.95	1.59	4.04	4.58	0.36	0.54	7.82	7.46	0.07	0.05

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Samples: P_{80} 150 µm

Modals

Mineral (%)	HC-7 Basalt (Open Pit)	HC-8 Crowded Porphyry	HC-9 Mafic Intrusive Roc	HC-10 Mixed PAG
Pyrite	0.32	0.17	0.10	4.16
Chalcopyrite	0.05	0.10	0.05	0.19
Other Sulphides	0.00	0.02	0.00	0.04
Quartz	6.93	24.9	8.14	18.8
Plagioclase	40.8	20.0	36.0	31.2
K-Feldspar	3.33	14.7	1.61	8.98
Alkali Feldspar	1.93	1.99	1.14	2.20
Micas	2.69	2.37	2.87	2.79
Chlorites	8.90	5.63	14.3	5.27
Clays	0.94	1.91	0.70	1.93
Ca-Fe-Al Silicate	4.50	0.27	5.71	8.95
Amphiboles	22.9	2.01	21.7	7.04
Titanite	1.54	0.28	1.70	1.69
Other Silicates	0.01	0.02	0.00	0.03
Fe-Oxides	1.69	0.22	0.85	3.36
Ti Oxide	0.03	0.15	0.13	0.10
Other Oxides	0.01	0.03	0.04	0.02
Carbonates	2.49	24.5	3.98	2.46
Apatite	0.17	0.36	0.18	0.32
Other	0.75	0.34	0.72	0.45
Total	100	100	100	100

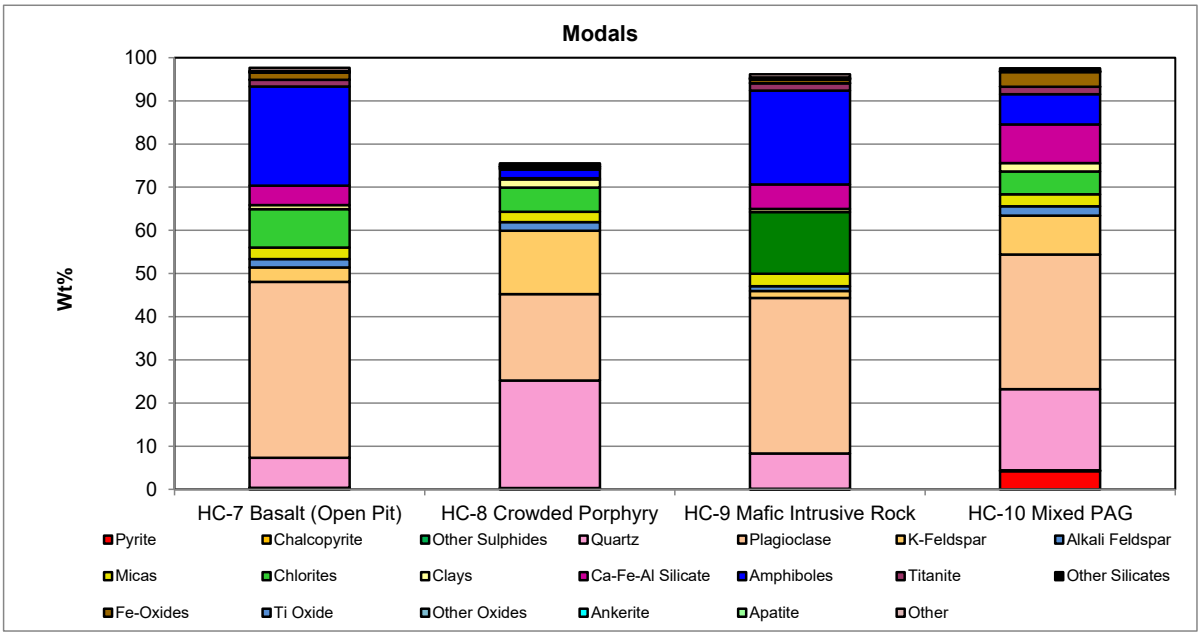


Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Samples: P_{80} 150 µm

Modals

Mineral (%)	HC-7 Basalt (Open Pit)	HC-8 Crowded Porphyry	HC-9 Mafic Intrusive Roc	HC-10 Mixed PAG
Pyrite	0.32	0.17	0.10	4.16
Chalcopyrite	0.05	0.10	0.05	0.19
Other Sulphides	0.00	0.02	0.00	0.04
Quartz	6.93	24.9	8.14	18.8
Plagioclase	40.8	20.0	36.0	31.2
K-Feldspar	3.33	14.7	1.61	8.98
Alkali Feldspar	1.93	1.99	1.14	2.20
Micas	2.69	2.37	2.87	2.79
Chlorites	8.90	5.63	14.3	5.27
Clays	0.94	1.91	0.70	1.93
Ca-Fe-Al Silicate	4.50	0.27	5.71	8.95
Amphiboles	22.9	2.01	21.7	7.04
Titanite	1.54	0.28	1.70	1.69
Other Silicates	0.01	0.02	0.00	0.03
Fe-Oxides	1.69	0.22	0.85	3.36
Ti Oxide	0.03	0.15	0.13	0.10
Other Oxides	0.01	0.03	0.04	0.02
Calcite	1.95	23.4	3.53	2.24
Dolomite	0.38	1.04	0.33	0.19
Ankerite	0.16	0.06	0.12	0.03
Other Carbonates	0.00	0.00	0.00	0.00
Apatite	0.17	0.36	0.18	0.32
Other	0.75	0.34	0.72	0.45
Total	100	100	100	100



Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

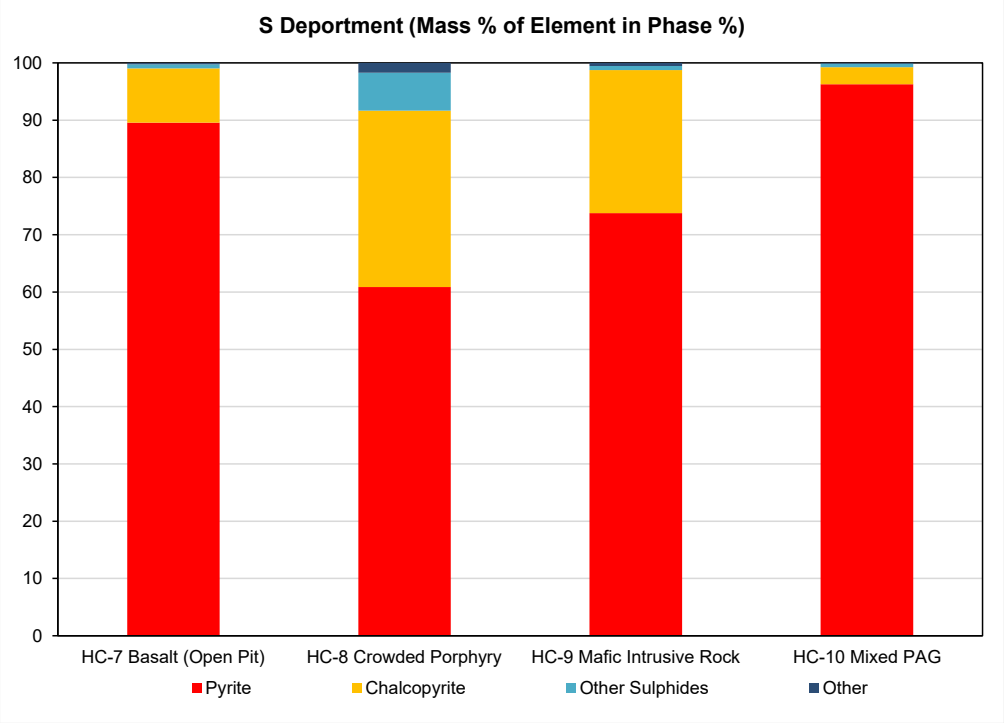
S Deportment

Sulphur Mass %

Mineral Mass	HC-7 Basalt (Open Pit)	HC-8 Crowded Porphyry	HC-9 Mafic Intrusive Rock	HC-10 Mixed PAG
Pyrite	0.17	0.07	0.05	2.15
Chalcopyrite	0.02	0.04	0.02	0.07
Other Sulphides	0.00	0.01	0.00	0.01
Other	0.00	0.00	0.00	0.00
Total	0.18	0.12	0.07	2.23

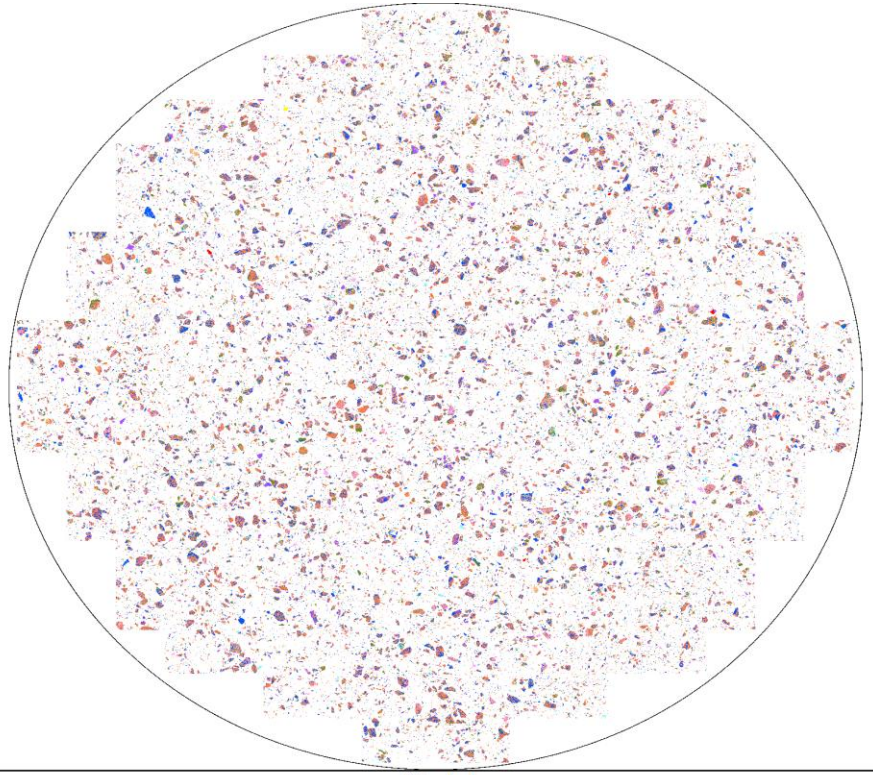
Sulphur Phases Normalized

Mineral Mass	HC-7 Basalt (Open Pit)	HC-8 Crowded Porphyry	HC-9 Mafic Intrusive Rock	HC-10 Mixed PAG
Pyrite	89.6	60.9	73.8	96.3
Chalcopyrite	9.47	30.8	25.0	2.95
Other Sulphides	0.70	6.61	0.70	0.64
Other	0.27	1.72	0.56	0.13
Total	100	100	100	100



Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Panorama - Overview - HC-7 Basalt (Open Pit) - Section A



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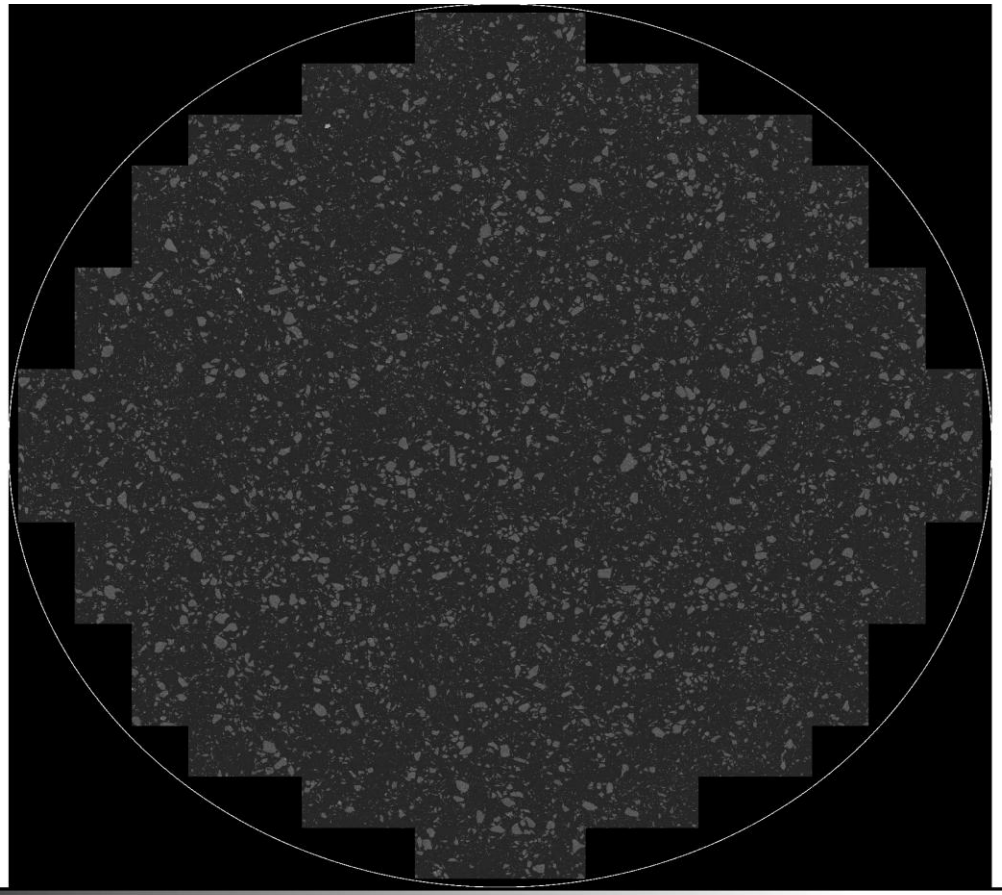
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Mosaic	Modal	10 mm	TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/28/22		
MI7013-SEP22 11A	TESCAN_Liberation analysis #1		

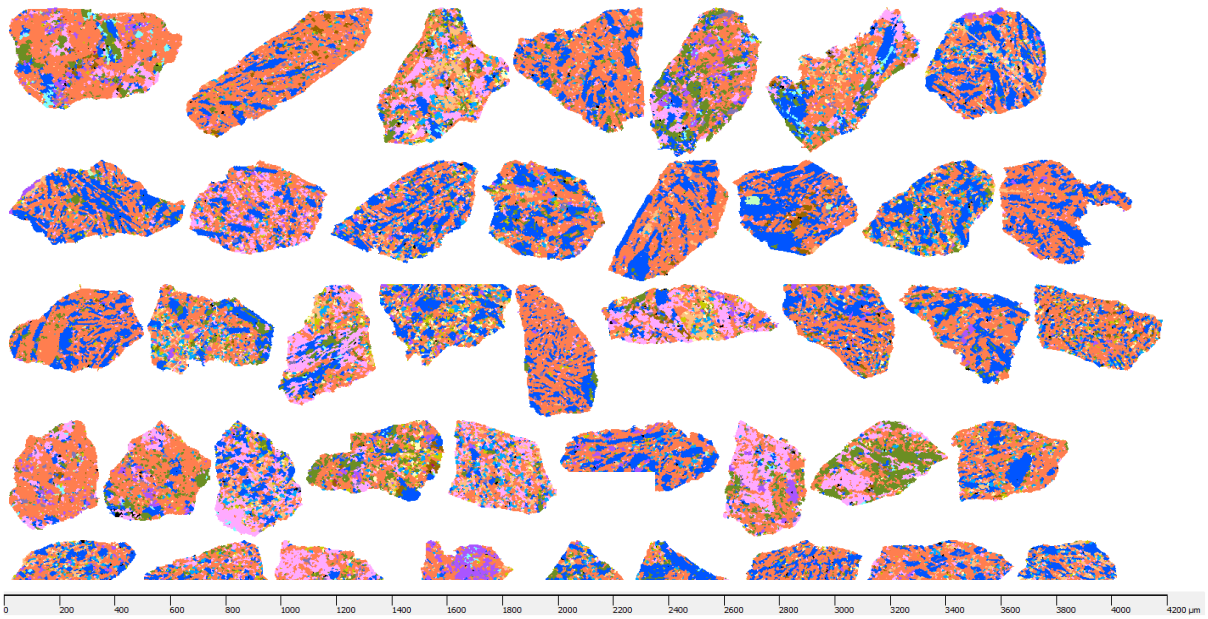
Panorama - Backscattered Electron Image - HC-7 Basalt (Open PIT) - Section A

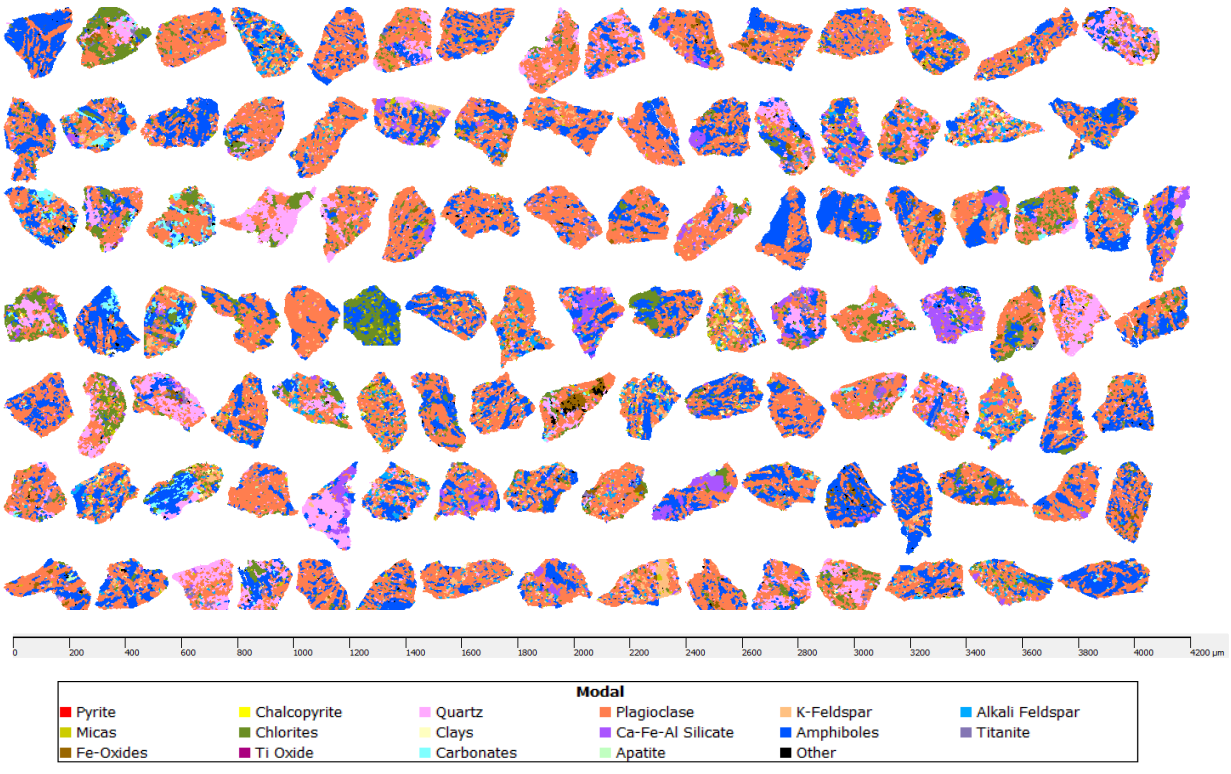


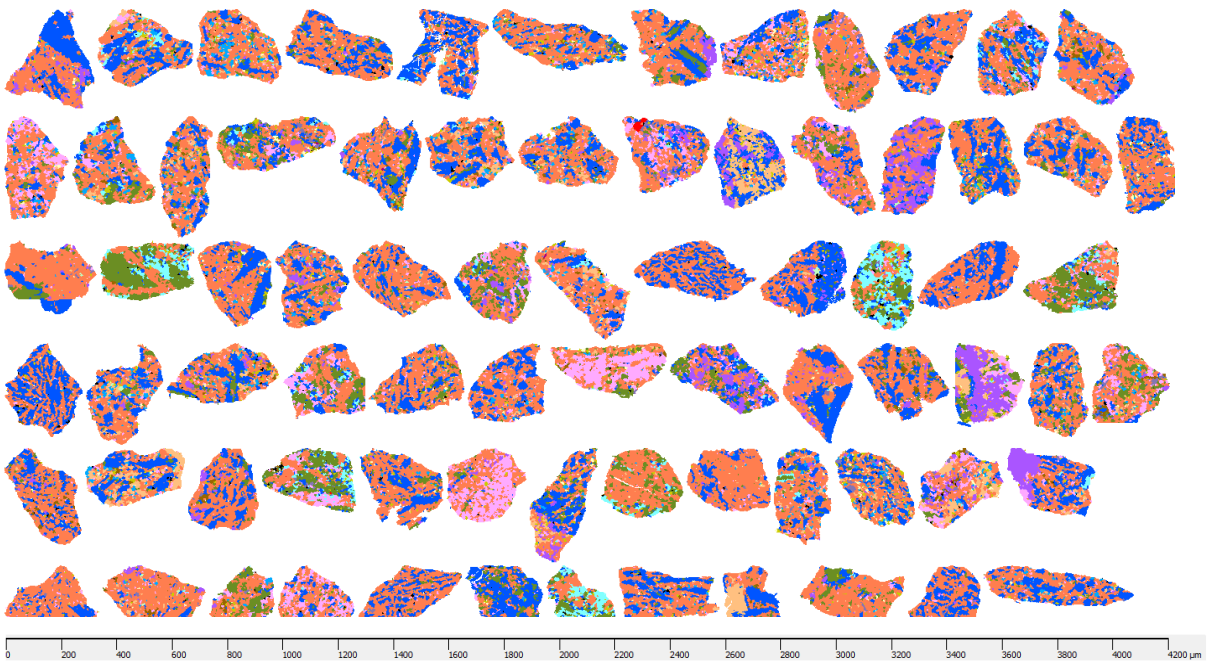
Mosaic	BSE		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/28/22	10 mm	
MI7013-SEP22 11A	TESCAN_Liberation analysis #1		

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Particle Images - HC-7 Basalt (Open PIT) - sorted by size



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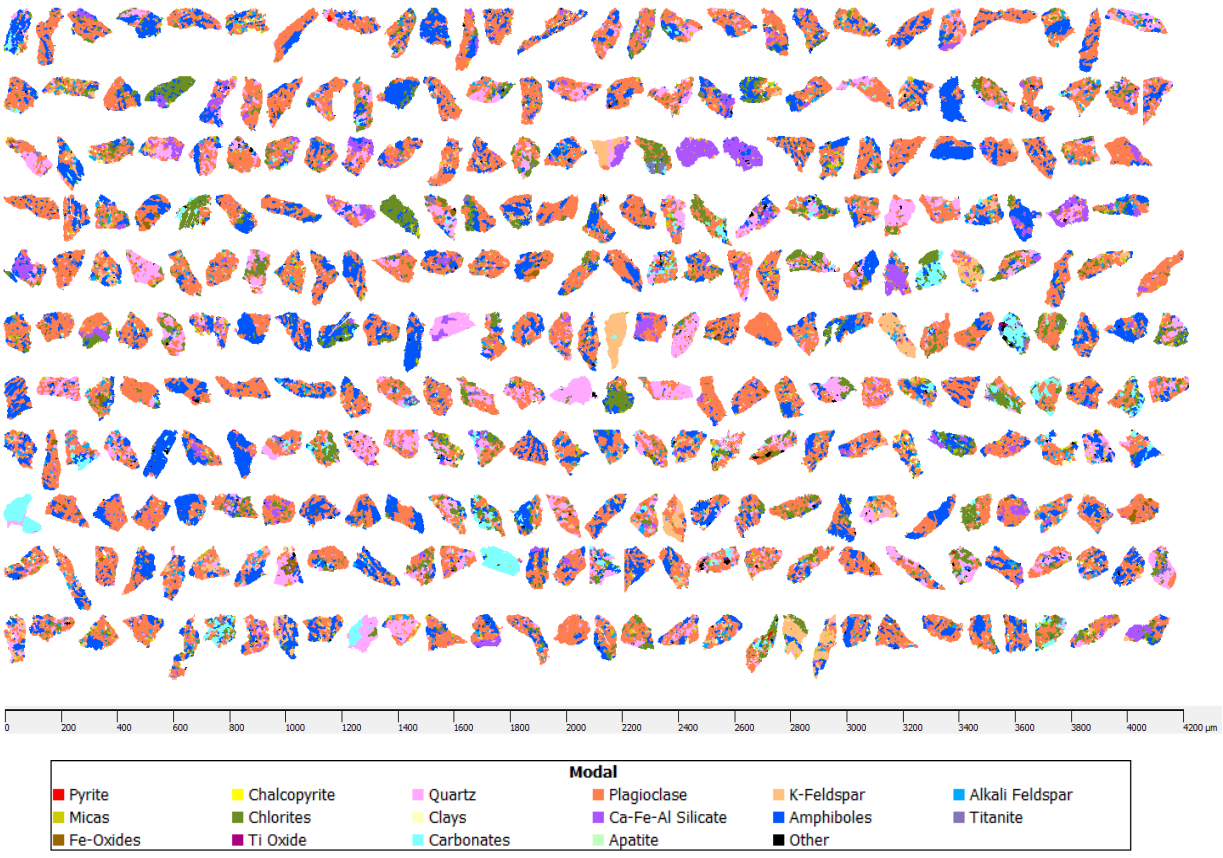
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other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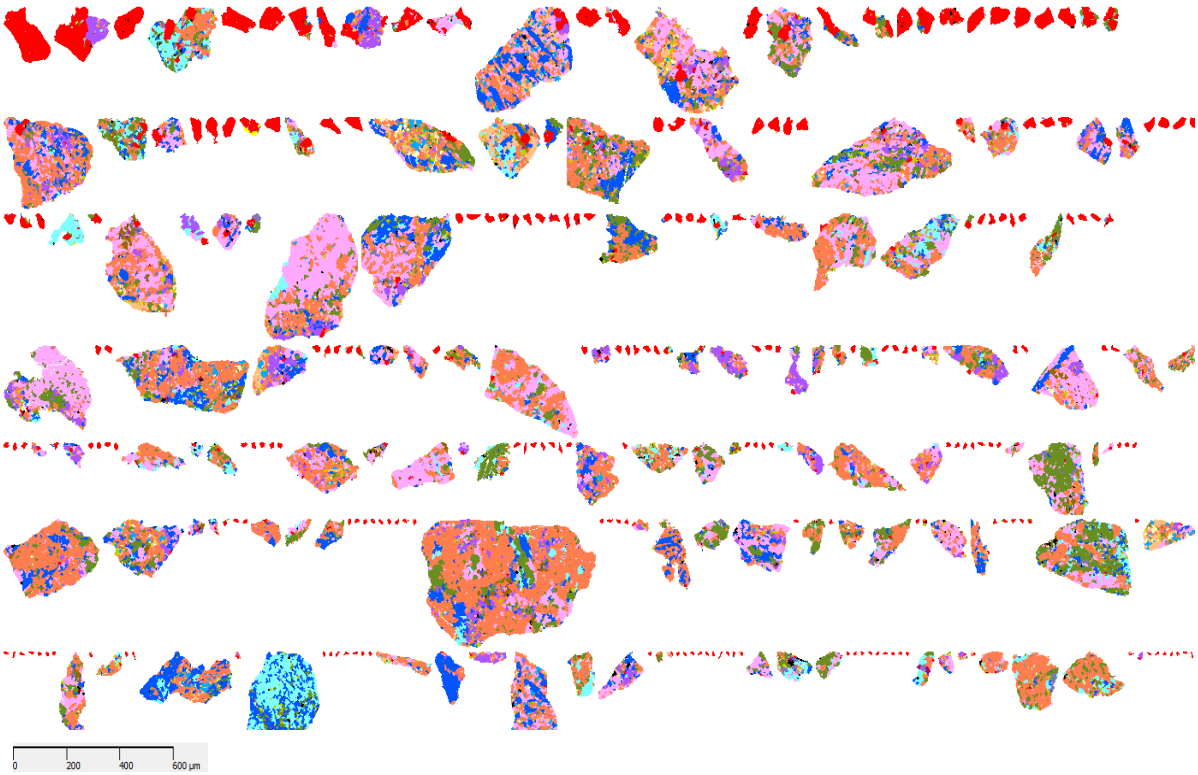
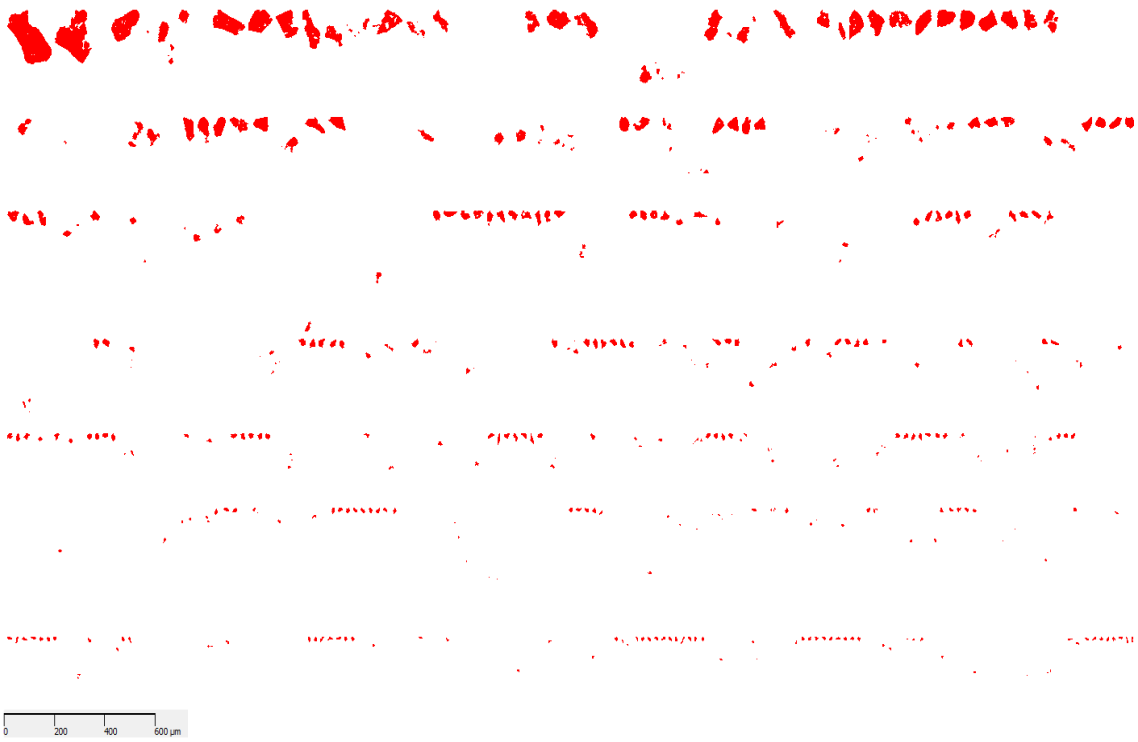
Modal
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Pyrite Particle Images - HC-7 Basalt (Open Pit)



Pyrite Particle Images - HC-7 Basalt (Open Pit) - Pyrite only



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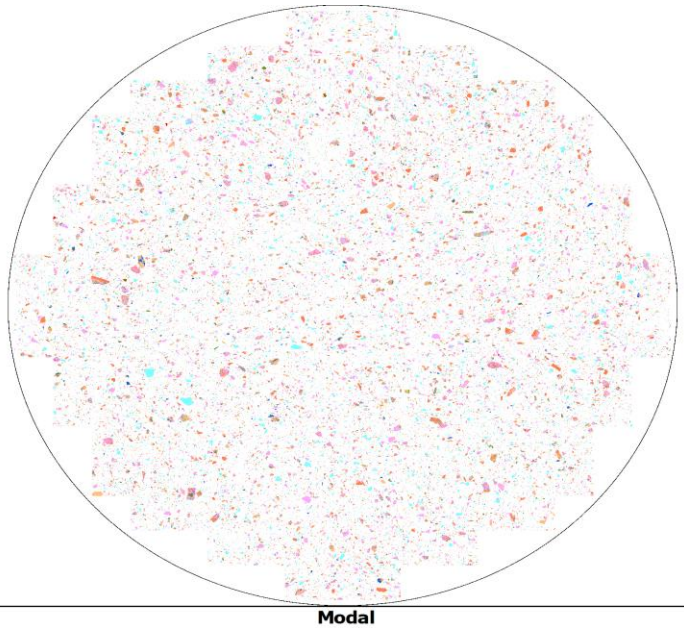
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Panorama - Overview - HC-8 Crowded Porphyry - Section A

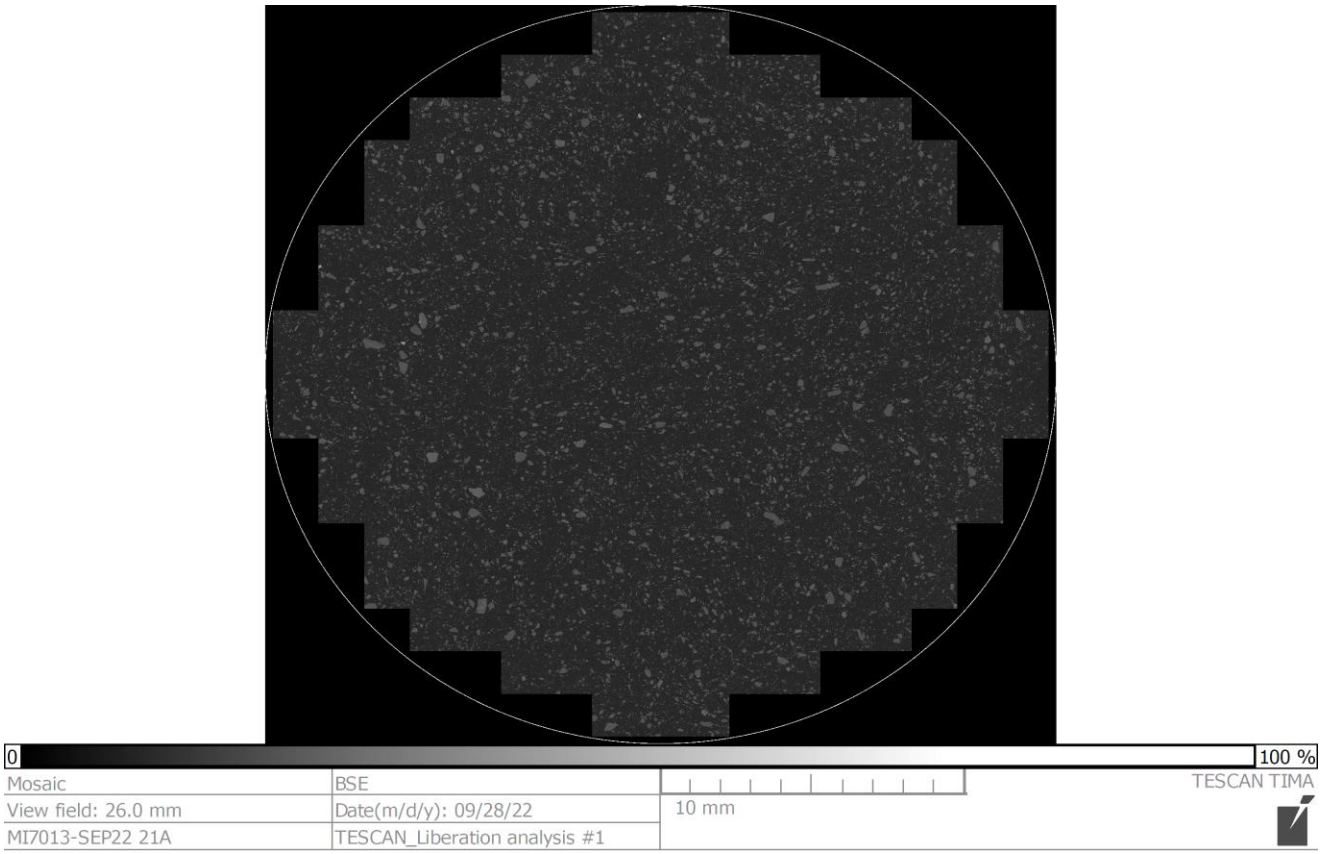


Modal

Pyrite	Chalcopyrite	Other Sulphides	Quartz	Plagioclase	K-Feldspar
Alkali Feldspar	Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles
Titanite	Fe-Oxides	Ti Oxide	Other Oxides	Carbonates	Apatite
Other					

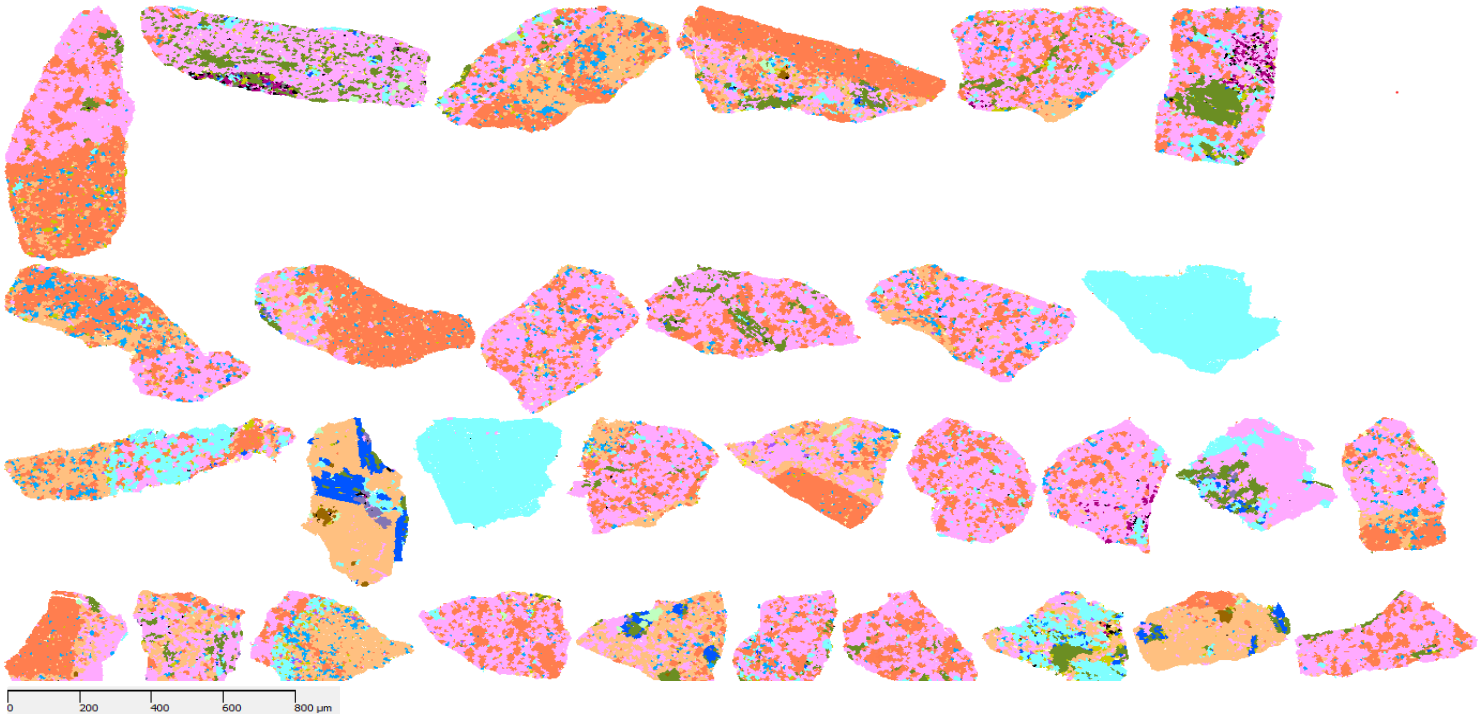
Mosaic	Modal		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/28/22	20 mm	
MI7013-SEP22 21A	TESCAN_Liberation analysis #1		

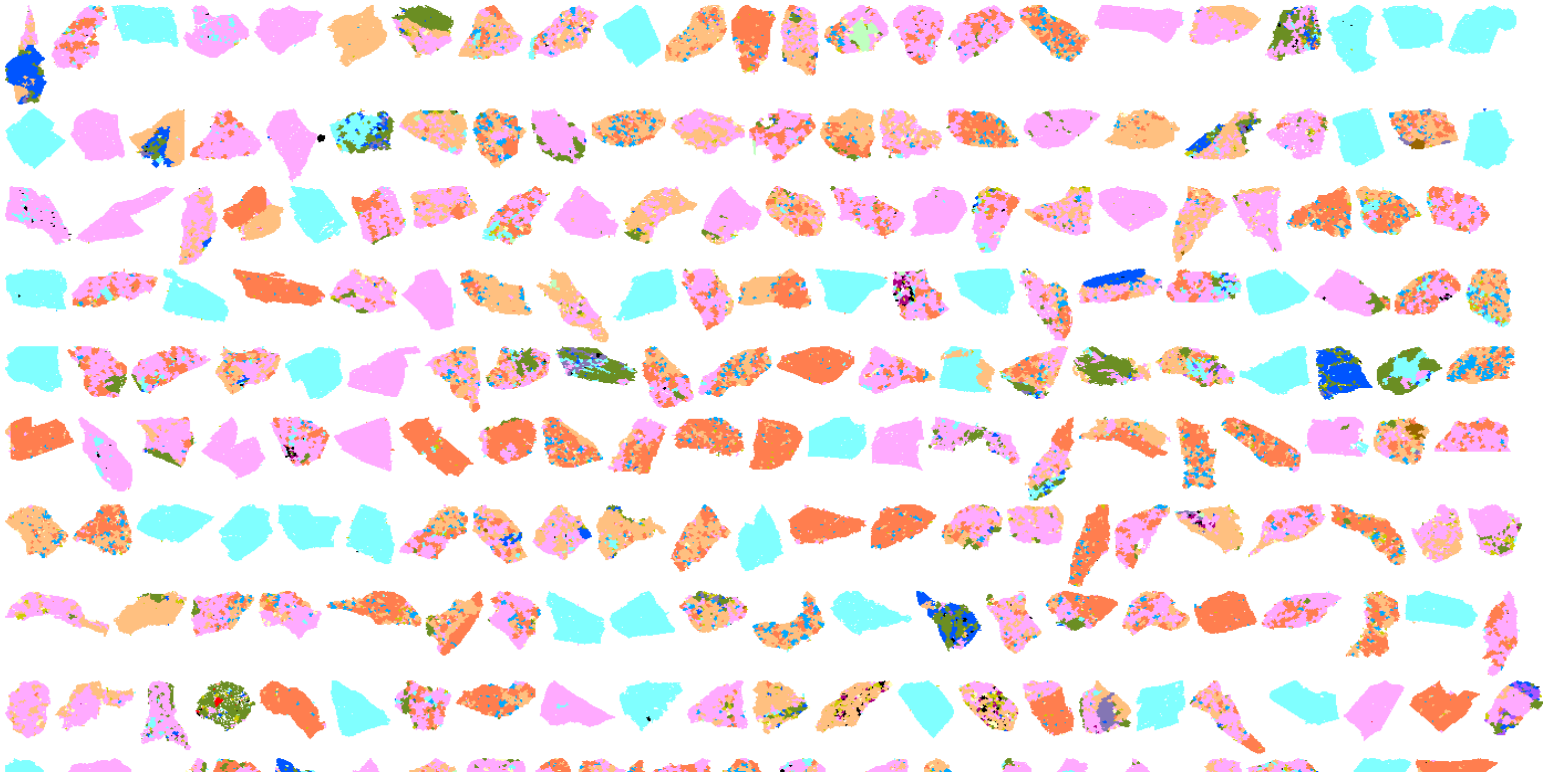
Panorama - Backscattered Electron Image - HC-8 Crowded Porphyry - Section A

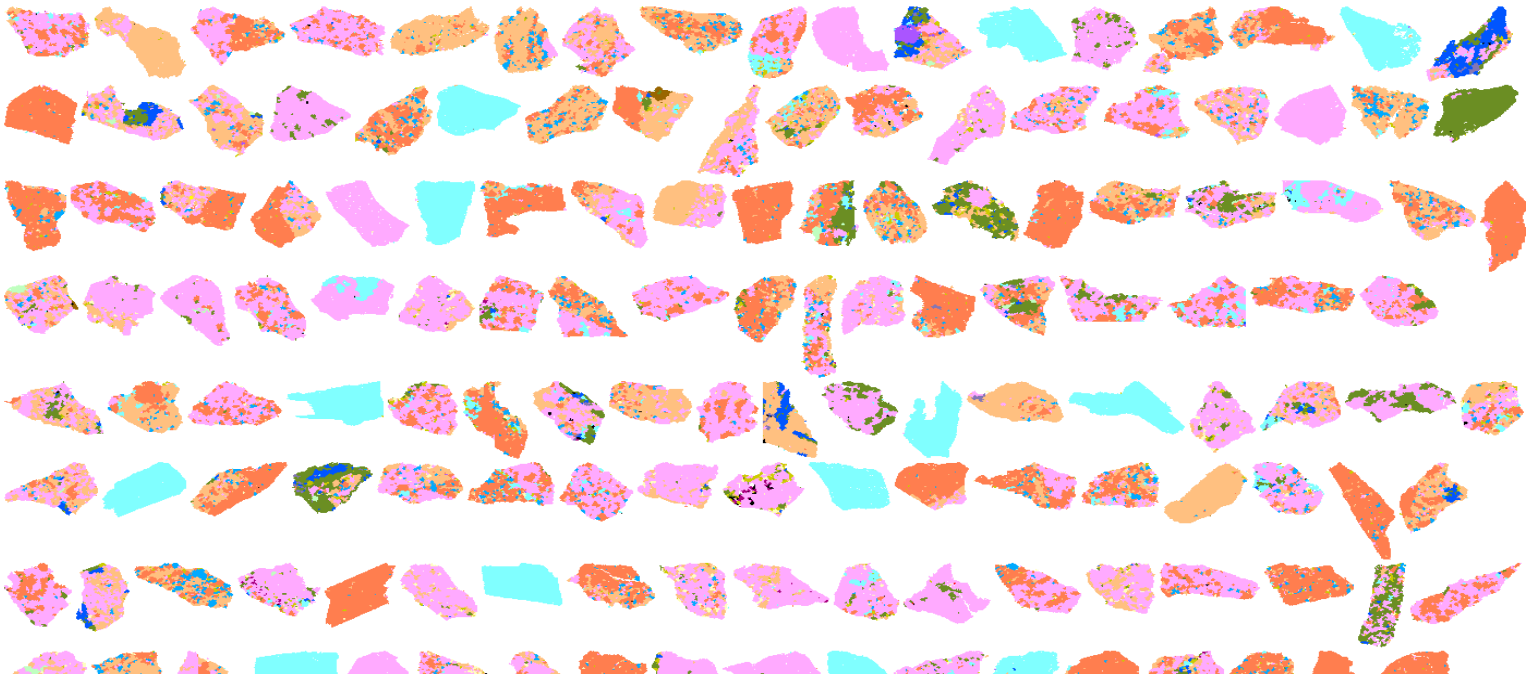


Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Particle Images - HC-8 Crowded Porphyry - sorted by size




0
200
400
600
800 µm
Modal
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other



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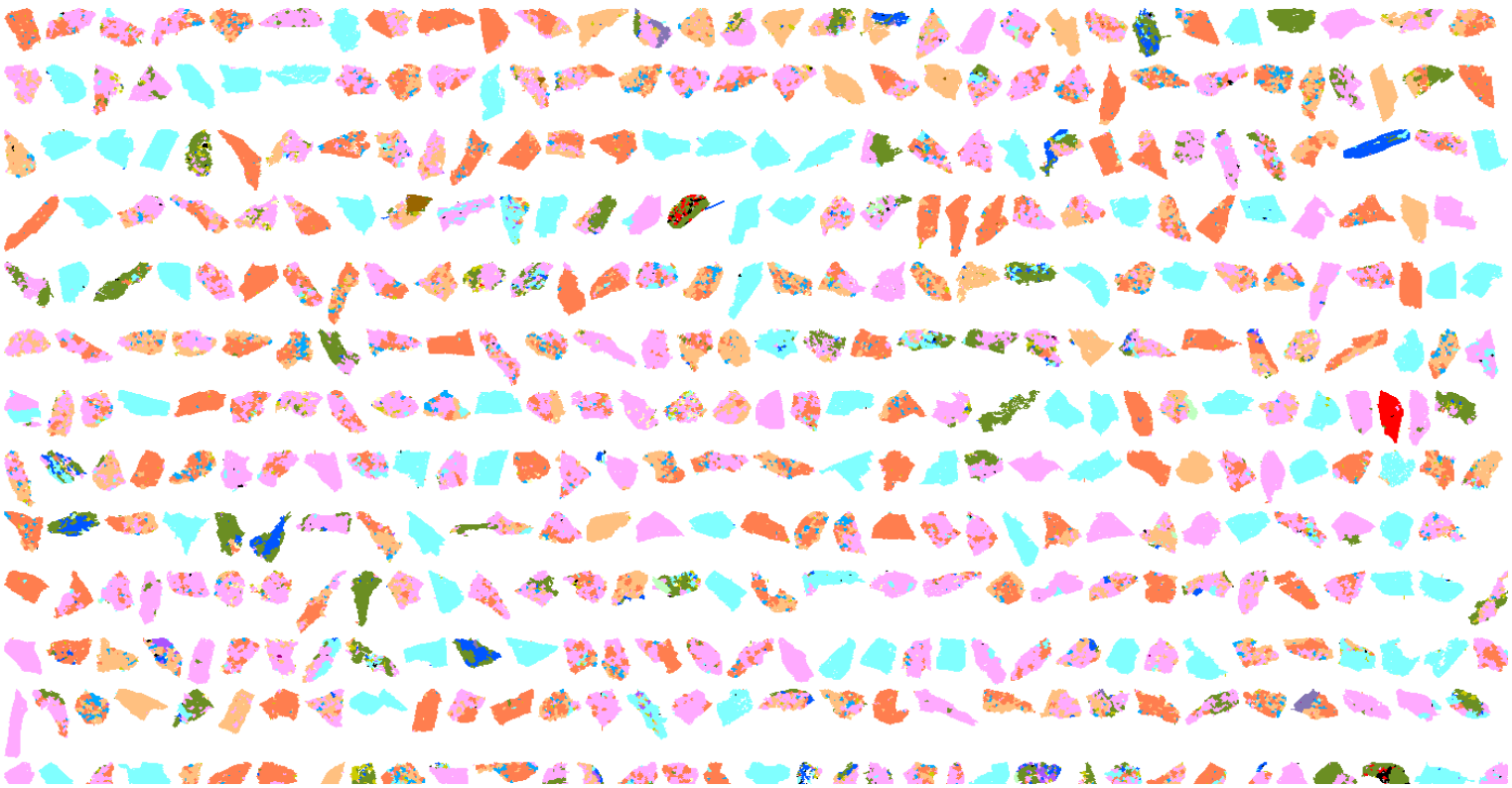
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

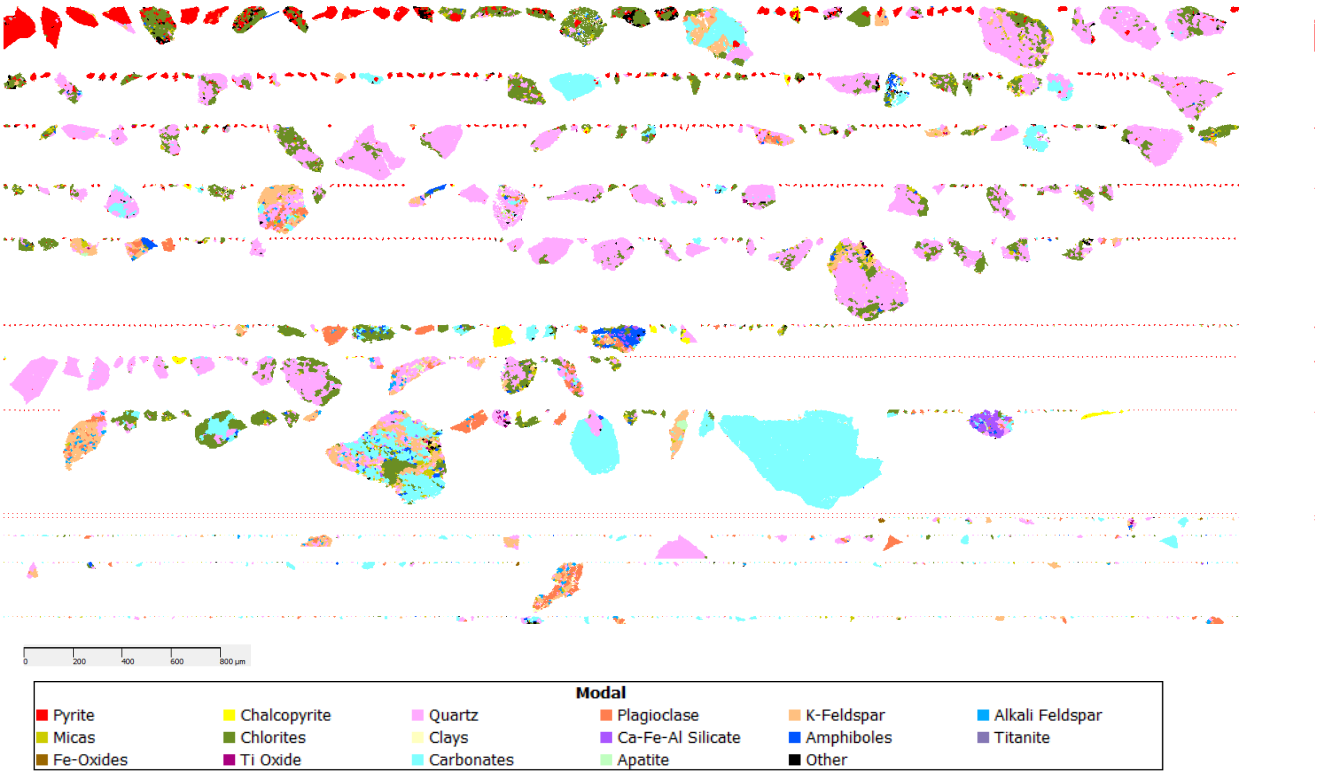


Modal

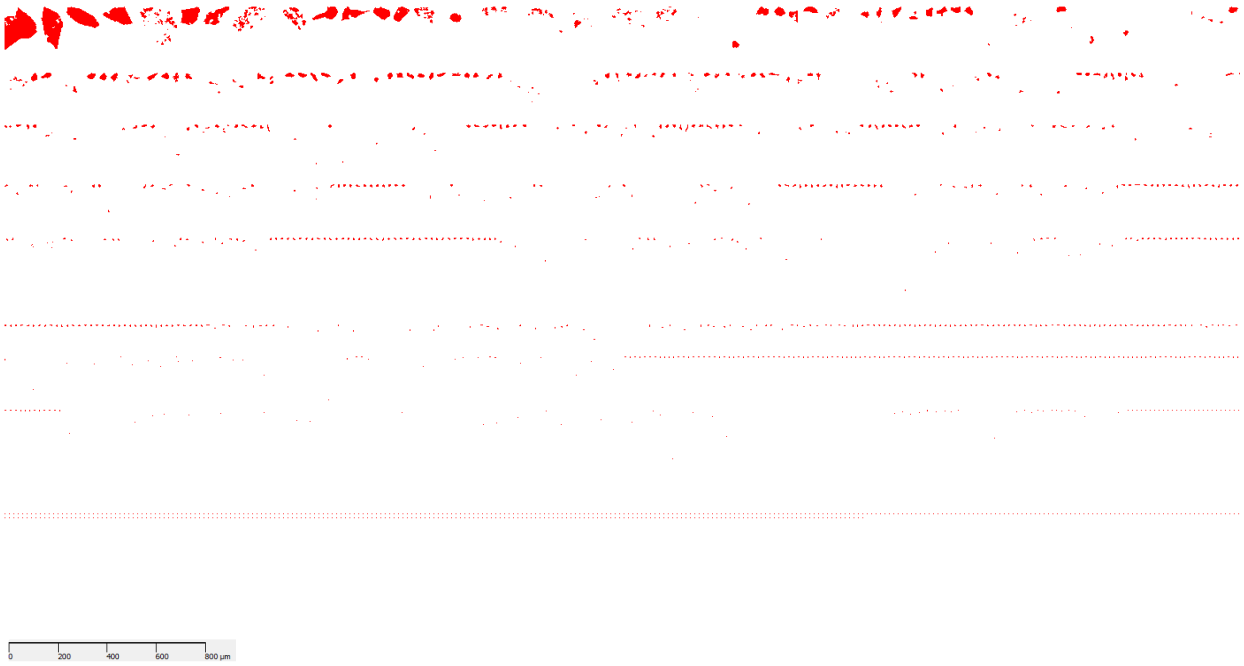
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Pyrite Particle Images - HC-8 - Crowded Porphyry



Pyrite Particle Images - HC-8 Crowded Porphyry - Pyrite only



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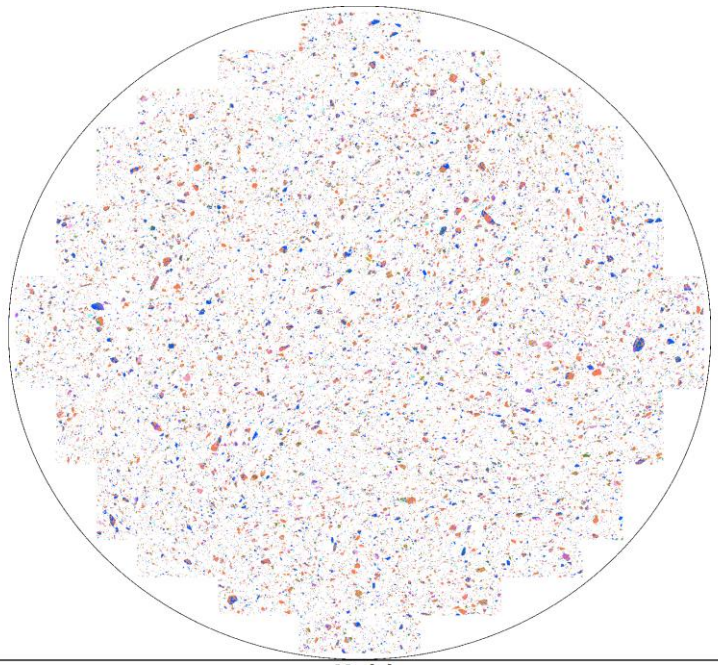
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Panorama - Overview - HC-9 Mafic Intrusive Rock - Section A

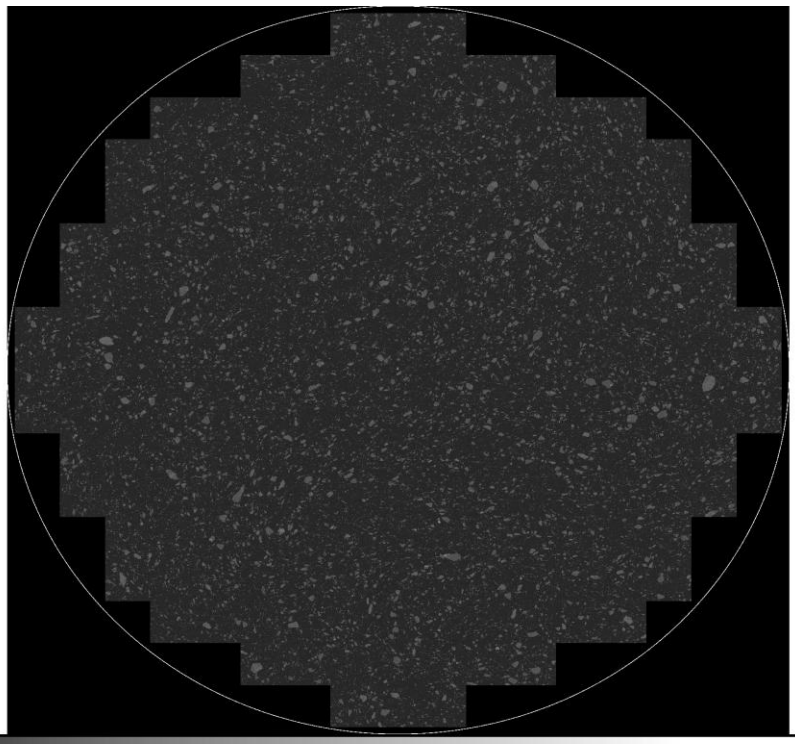


Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Other Oxides	Carbonates	Apatite	Other

Mosaic	Modal		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/29/22	10 mm	
MI7013-SEP22 31A	TESCAN_Liberation analysis #1		

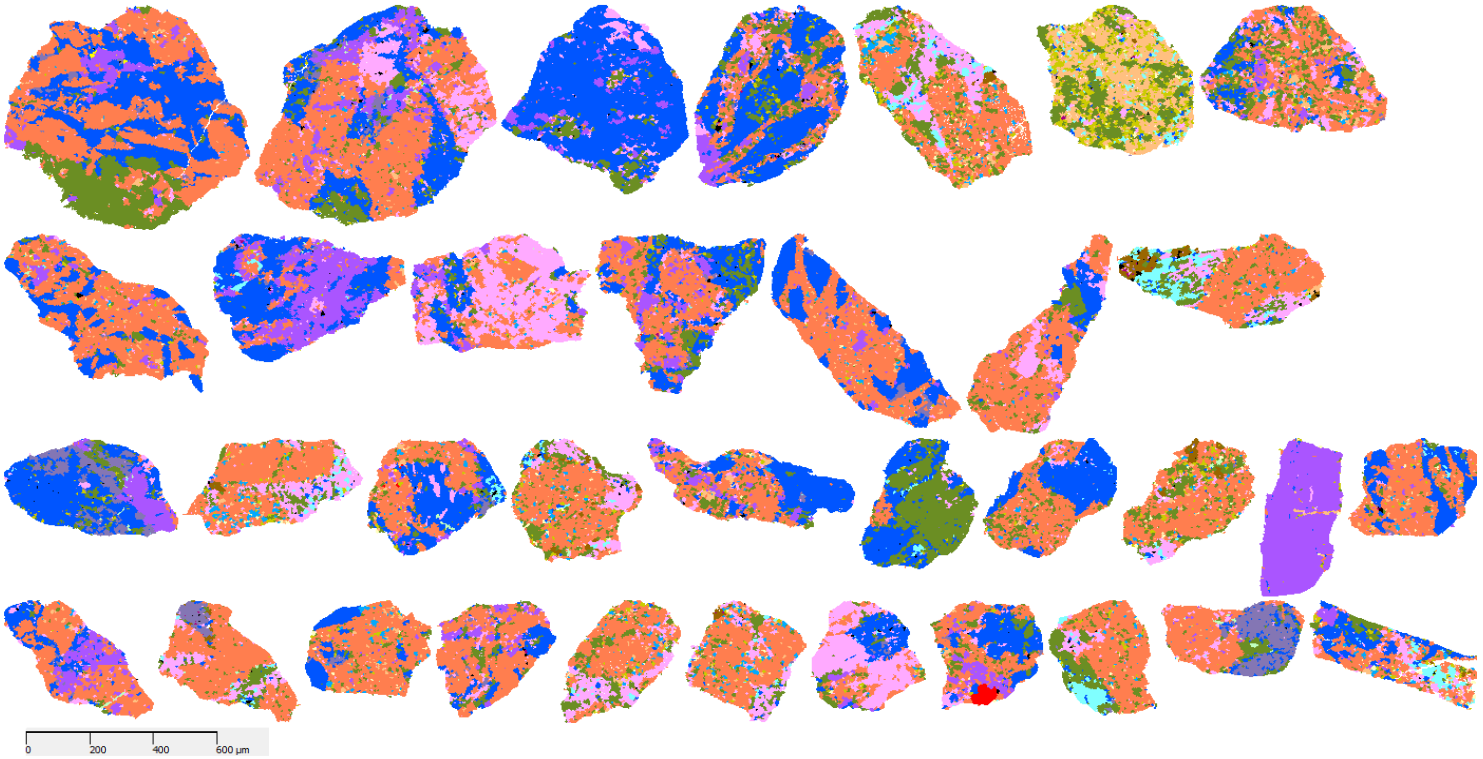
Panorama - Backscattered Electron Image - HC-9 Mafic Intrusive Rock - Section A

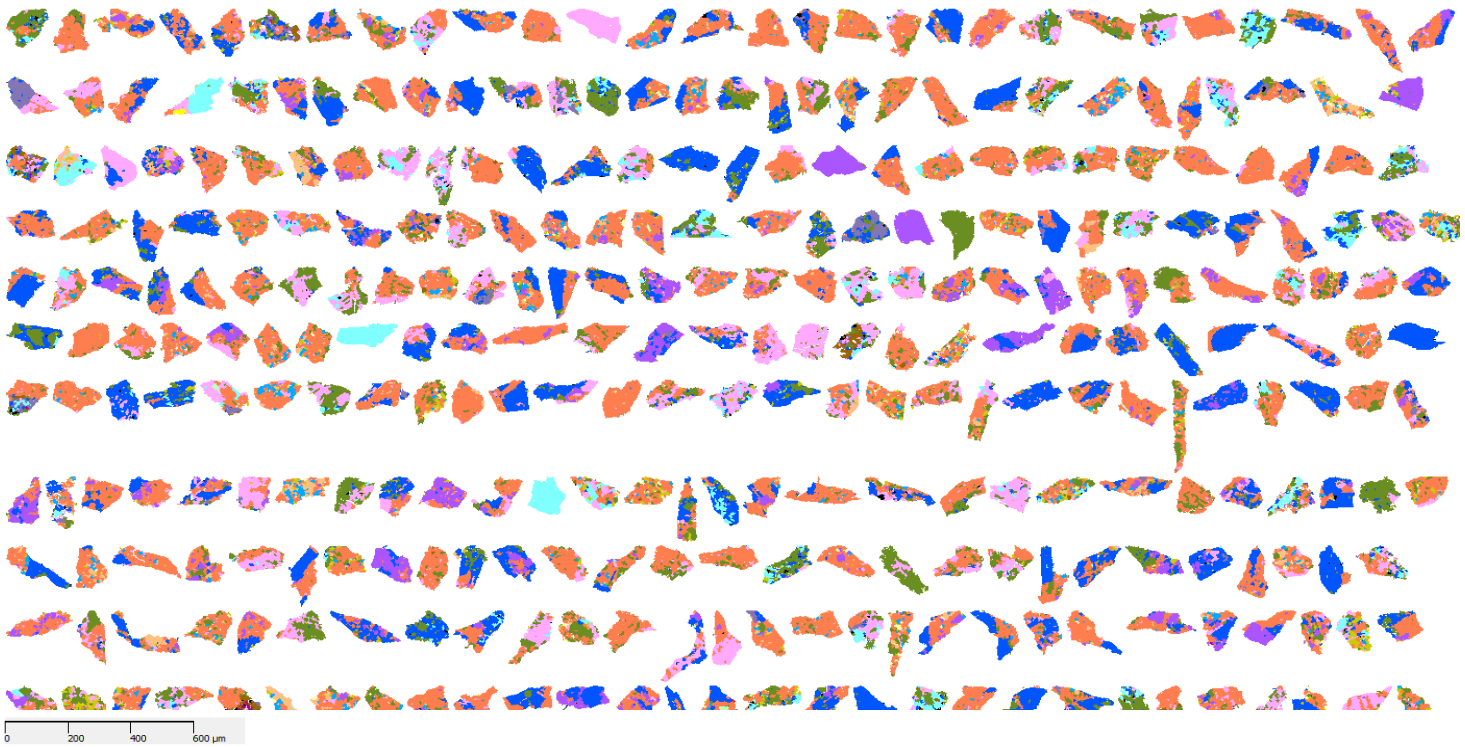


Mosaic	BSE		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/29/22	10 mm	
MI7013-SEP22 31A	TESCAN_Liberation analysis #1		

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

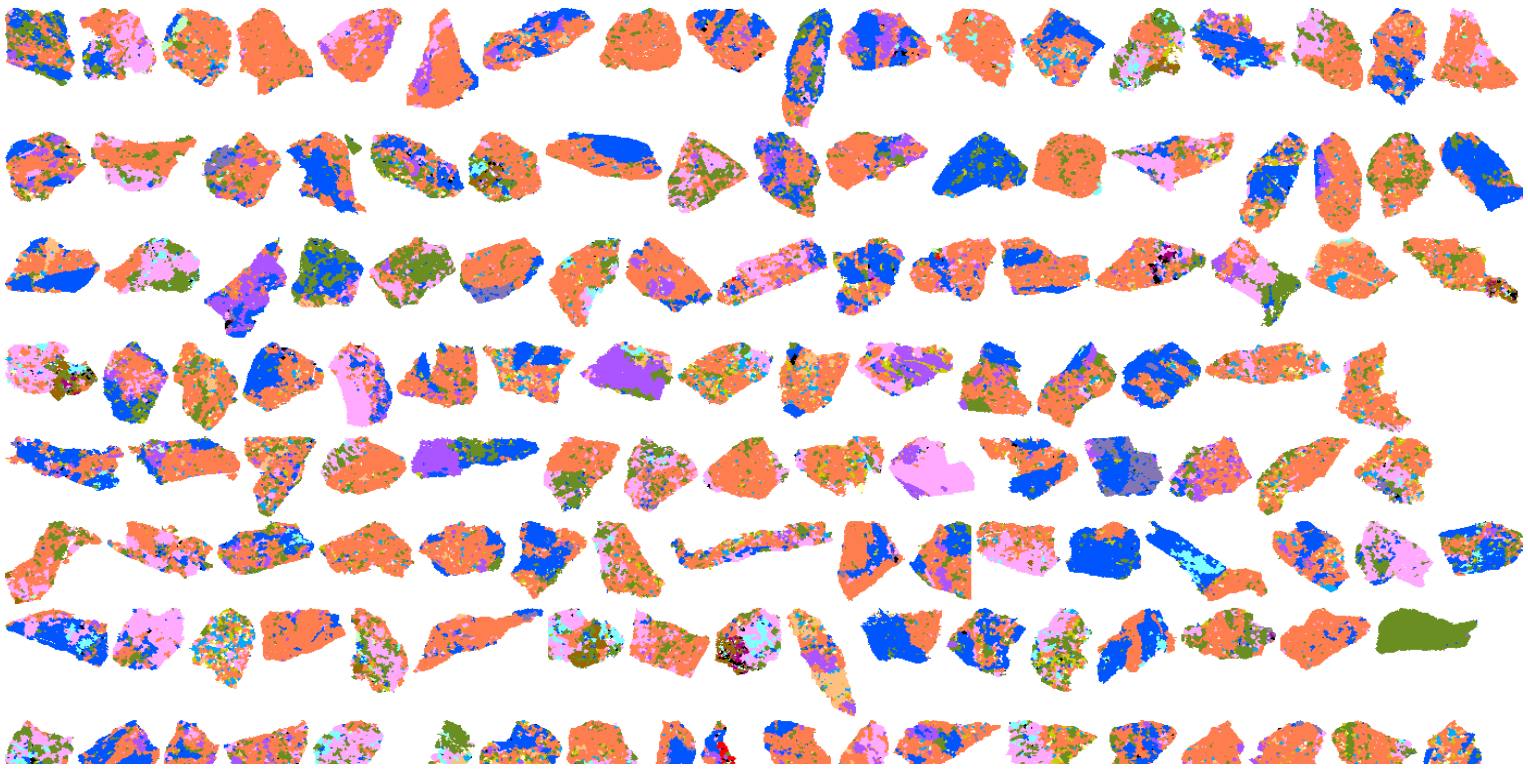
Particle Images - HC-9 Mafic Intrusive Rock - sorted by size

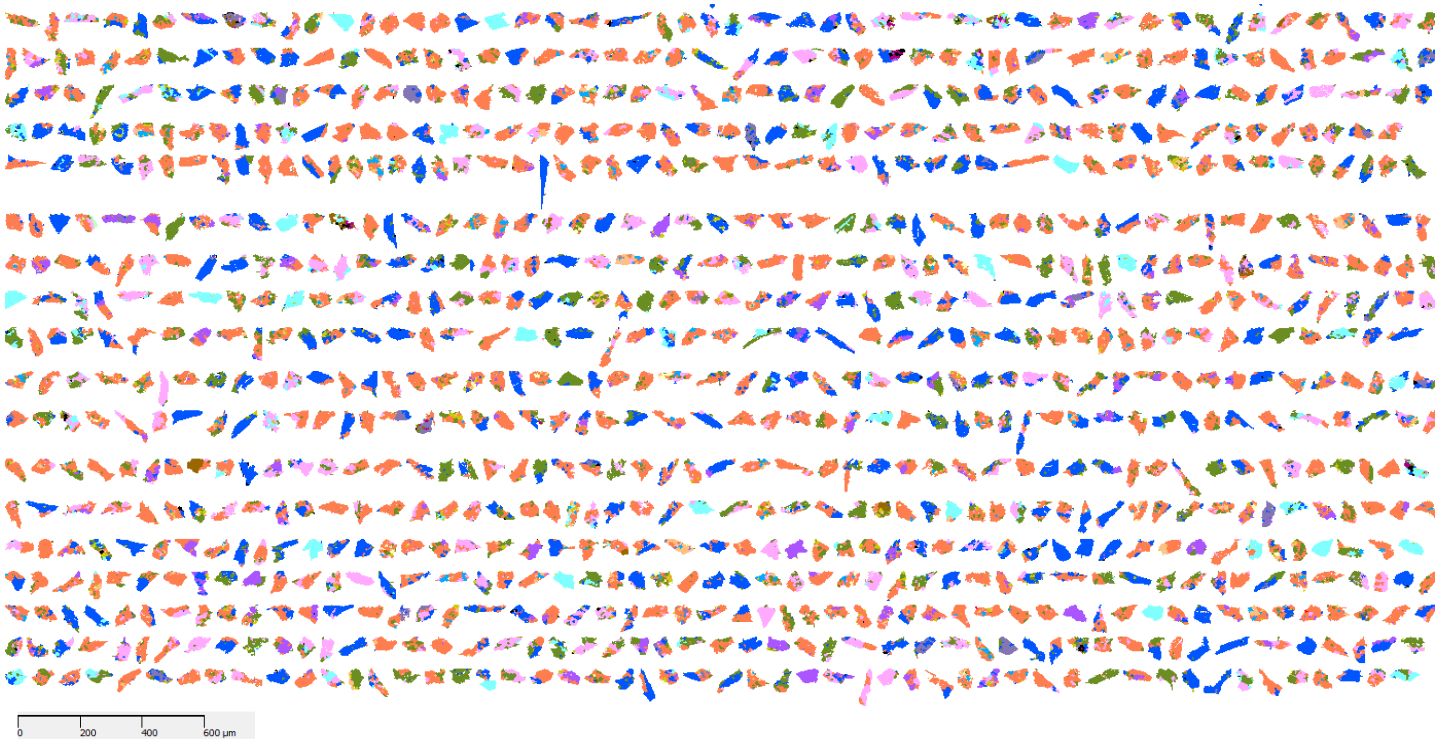




Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	


0
200
400
600 µm
Modal
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other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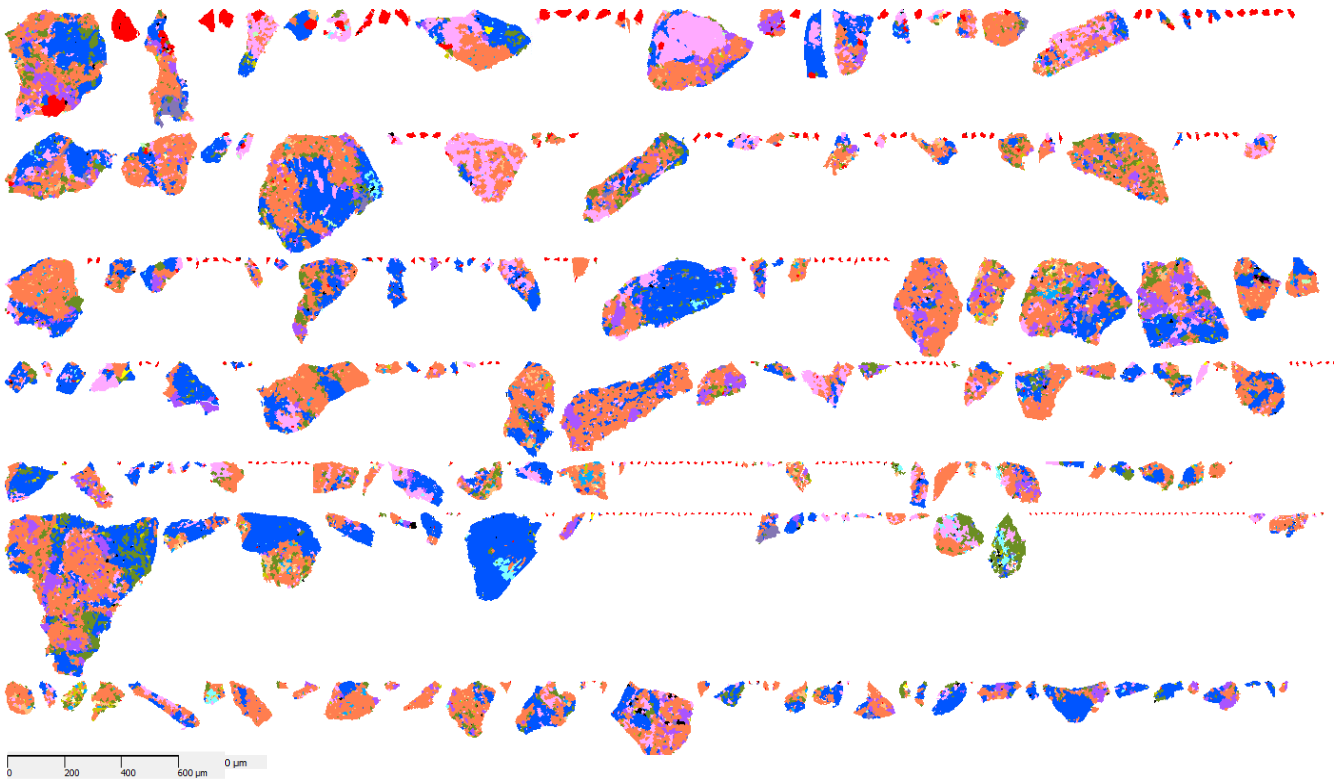
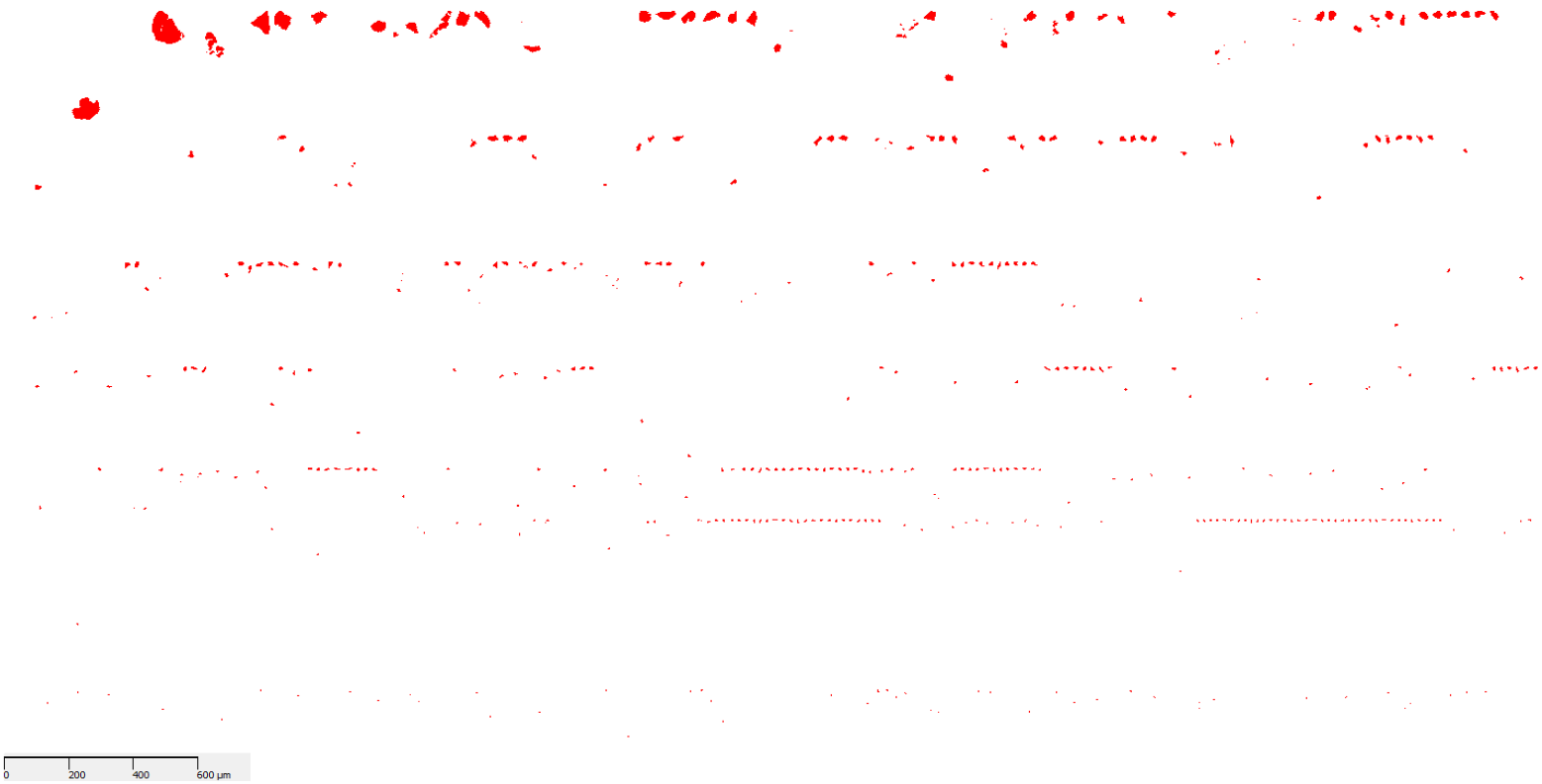
400
600 µm
Modal
Pyrite
Chalcopyrite
Quartz
Plagioclase
K-Feldspar
Alkali Feldspar
Micas
Chlorites
Clays
Ca-Fe-Al Silicate
Amphiboles
Titanite
Fe-Oxides
Ti Oxide
Carbonates
Apatite
Other

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Pyrite Particle Images - HC-9 Mafic Intusive Rock



Pyrite Particle Images - HC-9 Mafic Intrusive Rock - Pyrite only

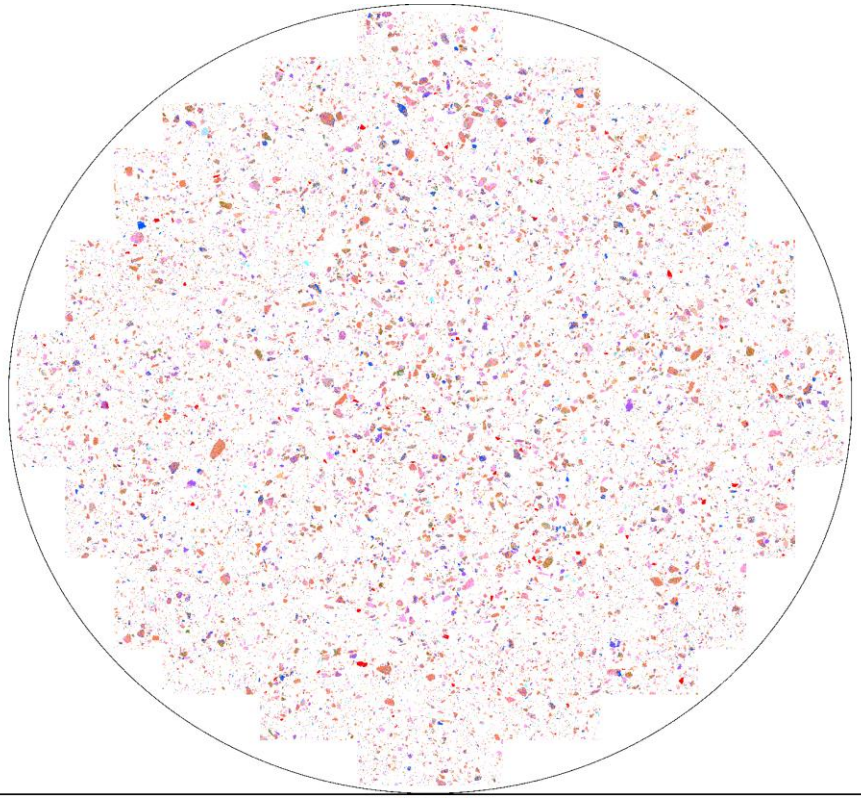


Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Panorama - Overview - HC-10 Mixed PAG - Section A



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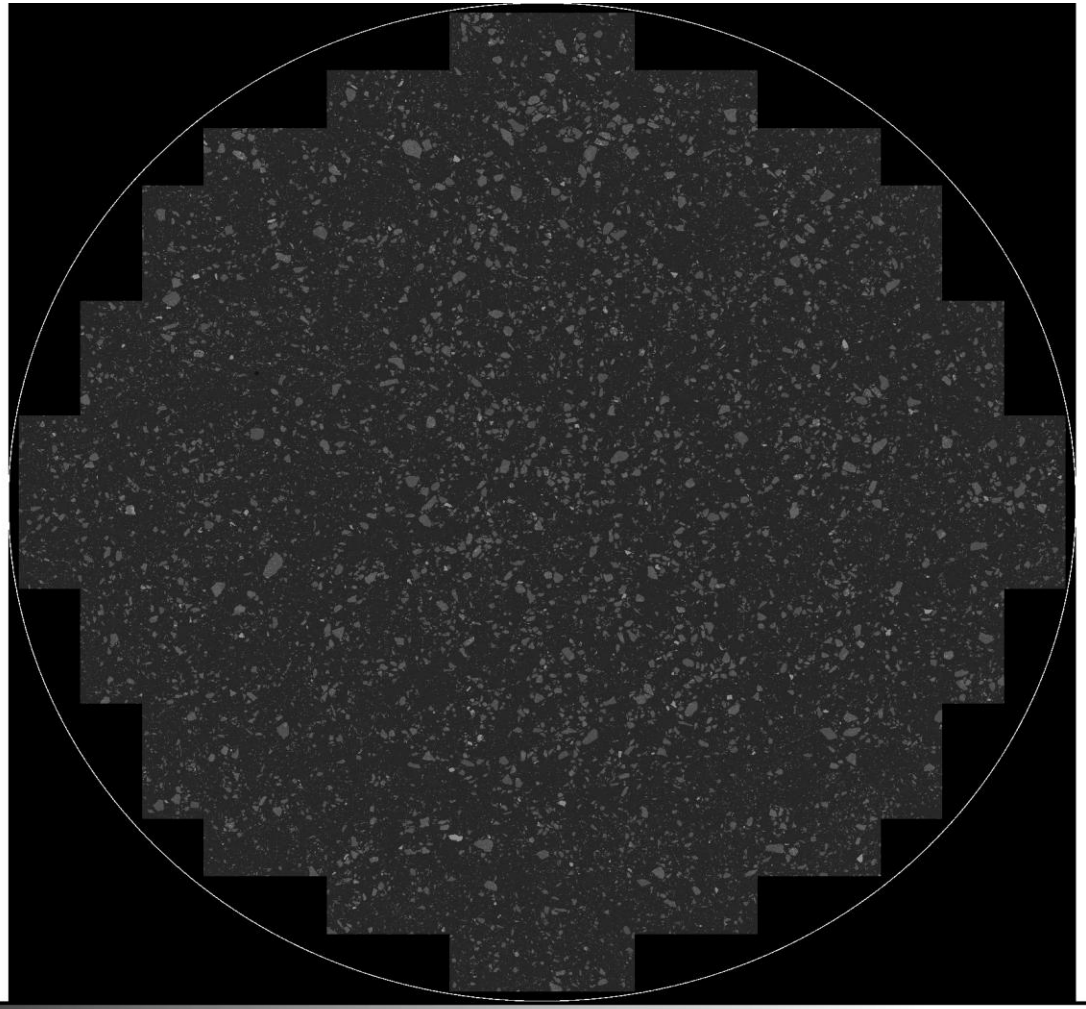
Pyrite	Chalcopyrite	Other Sulphides	Quartz	Plagioclase	K-Feldspar
Alkali Feldspar	Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles
Titanite	Other Silicates	Fe-Oxides	Ti Oxide	Other Oxides	Carbonates
Apatite	Other				

Mosaic	Modal	TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/29/22	20 mm
MI7013-SEP22 41A	TESCAN_Liberation analysis #1	

Panorama - Backscattered Electron Image - HC-10 Mixed PAG - Section A



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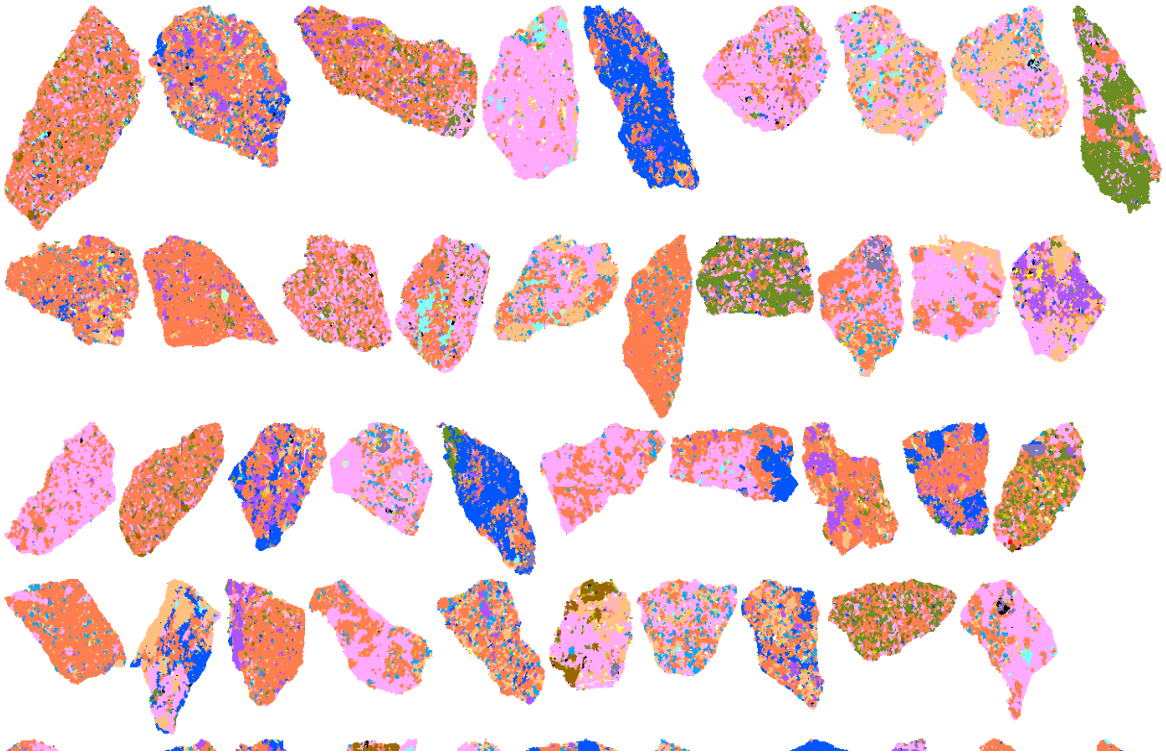
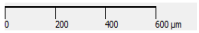
Mosaic	BSE		TESCAN TIMA
View field: 26.0 mm	Date(m/d/y): 09/29/22	10 mm	
MI7013-SEP22 41A	TESCAN_Liberation analysis #1		

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7013-SEP22

Particle Images - HC-10 Mixed PAG - sorted by size





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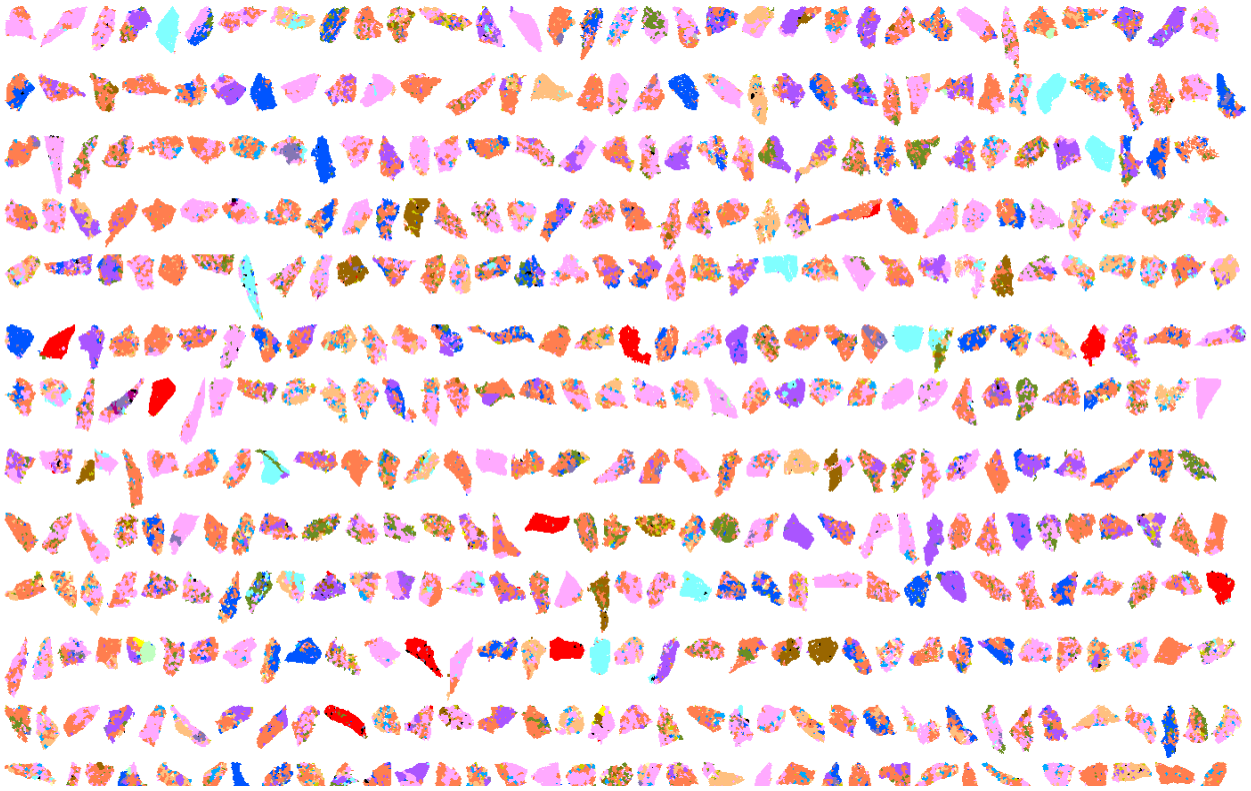
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	



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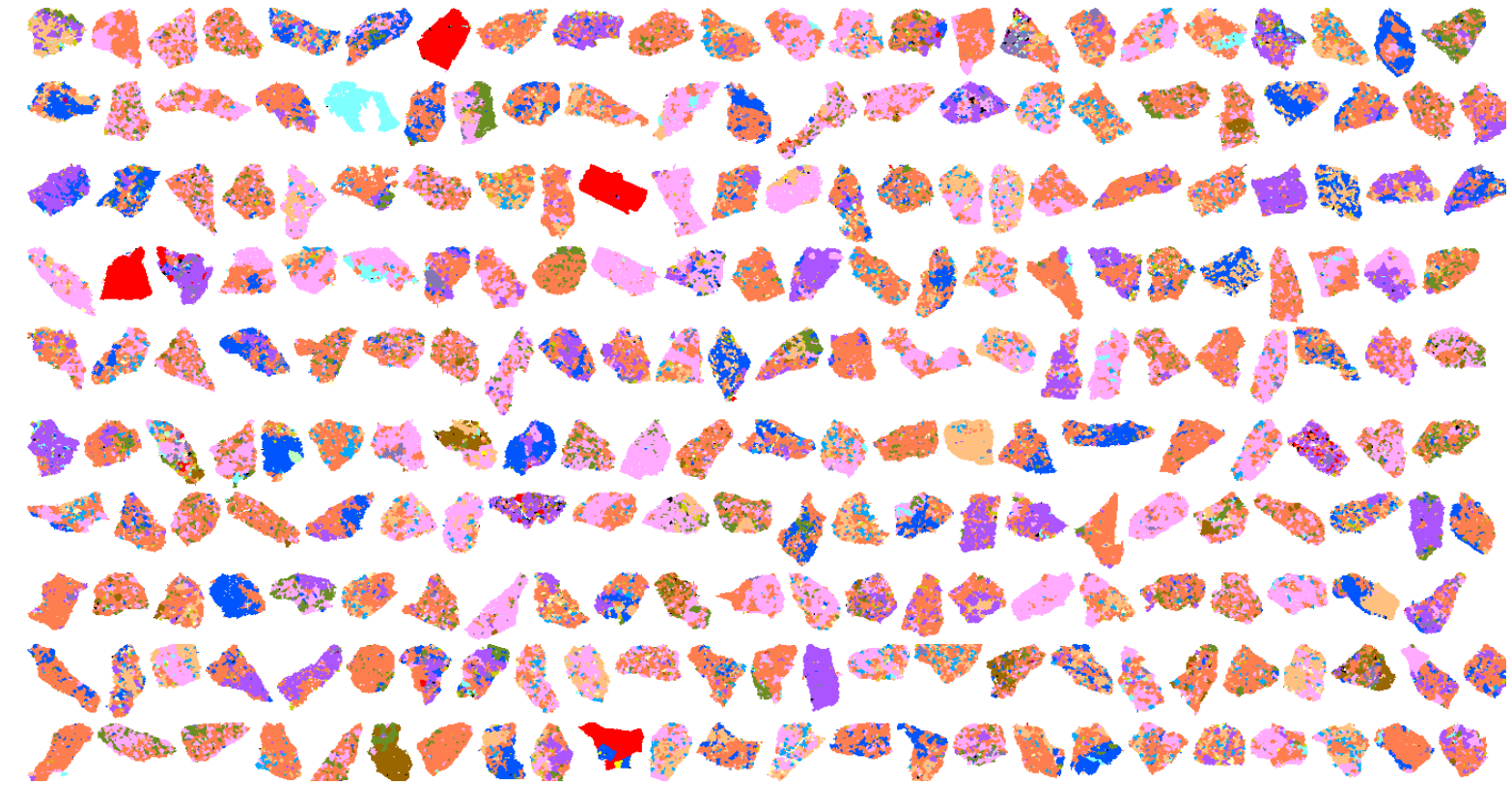
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	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Pyrite
Chalcopyrite
Quartz
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K-Feldspar
Alkali Feldspar
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Titanite
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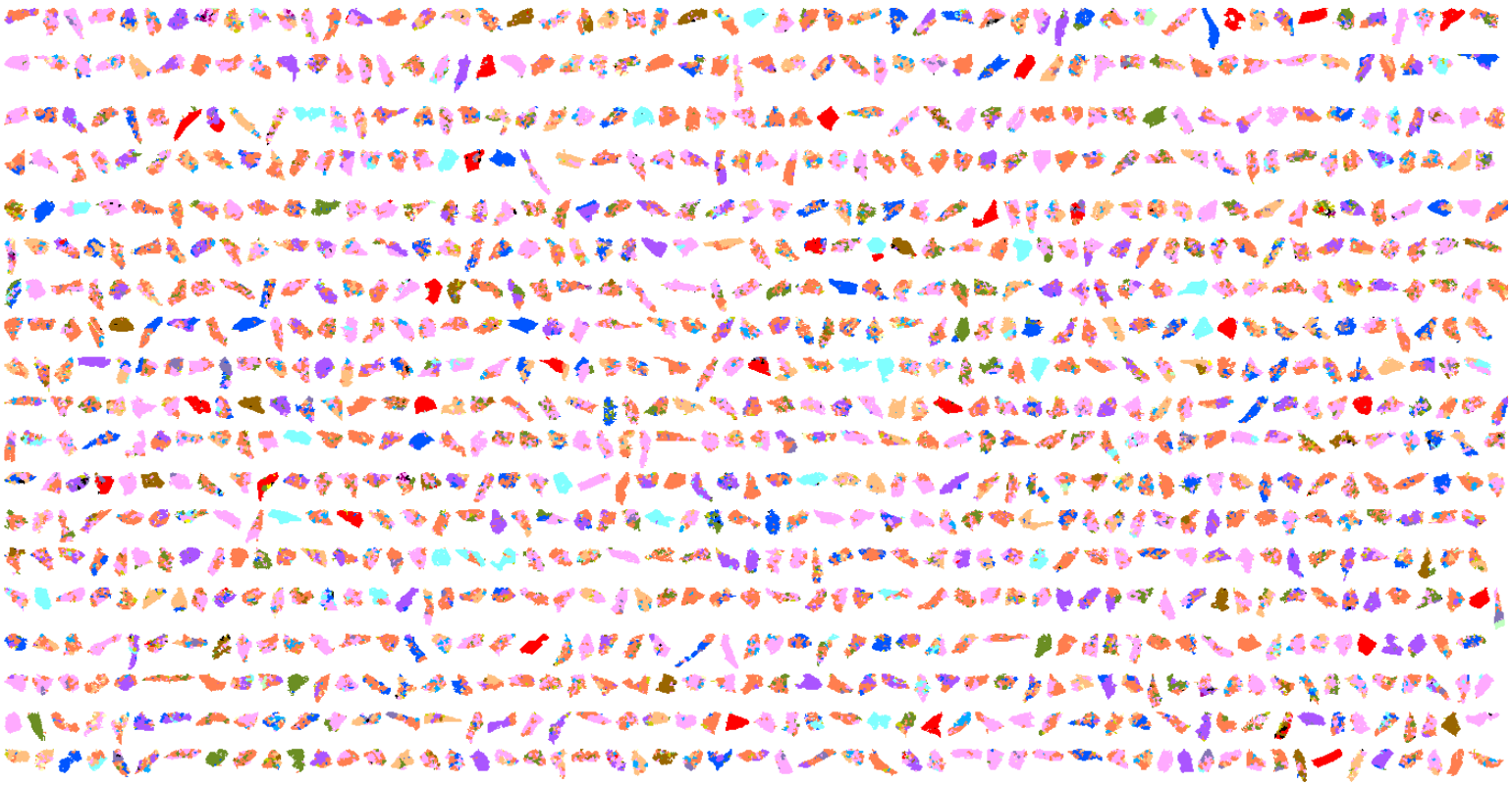
Carbonates
Apatite
Other



Modal

Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

Custom Min
2138 Upper Beaver (Agnico Eagle)
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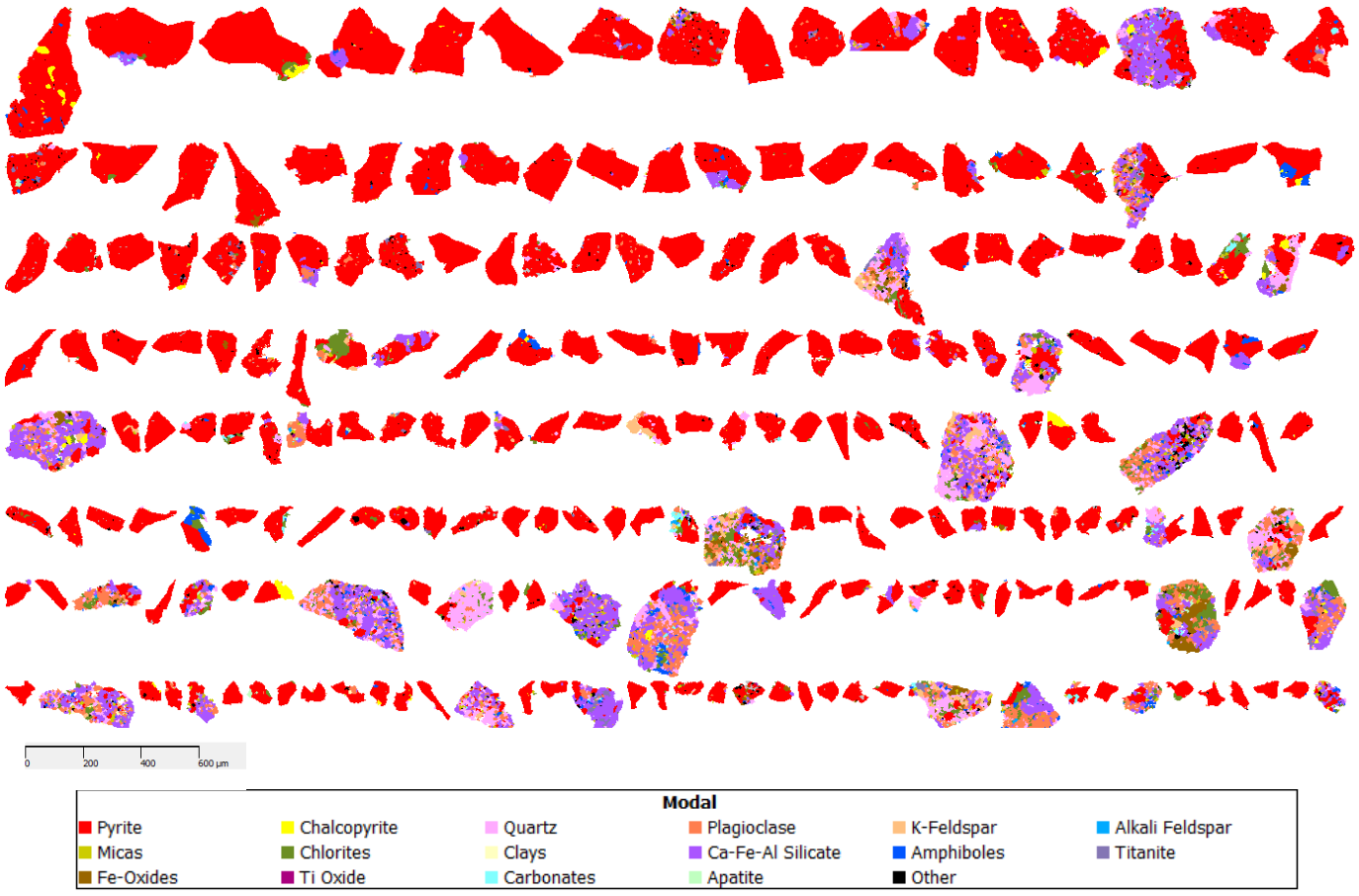
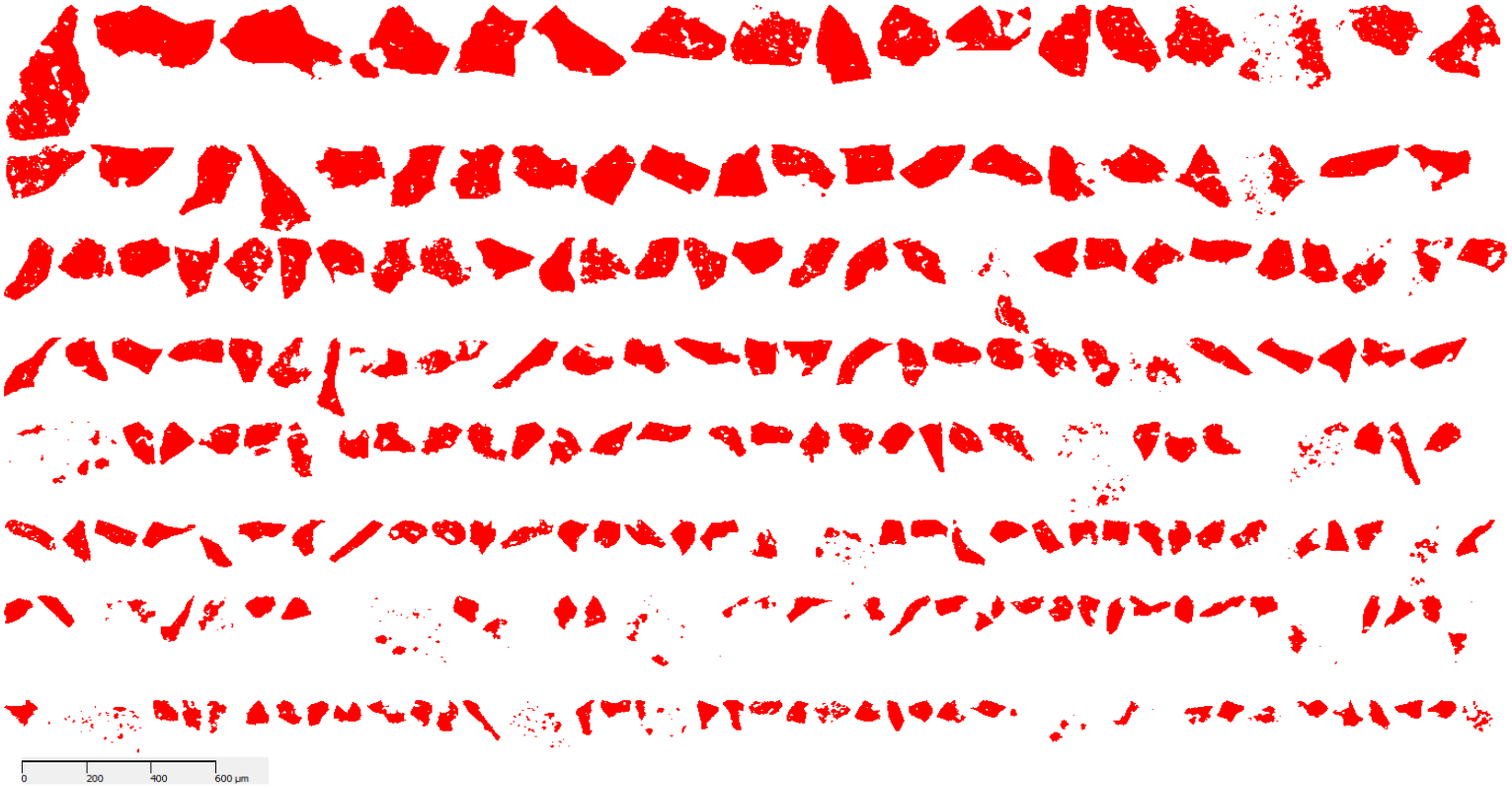
Pyrite Particle Images - HC-10 Mixed PAG



Pyrite Particle Images - HC-10 Mixed PAG - Pyrite only



Modal					
Pyrite	Chalcopyrite	Quartz	Plagioclase	K-Feldspar	Alkali Feldspar
Micas	Chlorites	Clays	Ca-Fe-Al Silicate	Amphiboles	Titanite
Fe-Oxides	Ti Oxide	Carbonates	Apatite	Other	

MINERALOGY DATA

prepared for:

Custom Min

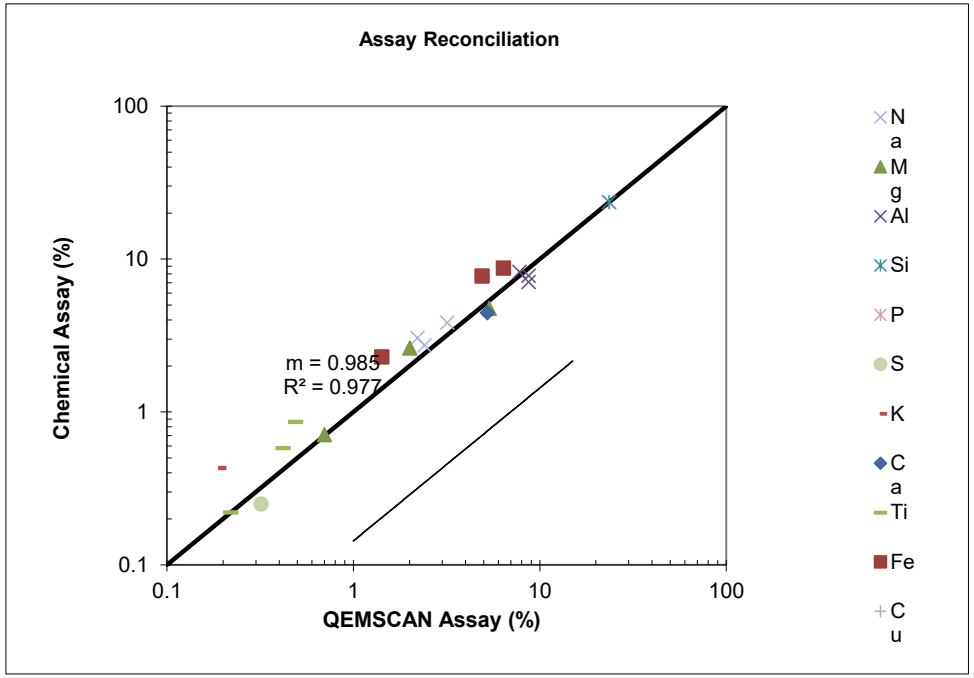
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22
April 22, 2022

Prepared by:

Hanna Horsch/Lain Glossop
Senior Mineralogist/Senior Mineralogist

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

Elemental Mass (%)



Elemental Mass (%) Absolute

	Sodium		Magnesium		Aluminum		Silicon	
Mineral Name	Na (Calculated)	Na (Assay)	Mg (Calculated)	Mg (Assay)	Al (Calculated)	Al (Assay)	Si (Calculated)	Si (Assay)
CAOND 169332	3.19	3.84	2.01	2.62	8.70	7.07	23.5	23.6
CAOND 188908	2.21	3.05	0.70	0.71	7.79	8.24	29.1	28.7
CAOND 163784	2.41	2.73	5.36	4.76	8.70	7.78	22.2	21.5

Phosphorus		Sulphur		Potassium		Calcium	
P (Calculated)	P (Assay)	S (Calculated)	S (Assay)	K (Calculated)	K (Assay)	Ca (Calculated)	Ca (Assay)
0.04	0.05	0.32	0.25	0.19	0.43	5.23	4.45
0.07	0.08	0.11	0.05	3.62	3.61	3.78	2.97
0.03	0.03	0.02	0.05	0.33	0.50	5.11	5.05

Titanium		Iron		Copper	
Ti (Calculated)	Ti (Assay)	Fe (Calculated)	Fe (Assay)	Cu (Calculated)	Cu (Assay)
0.49	0.86	6.38	8.73	0.05	0.06
0.22	0.22	1.42	2.29	0.01	0.01
0.42	0.58	4.90	7.76	0.00	0.00

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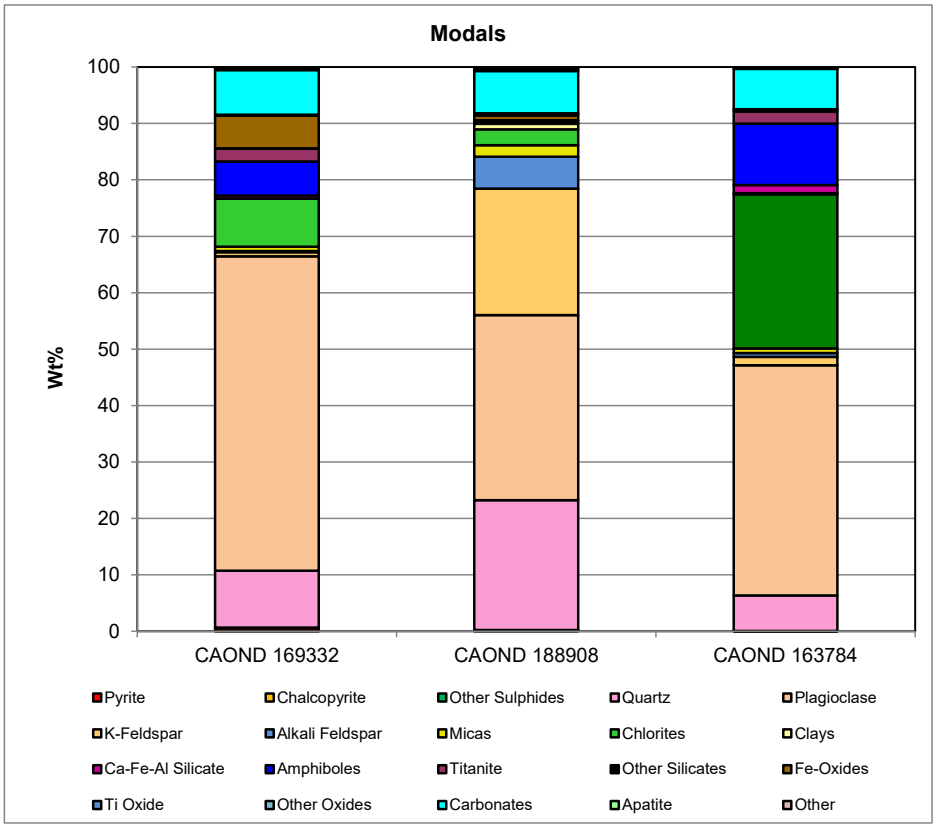
Modals

Mineral (%)	CAOND 169332	CAOND 188908	CAOND 163784
Pyrite	0.51	0.21	0.04
Chalcopyrite	0.14	0.02	0.01
Other Sulphides	0.01	0.00	0.00
Quartz	10.1	23.0	6.31
Plagioclase	55.7	32.8	40.8
K-Feldspar	0.73	22.5	1.49
Alkali Feldspar	0.22	5.65	0.70
Micas	0.78	2.03	0.81
Chlorites	8.48	2.82	27.3
Clays	0.06	0.98	0.22
Ca-Fe-Al Silicate	0.52	0.15	1.41
Amphiboles	6.03	0.43	10.9
Titanite	2.34	0.00	2.13
Other Silicates	0.01	0.05	0.00
Fe-Oxides	5.82	0.85	0.37
Ti Oxide	0.09	0.36	0.03
Other Oxides	0.02	0.02	0.00
Carbonates	7.93	7.50	7.17
Apatite	0.25	0.40	0.16
Other	0.27	0.29	0.13
Total	100	100	100



Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

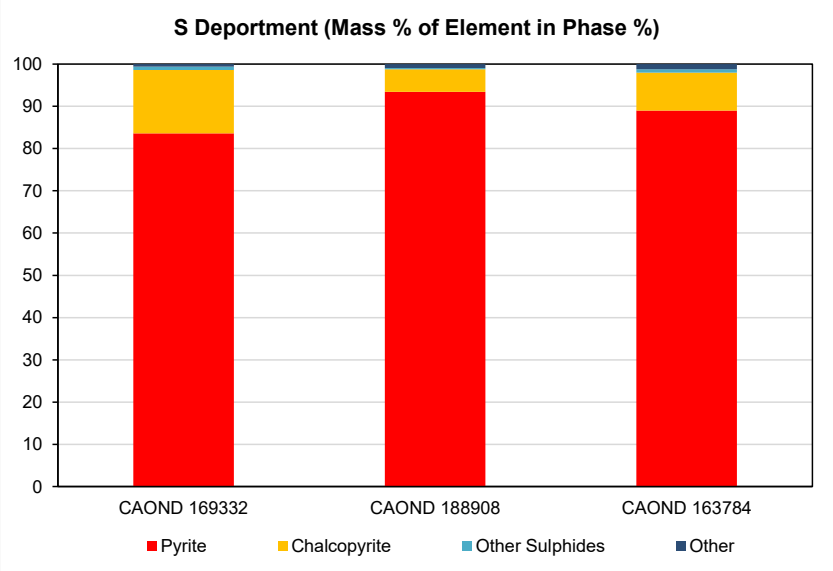
S Deportment

Sulphur Mass %

Mineral Mass	CAOND 169332	CAOND 188908	CAOND 163784
Pyrite	0.27	0.11	0.02
Chalcopyrite	0.05	0.01	0.00
Other Sulphides	0.00	0.00	0.00
Other	0.00	0.00	0.00
Total	0.32	0.11	0.02

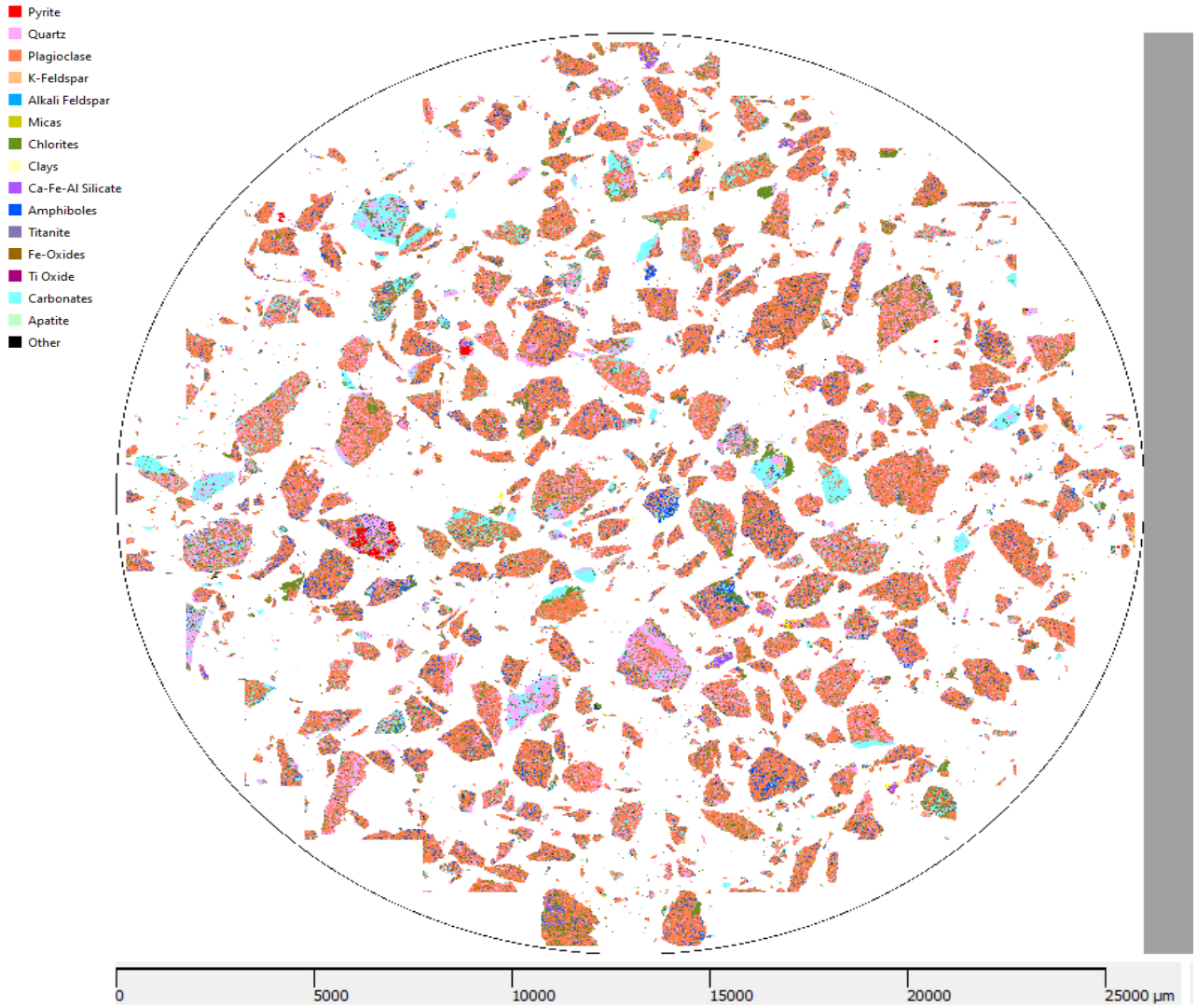
Sulphur Phases Normalized

Mineral Mass	CAOND 169332	CAOND 188908	CAOND 163784
Pyrite	83.6	93.4	89.0
Chalcopyrite	15.0	5.36	8.94
Other Sulphides	0.79	0.26	0.81
Other	0.63	0.97	1.22
Total	100	100	100

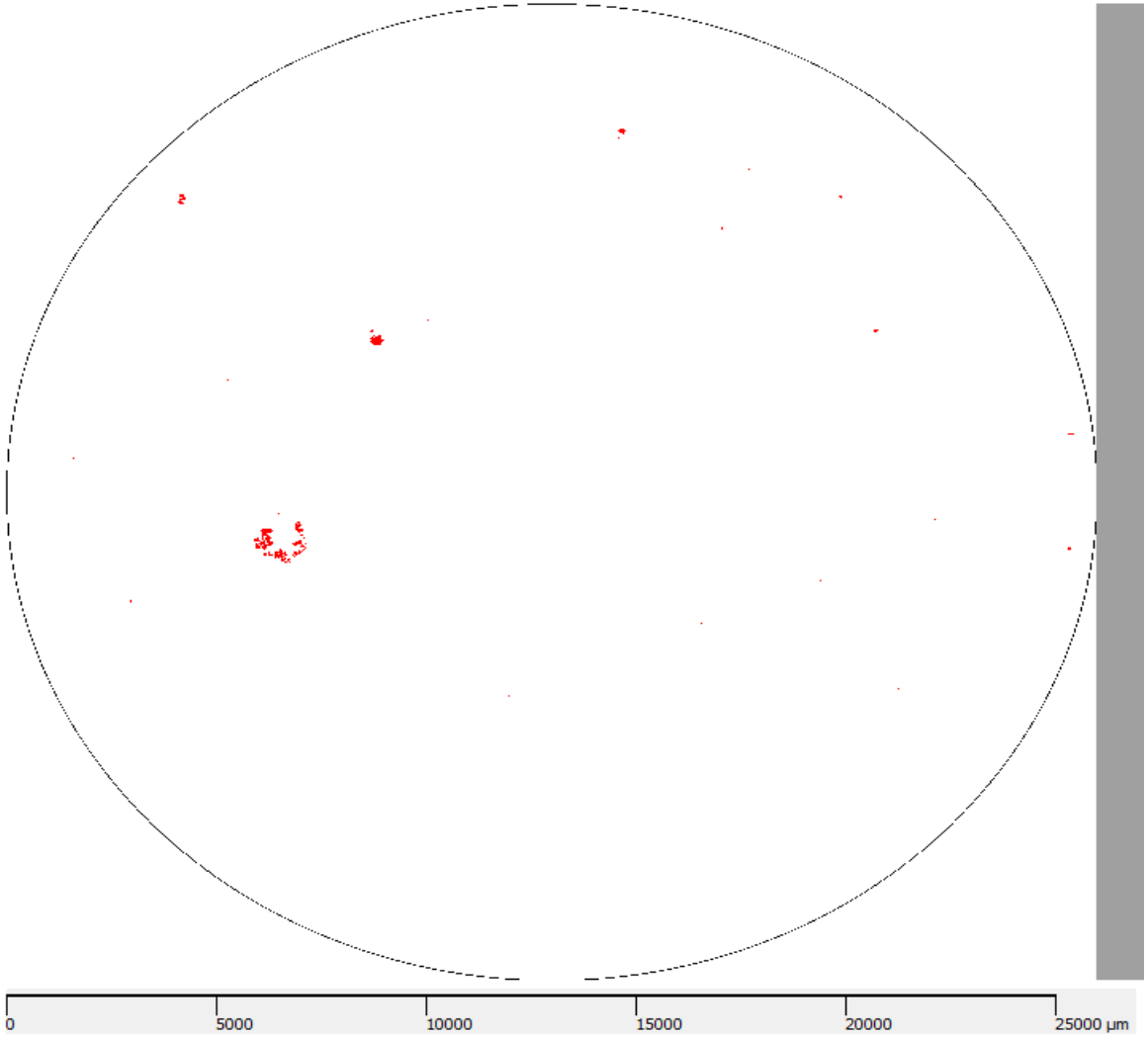


Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

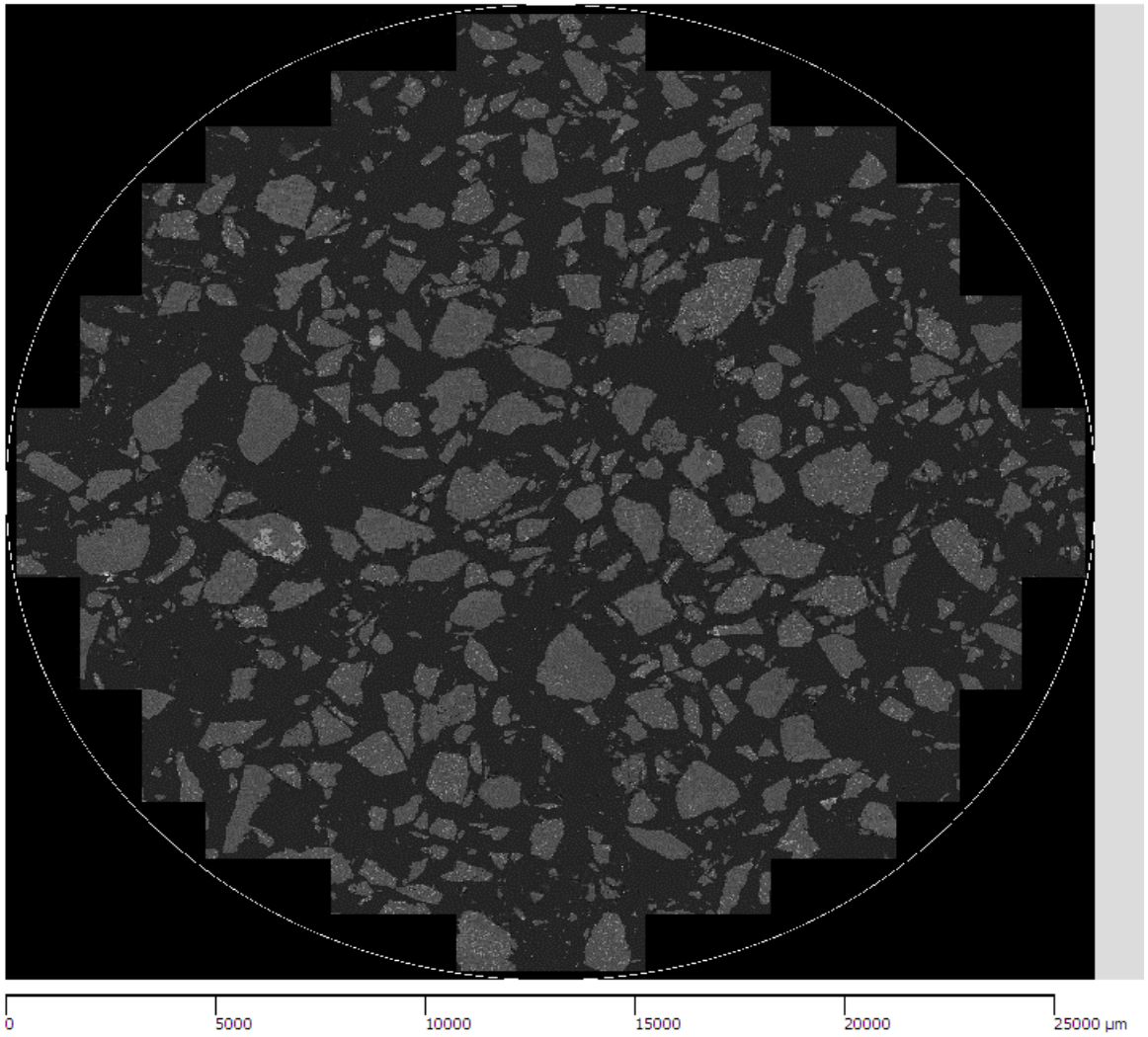
Panorama - Overview - CAOND 169332



Panorama - Distribution of Pyrite (red) - CAOND 169332

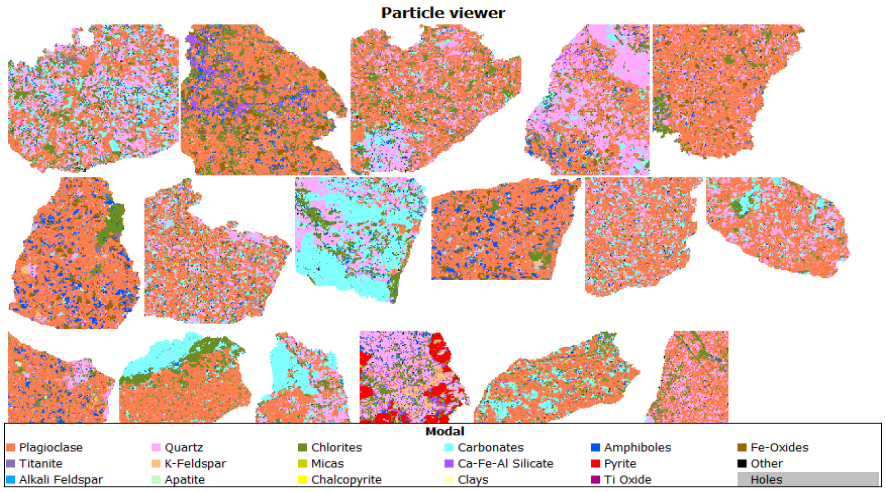


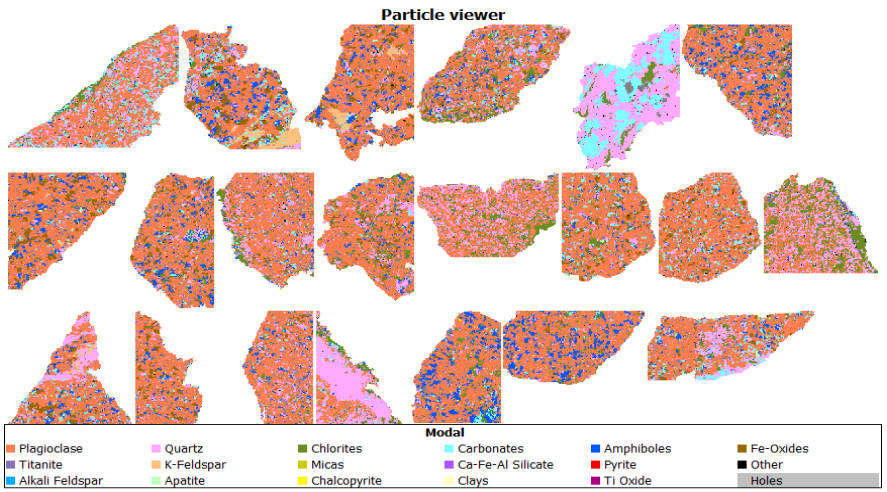
Panorama - Backscattered Electron Image - CAOND 169332

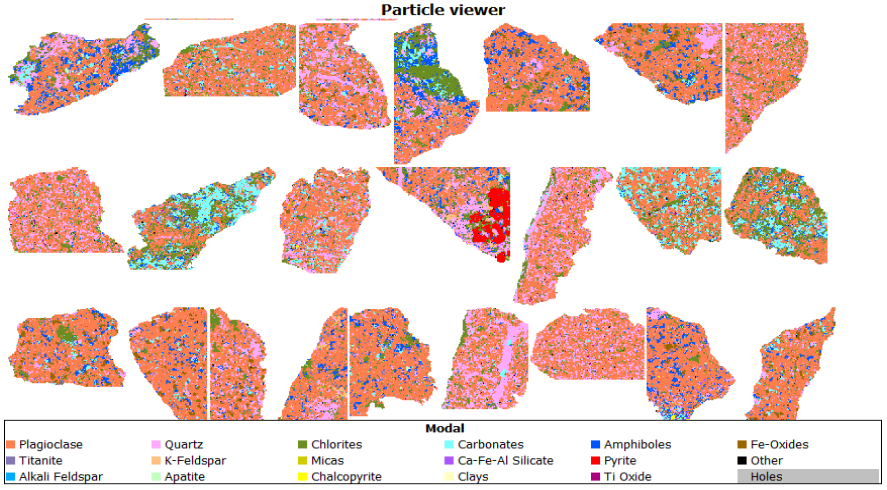


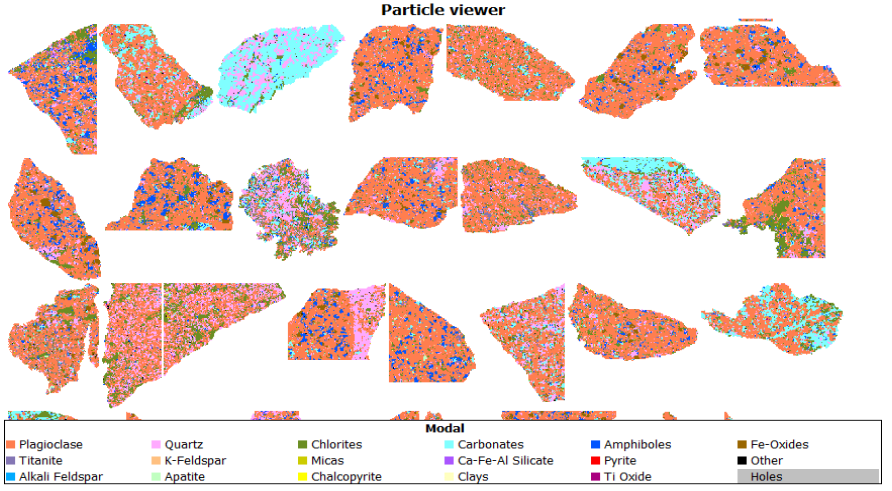
Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

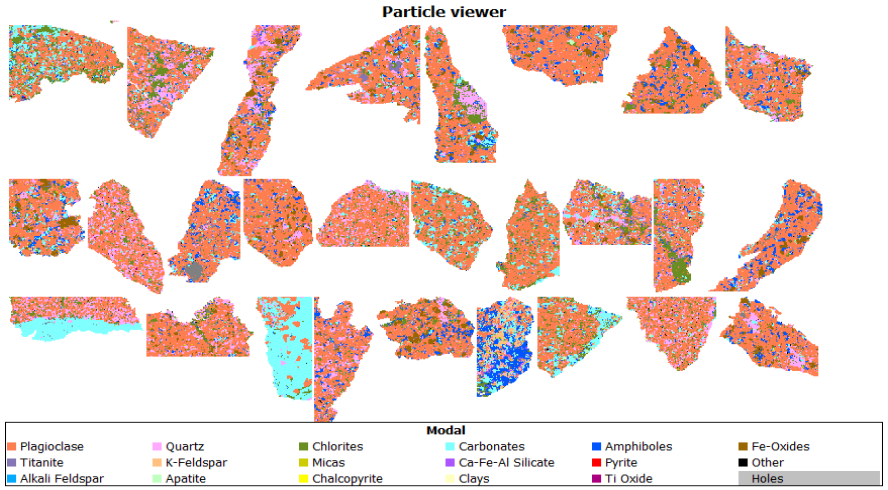
Particle Images CAOND 169332 - sorted by Size







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Quartz
Chlorites
Carbonates
Amphiboles
Fe-Oxides
Titanite
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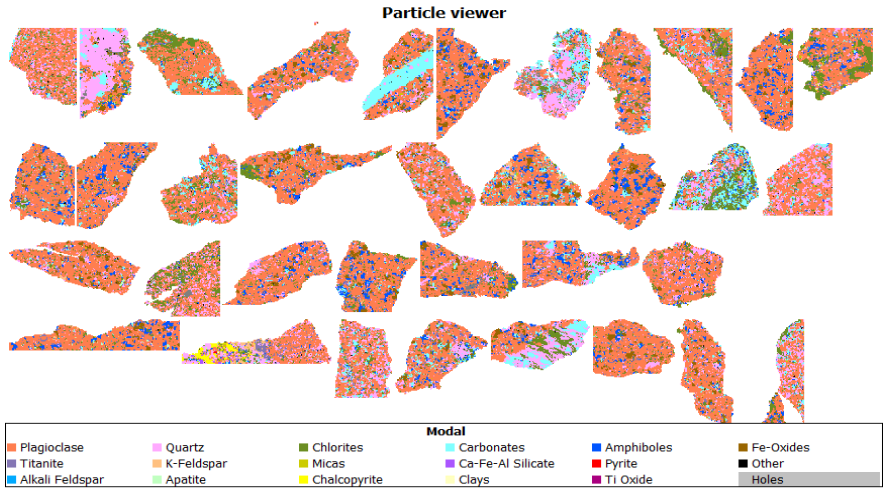
Micas
Ca-Fe-Al Silicate
Pyrite
Other
Alkali Feldspar
Apatite
Chalcopyrite
Clays
Ti Oxide
Holes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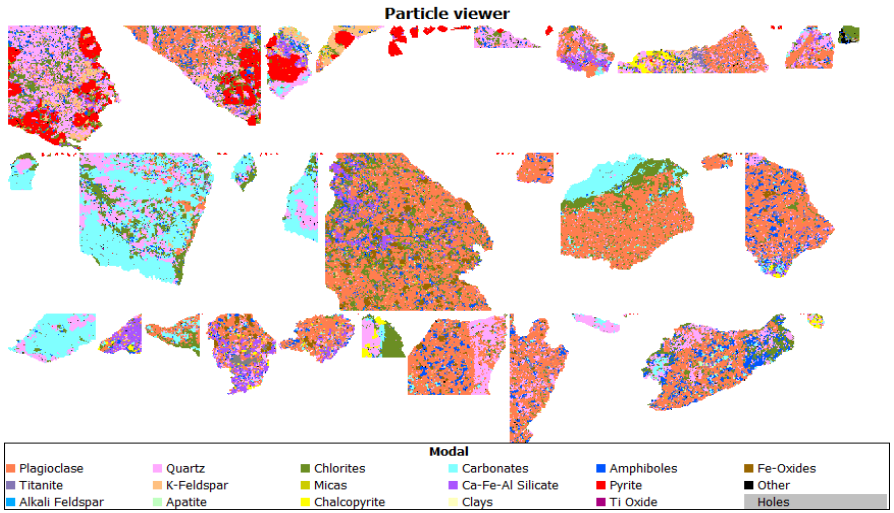
Alkali Feldspar
Apatite
Chalcopyrite
Clays
Ti Oxide
Holes

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

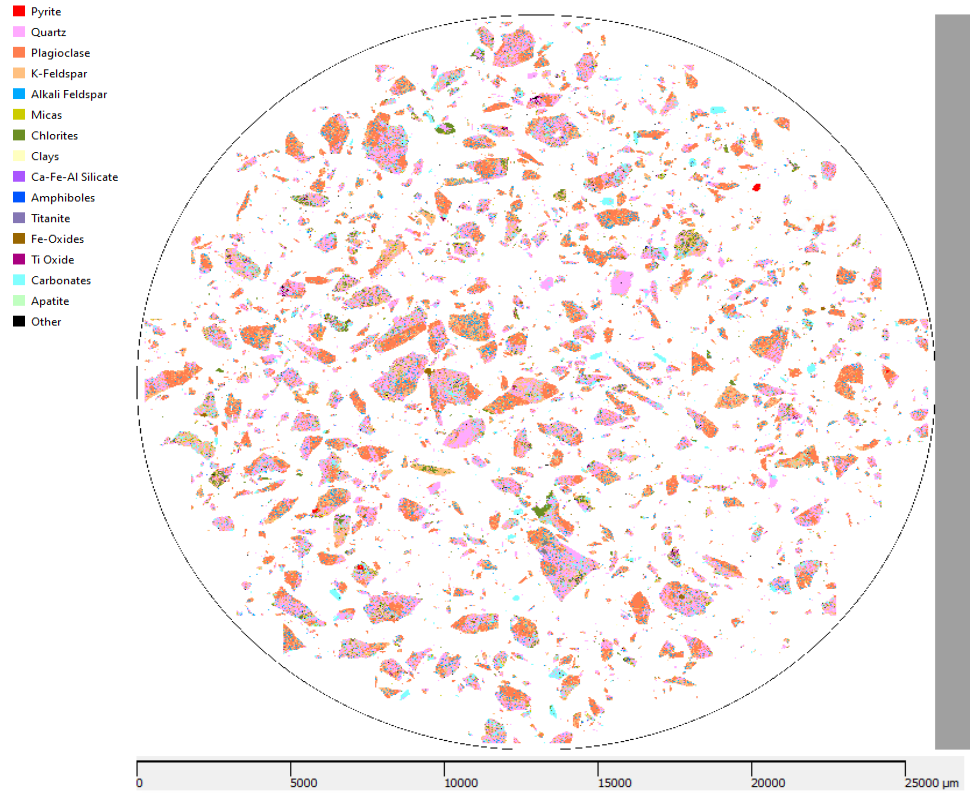
Pyrite Particle Images - CAOND 169332



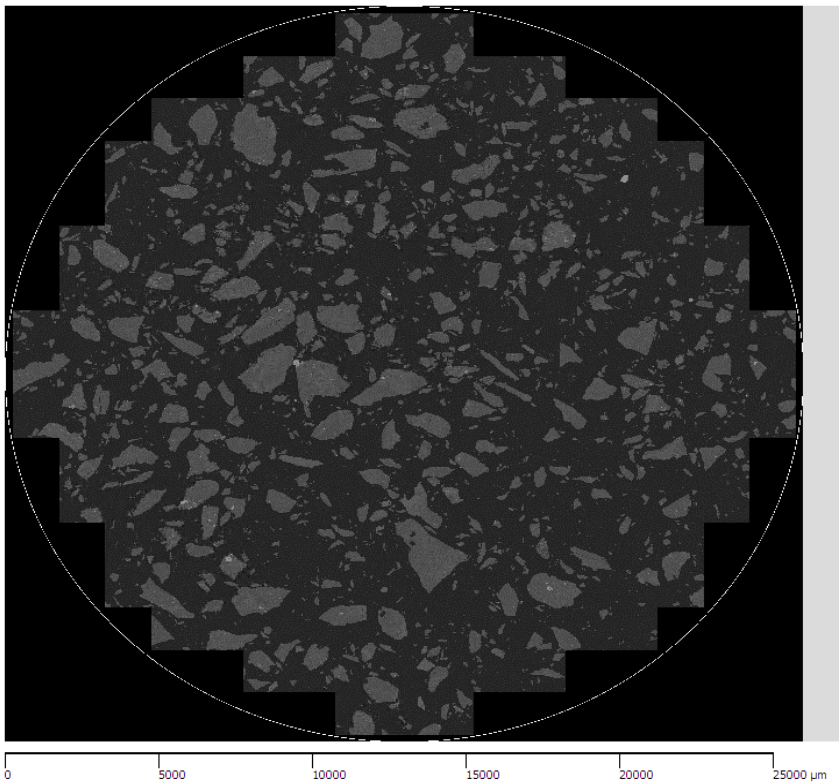
Pyrite Particle Images - CAOND 169332 - Pyrite only

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

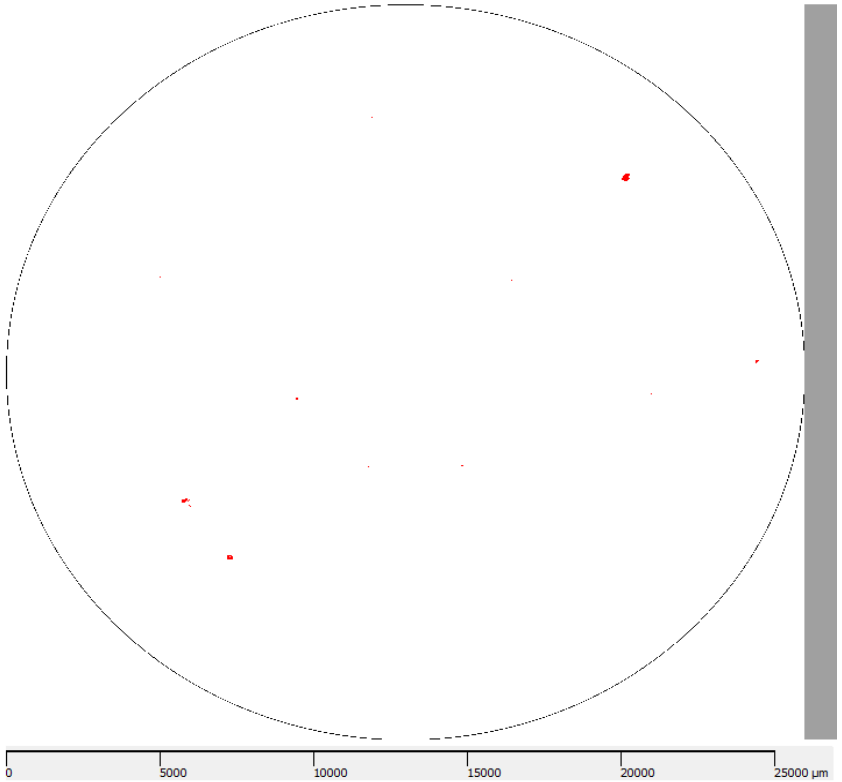
Panorama - Overview - CAOND 188908



Panorama - Backscattered Electron Image - CAOND 188908

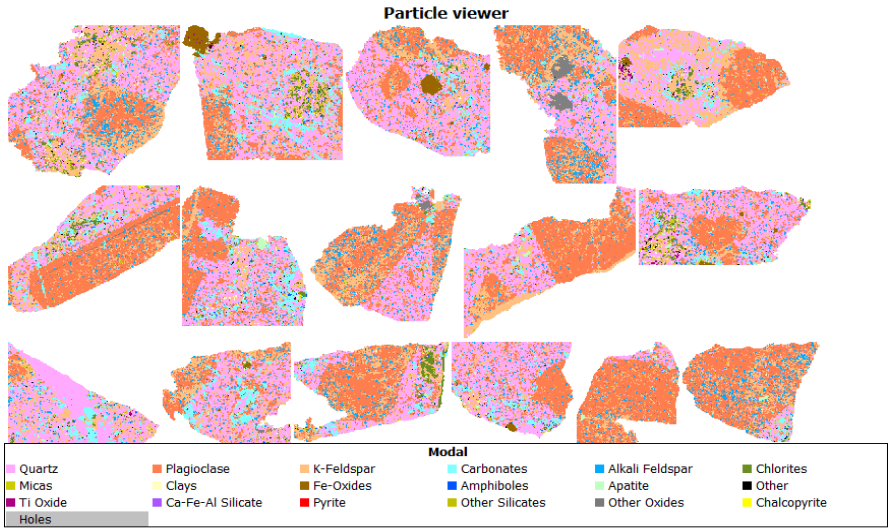


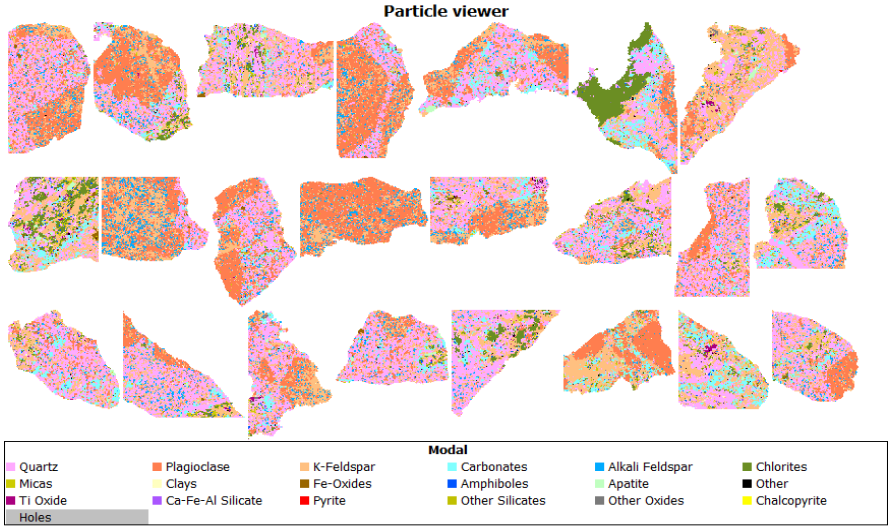
Panorama - Distribution of Pyrite (red) - CAOND 188908

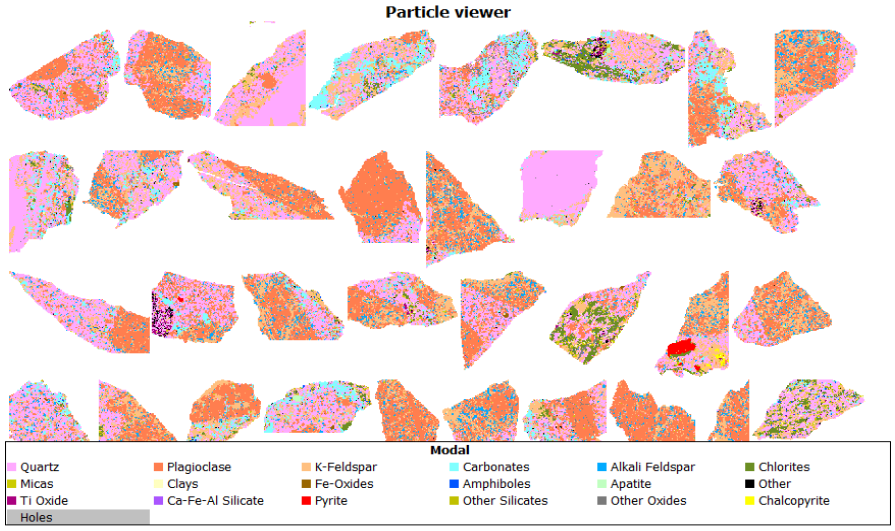


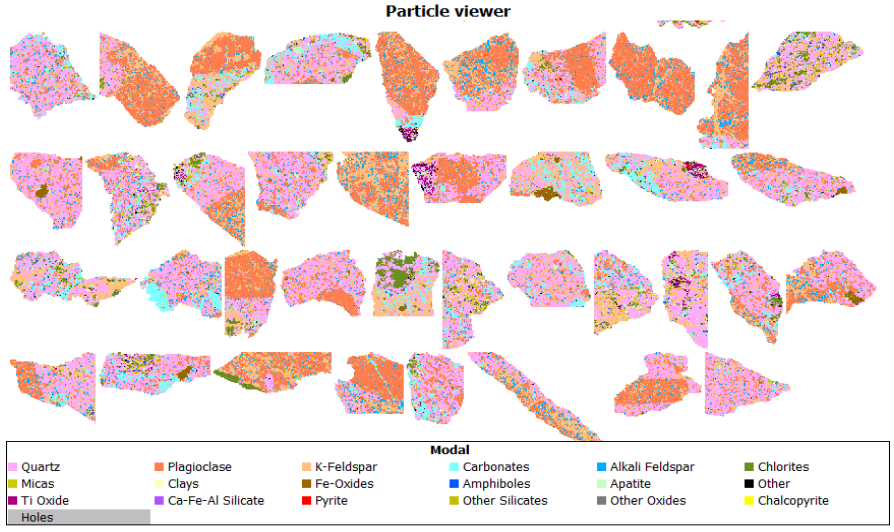
Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

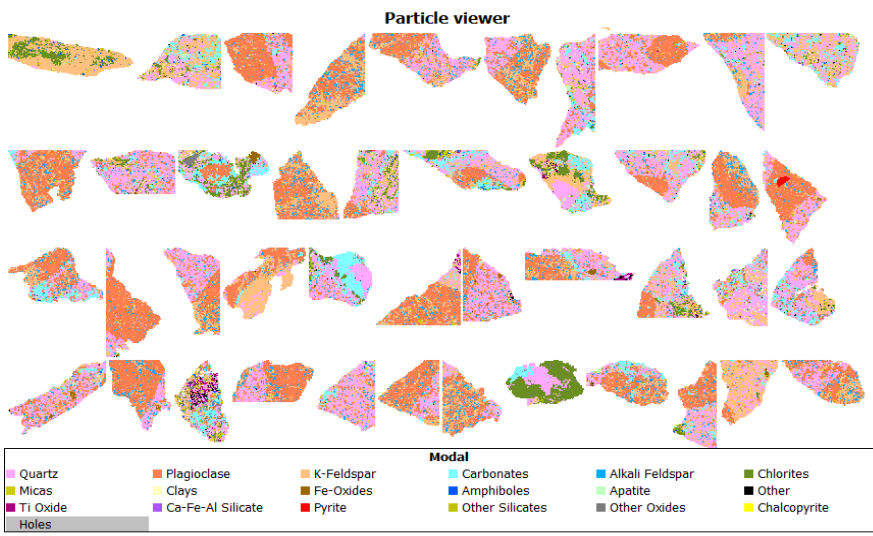
Particle Images CAOND 188908 - sorted by Size







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Micas
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Apatite
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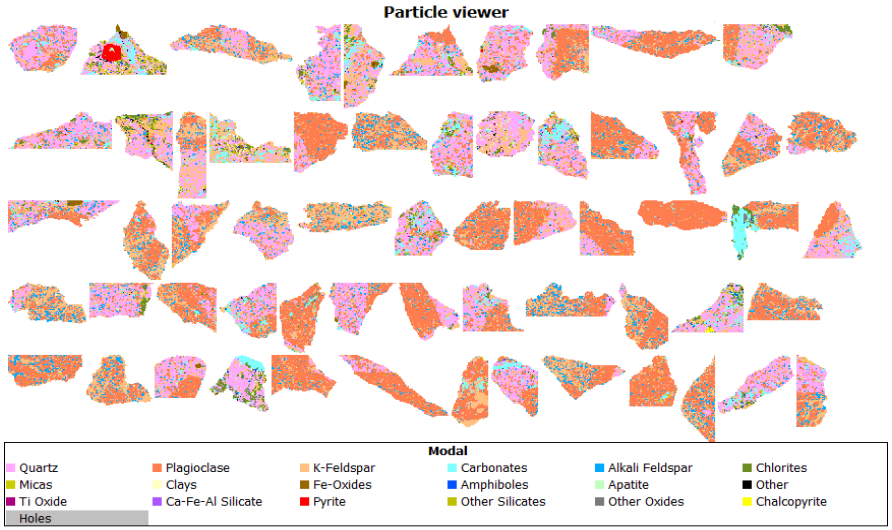
Ca-Fe-Al Silicate
Pyrite
Other Silicates
Other Oxides
Chalcopyrite
Holes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Ca-Fe-Al Silicate
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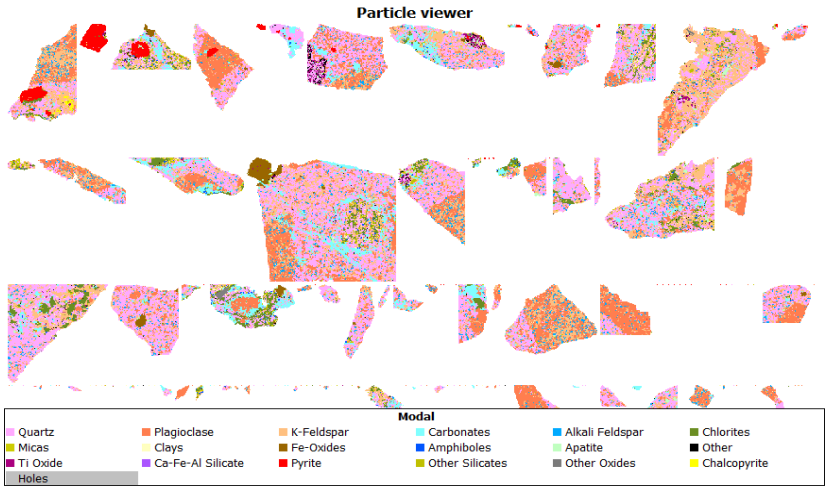
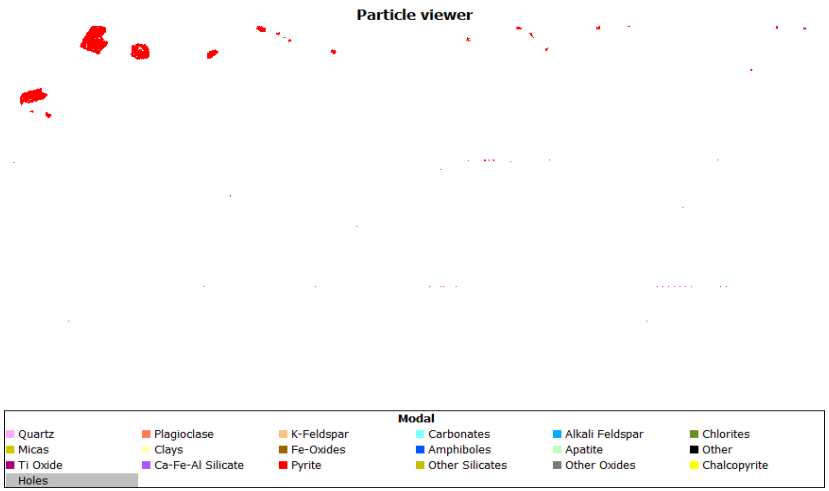
Chalcopyrite
Holes

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

Pyrite Particle Images - CAOND 188908

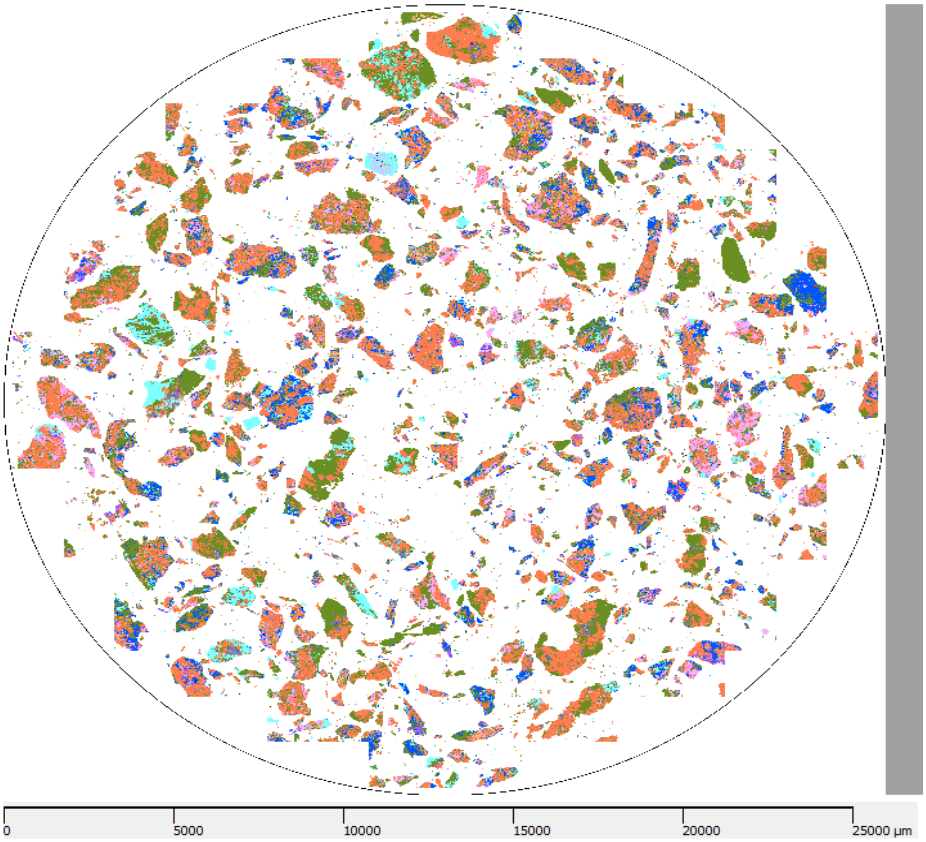


Pyrite Particle Images - CAOND 188908 - Pyrite only

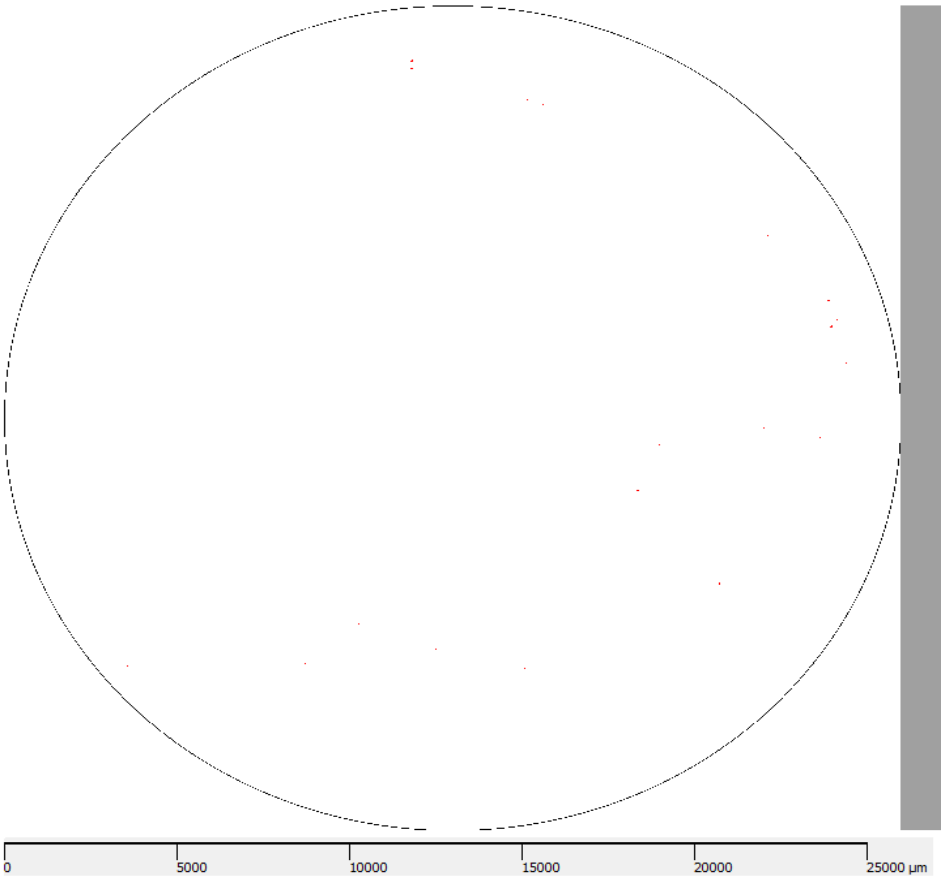


Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

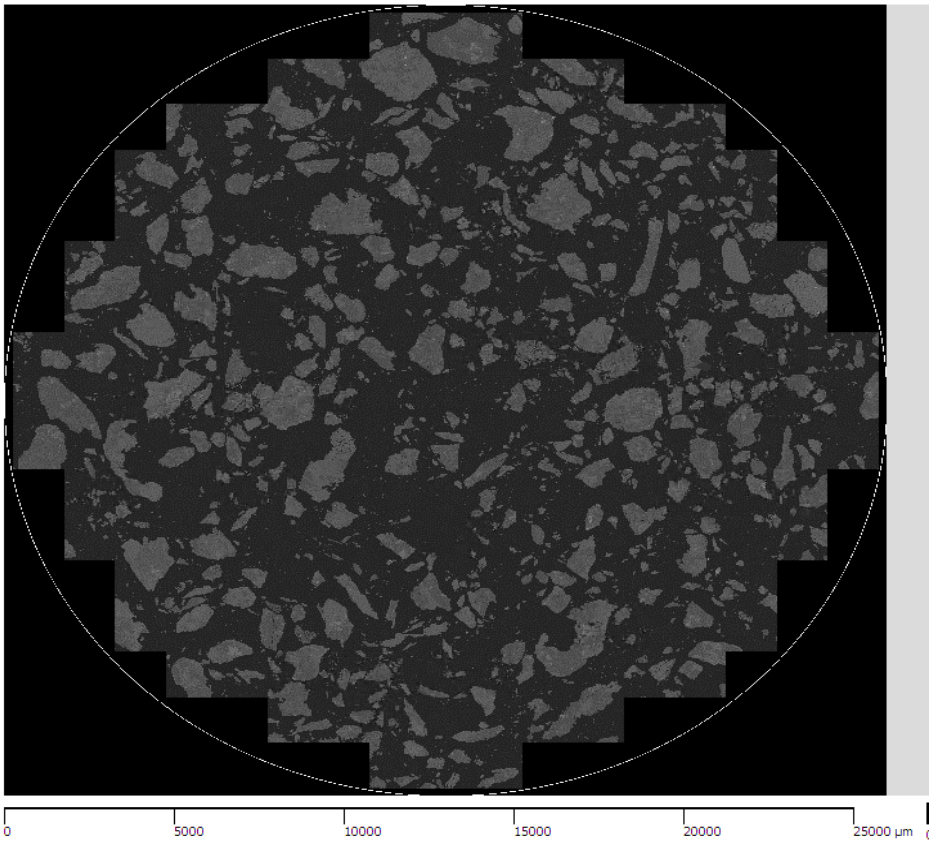
Panorama - Overview - CAOND 163784



Panorama - Distribution of Pyrite (red) - CAOND 163784

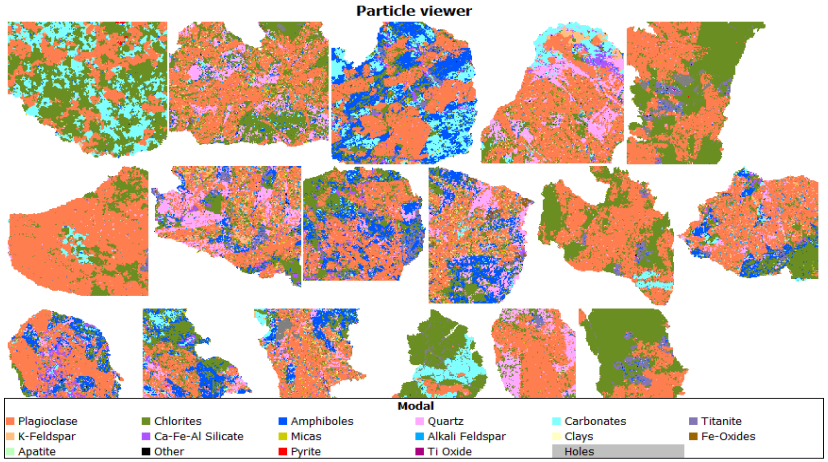


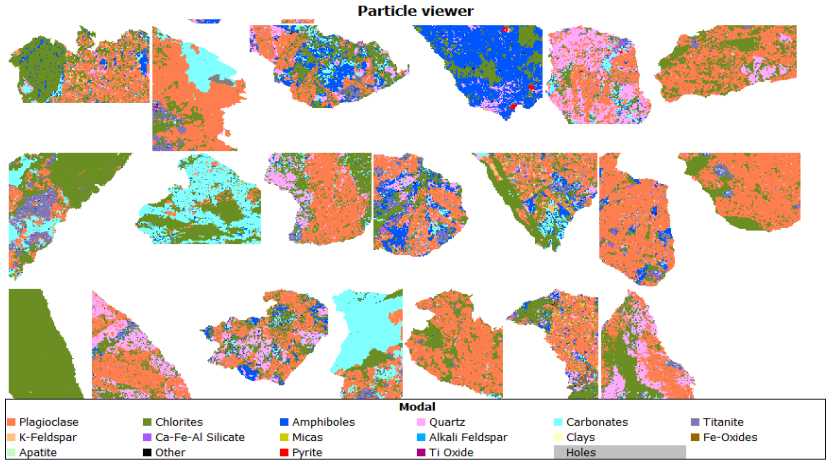
Panorama - Backscattered Electron Image - CAOND 163784

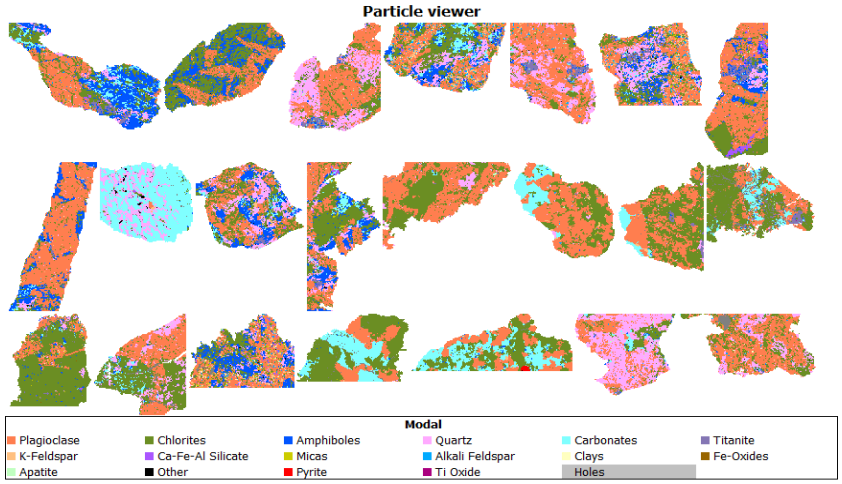


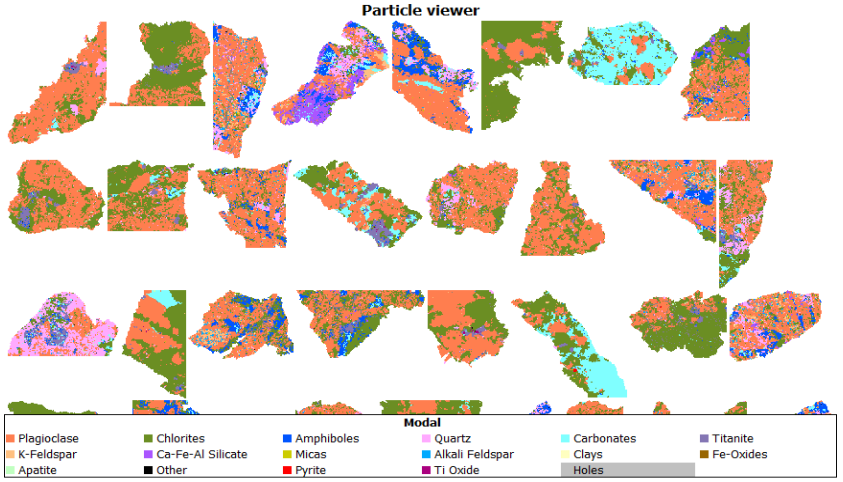
Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

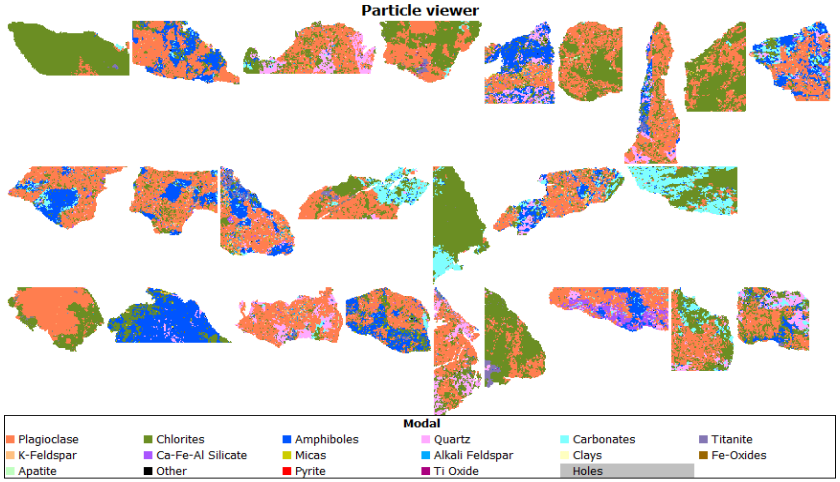
Particle Images CAOND 188908 - sorted by Size

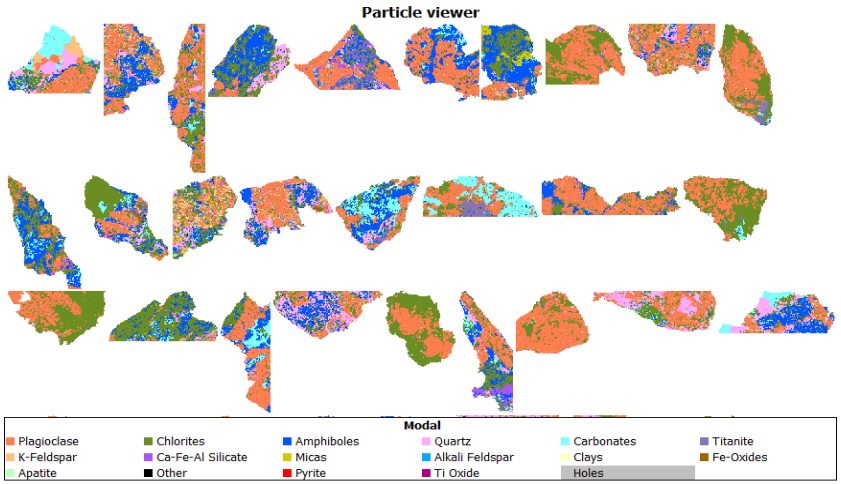






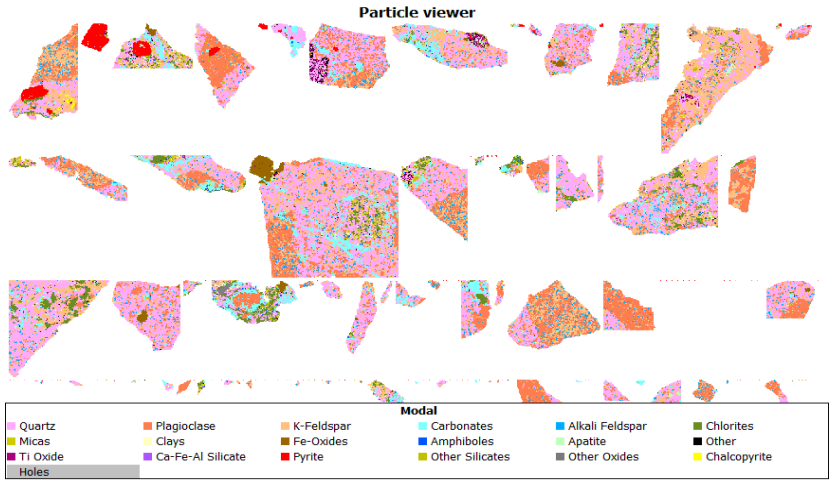



Particle viewer
Modal
Plagioclase
Chlorites
Amphiboles
Quartz
Carbonates
Titanite
K-Feldspar
Ca-Fe-Al Silicate
Micas
Alkali Feldspar
Clays
Fe-Oxides
Apatite
Other
Pyrite
Ti Oxide
Holes

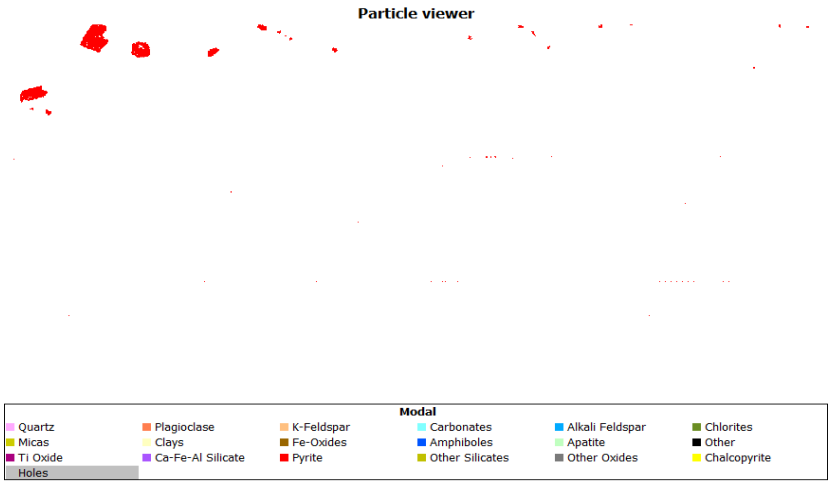

Particle viewer
Modal
Plagioclase
Chlorites
Amphiboles
Quartz
Carbonates
Titanite
K-Feldspar
Ca-Fe-Al Silicate
Micas
Alkali Feldspar
Clays
Fe-Oxides
Apatite
Other
Pyrite
Ti Oxide
Holes

Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22

Pyrite Particle Images - CAOND 188908



Pyrite Particle Images - CAOND 188908 - Pyrite only



Custom Min
2138 Upper Beaver (Agnico Eagle)
MI7011-MAR22
Apr-22

Sample

Paste Data Here →

Mass Cu Minerals		**Product**
	Mass %	0.0
Native Copper Association	**Pure Native Cu**	
	Free Native Cu	
	Lib Native Cu	
	Native Cu:Pyrite	
	Native Cu:Qtz/Feld	
	Native Cu:Mica/Chlor/Clays	
	Native Cu:Qtz/Feld:Mica/Chlor/Clays	
	Native Cu:Carbonates	
	Native Cu:Other Minerals	
	Complex Native Cu	
	Sum	
	Value from Modals	
Cu Sulphides Association	**Pure Cu Sul**	
	Free Cu Sul	
	Lib Cu Sul	
	Cu Sul:Pyrite	
	Cu Sul:Qtz/Feld	
	Cu Sul:Mica/Chlor/Clays	
	Cu Sul:Qtz/Feld:Mica/Chlor/Clays	
	Cu Sul:Carbonates	
	Cu Sul:Other Minerals	
	Complex Cu Sul	
	Sum	
	Value from Modals	
Pyrite Association	**Pure Pyrite**	
	Free Pyrite	
	Lib Pyrite	
	Pyrite : Other Sulphides	
	Pyrite : Quartz/Feld	
	Pyrite : Mica/Chlor/Clays	
	Pyrite : Qtz/Feld : Mica/Chlor/Clays	
	Pyrite : Oxides	
	Pyrite : Other Minerals	
	Complex	
	Sum	
	Value from Modals	
Modals	**Pyrite**	
	Chalcopyrite	
	Other Sulphides	
	Quartz	
	Plagioclase	
	K-Feldspar	
	Alkali Feldspar	
	Micas	
	Chlorites	
	Clays	
	Ca-Fe-Al Silicate	
	Amphiboles	
	Titanite	
	Other Silicates	
	Fe-Oxides	
	Ti Oxide	

	Other Oxides
	Carbonates
	Apatite
	Other
Al Deportment	**Plagioclase**
	K-Feldspar
	Micas
	Chlorites
	Clays
	Other Silicates
	Aluminum
	Other
	Sum
S Deportment	Pyrite
	Chalcopyrite
	Other Sulphides
	Other

Elemental Mass (%)

Na (Calculated)	Na
Na (Assay)	
Mg (Calculated)	Mg
Mg (Assay)	
Al (Calculated)	Al
Al (Assay)	
Si (Calculated)	Si
Si (Assay)	
P (Calculated)	P
P (Assay)	
S (Calculated)	S
S (Assay)	
K (Calculated)	K
K (Assay)	
Ca (Calculated)	Ca
Ca (Assay)	
Ti (Calculated)	Ti
Ti (Assay)	
Fe (Calculated)	Fe
Fe (Assay)	
Cu (Calculated)	Cu
Cu (Assay)	

Cu Sulphides Exposure

Exposed
>50-80% Exposed
>20-50% Exposed
<20% Exposed
Locked

	Sum	
	Value from Modals	
Native Copper Exposure		
	Exposed	
	>50-80% Exposed	
	>20-50% Exposed	
	<20% Exposed	
	Locked	
	Sum	
	Value from Modals	
Pyrite Exposure		
	Exposed	
	50-80% Exposed	
	30-50% Exposed	
	20-30% Exposed	
	10-20% Exposed	
	0-10% Exposed	
	Locked	
	Sum	
	Value from Modals	
Chalcopyrite Exposure		
	Exposed	
	>50-80% Exposed	
	>20-50% Exposed	
	<20% Exposed	
	Locked	
	Sum	
	Value from Modals	
Bornite Exposure		
	Exposed	
	>50-80% Exposed	
	>20-50% Exposed	
	<20% Exposed	
	Locked	Size
	Sum	
	Value from Modals	
Size - Cu Sulphides		
	+225	
	+210	
	+195	
	+180	
	+165	
	+150	
	+135	
	+120	
	+105	
	+90	
	+75	
	+66	
	+57	
	+48	
	+39	
	+30	
	+21	
	+12	
	+4	Size
	-4	
	Other	
	Sum	
	Value from Modals	

Size - Native Copper		
	+225	
	+210	
	+195	
	+180	
	+165	
	+150	
	+135	
	+120	
	+105	
	+90	
	+75	
	+66	
	+57	
	+48	
	+39	
	+30	
	+21	
	+12	
	+4	Size
	-4	
	Other	
	Sum	
	Value from Modals	
Size - Pyrite		
	+1.00	1.00
	+1.33	1.33
	+1.77	1.77
	+2.35	2.35
	+3.13	3.13
	+4.16	4.16
	+5.54	5.54
	+7.36	7.36
	+9.79	9.79
	+13.02	13.02
	+17.32	17.32
	+23.04	23.04
	+30.64	30.64
	+40.75	40.75
	+54.20	54.20
	+72.08	72.08
	+95.87	**95.87**
	+127.51	**127.51**
	+169.59	169.59
	+225.56	225.56
	+300.00	300.00
	Other	
	Sum	
	Value from Modals	
Size - Quartz/Feldspar		
	+225	
	+210	
	+195	
	+180	
	+165	
	+150	
	+135	
	+120	
	+105	
	+90	
	+75	
	+66	

	+57 **+48** **+39** **+30** **+21** **+12** **+4** **-4** Other	Size
Size - Mica/Chlorite/Clays		
	+225 **+210** **+195** **+180** **+165** **+150** **+135** **+120** **+105** **+90** **+75** **+66** **+57** **+48** **+39** **+30** **+21** **+12** +4 -4 **Other**	Size
Size - Carbonates		
	+225 **+210** **+195** **+180** **+165** **+150** **+135** **+120** **+105** **+90** **+75** **+66** **+57** **+48** **+39** **+30** **+21** +12 +4 **-4** **Other**	Size
Size - Particle		
	+500 **+450** **+400** **+350** **+300**	

+250
+225
+210
+195
+180
+165
+150
+135
+120
+105
+90
+75
+66
+57
+48
+39
+30
+21
+12
+4
-4
Other

CAOND 169332	CAOND 188908	CAOND 163784
As Rec'd	As Rec'd	

0.02	0.02	0
7.93	7.5	7.17
0.25	0.4	0.16
0.27	0.29	0.13

Modal(HH) / Mass of Sulphur in phase

Mass of Sulphur in phase

Modal(HH) / Sam	CAOND 169332	CAOND 188908
Pyrite	0.2657	0.1064
Chalcopyrite	0.0477	0.0061
Other Sulphides	0.0025	0.0003
Other	0.002	0.0011
Total	0.3178	0.1139

0.2657	0.1064	0.0219
0.0477	0.0061	0.0022
0.0025	0.0003	0.0002
0.002	0.0011	0.0003

3.19	2.21	2.41
3.84	3.05	2.73
2.01	0.7	5.36
2.62	0.71	4.76
8.7	7.79	8.7
7.07	8.24	7.78
23.49	29.1	22.18
23.57	28.73	21.45
0.04	0.07	0.03
0.05	0.08	0.03
0.32	0.11	0.02
0.25	0.05	0.05
0.19	3.62	0.33
0.43	3.61	0.5
5.23	3.78	5.11
4.45	2.97	5.05
0.49	0.22	0.42
0.86	0.22	0.58
6.38	1.42	4.9
8.73	2.29	7.76
0.05	0.01	0
0.06	0.01	0

16.46	**3.73**
#REF!	**#REF!**

	0.00
#REF!	

	0.00
0.36	**#REF!**
0.07	
0.435320949	
0.003550275	**#REF!**
0.01	**#REF!**
0.01	
0.11	
0.99	
#REF!	

#REF!	**0.00**
#REF!	**#REF!**

	0.00
#REF!	

Mass

	0.00
#REF!	

Mass

0.00
#REF!

Mass

0.00
0.00
0.00
0.00
0.00
1.52
3.41
6.46
11.24
15.75
20.21
24.60
28.27
32.98
39.40
49.61
53.61
53.61
53.61
66.26
100.00

166.26

Mass

0.00

Mass

0.00

Mass

0.0

Dont Paste past here

Modal(HH) / Mass of phase

Mass of phase

Modal(HH)	CAOND 165	CAOND 188	CAOND 163784
Pyrite	0.51	0.21	0.04
Chalcopyrit	0.14	0.02	0.01
Other Sulpl	0.01	0	0
Quartz	10.08	23	6.31
Plagioclase	55.7	32.78	40.77
K-Feldspar	0.73	22.45	1.49
Alkali Felds	0.22	5.65	0.7
Micas	0.78	2.03	0.81
Chlorites	8.48	2.82	27.31
Clays	0.06	0.98	0.22
Ca-Fe-Al Sil	0.52	0.15	1.41

Amphibole	6.03	0.43	10.92
Titanite	2.34	0	2.13
Other Silica	0.01	0.05	0
Fe-Oxides	5.82	0.85	0.37
Ti Oxide	0.09	0.36	0.03
Other Oxid	0.02	0.02	0
Carbonates	7.93	7.5	7.17
Apatite	0.25	0.4	0.16
Other	0.27	0.29	0.13
Total	100	100	100

CAOND 163784

0.0219
0.0022
0.0002
0.0003
0.0247

Assay reconcilliation

Sample		CAOND 16	CAOND 18	CAOND 163784
Na	TIMA Calcu	3.19	2.21	2.41
	Chemical A	3.84	3.05	2.73
Mg	TIMA Calcu	2.01	0.7	5.36
	Chemical A	2.62	0.71	4.76
Al	TIMA Calcu	8.7	7.79	8.7
	Chemical A	7.07	8.24	7.78
Si	TIMA Calcu	23.49	29.1	22.18
	Chemical A	23.57	28.73	21.45
P	TIMA Calcu	0.04	0.07	0.03
	Chemical A	0.05	0.08	0.03
S	TIMA Calcu	0.32	0.11	0.02
	Chemical A	0.25	0.05	0.05
K	TIMA Calcu	0.19	3.62	0.33
	Chemical A	0.43	3.61	0.5
Ca	TIMA Calcu	5.23	3.78	5.11
	Chemical A	4.45	2.97	5.05
Ti	TIMA Calcu	0.49	0.22	0.42
	Chemical A	0.86	0.22	0.58
Fe	TIMA Calcu	6.38	1.42	4.9
	Chemical A	8.73	2.29	7.76
Cu	TIMA Calcu	0.05	0.01	0
	Chemical A	0.06	0.01	0

Assay recor

Sample
Na

Mg

Al

Si

P

S

K

Ca

Ti

Fe

Cu

ıcilliation

	CAOND 165	CAOND 185	CAOND 163784
TIMA Calcu	3.19	2.21	2.41
Chemical A	3.84	3.05	2.73
TIMA Calcu	2.01	0.7	5.36
Chemical A	2.62	0.71	4.76
TIMA Calcu	8.7	7.79	8.7
Chemical A	7.07	8.24	7.78
TIMA Calcu	23.49	29.1	22.18
Chemical A	23.57	28.73	21.45
TIMA Calcu	0.04	0.07	0.03
Chemical A	0.05	0.08	0.03
TIMA Calcu	0.32	0.11	0.02
Chemical A	0.25	0.05	0.05
TIMA Calcu	0.19	3.62	0.33
Chemical A	0.43	3.61	0.5
TIMA Calcu	5.23	3.78	5.11
Chemical A	4.45	2.97	5.05
TIMA Calcu	0.49	0.22	0.42
Chemical A	0.86	0.22	0.58
TIMA Calcu	6.38	1.42	4.9
Chemical A	8.73	2.29	7.76
TIMA Calcu	0.05	0.01	0
Chemical A	0.06	0.01	0

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22
Sample receipt date: 31-Oct-22
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: ol-1071778

COC:

ANALYSIS REPORT

SGS WO: 16

Report Distribution

Name	Email
Timo Kirchner	timo.kirchner@lorax.ca
Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

Report pertains to static testing on the preleached material feed for humidity cell HC10

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

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ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
HC10-Preleach Residue	1.649	0.02	1.629	NA	50.9
Duplicates					
HC10-Preleach Residue		0.01			

QA/QC					
Blank	<0.005	<0.01			
Certified standards					
GS-314-2	2.562				
RTS-3a		1.03			

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

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Report date: 18-Nov-22

Version: Final

ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	CO3 NPR	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
HC10-Preleach Residue	0.237	0.23	19.2	0.38	22.3	-28.6	0.44	Slight	9.33
Duplicates									
HC10-Preleach Residue		0.23			23.5			Slight	23.5

QA/QC									
Blank		<0.01							
Certified standards									
NBM-1					41.9			Slight	
TIC-L1		0.13							

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HC10-Preleach Residue	1.26	42	1.41	32	464	4.99	0.17	8	0.97	385	0.04	30	0.05	1.66	53	0.25	97
Duplicates																	
HC10-Preleach Residue	1.27	42	1.43	33	480	5	0.18	9	0.98	389	0.04	30	0.06	1.68	53.4	0.26	100
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 151b	2.49	69	1.38	28	1844	3.37	0.41	6	1.44	281	0.17	14	0.06	0.75	37.6	0.08	149
OREAS 261	1.34	169	1.16	50	64	3.71	0.29	21	0.66	467	0.09	75	0.04	0.11	17.1	<0.01	22

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
HC10-Preleach Residue	27	8.3	0.26	10	0.2	5.3	0.02	8.38	44.8	0.20	5.1	0.2	0.32	0.1	<0.02	3.5	0.11
Duplicates																	
HC10-Preleach Residue	27	8.8	0.32	10	0.1	5.2	0.02	8.22	44.7	0.21	5.2	0.2	0.32	0.1	<0.02	3.5	0.11
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	0.01	<0.05	<0.1	<0.05	<0.1	0.2	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 151b	240	3.1	0.57	31	0.2	0.4	0.66	15.94	12.2	1.35	8.2	0.2	0.09	0.0	0.08	7.1	0.13
OREAS 261	129	14.2	0.20	16	1	0.6	0.27	54.28	31.2	3.21	4.4	0.2	0.47	0.1	0.03	27	0.14

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
HC10-Preleach Residue	7.04	0.44	1.8	10.4	2.1	6.4	<1	<0.3	<0.05	0.2	0.44	0.4	0.02	0.11	3.8	7.51	0.8
Duplicates																	
HC10-Preleach Residue	6.97	0.48	1.8	10.5	2.3	6.7	<1	<0.3	<0.05	0.2	0.55	0.4	0.03	0.11	4	7.92	0.8
QA/QC																	
Blank	<0.05	0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 151b	59	0.23	42.9	20.9	0.6	9.5	2	1.1	<0.05	0.4	0.10	2.6	0.11	0.60	0.7	10.70	0.9
OREAS 261	0.48	0.06	34.9	19.1	2.5	3.1	<1	0.4	<0.05	0.5	0.12	11.7	0.28	1.35	0.1	11.30	0.9

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ANALYSIS REPORT

ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GGC-07	Expected value	0.51			0.56						
	Tolerance (+/-)	0.09			0.09						
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						41.79	51.49	57.6	Slight	
	Tolerance (+/-)						2.87	2.54	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code		ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22
	Tolerance (%)	3.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code		ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
OREAS 502C	Expected value	102	9.53	0.80	59	0.53	0.68	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22
	Tolerance (%)	15.0	15.7	20.1	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4
OREAS 503D	Expected value	67	12.2	1.32	87	0.6	1.4	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21
	Tolerance (%)	21.4	22.0	25.1	15.8	38.6	11.1		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6
OREAS 260	Expected value	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14
	Tolerance (%)	14.4		26.7	36.0	24.0	16.7	24.3		12.9		42.2				55.6		12.9
OREAS 920	Expected value	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2	
	Tolerance (%)	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3	
OREAS 209	Expected value	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13
	Tolerance (%)	15.5	13.5	41.4	13.5		20.3		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7
OREAS 905	Expected value	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03
	Tolerance (%)	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12
OREAS 261	Expected value	128		0.20	17.8	1.23	0.59	0.27		31.5		5.0			0.1	0.03		0.14
	Tolerance (%)	12.0		22.3	24.0	30.3	18.5	19.3		10.8		15.0			45.2	188.6		27.9
OREAS 263	Expected value	127		0.29	30.8	1.22	0.57	0.27		31		4.9			0.2	0.03		
	Tolerance (%)	12.0		18.8	18.1	30.5	18.8	19.3		10.8		15.1			24.7	182.4		

CRM	Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code		ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Modified Acid Base Accounting
Date :January 25/2022

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified	Fizz Test
	pH	%	NP	%	%	%		NP	NP	
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.20	0.01	#N/A	0.005	0.01		#N/A		#N/A	#N/A
CAOND159634	8.69	2.32	193.3	0.301	<0.01	0.301	9.41	195.7	186.3	Moderate
CAOND159652	9.24	0.45	37.5	0.068	<0.01	0.068	2.13	41.3	39.2	Slight
CAOND163777	9.37	0.16	13.3	0.077	<0.01	0.077	2.41	17.9	15.5	Slight
CAOND163784	9.04	0.89	74.2	0.050	<0.01	0.050	1.56	91.0	89.5	Slight
CAOND163810	9.33	0.39	32.5	0.044	<0.01	0.044	1.38	36.2	34.8	Slight
CAOND163856	8.84	0.96	80.0	0.950	<0.01	0.950	29.69	84.9	55.2	Moderate
CAOND163898	8.97	1.00	83.3	0.028	<0.01	0.028	0.88	87.8	87.0	Moderate
CAOND164896	9.19	0.09	7.5	0.128	<0.01	0.128	4.00	13.1	9.1	Slight
CAOND164897	9.15	0.09	7.5	0.130	<0.01	0.130	4.06	13.1	9.1	Slight
CAOND164912	9.22	0.49	40.8	0.163	<0.01	0.163	5.09	46.3	41.2	Slight
CAOND164938	8.94	1.12	93.3	0.048	<0.01	0.048	1.50	99.1	97.6	Moderate
CAOND165224	9.05	1.04	86.7	1.017	0.02	0.997	31.16	87.6	56.4	Moderate
CAOND165226	9.04	0.72	60.0	2.185	0.02	2.165	67.66	62.5	-5.1	Moderate
CAOND165262	9.10	1.43	119.2	0.085	<0.01	0.085	2.66	119.3	116.7	Moderate
CAOND165292	9.29	1.32	110.0	0.038	<0.01	0.038	1.19	94.2	93.0	Slight
CAOND167536	9.08	1.82	151.7	0.037	<0.01	0.037	1.16	137.7	136.6	Moderate
CAOND167549	9.12	0.19	15.8	0.053	<0.01	0.053	1.66	21.5	19.8	Slight
CAOND167706	9.14	0.08	6.7	0.062	<0.01	0.062	1.94	9.6	7.6	Slight
CAOND167723	8.95	1.90	158.3	0.762	<0.01	0.762	23.81	160.9	137.1	Moderate
CAOND168748	8.92	1.63	135.8	0.061	<0.01	0.061	1.91	132.8	130.9	Moderate
CAOND168764	9.49	0.05	4.2	0.112	<0.01	0.112	3.50	9.6	6.1	None
CAOND168782	9.26	0.87	72.5	0.089	<0.01	0.089	2.78	73.6	70.9	Moderate
CAOND169332	9.32	0.88	73.3	0.247	<0.01	0.247	7.72	78.3	70.6	Moderate
CAOND169343	9.48	0.50	41.7	0.320	<0.01	0.320	10.00	45.6	35.6	Moderate
CAOND183467	9.50	0.14	11.7	0.145	<0.01	0.145	4.53	16.8	12.3	Slight
CAOND183477	9.39	0.66	55.0	0.092	<0.01	0.092	2.88	58.5	55.6	Moderate
CAOND188865	9.37	0.24	20.0	0.087	<0.01	0.087	2.72	24.7	22.0	Slight
CAOND188887	9.17	0.27	22.5	0.032	<0.01	0.032	1.00	28.2	27.2	Slight
CAOND188908	9.57	0.87	72.5	0.051	<0.01	0.051	1.59	72.7	71.1	Moderate
Duplicates										
CAOND159634								196.7		Moderate
CAOND168748								133.7		Moderate
CAOND168764								9.6		None
CAOND183477					<0.01					
CAOND168782				0.083						
CAOND164912		0.49								
QC										
GS314-2				2.526						
RTS-3A					0.88					
RTS-3A					0.94					
SY4		0.9								
NBM-1								41.2		Slight
NBM-1								41.2		Slight
OREAS 278										
Expected Values		0.91		2.56	0.98	0.699		46.0		Slight
Tolerance +/-		0.07		0.14	0.12	0.059		10.1		
TIC-L1		0.13								
GGC-07				0.532						
Expected Values		0.13		0.51						
Tolerance +/-		0.02		0.09						

Note:
AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.
NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.
NET Modified NP = Modified NP - AP
Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.
Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish.
Sulphide Sulphur determined by calculation

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date :January 25/2022

Sample ID	Ag	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	mg/kg	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
CAOND163777	0.02	2.08	<5	1.14	206	36.1	3.57	0.08	18	2.5	455	0.03	69	0.03	0.1	19.8	0.26	100
CAOND165226	0.85	1.57	17	2.99	31	2783	11.48	0.09	14	1.82	446	0.04	60	0.05	2.38	21.0	0.52	292
CAOND165262	0.06	2.36	17	4.50	25	660	6.8	0.22	18	2.64	587	0.03	30	0.05	0.1	82.4	0.07	242
CAOND167549	0.06	2.52	5	1.31	252	103	4.46	0.06	21	3.11	738	0.02	93	0.03	0.06	27.4	0.33	124
CAOND168782	0.26	1.55	<5	3.76	60	321	3.2	0.02	9	1.29	497	0.03	31	0.04	0.12	64.7	0.45	140
DUP																		
CAOND165226	1.08	1.53	16	2.92	31	2697	11.4	0.09	14	1.76	430	0.04	61	0.05	2.41	20.3	0.51	281
QC																		
OREAS 502C	0.75	1.88	424	1.04	65	7418	4.43	1.07	29	1.26	378	0.16	34	0.1	0.91	63.3	0.34	111
Expected Values	0.796	2.07	383	1.09	66	0.779	4.45	1.07	30.9	1.21	380	0.192	36.4	0.096	0.821	66	0.34	110
Tolerance (%)	20.14	15.6	17.7	18.4	18.7	6.64	11.39	15.2	14.1	10.2	7.18	32.2	18.8	12.5	14.5	25.5	10.8	11.3

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Zn ppm	Zr ppm	As ppm	Be ppm	Bi ppm	Cd ppm	Ce ppm	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm	Nb ppm
Method Code	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	1	0.5	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05
CAOND163777	26	4	5	<0.1	0.03	<0.01	4.5	24.9	0.36	7.6	<0.1	0.19	<0.01	<0.02	1.6	0.09	0.3	0.18
CAOND165226	26	26.4	17	0.4	10.91	<0.01	11.58	57.5	0.28	12.9	0.4	1.01	0.21	0.04	5.5	0.24	120	0.47
CAOND165262	27	11.4	5	0.3	0.63	<0.01	14.48	28.9	0.77	12.3	0.2	0.38	0.05	0.03	7.9	0.16	22.07	<0.05
CAOND167549	50	7	5	0.1	<0.02	0.01	5.74	35.6	0.52	9.4	<0.1	0.33	0.02	<0.02	1.9	0.15	0.26	0.17
CAOND168782	19	9.8	6	0.3	0.22	0.01	7.37	22	0.08	8.2	0.3	0.58	0.01	<0.02	2.5	0.23	0.64	0.75
DUP																		
CAOND165226	26	25.4	16	0.3	11.07	<0.01	11.08	55.9	0.27	12.4	0.4	0.99	0.22	0.04	5.3	0.25	111	0.48
QC																		
OREAS 502C	99	9.2	56	0.5	0.64	0.29	59.33	13.5	8.76	9.3	0.3	0.42	0.02	0.05	29.1	0.19	230	1.76
Expected Values	102	9.53	59	0.53	0.68	BDL	59	13.5	9.02	8.67	BDL	0.41	BDL	0.061	29.4	0.22	223	BDL
Tolerance (%)	15.0	15.7	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8	

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
CAOND163777	0.3	5.7	0.7	3.4	<1	<0.3	<0.05	0.28	<0.05	0.1	0.03	<0.05	0.4	9.19	0.8
CAOND165226	1.1	6.5	2.53	12.4	7	1	<0.05	0.57	1.2	0.3	0.03	0.83	15.4	20.14	2
CAOND165262	2	16.4	1.56	19	<1	<0.3	<0.05	0.35	0.06	0.2	0.06	0.35	0.8	11.03	1.2
CAOND167549	0.4	3.4	2.14	4.3	<1	<0.3	<0.05	0.37	<0.05	0.1	0.02	<0.05	0.2	12.73	1.2
CAOND168782	1	1	2.62	6.4	<1	0.6	<0.05	0.59	<0.05	0.2	<0.02	0.07	2	21.38	2.1
DUP															
CAOND165226	1.1	6.2	2.51	11.7	6	1	<0.05	0.54	1.22	0.3	0.03	0.79	15	18.83	2
QC															
OREAS 502C	11.3	129	4.25	7.8	3	2.5	<0.05	0.55	0.41	18	0.66	4.52	3.3	15.85	1.4
Expected Values	11.1	124	4.78	7.28	BDL	2.71	0.009	0.58	0.47	17.6	0.67	4.53	2.98	16.1	1.51
Tolerance (%)	24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : April 13/ 2022

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified	Fizz Test
	pH	%	NP	%	%	%		NP	NP	
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.20	0.01	#N/A	0.005	0.01		#N/A		#N/A	#N/A
CAOND128083	9.25	0.15	12.5	0.055	<0.01	0.055	1.72	15.5	13.8	Slight
CAOND128098	9.03	1.68	140.0	0.066	<0.01	0.066	2.06	140.3	138.2	Moderate
CAOND128133	8.78	1.4	116.7	0.11	<0.01	0.11	3.44	120.3	116.8	Moderate
CAOND128147	8.85	1.15	95.8	0.056	<0.01	0.056	1.75	96.1	94.4	Moderate
CAOND128163	8.91	1.95	162.5	0.098	<0.01	0.098	3.06	161.8	158.8	Moderate
CAOND128183	8.15	5.5	458.3	0.099	<0.01	0.099	3.09	461.1	458.0	Slight
CAOND128192	9.60	1.07	89.2	0.034	<0.01	0.034	1.06	91.9	90.9	Moderate
CAOND130898	9.08	0.49	40.8	0.12	<0.01	0.12	3.75	45.0	41.3	Moderate
CAOND130912	9.10	1.14	95.0	0.058	<0.01	0.058	1.81	103.1	101.3	Moderate
CAOND130922	9.31	0.21	17.5	0.017	<0.01	0.017	0.53	22.3	21.7	Slight
CAOND130939	9.08	1.5	125.0	0.217	<0.01	0.217	6.78	132.6	125.8	Moderate
CAOND130973	8.85	0.41	34.2	0.07	<0.01	0.07	2.19	43.9	41.7	Moderate
CAOND135432	9.22	0.1	8.3	0.122	<0.01	0.122	3.81	37.7	33.9	Slight
CAOND135447	9.54	0.29	24.2	0.058	<0.01	0.058	1.81	26.6	24.8	Slight
CAOND135493	9.48	0.12	10.0	0.044	<0.01	0.044	1.38	14.7	13.3	Slight
CAOND135669	8.64	0.14	11.7	1.697	0.03	1.667	52.09	16.0	-36.0	Slight
CAOND135691	9.18	0.21	17.5	0.078	<0.01	0.078	2.44	21.5	19.1	Slight
CAOND135702	9.33	0.04	3.3	0.094	<0.01	0.094	2.94	8.0	5.0	Slight
CAOND135719	9.42	0.07	5.8	0.122	<0.01	0.122	3.81	9.6	5.8	Slight
CAOND136961	9.01	1.2	100.0	2.035	<0.01	2.035	63.59	104.6	41.0	Moderate
CAOND143739	9.41	0.07	5.8	0.045	<0.01	0.045	1.41	9.2	7.8	Slight
CAOND143752	9.45	0.25	20.8	0.137	<0.01	0.137	4.28	22.8	18.5	Slight
CAOND143769	9.12	0.5	41.7	0.077	<0.01	0.077	2.41	45.6	43.2	Moderate
CAOND143779	9.19	0.08	6.7	0.128	<0.01	0.128	4.00	10.4	6.4	Slight
CAOND147295	9.14	0.27	22.5	0.012	<0.01	0.012	0.38	27.0	26.6	Slight
CAOND147309	9.06	0.69	57.5	0.27	<0.01	0.27	8.44	62.7	54.3	Moderate
CAOND147365	9.39	0.1	8.3	0.196	<0.01	0.196	6.13	12.3	6.1	Slight
CAOND147376	9.03	1.03	85.8	0.057	<0.01	0.057	1.78	89.7	87.9	Moderate
CAOND147387	9.39	0.25	20.8	0.028	<0.01	0.028	0.88	24.4	23.5	Slight
CAOND147404	9.54	0.31	25.8	0.022	<0.01	0.022	0.69	29.7	29.0	Slight
CAOND152411	9.01	0.3	25.0	0.076	<0.01	0.076	2.38	29.4	27.0	Slight
CAOND152417	9.42	0.07	5.8	0.09	<0.01	0.09	2.81	10.3	7.5	None
CAOND152424	9.09	0.11	9.2	0.098	<0.01	0.098	3.06	13.7	10.7	Slight
CAOND152437	8.51	0.96	80.0	0.113	<0.01	0.113	3.53	84.3	80.8	Moderate
CAOND160691	9.55	0.13	10.8	0.073	<0.01	0.073	2.28	14.3	12.1	Slight
CAOND160704	9.52	0.64	53.3	0.123	<0.01	0.123	3.84	58.1	54.2	Moderate
CAOND160721	9.35	0.16	13.3	0.082	<0.01	0.082	2.56	17.6	15.1	Slight
CAOND160761	9.02	0.11	9.2	0.02	<0.01	0.02	0.63	15.0	14.3	None
CAOND160774	9.23	0.18	15.0	0.052	<0.01	0.052	1.63	19.5	17.9	Slight
CAOND160788	9.31	0.13	10.8	0.097	<0.01	0.097	3.03	15.8	12.8	Slight
CAOND162504	9.32	0.27	22.5	0.204	<0.01	0.204	6.38	25.1	18.7	Slight
CAOND162513	9.64	0.02	1.7	0.041	<0.01	0.041	1.28	5.4	4.2	None
CAOND162549	9.58	0.3	25.0	0.025	<0.01	0.025	0.78	28.1	27.3	Slight
CAOND162569	9.53	0.77	64.2	0.022	<0.01	0.022	0.69	14.5	13.8	Moderate
CAOND163334	9.47	0.27	22.5	0.156	<0.01	0.156	4.88	25.2	20.4	Slight
CAOND163343	9.67	0.06	5.0	0.106	<0.01	0.106	3.31	8.8	5.5	None
CAOND163353	9.53	0.23	19.2	0.125	<0.01	0.125	3.91	22.9	19.0	Slight
CAOND163396	9.35	0.23	19.2	0.237	<0.01	0.237	7.41	22.4	15.0	Slight
CAOND163405	9.30	0.09	7.5	0.103	<0.01	0.103	3.22	11.6	8.4	Slight
CAOND163421	9.31	0.02	1.7	0.304	<0.01	0.304	9.50	6.9	-2.6	None
CAOND163433	9.29	0.34	28.3	0.29	<0.01	0.29	9.06	32.1	23.0	Slight
CAOND163446	8.96	1.57	130.8	0.074	<0.01	0.074	2.31	134.9	132.6	Moderate
CAOND163796	8.92	1.58	131.7	0.189	<0.01	0.189	5.91	135.4	129.5	Moderate
CAOND163824	9.26	0.13	10.8	0.201	<0.01	0.201	6.28	14.6	8.3	Slight
CAOND163834	8.87	2.02	168.3	0.144	<0.01	0.144	4.50	147.0	142.5	Moderate
CAOND163908	9.47	1.12	93.3	0.047	<0.01	0.047	1.47	93.1	91.6	Moderate
CAOND163918	9.21	0.45	37.5	0.098	0.02	0.078	2.44	38.9	36.4	Slight
CAOND164779	8.72	1.2	100.0	0.203	<0.01	0.203	6.34	99.3	92.9	Moderate
CAOND164923	8.98	0.46	38.3	0.013	<0.01	0.013	0.41	49.0	48.6	Slight
CAOND164932	9.33	0.1	8.3	0.044	<0.01	0.044	1.38	12.6	11.2	None
CAOND164955	9.30	0.25	20.8	0.042	<0.01	0.042	1.31	25.2	23.9	Slight
CAOND165195	9.14	0.03	2.5	0.079	<0.01	0.079	2.47	7.5	5.0	None
CAOND165203	9.02	0.42	35.0	0.038	<0.01	0.038	1.19	38.4	37.3	Slight
CAOND165558	8.94	0.92	76.7	0.203	<0.01	0.203	6.34	78.3	72.0	Moderate

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : April 13/ 2022

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified	Fizz Test
	pH	%	NP	%	%	%		NP	NP	
CAOND165612	9.09	0.7	58.3	0.092	<0.01	0.092	2.88	59.5	56.6	Slight
CAOND166348	9.21	0.04	3.3	0.115	<0.01	0.115	3.59	7.8	4.2	None
CAOND168893	9.39	0.28	23.3	0.006	<0.01	0.006	0.19	27.3	27.1	Slight
CAOND169457	9.23	1.26	105.0	0.065	<0.01	0.065	2.03	104.3	102.2	Moderate
CAOND175906	9.46	0.86	71.7	0.013	<0.01	0.013	0.41	66.1	65.7	Slight
CAOND175938	9.41	1.55	129.2	0.105	<0.01	0.105	3.28	99.7	96.4	Slight
CAOND179977	9.33	0.9	75.0	0.192	0.04	0.152	4.75	76.1	71.4	Slight
CAOND181514	9.27	1.82	151.7	0.045	<0.01	0.045	1.41	150.5	149.1	Moderate
CAOND184563	9.16	0.44	36.7	0.08	<0.01	0.08	2.50	41.1	38.6	Slight
CAOND185519	9.10	0.15	12.5	0.023	<0.01	0.023	0.72	17.5	16.8	Slight
CAOND186035	9.32	0.13	10.8	0.065	<0.01	0.065	2.03	15.5	13.5	None
CAOND186041	9.47	0.08	6.7	0.015	<0.01	0.015	0.47	11.4	10.9	None
CAOND186416	9.37	0.05	4.2	0.257	<0.01	0.257	8.03	8.8	0.8	None
CAOND186418	9.06	0.13	10.8	0.966	0.02	0.946	29.56	14.4	-15.1	Slight
CAOND186426	9.46	0.2	16.7	0.138	<0.01	0.138	4.31	20.5	16.2	Slight
CAOND186541	9.08	0.92	76.7	0.045	0.04	0.005	0.16	84.0	83.8	Slight
CAOND186548	9.10	2.14	178.3	0.12	<0.01	0.12	3.75	175.2	171.4	Moderate
CAOND186553	9.25	1.22	101.7	0.014	<0.01	0.014	0.44	106.2	105.8	Slight
CAOND186834	9.46	0.92	76.7	0.23	<0.01	0.23	7.19	80.6	73.4	Slight
CAOND186840	9.28	0.83	69.2	0.284	<0.01	0.284	8.88	72.7	63.9	Slight
CAOND187492	9.34	0.05	4.2	0.066	<0.01	0.066	2.06	9.3	7.2	None
CAOND187498	9.25	0.1	8.3	0.039	<0.01	0.039	1.22	38.1	36.9	None
CAOND187628	9.39	0.24	20.0	0.009	<0.01	0.009	0.28	23.8	23.6	Slight
CAOND187636	9.66	0.77	64.2	0.082	<0.01	0.082	2.56	67.3	64.7	Slight
CAOND188616	8.84	1.25	104.2	0.057	<0.01	0.057	1.78	103.2	101.5	Moderate
CAOND188623	9.40	0.11	9.2	0.026	<0.01	0.026	0.81	14.7	13.9	None
CAOND188631	9.23	0.1	8.3	0.08	<0.01	0.08	2.50	15.0	12.5	Slight
CAOND188640	8.85	2.11	175.8	0.064	<0.01	0.064	2.00	169.6	167.6	Moderate
CAOND188895	9.40	0.28	23.3	0.039	<0.01	0.039	1.22	27.5	26.3	Slight
CAOND188916	9.26	0.83	69.2	0.061	<0.01	0.061	1.91	70.4	68.5	Moderate
CAOND189446	9.09	0.59	49.2	0.02	<0.01	0.02	0.63	53.5	52.9	Slight
CAOND189719	9.13	2.14	178.3	0.057	<0.01	0.057	1.78	174.0	172.2	Moderate
CAOND191002	8.84	1.65	137.5	0.085	<0.01	0.085	2.66	141.1	138.4	Moderate
CAOND191005	8.95	1.47	122.5	0.056	<0.01	0.056	1.75	129.5	127.7	Moderate
CAOND191008	9.02	2.41	200.8	0.062	<0.01	0.062	1.94	196.6	194.6	Moderate
CAOND191089	9.40	0.92	76.7	0.207	<0.01	0.207	6.47	78.1	71.6	Slight
CAOND191157	9.16	0.57	47.5	0.038	<0.01	0.038	1.19	50.9	49.7	Slight
CAOND194796	9.51	0.28	23.3	0.16	<0.01	0.16	5.00	27.2	22.2	Slight
CAOND198933	8.67	0.07	5.8	0.075	0.05	0.025	0.78	49.6	48.8	None
CAOND200894	9.21	0.61	50.8	1.125	<0.01	1.125	35.16	51.5	16.3	Slight
CAOND200903	9.72	0.34	28.3	0.112	<0.01	0.112	3.50	28.5	25.0	Slight
KLUB11_180W2_179564	8.67	0.38	31.7	0.193	0.04	0.153	4.78	34.3	29.5	Slight
KLUB11_180W2_179592	8.51	0.53	44.2	0.031	0.03	0.001	0.03	49.4	49.3	Slight
KLUB11_180W2_179597	8.31	1.05	87.5	3.021	0.01	3.011	94.09	73.5	-20.6	Slight
KLUB12_207_256263	8.60	0.54	45.0	0.079	0.08	-0.001	-0.03	53.7	53.7	Slight
KLUB12_207_256280	8.54	1.4	116.7	0.61	0.67	-0.06	-1.88	122.5	124.4	Moderate
KLUB12_207W1_256537	8.85	0.07	5.8	1.76	0.01	1.75	54.69	8.9	-45.8	None
KLUB12_207W1_256548	8.91	0.28	23.3	2.08	<0.01	2.08	65.00	24.9	-40.1	Slight
KLUB12_210W1_248885	8.58	0.63	52.5	0.085	0.07	0.015	0.47	55.1	54.6	Slight
KLUB12_210W1_248895	8.88	0.92	76.7	0.042	<0.01	0.042	1.31	75.9	74.6	Slight
KLUB12_222_257822	8.93	0.32	26.7	0.017	<0.01	0.017	0.53	29.2	28.7	Slight
KLUB12_222_257834	9.08	0.06	5.0	0.355	<0.01	0.355	11.09	8.5	-2.6	None
KLUB12_223_251189	8.63	2.03	169.2	0.925	<0.01	0.925	28.91	167.8	138.9	Moderate
KLUB12_223_251197	8.57	0.36	30.0	0.149	0.03	0.119	3.72	32.7	29.0	Slight
Duplicates										
CAOND128083	9.21							16.5		Slight
CAOND136961	9.00							104.0		Moderate
CAOND143739	9.46							9.2		Slight
CAOND160788	9.31							15.8		Slight
CAOND162504	9.32							25.1		Slight
CAOND164932	9.34				<0.01			12.6		None
CAOND164955	9.30							27.3		Slight
CAOND186541	9.03							84.0		Slight
CAOND186548	9.08				<0.01			175.8		Moderate
CAOND191089	9.41							9.41		Slight

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : April 13/ 2022

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified	Fizz Test
	pH	%	NP	%	%	%		NP	NP	
CAOND191157	9.15							48.5		Slight
CAOND181514				0.028						
CAOND188631				0.084						
KLUB12_210W1_248895		0.91		0.038						
CAOND188623					<0.01					
KLUB12_223_251189					<0.01					
CAOND135432					<0.01					
CAOND160691					<0.01					
CAOND130939				0.203						
CAOND163353				0.133						
QC										
GS314-2				2.676						
RTS-3A					0.97					
RTS-3A					1.01					
RTS-3A					0.97					
RTS-3A					0.96					
RTS-3A					0.93					
SY4		0.91								
NBM-1								40.5		Slight
NBM-1								40.0		Slight
NBM-1								40.2		Slight
NBM-1								40.2		Slight
NBM-1								41.4		Slight
OREAS 278										
Expected Values		0.91		2.56	0.98			46.0		Slight
Tolerance +/-		0.07		0.14	0.12			10.1		
GGC-07				0.532						
GGC-07				0.525						
GGC-07				0.511						
Expected Values				0.51						
Tolerance +/-				0.09						

Note:
AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.
NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.
NET Modified NP = Modified NP - AP
Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.
Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish.
Sulfide by calculation

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : April 13/ 2022

Sample ID	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn
	mg/kg	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm
Method Code	ICM21B20	ICP21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	ICP21B20	IMS21B20	ICP21B20	ICP21B20
LOD	0.01	0.01	1	5	0.1	0.02	0.01	0.01	0.05	0.1	1	0.05	0.5	0.01	0.1	0.1	0.05	0.01	0.02	0.01	0.1	1	0.01	0.01	2
CAOND128083	0.04	1.7	8	<5	0.2	0.07	1.2	<0.01	10.61	23.9	77	0.21	82.9	4.54	8.6	0.2	0.3	0.05	0.02	0.05	3.9	13	0.2	1.75	525
CAOND128098	0.06	2.91	4	6	0.4	0.07	5.14	0.01	11.56	28.7	97	0.18	169	6.33	15.1	0.5	0.33	0.03	0.06	0.02	4.2	27	0.32	2.94	905
CAOND128133	0.05	3.93	9	<5	0.3	0.13	4.42	<0.01	6.06	45.2	187	0.36	139	7.17	16	0.6	0.17	0.03	0.05	0.01	1.8	33	0.26	4.43	875
CAOND128147	0.14	3.49	3	<5	0.3	0.08	3.65	<0.01	8.27	49.4	318	0.91	383	6.81	14.6	0.5	0.25	0.07	0.05	0.04	3.4	29	0.2	4.61	628
CAOND128163	0.17	2.41	14	<5	0.2	0.24	5.86	0.02	4.79	65.7	266	0.55	1065	5.31	12.3	0.3	0.3	0.38	0.03	0.04	2	20	0.15	3.19	563
CAOND128183	1.7	0.73	4	13	0.2	7.27	14.98	0.36	27.61	15.4	3	0.45	247	1.25	2.4	<0.1	0.18	0.3	0.06	0.1	12.3	9	0.21	0.83	1051
CAOND128192	<0.01	0.77	<1	48	0.3	0.07	3.37	<0.01	35.85	5	5	0.43	2.7	1.17	2.4	<0.1	0.36	0.06	<0.02	0.23	16.7	7	0.06	0.57	252
CAOND130898	<0.01	2.52	10	9	0.2	0.04	2.13	<0.01	5.17	31.6	139	0.56	119	4.89	8.1	0.2	0.12	0.06	<0.02	0.13	1.8	20	0.12	2.63	561
CAOND130912	0.15	2.52	5	29	0.8	0.09	3.98	<0.01	47.69	22.2	138	0.4	593	5.69	12.1	0.4	0.64	0.11	0.04	0.1	21.8	20	0.1	3.11	596
CAOND130922	<0.01	1.84	3	14	0.3	0.08	1.54	<0.01	7.48	26.4	129	0.37	123	5.65	7.8	0.2	0.37	0.06	0.02	0.1	2.8	15	0.16	1.94	377
CAOND130939	0.14	3.64	7	13	0.8	0.12	5.01	0.01	6.75	49.2	181	0.4	515	7.63	13.9	0.4	0.19	0.07	0.05	0.08	2.8	40	0.17	3.67	817
CAOND130973	0.1	1.13	3	66	0.3	0.06	1.84	<0.01	28.51	11.3	25	0.13	496	2.33	6.8	0.2	0.7	0.1	<0.02	0.09	13.5	10	0.07	1.21	299
CAOND135432	0.03	1.67	18	<5	0.3	0.17	1.23	0.01	8.94	41.3	113	0.15	533	5.92	9.9	0.3	0.53	0.07	0.03	0.03	3.4	12	0.23	1.89	376
CAOND135447	0.05	1.19	10	<5	0.2	0.14	1.86	0.01	9.29	18.4	40	0.1	587	4.91	7.3	0.3	0.51	0.49	<0.02	0.03	3.8	8	0.19	1.07	295
CAOND135493	0.01	1.33	7	7	0.2	0.51	1.31	<0.01	9	26	31	0.15	207	3.95	8.1	0.2	0.51	0.39	<0.02	0.05	3	11	0.21	1.51	364
CAOND135669	0.12	2.34	13	20	0.3	0.58	1.29	<0.01	4.75	45.9	31	0.16	356	11.43	10.4	0.4	0.48	0.26	0.03	0.04	1.6	19	0.21	2.21	904
CAOND135691	0.01	2.65	8	<5	0.2	0.02	1.62	<0.01	8.34	31.7	147	0.27	72.5	4.95	9.1	0.2	0.22	0.07	<0.02	0.05	3.2	23	0.16	2.57	665
CAOND135702	<0.01	1.88	6	6	0.1	0.06	1.08	<0.01	5.36	24.7	92	0.42	91	3.42	6.3	<0.1	0.26	0.06	<0.02	0.09	1.9	15	0.16	1.73	368
CAOND135719	0.09	1.75	8	<5	0.1	0.04	0.97	<0.01	4.31	27.4	92	0.26	124	3.08	5.6	0.1	0.24	0.03	<0.02	0.05	1.4	17	0.12	1.66	425
CAOND136961	0.13	3.37	10	6	0.4	2.03	3.87	0.02	9.79	82.4	212	0.4	43.8	7.4	14.6	0.3	0.2	0.28	0.04	0.03	4.4	45	0.1	3.55	1018
CAOND143739	0.06	1.41	4	<5	0.2	0.09	1.07	<0.01	7.73	18.6	50	0.3	90	3.7	6.8	0.1	0.55	0.03	<0.02	0.06	2.7	10	0.23	1.26	352
CAOND143752	<0.01	1.03	6	<5	0.2	0.13	1.5	<0.01	9.02	19.4	48	0.15	126	2.98	6.2	0.2	0.66	0.04	<0.02	0.04	3	7	0.26	0.96	319
CAOND143769	0.03	2.29	12	<5	0.4	0.16	2.13	<0.01	11.55	88.8	106	0.35	671	7.9	16.9	0.6	0.73	0.06	0.02	0.04	4.2	20	0.37	2.62	634
CAOND143779	0.04	1.81	5	6	0.2	0.08	1.04	<0.01	6.65	26.1	117	0.34	129	3.2	6.6	0.1	0.23	0.01	<0.02	0.07	2.3	16	0.16	1.84	426
CAOND147295	<0.01	2.44	6	15	0.2	0.04	1.74	<0.01	9.57	25.4	57	0.28	23.7	6.65	11.4	0.3	0.54	0.05	<0.02	0.06	3.4	19	0.23	2.65	675
CAOND147309	<0.01	2.95	10	29	0.3	0.1	2.68	0.01	9.25	36.2	153	0.32	26.2	6.53	11.3	0.2	0.21	0.06	0.03	0.06	3.4	26	0.19	3.29	713
CAOND147365	0.08	1.72	6	10	0.1	0.06	1.14	<0.01	6.77	32.3	92	0.21	665	3.26	5.6	0.1	0.19	0.06	<0.02	0.06	3.1	14	0.09	1.61	344
CAOND147376	0.25	3.34	4	8	0.3	0.07	3.49	<0.01	6.88	37.6	262	0.41	200	6.91	14.1	0.4	0.24	0.07	0.04	0.03	3.2	31	0.18	3.4	664
CAOND147387	0.07	1.97	3	8	0.3	0.14	1.66	<0.01	11.2	22.8	163	0.2	243	5.37	9.6	0.3	0.41	0.07	0.04	0.05	4.8	14	0.19	2.07	422
CAOND147404	0.03	1.63	4	9	0.1	0.13	1.86	<0.01	4.74	18.3	119	0.28	99	4.28	6.3	0.2	0.26	0.18	<0.02	0.07	1.8	13	0.11	1.44	347
CAOND152411	0.04	2.18	7	6	0.3	0.16	1.95	<0.01	7.56	27.8	125	0.19	160	4.09	9.1	0.2	0.31	0.04	<0.02	0.05	2.7	20	0.15	2.46	454
CAOND152417	0.04	1.67	5	8	0.1	0.5	1.07	<0.01	6.74	23.5	100	0.26	317	3.24	6.3	<0.1	0.22	0.08	<0.02	0.08	2.4	12	0.12	1.58	326
CAOND152424	0.02	2	6	10	0.2	0.14	1.09	<0.01	6.34	29.7	143	0.2	568	3.53	7.7	0.1	0.2	0.07	<0.02	0.05	2.2	19	0.12	2.28	390
CAOND152437	0.11	4.95	6	8	0.5	0.22	3.24	<0.01	9.58	41.1	240	0.4	882	8.94	20.3	0.4	0.42	0.12	0.04	0.04	4.4	49	0.18	6.16	969
CAOND160691	0.22	0.67	3	7	0.3	2.01	1.2	0.01	14.35	13.6	40	0.26	508	4.01	4.4	0.2	0.99	0.13	<0.02	0.07	6.7	4	0.31	0.57	158
CAOND160704	0.13	1.22	2	<5	0.3	2.23	2.34	<0.01	20.48	24.2	67	0.16	1254	4.61	10.5	0.3	0.35	0.07	0.03	0.04	7.9	11	0.26	1.29	427
CAOND160721	0.05	1.34	5	<5	0.3	0.36	1.47	<0.01	9.81	26.5	54	0.61	315	3.63	6.7	0.1	0.67	0.05	<0.02	0.12	3.1	10	0.3	1.29	280
CAOND160761	<0.01	2.43	6	5	0.3	<0.02	1.18	<0.01	8.4	34.1	135	0.4	57.4	6.16	11	0.2	0.29	0.07	<0.02	0.1	2.9	23	0.21	2.77	518
CAOND160774	<0.01	2.22	4	5	0.1	<0.02	1.43	<0.01	6.35	26.3	170	0.7	85.2	3.82	7.7	0.1	0.28	0.02	<0.02	0.12	2.1	19	0.16	2.18	540
CAOND160788	0.03	2.45	5	5	0.1	<0.02	1.29	<0.01	5.9	30.3	206	0.65	297	4.01	8.1	0.1	0.25	0.1	<0.02	0.1	2	24	0.15	2.52	475
CAOND162504	0.04	1.15	4	6	0.2	0.26	1.64	<0.01	11.02	32.4	62	0.08	1695	4.35	7.3	0.3	0.8	0.09	0.02	0.03	3.8	9	0.33	1.2	301
CAOND162513	0.06	1.3	3	8	0.2	0.18	0.98	<0.01	21.1	28.2	60	0.31	389	3.5	8.2	0.2	0.93	0.02	<0.02	0.05	9.6	9	0.27	1.28	317
CAOND162549	0.28	1.2	4	10	0.3	0.21	1.9	<0.01	11.03	26.2	28	0.11	128	5.43	7.7	0.4	0.8	0.1	<0.02	0.04	4.8	8	0.24	1.09	358
CAOND162569	<0.01	0.89	<1	27	0.2	0.02	2.45	<0.01	29.89	8.3	18	0.27	3.6	1.79	5.4	0.1	0.63	0.01	<0.02	0.13	13.6	7	0.06	0.8	240
CAOND163334	0.49	1	3	<5	0.3	9.97	1.58	<0.01	10.16	24.6	58	0.15	1443	4.88	7.2	0.3	0.9	0.27	<0.02	0.04	3.9	9	0.29	1.03	270
CAOND163343	0.01	1.03	6	<5	0.2	0.22	1.13	<0.01	12.74	18.7	51	0.19	189	2.95	6.3	0.2	0.82	0.02	<0.02	0.04	4.7	6	0.29	0.88	239
CAOND163353	0.09	1.53	4	<5	0.4	0.23	1.33	<0.01	10.53	54.2	76	0.26	151	7.08	10.7	0.3	1.13	0.02	0.02	0.02	3.9	12	0.36	1.83	364
CAOND163396	0.1	1.68	8	5	0.3	0.07	1.65	<0.01	9.97	25.5	56	0.26	127	4.02	8	0.2	0.65	0.03	<0.02	0.04	3.6	14	0.26	1.61	457
CAOND163405	<0.01	1.99	7	5	0.3	0.05	1.11	<0.01	10.84	23.7	58	0.51	53.5	4.7	9	0.2	0.59	0.03	<0.02	0.06	3.7	14	0.27	1.95	494
CAOND163421	0.06	2.12	22	7	0.2	0.14	1.03	<0.01	7.63	34.7	28	0.48	112	4.94	10.7	0.2	0.47	0.03	<0.02	0.07	2.7	17	0.19	2.03	456
CAOND163433	0.06	2.37	15	<5	0.2	0.12	2	<0.01	10.07	32	35	0.2	57.9	6.47	14.5	0.4	0.56	0.02	<0.02	0.03	3.8	20	0.21	2.28	629
CAOND163446	0.02	3.14	5	<5	0.8	0.16	4.94	<0.01	5.98	25.8	36	0.14	219	6.93	15.1	0.4	0.11	0.04	0.05	0.01	2.1	28	0.16	2.48	807
CAOND163796	0.01	2.74	10	<5	0.2	0.09	5.23	<0.01	9.83	37.9	87	0.08	87.4	6.36	12.8	0.4	0.36	0.21	<0.02	0.03	3.3	27	0.28	2.4	746
CAOND163824	0.04	1.3	15	18	0.2	0.2	1.17	<0.01	9.9	45.8	27	0.12	275	5	8.8	0.3	0.54	0.15	<0.02	0.05	3.8	10	0.21	1.46	421
CAOND163834	0.03	2.38	52	12	0.3	0.11	4.56	<0.01	10.54	47	32	0.58	1016	7.3	10.5	0.2	0.06	0.61	0.05	0.12	5.2	20	0.11	2.32	837
CAOND163908	0.05	1.19	1	23	0.2	0.06	3.69	0.03	35.19	8.3	16	0.29	67.4	2.08	5.5	0.2	0.36	0.06	<0.02	0.11	17.3	11	0.07	1.04	434
CAOND163918	0.06	0.92	2	318	0.4	1.19	1.71	0.02	30.03	8.9	20	0.24	648	2.22	5	0.2	0.69	0.42	<0.02	0.12	14.9	8	0.07	0.91	293
CAOND164779	0.13	4.13	9	30	0.3	0.61	3.84	0.01	16.72	38.1	23	0.95	1878	9.06	14.4	0.2	0.37	0.09	0.06	0.22	8.9	33	0.2	3.18	674
CAOND164923	0.05	1.81	5	27	1.1	0.18	2.79	0.02	66.94	22.5	110	0.25	26.7	5.28	11	0.4	0.28	0.05	0.03	0.08	31	13	0.32	2.25	584
CAOND164932	0.01	2.08	5	5	0.1	0.09	1.4	<0.01	5.36	30.7	204	0.54	90.5	3.54	7.1	0.2	0.3	0.02	<0.02	0.08	2.2	18	0.16	2.26	374
CAOND164955	0.04	1.96	4	<5	0.2	0.11	1.81	<0.01	5.74	25.2	151	0.82	171	3.32	7	0.1	0.32	0.15	<0.02	0.13	2	17	0.17	1.97	317
CAOND165195	0.02	2.18	7	<5	0.1	0.04	0.92	<0.01	5.7	31.8	197	0.35	99.4	3.7	6	0.1	0.1	0.04	<0.02	0.06	2.2	20	0.09	2.33	474
CAOND165203	0.03	2.4	5	<5	0.2	0.05	1.96	<0.01	5.33	28.1	206	0.37	73.4	4.52	8.1	0.2	0.15	0.05	<0.02	0.08	2	21	0.11	2.74	614
CAOND165558	8.35	2.01	5	8	0.2	0.32	3.42	<0.01	8.06	30.8	133	0.45	1733	6.2	9.2	0.2	0.26	0.71	<0.02	0.1	3.1	20	0.2	2.02	486
CAOND165612	0.21	1.53	4	28	0.3	1.57	2.96	0.02	19.72	35.2	36	0.51	925	8.1	9.7	0.5	0.67	0.35	0.03	0.08	10.2	14	0.24	1.89	570
CAOND166348	0.06	2.28	9	7	0.2	0.25	1.05	<0.01	5.99	28.4	136	0.4	104	4.4	7.8	0.1	0.15	0.04	<0.02	0.06	2.5	22	0.1	2.31	557
CAOND168893	<0.01	1.84	3	16	0.2	0.05	1.88	<0.01	11.33	17.5	72	0.18	12.5	3.59	7.9	0.3	0.32	0.02	<0.02	0.04	5.1	17	0.23	1.73	490
CAOND169457	0.09	2.4	8	11	0.2	0.66	4.68	0.01	7.69	46.1	214	0.43	67.2	7.02	10.7	0.4	0.43	0.06	0.05	0.08	3	20	0.2	2	1369
CAOND175906	0.02	1.12	<1	37	0.2	0.03	2.4	0.02	25.75	13.7	10	0.34	66.1	2.71	3.2	0.1	0.06	0.01	<0.02	0.18	11.8	12	0.03	0.75	236

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : April 13/ 2022

Sample ID	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn
	mg/kg	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm
CAOND175938	0.17	0.34	3	63	0.1	0.1	2.94	0.03	23.43	18.1	6	0.31	292	2.07	0.9	0.1	0.08	0.06	<0.02	0.18	10.8	1	0.03	0.82	320
CAOND179977	0.24	1.22	4	644	0.3	0.14	3.27	0.03	58.61	21.9	95	0.42	481	5.58	6	0.2	0.44	0.1	<0.02	0.22	28.4	9	0.09	0.96	330
CAOND181514	0.02	2.78	1	33	0.2	0.1	5.91	0.03	31.09	35.7	70	0.27	12.1	5.69	9.5	0.2	0.08	<0.01	<0.02	0.12	13.7	29	0.05	1.84	788
CAOND184563	0.04	2.87	3	5	0.2	<0.02	2.24	0.02	5.73	34.5	284	0.53	81.6	4.94	9.1	0.2	0.2	0.01	<0.02	0.05	2	31	0.16	3.2	811
CAOND185519	0.05	2.54	7	27	0.2	0.09	1.22	<0.01	9.23	34.2	131	0.43	94.4	5.94	10	0.2	0.39	0.08	0.02	0.11	3.3	24	0.25	2.46	683
CAOND186035	0.07	1.65	6	7	0.2	0.14	1.55	<0.01	9.1	22.3	58	0.09	188	3.49	7.1	0.2	0.7	0.01	<0.02	0.03	3.4	12	0.27	1.45	397
CAOND186041	0.03	1.64	3	8	0.2	0.07	1.34	<0.01	9.14	19.5	60	0.19	89.7	4.47	7.7	0.3	0.76	<0.01	<0.02	0.05	3.7	13	0.3	1.45	364
CAOND186416	0.12	1.48	21	7	0.3	0.09	1.14	<0.01	8.93	49.8	58	0.39	993	5.08	7.2	0.2	0.65	0.1	<0.02	0.11	3.4	11	0.29	1.36	338
CAOND186418	0.4	2.18	58	8	0.4	0.33	1.2	<0.01	8.11	222	87	0.53	1027	9.96	10.7	0.3	0.75	0.37	<0.02	0.08	3.7	19	0.28	2.21	455
CAOND186426	0.05	1.29	6	5	0.2	0.07	1.58	<0.01	8.32	22.8	51	0.14	60.1	3.24	6.2	0.2	0.63	0.02	<0.02	0.05	3.1	10	0.25	1.12	324
CAOND186541	0.05	2.48	6	993	0.3	0.12	3.94	0.02	8.53	31	77	0.23	65.8	7.65	11.3	0.6	0.54	0.29	0.04	0.04	3.4	17	0.24	3.08	1039
CAOND186548	0.05	2.62	6	21	0.4	0.14	6.67	0.02	7.7	26.3	49	0.47	145	6.86	9.3	0.2	0.16	0.03	0.03	0.18	3.5	19	0.17	2.35	1249
CAOND186553	0.04	2.52	6	18	1.1	0.09	4.56	0.02	55.51	22	63	0.17	61.4	8.1	11.6	0.5	0.68	0.07	0.05	0.05	28.5	20	0.18	2.72	948
CAOND186834	0.29	2.31	24	<5	<0.1	0.82	3.67	0.01	6.11	50.1	159	0.2	474	4.54	9.8	0.3	0.22	0.08	<0.02	0.04	2.8	31	0.08	2.06	911
CAOND186840	0.14	2.29	36	<5	<0.1	0.5	3.35	<0.01	4.24	44.1	178	0.11	158	4.36	7.7	0.3	0.14	0.09	<0.02	0.03	1.8	31	0.06	1.95	627
CAOND187492	0.06	1.69	4	<5	0.2	0.05	1.24	<0.01	8.09	30.2	45	0.57	208	4.22	5.6	0.1	0.35	0.02	<0.02	0.11	3.1	15	0.2	1.6	314
CAOND187498	0.02	1.67	3	5	0.2	0.04	1.26	<0.01	6.48	22.2	80	0.51	95.5	3.72	5.9	0.1	0.32	0.03	<0.02	0.1	2.3	14	0.19	1.74	341
CAOND187628	0.02	1.97	7	13	0.2	0.19	1.8	<0.01	7.36	29.4	33	0.11	10.2	5.08	10	0.4	0.57	0.01	<0.02	0.03	2.8	15	0.23	1.99	733
CAOND187636	0.16	0.85	1	32	0.2	0.03	2.75	0.01	11.55	6.8	11	0.35	385	1.48	3.1	0.1	0.33	0.09	<0.02	0.17	5.6	7	0.03	0.58	270
CAOND188616	0.02	3.87	4	6	0.3	0.07	4.39	0.01	6.96	52.4	110	0.47	138	8.43	14.6	0.3	0.22	0.05	0.04	0.08	2.6	42	0.27	3.64	878
CAOND188623	0.04	1.64	3	6	0.2	0.11	1.47	<0.01	8.68	39.5	85	0.26	227	4.59	7.4	0.3	0.44	0.05	<0.02	0.03	4.5	12	0.19	1.67	357
CAOND188631	0.02	2.24	5	<5	0.2	0.06	1.28	0.01	7.19	27.9	106	0.26	103	3.84	7.3	0.2	0.23	0.03	<0.02	0.04	2.8	24	0.17	2.3	509
CAOND188640	1.76	3.1	21	<5	0.5	1.14	6.15	0.17	3.46	40.4	97	0.93	99.8	5.32	7.5	0.2	0.13	0.17	0.03	0.15	1.4	25	0.14	3.06	647
CAOND188895	0.15	1.64	3	9	0.2	3	1.61	<0.01	6.99	40.2	137	0.78	307	5.61	9.3	0.4	0.5	0.12	0.02	0.08	2.7	14	0.21	2.01	302
CAOND188916	0.03	0.93	2	43	0.2	0.32	2.71	0.01	33.82	9.9	8	0.58	11.9	1.66	3.4	0.2	0.43	0.08	<0.02	0.16	16.9	9	0.06	0.82	248
CAOND189446	0.07	2.19	3	<5	0.2	0.34	2.27	<0.01	6.9	30	185	0.84	86.2	5.07	9.1	0.3	0.21	0.01	0.02	0.1	2.5	16	0.16	2.61	495
CAOND189719	0.03	2.36	2	6	0.2	0.08	6.54	0.04	4.08	33.5	176	0.27	95.9	6.92	9.3	0.2	<0.05	0.03	0.02	0.08	1.7	25	0.16	2.4	1017
CAOND191002	0.03	3.74	4	7	0.3	0.09	5.54	0.02	6.2	37.9	272	0.4	122	6.69	12	0.4	0.16	0.02	0.04	0.06	2.3	38	0.2	3.98	1196
CAOND191005	0.02	3.62	6	9	0.4	0.08	5.12	0.01	12.62	38.3	183	0.54	124	6.91	12.2	0.3	0.29	0.02	0.04	0.09	5.2	35	0.25	3.96	1086
CAOND191008	0.09	3.03	4	6	0.3	0.12	7.46	0.04	10.38	36	74	0.31	212	6.55	9.9	0.3	0.13	0.07	0.04	0.1	3.7	28	0.26	2.96	1225
CAOND191089	0.06	0.85	6	54	0.2	0.17	2.92	0.02	14.77	11.2	11	0.46	8.6	1.49	3	0.1	0.28	0.08	<0.02	0.19	7	7	0.03	0.67	313
CAOND191157	0.03	1.71	2	6	0.3	0.03	2.64	0.01	5.32	20	233	0.42	304	2.87	5.3	0.2	0.26	0.08	<0.02	0.08	2	20	0.13	1.81	447
CAOND194796	0.03	1.64	11	12	0.1	0.17	1.77	<0.01	5.7	27.7	131	0.08	36.2	2.93	5.8	0.2	0.17	0.05	<0.02	0.02	2.5	16	0.07	1.44	665
CAOND198933	0.16	1.72	3	19	0.2	0.12	1.22	<0.01	7.44	20.9	120	0.15	287	4.07	6	0.2	0.19	0.25	<0.02	0.07	3.8	14	0.09	1.62	353
CAOND200894	0.32	0.59	17	49	0.2	12.42	2.29	0.01	12.69	50.5	9	0.34	408	2.9	1.7	0.2	0.17	0.09	<0.02	0.24	6.1	4	0.04	0.23	129
CAOND200903	0.07	0.67	7	51	<0.1	4.31	1.26	<0.01	12.02	17.2	8	0.23	790	1.6	3.2	0.1	0.28	0.21	<0.02	0.12	6.2	5	0.04	0.44	120
KLUB11_180W2_179564	0.03	1.55	9	26	0.2	0.07	2.02	0.01	10	20.9	22	0.1	68.3	3.03	5.9	0.2	0.15	0.03	<0.02	0.06	4.6	17	0.05	1.22	500
KLUB11_180W2_179592	0.02	1.51	4	15	0.2	0.08	2.68	0.01	9.54	10.9	19	0.16	1.5	2.84	5.7	0.2	0.14	0.02	0.02	0.06	4.4	22	0.06	0.92	438
KLUB11_180W2_179597	0.13	0.98	9	19	0.4	1.1	2.61	0.02	7.56	22.9	7	0.56	45.2	4.46	2	0.2	0.07	0.13	<0.02	0.2	3.4	17	0.03	0.64	413
KLUB12_207_256263	<0.01	2.14	8	42	0.4	0.03	2.73	0.01	62.59	20	142	0.31	3.4	5.25	11.9	0.4	0.67	0.04	<0.02	0.07	36.2	17	0.11	2.57	539
KLUB12_207_256280	<0.01	2.16	6	131	0.5	0.02	5.99	0.02	69.52	21.7	148	0.34	2	5.5	11.8	0.4	0.86	0.06	0.02	0.08	32.6	20	0.1	2.57	637
KLUB12_207W1_256537	0.3	0.98	13	16	0.1	0.18	0.71	<0.01	3.58	45.4	70	0.11	488	2.97	2.8	0.1	0.11	0.06	<0.02	0.08	1.4	9	0.05	0.91	291
KLUB12_207W1_256548	0.33	0.69	4	25	0.1	0.17	1.39	<0.01	10.18	28.3	9	0.09	520	2.64	2.8	0.2	0.17	0.05	<0.02	0.08	4.3	5	0.05	0.55	215
KLUB12_210W1_248885	0.06	1.38	3	17	0.1	0.02	2.58	0.02	19.78	10.3	29	0.14	143	2.54	7.6	0.2	0.21	0.04	<0.02	0.05	8.8	21	0.04	1.24	317
KLUB12_210W1_248895	0.02	1.56	3	36	0.2	0.03	2.89	<0.01	20.8	17.8	22	0.27	217	2.95	6.1	0.1	0.1	0.05	<0.02	0.17	9.3	24	0.05	1.33	383
KLUB12_222_257822	0.02	0.98	3	26	0.1	0.03	1.58	<0.01	15.03	6.7	7	0.14	61.9	1.54	4.8	0.1	0.27	0.01	<0.02	0.1	6.7	10	0.06	0.61	205
KLUB12_222_257834	0.04	1.4	4	21	0.2	0.12	0.81	<0.01	17.61	15.7	7	0.14	87.2	2.64	5.1	0.1	0.19	0.03	<0.02	0.08	8	17	0.06	0.75	264
KLUB12_223_251189	2.2	2.7	30	11	0.2	0.73	6.69	0.03	6.86	55.7	171	1.06	7033	6.42	13.9	0.3	0.15	0.95	0.11	0.12	2.8	23	0.11	2.44	1195
KLUB12_223_251197	0.43	1.54	21	5	0.1	0.14	2.04	0.02	5.07	32.3	125	0.09	832	3.17	6.5	0.3	0.38	0.67	<0.02	0.02	2	11	0.07	1.41	544
DUP																									
CAOND135493	0.05	1.31	8	7	0.2	0.54	1.28	<0.01	9.07	26.3	32	0.15	165	3.99	8.2	0.3	0.54	0.37	<0.02	0.05	3.1	11	0.22	1.53	367
CAOND163796	0.02	2.77	12	<5	0.2	0.09	5.42	<0.01	9.91	39.9	88	0.08	83.2	6.47	13	0.4	0.34	0.14	<0.02	0.03	3.4	27	0.28	2.41	746
CAOND186416	0.13	1.5	22	6	0.3	0.09	1.19	<0.01	9.2	52.2	61	0.4	1014	5.2	7.3	0.2	0.69	0.11	<0.02	0.11	3.5	12	0.31	1.38	340
CAOND188616	0.03	3.9	5	6	0.3	0.07	4.26	0.01	6.89	57.8	110	0.49	143	8.36	15.1	0.3	0.2	0.03	0.05	0.08	2.5	43	0.26	3.63	873
KLUB12_222_257822	0.01	1.01	3	27	0.1	0.04	1.6	<0.01	15.71	5.8	7	0.14	65.7	1.58	4.8	0.1	0.29	0.03	<0.02	0.11	7	10	0.06	0.62	206
QC																									
OREAS 920	0.09	2.45	4	87	0.8	0.99	0.33	0.07	76.57	14.7	45	2.48	108	3.59	7.3	<0.1	0.76	0.01	0.04	0.51	37.9	22	0.27	1.06	514
Expected Values	0.1	2.43	4.38	80.13	0.73	0.68	0.32	0.06	71.53	14.97	42.5	2.1	110	3.63	6.86	< 0.1	0.61	< 0.01	0.03	0.45	37.24	21.23		1.1	525.59
Tolerance (%)	59.20	18.60	29.80	12.8	41.50	41.80	19.80	39.30	14.3	13.80	12.70	56.9	12.80	12.70	28.70		41.8		17.20	44.50	27.3	21.70		18.90	10.30
OREAS 503d	1.22	2.11	84	342	0.6	1.4	1.1	0.23	59.46	15.2	64	8.9	5175	4.4	8.8	0.2	0.5	0.01	0.07	1	29.4	29	0.21	1.14	397
OREAS 503d	1.32	2.09	83	359	0.5	1.43	1.17	0.29	61.79	15.3	64	9.28	5104	4.47	9.1	0.2	0.49	0.07	0.07	1.07	30.5	27	0.2	1.19	406
Expected Values	1.32	2.08	87	361	0.6	1.42	1.19	BDL	62	15.9	66	9.28	5220	4.58	8.7	0.15	0.48	BDL	0.074	1.06	30.5	27.9	0.21	1.21	410
Tolerance (%)	25.10	16.80	15.80	19.5	38.60	11.10	20.00		21	11.10	17.10	16.7	6.58	11.50	18.70	56.7	18.3		21.90	10.80	16	33.00	10.60	12.70	106.30
OREAS 905	0.48	0.88	31	244	0.9	5.71	0.31	0.33	75.28	13.2	16	1.37	1450	3.31	6	<0.1	1.4	0.02	0.55	0.33	39.4	5	0.04	0.15	333
Expected Values	0.516	0.817	31.7	249	0.93	5.74	0.337	0.34	80	13.9	17.6	1.32	1562	3.50	6.43	<1	1.22	<0.05	0.58	0.322	39.8	4.87	0.034	0.158	350
Tolerance (%)	15.90	14.01	18.72	16.05	43.14	11.42	18.48	19.35	10.66	12.21	30.07	21.85	10.94	11.48	15.59	BDL	22.83	BDL	20.95	21.31	11.14	83.55	109.09	24.34	12.12
OREAS 502c	0.75	2.15	56	387	0.5	0.68	1.15	0.37	57.7	13.1	65	8.68	7858	4.47	8.4	0.3	0.42	0.03	0.06	1.03	29.7	32	0.22	1.18	397
Expected Values	0.796	2.07	59	383	0.53	0.68	1.09	BDL	59	13.5	66	9.02	7790	4.45	8.67	BDL	0.41	BDL	0.061	1.07	29.4	30.9	0.22	1.21	380
Tolerance (%)	13.14	11.21	14.24	13.26	57.17	17.35	12.29		10.21	11.85	13.79	11.39	10.02	10.56	12.88		40.49		91.97	12.34	10.85	18.09	21.36	12.07	11.32
OREAS 260	0.14	1.26	13	143	1.1	0.54	0.9	0.21	55.52	30.9	46	3.21	46.3	3.67	4.6	0.1	0.47	0.04	0.02	0.27	26.5	21	0.13	0.6	450
Expected Values	0.146	1.33	12.5	151	1.24	0.54	0.885	0.21	55	32.1	49.2	3.12	46.5	3.73	5.05	BDL	0.33	0.047	0.027	0.285	28.1	21.5	0.14	0.593	450
Tolerance (%)	30.77	12.8	35.29	20.12	35.07	20.41	14.46	27.03	#N/A	11.39	16.31	#N/A	13.55	11.33	16.04	BDL	#N/A	#N/A	90.91	23.08	#N/A	24.25	33.33	14.55	11.76

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : April 13/ 2022

Sample ID	Mo	Na	Nb	Ni	P	Pb	Rb	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	V	W	Y	Yb	Zn	Zr
	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	IMS21B20	ICP21B20	IMS21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP21B20	ICP21B20
LOD	0.05	0.01	0.05	1	0.01	0.2	0.2	0.01	0.05	0.1	1	0.3	0.5	0.05	0.02	0.05	0.1	0.01	0.02	0.05	1	0.1	0.05	0.1	1	0.5
CAOND128083	0.45	0.05	0.37	43	0.04	0.6	2.8	0.07	4.23	5	<1	0.4	41.2	<0.05	0.51	<0.05	0.3	0.34	0.02	<0.05	152	1.4	17.21	1.6	29	5.4
CAOND128098	0.57	0.05	0.22	47	0.04	0.2	1.2	0.07	1.51	23.7	<1	0.6	44.7	<0.05	0.84	<0.05	0.2	0.32	<0.02	0.06	286	3.7	27.53	2.6	44	7.9
CAOND128133	0.29	0.04	0.12	75	0.03	0.3	1	0.14	2.1	27.7	1	0.5	29.8	<0.05	0.63	<0.05	0.1	0.37	<0.02	<0.05	270	1.3	20.95	2	50	4.2
CAOND128147	0.39	0.04	0.07	92	0.03	0.3	2.9	0.1	1.71	24.7	<1	0.4	38.6	<0.05	0.47	<0.05	0.1	0.27	0.02	0.08	234	0.9	15.25	1.5	41	5.7
CAOND128163	1.14	0.04	0.11	78	0.02	0.3	2.1	0.12	4.26	7.4	1	0.3	48.2	<0.05	0.34	<0.05	0.1	0.26	<0.02	0.21	166	6.1	11.38	1.1	25	8
CAOND128183	789	0.01	<0.05	12	0.02	9.7	4.9	0.13	2.11	6.9	1	<0.3	217	<0.05	0.73	0.14	0.6	<0.01	0.27	0.22	24	0.2	21.84	1.5	10	4
CAOND128192	3.97	0.04	<0.05	5	0.08	0.7	11.1	0.03	0.73	1.7	<1	<0.3	95.2	<0.05	0.24	<0.05	2.6	<0.01	0.06	0.55	11	7	4.83	0.4	8	11.3
CAOND130898	0.51	0.04	0.1	69	0.03	0.7	7.6	0.09	1.41	8.4	<1	<0.3	44.6	<0.05	0.27	<0.05	0.1	0.28	0.05	<0.05	158	0.4	8.75	0.9	29	2
CAOND130912	1.3	0.04	0.14	49	0.21	0.9	2.6	0.07	2.33	11.2	<1	0.7	58.5	<0.05	0.51	<0.05	3.5	0.21	<0.02	0.67	145	0.5	10.19	0.8	44	28.4
CAOND130922	2.71	0.06	0.22	51	0.03	0.6	5.7	0.01	3.1	6.1	<1	<0.3	64.3	<0.05	0.4	<0.05	0.2	0.35	0.03	0.2	146	0.9	13.35	1.3	30	8.1
CAOND130939	2.88	0.05	0.08	73	0.03	0.4	3.7	0.2	2	22.2	<1	0.3	64.5	<0.05	0.41	0.05	0.1	0.28	<0.02	0.16	249	6.9	12.78	1.3	51	4.9
CAOND130973	3.36	0.05	0.25	14	0.09	1	1.9	0.07	1.32	4.5	<1	0.4	37.7	<0.05	0.22	<0.05	1.8	0.12	<0.02	0.51	66	1	5.09	0.5	24	17.9
CAOND135432	0.62	0.07	0.33	46	0.04	0.4	1.4	0.15	4.11	6.2	<1	0.4	31.3	<0.05	0.54	<0.05	0.3	0.48	<0.02	0.14	213	1.7	19.62	1.9	34	12.3
CAOND135447	0.86	0.07	0.5	20	0.04	0.5	1.4	0.06	7.3	4.9	<1	0.3	48.7	<0.05	0.43	<0.05	0.3	0.48	<0.02	0.1	202	1.2	14.61	1.4	17	9.8
CAOND135493	1.02	0.07	0.39	18	0.05	0.4	2.4	0.02	5.26	6.2	<1	0.5	31	<0.05	0.52	<0.05	0.4	0.52	<0.02	0.18	227	10.4	17.56	1.7	21	12.1
CAOND135669	0.69	0.05	0.29	28	0.04	1.1	1.5	1.77	6.39	14	1	0.4	74.1	<0.05	0.37	0.14	0.2	0.49	<0.02	0.09	272	1.8	14.63	1.6	35	9.7
CAOND135691	0.29	0.04	0.18	62	0.03	0.6	3	0.09	1.29	5.4	<1	<0.3	42.4	<0.05	0.41	<0.05	0.1	0.38	0.02	<0.05	151	0.4	13.17	1.3	35	4.5
CAOND135702	0.22	0.05	0.24	53	0.03	0.5	6.9	0.1	0.92	3.4	<1	<0.3	31	<0.05	0.4	<0.05	0.1	0.35	0.04	<0.05	116	0.5	13.48	1.3	26	5.3
CAOND135719	0.29	0.05	0.22	56	0.03	0.7	4	0.15	0.57	2.9	<1	<0.3	26	<0.05	0.34	<0.05	0.1	0.32	0.03	<0.05	101	0.5	10.93	1	27	4.9
CAOND136961	0.55	0.08	0.08	84	0.05	1.4	2.1	2.19	0.69	23.5	1	0.4	115	<0.05	0.29	0.59	0.4	0.25	<0.02	0.14	219	1.1	8.14	0.8	56	6.8
CAOND143739	0.43	0.04	0.51	33	0.04	0.4	4.6	0.05	1.76	3.7	<1	0.5	27.9	<0.05	0.57	<0.05	0.3	0.38	0.03	0.06	123	1.2	19.65	1.9	23	10.4
CAOND143752	0.31	0.06	0.74	29	0.04	0.5	2.3	0.15	2.26	3	<1	0.5	30.9	<0.05	0.67	<0.05	0.3	0.41	<0.02	0.07	136	3.2	22.91	2.3	18	11.8
CAOND143769	2.4	0.07	0.37	52	0.04	0.4	1.5	0.08	1.94	13	<1	0.7	13.8	<0.05	0.92	<0.05	0.3	0.46	<0.02	0.21	285	3	31.04	3.1	38	16.5
CAOND143779	0.29	0.05	0.2	58	0.03	0.4	4.7	0.15	1.11	3.3	<1	<0.3	39.3	<0.05	0.43	<0.05	0.1	0.3	0.03	<0.05	108	0.9	13.45	1.3	27	4.3
CAOND147295	0.39	0.06	0.24	31	0.04	0.6	3.3	<0.01	2.89	8.6	<1	0.4	42.6	<0.05	0.56	<0.05	0.3	0.58	<0.02	0.09	287	2.1	18.5	1.9	60	11.3
CAOND147309	0.32	0.05	0.16	65	0.03	0.6	3.7	0.28	1.3	13.6	<1	0.4	60.6	<0.05	0.5	0.08	0.2	0.34	0.03	<0.05	213	0.7	16.43	1.5	55	3.9
CAOND147365	2.07	0.05	0.19	54	0.03	1.1	3.3	0.23	1.48	3.8	<1	<0.3	48.9	<0.05	0.25	<0.05	0.1	0.25	0.02	0.09	90	0.9	7.96	0.8	29	4.2
CAOND147376	0.82	0.06	0.1	92	0.03	0.4	2.2	0.05	0.55	26.6	<1	0.4	43.8	<0.05	0.39	<0.05	0.1	0.33	<0.02	0.14	287	2.6	11.76	1.3	61	5.8
CAOND147387	10.92	0.06	0.2	58	0.03	0.5	2.5	0.03	1.93	6.4	<1	0.4	65.4	<0.05	0.43	<0.05	0.2	0.38	<0.02	0.3	178	6.4	14.6	1.5	35	10
CAOND147404	0.94	0.05	0.25	46	0.03	0.6	3.6	0.02	2.15	4.3	<1	<0.3	62.7	<0.05	0.29	<0.05	0.1	0.3	<0.02	0.1	111	6.5	9.64	0.9	22	5.7
CAOND152411	11.36	0.05	0.2	56	0.03	0.5	2.5	0.09	2.04	6.8	<1	0.3	53.3	<0.05	0.39	<0.05	0.2	0.38	<0.02	0.1	151	2	11.96	1.2	31	6.2
CAOND152417	3.02	0.06	0.22	49	0.03	0.4	5.8	0.1	1.53	3.4	<1	<0.3	35.8	<0.05	0.29	<0.05	0.1	0.32	0.03	0.1	101	1.5	9.08	0.9	24	4.6
CAOND152424	0.81	0.05	0.13	62	0.03	0.3	3.2	0.11	1.52	4.3	<1	<0.3	33.5	<0.05	0.28	<0.05	0.1	0.33	<0.02	0.09	134	1.3	9.03	0.9	29	3.8
CAOND152437	12.74	0.03	0.07	90	0.06	0.5	1.5	0.12	1.31	27.3	<1	0.6	24.9	<0.05	0.46	<0.05	0.4	0.35	<0.02	0.39	297	1.6	14.49	1.4	86	13.5
CAOND160691	33.73	0.07	1.52	19	0.04	0.8	5	0.07	1.54	2.9	<1	0.9	33.9	<0.05	0.86	0.09	0.3	0.45	0.03	0.59	139	1.8	27.55	2.7	11	19.1
CAOND160704	2.77	0.06	0.2	38	0.04	0.3	2.2	0.14	0.69	3.5	2	0.5	16.4	<0.05	0.73	0.95	0.3	0.17	<0.02	0.07	173	10.9	23.87	2.2	24	6.4
CAOND160721	1.31	0.05	0.66	31	0.04	0.4	10.8	0.08	2.68	4.3	<1	0.6	38.5	<0.05	0.82	0.05	0.2	0.48	0.06	0.09	143	1.8	26.89	2.6	17	13
CAOND160761	0.25	0.05	0.21	62	0.04	0.4	6.2	<0.01	3.18	5.9	<1	0.4	30.2	<0.05	0.55	<0.05	0.2	0.47	0.03	<0.05	210	2.2	17.88	1.7	33	6.7
CAOND160774	0.22	0.06	0.19	65	0.03	0.4	9.5	0.06	1.85	4.2	<1	<0.3	42.5	<0.05	0.43	<0.05	0.1	0.34	0.07	<0.05	118	0.4	13.7	1.4	32	5.4
CAOND160788	0.46	0.05	0.18	73	0.03	0.4	7.2	0.1	1.79	4.1	<1	<0.3	33.3	<0.05	0.41	<0.05	0.1	0.37	0.05	0.06	117	7.1	13.08	1.3	37	5.3
CAOND162504	2.26	0.07	0.61	26	0.04	0.5	1.1	0.21	1.17	4.6	<1	0.7	29.2	<0.05	0.83	<0.05	0.3	0.45	<0.02	0.24	162	5.2	26.71	2.8	21	16
CAOND162513	2.04	0.07	0.52	34	0.04	0.6	4.3	0.04	1.52	4	<1	0.6	32.8	<0.05	0.73	<0.05	0.3	0.42	0.02	0.47	139	2.6	24.12	2.4	23	20.9
CAOND162549	2.6	0.07	0.46	17	0.05	0.6	1.3	0.02	1.87	8.8	<1	0.6	47.6	<0.05	0.5	0.07	0.4	0.54	<0.02	0.38	252	3.4	17.63	1.8	20	16.6
CAOND162569	0.27	0.07	0.1	9	0.08	0.7	5.8	0.02	0.33	3.4	<1	<0.3	44.5	<0.05	0.21	<0.05	2.9	0.03	0.03	0.75	42	0.3	4.69	0.4	22	15.1
CAOND163334	10.3	0.08	0.56	26	0.04	0.8	1.9	0.17	1.09	4.1	2	0.6	19.7	<0.05	0.74	0.38	0.3	0.42	<0.02	0.33	165	3.5	24.14	2.4	17	19.4
CAOND163343	0.49	0.06	0.99	29	0.04	0.5	3.3	0.11	1.42	3.6	1	0.6	34.9	<0.05	0.73	<0.05	0.3	0.45	<0.02	0.08	146	2	24.35	2.5	17	14.5
CAOND163353	2.16	0.07	0.43	38	0.04	0.5	1.6	0.13	1.1	7.3	<1	0.9	9.8	<0.05	0.94	<0.05	0.3	0.47	<0.02	0.58	223	1.9	31.09	3.1	28	27.4
CAOND163396	0.61	0.05	0.45	34	0.04	0.6	2.4	0.25	2.29	4.4	<1	0.5	36.3	<0.05	0.67	<0.05	0.3	0.45	<0.02	0.07	146	1.8	23.26	2.3	30	14
CAOND163405	0.36	0.04	0.36	35	0.03	0.5	5.4	0.09	2.17	6.1	<1	0.5	33.4	<0.05	0.7	<0.05	0.2	0.43	0.03	0.08	155	1.9	23.6	2.3	34	13.8
CAOND163421	0.6	0.05	0.24	26	0.04	0.7	4.4	0.32	1.8	6.8	<1	0.4	29.1	<0.05	0.45	<0.05	0.3	0.56	0.04	0.08	238	2.3	14.71	1.6	35	11.4
CAOND163433	1.55	0.06	0.28	26	0.05	0.5	1.2	0.36	2.19	8.3	<1	0.4	32.6	<0.05	0.49	<0.05	0.4	0.63	<0.02	0.09	298	3	16.95	1.8	41	14.4
CAOND163446	0.43	0.05	<0.05	26	0.04	0.3	0.8	0.09	0.37	24.7	<1	<0.3	59	<0.05	0.4	<0.05	0.2	0.23	<0.02	<0.05	348	8.8	12.87	1.2	37	3.2
CAOND163796	0.41	0.05	0.29	48	0.04	0.4	0.7	0.18	1.13	10.1	<1	0.5	32.5	<0.05	0.61	<0.05	0.3	0.39	<0.02	<0.05	204	57.5	21.24	2.3	41	7.8
CAOND163824	1.06	0.08	0.29	22	0.05	0.4	1.9	0.25	4.23	6.1	<1	0.5	25.7	<0.05	0.48	<0.05	0.4	0.47	<0.02	0.19	265	4.8	16.7	1.6	25	12
CAOND163834	1.04	0.05	<0.05	28	0.04	0.5	10	0.17	1.42	17.2	<1	<0.3	73.4	<0.05	0.24	<0.05	0.2	0.02	0.04	0.05	226	0.2	5.82	0.7	26	3.3
CAOND163908	0.41	0.07	<0.05	10	0.08	1	8.1	0.05	1.68	3	<1	<0.3	161	<0.05	0.28	<0.05	2.4	<0.01	0.04	0.51	39	0.2	6.16	0.4	24	13.4
CAOND163918	19.98	0.06	0.11	11	0.08	1.9	5	0.11	2.55	3.4	<1	<0.3	69.3	<0.05	0.23	0.17	2.9	0.04	0.02	0.73	47	0.6	5.23	0.4	34	19.5
CAOND164779	27.29	<0.01	<0.05	35	0.05	0.7	19.8	0.27	1.52	16.7	<1	<0.3	17.2	<0.05	0.35	<0.05	0.3	0.02	0.09	0.53	231	0.8	10.4	1.2	44	14.9
CAOND164923	0.94	0.07	0.63	28	0.22	2.4	2.5	0.01	1.79	6.6	<1	1.1	95	<0.05	0.84	<0.05	4.9	0.41	<0.02	1.18	135	0.9	23.49	2.2	46	35.4
CAOND164932	0.47	0.06	0.2	69	0.03	0.4	9	0.06	0.99	3.5	<1	<0.3	28.2	<0.05	0.38	<0.05	0.1	0.38	0.05	0.07	122	0.8	13.89	1.3	24	8.1
CAOND164955	1.75	0.04	0.22	59	0.03	0.3	15.7	0.04	2.12	4	<1	0.3	25.6	<0.05	0.41	<0.05	0.1	0.41	0.09	<0.05	119	30.6	14.87	1.4	22	8.3
CAOND165195	0.37	0.04	0.14	83	0.03	0.5	5.1	0.09	0.83	3.2	<1	<0.3	20.1	<0.05	0.19	<0.05	0.1	0.29	0.03	<0.05	96	0.5	6.39	0.6	28	2.6
CAOND165203	0.48	0.04	0.1	84	0.03	0.4	6.3	0.05	1.24	4.7	<1	<0.3	20.7	<0.05	0.28	<0.05	0.1	0.25	0.03	<0.05	128	1	9.29	0.9	33	4.3
CAOND165558	3.83	0.04	0.17	62	0.03	0.3	9.4	0.25	1.86	7	1	0.5	19.4	<0.05	0.46	0.05	0.2	0.27	0.04	0.19	173	104	15.58	1.5	25	6.7
CAOND165612	4.39	0.07	0.25	25	0.04	0.6	5.4	0.09	3.86	11.6	1	0.6	26.4	<0.05	0.53	0.11	0.3	0.52	0.03	0.46	316	4.8	19.23	1.9	24	19
CAOND166348	0.67	0.08	0.13	58	0.03	0.6	3.4	0.13	0.53	4.3	<1	<0.3	21.7	<0.05	0.22	<0.05	0.2	0.34	<0.02	<0.05	144	0.8	7.28	0.7	46	3.9
CAOND168893	0.38	0.06	0.35	37	0.04	0.5	1.9	<0.01	1.23	6.4	<1	0.6	84.7	<0.05	0.45	<0.05	0.6	0.35	<0.02	0.11	126	0.5	16.41	1.7	26	7.9
CAOND169457	0.77	0.07	0.21	76	0.03	0.5	7.3	0.08	5.86	18.5	<1	0.4	89.5	<0.05	0.48	<0.05	0.2	0.47	0.06	<0.05	258	1.8	16.99	1.6	46	11.2
CAOND175906	1.19	0.03	<0.05	17	0.1	0.8	7	0.01	0.92	1.7	<1	<0.3	74.4	<0.05	0.2	<0.05	0.5	<0.01	0.04	<0.05	17	0.3	2.58	0.2	25	4.4

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : April 13/ 2022

Sample ID	Mo	Na	Nb	Ni	P	Pb	Rb	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	V	W	Y	Yb	Zn	Zr
	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
CAOND175938	1.53	0.04	<0.05	9	0.1	1	6.8	0.14	1.92	2.1	<1	<0.3	110	<0.05	0.2	<0.05	0.5	<0.01	0.04	<0.05	8	0.8	3.14	0.2	13	4.2
CAOND179977	28.21	0.06	0.43	46	0.17	1.5	13	0.23	1.33	6.5	<1	0.5	304	<0.05	0.41	<0.05	1.7	0.19	0.06	0.45	89	2.3	9.34	0.7	20	15.2
CAOND181514	0.57	0.04	<0.05	45	0.1	1	5.9	0.04	0.69	6.3	<1	<0.3	284	<0.05	0.24	<0.05	0.9	0.01	0.03	<0.05	71	0.1	3.25	0.3	47	6.3
CAOND184563	0.81	0.03	0.13	80	0.03	0.4	3.3	0.09	1.54	3.9	<1	0.3	29.8	<0.05	0.38	<0.05	0.1	0.37	0.02	<0.05	144	0.4	13.21	1.2	50	6.4
CAOND185519	0.3	0.04	0.25	61	0.04	0.4	11	0.03	1.86	9.2	<1	0.6	18.5	<0.05	0.62	<0.05	0.2	0.44	0.05	<0.05	192	1.9	21.32	2.1	36	10.5
CAOND186035	0.35	0.06	0.54	33	0.04	0.6	1.8	0.07	1.42	4.3	<1	0.6	49.4	<0.05	0.7	<0.05	0.3	0.54	<0.02	0.08	151	1.8	24.75	2.4	23	16.9
CAOND186041	0.71	0.06	0.49	39	0.04	0.5	3.2	0.01	1.19	4.4	<1	0.7	39.5	<0.05	0.71	<0.05	0.3	0.52	<0.02	0.17	158	1.8	26.89	2.6	23	17.3
CAOND186416	0.63	0.05	0.52	41	0.03	0.5	10.4	0.27	1.46	4.2	1	0.6	25.6	<0.05	0.67	0.06	0.3	0.51	0.05	0.08	153	4.5	25.21	2.4	19	17.6
CAOND186418	2.43	0.04	0.36	49	0.03	0.8	6.9	1.05	1.12	6.7	1	0.8	20.1	<0.05	0.66	0.32	0.2	0.48	0.03	0.21	194	88.1	23.2	2.3	31	18.3
CAOND186426	0.33	0.05	0.59	33	0.04	0.4	3.2	0.16	1.26	3.3	<1	0.6	26.8	<0.05	0.63	<0.05	0.3	0.46	<0.02	0.1	128	1.8	23.36	2.2	19	15.6
CAOND186541	0.91	0.05	0.19	41	0.04	0.9	2.4	0.05	3.78	15.4	<1	0.6	147	<0.05	0.51	<0.05	0.3	0.56	<0.02	0.2	337	2.2	17.87	1.8	48	14.8
CAOND186548	1.33	0.04	<0.05	31	0.04	1.3	11.4	0.15	0.8	13.4	<1	<0.3	198	<0.05	0.36	<0.05	0.1	0.07	0.06	0.15	196	0.2	11.61	1.2	39	7.6
CAOND186553	0.93	0.05	0.18	31	0.15	1	2	<0.01	1.34	16.1	<1	0.7	77.5	<0.05	0.66	<0.05	3	0.31	<0.02	0.7	242	2	14.84	1.2	44	31.6
CAOND186834	0.69	0.06	0.13	66	0.04	0.6	2.3	0.27	0.5	7.7	<1	<0.3	56.7	<0.05	0.21	0.06	0.3	0.32	<0.02	<0.05	166	0.7	7.29	0.7	44	6.1
CAOND186840	0.36	0.04	0.08	72	0.04	0.7	1.2	0.28	0.93	6.4	<1	<0.3	68.5	<0.05	0.16	0.06	0.2	0.22	<0.02	<0.05	137	0.4	4.91	0.4	34	4.1
CAOND187492	1.99	0.04	0.32	41	0.04	0.5	12.3	0.07	0.69	3.1	<1	0.4	17.5	<0.05	0.52	<0.05	0.2	0.49	0.07	0.1	145	1.5	18.28	1.6	18	8.8
CAOND187498	0.37	0.03	0.25	50	0.03	0.3	11.6	0.04	0.94	3.3	<1	0.4	16.3	<0.05	0.47	<0.05	0.1	0.43	0.06	0.05	129	1.4	16.71	1.6	20	8.7
CAOND187628	0.47	0.07	0.25	20	0.05	0.6	0.9	<0.01	4.93	8.3	<1	0.5	43.6	<0.05	0.52	<0.05	0.4	0.67	<0.02	0.09	281	2	19.42	1.9	34	16.1
CAOND187636	1.16	0.05	0.06	8	0.05	0.3	11.9	0.08	0.87	1.3	<1	<0.3	62.9	<0.05	0.12	<0.05	0.9	0.02	0.05	0.21	13	0.4	2.85	0.2	14	9.8
CAOND188616	2.21	0.03	0.08	62	0.03	0.5	8.5	0.07	0.98	22.7	<1	0.4	54.6	<0.05	0.65	<0.05	0.2	0.32	0.05	0.08	262	2.3	21.6	2.1	41	7.6
CAOND188623	1.09	0.07	0.27	51	0.03	0.5	2.2	0.02	2.4	4.7	<1	0.5	40.5	<0.05	0.45	<0.05	0.2	0.47	<0.02	0.14	154	4	16.73	1.7	21	12.3
CAOND188631	0.33	0.04	0.19	61	0.03	0.7	2.7	0.11	1.04	4	<1	0.3	26.1	<0.05	0.42	<0.05	0.2	0.4	<0.02	<0.05	121	0.6	15.08	1.3	32	6.4
CAOND188640	534	<0.01	<0.05	54	0.02	11.4	12.8	0.07	2.82	11.1	<1	<0.3	85.8	<0.05	0.26	<0.05	<0.1	0.01	0.3	0.11	128	0.9	8.76	0.9	24	5.5
CAOND188895	1.25	0.05	0.23	56	0.03	0.5	8.5	0.03	1.74	4.4	<1	0.6	18.1	<0.05	0.49	0.11	0.2	0.45	0.05	0.16	178	1.7	17.86	1.8	18	11.3
CAOND188916	0.72	0.04	<0.05	7	0.07	0.8	9.4	0.06	0.37	2.1	<1	<0.3	54.3	<0.05	0.24	<0.05	2.6	<0.01	0.04	0.53	21	0.3	5.05	0.4	16	14.2
CAOND189446	0.34	0.04	0.13	63	0.03	0.2	11.2	0.01	1.3	7.4	<1	0.3	27.7	<0.05	0.43	<0.05	0.2	0.32	0.06	<0.05	167	1	14.72	1.4	23	5.4
CAOND189719	22.82	0.04	<0.05	74	0.04	0.5	4.4	0.1	0.21	11.7	<1	<0.3	95.4	<0.05	0.25	<0.05	<0.1	0.04	<0.02	<0.05	196	0.5	9.31	1	41	1.7
CAOND191002	0.25	0.03	0.06	82	0.03	0.4	3.4	0.08	0.9	18.4	<1	0.3	42.7	<0.05	0.43	<0.05	0.1	0.26	0.02	<0.05	205	0.6	14.96	1.5	58	4.9
CAOND191005	0.35	0.03	0.13	69	0.05	0.5	5.4	0.06	1.54	18.8	1	0.5	40.2	<0.05	0.58	<0.05	0.6	0.41	0.04	0.09	228	0.8	20.59	1.9	53	9.5
CAOND191008	0.34	0.03	0.11	48	0.03	0.4	5.6	0.06	0.67	12.3	<1	0.4	119	<0.05	0.7	<0.05	0.2	0.23	0.03	<0.05	175	8	22.24	2	41	6
CAOND191089	0.38	0.04	<0.05	9	0.05	0.6	10.2	0.3	1.24	1.2	<1	<0.3	107	<0.05	0.13	0.07	0.8	<0.01	0.06	0.21	15	0.1	2.92	0.2	17	9.7
CAOND191157	1.1	0.03	0.19	65	0.02	0.3	7.6	0.03	1.54	3.2	1	0.3	39.5	<0.05	0.34	<0.05	0.1	0.33	0.04	0.07	88	1.1	11.95	1.1	22	7
CAOND194796	0.51	0.06	0.19	63	0.03	0.6	1.6	0.18	1.48	7.1	<1	<0.3	94.3	<0.05	0.2	<0.05	0.3	0.29	<0.02	0.05	116	0.6	6.23	0.6	28	4.6
CAOND198933	4.33	0.04	0.19	57	0.03	0.7	3.2	0.08	1.73	6.8	<1	0.4	71.7	<0.05	0.22	<0.05	0.2	0.27	<0.02	0.16	115	3.6	7.41	0.7	24	5.5
CAOND200894	11.54	0.03	0.44	16	0.05	2.3	14.8	1.39	1.15	2	1	0.3	35.2	<0.05	0.18	0.76	0.4	0.11	0.08	0.1	21	1.7	4.54	0.3	7	4.8
CAOND200903	6.35	0.06	0.06	12	0.06	0.8	7.6	0.15	0.37	1.5	<1	<0.3	34.8	<0.05	0.15	0.82	0.5	0.02	0.04	0.16	20	0.2	3.91	0.3	13	9.4
KLUB11_180W2_179564	0.66	0.05	0.41	18	0.08	1.5	2.2	0.23	1.6	3.1	<1	0.5	64.8	<0.05	0.17	<0.05	0.5	0.15	<0.02	0.05	38	1.4	5.22	0.4	30	4.7
KLUB11_180W2_179592	0.39	0.04	0.37	13	0.08	1.2	2.9	0.03	2.79	3.4	<1	<0.3	115	<0.05	0.18	<0.05	0.5	0.11	<0.02	0.06	39	0.5	5.52	0.5	21	4.1
KLUB11_180W2_179597	0.62	0.04	<0.05	21	0.09	1	7.4	3.31	2.4	1.7	<1	<0.3	72.3	<0.05	0.13	<0.05	0.3	<0.01	0.05	<0.05	13	0.2	2.08	0.2	15	4.4
KLUB12_207_256263	7.26	0.06	0.43	39	0.24	1.2	2.6	0.08	0.73	11.6	<1	0.5	96.5	<0.05	0.43	<0.05	4	0.24	<0.02	1.01	137	5.8	10.25	0.7	40	23.7
KLUB12_207_256280	5.69	0.08	0.37	33	0.22	1.2	2.8	0.61	0.51	14.3	<1	0.4	198	<0.05	0.41	<0.05	4.2	0.2	<0.02	1.02	152	18.8	9.54	0.6	38	34.1
KLUB12_207W1_256537	5.83	0.04	0.17	63	0.04	0.4	4.4	1.57	0.36	3	1	<0.3	28.5	<0.05	0.11	0.08	0.2	0.14	<0.02	0.07	50	1.3	3.72	0.3	25	3.6
KLUB12_207W1_256548	1.76	0.06	0.39	13	0.07	0.5	3.6	1.84	0.28	2.5	2	<0.3	31.2	<0.05	0.14	0.09	0.5	0.09	<0.02	0.11	25	5.1	4.2	0.3	21	5.2
KLUB12_210W1_248885	0.61	0.08	0.29	16	0.09	0.3	2.3	0.08	1.58	5.1	<1	<0.3	86.7	<0.05	0.22	<0.05	0.5	0.13	<0.02	0.09	48	0.2	5.95	0.3	18	7.6
KLUB12_210W1_248895	1.7	0.06	<0.05	16	0.09	<0.2	6.9	0.03	0.45	3.1	<1	<0.3	61.6	<0.05	0.2	<0.05	0.4	0.01	0.03	<0.05	30	0.3	4.39	0.2	20	5
KLUB12_222_257822	2.86	0.09	0.43	7	0.08	<0.2	4.7	0.02	0.3	5.1	<1	<0.3	33.9	<0.05	0.16	<0.05	0.8	0.13	<0.02	0.16	42	1.1	4.67	0.4	18	8.6
KLUB12_222_257834	4.29	0.07	0.37	7	0.08	0.6	4	0.33	0.45	3.5	<1	<0.3	38.5	<0.05	0.16	<0.05	0.7	0.12	<0.02	0.1	38	4.4	4.63	0.4	23	6.3
KLUB12_223_251189	1.79	0.04	0.07	93	0.03	0.4	8.8	0.87	4.23	20.9	2	<0.3	169	<0.05	0.21	0.12	0.2	0.16	0.04	0.24	199	0.3	7.59	0.6	45	4.6
KLUB12_223_251197	0.52	0.06	0.29	67	0.04	0.2	1.2	0.15	12.8	6.4	<1	<0.3	74.6	<0.05	0.2	0.05	0.2	0.38	<0.02	<0.05	128	0.8	6.93	0.5	30	8.8
DUP																										
CAOND135493	1.29	0.06	0.37	18	0.05	0.4	2.4	0.02	5.2	6.3	<1	0.4	29.6	<0.05	0.53	<0.05	0.4	0.51	<0.02	0.17	238	14.7	17.59	1.8	23	12.1
CAOND163796	0.39	0.05	0.28	48	0.04	0.4	0.7	0.21	1.18	10.1	<1	0.5	32.5	<0.05	0.59	<0.05	0.3	0.4	<0.02	<0.05	208	42.4	20.93	2.2	43	7.9
CAOND186416	0.59	0.05	0.54	44	0.03	0.5	10.8	0.29	1.48	4.4	<1	0.7	27.2	<0.05	0.68	<0.05	0.2	0.51	0.05	0.08	157	5.2	26.07	2.6	20	17.7
CAOND188616	2.44	0.03	0.08	64	0.03	0.5	8.8	0.1	1.01	23.3	<1	0.4	53.5	<0.05	0.62	<0.05	0.2	0.31	0.04	0.08	266	2.2	21.48	2	42	7.4
KLUB12_222_257822	3.12	0.09	0.44	7	0.08	<0.2	4.7	0.02	0.32	5.1	<1	<0.3	34.9	<0.05	0.16	<0.05	0.8	0.14	<0.02	0.16	44	1.1	4.71	0.4	19	9.4
QC																										
OREAS 920	0.4	0.03	0.79	36	0.07	22.3	24.3	0.03	0.61	3.3	<1	1.3	16	<0.05	0.74	<0.05	16.3	0.16	0.19	2.32	29	0.5	20.75	1.8	105	24.6
Expected Values	0.41	< 0.04		38.38	0.07	21.54	24.8	0.03	0.61	2.91	0.87	1.21	16.9	< 0.05	0.73	< 0.05	15.29	0.12	0.15	2.15	26.3	< 0.6	18.8	< 1.5	106.41	21.3
Tolerance (%)	50.70			14.80	20.40	20.00	34.1	40.50	45.10	47.10	59.5	55.1	14.10		59.70		24.00	60.5	43.7	38.50	25.8		46.90		14.50	23.50
OREAS 503d	353	0.21	1.51	27	0.1	8.3	88.5	0.81	2.28	6.8	3	2.4	88.7	<0.05	0.57	0.24	16.4	0.27	0.69	4.02	105	1.6	15.91	1.5	67	10.8
OREAS 503d	357	0.22	1.49	30	0.11	8.3	120	0.75	2.27	7.8	2	2.2	86	<0.05	0.53	0.29	17.2	0.32	0.63	4.26	106	2.2	16.43	1.2	64	13.5
Expected Values	342	0.209	1.21	31.2	0.105	8.39	120	0.798	2.36	7.18	3.04	2.51	88	BDL	0.57	0.3	17.4	0.318	0.66	4.35	104	1.91	16.9	1.47	67	12.2
Tolerance (%)	12.90	38.30	59.2	13.00	14.90	21.50	12.1	13.90	36.10	21.90	45.5	16.2	36.50		18.70	32.10	9.62	18.1	30.1	21.70	14.7	49.2	17.70	13.40	21.40	22.00
OREAS 905	2.83	0.09	0.76	7	0.02	16.1	20.3	0.06	1.21	2	2	1.3	11.6	<0.05	0.45	0.08	9.1	0.02	0.13	2.29	5	0.5	7.42	0.3	67	47.5
Expected Values	3.02	0.092	#N/A	8.9	0.023	17.1	19.3	0.065	1.12	1.89	2.32	1.27	12.3	<0.01	0.44	0.065	8.88	0.019	0.11	2.37	6.05	<1	7.08	0.27	67	47.5
Tolerance (%)	15.33	42.11	#N/A	26.75	78.79	13.75	13.26	73.68	24.00	23.01	73.22	53.60	22.62	BDL	22.78	101.89	14.23	89.86	75.00	16.44	67.4	BDL	12.45	75.86	14.40	13.48
OREAS 502c	236	0.2	1.5	33	0.1	11.5	118	0.87	4.36	6.8	3	2.7	69.6	<0.05	0.55	0.42	18.2	0.34	0.71	4.74	110	2.9	16.99	1.5	101	9.9
Expected Values	223	0.192	BDL	36.4	0.096	11.1	124	0.821	4.78	7.28	BDL	2.71	66	0.009	0.58	0.47	17.6	BDL	0.34	4.53	110	2.98	16.1	1.51	102	BDL
Tolerance (%)	10.06	23.02		16.87	23.02	14.50	10.4	13.05	12.62	13.43		37.68	11.89	1398.9	18.62	36.60	11.42		17.35	12.76	12.3	18.39	10.78	26.56	12.45	
OREAS 260	0.4	0.08	0.05	75	0.04	30.5	19.9	0.07	1.37	3.2	<1	0.5	14	<0.05	0.48	0.06	11.3	<0.01	0.18	1.28	21	0.1	11.77	0.8	121	17.5
Expected Values	0.43	0.082	BDL	75	0.04	30.7	21.2	0.077	1.32	3.39	BDL	0.62	14.8	BDL	0.52	0.081	11.3	BDL	0.22	1.29	22	BDL	11.7	0.99	125	12.6
Tolerance (%)	49.28	46.15	BDL	14.29	66.67	12.35	#N/A	66.67	21.85	19.06	BDL	#N/A	20.32	BDL	21.28	89.66	13.01	BDL	37.84	21.46	23.9	BDL	11.76	42.94	12.77	#N/A

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : 21 Mar 22

Sample ID	Paste	S(T)	Modified	Fizz Test
	pH	%	NP	
Method Code	Sobek	CSA06V	Modified	Sobek
LOD	0.20	0.005		#N/A
CAOND 128183 Duplicate	8.16	0.142	458.1	Slight
CAOND 147365 Duplicate	9.41	0.247	13.5	Slight
CAOND 160704 Duplicate	9.59	0.188	61.4	Moderate
CAOND 164923 Duplicate	9.12	0.015	47.9	Moderate
CAOND 186418 Duplicate	9.15	0.797	16.2	Moderate
CAOND 200894 Duplicate	9.23	0.559	48.8	Moderate
KLUB12_207_256280-Dup	8.58	0.369	121.6	Moderate
Duplicates				
CAOND 128183 Duplicate	8.22	0.149	456.3	Siight
QC				
GS314-2		0.029		
NBM-1			42.0	Slight
Expected Values		0.03	46.0	Slight
Tolerance +/-		0.01	10.1	

Note:
NP = Neutralization potential in tonnes $CaCO_3$ equivalent per 1000 tonnes of material.

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : March 17 / 2022

Sample ID	Ag	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg
	mg/kg	%	ppm	%	ppm	ppm	%	%	ppm	%
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01
CAOND 147365-Duplicate	0.13	1.55	13	0.91	80	756	3.09	0.06	13	1.54
CAOND 186418-Duplicate	0.30	2.06	8	1.00	83	1214	9.13	0.07	16	2.15
CAOND 200894-Duplicate	0.13	0.51	51	2.11	7	212	1.85	0.24	3	0.27
KLUB12_207_256280-DUP	<0.01	2.06	104	5.68	146	2.3	5.38	0.06	18	2.49
DUP										
CAOND 186418-Duplicate	0.28	2.08	9	1.01	83	1204	9.4	0.07	16	2.16
QC										
OREAS 503d	1.23	2.1	365	1.19	64	5215	4.53	1.1	28	1.22
Certified Values	1.32	2.08	361	1.19	66	0.522	4.58	1.06	27.9	1.21
Tolerance (%)	25.1	16.80	19.5	20.00	17.10	6.58	11.50	10.80	33.00	12.70

Sample ID	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr
	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
LOD	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5
CAOND 147365-Duplicate	303	0.05	52	0.03	0.24	31.5	0.2	69	25	4.6
CAOND 186418-Duplicate	393	0.05	48	0.03	0.85	13.9	0.38	174	28	16.9
CAOND 200894-Duplicate	118	0.04	12	0.06	0.59	33.9	0.1	16	6	4.5
KLUB12_207_256280-DUP	593	0.06	29	0.22	0.44	160	0.17	146	37	28.7
DUP										
CAOND 186418-Duplicate	395	0.05	48	0.03	0.83	14.1	0.38	170	29	17.6
QC										
OREAS 503d	389	0.22	28	0.11	0.82	86.8	0.32	104	64	13.3
Certified Values	0.041	0.209	31.2	0.1	0.8	88	0.318	104	67.00	12.2
Tolerance (%)	106.30	38.30	13.00	14.9	13.90	36.50	18.05	14.70	21.40	22.00

Sample ID	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05
CAOND 147365-Duplicate	8	<0.1	0.08	<0.01	5.46	30.5	0.19	4.9	0.1	0.17
CAOND 186418-Duplicate	54	0.3	0.16	<0.01	6.77	193	0.42	12.6	0.3	0.64
CAOND 200894-Duplicate	13	0.1	7.21	<0.01	12.86	35.1	0.28	1.5	0.1	0.14
KLUB12_207_256280-DUP	5	0.4	0.02	0.02	55.69	20.1	0.32	11.8	0.3	0.76
DUP										
CAOND 186418-Duplicate	54	0.4	0.17	<0.01	6.48	187	0.43	12.5	0.3	0.68
QC										
OREAS 503d	83	0.5	1.37	0.17	59.55	14.6	8.68	9	0.2	0.49
Certified Values	87	0.6	1.42	BDL	62	15.90	9.28	8.7	0.15	0.48
Tolerance (%)	15.80	38.60	11.10		21.00	11.10	16.70	18.70	56.70	18.3

Sample ID	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1
CAOND 147365-Duplicate	0.04	<0.02	2.6	0.06	2.89	0.15	0.6	4.2	1.03	3
CAOND 186418-Duplicate	0.32	<0.02	2.8	0.19	2.23	0.35	<0.2	6.2	0.9	6.1
CAOND 200894-Duplicate	0.07	<0.02	5.6	0.03	8.86	0.37	1.7	14	0.85	1.9
KLUB12_207_256280-DUP	0.05	0.02	31.8	0.1	6.28	0.3	1.1	2.3	0.43	12.2
DUP										
CAOND 186418-Duplicate	0.38	<0.02	2.7	0.2	2.29	0.38	<0.2	6.3	0.93	6
QC										
OREAS 503d	0.04	0.06	28.6	0.2	316	1.81	8.2	120	2.27	7.2
Certified Values	BDL	0.074	30.5	0.21	342	1.21	8.39	120	2.36	7.18
Tolerance (%)		21.90	16	10.60	12.9	59.2	21.50	12.13	36.1	21.9

Sample ID	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
CAOND 147365-Duplicate	<1	<0.3	<0.05	0.16	0.06	<0.1	<0.02	0.06	0.5	5.6	0.5
CAOND 186418-Duplicate	<1	0.5	<0.05	0.46	0.2	0.2	0.03	0.14	61.4	18.47	1.7
CAOND 200894-Duplicate	<1	<0.3	<0.05	0.16	0.48	0.4	0.06	0.07	1.5	4.32	0.3
KLUB12_207_256280-DUP	<1	0.4	<0.05	0.37	<0.05	4.1	<0.02	0.91	17.5	9.11	0.7
DUP											
CAOND 186418-Duplicate	<1	0.5	<0.05	0.48	0.18	0.2	0.03	0.14	62.4	18.3	1.8
QC											
OREAS 503d	2	2.1	<0.05	0.53	0.3	16.4	0.62	3.93	2	16.58	1.4
Certified Values	3.04	2.51	BDL	0.57	0.3	17.4	0.66	4.35	1.91	16.9	1.47
Tolerance (%)	45.5	16.22		18.7	32.1	9.62	30.1	21.7	49.2	17.70	13.40

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Modified Acid Base Accounting
Date :October 8/2021

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified
	pH	%	NP	%	%	%		NP	NP
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.
LOD	0.20	0.01	#N/A	0.005	0.01		#N/A	0.5	#N/A
27192	8.64	1.36	113.3	0.289	0.02	0.27	8.41	89.0	80.6
27431	8.51	1.46	121.7	0.877	0.05	0.83	25.84	108.4	82.5
39897	8.19	1.00	83.3	3.012	0.19	2.82	88.19	68.1	-20.1
88069	6.98	0.41	34.2	27.654	0.52	27.13	847.94	33.0	-814.9
88258	8.32	0.82	68.3	0.289	0.07	0.22	6.84	72.9	66.0
88259	8.13	1.26	105.0	3.437	0.27	3.17	98.97	112.6	13.7
88732	8.67	0.31	25.8	0.111	0.03	0.08	2.53	30.1	27.6
89463	9.40	0.26	21.7	0.097	<0.01	0.10	3.03	26.0	23.0
90505	9.53	1.27	105.8	0.016	<0.01	0.02	0.50	108.8	108.3
90555	9.61	1.72	143.3	0.025	<0.01	0.03	0.78	112.3	111.5
90558	9.60	1.75	145.8	0.035	<0.01	0.04	1.09	110.5	109.4
92861	8.30	1.56	130.0	1.480	0.50	0.98	30.63	134.5	103.9
92862	9.28	0.79	65.8	0.241	<0.01	0.24	7.53	68.2	60.7
93713	8.82	0.98	81.7	0.090	<0.01	0.09	2.81	69.9	67.1
95535	8.16	2.94	245.0	0.069	0.06	0.01	0.28	544.5	544.2
175984	8.38	2.05	170.8	0.523	0.53	0	0.00	156.8	156.8
177513	8.32	2.82	235.0	0.267	0.01	0.26	8.03	230.3	222.3
179323	8.34	1.07	89.2	0.410	0.40	0.01	0.31	93.3	92.9
179362	8.25	1.61	134.2	2.661	0.53	2.13	66.59	138.5	71.9
250983	8.32	0.73	60.8	0.509	0.22	0.29	9.03	65.4	56.3
250988	8.49	0.76	63.3	0.097	0.06	0.04	1.16	67.8	66.7
262374	8.49	0.69	57.5	0.708	0.69	0.02	0.56	62.4	61.8
262393	8.57	0.32	26.7	0.728	0.72	0.01	0.25	29.6	29.3
262423	8.98	0.21	17.5	0.245	<0.01	0.25	7.66	21.8	14.1
268448	6.50	0.02	1.7	6.131	0.31	5.82	181.91	3.7	-178.2
277486	9.20	1.16	96.7	0.027	<0.01	0.03	0.84	106.6	105.7
281591	9.00	1.99	165.8	0.603	0.02	0.58	18.22	141.1	122.9
284023	8.54	0.73	60.8	1.029	0.58	0.45	14.03	64.0	50.0
284960	8.40	1.30	108.3	0.469	0.46	0.01	0.28	119.1	118.8
293708	8.65	1.10	91.7	0.408	0.18	0.23	7.13	91.0	83.8
313379	8.21	0.08	6.7	1.426	0.09	1.34	41.75	12.1	-29.6
314036	8.42	0.24	20.0	0.433	0.04	0.39	12.28	26.4	14.1
315444	8.55	2.02	168.3	1.073	0.06	1.01	31.66	131.9	100.3
324659	8.41	1.52	126.7	0.622	0.04	0.58	18.19	129.7	111.5
325304	9.28	0.48	40.0	0.143	<0.01	0.14	4.47	40.5	36.0
325313	10.08	1.30	108.3	0.055	<0.01	0.06	1.72	86.6	84.9
1241053	9.49	1.90	158.3	0.023	<0.01	0.02	0.72	167.7	167.0
CAOND105122	9.07	0.49	40.8	0.021	<0.01	0.02	0.66	50.1	49.5
CAOND105663	9.78	0.72	60.0	0.101	0.01	0.09	2.84	56.2	53.3
CAOND125609	9.22	0.91	75.8	0.237	<0.01	0.24	7.41	82.3	74.9
CAOND125656	9.05	0.99	82.5	0.079	<0.01	0.08	2.47	88.3	85.8
CAOND127496	9.25	0.45	37.5	0.257	<0.01	0.26	8.03	41.8	33.8
CAOND128009	8.93	0.60	50.0	0.053	<0.01	0.05	1.66	62.4	60.8
CAOND128338	8.05	0.15	12.5	5.244	0.03	5.21	162.94	13.8	-149.1
CAOND139371	9.36	1.52	126.7	0.022	<0.01	0.02	0.69	133.5	132.8
CAOND143812	9.10	0.33	27.5	0.040	<0.01	0.04	1.25	32.2	31.0
CAOND144162	9.10	1.15	95.8	0.050	<0.01	0.05	1.56	103.1	101.5
CAOND144756	9.01	1.83	152.5	0.147	<0.01	0.15	4.59	160.0	155.4
CAOND147054	9.13	0.75	62.5	0.549	0.02	0.53	16.53	64.4	47.9
CAOND152062	9.83	0.69	57.5	0.092	<0.01	0.09	2.88	65.7	62.9
CAOND152076	8.71	0.18	15.0	0.220	0.03	0.19	5.94	22.0	16.0
CAOND152203	9.62	0.82	68.3	0.032	<0.01	0.03	1.00	73.6	72.6
CAOND152218	9.57	0.14	11.7	0.041	<0.01	0.04	1.28	16.3	15.0
CAOND154037	8.55	2.35	195.8	2.164	0.03	2.13	66.69	192.3	125.7
CAOND154411	8.42	0.51	42.5	0.334	0.09	0.24	7.63	49.8	42.1
CAOND155877	9.41	1.39	115.8	0.027	<0.01	0.03	0.84	125.5	124.7
CAOND157956	8.48	0.68	56.7	0.147	0.16	0	0	61.3	61.3
CAOND157957	8.34	1.22	101.7	0.377	0.39	0	0	106.7	106.7
CAOND158905	9.39	1.01	84.2	0.206	<0.01	0.21	6.44	85.1	78.7
CAOND161540	9.69	0.84	70.0	0.267	<0.01	0.27	8.34	72.0	63.7
CAOND161712	9.33	1.26	105.0	0.529	<0.01	0.53	16.53	91.9	75.4
L750071	9.40	1.57	130.8	0.029	<0.01	0.03	0.91	139.6	138.7
P131723	9.12	3.21	267.5	0.014	<0.01	0.01	0.44	269.1	268.6

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Modified Acid Base Accounting
Date :October 8/2021

Sample ID	Paste	TIC	CaCO3	S(T)	S(SO4)	S (sulfide)	AP	Modified	Net Modified
	pH	%	NP	%	%	%		NP	NP
Q324939	8.26	2.01	167.5	1.189	0.05	1.14	35.59	172.6	137.0
Q547738	9.00	2.04	170.0	0.060	<0.01	0.06	1.88	179.8	177.9
R223828	9.15	1.93	160.8	0.029	<0.01	0.02	0.63	161.7	161.0
R225293	9.23	1.19	99.2	<0.005	<0.01	<0.01	<0.3	106.8	106.8
R324732	8.96	1.76	146.7	0.134	<0.01	0.10	3.13	146.4	143.3
R350285	9.32	3.31	275.8	0.026	<0.01	0.02	0.63	232.3	231.7
Duplicates									
27192	8.61							87.8	
250983	8.33							64.4	
250988	8.50							67.7	
CAOND125609	9.21							81.7	
CAOND125656	9.09							88.0	
CAOND161540	9.73							71.3	
CAOND161712	9.46							90.9	
CAOND152218					<0.01				
90505				0.013					
325313				0.055					
R223828		1.96							
QC									
GS314-2				2.574					
GS314-2				2.569					
RTS-3A					0.93				
RTS-3A					1.01				
SY4		0.90							
NBM-1								41.8	
NBM-1								43.1	
NBM-1								42.3	
OREAS 278									
Expected Values		0.91		2.56	0.98	0.699		46.0	
Tolerance +/-		0.07		0.14	0.12	0.059		10.1	
TIC-L1		0.12							
Expected Values		0.13							
Tolerance +/-		0.02							

Note:

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date :October 8/2021

Sample ID	Ag	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	As	Be	Bi	Cd	Ce
	mg/kg	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	1	0.1	0.02	0.01	0.05
27192	0.79	0.38	90	2.69	17	2609	2.18	0.25	<1	0.74	230	0.02	9	0.10	0.32	132	<0.01	5	12	5.4	6	<0.1	0.09	0.04	20.02
27431	0.65	0.37	474	3.27	41	1685	3.86	0.14	3	0.86	266	0.05	25	0.09	0.86	176	<0.01	23	10	7.3	3	0.2	0.36	0.02	11.41
39897	16.63	0.36	91	2.31	23	>10000	4.02	0.26	1	0.54	241	0.03	14	0.10	3.09	136	<0.01	3	14	16.1	7	0.1	0.76	0.07	8.04
88069	2.99	0.35	<5	1.84	39	562	>15.00	0.18	2	0.10	115	0.02	94	0.03	>5.00	47.2	0.04	<1	4	5.3	135	0.2	26.05	0.08	8.46
88258	0.16	1.37	45	3.07	77	2325	7.59	0.03	9	1.53	363	0.05	97	0.13	0.28	80.1	0.04	156	38	12.2	3	0.3	0.30	<0.01	63.19
88259	4.23	1.07	115	4.76	58	>10000	11.24	0.02	7	1.13	470	0.05	167	0.12	3.08	185	0.07	144	28	12.8	5	0.5	3.75	<0.01	55.15
88732	0.05	0.93	53	1.47	41	566	2.84	0.22	8	0.81	162	0.05	17	0.10	0.11	36.3	0.15	36	14	6.4	2	0.2	0.03	<0.01	16.57
89463	0.38	1.60	15	1.54	49	73.9	2.89	0.10	16	1.54	270	0.05	18	0.09	0.05	88.8	0.22	56	27	6.1	2	0.4	0.06	<0.01	17.16
90505	0.01	1.51	39	4.26	44	31.1	3.05	0.11	20	1.08	501	0.04	14	0.08	<0.01	134	<0.01	39	35	3.6	2	0.2	<0.02	0.02	19.49
90555	0.09	0.37	30	3.14	13	23.7	2.22	0.20	2	0.95	238	0.03	11	0.10	0.02	86.2	<0.01	5	10	2.5	2	0.1	0.14	0.02	27.41
90558	0.05	0.31	41	3.23	15	26.4	2.32	0.20	<1	0.86	246	0.03	11	0.11	0.03	106	<0.01	5	12	1.9	2	0.2	0.06	0.02	25.85
92861	3.40	0.9	233	5.78	33	4384	2.51	0.17	10	0.72	325	0.03	49	0.09	1.51	468	<0.01	17	17	7.2	3	0.1	0.82	<0.01	10.94
92862	0.07	1.10	57	2.74	30	362	3.36	0.22	12	0.83	199	0.04	22	0.10	0.23	111	<0.01	15	22	3.3	2	0.2	0.08	0.02	15.4
93713	0.57	1.25	35	2.12	30	836	3.68	0.15	14	0.99	217	0.03	21	0.09	0.09	115	<0.01	20	32	6.5	20	0.2	0.22	0.06	25.18
95535	1.74	2.14	23	9.14	47	2.7	3.51	0.16	31	1.72	747	0.02	70	0.16	0.07	163	<0.01	46	29	9.7	1	0.3	0.03	0.01	20.95
175984	0.84	0.42	62	5.28	32	4.7	2.14	0.27	3	1.27	455	0.02	23	0.11	0.54	148	<0.01	20	9	10.9	2	0.2	0.09	<0.01	104
177513	1.79	1.11	6	8.84	64	154	8.01	0.02	13	1.17	361	0.02	36	<0.01	0.30	334	<0.01	87	17	2.1	4	0.4	0.22	<0.01	10.04
179323	0.20	2.19	21	4.67	114	1.9	5.06	0.05	20	2.82	511	0.04	51	0.22	0.41	137	0.19	148	35	30.4	6	0.5	0.07	<0.01	181
179362	1.53	1.47	133	6.19	54	15.3	4.49	0.26	16	1.45	441	0.01	44	0.13	2.75	176	<0.01	28	23	17.6	2	0.3	0.3	<0.01	11.02
250983	0.08	1.21	74	3.07	33	336	3.76	0.23	12	0.96	318	0.03	15	0.10	0.54	81.8	0.14	24	17	8.8	4	0.2	1.36	<0.01	14.48
250988	0.19	1.17	482	2.98	46	350	4.27	0.08	13	1.09	327	0.05	15	0.10	0.09	117	0.15	45	19	7.7	5	0.2	4.78	0.02	18.08
262374	0.36	0.94	6	3.57	38	24.9	1.01	0.02	13	1.17	334	0.05	17	0.09	0.72	63.3	0.13	89	22	4.5	3	0.2	0.04	<0.01	17.43
262393	0.07	0.91	16	2.43	42	14.4	1.30	0.09	8	0.71	270	0.06	13	0.09	0.75	55.3	0.11	40	19	5.7	2	0.2	0.03	<0.01	25.7
262423	0.13	1.30	17	1.34	64	15.5	2.27	0.07	17	0.92	688	0.04	7	0.08	0.27	27	0.16	52	32	4.2	10	0.2	0.03	<0.01	14.94
268448	11.26	0.73	<5	0.56	27	>10000	>15.00	0.04	9	0.78	212	0.02	172	0.03	>5.00	35.4	0.06	146	31	10.1	7	1.1	2.58	0.05	9.82
277486	0.34	2.90	56	4.04	162	5.5	6.12	0.02	38	3.93	530	0.04	44	0.19	0.01	121	0.02	188	33	17.9	4	1.2	0.19	<0.01	96.53
281591	1.14	0.62	150	3.52	42	2175	7.20	0.35	4	1.52	495	0.02	18	0.10	0.63	285	<0.01	22	20	14.7	16	0.4	0.80	0.04	23.07
284023	0.42	1.25	542	3.40	45	1791	3.51	0.11	16	1.00	221	0.05	32	0.10	0.99	345	<0.01	47	28	6.1	3	0.3	0.30	0.01	13.26
284960	0.25	2.44	529	5.08	119	92.4	5.40	0.04	22	2.66	636	0.04	47	0.14	0.46	277	0.12	130	37	14.4	3	0.3	21.76	0.01	48.52
293708	0.26	0.50	88	3.07	25	435	4.05	0.17	6	0.75	306	0.06	29	0.08	0.43	84.4	<0.01	36	14	7.5	2	0.3	0.09	<0.01	21.1
313379	1.98	1.13	28	0.90	50	>10000	3.73	0.10	9	1.03	220	0.05	42	0.10	1.33	56.9	0.17	48	28	12.2	2	0.3	1.04	<0.01	18.66
314036	17.10	1.39	302	1.62	87	3996	6.38	0.10	11	1.38	286	0.03	43	0.10	0.45	125	0.16	56	24	14.1	4	0.5	0.33	<0.01	24.9
315444	5.48	0.44	99	3.79	21	>10000	3.51	0.28	2	1.22	402	0.03	22	0.10	1.15	216	<0.01	9	32	12.4	66	0.2	3.3	0.33	13.13
324659	0.64	1.72	71	4.96	188	4506	8.65	0.07	17	1.73	582	0.05	87	0.04	0.58	254	0.01	221	32	9.6	3	0.8	0.59	<0.01	13.46
325304	0.74	0.98	123	1.62	28	951	6.96	0.38	6	0.49	152	0.03	45	0.08	0.13	50	<0.01	26	11	10.0	10	0.1	0.43	<0.01	21.59
325313	0.09	0.35	75	2.47	26	332	2.43	0.28	1	0.68	267	0.05	6	0.08	0.06	122	<0.01	10	8	7.2	2	0.1	0.08	0.01	23.61
1241053	0.09	2.34	<5	6.43	164	1.9	3.80	0.02	21	3.12	615	0.04	62	0.08	0.01	92.5	0.28	245	26	8.0	3	0.3	0.11	<0.01	102
CAOND105122	0.02	2.68	6	2.94	188	10	5.90	0.04	30	3.31	771	0.05	66	0.05	<0.01	78.7	0.56	242	34	9.6	5	0.4	0.05	<0.01	9.5
CAOND105663	0.93	0.53	296	1.92	37	205	0.85	0.27	3	0.63	231	0.05	6	0.06	0.09	101	<0.01	6	11	8.9	1	0.2	0.52	<0.01	17.05
CAOND125609	0.20	2.56	<5	3.47	276	625	7.04	0.05	23	3.21	486	0.04	71	0.02	0.21	23.4	0.39	179	30	12.6	3	0.4	8.84	<0.01	15.84
CAOND125656	0.04	0.96	9	3.72	66	686	3.02	0.06	6	1.22	318	0.05	24	0.04	0.07	41.5	0.32	119	13	7.8	2	0.3	1.27	<0.01	7.65
CAOND127496	0.05	1.37	6	2.30	154	101	2.35	0.04	17	1.47	369	0.05	65	0.03	0.25	26.6	0.36	89	22	7.8	24	0.1	0.23	<0.01	4.7
CAOND128009	0.11	1.95	14	2.88	98	31	3.62	0.07	27	2.51	450	0.04	32	0.18	0.04	103	0.18	88	23	20.1	10	1.0	0.17	<0.01	32.76
CAOND128338	0.61	1.52	53	0.74	62	416	8.29	0.26	15	0.43	246	0.01	112	0.05	>5.00	10.8	0.07	28	51	23.2	298	0.2	7.83	<0.01	26.83
CAOND139371	0.02	2.33	11	5.45	186	20.8	7.49	0.09	23	2.30	899	0.03	87	0.04	<0.01	58.2	0.32	187	34	5.4	2	0.2	0.04	0.01	5
CAOND143812	0.05	1.94	<5	1.79	150	187	4.75	0.04	15	2.25	402	0.05	63	0.03	0.03	28	0.40	136	22	7.7	5	0.2	0.16	<0.01	4.08
CAOND144162	0.12	2.85	<5	3.92	172	298	6.98	0.02	29	3.43	659	0.04	50	0.02	0.03	39.9	0.31	235	38	5.9	2	0.4	0.98	<0.01	7.79
CAOND144756	0.04	3.90	7	6.42	192	80.2	7.13	0.18	28	4.01	924	0.02	86	0.03	0.16	104	0.33	171	38	2.2	9	0.3	0.20	<0.01	5.85
CAOND147054	0.74	0.57	152	2.04	26	363	5.79	0.16	5	0.68	169	0.05	28	0.07	0.51	58	<0.01	45	16	12.1	4	0.4	0.25	<0.01	26.4
CAOND152062	0.02	1.65	<5	2.58	93	8.7	2.85	<0.01	12	1.75	348	0.07	35	0.16	0.08	20.4	0.22	109	23	5.8	5	0.2	0.05	0.02	7.68
CAOND152076	0.01	2.06	33	1.35	60	29.4	3.97	0.12	10	1.65	429	0.04	31	0.12	0.22	73.3	0.20	69	29	5.6	5	0.3	0.09	<0.01	33.85
CAOND152203	0.02	2.10	58	3.31	74	21	4.78	0.32	13	0.98	571	0.03	58	0.11	0.02	96.8	0.25	38	25	5.2	29	0.2	0.04	0.01	30.09
CAOND152218	<0.01	1.72	20	1.08	86	5.9	3.51	0.12	14	0.82	558	0.03	37	0.11	0.04	39.2	0.20	49	24	4.3	20	0.2	0.02	<0.01	29.71
CAOND154037	0.78	1.25	57	6.52	26	1258	5.81	0.31	8	1.40	538	0.02	58	0.15	2.13	136	<0.01	28	24	14.0	7	0.2	0.85	<0.01	13.46

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date :October 8/2021

Sample ID	Ag	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	As	Be	Bi	Cd	Ce
	mg/kg	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
CAOND154411	0.15	1.60	23	2.33	47	2550	3.67	0.09	9	1.50	361	0.06	71	0.14	0.34	73.7	0.24	79	24	11.0	4	0.2	0.38	<0.01	42.93
CAOND155877	<0.01	2.45	<5	4.80	108	2.1	4.49	0.03	15	2.12	673	0.05	50	0.13	0.02	118	0.06	127	27	5.4	2	0.2	<0.02	<0.01	43.27
CAOND157956	<0.01	1.04	100	2.59	50	1.6	1.56	0.09	11	0.86	186	0.06	10	0.08	0.16	135	<0.01	22	29	8.3	<1	0.1	<0.02	0.02	32.3
CAOND157957	0.02	1.17	73	4.44	43	2.6	1.77	0.14	13	0.82	276	0.04	10	0.08	0.42	95.6	<0.01	17	28	7.8	2	0.2	<0.02	0.02	25.12
CAOND158905	0.02	1.40	34	3.05	30	64.7	2.78	0.22	10	1.05	487	0.04	44	0.15	0.24	78.3	<0.01	26	20	3.3	5	0.2	0.09	<0.01	43.82
CAOND161540	0.03	0.97	55	2.79	57	36.9	2.05	0.23	6	0.50	182	0.04	167	0.08	0.29	87.9	<0.01	14	13	6.5	8	0.2	0.27	<0.01	37.42
CAOND161712	0.99	0.54	72	2.75	28	2249	5.08	0.26	3	0.87	315	0.04	35	0.14	0.55	144	<0.01	24	12	15.6	4	0.2	0.69	0.04	32.94
L750071	0.04	2.62	<5	5.35	191	251	6.60	0.04	26	3.08	872	0.04	72	0.04	0.03	77.5	0.25	249	36	3.7	3	0.3	0.08	<0.01	5.98
P131723	0.02	1.34	<5	10.15	164	5.5	3.47	0.02	13	1.55	643	0.04	48	0.03	0.01	45.7	0.24	185	13	7.4	1	0.2	0.13	0.08	20.7
Q324939	0.51	2.95	256	6.29	100	8185	5.89	0.10	34	3.10	990	0.04	66	0.04	1.22	201	<0.01	138	59	3.9	9	0.2	0.43	0.04	15.81
Q547738	1.92	2.46	6	6.70	119	120	7.40	0.03	22	2.86	730	0.04	56	0.09	0.06	57.4	0.11	202	37	17.4	4	0.5	0.04	<0.01	53.35
R223828	0.06	3.23	11	5.30	107	114	5.45	0.24	28	4.01	745	0.02	136	0.04	0.03	244	<0.01	95	41	5.6	16	0.7	0.16	0.01	12.53
R225293	0.02	1.48	6	4.46	190	1.2	1.97	0.03	20	1.86	445	0.05	45	0.04	<0.01	43.6	0.33	132	22	6.4	5	0.2	0.02	<0.01	32.53
R324732	0.06	2.51	38	3.38	47	157	4.09	0.21	27	3.65	724	0.02	29	0.17	0.15	31.5	<0.01	41	43	5.5	4	0.2	0.22	<0.01	46.85
R350285	0.02	0.78	34	5.49	49	151	4.35	0.31	5	2.65	859	0.02	30	0.12	0.03	246	<0.01	42	20	20.0	8	0.3	0.17	0.03	38.27
DUP																									
95535	1.40	2.17	25	9.19	47	2.3	3.65	0.16	31	1.74	757	0.02	70	0.16	0.07	164	<0.01	48	31	10.0	1	0.3	0.03	0.02	22.17
CAOND143812	0.04	1.96	<5	1.84	153	181	4.72	0.04	15	2.24	416	0.05	61	0.03	0.02	28.4	0.4	135	24	7.8	5	0.2	0.11	<0.01	4.02
CAOND158905	0.02	1.39	35	3.01	30	66.2	2.76	0.21	9	1.03	480	0.03	42	0.15	0.23	76.2	<0.01	26	21	2.9	5	0.2	0.09	<0.01	42.69
*Rep 268448																									
QC																									
OREAS 260	0.14	1.24	150	0.93	47	46.3	3.79	0.27	20	0.61	451	0.09	70	0.04	0.08	14.1	<0.01	19	128	13.1	12	1.2	0.51	0.2	58.77
OREAS 260	0.14	1.32	146	0.89	48	46.3	3.63	0.28	21	0.58	431	0.09	69	0.04	0.08	15.1	<0.01	20	117	12.8	12	1.1	0.54	0.2	64.42
CCU-1D																									
Expected Values	0.146	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.593	450	0.082	75	0.04	0.077	14.8	BDL	22.0	125	12.6	12.5	1.24	0.54	0.21	55
Tolerance (%)	30.77	12.80	20.12	14.46	16.31	13.55	11.33	23.08	24.25	14.55	11.76	46.15	14.29	66.67	66.67	20.32	BDL	23.9	12.77	#N/A	35.29	35.07	20.41	27.03	#N/A
OREAS 502b	2.09	1.84	307	1.04	75	6879	4.93	0.93	29	1.28	378	0.14	29	0.09	0.91	58.2	0.31	107	112	10.4	18	0.4	4.76	0.14	54.15
OREAS 502b	2.00	1.86	300	1.03	77	7356	4.79	0.91	28	1.24	378	0.14	31	0.09	0.95	62.4	0.3	109	117	11.3	23	0.4	5.13	0.26	52.02
Expected Values	2.01	1.90	299	1.10	79	7580	5.02	0.941	29.1	1.22	398	0.148	33.5	0.098	0.97	63	0.307	114	124	10.9	18.6	0.43	5.22	0.2	52
Tolerance (%)	11.91	12.00	15.26	13.07	14.09	10.55	11.08	13.52	20.50	12.82	11.93	31.07	19.13	25.68	13.42	12.74	19.95	13.0	12.79	24.05	45.54	103.35	11.60	#N/A	10.79

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date :October 8/2021

Sample ID	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb	Cu	Fe
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP90Q100	ICP90Q100
LOD	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1	0.01	0.05
27192	8.2	0.33	1.1	0.2	0.16	0.39	<0.02	9.1	0.03	6.48	0.08	1.1	8.4	4.67	2.1	<1	<0.3	<0.05	0.17	<0.05	0.5	0.04	0.10	6.9	3.03	0.2		
27431	12.3	0.22	2.1	0.2	0.21	0.28	<0.02	5.6	0.04	17.74	0.06	1.6	5.7	1.85	2.9	<1	<0.3	<0.05	0.16	0.11	0.3	0.03	0.13	0.6	3.63	0.3		
39897	21.4	0.38	1.3	0.2	0.40	2.57	0.11	3.4	0.08	17.56	0.05	1.8	9.4	3.46	1.8	3	<0.3	<0.05	0.200	0.17	0.3	0.07	0.27	82.1	3.57	0.4	2.94	
88069	171	0.32	1.4	0.3	0.12	1.34	<0.02	3.5	0.02	9.57	0.41	39.4	8.5	14.8	1.4	3	<0.3	0.06	0.07	5.18	0.3	2.12	<0.05	1.0	2.09	0.2		23.89
88258	25.8	0.10	13.2	0.4	0.30	0.25	0.04	31.2	0.07	56.72	0.07	1.0	1.5	1.3	11.2	<1	0.4	<0.05	0.35	0.12	0.7	<0.02	0.37	0.4	8.26	0.5		
88259	39.5	0.07	10.6	0.4	0.28	1.91	0.30	29.5	0.07	278	0.19	2.3	1.0	1.8	10.4	8	0.5	<0.05	0.31	1.07	0.6	<0.02	0.48	32.9	7.64	0.5	3.17	
88732	10	0.37	6.4	0.2	0.18	<0.01	<0.02	7.1	0.05	3.17	0.46	0.5	11.1	8.43	4.3	<1	0.3	<0.05	0.23	<0.05	0.5	0.05	0.12	28.6	6.26	0.4		
89463	15.5	0.43	11.2	0.2	0.21	0.02	<0.02	7.3	0.05	18.81	0.48	0.8	5.0	3.34	6.6	<1	0.4	<0.05	0.24	<0.05	0.5	0.02	0.09	2.7	6.93	0.5		
90505	13.6	0.22	9.3	0.2	0.08	0.02	<0.02	8.0	0.04	0.29	<0.05	0.7	3.8	0.55	5.2	<1	<0.3	<0.05	0.13	<0.05	0.4	<0.02	<0.05	0.1	2.31	0.2		
90555	9.6	0.27	1.3	0.2	0.05	0.01	<0.02	11.2	0.03	0.18	<0.05	0.5	7.3	0.54	2.4	<1	<0.3	<0.05	0.20	0.06	0.5	0.04	<0.05	0.2	3.36	0.2		
90558	14.1	0.26	1.0	0.2	<0.05	<0.01	<0.02	10.8	0.03	0.55	<0.05	0.6	7.1	1.09	2.5	<1	<0.3	<0.05	0.20	<0.05	0.5	0.04	<0.05	0.2	3.19	0.2		
92861	16.6	0.25	4.3	0.1	0.18	0.98	0.06	5.6	0.05	897	<0.05	2.9	6.3	1.25	2.6	2	<0.3	<0.05	0.12	0.18	0.2	0.04	0.22	0.1	3.17	0.3		
92862	35.2	0.26	4.7	0.2	0.08	0.10	<0.02	6.7	0.03	4.84	<0.05	0.8	8.1	0.96	2.1	<1	<0.3	<0.05	0.12	<0.05	0.3	0.04	<0.05	<0.1	2.25	0.2		
93713	14.2	0.22	6.2	0.2	0.14	1.93	<0.02	12.1	0.03	7.63	<0.05	0.7	5.5	43.97	3.0	<1	<0.3	<0.05	0.17	<0.05	0.5	0.03	0.12	0.1	3.19	0.2		
95535	24.5	0.24	6.6	0.1	0.24	0.16	<0.02	9.9	0.07	11.83	<0.05	1.1	5.4	0.31	6.3	<1	<0.3	<0.05	0.21	<0.05	0.8	0.02	0.22	0.3	4.73	0.4		
175984	8.0	0.28	1.6	0.2	0.28	0.09	<0.02	68.8	0.06	226	<0.05	1.3	8.9	0.77	2.5	<1	<0.3	<0.05	0.20	<0.05	1.6	0.04	0.25	0.6	4.81	0.5		
177513	19.8	0.09	7.7	0.3	<0.05	0.15	<0.02	4.9	0.03	20.2	<0.05	1.0	1.0	0.34	3.4	<1	<0.3	<0.05	0.15	<0.05	<0.1	<0.02	0.09	25.1	5.04	0.3		
179323	18.2	0.29	11.8	0.5	0.73	0.06	0.03	117	0.09	221	0.23	1.7	2.0	0.67	10.1	<1	0.7	<0.05	0.40	<0.05	3.9	<0.02	0.97	1.7	10.11	0.7		
179362	27.6	0.4	5.1	0.1	0.43	0.39	<0.02	5.7	0.08	949	<0.05	2.3	9.8	1.02	4.6	<1	<0.3	<0.05	0.18	0.09	0.6	0.04	0.30	0.4	5.74	0.5		
250983	29.4	0.26	4.5	0.2	0.27	0.13	<0.02	6.2	0.07	24.04	0.34	0.6	8.5	1.07	2.4	<1	0.3	<0.05	0.23	0.10	0.3	0.03	0.12	0.6	7.69	0.6		
250988	15.7	0.15	7	0.2	0.26	0.79	<0.02	8.1	0.06	11.48	0.32	0.7	3.2	8.23	4.4	<1	0.4	<0.05	0.21	0.11	0.4	<0.02	0.11	0.4	7.09	0.5		
262374	5.2	0.07	5.4	0.2	0.13	0.08	<0.02	6.9	0.09	14.85	0.35	0.7	0.9	0.39	4.5	<1	0.4	<0.05	0.23	<0.05	1.1	<0.02	0.34	8.7	7.97	0.7		
262393	7.4	0.12	5.2	0.2	0.17	<0.01	<0.02	12.7	0.07	8.23	0.41	1.1	3.7	0.22	3	<1	0.3	<0.05	0.2	<0.05	0.6	<0.02	0.15	3.7	7.04	0.6		
262423	10.3	0.12	4.7	0.2	0.13	0.05	<0.02	6.5	0.05	3.79	0.39	0.7	2.5	0.19	3.3	<1	<0.3	<0.05	0.15	<0.05	0.5	0.02	0.07	0.6	4.86	0.4		
268448	58.4	0.09	10.4	0.7	0.21	0.84	0.26	4.5	0.04	187	0.17	9.9	1.5	2.77	4.6	11	0.8	<0.05	0.11	0.65	0.3	0.04	0.36	53.1	2.99	0.3	6.21	32.89
277486	24.3	0.36	16.8	0.8	0.43	1.46	0.06	48.7	0.11	2.83	<0.05	0.8	1.2	0.36	21.3	<1	<0.3	<0.05	0.44	0.78	4.0	<0.02	0.75	0.3	11.23	0.8		
281591	71.9	0.42	2.4	0.2	0.35	0.15	0.02	10.4	0.07	10.74	<0.05	1.5	14.2	1.00	5.9	<1	<0.3	<0.05	0.21	0.19	1.4	0.08	0.35	11.2	5.59	0.5		
284023	12.1	0.2	8.3	0.2	0.15	0.37	0.05	6.4	0.03	13.04	<0.05	0.8	4.5	1.16	4.8	<1	<0.3	<0.05	0.10	0.1	0.3	0.02	0.07	<0.1	2.07	0.2		
284960	26	0.2	12.7	0.4	0.39	0.04	0.03	24.1	0.07	43.6	0.09	1.1	2.3	0.27	16.2	1	0.4	<0.05	0.24	0.89	1.8	<0.02	0.48	29.9	6.88	0.5		
293708	9.6	0.26	3.6	0.2	0.2	0.57	<0.02	12.5	0.05	30.44	<0.05	0.8	7.2	0.97	3.6	<1	<0.3	<0.05	0.14	<0.05	0.4	0.03	0.16	0.3	3.6	0.3		
313379	17.6	0.13	9.6	0.3	0.36	0.17	0.08	8.7	0.05	5.75	0.41	1.0	3.7	1.17	4.7	1	0.5	<0.05	0.21	0.2	0.5	0.03	0.24	9.5	5.32	0.3	1.37	
314036	17.6	0.21	9.4	0.4	0.38	2.92	<0.02	13	0.06	1.76	0.27	1.1	3.5	4.29	5.5	1	0.4	<0.05	0.19	<0.05	0.9	0.02	0.32	13.4	5.91	0.4		
315444	41.4	0.33	1.6	0.2	0.29	19.33	0.1	6.2	0.05	20.59	<0.05	1.8	9.1	169	3.3	3	<0.3	<0.05	0.19	0.38	0.4	0.05	0.23	0.3	4.62	0.4	1.08	
324659	24.1	0.2	13	0.4	0.23	0.45	0.09	9.3	0.08	297	<0.05	1.6	3	2.09	17.1	2	<0.3	<0.05	0.17	0.18	<0.1	<0.02	0.41	0.1	5.87	0.6		
325304	15.1	0.36	3.3	0.2	0.25	0.33	<0.02	11.4	0.05	176	<0.05	1.0	12	1.14	2.1	<1	<0.3	<0.05	0.14	0.14	0.6	0.05	0.31	1.5	3.53	0.3		
325313	6.1	0.24	1.4	0.2	0.19	0.18	<0.02	11.1	0.04	2.54	<0.05	0.7	9.4	1.82	2.8	<1	<0.3	<0.05	0.16	<0.05	0.7	0.04	0.12	0.2	3.18	0.3		
1241053	18.5	0.22	13	0.7	0.28	0.05	0.03	63	0.12	158	0.09	0.5	1.3	0.63	16.2	<1	0.4	<0.05	0.32	<0.05	2.7	<0.02	0.21	2.3	11.01	0.9		
CAOND105122	37.4	0.22	11.3	0.4	0.37	0.03	0.03	3.8	0.22	10.51	0.17	0.7	1.1	2.26	20	<1	0.4	<0.05	0.39	<0.05	0.1	<0.02	0.07	1.8	16.38	1.6		
CAOND105663	5.6	0.46	2.1	0.2	0.32	0.53	<0.02	8.2	0.03	200	<0.05	0.8	11.7	1.35	1.5	<1	<0.3	<0.05	0.11	0.05	0.7	0.06	0.23	0.2	2.81	0.2		
CAOND125609	62.9	0.68	15.3	0.5	0.45	0.08	0.03	6.9	0.16	14.06	0.16	1.4	6.8	0.61	9.2	1	0.5	<0.05	0.43	0.31	0.1	0.04	0.36	2.8	17.34	1.4		
CAOND125656	16.4	0.22	7.2	0.4	0.35	0.06	<0.02	2.7	0.2	4.12	0.28	0.3	4.6	0.58	5.2	<1	0.5	<0.05	0.48	0.41	0.2	0.02	0.08	31	19.52	1.7		
CAOND127496	31.4	0.16	5.3	0.2	0.32	0.03	<0.02	1.5	0.11	0.26	0.22	0.4	3	0.83	3.6	<1	<0.3	<0.05	0.3	0.05	<0.1	<0.02	<0.05	0.7	11.62	1		
CAOND128009	23.1	0.41	8	0.3	0.52	0.32	0.02	14	0.08	1.59	0.11	1.8	2.1	1.91	8	<1	0.5	<0.05	0.31	0.18	2.5	<0.02	0.56	0.8	8.75	0.6		
CAOND128338	74.2	0.29	4.7	0.3	0.59	0.08	<0.02	12	0.06	49.96	0.16	4.2	17.1	1.08	3.3	3	0.4	<0.05	0.16	1.46	2.5	0.14	0.5	0.4	5.07	0.4		
CAOND139371	29.1	0.24	9.9	0.3	0.19	<0.01	<0.02	1.9	0.15	4.02	0.11	0.4	4.5	0.65	13.3	<1	<0.3	<0.05	0.28	<0.05	<0.1	0.02	<0.05	1.3	11.61	1.1		
CAOND143812	29	0.36	9.9	0.4	0.34	0.02	<0.02	1.3	0.14	0.12	0.25	0.3	2.9	2.6	4.8	<1	0.3	<0.05	0.29	<0.05	<0.1	<0.02	<0.05	1.9	13.48	1.3		
CAOND144162	33.8	0.2	15.6	0.5	0.25	0.07	0.03	3.5	0.2	17.13	0.14	0.3	1.9	0.54	27.7	<1	0.7	<0.05	0.34	0.35	0.2	<0.02	0.18	2.5	14.17	1.6		
CAOND144756	40	0.35	12.4	0.3	0.06	<0.01	0.03	2	0.14	5.61	<0.05	0.4	11.7	1.14	17	<1	<0.3	<0.05	0.34	0.06	<0.1	0.06	<0.05	1.5	13.41	1.1		
CAOND147054	10.9	0.22	4.2	0.3	0.30	0.98	<0.02	14.3	0.05	29.11	<0.05	2.4	7.2	0.93	2.7	<1	<0.3	<0.05	0.18	0.06	0.4	0.04	0.3	1	4.46	0.3		
CAOND152062	18.6	<0.05	10.8	0.4	0.17	<0.01	<0.02	2.2	0.04	1.07	0.27	3.6	0.2	0.53	12.1	<1	<0.3	<0.05	0.33	<0.05	1.3	<0.02	0.14	0.3	8.87	0.4		
CAOND152076	20.4	0.13	8.4	0.2	0.17	<0.01	<0.02	12.7	0.04	0.67	0.16	0.9	6.2	1.01	6.9	<1	0.3	<0.05	0.23	<0.05	1.3	0.03	0.14	1.2	6.15	0.4		
CAOND152203	24.5	0.32	6.6	0.2	0.12	<0.01	<0.02	11.9	0.05	1.28	0.24	0.9	19.6	0.59	4.2	<1	<0.3	<0.05	0.34	<0.05	1.0	0.12	0.07	1.2	9.24	0.4		
CAOND152218	16.2	0.16	5.1	0.2	0.10	<0.01	<0.02	11.8	0.03	0.67	0.34	0.7	6.4	1.00	4.1	<1	<0.3	<0.05	0.29	<0.05	1.0	0.05	0.10	0.3	7.24	0.3		
CAOND154037	19.7	0.32	3.8	0.2	0.29	0.15	0.03	7.9	0.08	1037	<0.05	3.1	11.4	1.4	3.3	2	<0.3	<0.05	0.23	0.32	0.3	0.06	0.30	1.3	6.18	0.5		

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date :October 8/2021

Sample ID	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb	Cu	Fe
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	ICP90Q100	ICP90Q100
CAOND154411	23.1	0.29	9.4	0.2	0.34	0.06	0.04	20.1	0.08	17.7	0.49	0.6	5.5	0.92	7.9	1	0.6	<0.05	0.39	0.09	1.0	0.02	0.43	3.2	7.82	0.5		
CAOND155877	29	0.1	13.3	0.2	0.16	<0.01	0.02	14.8	0.07	0.67	0.09	0.7	1.9	0.21	14.7	<1	<0.3	<0.05	0.46	<0.05	1.1	<0.02	0.09	0.2	8.63	0.5		
CAOND157956	7.5	0.2	5.1	<0.1	0.28	0.02	<0.02	12.4	0.04	4.95	<0.05	1.6	3.8	0.15	2.1	<1	<0.3	<0.05	0.14	<0.05	2.6	<0.02	0.66	0.2	2.01	0.2		
CAOND157957	9.8	0.33	4.5	<0.1	0.28	<0.01	0.03	9.4	0.09	2.41	0.05	1.2	6.1	0.3	2.5	<1	<0.3	<0.05	0.34	<0.05	2.0	0.03	0.39	0.2	8.31	0.5		
CAOND158905	33.2	0.32	5.2	<0.1	0.08	<0.01	<0.02	15.4	0.05	0.76	<0.05	0.5	10.2	0.35	2.7	<1	<0.3	<0.05	0.36	<0.05	0.8	0.06	<0.05	0.2	4.27	0.3		
CAOND161540	45.3	0.42	3.5	<0.1	0.19	0.03	<0.02	13.8	0.05	0.9	<0.05	0.9	9.5	0.6	2.1	<1	<0.3	<0.05	0.27	<0.05	1.3	0.05	0.09	0.3	3.9	0.3		
CAOND161712	25.9	0.39	2.4	<0.1	0.39	0.42	<0.02	13.3	0.08	21.94	<0.05	1.2	13.1	0.53	2.6	<1	<0.3	<0.05	0.3	0.14	0.6	0.06	0.54	4.5	5.12	0.4		
L750071	32	0.23	13.3	0.5	0.14	0.15	0.05	1.8	0.17	3.92	0.09	<0.2	2.6	1.41	22.4	<1	<0.3	<0.05	0.38	<0.05	<0.1	<0.02	<0.05	2.5	11.56	1.1		
P131723	14.6	0.14	8.7	0.3	0.31	0.12	0.04	7.4	0.23	200	0.17	0.2	0.8	0.3	19.3	<1	0.5	<0.05	0.55	<0.05	<0.1	<0.02	0.24	3.3	17.57	1.4		
Q324939	51.8	0.39	12.8	0.2	0.1	3.32	0.12	9.9	0.08	25.16	<0.05	1.6	5.7	1.73	14	3	<0.3	<0.05	0.19	0.25	0.2	0.03	0.08	0.2	4.47	0.4		
Q547738	22.4	0.4	14.1	0.5	0.48	0.66	0.05	29	0.15	3	0.12	0.4	2	1.24	20.6	<1	0.5	<0.05	0.4	<0.05	1.5	<0.02	0.4	4.6	10.48	0.8		
R223828	35.6	2.12	12.6	0.2	0.16	0.21	0.02	4.6	0.12	3.54	<0.05	0.4	25.9	2.1	14.7	<1	<0.3	<0.05	0.26	<0.05	0.3	0.12	0.09	1.7	5.84	0.6		
R225293	11.8	0.14	7.9	0.3	0.28	0.08	<0.02	13.6	0.21	0.9	0.23	0.6	1.9	1.36	10.2	<1	0.5	<0.05	0.4	<0.05	0.6	<0.02	0.45	4.3	11.65	1.3		
R324732	31.4	0.34	7.0	<0.1	0.16	<0.01	<0.02	19.8	0.08	1.25	<0.05	0.4	10.9	0.42	5.4	<1	<0.3	<0.05	0.43	<0.05	1.4	0.06	0.12	0.4	5.98	0.4		
R350285	29.6	0.82	2.2	<0.1	0.53	0.06	0.02	14.5	0.11	2.99	<0.05	1.0	15.1	1.37	9.7	<1	<0.3	<0.05	0.39	<0.05	1.6	0.06	0.32	2.3	7.26	0.7		
DUP																												
95535	24.5	0.25	6.4	0.2	0.26	0.13	<0.02	10.6	0.07	13.32	<0.05	1.2	5.5	0.27	6.1	<1	<0.3	<0.05	0.26	<0.05	0.9	0.03	0.24	0.4	4.7	0.5		
CAOND143812	29.8	0.35	10.3	0.3	0.33	0.01	<0.02	1.3	0.14	0.14	0.26	0.3	2.8	2.58	4.8	<1	<0.3	<0.05	0.28	<0.05	<0.1	<0.02	<0.05	1.9	13.36	1.2		
CAOND158905	32.6	0.31	5.4	<0.1	0.09	<0.01	<0.02	14.9	0.05	0.76	<0.05	0.5	10	0.35	2.6	<1	<0.3	<0.05	0.37	<0.05	0.7	0.06	<0.05	0.2	4.18	0.3		
*Rep 268448																											6.44	33.96
QC																												
OREAS 260	30.5	2.48	4.5	0.2	0.39	0.03	0.02	25.6	0.12	0.27	<0.05	30.4	18.4	1.15	3.2	<1	0.4	<0.05	0.43	0.07	11.2	0.2	1.29	<0.1	11.87	0.9		
OREAS 260	30.8	3.48	4.7	<0.1	0.45	0.05	0.03	28.9	0.16	0.46	0.06	30.2	22.1	1.3	3.1	<1	0.5	<0.05	0.58	0.06	11.5	0.21	1.27	0.1	11.9	1		
CCU-1D																											24.64	29.04
Expected Values	32.10	3.12	5.05	BDL	0.33	0.047	0.027	28.1	0.140	0.43	BDL	30.7	21.2	1.32	3.39	BDL	0.62	BDL	0.52	0.081	11.30	0.22	1.29	BDL	11.7	0.99	23.93	29.26
Tolerance (%)	11.39	#N/A	16.04	BDL	#N/A	#N/A	90.91	#N/A	33.33	49.28	BDL	12.35	#N/A	21.85	19.06	BDL	#N/A	BDL	21.28	89.66	13.01	37.84	21.46	BDL	11.76	42.94	7.56	5.09
OREAS 502b	19	8.3	9.6	0.3	0.39	0.02	0.53	24.2	0.18	235	1.57	19.3	111	0.9	7.7	7	9.5	<0.05	0.44	0.15	15.9	0.59	4.17	2.2	14.92	1.2		
OREAS 502b	19.3	9.09	8.9	0.2	0.44	0.06	0.62	24.6	0.23	219	1.65	19.5	106	0.89	7.7	8	9.8	<0.05	0.55	0.12	14.8	0.58	3.8	3.4	14.18	1.3		
Expected Values	19.0	8.34	8.58	0.22	0.43	0.038	0.58	25.4	0.2	229	1.44	19.6	106	1.09	7.00	7.97	9.93	#N/A	0.52	0.16	15.0	0.60	3.93	2.29	15.2	1.39		
Tolerance (%)	12.00	12.20	13.80	76.41	48.56	#N/A	20.53	11.62	25.35	10.58	20.6	13.39	11.05	24.05	14.56	52.16	19.24	#N/A	21.75	157.53	12.39	20.18	14.11	23.36	11.44	32.54		

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : 21 March 2022

Sample ID	Ag	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	As	Be	Bi	Cd	Ce
	mg/kg	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	1	0.1	0.02	0.01	0.05
CAOND159634	1.36	3.41	16	7.68	145	2801	6.88	0.18	29	3.24	716	0.02	89	0.04	0.36	96.1	0.19	169	32	8.4	4	0.3	1.38	0.03	7.92
CAOND159652	0.06	1.92	10	2.17	139	579	4.51	0.11	18	2.24	345	0.06	56	0.03	0.07	31.3	0.37	136	23	12.3	4	0.2	0.14	0.01	7.89
CAOND163784	0.02	3.53	<5	3.14	307	43.1	5.97	0.04	30	3.98	765	0.05	92	0.03	0.04	18.9	0.28	198	42	6.1	3	0.2	0.05	<0.01	9.71
CAOND163810	0.06	1.92	7	2.09	68	385	6.67	0.06	15	2.14	532	0.07	31	0.05	0.05	17.2	0.64	302	27	19.9	7	0.2	0.07	<0.01	6.78
CAOND163856	1.44	2.63	10	3.71	95	9006	10.65	0.05	22	2.8	706	0.04	60	0.04	1.07	24.7	0.4	268	38	23.2	37	0.3	0.89	0.02	11.98
CAOND163898	0.14	3.88	28	3.67	373	250	7.4	0.07	33	4.88	717	0.05	104	0.03	0.03	46.8	0.44	246	43	11.3	2	0.4	0.22	<0.01	7.31
CAOND164896	0.04	1.87	<5	0.86	67	71.7	3.43	0.05	15	1.87	445	0.04	42	0.03	0.1	17	0.34	99	28	6	5	0.1	0.03	0.01	5.12
CAOND164897	0.04	2.42	6	1.16	87	104	4.46	0.07	19	2.36	604	0.04	55	0.04	0.13	24.7	0.44	139	38	7.7	5	0.2	0.06	0.02	7.77
CAOND164912	0.05	2.52	9	2.16	173	73	5.91	0.07	22	2.95	568	0.05	66	0.03	0.2	18.9	0.39	180	37	9.3	5	0.3	0.49	0.02	5.9
CAOND164938	0.03	3.45	<5	4.07	235	110	5.9	0.04	31	3.93	749	0.05	83	0.03	0.06	112	0.24	181	41	6.2	2	0.2	0.08	0.01	6.07
CAOND165224	0.33	1.58	19	3.69	25	3212	>15.00	0.09	14	1.67	474	0.04	76	0.04	1.09	23.7	0.35	324	25	15.1	10	0.5	3.37	0.08	8.73
CAOND165292	0.12	0.34	310	2.63	5	98	1.62	0.22	2	0.89	397	0.04	5	0.08	0.03	86.1	<0.01	15	14	18	<1	0.2	0.34	0.03	33.99
CAOND167536	0.02	2.43	9	4.5	71	65.3	7.48	0.13	18	2.66	922	0.05	52	0.04	0.04	121	0.02	168	45	2.6	3	0.5	0.1	0.05	13.55
CAOND167706	0.08	0.83	<5	1.07	46	328	2.68	0.03	5	0.67	202	0.07	23	0.04	0.07	16.9	0.48	113	11	17.9	3	0.2	0.04	0.01	8.89
CAOND167723	0.71	2.99	<5	6.39	187	6512	6.34	0.04	33	2.68	688	0.04	72	0.03	0.84	19.8	0.18	194	31	3.3	13	0.2	0.2	<0.01	4.47
CAOND168748	0.07	3.5	<5	5.12	66	136	6.33	0.19	36	3.01	919	0.01	56	0.04	0.08	19.1	0.25	160	39	6.7	10	0.4	0.17	0.03	8.96
CAOND168764	0.03	1.78	<5	1.12	56	66.1	3.34	0.03	13	1.56	450	0.06	38	0.04	0.14	35.1	0.52	136	24	15.2	7	0.3	0.06	<0.01	8.15
CAOND169332	0.13	2.03	17	3.59	33	630	7.38	0.02	16	2.17	680	0.08	25	0.05	0.35	39.2	0.6	354	32	17.7	17	0.3	0.25	0.01	4.61
CAOND169343	0.55	1.19	26	2.33	28	3459	5.07	0.04	9	1.3	485	0.08	22	0.05	0.36	30.2	0.5	256	27	15.2	39	0.4	0.26	0.03	7.48
CAOND183467	0.05	1.82	21	1.26	116	159	4.41	0.1	14	1.84	397	0.08	53	0.03	0.14	24.7	0.44	143	34	8.6	7	0.2	0.52	0.02	9.06
CAOND183477	0.04	2.27	19	2.71	145	231	5.07	0.06	21	2.36	603	0.06	63	0.03	0.11	34.9	0.35	179	35	7.7	4	0.2	0.23	0.02	5.1
CAOND188865	0.03	1.88	5	1.72	54	117	4.25	0.12	14	1.86	383	0.04	46	0.04	0.09	19	0.52	153	19	9.3	6	0.2	0.04	0.01	8.35
CAOND188887	0.1	2.35	34	1.47	175	241	6.84	0.08	18	2.95	407	0.06	67	0.03	0.03	27.2	0.44	201	26	10.9	9	0.2	0.14	0.01	7.13
CAOND188908	0.04	0.75	117	3.04	8	103	1.5	0.26	6	0.46	267	0.05	6	0.08	0.07	67.2	<0.01	16	15	18.3	1	0.3	0.2	0.03	35.52
Duplicate																									
*Rep CAOND163898	0.12	3.83	29	3.75	384	247	7.33	0.07	34	4.85	702	0.04	106	0.03	0.03	48.1	0.44	253	42	11.3	3	0.4	0.28	<0.01	7.38
QC																									
OREAS 260	0.14	1.32	155	0.89	49	46.6	3.76	0.27	21	0.62	460	0.09	74	0.04	0.08	14.3	<0.01	22	129	16.5	13	1.1	0.55	0.2	60.16
Expected Values	0.146	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.593	450	0.082	75	0.04	0.077	14.8	BDL	22.0	125	12.6	12.5	1.24	0.54	0.21	55
Tolerance (%)	30.77	12.80	20.12	14.46	16.31	13.55	11.33	23.08	24.25	14.55	11.76	46.15	14.29	66.67	66.67	20.32	BDL	23.9	12.77	#N/A	35.29	35.07	20.41	27.03	#N/A
OREAS 502C	0.77	2.02	411	1.03	67	7677	4.41	1.07	29	1.23	375	0.2	35	0.1	0.87	61.3	0.35	114	101	9.6	58	0.4	0.66	0.32	58.54
Expected Values	0.796	2.07	383	1.09	66.0	7790	4.45	1.07	30.9	1.21	380	0.192	36.4	0.096	0.821	66.0	BDL	110.0	102	BDL	59	0.53	0.68	BDL	59
Tolerance (%)	13.14	11.21	13.26	12.29	13.79	10.02	10.56	12.34	18.09	12.07	11.32	23.02	16.87	23.02	13.05	11.89		12.3	12.45		14.24	57.17	17.35		10.21

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : 21 March 2022

Sample ID	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
CAOND159634	29.2	0.99	11.5	0.1	0.22	0.31	0.05	4.1	0.15	311	0.08	1.5	13.8	2.3	12.4	2	<0.3	<0.05	0.29	0.11	0.1	0.06	0.16	0.6	10.14	1
CAOND159652	19	0.39	7.4	<0.1	0.4	0.14	<0.02	3.2	0.12	8.94	0.18	0.5	8.6	1.54	7.4	<1	0.3	<0.05	0.27	<0.05	0.1	0.03	0.35	4.8	9.23	0.9
CAOND163784	35.4	0.31	13.7	0.1	0.19	0.03	<0.02	3.5	0.13	1.44	0.14	<0.2	3.2	0.44	10.7	<1	<0.3	<0.05	0.32	<0.05	0.1	<0.02	0.05	0.7	10.14	1
CAOND163810	36.5	0.19	12.3	0.2	0.71	0.13	<0.02	2.8	0.23	2.92	0.39	0.3	3.9	2.52	9.1	<1	0.6	<0.05	0.5	<0.05	0.4	<0.02	0.38	2.3	18.9	1.9
CAOND163856	44.6	0.18	15.8	0.4	0.79	0.99	0.13	5.8	0.27	31.58	0.35	0.7	2.3	6.02	18.2	2	0.7	<0.05	0.57	0.16	0.2	<0.02	0.49	5.2	20.41	2.1
CAOND163898	57.4	0.64	15.4	0.1	0.45	0.05	0.03	3.3	0.21	1.33	0.18	0.3	7.6	2.03	27.3	<1	0.4	<0.05	0.48	<0.05	0.1	0.03	0.2	1.6	16.88	1.6
CAOND164896	22.9	0.37	6.2	<0.1	0.24	0.02	<0.02	1.7	0.12	0.14	0.35	0.2	4.8	0.75	2.9	<1	<0.3	<0.05	0.31	<0.05	<0.1	0.03	<0.05	0.4	10.77	1
CAOND164897	30.6	0.44	8	<0.1	0.31	0.02	<0.02	2.7	0.17	0.24	0.33	0.4	6.6	1.04	4.1	<1	<0.3	<0.05	0.42	<0.05	0.1	0.04	<0.05	0.4	13.96	1.3
CAOND164912	51.1	0.52	11.7	0.1	0.38	0.09	<0.02	2.1	0.17	0.7	0.23	<0.2	8	1.45	4.8	<1	0.4	<0.05	0.38	0.18	0.1	0.04	0.07	7.7	13.73	1.4
CAOND164938	36.4	0.37	13.5	<0.1	0.2	0.02	0.03	2.4	0.14	0.21	0.11	0.2	3.7	0.39	14.9	<1	<0.3	<0.05	0.33	<0.05	<0.1	<0.02	<0.05	0.7	11.42	1.1
CAOND165224	34.1	0.16	12.5	0.4	0.57	0.41	0.04	4.9	0.19	1014	0.28	1.2	4.5	1.98	12.8	2	0.9	<0.05	0.34	0.41	0.2	0.03	0.5	10.8	12.02	1.4
CAOND165292	5.3	0.52	1.2	<0.1	0.56	0.13	<0.02	16.1	0.06	1.06	<0.05	1	11.3	0.95	2.7	<1	<0.3	<0.05	0.2	0.1	2.4	0.04	0.53	1.3	4.65	0.4
CAOND167536	30.8	0.4	12	<0.1	0.06	0.02	0.03	5	0.1	0.46	<0.05	0.4	9.1	1.08	13.2	<1	<0.3	<0.05	0.23	<0.05	0.2	0.04	<0.05	0.2	4.65	0.7
CAOND167706	15.7	0.09	4.8	<0.1	0.8	0.02	<0.02	3.2	0.23	1.07	1.13	0.2	2.5	0.54	2.9	<1	0.5	<0.05	0.61	<0.05	0.3	<0.02	0.11	1.2	21.49	2
CAOND167723	45.3	0.35	11.7	0.1	0.14	0.3	0.03	1.7	0.13	0.67	0.09	<0.2	3.3	0.49	11.7	2	<0.3	<0.05	0.27	0.13	0.1	<0.02	<0.05	9.3	9.96	1
CAOND168748	37.1	0.77	12.4	0.1	0.23	0.19	0.04	3.6	0.16	1.43	0.16	<0.2	17.2	2.09	10	<1	<0.3	<0.05	0.38	<0.05	0.2	0.07	0.09	8.8	12.25	1.2
CAOND168764	24	0.11	7.5	<0.1	0.64	0.03	<0.02	2.9	0.23	0.3	0.67	0.4	2.5	1.8	4.3	<1	0.5	<0.05	0.56	<0.05	0.2	<0.02	0.06	0.8	20.2	2
CAOND169332	64.1	0.1	11.7	0.3	0.68	0.08	0.03	1.6	0.19	2.62	0.28	0.6	1	2.35	13.5	<1	0.5	<0.05	0.4	<0.05	0.2	<0.02	0.23	1.5	14.27	1.5
CAOND169343	45.5	0.1	8.2	0.2	0.68	0.88	0.03	3.1	0.2	11.17	0.41	0.8	1.7	5.04	8	<1	0.5	<0.05	0.41	<0.05	0.3	<0.02	0.4	1.4	16.14	1.5
CAOND183467	26.8	0.31	7.8	<0.1	0.38	0.15	<0.02	3.4	0.2	6.03	0.31	0.3	8.1	0.65	3.7	<1	0.3	<0.05	0.45	<0.05	0.2	0.03	0.1	8.8	15.59	1.6
CAOND183477	30.4	0.14	9.3	<0.1	0.29	0.04	<0.02	1.7	0.14	0.96	0.14	0.4	4.1	1.05	8.1	<1	<0.3	<0.05	0.29	<0.05	<0.1	<0.02	0.06	1.3	10.25	1
CAOND188865	25.5	0.48	7.5	<0.1	0.36	0.03	<0.02	2.8	0.19	0.29	0.47	0.5	13.5	0.82	4	<1	<0.3	<0.05	0.47	<0.05	0.1	0.06	0.05	0.8	16.77	1.5
CAOND188887	53.1	0.63	13	0.1	0.45	0.65	<0.02	3.1	0.18	1.96	0.23	0.3	6.7	2.15	5.5	<1	0.4	<0.05	0.41	0.07	0.1	0.03	0.17	43.1	15.15	1.5
CAOND188908	9.6	0.58	2.7	<0.1	0.56	0.16	<0.02	17	0.05	0.58	<0.05	0.6	15.5	0.65	2	<1	<0.3	<0.05	0.2	<0.05	2.5	0.06	0.64	0.9	4.43	0.4
Duplicate																										
*Rep CAOND163898	57.4	0.65	15.6	0.2	0.51	0.06	0.04	3.3	0.21	1.36	0.18	<0.2	7.6	2.04	27.4	<1	0.4	<0.05	0.48	<0.05	0.1	0.03	0.2	1.6	16.71	1.6
QC																										
OREAS 260	33.5	2.71	4.5	<0.1	0.44	0.04	0.02	29.4	0.13	0.44	<0.05	30.8	19.2	1.29	2.9	<1	0.4	<0.05	0.44	0.09	11.5	0.19	1.24	0.1	11.1	0.9
Expected Values	32.10	3.12	5.05	BDL	0.33	0.047	0.027	28.1	0.140	0.43	BDL	30.7	21.2	1.32	3.39	BDL	0.62	BDL	0.52	0.081	11.30	0.22	1.29	BDL	11.7	0.99
Tolerance (%)	11.39	#N/A	16.04	BDL	#N/A	#N/A	90.91	#N/A	33.33	49.28	BDL	12.35	#N/A	21.85	19.06	BDL	#N/A	BDL	21.28	89.66	13.01	37.84	21.46	BDL	11.76	42.94
OREAS 502C	13.1	8.39	8.7	<0.1	0.38	0.09	0.05	29.2	0.21	218	1.75	11	123	4.29	7.5	3	2.5	<0.05	0.49	0.43	17.2	0.65	3.97	3.3	14.97	1.4
Expected Values	13.50	9.02	8.67	BDL	0.41	BDL	0.061	29.4	0.220	223.00	BDL	11.1	124.0	4.78	7.28	BDL	2.71	0.009	0.58	0.47	17.60	0.34	4.53	2.98	16.1	1.51
Tolerance (%)	11.85	11.39	12.88		40.49		91.97	10.85	21.36	10.06		14.50	10.4	12.62	13.43		37.68	1398.9	18.62	36.60	11.42	17.35	12.76	18.39	10.78	26.56

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 10-Jun-25
Report date: 21-Jul-25
Sample receipt date: Jun-25
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 22

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 10-Jun-25
Report date: 17-Jul-25

Version: Final

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
NEB-2025-001 CAOND270687	0.052	<0.01	0.052	NA	1.6
NEB-2025-002 CAOND270688	0.048	NA	NA	NA	NA
NEB-2025-003 CAOND270700	0.010	NA	NA	NA	NA
NEB-2025-004 CAOND245043	0.015	NA	NA	NA	NA
NEB-2025-005 CAOND245044	0.100	NA	NA	NA	NA
NEB-2025-006 CAOND270698	<0.005	NA	NA	NA	NA
NEB-2025-007 CAOND270695	0.117	NA	NA	NA	NA
NEB-2025-008 CAOND245050	0.095	NA	NA	NA	NA
NEB-2025-009 CAOND270692	0.953	<0.01	0.953	NA	29.8
NEB-2025-010 CAOND270693	0.148	NA	NA	NA	NA
NEB-2025-011 CAOND270694	0.014	NA	NA	NA	NA
NEB-2025-012 CAOND245049	0.073	<0.01	0.073	NA	2.3
NEB-2025-013 CAOND245047	0.232	NA	NA	NA	NA
NEB-2025-014 CAOND245048	0.208	NA	NA	NA	NA
NEB-2025-015 CAOND245046	0.016	NA	NA	NA	NA
NEB-2025-016 CAOND270696	0.133	NA	NA	NA	NA
NEB-2025-017 CAOND270697	0.467	<0.01	0.467	NA	14.6
NEB-2025-018 CAOND245042	0.038	NA	NA	NA	NA
NEB-2025-019 CAOND245045	0.149	NA	NA	NA	NA
NEB-2025-020 CAOND245041	0.026	NA	NA	NA	NA
NEB-2025-021 CAOND270714	0.109	NA	NA	NA	NA
NEB-2025-022 CAOND270711	0.17	NA	NA	NA	NA
NEB-2025-023 CAOND270710	0.234	<0.01	0.234	NA	7.3
NEB-2025-024 CAOND270709	0.021	NA	NA	NA	NA
NEB-2025-025 CAOND270708	0.021	NA	NA	NA	NA
NEB-2025-026 CAOND270707	0.009	NA	NA	NA	NA
NEB-2025-027 CAOND270712	0.036	NA	NA	NA	NA
NEB-2025-028 CAOND270713	0.331	<0.01	0.331	NA	10.3
NEB-2025-029 CAOND270718	0.213	NA	NA	NA	NA
NEB-2025-030 CAOND270699	0.019	NA	NA	NA	NA
NEB-2025-031 CAOND270719	0.112	NA	NA	NA	NA
NEB-2025-032 CAOND270706	0.175	NA	NA	NA	NA
NEB-2025-033 CAOND270705	0.209	NA	NA	NA	NA
NEB-2025-034 CAOND270704	0.712	<0.01	0.712	NA	22.3
NEB-2025-035 CAOND270703	0.688	NA	NA	NA	NA
NEB-2025-036 CAOND270701	0.005	NA	NA	NA	NA
NEB-2025-037 CAOND270702	0.009	NA	NA	NA	NA
NEB-2025-038 CAOND270715	0.094	NA	NA	NA	NA
NEB-2025-039 CAOND270716	0.019	<0.01	0.019	NA	0.6
NEB-2025-040 CAOND270717	0.288	NA	NA	NA	NA
NEB-2025-041 CAOND270684	0.023	NA	NA	NA	NA
NEB-2025-042 CAOND270677	0.178	NA	NA	NA	NA
NEB-2025-043 CAOND270676	0.016	NA	NA	NA	NA
NEB-2025-044 CAOND270678	0.153	NA	NA	NA	NA
NEB-2025-045 CAOND270680	0.038	<0.01	0.038	NA	1.2
NEB-2025-046 CAOND270682	0.145	NA	NA	NA	NA
NEB-2025-047 CAOND270679	0.213	NA	NA	NA	NA
NEB-2025-048 CAOND270689	0.024	NA	NA	NA	NA
NEB-2025-049 CAOND270690	0.059	NA	NA	NA	NA
NEB-2025-050 CAOND270691	0.014	<0.01	0.014	NA	0.4
FB-7 Composite	0.097	NA	NA	NA	NA
Duplicates					
NEB-2025-006 CAOND270698		<0.01			
*Rep NEB-2025-007 CAOND270(	0.118				
*Rep NEB-2025-050 CAOND270(	0.013				

3260 Production Way
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SGS proposal: 20619-PR2 Work order date: 10-Jun-25
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Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	Modified NP	Net Modified NP	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01					0.2
Sample ID							
NEB-2025-001 CAOND270687	NA	2.67	222.5	214.9	213.3	Moderate	9.13
NEB-2025-002 CAOND270688	NA	0.18	15.0	21.4	NA	Slight	9.10
NEB-2025-003 CAOND270700	NA	0.04	3.3	12.3	NA	None	9.40
NEB-2025-004 CAOND245043	NA	0.88	73.3	84.0	NA	Slight	9.16
NEB-2025-005 CAOND245044	NA	0.77	64.2	69.2	NA	Slight	8.51
NEB-2025-006 CAOND270698	NA	0.73	60.8	62.7	NA	Slight	9.49
NEB-2025-007 CAOND270695	NA	0.70	58.3	71.3	NA	Slight	8.96
NEB-2025-008 CAOND245050	NA	1.38	115.0	125.9	NA	Moderate	8.94
NEB-2025-009 CAOND270692	NA	2.30	191.7	188.4	158.7	Moderate	8.57
NEB-2025-010 CAOND270693	NA	0.87	72.5	86.2	NA	Slight	8.79
NEB-2025-011 CAOND270694	NA	0.26	21.7	31.3	NA	Slight	9.24
NEB-2025-012 CAOND245049	NA	0.11	9.2	15.8	13.5	Slight	9.42
NEB-2025-013 CAOND245047	NA	1.22	101.7	119.0	NA	Moderate	8.88
NEB-2025-014 CAOND245048	NA	0.83	69.2	78.1	NA	Slight	9.09
NEB-2025-015 CAOND245046	NA	0.61	50.8	57.2	NA	Slight	9.31
NEB-2025-016 CAOND270696	NA	0.15	12.5	21.9	NA	None	9.10
NEB-2025-017 CAOND270697	NA	1.63	135.8	150.9	136.3	Moderate	8.98
NEB-2025-018 CAOND245042	NA	0.67	55.8	66.0	NA	Slight	9.09
NEB-2025-019 CAOND245045	NA	1.26	105.0	113.7	NA	Moderate	9.23
NEB-2025-020 CAOND245041	NA	1.25	104.2	115.8	NA	Slight	9.00
NEB-2025-021 CAOND270714	NA	0.16	13.3	28.4	NA	None	9.20
NEB-2025-022 CAOND270711	NA	1.46	121.7	137.2	NA	Moderate	8.70
NEB-2025-023 CAOND270710	NA	1.06	88.3	54.4	47.1	Slight	8.87
NEB-2025-024 CAOND270709	NA	1.50	125.0	134.2	NA	Slight	8.99
NEB-2025-025 CAOND270708	NA	0.50	41.7	49.5	NA	Slight	9.48
NEB-2025-026 CAOND270707	NA	1.10	91.7	102.5	NA	Slight	9.11
NEB-2025-027 CAOND270712	NA	2.79	232.5	228.9	NA	Moderate	8.95
NEB-2025-028 CAOND270713	NA	0.79	65.8	81.4	71.1	Slight	8.71
NEB-2025-029 CAOND270718	NA	1.40	116.7	130.9	NA	Slight	8.69
NEB-2025-030 CAOND270699	NA	1.56	130.0	135.6	NA	Slight	8.74
NEB-2025-031 CAOND270719	NA	2.09	174.2	183.3	NA	Slight	8.34
NEB-2025-032 CAOND270706	NA	0.94	78.3	92.3	NA	Slight	8.81
NEB-2025-033 CAOND270705	NA	0.80	66.7	83.9	NA	Slight	8.92
NEB-2025-034 CAOND270704	NA	2.55	212.5	197.7	175.5	Moderate	8.72
NEB-2025-035 CAOND270703	NA	2.09	174.2	179.8	NA	Moderate	8.77
NEB-2025-036 CAOND270701	NA	0.50	41.7	47.7	NA	Slight	9.30
NEB-2025-037 CAOND270702	NA	0.53	44.2	49.0	NA	Slight	9.25
NEB-2025-038 CAOND270715	NA	1.72	143.3	158.4	NA	Slight	9.17
NEB-2025-039 CAOND270716	NA	1.23	102.5	114.5	113.9	Slight	9.20
NEB-2025-040 CAOND270717	NA	0.71	59.2	64.1	NA	Slight	9.42
NEB-2025-041 CAOND270684	NA	1.11	92.5	97.1	NA	Slight	9.61
NEB-2025-042 CAOND270677	NA	1.76	146.7	153.7	NA	Slight	8.90
NEB-2025-043 CAOND270676	NA	0.76	63.3	70.7	NA	Slight	9.64
NEB-2025-044 CAOND270678	NA	0.91	75.8	89.8	NA	Slight	9.51
NEB-2025-045 CAOND270680	NA	1.40	116.7	130.4	129.3	Slight	8.85
NEB-2025-046 CAOND270682	NA	0.47	39.2	51.4	NA	Slight	8.91
NEB-2025-047 CAOND270679	NA	1.18	98.3	110.7	NA	Slight	8.98
NEB-2025-048 CAOND270689	NA	1.40	116.7	100.1	NA	Slight	9.56
NEB-2025-049 CAOND270690	NA	1.98	165.0	103.0	NA	Slight	9.69
NEB-2025-050 CAOND270691	NA	1.36	113.3	122.8	122.4	Slight	9.39
FB-7 Composite	NA	1.07	89.2	97.7	NA	Slight	9.17
Duplicates							
NEB-2025-001 CAOND270687				216.0		Moderate	9.04
NEB-2025-020 CAOND245041				116.2		Slight	8.99
NEB-2025-021 CAOND270714				28.1		None	9.11

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ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A

QA/QC					
Blank	0.006	<0.01			
Certified standards					
RTS-3a		0.96			
GS915-8	0.127				
GS-314-2	2.582				

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ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01					0.2
NEB-2025-040 CAOND270717				64.0		Slight	9.38
NEB-2025-041 CAOND270684				97.3		Slight	9.60
NEB-2025-041 CAOND270684		1.12					
NEB-2025-028 CAOND270713		0.77					
QA/QC							
Blank							
Certified standards							
NBM-1				42.3		Slight	
NBM-1				43.0		Slight	
NBM-1				43.0		Slight	
TIC-L1		0.12					
SX35-13		11.66					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
NEB-2025-001 CAOND270687	2.03	10	7.19	49	555	3.69	0.26	14	2.54	557	0.01	42	0.02	0.05	46.1	<0.01	77
NEB-2025-002 CAOND270688	1.74	7	1.2	161	218	2.23	0.11	13	1.85	330	0.08	47	0.02	0.05	19.4	0.20	75
NEB-2025-003 CAOND270700	2.81	<5	0.33	111	5	3.64	0.01	22	3.52	162	0.10	45	0.08	<0.01	8.2	<0.01	184
NEB-2025-004 CAOND245043	1.44	37	3.35	60	5	2.58	0.08	12	1.73	426	0.13	18	0.09	<0.01	94.6	0.12	81
NEB-2025-005 CAOND245044	0.83	254	2.86	22	3	1.11	0.22	7	0.64	271	0.06	11	0.05	0.10	204	<0.01	11
NEB-2025-006 CAOND270698	0.64	72	2.32	6	4	1.09	0.27	2	0.49	275	0.08	6	0.05	0.01	38.2	<0.01	10
NEB-2025-007 CAOND270695	3.07	9	3.62	56	102	7.87	0.01	12	2.34	1457	0.07	54	0.10	0.12	34.2	0.67	227
NEB-2025-008 CAOND245050	4.50	7	5.14	173	70	8.61	0.03	23	3.65	1333	0.05	75	0.09	0.10	34.4	0.46	290
NEB-2025-009 CAOND270692	3.73	21	6.88	16	225	9.51	0.2	21	2.47	1068	0.01	41	0.05	1.00	33.4	0.02	205
NEB-2025-010 CAOND270693	4.05	29	2.87	8	56	8.91	0.19	22	4.15	503	0.01	31	0.06	0.16	24.8	0.03	240
NEB-2025-011 CAOND270694	1.55	14	1.6	99	88	6.29	0.05	11	1.66	528	0.09	40	0.05	0.01	28.6	0.33	206
NEB-2025-012 CAOND245049	2.09	<5	1.21	153	661	3.91	0.05	13	2.14	313	0.09	49	0.02	0.07	28	0.32	121
NEB-2025-013 CAOND245047	3.68	<5	5.35	189	129	7.98	<0.01	16	3.04	1600	0.06	70	0.10	0.25	34.1	0.72	276
NEB-2025-014 CAOND245048	3.13	<5	4.07	169	110	7.46	<0.01	13	2.63	1250	0.09	82	0.09	0.21	45.7	0.84	284
NEB-2025-015 CAOND245046	1.18	<5	2.63	96	72	6.16	0.04	7	1.32	507	0.10	33	0.04	0.01	29.3	0.36	219
NEB-2025-016 CAOND270696	2.83	12	1.92	26	175	8.82	0.03	11	2.16	1064	0.08	49	0.09	0.14	27.6	0.73	319
NEB-2025-017 CAOND270697	3.02	14	5.53	133	3374	6.7	0.01	21	3.56	613	0.08	71	0.02	0.49	90.1	0.03	258
NEB-2025-018 CAOND245042	3.07	<5	2.73	43	191	7.19	0.02	26	3.99	797	0.06	31	0.05	0.03	28.1	0.37	315
NEB-2025-019 CAOND245045	2.71	<5	4.45	244	1621	7.77	0.04	17	3.10	573	0.08	74	0.02	0.16	49.7	0.24	240
NEB-2025-020 CAOND245041	3.55	6	4.51	269	68	6.61	0.04	27	4.50	998	0.06	94	0.03	0.02	35.2	0.18	220
NEB-2025-021 CAOND270714	3.41	<5	1.47	65	139	5.68	0.03	33	3.43	473	0.07	118	0.03	0.12	22.6	0.34	114
NEB-2025-022 CAOND270711	4.52	<5	5.77	48	81	10.82	<0.01	27	2.88	2063	0.05	50	0.12	0.18	16.7	0.58	372
NEB-2025-023 CAOND270710	3.85	<5	4.37	60	122	8.46	<0.01	24	2.75	1871	0.06	52	0.10	0.25	12.6	0.49	287
NEB-2025-024 CAOND270709	3.51	8	5.13	120	31	6.53	0.01	38	3.75	538	0.06	62	0.04	0.02	38	0.02	247
NEB-2025-025 CAOND270708	1.49	66	1.9	46	452	2.41	0.07	12	1.70	215	0.11	23	0.07	0.02	31.1	0.03	62
NEB-2025-026 CAOND270707	2.53	18	3.96	55	14	3.54	0.13	22	2.85	397	0.04	39	0.05	<0.01	41	0.01	111
NEB-2025-027 CAOND270712	2.85	9	7.85	132	92	4.8	0.24	29	3.59	777	0.03	76	0.01	0.05	104	0.01	84
NEB-2025-028 CAOND270713	3.58	8	3.15	247	5398	7.79	0.02	20	4.20	719	0.05	131	0.04	0.36	33.1	0.24	233
NEB-2025-029 CAOND270718	3.65	5	5.57	172	131	7.6	0.03	29	3.10	1661	0.05	81	0.09	0.23	35.2	0.61	289
NEB-2025-030 CAOND270699	0.89	37	5.14	9	17	1.48	0.13	7	0.93	802	0.04	12	0.07	0.02	25	<0.01	15
NEB-2025-031 CAOND270719	2.83	10	7.06	79	66	6.33	0.1	25	2.00	722	0.02	36	0.07	0.13	34.5	0.01	176
NEB-2025-032 CAOND270706	3.34	<5	4.42	149	110	6.87	0.01	19	2.69	1471	0.05	78	0.09	0.18	44.4	0.74	232
NEB-2025-033 CAOND270705	3.17	6	4.26	159	137	6.89	<0.01	15	2.42	1401	0.07	85	0.10	0.23	52.9	0.84	262
NEB-2025-034 CAOND270704	3.03	26	6.31	42	134	8.54	0.24	18	2.60	1356	0.02	47	0.07	0.71	65.6	0.01	171
NEB-2025-035 CAOND270703	3.13	20	6.88	13	949	9.05	0.22	21	2.19	720	0.02	38	0.05	0.71	49.7	0.02	216
NEB-2025-036 CAOND270701	0.65	39	2.02	65	32	2.59	0.1	4	0.69	297	0.09	14	0.06	<0.01	34.7	0.11	58
NEB-2025-037 CAOND270702	0.71	35	1.96	24	35	1.68	0.1	4	0.71	267	0.08	11	0.04	<0.01	47.8	0.05	34
NEB-2025-038 CAOND270715	2.86	27	6.05	114	27	4.36	0.13	21	2.92	844	0.06	28	0.14	0.10	53	0.11	108
NEB-2025-039 CAOND270716	2.59	<5	4.3	120	120	6.77	0.02	18	3.24	818	0.08	59	0.04	0.01	56	0.15	231
NEB-2025-040 CAOND270717	0.84	74	2.54	16	456	2.01	0.12	6	0.68	281	0.09	10	0.06	0.31	34.3	<0.01	25
NEB-2025-041 CAOND270684	1.02	14	3.93	29	69	1.65	0.09	8	0.91	282	0.09	21	0.05	0.02	32.6	0.05	31
NEB-2025-042 CAOND270677	3.43	14	5.91	7	184	8.62	0.25	13	1.85	667	0.01	33	0.06	0.20	42.2	0.01	159
NEB-2025-043 CAOND270676	1.03	145	2.79	26	21	2.71	0.12	5	0.95	418	0.07	14	0.06	0.02	68.6	0.06	50
NEB-2025-044 CAOND270678	3.20	18	4.3	25	85	9.75	0.11	12	2.48	1118	0.10	32	0.12	0.16	27.3	0.87	322
NEB-2025-045 CAOND270680	3.67	6	5.76	21	81	10.55	<0.01	16	2.96	1307	0.05	34	0.12	0.04	29.3	0.76	345
NEB-2025-046 CAOND270682	3.74	<5	2.55	38	97	8.5	<0.01	16	3.28	1286	0.05	72	0.09	0.16	27.2	0.50	212
NEB-2025-047 CAOND270679	4.01	5	4.81	184	453	8.6	0.03	21	3.00	1502	0.06	83	0.09	0.23	21	0.65	318
NEB-2025-048 CAOND270689	0.37	77	2.59	6	33	1.37	0.2	<1	1.04	347	0.05	6	0.04	0.03	65.7	<0.01	9
NEB-2025-049 CAOND270690	0.76	668	3.77	60	18	2.49	0.26	8	2.12	715	0.05	28	0.11	0.06	376	<0.01	23
NEB-2025-050 CAOND270691	1.09	48	5.02	48	3	0.97	0.07	12	1.62	403	0.09	7	0.18	0.01	155	0.11	52
FB-7 Composite	2.40	31	3.92	82	215	5.52	0.11	16	2.24	723	0.05	45	0.06	0.11	46.7	0.23	165
Duplicates																	
NEB-2025-009 CAOND270692	3.65	21	6.75	15	221	9.35	0.19	20	2.44	1049	0.01	41	0.05	0.98	32.8	0.02	200
NEB-2025-034 CAOND270704	3.05	26	6.35	42	142	8.64	0.24	18	2.61	1363	0.02	47	0.07	0.73	65.9	0.01	170
QA/QC																	
BLANK	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 502c	2.05	417	1.07	67	7803	4.5	1.13	31	1.26	380	0.17	36	0.10	0.81	65.2	0.34	111
OREAS 501c	2.10	417	1	68	2764	4.04	1.21	33	1.27	388	0.18	56	0.10	0.34	60.6	0.36	110

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
NEB-2025-001 CAOND270687	19	6.5	0.15	<1	0.3	0.5	<0.01	8.45	23.2	0.32	5.4	<0.1	0.20	0.06	0.03	4.9	0.13
NEB-2025-002 CAOND270688	24	3.9	0.04	<1	<0.1	0.0	<0.01	3.54	22.1	0.22	5.0	<0.1	0.18	<0.01	<0.02	1.3	0.08
NEB-2025-003 CAOND270700	23	9.6	0.04	<1	0.3	0.1	<0.01	2.29	21.4	0.16	12.7	<0.1	0.35	0.02	<0.02	1	0.03
NEB-2025-004 CAOND245043	31	8.3	0.02	<1	0.6	0.1	0.02	29.2	11.6	0.21	7.9	<0.1	0.41	0.05	<0.02	13.6	0.09
NEB-2025-005 CAOND245044	21	4.4	0.02	<1	0.2	0.1	0.02	14.16	5.4	0.26	3.0	<0.1	0.19	0.05	<0.02	6.8	0.04
NEB-2025-006 CAOND270698	9	6.9	<0.01	<1	0.3	<0.02	0.01	23.59	3.8	0.21	2.4	<0.1	0.24	0.01	<0.02	11.5	0.04
NEB-2025-007 CAOND270695	94	10.7	0.02	9	0.3	<0.02	0.02	8.07	42.8	0.34	11.9	<0.1	0.40	<0.01	<0.02	3	0.17
NEB-2025-008 CAOND245050	75	6.5	0.02	7	0.6	0.1	0.04	6.15	43.3	0.14	16.2	0.1	0.22	0.01	0.04	2.2	0.16
NEB-2025-009 CAOND270692	49	2.6	0.10	38	0.5	2.0	0.02	23.52	61.4	0.36	11.8	<0.1	0.10	0.46	0.07	11.5	0.17
NEB-2025-010 CAOND270693	39	3.8	0.03	10	0.5	0.2	<0.01	12.66	52.4	0.47	13.6	<0.1	0.13	0.02	0.04	6	0.11
NEB-2025-011 CAOND270694	43	8.0	0.07	1	0.2	<0.02	0.02	12.55	23.4	0.11	9.5	<0.1	0.34	0.02	<0.02	5.2	0.32
NEB-2025-012 CAOND245049	22	7.3	0.13	1	0.1	0.1	<0.01	5.2	35.9	0.20	7.1	<0.1	0.30	0.05	<0.02	2.1	0.14
NEB-2025-013 CAOND245047	104	14.7	0.03	7	0.5	<0.02	0.01	7.29	46	0.19	13.7	0.2	0.52	0.01	0.03	2.9	0.15
NEB-2025-014 CAOND245048	89	12.5	0.03	6	0.4	0.1	0.02	8.48	48.9	0.14	12.7	0.2	0.54	<0.01	0.03	3.7	0.14
NEB-2025-015 CAOND245046	30	6.5	0.02	<1	0.2	<0.02	0.01	10.69	19.3	0.11	9.0	<0.1	0.36	<0.01	<0.02	4.2	0.39
NEB-2025-016 CAOND270696	86	11.0	0.05	8	0.2	<0.02	0.02	5.88	41.7	0.56	12.5	<0.1	0.38	<0.01	<0.02	2.1	0.18
NEB-2025-017 CAOND270697	31	9.0	0.65	<1	0.3	0.3	0.01	4.91	30	0.18	14.1	0.2	0.24	0.21	0.06	2.2	0.11
NEB-2025-018 CAOND245042	55	5.5	0.05	<1	0.6	0.1	0.01	9.33	31.6	0.23	14.1	<0.1	0.30	0.01	0.03	3.9	0.21
NEB-2025-019 CAOND245045	24	6.7	0.03	<1	0.3	0.1	0.02	7.35	42.4	0.16	11.3	0.2	0.25	0.05	0.03	3.2	0.16
NEB-2025-020 CAOND245041	50	1.8	0.01	2	0.4	<0.02	0.01	6.32	35.1	0.33	13.4	<0.1	0.09	0.01	0.03	2.3	0.26
NEB-2025-021 CAOND270714	56	5.1	0.04	22	<0.1	<0.02	0.01	3.52	43.6	0.25	8.6	<0.1	0.18	0.05	<0.02	1.3	0.05
NEB-2025-022 CAOND270711	117	7.6	0.04	36	0.2	<0.02	0.01	7.65	48.6	0.28	18.6	0.1	0.32	0.02	0.04	2.8	0.16
NEB-2025-023 CAOND270710	96	8.2	0.03	18	0.4	0.0	0.02	11.54	41.7	0.11	17.8	0.2	0.31	0.02	0.06	4.2	0.14
NEB-2025-024 CAOND270709	49	2.1	0.01	<1	0.3	0.0	<0.01	9.28	31	0.13	15.6	<0.1	0.29	<0.01	0.03	3.6	0.18
NEB-2025-025 CAOND270708	16	13.6	0.22	<1	0.3	0.2	<0.01	28.11	11.1	0.14	8.2	<0.1	0.40	0.06	<0.02	13.2	0.06
NEB-2025-026 CAOND270707	29	7.0	0.11	<1	0.4	0.1	0.01	10.01	19.5	0.23	9.4	<0.1	0.17	0.02	<0.02	4.2	0.11
NEB-2025-027 CAOND270712	28	2.1	0.03	<1	0.3	0.1	0.04	5.11	28.3	0.37	6.7	<0.1	0.07	0.02	<0.02	2.1	0.13
NEB-2025-028 CAOND270713	42	8.4	1.39	2	0.4	0.9	<0.01	14.16	41.5	0.16	14.0	0.3	0.31	0.45	0.06	7	0.21
NEB-2025-029 CAOND270718	93	9.9	0.03	6	0.6	0.1	<0.01	19.5	52.5	0.30	13.8	0.1	0.43	0.03	0.04	8.7	0.19
NEB-2025-030 CAOND270699	5	8.1	0.05	<1	0.3	0.1	<0.01	47.97	8.8	0.22	3.6	<0.1	0.24	0.02	0.03	22.6	0.11
NEB-2025-031 CAOND270719	36	5.4	0.08	6	0.6	0.5	0.01	29.21	31.3	0.53	10.2	<0.1	0.13	0.06	0.04	13.9	0.15
NEB-2025-032 CAOND270706	92	12.3	0.02	4	0.4	0.0	0.02	9.38	49.3	0.15	11.6	<0.1	0.54	0.02	<0.02	3.9	0.14
NEB-2025-033 CAOND270705	81	14.0	0.03	4	0.5	<0.02	<0.01	6.36	53.1	0.15	11.4	0.1	0.60	0.02	0.02	2.6	0.14
NEB-2025-034 CAOND270704	66	3.1	0.10	26	0.5	0.2	0.05	9.92	44	0.37	9.4	<0.1	0.11	0.04	0.05	4.5	0.11
NEB-2025-035 CAOND270703	32	4.4	0.27	21	0.4	0.2	0.02	8.01	131	0.52	11.8	<0.1	0.11	0.03	0.06	4	0.13
NEB-2025-036 CAOND270701	16	8.2	0.06	2	0.2	0.0	0.01	15.05	7.4	0.09	4.7	<0.1	0.31	0.02	<0.02	7	0.05
NEB-2025-037 CAOND270702	19	4.8	0.07	<1	0.2	0.1	<0.01	10.48	5.4	0.12	4.4	<0.1	0.21	0.01	<0.02	5	0.03
NEB-2025-038 CAOND270715	59	36.4	0.02	<1	0.7	0.0	0.02	29.54	20.8	0.28	11.4	<0.1	0.86	0.01	0.02	13.6	0.1
NEB-2025-039 CAOND270716	61	4.9	0.04	<1	0.4	0.0	0.03	9.18	28.6	0.14	13.3	0.2	0.18	<0.01	0.04	3.9	0.32
NEB-2025-040 CAOND270717	14	5.4	0.33	<1	0.3	0.2	0.01	21.44	5.8	0.21	4.6	<0.1	0.22	0.10	<0.02	10.5	0.05
NEB-2025-041 CAOND270684	12	6.8	0.07	<1	0.2	0.3	<0.01	16.11	8.2	0.17	5.2	<0.1	0.21	0.02	<0.02	8.2	0.03
NEB-2025-042 CAOND270677	15	2.5	0.03	4	0.4	0.1	<0.01	8.58	49.1	0.45	8.1	<0.1	0.06	0.03	0.05	3.6	0.11
NEB-2025-043 CAOND270676	29	8.6	0.01	<1	0.4	<0.02	0.02	25.98	9	0.23	5.9	<0.1	0.30	0.02	<0.02	12.6	0.06
NEB-2025-044 CAOND270678	89	13.2	0.04	8	0.3	0.3	0.02	10.56	41.3	1.55	15.2	<0.1	0.54	0.01	0.03	4.1	0.23
NEB-2025-045 CAOND270680	87	5.1	<0.01	3	0.5	<0.02	0.02	9.33	43.9	0.34	16.9	0.2	0.25	<0.01	0.04	3.5	0.29
NEB-2025-046 CAOND270682	93	8.0	0.04	12	0.3	<0.02	0.03	6	48	0.33	13.4	<0.1	0.28	<0.01	<0.02	2	0.15
NEB-2025-047 CAOND270679	82	9.2	0.02	16	0.5	0.1	0.01	6.05	51.4	0.15	15.4	0.1	0.37	0.02	0.06	2.3	0.15
NEB-2025-048 CAOND270689	12	4.7	0.12	<1	0.3	0.1	0.01	16.68	6.4	0.28	1.0	<0.1	0.18	0.06	<0.02	7.7	0.04
NEB-2025-049 CAOND270690	34	29.0	0.03	<1	0.6	0.1	0.04	54	13.8	0.32	2.9	<0.1	0.78	0.02	<0.02	25.7	0.11
NEB-2025-050 CAOND270691	15	6.2	<0.01	4	0.6	0.0	0.03	23.04	3.4	0.19	4.2	<0.1	0.27	<0.01	0.02	9.8	0.07
FB-7 Composite	43	7.4	0.07	2	0.3	0.1	<0.01	13.45	29.8	0.27	9.7	<0.1	0.28	0.04	0.03	5.9	0.14
Duplicates																	
NEB-2025-009 CAOND270692	48	2.6	0.11	37	0.4	1.8	0.02	22.89	60.8	0.37	11.6	<0.1	0.07	0.30	0.07	11.3	0.18
NEB-2025-034 CAOND270704	66	2.8	0.10	27	0.5	0.2	0.05	10.11	45.1	0.37	9.6	<0.1	0.09	0.05	0.06	4.6	0.15
QA/QC																	
BLANK	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 502c	104	9.4	0.83	59	0.5	0.7	0.32	59.32	12.7	9.26	8.7	<0.1	0.41	0.06	0.06	29.7	0.23
OREAS 501c	74	9.1	0.44	24	0.6	0.7	0.14	63.5	13.2	10.09	8.6	<0.1	0.40	0.01	0.05	31.8	0.24

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
NEB-2025-001 CAOND270687	18.50	<0.05	0.5	10.6	0.5	12.1	<1	<0.3	<0.05	0.2	0.17	0.1	0.05	0.10	0.3	6.03	0.8
NEB-2025-002 CAOND270688	1.46	0.18	0.6	7.5	0.4	4.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.03	<0.05	0.6	6.19	0.6
NEB-2025-003 CAOND270700	6.44	<0.05	0.9	0.6	<0.05	14.3	<1	<0.3	<0.05	0.1	<0.05	1.5	<0.02	0.20	0.1	1.94	0.2
NEB-2025-004 CAOND245043	9.98	0.44	1.1	4.6	0.2	7.9	<1	0.4	<0.05	0.3	<0.05	2.8	<0.02	0.78	19.1	6.71	0.6
NEB-2025-005 CAOND245044	2.29	<0.05	1.5	8.8	0.2	1.2	<1	<0.3	<0.05	0.1	<0.05	0.8	<0.02	0.23	1.6	2.09	0.2
NEB-2025-006 CAOND270698	0.51	<0.05	0.9	7.9	0.1	1.3	<1	<0.3	<0.05	0.1	<0.05	1.4	0.02	0.37	0.2	2.34	0.2
NEB-2025-007 CAOND270695	0.33	0.26	0.7	1.1	0.3	8	<1	<0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	<0.1	13.42	1.3
NEB-2025-008 CAOND245050	0.79	0.11	0.4	1.5	0.4	31.8	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	0.3	12.73	1.2
NEB-2025-009 CAOND270692	3.12	0.05	1.5	8.6	0.3	14.4	1	<0.3	<0.05	0.5	1.09	0.1	0.05	0.06	0.5	10.40	1.1
NEB-2025-010 CAOND270693	0.76	<0.05	0.3	8.7	0.6	19.3	<1	<0.3	<0.05	0.3	<0.05	0.1	0.06	0.06	1.7	6.32	0.7
NEB-2025-011 CAOND270694	5.80	0.43	0.8	2.2	0.7	5.9	<1	0.4	<0.05	0.5	<0.05	0.9	<0.02	0.21	1	17.16	2.1
NEB-2025-012 CAOND245049	8.07	0.21	0.3	3.3	0.9	5.1	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	0.08	1.1	10.28	1.2
NEB-2025-013 CAOND245047	0.38	0.23	0.8	0.5	0.6	19.8	<1	0.3	<0.05	0.4	<0.05	0.3	<0.02	0.08	0.8	10.67	1.1
NEB-2025-014 CAOND245048	0.33	0.31	0.8	0.3	1.2	18.4	<1	0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	0.2	10.65	1.1
NEB-2025-015 CAOND245046	10.12	0.57	0.6	1.6	0.7	4.6	<1	0.5	<0.05	0.6	<0.05	0.3	<0.02	0.11	1.1	21.15	2.7
NEB-2025-016 CAOND270696	0.36	0.26	1	1.7	0.1	6.6	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	<0.1	11.84	1.3
NEB-2025-017 CAOND270697	237.00	<0.05	0.7	0.9	0.4	21.5	2	<0.3	<0.05	0.2	0.11	0.1	<0.02	0.18	0.3	4.13	0.7
NEB-2025-018 CAOND245042	8.72	0.18	0.8	1.4	0.5	21.9	1	0.5	<0.05	0.4	<0.05	0.4	<0.02	0.12	0.8	14.02	1.6
NEB-2025-019 CAOND245045	32.49	0.11	0.3	2	0.6	18.1	<1	0.3	<0.05	0.4	0.07	<0.1	<0.02	<0.05	0.7	11.66	1.2
NEB-2025-020 CAOND245041	3.61	0.11	0.4	2.6	0.4	22	<1	0.3	<0.05	0.5	<0.05	0.1	<0.02	<0.05	0.5	15.36	1.9
NEB-2025-021 CAOND270714	0.23	0.14	0.6	1.5	0.1	4.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.02	<0.05	0.1	4.30	0.4
NEB-2025-022 CAOND270711	0.26	0.18	0.7	0.5	0.2	23.2	<1	0.3	<0.05	0.5	<0.05	0.2	<0.02	<0.05	0.2	13.95	1.3
NEB-2025-023 CAOND270710	0.61	0.22	0.8	0.6	0.1	26.3	<1	0.4	<0.05	0.5	<0.05	0.3	<0.02	0.07	0.2	13.23	1.1
NEB-2025-024 CAOND270709	4.01	<0.05	0.4	0.8	0.1	21.8	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	0.3	4.89	0.9
NEB-2025-025 CAOND270708	5.20	0.05	0.4	2.7	0.2	5.4	<1	<0.3	<0.05	0.2	0.11	1.3	<0.02	0.30	0.3	3.75	0.4
NEB-2025-026 CAOND270707	12.33	<0.05	0.3	4.6	0.2	7.9	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	0.11	0.2	4.47	0.7
NEB-2025-027 CAOND270712	7.58	<0.05	0.5	9.8	0.8	8.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.04	<0.05	0.9	4.64	0.8
NEB-2025-028 CAOND270713	125.00	0.13	0.6	1.3	2.2	21.1	4	0.6	<0.05	0.4	0.32	0.5	<0.02	0.25	1.3	12.34	1.4
NEB-2025-029 CAOND270718	0.85	0.17	0.6	0.9	0.7	25.3	<1	<0.3	<0.05	0.6	<0.05	0.1	<0.02	<0.05	0.7	14.22	1.5
NEB-2025-030 CAOND270699	0.99	<0.05	0.6	3.8	0.2	1.9	<1	<0.3	<0.05	0.4	<0.05	1.6	<0.02	0.36	<0.1	7.48	0.7
NEB-2025-031 CAOND270719	2.95	<0.05	0.8	4.7	0.2	12.6	<1	<0.3	<0.05	0.5	<0.05	0.4	0.03	0.09	0.2	11.60	1
NEB-2025-032 CAOND270706	0.35	0.28	0.7	0.7	0.6	15.2	<1	<0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	0.5	9.81	1.1
NEB-2025-033 CAOND270705	0.32	0.34	0.8	0.5	0.7	17.8	<1	<0.3	<0.05	0.3	<0.05	<0.1	<0.02	<0.05	0.4	9.83	1.1
NEB-2025-034 CAOND270704	2.75	<0.05	2	9.8	0.5	14.7	<1	<0.3	<0.05	0.4	<0.05	0.2	0.07	0.05	0.3	6.62	0.7
NEB-2025-035 CAOND270703	1.75	<0.05	0.7	10.4	0.6	16.1	<1	<0.3	<0.05	0.3	0.05	<0.1	0.07	0.09	0.9	6.46	0.8
NEB-2025-036 CAOND270701	2.15	0.36	0.6	2.2	0.3	2.5	<1	<0.3	<0.05	0.2	<0.05	1.3	<0.02	0.34	1.2	3.64	0.4
NEB-2025-037 CAOND270702	4.45	0.16	0.5	3.7	0.1	2.4	<1	<0.3	<0.05	0.1	<0.05	0.7	<0.02	0.20	1.5	2.12	0.2
NEB-2025-038 CAOND270715	0.31	0.14	0.9	6	0.1	10.3	<1	0.4	<0.05	0.3	<0.05	1.5	<0.02	0.51	0.2	6.23	0.6
NEB-2025-039 CAOND270716	33.42	0.16	0.9	1.3	0.4	18.2	<1	0.4	<0.05	0.6	<0.05	0.3	<0.02	0.14	0.4	17.92	2.1
NEB-2025-040 CAOND270717	8.22	<0.05	0.6	4.3	0.3	1.9	<1	<0.3	<0.05	0.2	0.09	1.4	<0.02	0.29	0.4	3.69	0.3
NEB-2025-041 CAOND270684	225.00	0.10	0.6	4.9	0.4	2.3	<1	<0.3	<0.05	0.2	<0.05	0.5	<0.02	0.15	0.7	3.22	0.3
NEB-2025-042 CAOND270677	1.49	<0.05	0.4	9.6	0.7	16.1	<1	<0.3	<0.05	0.3	<0.05	0.1	0.05	<0.05	0.5	5.62	0.7
NEB-2025-043 CAOND270676	0.99	0.06	0.9	4	0.3	2.5	<1	0.4	<0.05	0.2	<0.05	1.7	<0.02	0.37	1.5	4.11	0.4
NEB-2025-044 CAOND270678	1.62	0.47	1.1	3.8	0.4	14.6	<1	<0.3	<0.05	0.6	<0.05	0.2	<0.02	0.05	0.6	16.12	1.7
NEB-2025-045 CAOND270680	0.30	0.34	0.5	0.7	0.3	21.6	<1	<0.3	<0.05	0.7	<0.05	0.1	<0.02	<0.05	0.7	19.66	2.1
NEB-2025-046 CAOND270682	0.25	0.17	0.6	0.7	0.5	6.8	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	0.1	10.93	1.1
NEB-2025-047 CAOND270679	0.42	0.19	0.5	2.3	0.4	33.9	<1	0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	0.5	11.79	1.1
NEB-2025-048 CAOND270689	0.77	<0.05	1.2	5.3	0.4	2.1	<1	<0.3	<0.05	0.2	<0.05	0.7	<0.02	0.16	0.5	2.89	0.3
NEB-2025-049 CAOND270690	0.51	0.06	2.8	11.1	0.5	5.3	<1	<0.3	<0.05	0.5	<0.05	2.6	0.05	0.91	0.2	8.50	0.7
NEB-2025-050 CAOND270691	1.18	0.51	1	2.9	0.2	5.6	<1	0.4	<0.05	0.3	<0.05	1.5	<0.02	0.38	2.4	5.61	0.5
FB-7 Composite	33.70	0.14	0.6	4.7	0.4	11.7	<1	<0.3	<0.05	0.3	0.05	0.6	<0.02	0.16	0.6	8.07	0.9
Duplicates																	
NEB-2025-009 CAOND270692	3.24	<0.05	1.5	8.7	0.3	14.3	2	<0.3	<0.05	0.5	0.86	0.1	0.05	0.06	0.4	10.24	1.1
NEB-2025-034 CAOND270704	2.92	0.07	2.1	10.1	0.5	15.1	<1	<0.3	<0.05	0.4	0.06	0.2	0.07	0.06	0.3	6.82	0.8
QA/QC																	
BLANK	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 502c	225	1.81	10.9	118	4.4	6.9	3	2.6	<0.05	0.6	0.49	17.5	0.69	4.74	3.1	15.90	1.6
OREAS 501c	89.18	1.73	8	128	1.5	6.9	2	2.6	<0.05	0.6	0.28	18.8	0.78	4.97	3.3	16.29	1.6

3260 Production Way
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ANALYSIS REPORT

ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP Method 1996	Modified NP	Modified with Siderite Correction NP
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t
	Method Code	CSA06V	CSA07V	CSA07D	Calc.	CSA06V	CSB02V	CSB02V		Modified	
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005		0.5	
GGC-07	Expected value	0.51				0.56					
	Tolerance (+/-)	0.09				0.09					
HCC-1	Expected value	33.92									
	Tolerance (+/-)	5.04									
RTS-3a	Expected value		0.98	1.34							
	Tolerance (+/-)		0.12	0.35							
OREAS 278	Expected value				0.699						
	Tolerance (+/-)				0.06						
NBM-1	Expected value								38.67	42.07	50.27
	Tolerance (+/-)								3.55	3.72	2.31
TIC-L1	Expected value						0.13	0.477			
	Tolerance (+/-)						0.02	0.78			
GS314-2	Expected value	2.56				5.15					
	Tolerance (+/-)	0.14				0.27					
GS915-8	Expected value	0.13				0.07					
	Tolerance (+/-)	0.02				0.02					
OREAS 550	Expected value	0.220				4.110					
	Tolerance (+/-)	0.004				0.22					
SX35-13	Expected value						11.954				
	Tolerance (+/-)						0.626				
SY4	Expected value						0.95				
	Tolerance (+/-)						0.06				

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Sobek With Siderite NP kg CaCO3/t	Fizz Test	Paste pH
	Sobek	Sobek 0.2
57.6	Slight	
1.3		

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000
OREAS 501b	Expected value	1.99	369	0.966	85	2580	4.08	1.08	31.7	1.21	393	0.167	37.5	0.1	0.364	60	0.338	110	80	10.9	0.721	18.6	0.49	1.6
	Tolerance (%)	11.26%	13.39%	12.59	12.94%	10.05%	10.61%	12.31%	17.89%	12.07%	11.27%	24.97%	16.67%	22.5%	16.87%	12.08%	17.4%	12.27%	13.12%	21.47%	13.47%	23.44%	61.02%	13.12%
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59

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SGS

Metals - Aqu

CRM	Test	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
	Upper detection	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000
OREAS 501b	Expected value		61	14.9	9.93	8.7	0.2	0.43		0.19	29.3	0.21	97		9.42	126	0.49	7.08	2.78	4.65			0.078	17.9	
	Tolerance (%)		10.2%	11.68%	11.26%	12.87%	135%	39.07%		36.32%	10.85%	21.9%	10.13%		15.31%	10.4%	35.51%	13.53%	99.93%	26.13%			170.26%	11.4%	
OREAS 502C	Expected value	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67
	Tolerance (%)		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0
OREAS 503D	Expected value	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66
	Tolerance (%)		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1
OREAS 260	Expected value	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2
	Tolerance (%)	24.3		12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5
OREAS 920	Expected value	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15
	Tolerance (%)	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7
OREAS 209	Expected value	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04
	Tolerance (%)		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4
OREAS 905	Expected value	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11
	Tolerance (%)	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3
OREAS 261	Expected value	0.27		31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28
	Tolerance (%)	19.3		10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9
OREAS 263	Expected value	0.27		31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53
	Tolerance (%)	19.3		10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4
OREAS 235	Expected value	0.033	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6
	Tolerance (%)	86	10	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18
OREAS 151b	Expected value	0.58	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12
	Tolerance (%)	14	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7
OREAS 609b	Expected value	7.93	34	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009
	Tolerance (%)	10.32	10.15	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78
OREAS 607b	Expected value	3.16	41.6	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41
	Tolerance (%)	10.79	10.12	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20
OREAS 610	Expected value	12.3	13.7	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49
	Tolerance (%)	10.20	10.36	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36
OREAS 501c	Expected value		64	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3	
	Tolerance (%)		10.08	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65	
OREAS 601c	Expected value	2.7	34.7	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20
	Tolerance (%)	10.93	10.14	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17
OREAS 624	Expected value	125	24	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9	
	Tolerance (%)	10.02	10.52	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62	
OREAS 601b	Expected value	2.04	38.5	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08
	Tolerance (%)	11.23	10.32	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63
OREAS 623	Expected value	52	36.4	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26
	Tolerance (%)	10.05	10.34	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23
OREAS 603c	Expected value	30.4	30.7	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68
	Tolerance (%)	10.08	10.16	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36
OREAS 523	Expected value			698.000							233		293		27.4			6.41		9.88					
	Tolerance (%)			10.36							10.54		10.85		28.25			29.50		263.04					

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

Metals - Aqu

CRM	Test	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.1	0.05	0.1
	Upper detection	10000	10000	10000	100
OREAS 501b	Expected value	4.56	2.34	16.6	1.5
	Tolerance (%)	12.74%	20.68%	10.75%	0.3
OREAS 502C	Expected value	4.53	2.98	16.1	1.51
	Tolerance (%)	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	4.35	1.91	16.9	1.47
	Tolerance (%)	21.7	49.2	17.7	13.4
OREAS 260	Expected value	1.29	0.063	11.70	0.99
	Tolerance (%)	39.5	33.3	30.8	29.4
OREAS 920	Expected value	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	38.5		46.9	
OREAS 209	Expected value	0.43	0.36	12.98	0.93
	Tolerance (%)	29.9	51.4	15.2	17.3
OREAS 905	Expected value	2.37	<1	7.08	0.27
	Tolerance (%)	24.6		20.8	44.4
OREAS 261	Expected value	1.29	0.09	11.70	0.98
	Tolerance (%)	19.7	281.7	11.1	35.5
OREAS 263	Expected value	1.28		12.00	0.99
	Tolerance (%)	19.8		11.0	35.3
OREAS 235	Expected value	1.55	0.45	9.47	0.85
	Tolerance (%)	18	38	11	39
OREAS 151b	Expected value	0.60		10.40	0.93
	Tolerance (%)	30.8		11.2	36.9
OREAS 609b	Expected value	2.04	1.81	5.22	0.21
	Tolerance (%)	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	2.23	0.58	5.77	0.21
	Tolerance (%)	15.61	31.55	12.17	129.05
OREAS 610	Expected value	1.12	3.58	3.09	
	Tolerance (%)	21.16	13.49	14.05	
OREAS 501c	Expected value	4.87	2.96		
	Tolerance (%)	12.57	14.22		
OREAS 601c	Expected value	2.04	1.16	5.1	0.23
	Tolerance (%)	16.13	20.78	12.45	118.70
OREAS 624	Expected value	0.74	2.73	6.59	0.84
	Tolerance (%)	26.89	19.16	11.90	39.76
OREAS 601b	Expected value	2.22	1.86	5.34	0.2
	Tolerance (%)	15.63	23.44	33.41	135.00
OREAS 623	Expected value	1.43	2.62	7.43	
	Tolerance (%)	18.74	19.54	11.68	
OREAS 603c	Expected value	2.19	2.99	5.55	0.22
	Tolerance (%)	15.71	14.18	12.25	123.64
OREAS 523	Expected value		160	14.8	
	Tolerance (%)		25.62	18.45	

3260 Production Way
Burnaby - British Columbia - V5A 4W4
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SGS proposal: 20619-PR2
SGS project #: 11/07/1905

Work order date: 24-Jul-25
Report date: 8-Sep-25
Sample receipt date: Jun-25
Version: Final

Customer details

Name:	Timo krichner
Address:	Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 23

Report Distribution

Name	Email
Timo krichner	

Special notes:

Composite HC11 prepared using equal quantities of
CAOND270714
CAOND270704
CAOND270679

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 24-Jul-25
Report date: 8-Sep-25

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
NEB-2025-001 CAOND270687	6.440	82	6.91	116	560.0	4.49	2.84	17	2.73	556	0.09	50.0	0.02	0.06	48.6	0.33	250
NEB-2025-002 CAOND270688	8.200	60	5.26	261	224.0	6.01	0.98	15	4.42	869	2.72	81.0	0.02	0.05	118	0.42	257
NEB-2025-003 CAOND270700	9.710	11	0.35	83	5.1	3.72	0.23	23	3.40	166	5.80	46.0	0.09	<0.01	36.6	0.25	203
NEB-2025-004 CAOND245043	7.800	146	3.65	41	4.5	3.05	0.77	13	1.86	473	4.69	20.0	0.10	0.01	336	0.29	107
NEB-2025-005 CAOND245044	7.880	470	2.77	22	4.0	1.84	2.21	11	0.92	268	3.29	12.0	0.05	0.11	348	0.14	48
NEB-2025-006 CAOND270698	8.080	158	2.24	12	3.4	1.87	2.11	4	0.66	269	3.94	10.0	0.05	0.02	128	0.12	42
NEB-2025-007 CAOND270695	6.360	35	6.42	46	112.0	10.7	0.14	13	2.96	1876	1.58	60.0	0.10	0.13	147	1.08	390
NEB-2025-008 CAOND245050	6.740	33	5.07	136	71.8	9.03	0.17	24	3.54	1300	1.80	73.0	0.10	0.11	45.6	0.88	334
NEB-2025-009 CAOND270692	5.710	131	6.88	18	228.0	10.05	1.36	22	2.45	1076	0.05	43.0	0.06	1.02	34.7	0.71	424
NEB-2025-010 CAOND270693	6.410	186	2.89	11	62.6	10.04	1.54	24	4.12	513	0.15	35.0	0.06	0.17	27.1	0.65	471
NEB-2025-011 CAOND270694	6.850	146	3.47	86	92.7	8.2	0.86	11	3.14	935	3.39	55.0	0.05	0.01	138	0.62	293
NEB-2025-012 CAOND245049	7.500	70	5.06	190	653.0	7.69	0.61	14	4.21	681	2.77	74.0	0.02	0.09	156	0.48	294
NEB-2025-013 CAOND245047	6.650	26	6.36	132	131.0	9	0.1	16	2.91	1661	1.86	67.0	0.11	0.26	122	0.92	345
NEB-2025-014 CAOND245048	7.210	17	5.72	130	108.0	8.88	0.03	13	2.55	1387	2.46	80.0	0.10	0.23	193	0.99	374
NEB-2025-015 CAOND245046	6.470	54	4.4	85	75.6	8.12	0.58	8	3.04	951	3.70	55.0	0.04	0.01	117	0.67	307
NEB-2025-016 CAOND270696	6.110	35	5.59	25	174.0	12.37	0.19	11	3.38	1621	1.56	59.0	0.09	0.14	139	1.19	566
NEB-2025-017 CAOND270697	6.490	26	5.19	102	3315.0	7.11	0.14	20	3.36	591	2.93	68.0	0.02	0.49	107	0.47	275
NEB-2025-018 CAOND245042	6.800	28	3.01	40	199.0	8.44	0.22	27	3.93	814	2.82	31.0	0.05	0.04	69.3	0.75	368
NEB-2025-019 CAOND245045	7.300	34	4.31	206	1607.0	8.37	0.54	17	2.99	561	3.49	72.0	0.02	0.17	83.3	0.43	277
NEB-2025-020 CAOND245041	7.160	40	4.46	187	67.8	7.45	0.39	28	4.48	1004	2.69	94.0	0.03	0.03	66.1	0.49	258
NEB-2025-021 CAOND270714	7.990	47	5.83	128	143.0	8.6	0.3	35	4.83	1364	2.10	129.0	0.03	0.13	141	0.65	293
NEB-2025-022 CAOND270711	6.050	21	6.22	36	80.9	11.2	0.13	26	2.73	2490	1.25	48.0	0.12	0.19	28.8	1.28	426
NEB-2025-023 CAOND270710	6.740	14	4.5	41	123.0	8.63	0.1	23	2.59	1799	2.48	50.0	0.10	0.26	27.5	1.01	314
NEB-2025-024 CAOND270709	6.570	27	4.71	94	33.8	7.34	0.16	37	3.58	515	2.54	59.0	0.04	0.02	61.6	0.60	290
NEB-2025-025 CAOND270708	7.910	136	1.89	35	442.0	2.84	0.69	13	1.71	211	4.56	23.0	0.07	0.02	148	0.18	86
NEB-2025-026 CAOND270707	7.060	122	4.01	49	14.1	4.19	1.25	25	2.99	410	2.18	45.0	0.06	<0.01	67.3	0.43	231
NEB-2025-027 CAOND270712	6.730	66	7.93	148	94.7	6.11	1.96	33	3.77	797	0.75	85.0	0.01	0.05	117	0.32	220
NEB-2025-028 CAOND270713	7.250	36	3.66	206	5469.0	8.87	0.22	20	4.11	766	2.79	138.0	0.04	0.37	105	0.41	284
NEB-2025-029 CAOND270718	6.770	34	6.25	124	140.0	8.46	0.79	29	2.97	1696	1.67	79.0	0.09	0.24	85.4	0.93	327
NEB-2025-030 CAOND270699	7.240	106	4.78	18	17.7	2.02	2.2	8	1.04	765	3.03	17.0	0.07	0.02	63.9	0.10	61
NEB-2025-031 CAOND270719	4.460	54	7.28	75	65.0	6.75	1.02	27	2.00	746	0.49	37.0	0.08	0.12	40.3	0.41	272
NEB-2025-032 CAOND270706	7.090	41	6.79	111	115.0	8.78	0.31	20	2.60	1791	1.47	78.0	0.10	0.20	226	0.98	352
NEB-2025-033 CAOND270705	7.240	30	6.66	156	139.0	8.79	0.14	15	2.28	1579	1.85	80.0	0.10	0.24	258	1.02	374
NEB-2025-034 CAOND270704	6.190	163	6.43	56	143.0	9.36	1.65	19	2.64	1379	0.56	51.0	0.07	0.72	74.5	0.47	363
NEB-2025-035 CAOND270703	5.840	117	6.83	14	943.0	10	1.47	22	2.23	727	0.69	41.0	0.06	0.74	58.8	0.54	431
NEB-2025-036 CAOND270701	7.100	470	2.92	47	37.0	3.47	2.6	5	1.41	484	3.70	23.0	0.06	<0.01	232	0.20	91
NEB-2025-037 CAOND270702	7.260	383	2.24	19	38.7	2.06	2.33	6	0.79	293	3.81	12.0	0.05	<0.01	236	0.13	55
NEB-2025-038 CAOND270715	7.260	118	5.9	91	33.7	4.67	0.85	24	2.90	822	3.12	28.0	0.15	0.11	69	0.35	145
NEB-2025-039 CAOND270716	6.460	31	4.2	107	124.0	7.31	0.36	18	3.17	796	3.21	58.0	0.04	0.02	91.3	0.56	267
NEB-2025-040 CAOND270717	7.240	158	2.42	14	442.0	2.31	1.39	7	0.72	263	4.40	11.0	0.06	0.32	149	0.10	54
NEB-2025-041 CAOND270684	7.850	145	3.83	23	68.1	2.15	0.91	9	1.05	272	4.68	23.0	0.06	0.03	145	0.18	74
NEB-2025-042 CAOND270677	6.570	86	5.6	15	183.0	9.5	2.1	14	1.87	641	0.14	37.0	0.06	0.21	42.7	0.70	498
NEB-2025-043 CAOND270676	7.520	444	2.92	21	20.3	3.26	2.43	6	1.03	467	3.89	14.0	0.07	0.02	262	0.21	83
NEB-2025-044 CAOND270678	5.940	47	5.74	22	84.5	10.98	0.26	12	2.68	1654	1.90	33.0	0.13	0.17	105	1.29	422
NEB-2025-045 CAOND270680	5.720	42	6.11	19	79.0	11.02	0.19	16	2.89	1335	1.59	34.0	0.13	0.05	78.1	1.10	377
NEB-2025-046 CAOND270682	6.600	23	5.71	34	101.0	11.28	0.11	17	4.12	1599	1.34	79.0	0.10	0.16	129	1.04	388
NEB-2025-047 CAOND270679	6.820	13	5.19	146	462.0	8.92	0.1	21	2.82	1583	2.35	79.0	0.10	0.25	38.1	0.97	343
NEB-2025-048 CAOND270689	6.900	276	2.55	20	33.3	1.82	2.21	5	1.13	337	2.72	11.0	0.05	0.03	135	0.10	50
NEB-2025-049 CAOND270690	6.920	945	3.6	101	18.4	3.47	2.9	17	2.35	684	2.75	35.0	0.11	0.08	464	0.17	86
NEB-2025-050 CAOND270691	7.200	189	5.76	46	2.5	1.64	1.07	16	2.79	518	3.99	11.0	0.20	0.02	517	0.31	92
Duplicates																	
*Rep NEB-2025-013 CAOND245047	6.620	26	6.3	135	130.0	9.02	0.1	16	2.92	1661	1.86	67.0	0.11	0.26	120	0.92	343
*Rep NEB-2025-041 CAOND270684	7.890	147	3.84	25	70.9	2.17	0.92	11	1.05	275	4.72	23.0	0.06	0.03	145	0.18	74
QA/QC																	
*Blk BLANK	<0.01	<1	<0.01	<1	1.1	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<2
Certified standards																	
*Std OREAS 609b	6.620	583	0.9	13	4923.0	2.93	2.66	31	0.14	218	1.87	7.0	0.04	2.30	210	0.12	14
*Std OREAS 681	7.880	398	5.68	1636	271.0	7.36	1.41	14	5.15	1252	1.64	463.0	0.15	0.11	452	0.56	250

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
Sample ID																	
NEB-2025-001 CAOND270687	23	68	0.11	3	0.7	0.52	<0.02	19.18	24.6	2	15.0	2.14	0.06	10.9	0.32	17.820	2.2
NEB-2025-002 CAOND270688	39	43	0.04	6	0.3	0.06	<0.02	8.56	41	2	15.5	1.33	0.05	3.3	0.35	1.730	2.4
NEB-2025-003 CAOND270700	27	63	0.04	1	0.5	0.08	<0.02	3.56	21.5	<1	17.4	2.29	<0.02	1.7	0.1	6.530	2.4
NEB-2025-004 CAOND245043	37	87	0.76	3	1.3	0.15	<0.02	38.41	13.6	<1	17.5	2.52	0.03	17.2	0.15	9.770	6.2
NEB-2025-005 CAOND245044	28	35	0.03	2	1	0.06	<0.02	17.54	6.6	2	19.5	1.32	<0.02	8	0.05	3.000	1.9
NEB-2025-006 CAOND270698	24	51	<0.02	2	1.2	<0.04	<0.02	28.78	6.2	2	20.3	1.63	<0.02	14.1	0.06	0.670	2.6
NEB-2025-007 CAOND270695	107	57	0.03	10	0.4	<0.04	0.04	12.4	50.8	<1	18.2	1.73	0.08	4.8	0.36	0.530	3.7
NEB-2025-008 CAOND245050	74	35	<0.02	9	0.7	0.08	0.04	8.33	43.2	<1	16.8	1.08	0.05	3	0.24	0.940	2.7
NEB-2025-009 CAOND270692	52	31	0.10	42	0.7	1.70	<0.02	30.95	61.2	2	16.8	1.11	0.13	14.3	0.3	3.450	2.6
NEB-2025-010 CAOND270693	44	58	<0.02	15	0.8	0.16	<0.02	19.55	54.6	2	19.9	1.91	0.06	9	0.31	1.080	2.3
NEB-2025-011 CAOND270694	63	50	0.07	5	0.7	<0.04	0.07	24.92	35.8	<1	18.8	1.80	0.07	10.4	0.68	6.170	5.5
NEB-2025-012 CAOND245049	33	45	0.10	7	0.3	0.16	0.17	11.39	63.8	<1	16.4	1.50	0.06	5	0.38	7.820	2.6
NEB-2025-013 CAOND245047	102	57	0.03	9	0.6	<0.04	0.03	12.54	46.4	<1	17.6	1.52	0.06	4.9	0.3	0.510	3.1
NEB-2025-014 CAOND245048	89	51	0.03	9	0.5	0.06	0.04	16.84	51.5	<1	18.0	1.44	0.06	7.4	0.27	0.390	3.0
NEB-2025-015 CAOND245046	52	35	0.02	4	0.6	<0.04	0.03	19.75	35	<1	18.1	1.49	0.06	7.2	0.74	10.830	5.7
NEB-2025-016 CAOND270696	104	55	0.04	9	0.4	<0.04	0.04	10.13	53.7	<1	19.1	1.60	0.07	3.7	0.38	0.590	3.5
NEB-2025-017 CAOND270697	32	76	0.52	5	0.4	0.29	0.06	12.4	31.4	<1	16.2	2.40	0.06	4.9	0.38	238.000	3.7
NEB-2025-018 CAOND245042	56	55	0.06	4	0.8	0.10	<0.02	14.97	32.9	<1	16.8	1.70	0.04	6	0.42	9.090	3.7
NEB-2025-019 CAOND245045	26	34	0.06	3	0.3	0.13	<0.02	9.01	43	<1	13.9	1.04	0.04	3.8	0.28	31.950	1.6
NEB-2025-020 CAOND245041	51	35	<0.02	4	0.5	<0.04	<0.02	9.19	37.5	<1	15.3	1.08	0.03	3.4	0.39	3.510	2.7
NEB-2025-021 CAOND270714	70	27	0.04	23	0.2	<0.04	0.04	6.58	50.7	<1	16.0	0.86	0.04	2.5	0.16	0.310	2.5
NEB-2025-022 CAOND270711	117	77	0.04	37	0.4	<0.04	<0.02	12.84	48.1	<1	17.6	2.11	0.06	4.7	0.41	0.320	4.5
NEB-2025-023 CAOND270710	94	94	0.03	19	0.6	<0.04	0.03	18.32	43.5	<1	18.0	2.48	0.06	6.8	0.37	0.700	5.0
NEB-2025-024 CAOND270709	48	36	0.03	3	0.5	<0.04	<0.02	16.94	33.2	<1	16.9	1.31	0.04	6.4	0.36	6.640	4.7
NEB-2025-025 CAOND270708	19	66	0.19	2	0.8	0.22	<0.02	35.69	13.1	<1	19.0	2.05	<0.02	16.1	0.11	5.620	2.5
NEB-2025-026 CAOND270707	38	60	0.08	3	0.8	0.13	<0.02	17.1	23.1	2	19.2	2.13	0.03	7.2	0.26	15.330	3.7
NEB-2025-027 CAOND270712	32	35	0.03	2	0.7	0.08	0.03	8.78	32	3	13.1	1.22	0.04	3.7	0.25	9.500	1.9
NEB-2025-028 CAOND270713	44	48	2.26	3	0.5	0.84	<0.02	23.12	43.1	<1	16.3	1.56	0.08	12.5	0.38	123.000	2.4
NEB-2025-029 CAOND270718	93	42	0.04	8	0.6	0.13	<0.02	20.5	53.5	<1	16.6	1.23	0.06	9	0.28	1.010	2.8
NEB-2025-030 CAOND270699	12	52	0.04	2	0.8	0.05	<0.02	50.06	10.1	1	16.7	1.68	0.04	23.8	0.14	1.350	2.0
NEB-2025-031 CAOND270719	40	41	0.06	8	0.8	0.49	<0.02	32.52	32.4	1	11.8	1.22	0.06	15.3	0.27	3.420	1.8
NEB-2025-032 CAOND270706	94	50	0.03	6	0.4	<0.04	0.04	13.74	51.6	<1	18.2	1.50	0.06	5.4	0.28	0.430	3.0
NEB-2025-033 CAOND270705	78	44	0.03	6	0.5	<0.04	0.04	10.96	52.3	<1	18.4	1.41	0.06	4.2	0.27	0.420	3.1
NEB-2025-034 CAOND270704	74	37	0.08	31	0.8	0.15	0.05	15.29	47.8	2	16.5	1.12	0.10	6.7	0.23	3.240	1.6
NEB-2025-035 CAOND270703	35	56	0.27	27	0.6	0.23	<0.02	14.97	135	2	18.1	1.64	0.09	6.7	0.37	2.190	2.0
NEB-2025-036 CAOND270701	29	47	0.06	3	0.9	0.06	<0.02	21.35	12	<1	17.2	1.52	0.02	10.1	0.1	3.100	2.3
NEB-2025-037 CAOND270702	23	32	0.11	1	1	0.10	<0.02	14.76	6.5	<1	18.6	1.14	<0.02	7	0.05	5.540	1.7
NEB-2025-038 CAOND270715	61	106	0.03	2	1.1	<0.04	0.03	47.7	22.9	1	17.0	2.88	0.04	20.4	0.2	0.450	3.7
NEB-2025-039 CAOND270716	64	51	0.06	3	0.6	0.05	0.04	22	30.8	<1	17.0	1.59	0.05	8.4	0.64	33.450	4.8
NEB-2025-040 CAOND270717	18	42	0.29	1	0.9	0.21	<0.02	31.48	6.8	<1	18.0	1.38	0.02	13.8	0.08	8.620	1.8
NEB-2025-041 CAOND270684	15	57	0.07	2	0.7	0.31	0.04	21.24	10.4	1	17.9	1.72	0.02	10	0.08	224.000	1.6
NEB-2025-042 CAOND270677	21	47	0.03	9	0.7	0.13	<0.02	17.29	52.1	3	20.3	1.35	0.10	6.8	0.31	2.090	3.0
NEB-2025-043 CAOND270676	34	51	0.03	1	1.1	<0.04	0.03	31.91	10.6	<1	19.2	1.65	0.03	13.9	0.1	1.400	3.0
NEB-2025-044 CAOND270678	104	56	0.04	10	0.6	0.29	0.05	18.17	47.7	2	18.7	1.82	0.09	6.6	0.43	2.310	4.7
NEB-2025-045 CAOND270680	88	54	0.03	5	0.5	<0.04	0.04	13.86	45.8	<1	18.1	1.54	0.08	4.7	0.46	0.480	4.3
NEB-2025-046 CAOND270682	107	48	0.03	15	0.4	<0.04	0.06	10.3	56	<1	17.7	1.42	0.08	3.6	0.34	0.480	3.4
NEB-2025-047 CAOND270679	87	41	0.02	17	0.5	0.09	0.03	9.57	53	<1	16.5	1.30	0.07	3.2	0.28	0.680	3.0
NEB-2025-048 CAOND270689	20	32	0.09	1	0.9	0.14	0.02	21.58	7	2	17.0	1.15	<0.02	9.5	0.06	1.190	1.4
NEB-2025-049 CAOND270690	48	100	0.02	3	1.9	0.11	0.05	65.71	17.5	3	18.0	2.86	0.04	30	0.18	1.340	2.8
NEB-2025-050 CAOND270691	27	76	<0.02	6	1.6	0.05	0.03	31.65	6.1	<1	15.4	2.12	0.05	11.8	0.15	1.570	6.6
Duplicates																	
*Rep NEB-2025-013 CAOND245047	103	55	0.03	9	0.6	<0.04	0.02	12.64	48.6	<1	17.6	1.56	0.07	5	0.3	0.480	3.2
*Rep NEB-2025-041 CAOND270684	15	57	0.07	2	0.7	0.32	0.04	22.18	10.6	1	18.2	1.64	0.02	10.6	0.08	228.000	1.6
QA/QC																	
*Blk BLANK	1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01	<0.05	<0.1
Certified standards																	
*Std OREAS 609b	1327	172	24.08	1469	2.4	107.00	8.29	75.07	5.3	6	21.7	4.86	2.09	36.2	0.08	5.560	14.1
*Std OREAS 681	87	52	0.13	1	1.4	0.09	0.07	42	49.7	4	16.7	1.62	0.04	18.8	0.3	1.530	6.3

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Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
Sample ID															
NEB-2025-001 CAOND270687	1.3	111	4.6	38.2	<2	0.3	0.14	0.4	0.15	0.40	0.5	0.5	31.3	12.30	2.00
NEB-2025-002 CAOND270688	1.2	64.2	1.8	40.1	<2	<0.3	0.17	0.5	<0.05	0.30	0.3	0.1	1.8	19.80	2.40
NEB-2025-003 CAOND270700	1.7	3	0.4	21.8	<2	0.5	0.19	0.2	<0.05	2.20	0.0	0.5	6.7	3.80	0.60
NEB-2025-004 CAOND245043	3.2	32.5	0.7	13.2	<2	0.7	0.38	0.4	<0.05	3.70	0.1	1.2	35.3	9.60	1.00
NEB-2025-005 CAOND245044	3.5	90.3	1.4	6.1	<2	<0.3	0.12	0.2	<0.05	1.20	0.2	0.5	9.5	3.50	0.30
NEB-2025-006 CAOND270698	2.6	65.5	1.0	4.2	<2	<0.3	0.16	0.2	<0.05	2.10	0.2	0.8	5.9	3.70	0.40
NEB-2025-007 CAOND270695	1.2	3.7	0.6	44.8	<2	<0.3	0.23	0.7	<0.05	0.30	0.0	0.1	0.1	23.50	2.40
NEB-2025-008 CAOND245050	0.7	8	0.8	42.9	<2	<0.3	0.19	0.5	<0.05	<0.2	0.0	0.1	1.4	16.90	1.70
NEB-2025-009 CAOND270692	2.2	60.7	1.8	34.1	<2	1.8	0.18	0.6	0.98	0.30	0.4	0.2	13.1	13.50	1.80
NEB-2025-010 CAOND270693	1.2	67.7	3.0	39.7	<2	0.5	0.15	0.5	<0.05	0.40	0.4	0.2	29.5	10.90	1.80
NEB-2025-011 CAOND270694	1.7	22.5	2.0	36.1	<2	0.4	0.34	1.1	<0.05	1.40	0.1	0.4	2.5	38.00	4.60
NEB-2025-012 CAOND245049	1.2	28	3.5	43.6	<2	<0.3	0.17	0.6	0.07	0.30	0.1	0.2	2.6	21.90	2.60
NEB-2025-013 CAOND245047	1.4	2.1	1.5	44.9	<2	<0.3	0.19	0.6	<0.05	0.40	<0.02	0.1	1.7	19.20	2.00
NEB-2025-014 CAOND245048	1.2	0.8	2.8	48.6	<2	<0.3	0.20	0.6	<0.05	<0.2	<0.02	0.1	0.4	19.10	1.90
NEB-2025-015 CAOND245046	1.6	14.7	2.0	35.8	<2	0.6	0.35	1.2	<0.05	0.60	0.1	0.2	2.4	41.80	5.00
NEB-2025-016 CAOND270696	2	5	0.4	48.7	<2	<0.3	0.22	0.7	<0.05	0.20	0.0	0.1	0.1	22.10	2.40
NEB-2025-017 CAOND270697	1.6	3.6	2.2	35.6	<2	1.2	0.23	0.5	0.14	0.40	<0.02	0.7	8.3	13.60	2.20
NEB-2025-018 CAOND245042	1.3	8.3	1.2	38.1	<2	<0.3	0.23	0.7	<0.05	0.80	<0.02	0.3	2.3	23.30	2.70
NEB-2025-019 CAOND245045	0.6	12.9	1.4	38.9	<2	<0.3	0.10	0.5	0.07	<0.2	0.1	0.1	2.7	15.40	1.90
NEB-2025-020 CAOND245041	0.9	15.9	1.1	35.2	<2	<0.3	0.18	0.6	<0.05	0.30	0.1	0.1	2.4	21.90	2.60
NEB-2025-021 CAOND270714	0.9	9	0.7	38	<2	<0.3	0.17	0.3	<0.05	<0.2	0.1	<0.05	0.3	10.10	1.00
NEB-2025-022 CAOND270711	0.8	2.4	0.4	40.7	<2	<0.3	0.29	0.7	<0.05	0.30	0.0	0.1	0.5	25.00	2.70
NEB-2025-023 CAOND270710	1.1	3.1	0.4	35.7	<2	<0.3	0.32	0.7	<0.05	0.90	<0.02	0.3	0.9	24.30	2.60
NEB-2025-024 CAOND270709	1.4	4.8	2.0	34.8	<2	0.4	0.29	0.5	<0.05	0.50	<0.02	0.2	9.3	12.30	2.20
NEB-2025-025 CAOND270708	1.4	23.9	0.9	10.3	<2	<0.3	0.15	0.3	0.10	2.20	0.1	0.8	6.9	6.50	0.70
NEB-2025-026 CAOND270707	1.5	46.4	3.1	23.9	<2	0.9	0.22	0.4	<0.05	1.10	0.2	0.5	10.8	10.10	1.60
NEB-2025-027 CAOND270712	1.6	82.7	8.3	32.3	<2	0.4	0.12	0.3	<0.05	0.20	0.4	0.2	20.2	8.80	1.40
NEB-2025-028 CAOND270713	1.6	7.1	5.1	34.7	4	0.8	0.15	0.6	0.35	0.80	0.0	0.5	4.2	19.70	2.30
NEB-2025-029 CAOND270718	0.9	6.3	1.3	42.5	<2	<0.3	0.18	0.6	<0.05	<0.2	<0.02	0.1	13.5	18.00	1.90
NEB-2025-030 CAOND270699	1.4	50.2	1.4	5.8	<2	<0.3	0.12	0.4	<0.05	2.50	0.2	0.8	8.5	9.70	1.00
NEB-2025-031 CAOND270719	1.7	26.7	1.3	23.7	<2	0.4	0.11	0.6	<0.05	0.80	0.2	0.3	4.2	14.60	1.60
NEB-2025-032 CAOND270706	1.4	4.1	1.4	45.5	<2	<0.3	0.19	0.6	<0.05	<0.2	<0.02	0.1	1.1	18.60	1.90
NEB-2025-033 CAOND270705	1.5	2.3	1.7	47.4	<2	<0.3	0.21	0.6	<0.05	0.20	<0.02	0.1	0.9	18.90	1.90
NEB-2025-034 CAOND270704	2.6	68.2	1.9	36.2	<2	0.9	0.12	0.4	0.06	0.40	0.4	0.2	4.9	10.30	1.40
NEB-2025-035 CAOND270703	1.4	67	3.2	35.2	<2	0.5	0.13	0.5	0.07	0.30	0.4	0.3	11.8	11.50	2.00
NEB-2025-036 CAOND270701	1.8	44.5	0.6	9.7	<2	0.4	0.13	0.2	<0.05	1.70	0.2	0.6	2.5	6.10	0.70
NEB-2025-037 CAOND270702	1.8	51.6	0.6	5.1	<2	<0.3	0.11	0.2	<0.05	1.10	0.1	0.4	4.7	3.40	0.30
NEB-2025-038 CAOND270715	1.7	35.2	0.4	18.5	<2	0.9	0.27	0.5	<0.05	3.20	0.2	1.0	1.1	12.90	1.30
NEB-2025-039 CAOND270716	5.1	8.8	3.2	31.5	<2	1.1	0.33	0.9	<0.05	0.70	0.0	0.4	4.5	30.00	4.10
NEB-2025-040 CAOND270717	1.9	35.5	1.4	5.2	<2	0.5	0.12	0.2	0.10	1.90	0.1	0.6	4.6	5.00	0.50
NEB-2025-041 CAOND270684	1.3	39.1	1.6	6.2	<2	0.5	0.11	0.2	0.08	1.20	0.2	0.5	2.8	5.30	0.50
NEB-2025-042 CAOND270677	1	79.3	6.6	41.7	<2	0.8	0.19	0.4	0.06	0.40	0.4	0.2	18.6	10.90	1.80
NEB-2025-043 CAOND270676	2.4	43.5	0.9	7.7	<2	0.7	0.17	0.3	<0.05	2.40	0.2	0.8	5.3	6.20	0.60
NEB-2025-044 CAOND270678	1.8	6.5	1.1	44	<2	0.5	0.29	0.8	<0.05	0.30	0.0	0.1	1.7	26.00	2.90
NEB-2025-045 CAOND270680	1	4.1	0.8	42.8	<2	0.3	0.29	0.8	<0.05	0.30	0.0	0.1	1.9	27.10	3.10
NEB-2025-046 CAOND270682	1.1	2.9	1.7	42	<2	0.5	0.23	0.6	<0.05	0.20	0.0	0.1	0.3	19.70	2.30
NEB-2025-047 CAOND270679	1	5.1	0.8	42.5	<2	0.5	0.21	0.5	<0.05	0.20	0.0	0.1	2	16.60	1.80
NEB-2025-048 CAOND270689	3.5	57.5	3.4	5.3	<2	0.4	0.09	0.2	<0.05	1.10	0.2	0.4	15.3	4.20	0.40
NEB-2025-049 CAOND270690	5.7	103	2.1	12.1	<2	0.8	0.19	0.5	<0.05	5.00	0.5	1.8	2.6	12.60	1.20
NEB-2025-050 CAOND270691	3	28.8	0.9	18.7	<2	0.9	0.37	0.4	<0.05	2.80	0.1	0.7	6.1	10.20	1.00
Duplicates															
*Rep NEB-2025-013 CAOND245047	1.4	2.1	1.5	45.1	<2	<0.3	0.19	0.6	<0.05	0.40	<0.02	0.1	1.7	18.90	2.00
*Rep NEB-2025-041 CAOND270684	1.8	39.8	1.7	6.4	<2	0.5	0.10	0.2	0.06	1.20	0.2	0.4	2.9	5.30	0.50
QA/QC															
*Blk BLANK	<0.5	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1
Certified standards															
*Std OREAS 609b	443	106	167.0	3.7	14	11.9	1.04	0.6	22.42	12.30	1.4	4.2	4.2	11.60	0.60
*Std OREAS 681	10.3	76.8	0.4	27.4	<2	1.9	0.46	0.6	0.17	6.50	0.2	1.4	1.1	17.30	2.00

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 24-Jul-25
Report date: 8-Sep-25

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000

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Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000

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Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			NEB-2025-012	NEB-2025-015	NEB-2025-025	FB-7	HC-11	Blank
Parameter	**Method**	**Units**						
Volume Nanopure Water		mL	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	-
pH	meter		7.98	8.18	8.11	8.07	8.15	5.64
Redox	meter	mV	283	293	310	319	304	-
Conductivity	meter	uS/cm	67	68	73	91	84	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	0.7	0.5	0.8	0.7	0.8	-
Alkalinity	titration	mg CaCO3/L	29.2	27.7	31.2	33.9	35.7	-
Chloride		mg/L	< 1	< 1	< 1	< 1	< 1	-
Fluoride		mg/L	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	-
Sulphate	IC	mg/L	2.3	4.2	3.8	9.4	4.1	-
Ion Balance								
Major Anions	Calc	meq/L	0.63	0.64	0.70	0.87	0.80	
Major Cations	Calc	meq/L	0.71	0.71	0.75	0.96	0.89	
Difference	Calc	meq/L	-0.08	-0.07	-0.05	-0.08	-0.09	
Balance (%)	Calc	%	-6.2%	-5.4%	-3.5%	-4.5%	-5.3%	
Dissolved Metals								
Hardness CaCO3		mg/L	25.9	27.5	27.2	40.3	35.1	-
Aluminum Al	ICP-MS	mg/L	0.232	0.169	0.261	0.216	0.181	-
Antimony Sb	ICP-MS	mg/L	< 0.0009	< 0.0009	< 0.0009	< 0.0009	< 0.0009	-
Arsenic As	ICP-MS	mg/L	0.0013	0.0015	0.0021	0.002	0.0022	-
Barium Ba	ICP-MS	mg/L	0.00037	0.00109	0.03140	0.00873	0.00700	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.075	0.047	0.026	0.02	0.087	-
Cadmium Cd	ICP-MS	mg/L	< 0.000003	0.000003	0.000003	0.000009	0.000003	-
Calcium Ca	ICP-MS	mg/L	9.17	9.16	9.4	13.2	11.4	-
Chromium Cr	ICP-MS	mg/L	0.0001	< 0.00008	< 0.00008	< 0.00008	< 0.00008	-
Cobalt Co	ICP-MS	mg/L	0.000029	0.000023	0.000013	0.000035	0.000035	-
Copper Cu	ICP-MS	mg/L	0.004	0.002	0.0100	0.004	0.0010	-
Iron Fe	ICP-MS	mg/L	0.009	0.013	0.017	0.014	< 0.007	-
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0004	0.0003	0.0004	0.0006	0.0004	-
Magnesium Mg	ICP-MS	mg/L	0.74	1.13	0.90	1.82	1.60	-
Manganese Mn	ICP-MS	mg/L	0.00122	0.00195	0.00372	0.00814	0.00521	-
Mercury Hg	CVAAS	ug/L	0.01	< 0.01	0.01	0.01	< 0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.0004	0.0021	0.00430	0.0247	0.00660	-
Nickel Ni	ICP-MS	mg/L	0.0004	0.0002	< 0.0001	0.0002	0.0001	-
Phosphorus P	ICP-MS	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	-
Potassium K	ICP-MS	mg/L	0.752	0.792	2.660	1.75	1.920	-
Selenium Se	ICP-MS	mg/L	0.00016	0.00013	0.00009	0.00034	0.00029	-
Silicon Si	ICP-MS	mg/L	1.62	2.18	1.60	1.08	1.58	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	2.92	2.48	2.36	1.44	2.10	-
Strontium Sr	ICP-MS	mg/L	0.0574	0.127	0.1040	0.326	0.0776	-
Sulphur (S)	ICP-MS	mg/L	< 5	< 5	< 5	< 5	< 5	-
Thallium Tl	ICP-MS	mg/L	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	0.0006	0.001	0.0014	0.0009	0.0002	-
Uranium U	ICP-MS	mg/L	0.000003	0.00002	0.000137	0.000122	0.000033	-
Vanadium V	ICP-MS	mg/L	0.00945	0.015	0.00284	0.00354	0.00526	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

SGS

Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7
OREAS 609B	Expected value	6.71		0.939	19.9	4980	2.89	2.53	30.9	0.147	230	1.91	7.35	0.033	2.27	219	0.122	14.4
	Tolerance (%)	10.37		11.33	<=28	10.03	10.87	10.99	18.09	13.40	12.17	10.65	44.01	17.58	10.55	10.57	12.05	44.72
OREAS 681	Expected value	7.91	442	5.98	1642	264	7.47	1.35	13	5.19	1310	1.61	503	0.141	0.109	478	0.588	253
	Tolerance (%)	10.32	10.57	10.21	15.15	10.47	10.33	11.85	29.23	10.10	10.38	10.78	10.50	11.77	21.47	10.26	10.43	11.98

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
	Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7
OREAS 609B	Expected value	1,308	181	24.6	1,500	2.43	110	8.16	71	5.43	5.28	23	5	2.05	35.3	0.083	5.54	14.6
	Tolerance (%)	10.19	10.69	10.20	10.17	15.14	10.02	10.61	10.18	14.60	12.37	10.54	11.00	10.61	10.35	40.12	12.26	11.71
OREAS 681	Expected value	88	58	0.118		1.41	0.098		40.6	51	4.02	17.6	1.7	0.042	18.8	0.27	1.38	6.17
	Tolerance (%)	12.84	12.16	52.37		18.87	35.51		10.31	10.49	13.11	10.71	12.94	39.76	10.66	19.26	19.06	14.05

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
OREAS 609B	Expected value	448	109	158	3.73	15.5	11.6	1.07	0.57	21.5	12.2		4.26	4.42	11.4	0.56
	Tolerance (%)	10.28	10.23	10.08	16.70	26.13	14.31	26.68	31.93	10.58	10.20		12.93	20.66	12.19	54.64
OREAS 681	Expected value	10.2	80	0.24	27.7		1.89	0.42	0.58		6.55		1.44	1.09	17.5	1.77
	Tolerance (%)	22.25	10.31	62.08	10.90		36.46	44.76	31.55		10.38		18.68	37.94	11.43	24.12

3260 Production Way
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SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 17-Dec-25
Report date: 2-Jan-26
Sample receipt date: Old Sample
Version: Final

Customer details

Name:	Timo krichner
Address:	Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 25

Report Distribution

Name	Email

Special notes:

3260 Production Way
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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07C1
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data Approval

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07C1	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
HC 11	0.332	<0.01	0.332	NA	10.4
Duplicates					
HC 11	0.305	<0.01			
QA/QC					
Blank	0.008	<0.01			
Certified standards					
GS-314-2	2.568				
RTS-3a		0.99			

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 17-Dec-25
Report date: 2-Jan-26

Version: Final

ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Fizz Test
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek
LOD	0.005	0.01				
Sample ID						
HC 11	NA	1.25	104.2	103.9	93.5	Moderate
Duplicates						
HC 11		1.25		104.1		Moderate
QA/QC						
Blank		<0.01				
Certified standards						
NBM-1				42.8		Slight
TIC-L1		0.12				

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HC11	3.25	7	3.83	98	230	7.48	0.04	24	2.98	1073	0.03	86	0.06	0.36	30.3	0.30	194
Duplicates																	
*Rep HC11	3.24	7	3.88	97	229	7.49	0.04	24	2.97	1073	0.03	85	0.06	0.36	30.5	0.32	194
QA/QC																	
*Blk BLANK	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
*Std OREAS 151C	1.83	430	0.41	50	2339	2.89	0.9	36	0.68	277	0.15	18	0.06	0.70	33.1	0.22	61
*Std OREAS 601b	0.60	609	0.55	26	989	1.93	0.23	7	0.04	190	0.07	7	0.02	0.79	31.5	0.02	4

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
HC11	68	4.5	0.03	20	0.3	0.1	0.03	5.83	43.8	0.24	10.3	<0.1	0.17	0.02	0.04	2.5	0.09
Duplicates																	
*Rep HC11	68	4.8	0.04	20	0.3	0.1	0.03	6.26	44.4	0.24	10.7	0.1	0.20	0.03	0.03	2.5	0.1
QA/QC																	
*Blk BLANK	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
*Std OREAS 151C	89	6.4	1.03	21	1.5	7.1	0.22	32.32	7.4	8.17	8.7	<0.1	0.28	0.07	0.10	15.2	0.1
*Std OREAS 601b	259	38.6	49.23	266	0.5	19.3	2.17	37.8	2.6	1.26	3.7	<0.1	1.12	0.21	0.41	19.5	0.03

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
HC11	2.02	0.13	1.3	2.3	0.3	18	<1	0.8	<0.05	0.3	<0.05	0.1	0.02	<0.05	0.2	7.49	0.7
Duplicates																	
*Rep HC11	1.93	0.14	1.3	2.5	0.3	18.4	<1	1	<0.05	0.3	<0.05	0.1	0.02	<0.05	0.2	7.71	0.9
QA/QC																	
*Blk BLANK	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
*Std OREAS 151C	57	1.92	21.9	83.9	1.4	7.5	4	3.6	<0.05	0.5	1.33	6.6	0.60	2.82	6.1	10.52	0.7
*Std OREAS 601b	4.95	1.76	234	12.8	17.9	1.1	9	1.2	<0.05	0.3	13.20	6.9	1.14	2.35	2.2	5.73	0.2

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ANALYSIS REPORT

ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP Method 1996	Modified NP	Modified with Siderite Correction NP
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t
	Method Code	CSA06V	CSA07C1	CSA07D	Calc.	CSA06V	CSB02V	CSB02V		Modified	
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005		0.5	
GGC-07	Expected value	0.51				0.56					
	Tolerance (+/-)	0.09				0.09					
HCC-1	Expected value	33.92									
	Tolerance (+/-)	5.04									
RTS-3a	Expected value		0.98	1.34							
	Tolerance (+/-)		0.12	0.35							
OREAS 278	Expected value				0.699						
	Tolerance (+/-)				0.06						
NBM-1	Expected value								38.67	42.07	50.27
	Tolerance (+/-)								3.55	3.72	2.31
TIC-L1	Expected value						0.13	0.477			
	Tolerance (+/-)						0.02	0.78			
GS314-2	Expected value	2.56				5.15					
	Tolerance (+/-)	0.14				0.27					
GS915-8	Expected value	0.13				0.07					
	Tolerance (+/-)	0.02				0.02					
OREAS 550	Expected value	0.220				4.110					
	Tolerance (+/-)	0.004				0.22					
SX35-13	Expected value						11.954				
	Tolerance (+/-)						0.626				
SY4	Expected value						0.95				
	Tolerance (+/-)						0.06				

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Sobek ABA kg CaCO3/t	Sobek With Siderite NP kg CaCO3/t	Fizz Test	Paste pH
		Sobek	Sobek 0.2
51.71	57.6	Slight	
2.43	1.3		

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000
OREAS 501b	Expected value	1.99	369	0.966	85	2580	4.08	1.08	31.7	1.21	393	0.167	37.5	0.1	0.364	60	0.338	110	80	10.9	0.721	18.6	0.49	1.6
	Tolerance (%)	11.26%	13.39%	12.59	12.94%	10.05%	10.61%	12.31%	17.89%	12.07%	11.27%	24.97%	16.67%	22.5%	16.87%	12.08%	17.4%	12.27%	13.12%	21.47%	13.47%	23.44%	61.02%	13.12%
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59
OREAS 151c	Expected value	1.94	424	0.427	49.2	2390.0	2.94	0.894	37.8	0.68	280	0.15	17.2	0.06	0.68	34.9		61	91	6.300	1.01	21.5	1.46	6.56
	Tolerance (%)	10.6	11	11.2	15.1	10.1	10.9	11.4	16.6	10.4	12	18.1	24.5	22.5	13.7	13.6		14.1	12.8	29.8	12.5	21.6	18.6	10

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SGS

Metals - Aqu

CRM	Test	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
	Upper detection	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000
OREAS 501b	Expected value		61	14.9	9.93	8.7	0.2	0.43		0.19	29.3	0.21	97		9.42	126	0.49	7.08	2.78	4.65			0.078	17.9	
	Tolerance (%)		10.2%	11.68%	11.26%	12.87%	135%	39.07%		36.32%	10.85%	21.9%	10.13%		15.31%	10.4%	35.51%	13.53%	99.93%	26.13%			170.26%	11.4%	
OREAS 502C	Expected value	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67
	Tolerance (%)		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0
OREAS 503D	Expected value	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66
	Tolerance (%)		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1
OREAS 260	Expected value	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2
	Tolerance (%)	24.3		12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5
OREAS 920	Expected value	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15
	Tolerance (%)	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7
OREAS 209	Expected value	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04
	Tolerance (%)		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4
OREAS 905	Expected value	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11
	Tolerance (%)	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3
OREAS 261	Expected value	0.27		31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28
	Tolerance (%)	19.3		10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9
OREAS 263	Expected value	0.27		31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53
	Tolerance (%)	19.3		10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4
OREAS 235	Expected value	0.033	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6
	Tolerance (%)	86	10	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18
OREAS 151b	Expected value	0.58	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12
	Tolerance (%)	14	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7
OREAS 609b	Expected value	7.93	34	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009
	Tolerance (%)	10.32	10.15	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78
OREAS 607b	Expected value	3.16	41.6	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41
	Tolerance (%)	10.79	10.12	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20
OREAS 610	Expected value	12.3	13.7	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49
	Tolerance (%)	10.20	10.36	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36
OREAS 501c	Expected value		64	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3	
	Tolerance (%)		10.08	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65	
OREAS 601c	Expected value	2.7	34.7	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	25.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20
	Tolerance (%)	10.93	10.14	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.49	34.27	41.17	41.45		26.67	11.73	12.04	14.17
OREAS 624	Expected value	125	24	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9	
	Tolerance (%)	10.02	10.52	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62	
OREAS 601b	Expected value	2.04	38.5	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08
	Tolerance (%)	11.23	10.32	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63
OREAS 623	Expected value	52	36.4	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26
	Tolerance (%)	10.05	10.34	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23
OREAS 603c	Expected value	30.4	30.7	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68
	Tolerance (%)	10.08	10.16	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36
OREAS 523	Expected value			698.000							233		293		27.4			6.41		9.88					
	Tolerance (%)			10.36							10.54		10.85		28.25			29.50		263.04					
OREAS 151c	Expected value	0.22	31	7.47	8.13	9.0	0.13	0.3	0.1	0.10	14.5	0.09	55.0		20.8	89.0	1.5	7.18	4.48	3.57		0.48	1.27	6.0	0.23
	Tolerance (%)	21	10.2	13.4	11.5	12.8	202.3	60.0	60.0	22.5	11.7	37.8	10.2		12.4	10.1	18.6	13.5	65.8	24.0		20.4	20	12.1	20.7

SGS

Metals - Aqu

CRM	Test	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.1	0.05	0.1
	Upper detection	10000	10000	10000	100
OREAS 501b	Expected value	4.56	2.34	16.6	1.5
	Tolerance (%)	12.74%	20.68%	10.75%	0.3
OREAS 502C	Expected value	4.53	2.98	16.1	1.51
	Tolerance (%)	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	4.35	1.91	16.9	1.47
	Tolerance (%)	21.7	49.2	17.7	13.4
OREAS 260	Expected value	1.29	0.063	11.70	0.99
	Tolerance (%)	39.5	33.3	30.8	29.4
OREAS 920	Expected value	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	38.5		46.9	
OREAS 209	Expected value	0.43	0.36	12.98	0.93
	Tolerance (%)	29.9	51.4	15.2	17.3
OREAS 905	Expected value	2.37	<1	7.08	0.27
	Tolerance (%)	24.6		20.8	44.4
OREAS 261	Expected value	1.29	0.09	11.70	0.98
	Tolerance (%)	19.7	281.7	11.1	35.5
OREAS 263	Expected value	1.28		12.00	0.99
	Tolerance (%)	19.8		11.0	35.3
OREAS 235	Expected value	1.55	0.45	9.47	0.85
	Tolerance (%)	18	38	11	39
OREAS 151b	Expected value	0.60		10.40	0.93
	Tolerance (%)	30.8		11.2	36.9
OREAS 609b	Expected value	2.04	1.81	5.22	0.21
	Tolerance (%)	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	2.23	0.58	5.77	0.21
	Tolerance (%)	15.61	31.55	12.17	129.05
OREAS 610	Expected value	1.12	3.58	3.09	
	Tolerance (%)	21.16	13.49	14.05	
OREAS 501c	Expected value	4.87	2.96		
	Tolerance (%)	12.57	14.22		
OREAS 601c	Expected value	2.04	1.16	5.1	0.23
	Tolerance (%)	16.13	20.78	12.45	118.70
OREAS 624	Expected value	0.74	2.73	6.59	0.84
	Tolerance (%)	26.89	19.16	11.90	39.76
OREAS 601b	Expected value	2.22	1.86	5.34	0.2
	Tolerance (%)	15.63	23.44	33.41	135.00
OREAS 623	Expected value	1.43	2.62	7.43	
	Tolerance (%)	18.74	19.54	11.68	
OREAS 603c	Expected value	2.19	2.99	5.55	0.22
	Tolerance (%)	15.71	14.18	12.25	123.64
OREAS 523	Expected value		160	14.8	
	Tolerance (%)		25.62	18.45	
OREAS 151c	Expected value	3.06	5.56	10.30	0.69
	Tolerance (%)	14.1	12.2	11.2	46.2

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SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 12-Sep-22
Report date: 4-Nov-22
Sample receipt date: 08-Sep-22
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 17

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1 Work order date: 12-Sep-22
SGS project #: 2138 Report date: 4-Nov-22

Version: Final

Particle Size Analysis by Dry Screening Report

Sample: Mafic Syenite

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0	0.0	0.0%	0.0%
0.75"	19.0	0.0	0.0%	0.0%
+0.5"	12.5	0.0	0.0%	0.0%
+3/8"	9.5	0.9	0.9%	0.9%
+1/4"	6.3	11.0	11.1%	12.0%
+5 mesh	4.0	33.9	34.1%	46.0%
+9 mesh	2.0	20.4	20.5%	66.5%
+35 mesh	0.415	22.7	22.8%	89.3%
+100 mesh	0.150	6.4	6.4%	95.8%
+270 mesh	0.053	2.3	2.3%	98.1%
-270 mesh	-0.053	1.9	1.9%	100.0%
TOTAL		99.5	100.0%	

Sample: Crowded porphyry

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0	0.0	0.0%	0.0%
0.75"	19.0	0.0	0.0%	0.0%
+0.5"	12.5	0.0	0.0%	0.0%
+3/8"	9.5	0.9	0.9%	0.9%
+1/4"	6.3	20.9	21.0%	22.0%
+5 mesh	4.0	46.0	46.3%	68.3%
+9 mesh	2.0	17.6	17.7%	86.0%
+35 mesh	0.415	10.6	10.7%	96.7%
+100 mesh	0.150	2.0	2.0%	98.7%
+270 mesh	0.053	0.7	0.7%	99.4%
-270 mesh	-0.053	0.6	0.6%	100.0%
TOTAL		99.3	100.0%	

Sample: High Sulfur

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0	0.0	0.0%	0.0%
0.75"	19.0	0.0	0.0%	0.0%
+0.5"	12.5	0.0	0.0%	0.0%
+3/8"	9.5	0.0	0.0%	0.0%
+1/4"	6.3	13.2	13.3%	13.3%
+5 mesh	4.0	33.6	33.7%	47.0%
+9 mesh	2.0	22.6	22.7%	69.7%
+35 mesh	0.415	21.7	21.8%	91.5%
+100 mesh	0.150	5.0	5.0%	96.5%
+270 mesh	0.053	1.9	1.9%	98.4%
-270 mesh	-0.053	1.6	1.6%	100.0%
TOTAL		99.6	100.0%	

Sample: Basalt

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0	0.0	0.0%	0.0%
0.75"	19.0	0.0	0.0%	0.0%
+0.5"	12.5	0.0	0.0%	0.0%
+3/8"	9.5	0.0	0.0%	0.0%
+1/4"	6.3	16.3	16.4%	16.4%
+5 mesh	4.0	42.5	42.8%	59.2%
+9 mesh	2.0	21.3	21.4%	80.6%
+35 mesh	0.415	14.8	14.9%	95.5%
+100 mesh	0.150	2.7	2.7%	98.2%
+270 mesh	0.053	0.9	0.9%	99.1%
-270 mesh	-0.053	0.9	0.9%	100.0%
TOTAL		99.4	100.0%	

Sample: Gabbro

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0	0.0	0.0%	0.0%
0.75"	19.0	0.0	0.0%	0.0%
+0.5"	12.5	0.0	0.0%	0.0%
+3/8"	9.5	0.0	0.0%	0.0%
+1/4"	6.3	12.9	13.0%	13.0%
+5 mesh	4.0	37.0	37.3%	50.3%
+9 mesh	2.0	21.6	21.8%	72.0%
+35 mesh	0.415	19.6	19.7%	91.7%
+100 mesh	0.150	5.0	5.0%	96.8%
+270 mesh	0.053	1.9	1.9%	98.7%
-270 mesh	-0.053	1.3	1.3%	100.0%
TOTAL		99.3	100.0%	

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
Mafic Syenite	0.448	0.08	0.368	NA	11.5
Crowded Porphyry	0.153	0.01	0.143	NA	4.5
High Sulfur	1.066	0.23	0.836	NA	26.1
Basalt	0.233	<0.01	0.233	NA	7.3
Gabbro	0.097	<0.01	0.097	NA	3.0
Duplicates					
Mafic Syenite	0.450				
Gabbro		<0.01			

QA/QC					
Blank	<0.005	<0.01			
Certified standards					
GS-314-2	2.640				
RTS-3a		1.06			

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ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	CO3 NPR	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
Mafic Syenite	NA	0.88	73.3	6.38	79.1	67.6	6.88	Moderate	8.46
Crowded Porphyry	NA	1.00	83.3	18.65	81.3	76.8	18.18	Moderate	8.86
High Sulfur	NA	0.64	53.3	2.04	57.8	31.6	2.21	Moderate	8.48
Basalt	NA	1.02	85.0	11.67	80.5	73.2	11.06	Moderate	8.88
Gabbro	NA	0.38	31.7	10.45	37.6	34.6	12.41	Slight	9.18
Duplicates									
Mafic Syenite		0.86			78.6			Moderate	8.46
Gabbro									

QA/QC									
Blank		<0.01							
Certified standards									
NBM-1					41.5			Slight	
TIC-L1		0.12							

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
Mafic Syenite	1.67	158	3.21	58	726	4.33	0.15	15	1.68	483	0.04	48	0.13	0.45	118	0.13	87
Crowded Porphyry	0.94	173	2.91	15	326	2.01	0.16	10	1.03	339	0.04	13	0.08	0.16	127	0.03	29
High Sulfur	1.46	171	2.76	55	775	4.12	0.14	13	1.32	398	0.04	37	0.11	1.03	133	0.15	80
Basalt	2.48	31	3.67	147	554	6.71	0.08	21	2.62	691	0.04	67	0.04	0.22	65.8	0.34	205
Gabbro	2.27	29	2.03	152	259	4.87	0.07	20	2.43	476	0.04	63	0.04	0.07	43.2	0.38	151
Duplicates																	
Mafic Syenite	1.65	159	3.18	57	717	4.27	0.15	15	1.65	477	0.04	47	0.13	0.44	118	0.13	85
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 260	1.34	149	0.88	49	45	3.54	0.28	21	0.58	443	0.09	72	0.04	0.08	14.1	<0.01	21
OREAS 151b	2.48	67	1.36	27	1785	3.21	0.41	7	1.41	277	0.17	13	0.05	0.73	37.5	0.08	147

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Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
Mafic Syenite	27	13.2	0.14	6	0.5	0.3	0.03	33.96	33.1	0.40	7.6	0.1	0.39	0.1	<0.02	15.8	0.08
Crowded Porphyry	21	17.1	0.14	5	0.3	0.7	0.22	27.9	11.3	0.37	4.2	<0.1	0.55	0.2	<0.02	13.3	0.06
High Sulfur	26	14.2	0.24	9	0.4	0.4	0.04	29.94	33.9	0.32	6.7	0.1	0.42	0.2	<0.02	14	0.09
Basalt	33	7.7	0.15	12	0.4	0.4	0.03	10.29	38.9	0.42	10.5	0.2	0.39	0.3	0.04	4.6	0.21
Gabbro	29	9.3	0.04	5	0.3	0.3	<0.01	9.98	33.3	0.48	9.1	0.2	0.41	0.1	<0.02	4	0.17
Duplicates																	
Mafic Syenite	27	13.0	0.13	5	0.4	0.3	0.02	33.08	33.2	0.39	7.6	0.1	0.37	0.1	0.02	15.1	0.08
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	0.0	<0.02	<0.1	<0.01
Certified standards																	
OREAS 260	119	15.4	0.14	13	1.2	0.5	0.21	58.26	31.4	3.47	4.9	<0.1	0.49	0.0	0.03	30.8	0.14
OREAS 151b	227	2.8	0.44	31	0.3	0.4	0.63	17.62	11	1.24	7.4	<0.1	0.11	0.0	0.08	7.8	0.13

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Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
Mafic Syenite	13.46	0.26	1.2	7.6	1.0	8.4	<1	<0.3	<0.05	0.4	0.06	1.4	0.04	0.29	1.1	8.25	0.6
Crowded Porphyry	266.00	0.09	1.9	7.8	1.2	3.1	<1	<0.3	<0.05	0.2	0.12	1.8	0.05	0.50	0.8	4.86	0.4
High Sulfur	25.14	0.31	1.2	7.6	1.1	7.2	<1	0.3	<0.05	0.3	0.16	1.3	0.04	0.32	12.4	7.52	0.7
Basalt	25.19	0.21	0.7	6.1	2.4	14.4	<1	0.4	<0.05	0.5	0.11	0.3	0.03	0.13	2.1	16.44	1.6
Gabbro	3.56	0.30	0.6	6.7	1.4	8.7	<1	0.4	<0.05	0.4	0.06	0.4	0.03	0.15	6.4	14.9	1.4
Duplicates																	
Mafic Syenite	14.01	0.25	1.2	7.6	1.0	8.1	<1	<0.3	<0.05	0.4	<0.05	1.3	0.04	0.27	1.1	8.25	0.6
QA/QC																	
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 260	0	0.05	29.3	20.3	1.5	3.3	<1	0.5	<0.05	0.6	0.08	11.3	0.21	1.33	0.1	12.60	1
OREAS 151b	56.66	0.25	41.4	19.7	0.6	9.8	3	1.1	<0.05	0.4	0.09	2.5	0.14	0.60	0.6	10.79	0.9

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ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GGC-07	Expected value	0.51			0.56						
	Tolerance (+/-)	0.09			0.09						
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						41.79	51.49	57.6	Slight	
	Tolerance (+/-)						2.87	2.54	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22
	Tolerance (%)	3.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
OREAS 502C	Expected value	102	9.53	0.80	59	0.53	0.68	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22
	Tolerance (%)	15.0	15.7	20.1	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4
OREAS 503D	Expected value	67	12.2	1.32	87	0.6	1.4	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21
	Tolerance (%)	21.4	22.0	25.1	15.8	38.6	11.1		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6
OREAS 260	Expected value	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14
	Tolerance (%)	14.4		26.7	36.0	24.0	16.7	24.3		12.9		42.2				55.6		12.9
OREAS 920	Expected value	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2	
	Tolerance (%)	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3	
OREAS 209	Expected value	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13
	Tolerance (%)	15.5	13.5	41.4	13.5		20.3		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7
OREAS 905	Expected value	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03
	Tolerance (%)	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12
OREAS 261	Expected value	128		0.20	17.8	1.23	0.59	0.27		31.5		5.0			0.1	0.03		0.14
	Tolerance (%)	12.0		22.3	24.0	30.3	18.5	19.3		10.8		15.0			45.2	188.6		27.9
OREAS 263	Expected value	127		0.29	30.8	1.22	0.57	0.27		31		4.9			0.2	0.03		
	Tolerance (%)	12.0		18.8	18.1	30.5	18.8	19.3		10.8		15.1			24.7	182.4		

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3

CRM	Test	Ca*
	Units	%
Method Code		ICP95A50
	Lower detection	0.007
	Upper detection	43
OREAS 70B	Expected value	3.08
	Tolerance (%)	3.5
MRG_1	Expected value	10.55
	Tolerance (%)	5.1

*Borate fusion ICP

CRM	Test	Hg
	Units	ppm
Method Code		CVA37A25
OREAS 621	Expected value	3.93
	Tolerance (%)	10.3
CZN-4	Expected value	4.54
	Tolerance (%)	10.3

SGS proposal: 19195-PR1
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Work order date: 18-Aug-22
Report date: 26-Sep-22
Sample receipt date: in house
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 14, 15

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Special notes:

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1 Work order date: 18-Aug-22
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Particle Size Analysis by Dry Screening Report

Sample: HC-7 Basalt (Open Pit)

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3	14.3	14.3%	14.3%
+5 mesh	4.0	35.1	35.2%	49.5%
+9 mesh	2.0	21.0	21.1%	70.6%
+35 mesh	0.415	20.3	20.4%	91.0%
+100 mesh	0.150	5.6	5.6%	96.6%
+270 mesh	0.053	2.4	2.4%	99.0%
-270 mesh	-0.053	1.0	1.0%	100.0%
TOTAL		99.7	100.0%	

Sample: HC-8 Crowded Pophyry

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3	10.0	10.0%	10.0%
+5 mesh	4.0	36.9	36.9%	46.9%
+9 mesh	2.0	22.9	22.9%	69.9%
+35 mesh	0.415	21.0	21.0%	90.9%
+100 mesh	0.150	5.6	5.6%	96.5%
+270 mesh	0.053	2.4	2.4%	98.9%
-270 mesh	-0.053	1.1	1.1%	100.0%
TOTAL		99.9	100.0%	

Sample: HC-9 Mafic Intrusive rock

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3	23.8	23.8%	23.8%
+5 mesh	4.0	32.0	32.1%	55.9%
+9 mesh	2.0	19.2	19.2%	75.2%
+35 mesh	0.415	16.7	16.7%	91.9%
+100mesh	0.150	4.4	4.4%	96.3%
+270 mesh	0.053	2.3	2.3%	98.6%
-270 mesh	-0.053	1.4	1.4%	100.0%
TOTAL		99.8	100.0%	

Sample: HC-10 Mixed PAG

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5	1.2	1.2%	1.2%
+1/4"	6.3	16.2	16.2%	17.4%
+5 mesh	4.0	39.5	39.6%	57.0%
+9 mesh	2.0	20.2	20.2%	77.3%
+35 mesh	0.415	17.1	17.1%	94.4%
+100 mesh	0.150	3.7	3.7%	98.1%
+270 mesh	0.053	1.3	1.3%	99.4%
-270 mesh	-0.053	0.6	0.6%	100.0%
TOTAL		99.8	100.0%	

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Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
HC-7 Basalt (Open Pit)	0.192	<0.01	0.192	NA	6.0
HC-8 Crowded Porphyry	0.145	<0.01	0.145	NA	4.5
HC-9 Mafic Intrusive Rock	0.084	<0.01	0.084	NA	2.6
HC-10 Mixed PAG	1.864	0.02	1.844	NA	57.6
Duplicates					
HC-10 Mixed PAG	1.772				
HC-10 Mixed PAG		0.02			

QA/QC					
Blank	<0.005	<0.01			
Certified standards					
GS-314-2	2.501				
GS-314-5	0.102				
RTS-3a		1.02			

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ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t		kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
HC-7 Basalt (Open Pit)	0.253	0.25	20.8	3.47	27.2	21.2	4.54	Slight	9.27
HC-8 Crowded Porphyry	2.214	2.18	181.7	40.09	181.8	177.3	40.13	Moderate	8.54
HC-9 Mafic Intrusive Rock	0.39	0.43	35.8	13.65	39.7	37.1	15.11	Slight	9.07
HC-10 Mixed PAG	0.25	0.27	22.5	0.39	25.4	-32.3	0.44	Slight	8.79
Duplicates									
HC7					27.9			Slight	9.28
HC-8 Crowded Porphyry		2.19							
HC-10 Mixed PAG	0.252								

QA/QC									
Blank	<0.005	<0.01							
Certified standards									
NBM-1					42.8			Slight	
SY-4		0.91							
GS-314-2	4.953								
GS-314-5	0.067								

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HC-7 Basalt (Open Pit)	1.89	16	1.63	95	130	4.46	0.06	15	2.03	447	0.08	52	0.04	0.20	29.8	0.39	150
HC-8 Crowded Porphyry	0.90	48	7.22	13	253	1.71	0.12	9	0.93	519	0.04	13	0.06	0.14	116	0.04	35
HC-9 Mafic Intrusive Rock	2.53	<5	2.09	184	166	4.52	0.06	22	2.93	513	0.07	76	0.03	0.10	28.8	0.36	148
HC-10 Mixed PAG	1.17	32	1.44	32	422	4.96	0.13	10	1.01	383	0.05	33	0.05	1.92	39.1	0.21	90
QA/QC																	
Blank	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 502C	2.07	424	1.1	67	7612	4.43	1.11	30	1.23	369	0.22	35	0.10	0.86	65.5	0.34	112
OREAS 261	1.28	162	1.17	48	62	3.63	0.28	22	0.66	450	0.09	74	0.04	0.11	16.1	<0.01	21

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
HC-7 Basalt (Open Pit)	32	13.7	0.11	8	0.2	0.1	<0.01	11.26	33.1	0.27	8.9	0.2	0.62	0.0	<0.02	4.5	0.22
HC-8 Crowded Porphyry	16	13.4	0.81	4	0.2	3.0	0.13	23.15	12.5	0.40	4.2	0.1	0.45	0.2	0.03	10.9	0.1
HC-9 Mafic Intrusive Rock	32	8.2	0.05	5	0.2	0.1	<0.01	5.95	32.9	0.51	9.0	0.3	0.32	0.0	0.02	2.1	0.17
HC-10 Mixed PAG	22	6.2	0.25	11	0.1	2.2	0.01	7.72	47.6	0.21	4.7	0.2	0.25	0.1	<0.02	3.3	0.09
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 502C	98	9.2	0.85	56	0.4	0.7	0.36	56.99	13.4	9.60	8.7	0.3	0.43	0.1	0.07	30	0.23
OREAS 261	125	16.5	0.24	15	1.1	0.6	0.27	62.89	29.6	3.19	4.0	0.2	0.49	0.1	0.03	30.7	0.16

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
HC-7 Basalt (Open Pit)	0.72	0.26	1.4	4.3	1.2	7	<1	0.5	<0.05	0.6	0.05	0.2	0.03	0.16	1.2	19.46	1.8
HC-8 Crowded Porphyry	286.00	<0.05	4.2	6.3	1.8	4.7	<1	<0.3	<0.05	0.4	0.10	1.1	0.13	0.31	0.4	10.85	0.7
HC-9 Mafic Intrusive Rock	0.96	0.07	0.5	4.5	1.3	11.2	<1	0.3	<0.05	0.4	<0.05	<0.1	0.03	<0.05	0.6	14.29	1.3
HC-10 Mixed PAG	4.63	0.21	1.1	7.3	2.1	5.6	2	<0.3	<0.05	0.2	0.27	0.3	0.04	0.09	4.4	7.22	0.6
QA/QC																	
Blank	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 502C	235	1.74	10.8	116	5.0	7.5	3	2.8	<0.05	0.6	0.53	17.8	0.70	4.59	3.2	16.65	1.5
OREAS 261	0.51	<0.05	34	19.2	2.2	3	<1	0.5	<0.05	0.6	0.14	11.8	0.29	1.43	0.1	11.79	1

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ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GS314-5	Expected value	0.11			0.08						
	Tolerance (+/-)	0.03			0.03						
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						41.79	51.49	57.6	Slight	
	Tolerance (+/-)						2.87	2.54	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22
	Tolerance (%)	3.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
OREAS 502C	Expected value	102	9.53	0.80	59	0.53	0.68	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22
	Tolerance (%)	15.0	15.7	20.1	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4
OREAS 503D	Expected value	67	12.2	1.32	87	0.6	1.4	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21
	Tolerance (%)	21.4	22.0	25.1	15.8	38.6	11.1		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6
OREAS 260	Expected value	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14
	Tolerance (%)	14.4		26.7	36.0	24.0	16.7	24.3		12.9		42.2				55.6		12.9
OREAS 920	Expected value	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2	
	Tolerance (%)	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3	
OREAS 209	Expected value	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13
	Tolerance (%)	15.5	13.5	41.4	13.5		20.3		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7
OREAS 905	Expected value	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03
	Tolerance (%)	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12
OREAS 261	Expected value	128		0.20	17.8	1.23	0.59	0.27		31.5		5.0			0.1	0.03		0.14
	Tolerance (%)	12.0		22.3	24.0	30.3	18.5	19.3		10.8		15.0			45.2	188.6		27.9
OREAS 263	Expected value	127		0.29	30.8	1.22	0.57	0.27		31		4.9			0.2	0.03		
	Tolerance (%)	12.0		18.8	18.1	30.5	18.8	19.3		10.8		15.1			24.7	182.4		

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3

CRM	Test	Ca*
	Units	%
Method Code		ICP95A50
	Lower detection	0.007
	Upper detection	43
OREAS 70B	Expected value	3.08
	Tolerance (%)	3.5
MRG_1	Expected value	10.55
	Tolerance (%)	5.1

*Borate fusion ICP

CRM	Test	Hg
	Units	ppm
Method Code		CVA37A25
OREAS 621	Expected value	3.93
	Tolerance (%)	10.3
CZN-4	Expected value	4.54
	Tolerance (%)	10.3

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SGS proposal: 19195-PR1 COS1
SGS project #: 2138

Sample receipt date: 17-Jun-22
Report date: 4-Jul-22

Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 13

Report Distribution

Name	Email
Timo Kirchner	timo.kirchner@lorax.ca
Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
CAOND168764	0.122	<0.01	0.122	NA	3.8
CAOND169343	0.266	<0.01	0.266	NA	8.3
CAOND188908	0.063	<0.01	0.063	NA	2.0
CAOND164896	0.138	<0.01	0.138	NA	4.3
CAOND169332	0.292	<0.01	0.292	NA	9.1
Duplicates					
CAOND164896	0.151				

QA/QC					
Blank	<0.005				
Certified standards					
GGC-07	0.508				
RTS-3a		0.97			

SGS proposal: 19195-PR1 COS1 Sample receipt date: 17-Jun-22
SGS project #: 2138 Report date: 4-Jul-22

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t		kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
CAOND168764	NA	0.04	3.3	0.87	8.5	4.7	2.23	None	NA
CAOND169343	NA	0.57	47.5	5.71	53.8	45.5	6.47	Slight	NA
CAOND188908	NA	0.86	71.7	36.40	77.9	75.9	39.57	Slight	NA
CAOND164896	NA	0.08	6.7	1.55	12.0	7.7	2.78	None	NA
CAOND169332	NA	0.83	69.2	7.58	76.7	67.5	8.40	Slight	NA
Duplicates									
CAOND168764		0.05			8.9			None	

QA/QC									
Blank		<0.01							
Certified standards									
NBM-1					41.2			Slight	
TIC-L1		0.12							

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ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GGC-07	Expected value	0.51			0.56						
	Tolerance (+/-)	0.09			0.09						
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						41.74	51.49	57.6	Slight	
	Tolerance (+/-)						2.92	2.54	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22
Sample receipt date: 31-Oct-22
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: ol-1071778

COC:

ANALYSIS REPORT

SGS WO: 16

Report Distribution

Name	Email
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Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

Report pertains to static testing on the preleached material feed for humidity cell HC10

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1
SGS project #: 2138

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Version: Final

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
HC10-Preleach Residue	1.649	0.02	1.629	NA	50.9
Duplicates					
HC10-Preleach Residue		0.01			

QA/QC					
Blank	<0.005	<0.01			
Certified standards					
GS-314-2	2.562				
RTS-3a		1.03			

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ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	CO3 NPR	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Bulk NPR	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
HC10-Preleach Residue	0.237	0.23	19.2	0.38	22.3	-28.6	0.44	Slight	9.33
Duplicates									
HC10-Preleach Residue		0.23			23.5			Slight	23.5

QA/QC									
Blank		<0.01							
Certified standards									
NBM-1					41.9			Slight	
TIC-L1		0.13							

SGS proposal: 19195-PR1
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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HC10-Preleach Residue	1.26	42	1.41	32	464	4.99	0.17	8	0.97	385	0.04	30	0.05	1.66	53	0.25	97
Duplicates																	
HC10-Preleach Residue	1.27	42	1.43	33	480	5	0.18	9	0.98	389	0.04	30	0.06	1.68	53.4	0.26	100
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 151b	2.49	69	1.38	28	1844	3.37	0.41	6	1.44	281	0.17	14	0.06	0.75	37.6	0.08	149
OREAS 261	1.34	169	1.16	50	64	3.71	0.29	21	0.66	467	0.09	75	0.04	0.11	17.1	<0.01	22

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
HC10-Preleach Residue	27	8.3	0.26	10	0.2	5.3	0.02	8.38	44.8	0.20	5.1	0.2	0.32	0.1	<0.02	3.5	0.11
Duplicates																	
HC10-Preleach Residue	27	8.8	0.32	10	0.1	5.2	0.02	8.22	44.7	0.21	5.2	0.2	0.32	0.1	<0.02	3.5	0.11
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	0.01	<0.05	<0.1	<0.05	<0.1	0.2	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 151b	240	3.1	0.57	31	0.2	0.4	0.66	15.94	12.2	1.35	8.2	0.2	0.09	0.0	0.08	7.1	0.13
OREAS 261	129	14.2	0.20	16	1	0.6	0.27	54.28	31.2	3.21	4.4	0.2	0.47	0.1	0.03	27	0.14

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 18-Nov-22

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
HC10-Preleach Residue	7.04	0.44	1.8	10.4	2.1	6.4	<1	<0.3	<0.05	0.2	0.44	0.4	0.02	0.11	3.8	7.51	0.8
Duplicates																	
HC10-Preleach Residue	6.97	0.48	1.8	10.5	2.3	6.7	<1	<0.3	<0.05	0.2	0.55	0.4	0.03	0.11	4	7.92	0.8
QA/QC																	
Blank	<0.05	0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 151b	59	0.23	42.9	20.9	0.6	9.5	2	1.1	<0.05	0.4	0.10	2.6	0.11	0.60	0.7	10.70	0.9
OREAS 261	0.48	0.06	34.9	19.1	2.5	3.1	<1	0.4	<0.05	0.5	0.12	11.7	0.28	1.35	0.1	11.30	0.9

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ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GGC-07	Expected value	0.51			0.56						
	Tolerance (+/-)	0.09			0.09						
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						41.79	51.49	57.6	Slight	
	Tolerance (+/-)						2.87	2.54	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22
	Tolerance (%)	3.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
OREAS 502C	Expected value	102	9.53	0.80	59	0.53	0.68	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22
	Tolerance (%)	15.0	15.7	20.1	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4
OREAS 503D	Expected value	67	12.2	1.32	87	0.6	1.4	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21
	Tolerance (%)	21.4	22.0	25.1	15.8	38.6	11.1		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6
OREAS 260	Expected value	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14
	Tolerance (%)	14.4		26.7	36.0	24.0	16.7	24.3		12.9		42.2				55.6		12.9
OREAS 920	Expected value	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2	
	Tolerance (%)	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3	
OREAS 209	Expected value	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13
	Tolerance (%)	15.5	13.5	41.4	13.5		20.3		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7
OREAS 905	Expected value	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03
	Tolerance (%)	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12
OREAS 261	Expected value	128		0.20	17.8	1.23	0.59	0.27		31.5		5.0			0.1	0.03		0.14
	Tolerance (%)	12.0		22.3	24.0	30.3	18.5	19.3		10.8		15.0			45.2	188.6		27.9
OREAS 263	Expected value	127		0.29	30.8	1.22	0.57	0.27		31		4.9			0.2	0.03		
	Tolerance (%)	12.0		18.8	18.1	30.5	18.8	19.3		10.8		15.1			24.7	182.4		

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM Method Code	**Test** Units	Ca* % ICP95A50
	Lower detection	0.007
	Upper detection	43
OREAS 70B	Expected value	3.08
	Tolerance (%)	3.5
MRG_1	Expected value	10.55
	Tolerance (%)	5.1

*Borate fusion ICP

CRM Method Code	**Test** Units	Hg ppm CVA37A25
OREAS 621	Expected value	3.93
	Tolerance (%)	10.3
CZN-4	Expected value	4.54
	Tolerance (%)	10.3

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 10-Jun-25
Report date: 21-Jul-25
Sample receipt date: Jun-25
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 22

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 10-Jun-25
Report date: 17-Jul-25

Version: Final

ABA Report

Test Units	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
NEB-2025-001 CAOND270687	0.052	<0.01	0.052	NA	1.6
NEB-2025-002 CAOND270688	0.048	NA	NA	NA	NA
NEB-2025-003 CAOND270700	0.010	NA	NA	NA	NA
NEB-2025-004 CAOND245043	0.015	NA	NA	NA	NA
NEB-2025-005 CAOND245044	0.100	NA	NA	NA	NA
NEB-2025-006 CAOND270698	<0.005	NA	NA	NA	NA
NEB-2025-007 CAOND270695	0.117	NA	NA	NA	NA
NEB-2025-008 CAOND245050	0.095	NA	NA	NA	NA
NEB-2025-009 CAOND270692	0.953	<0.01	0.953	NA	29.8
NEB-2025-010 CAOND270693	0.148	NA	NA	NA	NA
NEB-2025-011 CAOND270694	0.014	NA	NA	NA	NA
NEB-2025-012 CAOND245049	0.073	<0.01	0.073	NA	2.3
NEB-2025-013 CAOND245047	0.232	NA	NA	NA	NA
NEB-2025-014 CAOND245048	0.208	NA	NA	NA	NA
NEB-2025-015 CAOND245046	0.016	NA	NA	NA	NA
NEB-2025-016 CAOND270696	0.133	NA	NA	NA	NA
NEB-2025-017 CAOND270697	0.467	<0.01	0.467	NA	14.6
NEB-2025-018 CAOND245042	0.038	NA	NA	NA	NA
NEB-2025-019 CAOND245045	0.149	NA	NA	NA	NA
NEB-2025-020 CAOND245041	0.026	NA	NA	NA	NA
NEB-2025-021 CAOND270714	0.109	NA	NA	NA	NA
NEB-2025-022 CAOND270711	0.17	NA	NA	NA	NA
NEB-2025-023 CAOND270710	0.234	<0.01	0.234	NA	7.3
NEB-2025-024 CAOND270709	0.021	NA	NA	NA	NA
NEB-2025-025 CAOND270708	0.021	NA	NA	NA	NA
NEB-2025-026 CAOND270707	0.009	NA	NA	NA	NA
NEB-2025-027 CAOND270712	0.036	NA	NA	NA	NA
NEB-2025-028 CAOND270713	0.331	<0.01	0.331	NA	10.3
NEB-2025-029 CAOND270718	0.213	NA	NA	NA	NA
NEB-2025-030 CAOND270699	0.019	NA	NA	NA	NA
NEB-2025-031 CAOND270719	0.112	NA	NA	NA	NA
NEB-2025-032 CAOND270706	0.175	NA	NA	NA	NA
NEB-2025-033 CAOND270705	0.209	NA	NA	NA	NA
NEB-2025-034 CAOND270704	0.712	<0.01	0.712	NA	22.3
NEB-2025-035 CAOND270703	0.688	NA	NA	NA	NA
NEB-2025-036 CAOND270701	0.005	NA	NA	NA	NA
NEB-2025-037 CAOND270702	0.009	NA	NA	NA	NA
NEB-2025-038 CAOND270715	0.094	NA	NA	NA	NA
NEB-2025-039 CAOND270716	0.019	<0.01	0.019	NA	0.6
NEB-2025-040 CAOND270717	0.288	NA	NA	NA	NA
NEB-2025-041 CAOND270684	0.023	NA	NA	NA	NA
NEB-2025-042 CAOND270677	0.178	NA	NA	NA	NA
NEB-2025-043 CAOND270676	0.016	NA	NA	NA	NA
NEB-2025-044 CAOND270678	0.153	NA	NA	NA	NA
NEB-2025-045 CAOND270680	0.038	<0.01	0.038	NA	1.2
NEB-2025-046 CAOND270682	0.145	NA	NA	NA	NA
NEB-2025-047 CAOND270679	0.213	NA	NA	NA	NA
NEB-2025-048 CAOND270689	0.024	NA	NA	NA	NA
NEB-2025-049 CAOND270690	0.059	NA	NA	NA	NA
NEB-2025-050 CAOND270691	0.014	<0.01	0.014	NA	0.4
FB-7 Composite	0.097	NA	NA	NA	NA
Duplicates					
NEB-2025-006 CAOND270698		<0.01			
*Rep NEB-2025-007 CAOND270695	0.118				
*Rep NEB-2025-050 CAOND270691	0.013				
QA/QC					
Blank	0.006	<0.01			
Certified standards					
RTS-3a		0.96			
GS915-8	0.127				
GS-314-2	2.582				

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SGS proposal: 20619-PR2 Work order date: 10-Jun-25
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Version: Final

ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01					0.2
Sample ID							
NEB-2025-001 CAOND270687	NA	2.67	222.5	214.9	213.3	Moderate	9.13
NEB-2025-002 CAOND270688	NA	0.18	15.0	21.4	NA	Slight	9.10
NEB-2025-003 CAOND270700	NA	0.04	3.3	12.3	NA	None	9.40
NEB-2025-004 CAOND245043	NA	0.88	73.3	84.0	NA	Slight	9.16
NEB-2025-005 CAOND245044	NA	0.77	64.2	69.2	NA	Slight	8.51
NEB-2025-006 CAOND270698	NA	0.73	60.8	62.7	NA	Slight	9.49
NEB-2025-007 CAOND270695	NA	0.70	58.3	71.3	NA	Slight	8.96
NEB-2025-008 CAOND245050	NA	1.38	115.0	125.9	NA	Moderate	8.94
NEB-2025-009 CAOND270692	NA	2.30	191.7	188.4	158.7	Moderate	8.57
NEB-2025-010 CAOND270693	NA	0.87	72.5	86.2	NA	Slight	8.79
NEB-2025-011 CAOND270694	NA	0.26	21.7	31.3	NA	Slight	9.24
NEB-2025-012 CAOND245049	NA	0.11	9.2	15.8	13.5	Slight	9.42
NEB-2025-013 CAOND245047	NA	1.22	101.7	119.0	NA	Moderate	8.88
NEB-2025-014 CAOND245048	NA	0.83	69.2	78.1	NA	Slight	9.09
NEB-2025-015 CAOND245046	NA	0.61	50.8	57.2	NA	Slight	9.31
NEB-2025-016 CAOND270696	NA	0.15	12.5	21.9	NA	None	9.10
NEB-2025-017 CAOND270697	NA	1.63	135.8	150.9	136.3	Moderate	8.98
NEB-2025-018 CAOND245042	NA	0.67	55.8	66.0	NA	Slight	9.09
NEB-2025-019 CAOND245045	NA	1.26	105.0	113.7	NA	Moderate	9.23
NEB-2025-020 CAOND245041	NA	1.25	104.2	115.8	NA	Slight	9.00
NEB-2025-021 CAOND270714	NA	0.16	13.3	28.4	NA	None	9.20
NEB-2025-022 CAOND270711	NA	1.46	121.7	137.2	NA	Moderate	8.70
NEB-2025-023 CAOND270710	NA	1.06	88.3	54.4	47.1	Slight	8.87
NEB-2025-024 CAOND270709	NA	1.50	125.0	134.2	NA	Slight	8.99
NEB-2025-025 CAOND270708	NA	0.50	41.7	49.5	NA	Slight	9.48
NEB-2025-026 CAOND270707	NA	1.10	91.7	102.5	NA	Slight	9.11
NEB-2025-027 CAOND270712	NA	2.79	232.5	228.9	NA	Moderate	8.95
NEB-2025-028 CAOND270713	NA	0.79	65.8	81.4	71.1	Slight	8.71
NEB-2025-029 CAOND270718	NA	1.40	116.7	130.9	NA	Slight	8.69
NEB-2025-030 CAOND270699	NA	1.56	130.0	135.6	NA	Slight	8.74
NEB-2025-031 CAOND270719	NA	2.09	174.2	183.3	NA	Slight	8.34
NEB-2025-032 CAOND270706	NA	0.94	78.3	92.3	NA	Slight	8.81
NEB-2025-033 CAOND270705	NA	0.80	66.7	83.9	NA	Slight	8.92
NEB-2025-034 CAOND270704	NA	2.55	212.5	197.7	175.5	Moderate	8.72
NEB-2025-035 CAOND270703	NA	2.09	174.2	179.8	NA	Moderate	8.77
NEB-2025-036 CAOND270701	NA	0.50	41.7	47.7	NA	Slight	9.30
NEB-2025-037 CAOND270702	NA	0.53	44.2	49.0	NA	Slight	9.25
NEB-2025-038 CAOND270715	NA	1.72	143.3	158.4	NA	Slight	9.17
NEB-2025-039 CAOND270716	NA	1.23	102.5	114.5	113.9	Slight	9.20
NEB-2025-040 CAOND270717	NA	0.71	59.2	64.1	NA	Slight	9.42
NEB-2025-041 CAOND270684	NA	1.11	92.5	97.1	NA	Slight	9.61
NEB-2025-042 CAOND270677	NA	1.76	146.7	153.7	NA	Slight	8.90
NEB-2025-043 CAOND270676	NA	0.76	63.3	70.7	NA	Slight	9.64
NEB-2025-044 CAOND270678	NA	0.91	75.8	89.8	NA	Slight	9.51
NEB-2025-045 CAOND270680	NA	1.40	116.7	130.4	129.3	Slight	8.85
NEB-2025-046 CAOND270682	NA	0.47	39.2	51.4	NA	Slight	8.91
NEB-2025-047 CAOND270679	NA	1.18	98.3	110.7	NA	Slight	8.98
NEB-2025-048 CAOND270689	NA	1.40	116.7	100.1	NA	Slight	9.56
NEB-2025-049 CAOND270690	NA	1.98	165.0	103.0	NA	Slight	9.69
NEB-2025-050 CAOND270691	NA	1.36	113.3	122.8	122.4	Slight	9.39
FB-7 Composite	NA	1.07	89.2	97.7	NA	Slight	9.17
Duplicates							
NEB-2025-001 CAOND270687				216.0		Moderate	9.04
NEB-2025-020 CAOND245041				116.2		Slight	8.99
NEB-2025-021 CAOND270714				28.1		None	9.11
NEB-2025-040 CAOND270717				64.0		Slight	9.38
NEB-2025-041 CAOND270684				97.3		Slight	9.60
NEB-2025-041 CAOND270684		1.12					
NEB-2025-028 CAOND270713		0.77					
QA/QC							
Blank							
Certified standards							
NBM-1				42.3		Slight	
NBM-1				43.0		Slight	
NBM-1				43.0		Slight	
TIC-L1		0.12					
SX35-13		11.66					

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 10-Jun-25
Report date: 17-Jul-25

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000	1000
Sample ID																									
NEB-2025-001 CAOND270687	2.03	10	7.19	49	555	3.69	0.26	14	2.54	557	0.01	42	0.02	0.05	46.1	<0.01	77	19	6.5	0.15	<1	0.3	0.5	<0.01	8.45
NEB-2025-002 CAOND270688	1.74	7	1.2	161	218	2.23	0.11	13	1.85	330	0.08	47	0.02	0.05	19.4	0.20	75	24	3.9	0.04	<1	<0.1	0.0	<0.01	3.54
NEB-2025-003 CAOND270700	2.81	<5	0.33	111	5	3.64	0.01	22	3.52	162	0.10	45	0.08	<0.01	8.2	<0.01	184	23	9.6	0.04	<1	0.3	0.1	<0.01	2.29
NEB-2025-004 CAOND245043	1.44	37	3.35	60	5	2.58	0.08	12	1.73	426	0.13	18	0.09	<0.01	94.6	0.12	81	31	8.3	0.02	<1	0.6	0.1	0.02	29.2
NEB-2025-005 CAOND245044	0.83	254	2.86	22	3	1.11	0.22	7	0.64	271	0.06	11	0.05	0.10	204	<0.01	11	21	4.4	0.02	<1	0.2	0.1	0.02	14.16
NEB-2025-006 CAOND270698	0.64	72	2.32	6	4	1.09	0.27	2	0.49	275	0.08	6	0.05	0.01	38.2	<0.01	10	9	6.9	<0.01	<1	0.3	<0.02	0.01	23.59
NEB-2025-007 CAOND270695	3.07	9	3.62	56	102	7.87	0.01	12	2.34	1457	0.07	54	0.10	0.12	34.2	0.67	227	94	10.7	0.02	9	0.3	<0.02	0.02	8.07
NEB-2025-008 CAOND245050	4.50	7	5.14	173	70	8.61	0.03	23	3.65	1333	0.05	75	0.09	0.10	34.4	0.46	290	75	6.5	0.02	7	0.6	0.1	0.04	6.15
NEB-2025-009 CAOND270692	3.73	21	6.88	16	225	9.51	0.2	21	2.47	1068	0.01	41	0.05	1.00	33.4	0.02	205	49	2.6	0.10	38	0.5	2.0	0.02	23.52
NEB-2025-010 CAOND270693	4.05	29	2.87	8	56	8.91	0.19	22	4.15	503	0.01	31	0.06	0.16	24.8	0.03	240	39	3.8	0.03	10	0.5	0.2	<0.01	12.66
NEB-2025-011 CAOND270694	1.55	14	1.6	99	88	6.29	0.05	11	1.66	528	0.09	40	0.05	0.01	28.6	0.33	206	43	8.0	0.07	1	0.2	<0.02	0.02	12.55
NEB-2025-012 CAOND245049	2.09	<5	1.21	153	661	3.91	0.05	13	2.14	313	0.09	49	0.02	0.07	28	0.32	121	22	7.3	0.13	1	0.1	0.1	<0.01	5.2
NEB-2025-013 CAOND245047	3.68	<5	5.35	189	129	7.98	<0.01	16	3.04	1600	0.06	70	0.10	0.25	34.1	0.72	276	104	14.7	0.03	7	0.5	<0.02	0.01	7.29
NEB-2025-014 CAOND245048	3.13	<5	4.07	169	110	7.46	<0.01	13	2.63	1250	0.09	82	0.09	0.21	45.7	0.84	284	89	12.5	0.03	6	0.4	0.1	0.02	8.48
NEB-2025-015 CAOND245046	1.18	<5	2.63	96	72	6.16	0.04	7	1.32	507	0.10	33	0.04	0.01	29.3	0.36	219	30	6.5	0.02	<1	0.2	<0.02	0.01	10.69
NEB-2025-016 CAOND270696	2.83	12	1.92	26	175	8.82	0.03	11	2.16	1064	0.08	49	0.09	0.14	27.6	0.73	319	86	11.0	0.05	8	0.2	<0.02	0.02	5.88
NEB-2025-017 CAOND270697	3.02	14	5.53	133	3374	6.7	0.01	21	3.56	613	0.08	71	0.02	0.49	90.1	0.03	258	31	9.0	0.65	<1	0.3	0.3	0.01	4.91
NEB-2025-018 CAOND245042	3.07	<5	2.73	43	191	7.19	0.02	26	3.99	797	0.06	31	0.05	0.03	28.1	0.37	315	55	5.5	0.05	<1	0.6	0.1	0.01	9.33
NEB-2025-019 CAOND245045	2.71	<5	4.45	244	1621	7.77	0.04	17	3.10	573	0.08	74	0.02	0.16	49.7	0.24	240	24	6.7	0.03	<1	0.3	0.1	0.02	7.35
NEB-2025-020 CAOND245041	3.55	6	4.51	269	68	6.61	0.04	27	4.50	998	0.06	94	0.03	0.02	35.2	0.18	220	50	1.8	0.01	2	0.4	<0.02	0.01	6.32
NEB-2025-021 CAOND270714	3.41	<5	1.47	65	139	5.68	0.03	33	3.43	473	0.07	118	0.03	0.12	22.6	0.34	114	56	5.1	0.04	22	<0.1	<0.02	0.01	3.52
NEB-2025-022 CAOND270711	4.52	<5	5.77	48	81	10.82	<0.01	27	2.88	2063	0.05	50	0.12	0.18	16.7	0.58	372	117	7.6	0.04	36	0.2	<0.02	0.01	7.65
NEB-2025-023 CAOND270710	3.85	<5	4.37	60	122	8.46	<0.01	24	2.75	1871	0.06	52	0.10	0.25	12.6	0.49	287	96	8.2	0.03	18	0.4	0.0	0.02	11.54
NEB-2025-024 CAOND270709	3.51	8	5.13	120	31	6.53	0.01	38	3.75	538	0.06	62	0.04	0.02	38	0.02	247	49	2.1	0.01	<1	0.3	0.0	<0.01	9.28
NEB-2025-025 CAOND270708	1.49	66	1.9	46	452	2.41	0.07	12	1.70	215	0.11	23	0.07	0.02	31.1	0.03	62	16	13.6	0.22	<1	0.3	0.2	<0.01	28.11
NEB-2025-026 CAOND270707	2.53	18	3.96	55	14	3.54	0.13	22	2.85	397	0.04	39	0.05	<0.01	41	0.01	111	29	7.0	0.11	<1	0.4	0.1	0.01	10.01
NEB-2025-027 CAOND270712	2.85	9	7.85	132	92	4.8	0.24	29	3.59	777	0.03	76	0.01	0.05	104	0.01	84	28	2.1	0.03	<1	0.3	0.1	0.04	5.11
NEB-2025-028 CAOND270713	3.58	8	3.15	247	5398	7.79	0.02	20	4.20	719	0.05	131	0.04	0.36	33.1	0.24	233	42	8.4	1.39	2	0.4	0.9	<0.01	14.16
NEB-2025-029 CAOND270718	3.65	5	5.57	172	131	7.6	0.03	29	3.10	1661	0.05	81	0.09	0.23	35.2	0.61	289	93	9.9	0.03	6	0.6	0.1	<0.01	19.5
NEB-2025-030 CAOND270699	0.89	37	5.14	9	17	1.48	0.13	7	0.93	802	0.04	12	0.07	0.02	25	<0.01	15	5	8.1	0.05	<1	0.3	0.1	<0.01	47.97
NEB-2025-031 CAOND270719	2.83	10	7.06	79	66	6.33	0.1	25	2.00	722	0.02	36	0.07	0.13	34.5	0.01	176	36	5.4	0.08	6	0.6	0.5	0.01	29.21
NEB-2025-032 CAOND270706	3.34	<5	4.42	149	110	6.87	0.01	19	2.69	1471	0.05	78	0.09	0.18	44.4	0.74	232	92	12.3	0.02	4	0.4	0.0	0.02	9.38
NEB-2025-033 CAOND270705	3.17	6	4.26	159	137	6.89	<0.01	15	2.42	1401	0.07	85	0.10	0.23	52.9	0.84	262	81	14.0	0.03	4	0.5	<0.02	<0.01	6.36
NEB-2025-034 CAOND270704	3.03	26	6.31	42	134	8.54	0.24	18	2.60	1356	0.02	47	0.07	0.71	65.6	0.01	171	66	3.1	0.10	26	0.5	0.2	0.05	9.92
NEB-2025-035 CAOND270703	3.13	20	6.88	13	949	9.05	0.22	21	2.19	720	0.02	38	0.05	0.71	49.7	0.02	216	32	4.4	0.27	21	0.4	0.2	0.02	8.01
NEB-2025-036 CAOND270701	0.65	39	2.02	65	32	2.59	0.1	4	0.69	297	0.09	14	0.06	<0.01	34.7	0.11	58	16	8.2	0.06	2	0.2	0.0	0.01	15.05
NEB-2025-037 CAOND270702	0.71	35	1.96	24	35	1.68	0.1	4	0.71	267	0.08	11	0.04	<0.01	47.8	0.05	34	19	4.8	0.07	<1	0.2	0.1	<0.01	10.48
NEB-2025-038 CAOND270715	2.86	27	6.05	114	27	4.36	0.13	21	2.92	844	0.06	28	0.14	0.10	53	0.11	108	59	36.4	0.02	<1	0.7	0.0	0.02	29.54
NEB-2025-039 CAOND270716	2.59	<5	4.3	120	120	6.77	0.02	18	3.24	818	0.08	59	0.04	0.01	56	0.15	231	61	4.9	0.04	<1	0.4	0.0	0.03	9.18
NEB-2025-040 CAOND270717	0.84	74	2.54	16	456	2.01	0.12	6	0.68	281	0.09	10	0.06	0.31	34.3	<0.01	25	14	5.4	0.33	<1	0.3	0.2	0.01	21.44
NEB-2025-041 CAOND270684	1.02	14	3.93	29	69	1.65	0.09	8	0.91	282	0.09	21	0.05	0.02	32.6	0.05	31	12	6.8	0.07	<1	0.2	0.3	<0.01	16.11
NEB-2025-042 CAOND270677	3.43	14	5.91	7	184	8.62	0.25	13	1.85	667	0.01	33	0.06	0.20	42.2	0.01	159	15	2.5	0.03	4	0.4	0.1	<0.01	8.58
NEB-2025-043 CAOND270676	1.03	145	2.79	26	21	2.71	0.12	5	0.95	418	0.07	14	0.06	0.02	68.6	0.06	50	29	8.6	0.01	<1	0.4	<0.02	0.02	25.98
NEB-2025-044 CAOND270678	3.20	18	4.3	25	85	9.75	0.11	12	2.48	1118	0.10	32	0.12	0.16	27.3	0.87	322	89	13.2	0.04	8	0.3	0.3	0.02	10.56
NEB-2025-045 CAOND270680	3.67	6	5.76	21	81	10.55	<0.01	16	2.96	1307	0.05	34	0.12	0.04	29.3	0.76	345	87	5.1	<0.01	3	0.5	<0.02	0.02	9.33
NEB-2025-046 CAOND270682	3.74	<5	2.55	38	97	8.5	<0.01	16	3.28	1286	0.05	72	0.09	0.16	27.2	0.50	212	93	8.0	0.04	12	0.3	<0.02	0.03	6
NEB-2025-047 CAOND270679	4.01	5	4.81	184	453	8.6	0.03	21	3.00	1502	0.06	83	0.09	0.23	21	0.65	318	82	9.2	0.02	16	0.5	0.1	0.01	6.05
NEB-2025-048 CAOND270689	0.37	77	2.59	6	33	1.37	0.2	<1	1.04	347	0.05	6	0.04	0.03	65.7	<0.01	9	12	4.7	0.12	<1	0.3	0.1	0.01	16.68
NEB-2025-049 CAOND270690	0.76	668	3.77	60	18	2.49	0.26	8	2.12	715	0.05	28	0.11	0.06	376	<0.01	23	34	29.0	0.03	<1	0.6	0.1	0.04	54
NEB-2025-050 CAOND270691	1.09	48	5.02	48	3	0.97	0.07	12	1.62	403	0.09	7	0.18	0.01	155	0.11	52	15	6.2	<0.01	4	0.6	0.0	0.03	23.04
FB-7 Composite	2.40	31	3.92	82	215	5.52	0.11	16	2.24	723	0.05	45	0.06	0.11	46.7	0.23	165	43	7.4	0.07	2	0.3	0.1	<0.01	13.45
Duplicates																									
NEB-2025-009 CAOND270692	3.65	21	6.75	15	221	9.35	0.19	20	2.44	1049	0.01	41	0.05	0.98	32.8	0.02	200	48	2.6	0.11	37	0.4	1.8	0.02	22.89
NEB-2025-034 CAOND270704	3.05	26	6.35	42	142	8.64	0.24	18	2.61	1363	0.02	47	0.07	0.73	65.9	0.01	170	66	2.8	0.10	27	0.5	0.2	0.05	10.11
QA/QC																									
BLANK	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05
Certified standards																									
OREAS 502c	2.05	417	1.07	67	7803	4.5	1.13	31	1.26	380	0.17	36	0.10	0.81	65.2	0.34	111	104	9.4	0.83	59	0.5	0.7	0.32	59.32
OREAS 501c	2.10	417	1	68	2764	4.04	1.21	33	1.27	388	0.18	56	0.10	0.34	60.6	0.36	110	74	9.1	0.44	24	0.6	0.7	0.14	63.5

Test	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																										
NEB-2025-001 CAOND270687	23.2	0.32	5.4	<0.1	0.20	0.06	0.03	4.9	0.13	18.50	<0.05	0.5	10.6	0.5	12.1	<1	<0.3	<0.05	0.2	0.17	0.1	0.05	0.10	0.3	6.03	0.8
NEB-2025-002 CAOND270688	22.1	0.22	5.0	<0.1	0.18	<0.01	<0.02	1.3	0.08	1.46	0.18	0.6	7.5	0.4	4.2	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.03	<0.05	0.6	6.19	0.6
NEB-2025-003 CAOND270700	21.4	0.16	12.7	<0.1	0.35	0.02	<0.02	1	0.03	6.44	<0.05	0.9	0.6	<0.05	14.3	<1	<0.3	<0.05	0.1	<0.05	1.5	<0.02	0.20	0.1	1.94	0.2
NEB-2025-004 CAOND245043	11.6	0.21	7.9	<0.1	0.41	0.05	<0.02	13.6	0.09	9.98	0.44	1.1	4.6	0.2	7.9	<1	0.4	<0.05	0.3	<0.05	2.8	<0.02	0.78	19.1	6.71	0.6
NEB-2025-005 CAOND245044	5.4	0.26	3.0	<0.1	0.19	0.05	<0.02	6.8	0.04	2.29	<0.05	1.5	8.8	0.2	1.2	<1	<0.3	<0.05	0.1	<0.05	0.8	<0.02	0.23	1.6	2.09	0.2
NEB-2025-006 CAOND270698	3.8	0.21	2.4	<0.1	0.24	0.01	<0.02	11.5	0.04	0.51	<0.05	0.9	7.9	0.1	1.3	<1	<0.3	<0.05	0.1	<0.05	1.4	0.02	0.37	0.2	2.34	0.2
NEB-2025-007 CAOND270695	42.8	0.34	11.9	<0.1	0.40	<0.01	<0.02	3	0.17	0.33	0.26	0.7	1.1	0.3	8	<1	<0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	<0.1	13.42	1.3
NEB-2025-008 CAOND245050	43.3	0.14	16.2	0.1	0.22	0.01	0.04	2.2	0.16	0.79	0.11	0.4	1.5	0.4	31.8	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	0.3	12.73	1.2
NEB-2025-009 CAOND270692	61.4	0.36	11.8	<0.1	0.10	0.46	0.07	11.5	0.17	3.12	0.05	1.5	8.6	0.3	14.4	1	<0.3	<0.05	0.5	1.09	0.1	0.05	0.06	0.5	10.40	1.1
NEB-2025-010 CAOND270693	52.4	0.47	13.6	<0.1	0.13	0.02	0.04	6	0.11	0.76	<0.05	0.3	8.7	0.6	19.3	<1	<0.3	<0.05	0.3	<0.05	0.1	0.06	0.06	1.7	6.32	0.7
NEB-2025-011 CAOND270694	23.4	0.11	9.5	<0.1	0.34	0.02	<0.02	5.2	0.32	5.80	0.43	0.8	2.2	0.7	5.9	<1	0.4	<0.05	0.5	<0.05	0.9	<0.02	0.21	1	17.16	2.1
NEB-2025-012 CAOND245049	35.9	0.20	7.1	<0.1	0.30	0.05	<0.02	2.1	0.14	8.07	0.21	0.3	3.3	0.9	5.1	<1	<0.3	<0.05	0.3	<0.05	0.1	<0.02	0.08	1.1	10.28	1.2
NEB-2025-013 CAOND245047	46	0.19	13.7	0.2	0.52	0.01	0.03	2.9	0.15	0.38	0.23	0.8	0.5	0.6	19.8	<1	0.3	<0.05	0.4	<0.05	0.3	<0.02	0.08	0.8	10.67	1.1
NEB-2025-014 CAOND245048	48.9	0.14	12.7	0.2	0.54	<0.01	0.03	3.7	0.14	0.33	0.31	0.8	0.3	1.2	18.4	<1	0.3	<0.05	0.3	<0.05	0.1	<0.02	<0.05	0.2	10.65	1.1
NEB-2025-015 CAOND245046	19.3	0.11	9.0	<0.1	0.36	<0.01	<0.02	4.2	0.39	10.12	0.57	0.6	1.6	0.7	4.6	<1	0.5	<0.05	0.6	<0.05	0.3	<0.02	0.11	1.1	21.15	2.7
NEB-2025-016 CAOND270696	41.7	0.56	12.5	<0.1	0.38	<0.01	<0.02	2.1	0.18	0.36	0.26	1	1.7	0.1	6.6	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	<0.1	11.84	1.3
NEB-2025-017 CAOND270697	30	0.18	14.1	0.2	0.24	0.21	0.06	2.2	0.11	237.00	<0.05	0.7	0.9	0.4	21.5	2	<0.3	<0.05	0.2	0.11	0.1	<0.02	0.18	0.3	4.13	0.7
NEB-2025-018 CAOND245042	31.6	0.23	14.1	<0.1	0.30	0.01	0.03	3.9	0.21	8.72	0.18	0.8	1.4	0.5	21.9	1	0.5	<0.05	0.4	<0.05	0.4	<0.02	0.12	0.8	14.02	1.6
NEB-2025-019 CAOND245045	42.4	0.16	11.3	0.2	0.25	0.05	0.03	3.2	0.16	32.49	0.11	0.3	2	0.6	18.1	<1	0.3	<0.05	0.4	0.07	<0.1	<0.02	<0.05	0.7	11.66	1.2
NEB-2025-020 CAOND245041	35.1	0.33	13.4	<0.1	0.09	0.01	0.03	2.3	0.26	3.61	0.11	0.4	2.6	0.4	22	<1	0.3	<0.05	0.5	<0.05	0.1	<0.02	<0.05	0.5	15.36	1.9
NEB-2025-021 CAOND270714	43.6	0.25	8.6	<0.1	0.18	0.05	<0.02	1.3	0.05	0.23	0.14	0.6	1.5	0.1	4.7	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.02	<0.05	0.1	4.30	0.4
NEB-2025-022 CAOND270711	48.6	0.28	18.6	0.1	0.32	0.02	0.04	2.8	0.16	0.26	0.18	0.7	0.5	0.2	23.2	<1	0.3	<0.05	0.5	<0.05	0.2	<0.02	<0.05	0.2	13.95	1.3
NEB-2025-023 CAOND270710	41.7	0.11	17.8	0.2	0.31	0.02	0.06	4.2	0.14	0.61	0.22	0.8	0.6	0.1	26.3	<1	0.4	<0.05	0.5	<0.05	0.3	<0.02	0.07	0.2	13.23	1.1
NEB-2025-024 CAOND270709	31	0.13	15.6	<0.1	0.29	<0.01	0.03	3.6	0.18	4.01	<0.05	0.4	0.8	0.1	21.8	<1	<0.3	<0.05	0.2	<0.05	0.2	<0.02	<0.05	0.3	4.89	0.9
NEB-2025-025 CAOND270708	11.1	0.14	8.2	<0.1	0.40	0.06	<0.02	13.2	0.06	5.20	0.05	0.4	2.7	0.2	5.4	<1	<0.3	<0.05	0.2	0.11	1.3	<0.02	0.30	0.3	3.75	0.4
NEB-2025-026 CAOND270707	19.5	0.23	9.4	<0.1	0.17	0.02	<0.02	4.2	0.11	12.33	<0.05	0.3	4.6	0.2	7.9	<1	<0.3	<0.05	0.2	<0.05	0.4	<0.02	0.11	0.2	4.47	0.7
NEB-2025-027 CAOND270712	28.3	0.37	6.7	<0.1	0.07	0.02	<0.02	2.1	0.13	7.58	<0.05	0.5	9.8	0.8	8.3	<1	<0.3	<0.05	0.2	<0.05	<0.1	0.04	<0.05	0.9	4.64	0.8
NEB-2025-028 CAOND270713	41.5	0.16	14.0	0.3	0.31	0.45	0.06	7	0.21	125.00	0.13	0.6	1.3	2.2	21.1	4	0.6	<0.05	0.4	0.32	0.5	<0.02	0.25	1.3	12.34	1.4
NEB-2025-029 CAOND270718	52.5	0.30	13.8	0.1	0.43	0.03	0.04	8.7	0.19	0.85	0.17	0.6	0.9	0.7	25.3	<1	<0.3	<0.05	0.6	<0.05	0.1	<0.02	<0.05	0.7	14.22	1.5
NEB-2025-030 CAOND270699	8.8	0.22	3.6	<0.1	0.24	0.02	0.03	22.6	0.11	0.99	<0.05	0.6	3.8	0.2	1.9	<1	<0.3	<0.05	0.4	<0.05	1.6	<0.02	0.36	<0.1	7.48	0.7
NEB-2025-031 CAOND270719	31.3	0.53	10.2	<0.1	0.13	0.06	0.04	13.9	0.15	2.95	<0.05	0.8	4.7	0.2	12.6	<1	<0.3	<0.05	0.5	<0.05	0.4	0.03	0.09	0.2	11.60	1
NEB-2025-032 CAOND270706	49.3	0.15	11.6	<0.1	0.54	0.02	<0.02	3.9	0.14	0.35	0.28	0.7	0.7	0.6	15.2	<1	<0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	0.5	9.81	1.1
NEB-2025-033 CAOND270705	53.1	0.15	11.4	0.1	0.60	0.02	0.02	2.6	0.14	0.32	0.34	0.8	0.5	0.7	17.8	<1	<0.3	<0.05	0.3	<0.05	<0.1	<0.02	<0.05	0.4	9.83	1.1
NEB-2025-034 CAOND270704	44	0.37	9.4	<0.1	0.11	0.04	0.05	4.5	0.11	2.75	<0.05	2	9.8	0.5	14.7	<1	<0.3	<0.05	0.4	<0.05	0.2	0.07	0.05	0.3	6.62	0.7
NEB-2025-035 CAOND270703	131	0.52	11.8	<0.1	0.11	0.03	0.06	4	0.13	1.75	<0.05	0.7	10.4	0.6	16.1	<1	<0.3	<0.05	0.3	0.05	<0.1	0.07	0.09	0.9	6.46	0.8
NEB-2025-036 CAOND270701	7.4	0.09	4.7	<0.1	0.31	0.02	<0.02	7	0.05	2.15	0.36	0.6	2.2	0.3	2.5	<1	<0.3	<0.05	0.2	<0.05	1.3	<0.02	0.34	1.2	3.64	0.4
NEB-2025-037 CAOND270702	5.4	0.12	4.4	<0.1	0.21	0.01	<0.02	5	0.03	4.45	0.16	0.5	3.7	0.1	2.4	<1	<0.3	<0.05	0.1	<0.05	0.7	<0.02	0.20	1.5	2.12	0.2
NEB-2025-038 CAOND270715	20.8	0.28	11.4	<0.1	0.86	0.01	0.02	13.6	0.1	0.31	0.14	0.9	6	0.1	10.3	<1	0.4	<0.05	0.3	<0.05	1.5	<0.02	0.51	0.2	6.23	0.6
NEB-2025-039 CAOND270716	28.6	0.14	13.3	0.2	0.18	<0.01	0.04	3.9	0.32	33.42	0.16	0.9	1.3	0.4	18.2	<1	0.4	<0.05	0.6	<0.05	0.3	<0.02	0.14	0.4	17.92	2.1
NEB-2025-040 CAOND270717	5.8	0.21	4.6	<0.1	0.22	0.10	<0.02	10.5	0.05	8.22	<0.05	0.6	4.3	0.3	1.9	<1	<0.3	<0.05	0.2	0.09	1.4	<0.02	0.29	0.4	3.69	0.3
NEB-2025-041 CAOND270684	8.2	0.17	5.2	<0.1	0.21	0.02	<0.02	8.2	0.03	225.00	0.10	0.6	4.9	0.4	2.3	<1	<0.3	<0.05	0.2	<0.05	0.5	<0.02	0.15	0.7	3.22	0.3
NEB-2025-042 CAOND270677	49.1	0.45	8.1	<0.1	0.06	0.03	0.05	3.6	0.11	1.49	<0.05	0.4	9.6	0.7	16.1	<1	<0.3	<0.05	0.3	<0.05	0.1	0.05	<0.05	0.5	5.62	0.7
NEB-2025-043 CAOND270676	9	0.23	5.9	<0.1	0.30	0.02	<0.02	12.6	0.06	0.99	0.06	0.9	4	0.3	2.5	<1	0.4	<0.05	0.2	<0.05	1.7	<0.02	0.37	1.5	4.11	0.4
NEB-2025-044 CAOND270678	41.3	1.55	15.2	<0.1	0.54	0.01	0.03	4.1	0.23	1.62	0.47	1.1	3.8	0.4	14.6	<1	<0.3	<0.05	0.6	<0.05	0.2	<0.02	0.05	0.6	16.12	1.7
NEB-2025-045 CAOND270680	43.9	0.34	16.9	0.2	0.25	<0.01	0.04	3.5	0.29	0.30	0.34	0.5	0.7	0.3	21.6	<1	<0.3	<0.05	0.7	<0.05	0.1	<0.02	<0.05	0.7	19.66	2.1
NEB-2025-046 CAOND270682	48	0.33	13.4	<0.1	0.28	<0.01	<0.02	2	0.15	0.25	0.17	0.6	0.7	0.5	6.8	<1	<0.3	<0.05	0.4	<0.05	<0.1	<0.02	<0.05	0.1	10.93	1.1
NEB-2025-047 CAOND270679	51.4	0.15	15.4	0.1	0.37	0.02	0.06	2.3	0.15	0.42	0.19	0.5	2.3	0.4	33.9	<1	0.3	<0.05	0.4	<0.05	0.1	<0.02	<0.05	0.5	11.79	1.1
NEB-2025-048 CAOND270689	6.4	0.28	1.0	<0.1	0.18	0.06	<0.02	7.7	0.04	0.77	<0.05	1.2	5.3	0.4	2.1	<1	<0.3	<0.05	0.2	<0.05	0.7	<0.02	0.16	0.5	2.89	0.3
NEB-2025-049 CAOND270690	13.8	0.32	2.9	<0.1	0.78	0.02	<0.02	25.7	0.11	0.51	0.06	2.8	11.1	0.5	5.3	<1	<0.3	<0.05	0.5	<0.05	2.6	0.05	0.91	0.2	8.50	0.7
NEB-2025-050 CAOND270691	3.4	0.19	4.2	<0.1	0.27	<0.01	0.02	9.8	0.07	1.18	0.51	1	2.9	0.2	5.6	<1	0.4	<0.05	0.3	<0.05	1.5	<0.02	0.38	2.4	5.61	0.5
FB-7 Composite	29.8	0.27	9.7	<0.1	0.28	0.04	0.03	5.9	0.14	33.70	0.14	0.6	4.7	0.4	11.7	<1	<0.3	<0.05	0.3	0.05	0.6	<0.02	0.16	0.6	8.07	0.9
Duplicates																										
NEB-2025-009 CAOND270692	60.8	0.37	11.6	<0.1	0.07	0.30	0.07	11.3	0.18	3.24	<0.05	1.5	8.7	0.3	14.3	2	<0.3	<0.05	0.5	0.86	0.1	0.05	0.06	0.4	10.24	1.1
NEB-2025-034 CAOND270704	45.1	0.37	9.6	<0.1	0.09	0.05	0.06	4.6	0.15	2.92	0.07	2.1	10.1	0.5	15.1	<1	<0.3	<0.05	0.4	0.06	0.2	0.07	0.06	0.3	6.82	0.8
QA/QC																										
BLANK	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																										
OREAS 502c	12.7	9.26	8.7	<0.1	0.41	0.06	0.06	29.7	0.23	225	1.81	10.9	118	4.4	6.9	3	2.6	<0.05	0.6	0.49	17.5	0.69	4.74	3.1	15.90	1.6
OREAS 501c	13.2	10.09	8.6	<0.1	0.40	0.01	0.05	31.8	0.24	89.18	1.73	8	128	1.5	6.9	2	2.6	<0.05	0.6	0.28	18.8	0.78	4.97	3.3	16.29	1.6

SGS

ANALYSIS REPORT

ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP Method 1996	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	CSA07D	Calc.	CSA06V	CSB02V	CSB02V		Modified			Sobek	Sobek
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005		0.5				0.2
GGC-07	Expected value	0.51				0.56								
	Tolerance (+/-)	0.09				0.09								
HCC-1	Expected value	33.92												
	Tolerance (+/-)	5.04												
RTS-3a	Expected value		0.98	1.34										
	Tolerance (+/-)		0.12	0.35										
OREAS 278	Expected value				0.699									
	Tolerance (+/-)				0.06									
NBM-1	Expected value								38.67	42.07	50.27	57.6	Slight	
	Tolerance (+/-)								3.55	3.72	2.31	1.3		
TIC-L1	Expected value						0.13	0.477						
	Tolerance (+/-)						0.02	0.78						
GS314-2	Expected value	2.56				5.15								
	Tolerance (+/-)	0.14				0.27								
GS915-8	Expected value	0.13				0.07								
	Tolerance (+/-)	0.02				0.02								
OREAS 550	Expected value	0.220				4.110								
	Tolerance (+/-)	0.004				0.22								
SX35-13	Expected value						11.954							
	Tolerance (+/-)						0.626							
SY4	Expected value						0.95							
	Tolerance (+/-)						0.06							

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000
OREAS 501b	Expected value	1.99	369	0.966	85	2580	4.08	1.08	31.7	1.21	393	0.167	37.5	0.1	0.364	60	0.338	110	80	10.9	0.721	18.6	0.49	1.6	
	Tolerance (%)	11.26%	13.39%	12.59	12.94%	10.05%	10.61%	12.31%	17.89%	12.07%	11.27%	24.97%	16.67%	22.5%	16.87%	12.08%	17.4%	12.27%	13.12%	21.47%	13.47%	23.44%	61.02%	13.12%	
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68	BDL
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5	
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4	BDL
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1	
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54	0.21
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7	24.3
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68	0.06
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8	39.3
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3	
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7	0.34
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4	25.59
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59	0.27
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5	19.3
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57	0.27
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8	19.3
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33	0.033
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18	86
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40	0.58
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16	14
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109	7.93
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02	10.32
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4	3.16
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19	10.79
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220	12.3
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01	10.20
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7	
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57	
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3	2.7
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12	10.93
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5	125
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24	10.02
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18	2.04
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28	11.23
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9	52
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30	10.05
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90	30.4
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03	10.08
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5	
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59	

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	1000	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 501b	Expected value	61	14.9	9.93	8.7	0.2	0.43		0.19	29.3	0.21	97		9.42	126	0.49	7.08	2.78	4.65			0.078	17.9		4.56	2.34	16.6	1.5
	Tolerance (%)	10.2%	11.68%	11.26%	12.87%	135%	39.07%		36.32%	10.85%	21.9%	10.13%		15.31%	10.4%	35.51%	13.53%	99.93%	26.13%			170.26%	11.4%		12.74%	20.68%	10.75%	0.3
OREAS 502C	Expected value	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)		12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	14.3	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value		31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)		10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value		31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)		10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3
OREAS 235	Expected value	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6	1.55	0.45	9.47	0.85
	Tolerance (%)	10	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18	18	38	11	39
OREAS 151b	Expected value	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12	0.60		10.40	0.93
	Tolerance (%)	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7	30.8		11.2	36.9
OREAS 609b	Expected value	34	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009	2.04	1.81	5.22	0.21
	Tolerance (%)	10.15	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	41.6	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41	2.23	0.58	5.77	0.21
	Tolerance (%)	10.12	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20	15.61	31.55	12.17	129.05
OREAS 610	Expected value	13.7	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49	1.12	3.58	3.09	
	Tolerance (%)	10.36	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36	21.16	13.49	14.05	
OREAS 501c	Expected value	64	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3		4.87	2.96		
	Tolerance (%)	10.08	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65		12.57	14.22		
OREAS 601c	Expected value	34.7	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20	2.04	1.16	5.1	0.23
	Tolerance (%)	10.14	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17	16.13	20.78	12.45	118.70
OREAS 624	Expected value	24	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9		0.74	2.73	6.59	0.84
	Tolerance (%)	10.52	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62		26.89	19.16	11.90	39.76
OREAS 601b	Expected value	38.5	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08	2.22	1.86	5.34	0.2
	Tolerance (%)	10.32	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63	15.63	23.44	33.41	135.00
OREAS 623	Expected value	36.4	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26	1.43	2.62	7.43	
	Tolerance (%)	10.34	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23	18.74	19.54	11.68	
OREAS 603c	Expected value	30.7	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68	2.19	2.99	5.55	0.22
	Tolerance (%)	10.16	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36	15.71	14.18	12.25	123.64
OREAS 523	Expected value		698.000							233		293		27.4			6.41		9.88							160	14.8	
	Tolerance (%)		10.36							10.54		10.85		28.25			29.50		263.04							25.62	18.45	

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CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Size Fraction Analysis**
Date : **December 4, 2018**

HC 1

Sieve Designation	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+3/8"	9.500	0.90	0.9%	0.9%
- 3/8" +1/4"	6.300	16.90	17.0%	17.9%
-1/4" + 5	4.000	37.30	37.5%	55.4%
5 + 10	1.700	23.20	23.3%	78.7%
-10 + 35	0.425	14.80	14.9%	93.6%
-35 + 100	0.150	4.00	4.0%	97.6%
-100 + 270	0.053	1.50	1.5%	99.1%
-270	-0.053	0.90	0.9%	100.0%
TOTAL		99.50	100.0%	

HC 2

Sieve Designation	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+3/8"	9.500	1.20	1.2%	1.2%
- 3/8" +1/4"	6.300	21.70	21.7%	22.9%
-1/4" + 5	4.000	37.00	37.1%	60.0%
5 + 10	1.700	20.70	20.7%	80.8%
-10 + 35	0.425	14.00	14.0%	94.8%
-35 + 100	0.150	3.50	3.5%	98.3%
-100 + 270	0.053	1.20	1.2%	99.5%
-270	-0.053	0.50	0.5%	100.0%
TOTAL		99.80	100.0%	

HC 3

Sieve Designation	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+3/8"	9.500	1.60	1.6%	1.6%
- 3/8" +1/4"	6.300	17.40	17.5%	19.1%
-1/4" + 5	4.000	32.60	32.7%	51.8%
5 + 10	1.700	24.00	24.1%	75.8%
-10 + 35	0.425	17.10	17.2%	93.0%
-35 + 100	0.150	4.80	4.8%	97.8%
-100 + 270	0.053	1.60	1.6%	99.4%
-270	-0.053	0.60	0.6%	100.0%
TOTAL		99.70	100.0%	

HC 4

Sieve Designation	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+3/8"	9.500	0.00	0.0%	0.0%
- 3/8" +1/4"	6.300	11.40	11.4%	11.4%
-1/4" + 5	4.000	41.20	41.2%	52.7%
5 + 10	1.700	26.10	26.1%	78.8%
-10 + 35	0.425	16.00	16.0%	94.8%
-35 + 100	0.150	3.30	3.3%	98.1%
-100 + 270	0.053	1.30	1.3%	99.4%
-270	-0.053	0.60	0.6%	100.0%
TOTAL		99.90	100.0%	

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Modified Acid-Base Accounting**
Date : **December 4, 2018**

Sample ID	**Paste pH**	**TIC %**	**CaCO3 NP**	**S(T) %**	**S(SO4) %**	**S(S-2) %**	**AP**	**Modified NP**	**Net Modified NP**	**Fizz Test**
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07V	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.2	0.01	#N/A	0.005	0.01	#N/A	#N/A	0.5	#N/A	#N/A
HC-1	8.03	2.23	185.8	0.225	0.15	0.08	2.3	155.4	153.1	Moderate
HC-2	9.14	0.05	4.2	0.889	0.01	0.88	27.5	11.2	-16.3	None
HC-3	9.24	1.1	91.7	0.171	<0.01	0.17	5.3	94.1	88.8	Moderate
HC-4	8.92	0.98	81.7	2.47	0.02	2.45	76.6	83.2	6.6	Moderate
176414	8.84	3.4	283.3	0.051	<0.01	0.05	1.6	197.2	195.6	Moderate
179639	9.16	0.45	37.5	0.511	<0.01	0.51	16.0	41.8	25.8	Slight
251005	8.83	1.54	128.3	1.14	<0.01	1.14	35.6	133.3	97.7	Moderate
293830	8.91	3.48	290.0	0.468	<0.01	0.47	14.6	240.6	226.0	Moderate
Q251366	9.35	1.07	89.2	0.191	<0.01	0.19	6.0	77.7	71.7	Moderate
Q547884	9.36	1.16	96.7	0.048	<0.01	0.05	1.5	85.7	84.2	Moderate
R324155	9.13	1.26	105.0	0.904	<0.01	0.90	28.3	112.0	83.8	Moderate
Duplicates										
HC-1	8.02							154.5		Moderate
176414		3.44								
Q251366					<0.01					
R324155				0.928						
QC										
GTS-2A				0.33						
RTS-3A					0.97					
SY4		0.92								
NBM-1								40.8		
Blank		<0.01		<0.005	<0.01					
Expected Values		0.91		0.341	0.98			40.4		
Tolerance (+/-)		0.07		0.030	0.12			2.2		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the calculated sulphide sulphur content: S(T) - S(SO4).

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET Modified NP = Modified NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Low-Level Metals by Aqua Regia Digestion with ICP-MS Finish**
Date : **December 4, 2018**

Sample ID	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2
HC-1	9.29	313.06	1.47	33.5	387	29.9	19.6	550	3.54	3.5	0.5	685.6	2.8	226.9	0.06	1.14	0.09	51
HC-2	2.39	384.2	1.71	43.2	148	62.6	91.1	522	4.39	10.2	0.2	132	1.4	115.7	<0.01	2.02	0.31	64
HC-3	240.66	644.23	2.23	21.4	1093	81.8	22.7	392	7.73	5.3	<0.1	1494	0.4	109.5	0.24	1.65	6.08	204
HC-4	11.09	3650.17	0.93	20.9	675	65.8	336.8	271	8.1	55.8	0.2	738	0.3	41	0.03	2.21	2.93	128
176414	181.92	207.91	2.3	19.8	1457	39.7	13.6	656	5.42	4.5	0.8	23457.7	2.6	335.2	0.24	1.45	3.7	66
179639	7.77	13.18	1.29	34.9	260	24.2	42.6	245	4.31	4.7	<0.1	2006.4	0.6	31.7	0.02	0.2	1.71	64
251005	387.14	4083.06	2.07	71.2	1480	102.9	119.5	1033	8.35	42.2	0.3	2678	0.1	78.9	0.39	2.64	1.56	186
293830	154.9	414.6	5.5	29.9	424	30.5	43.6	1038	3.45	12.6	0.1	1297.6	0.3	473.2	0.23	0.67	1.6	21
Q251366	3.78	1156.06	0.87	11.6	552	8.7	11.1	287	2.06	2.1	0.2	724.6	0.7	139	0.02	0.53	0.14	13
Q547884	2.62	8.21	1.21	15.3	18	5.9	7.5	461	1.17	1.2	0.6	50.8	2.8	103.6	0.01	0.58	0.05	10
R324155	48.63	4827.66	1.46	35.6	2897	49.2	52.9	474	5.58	5.4	0.4	320.1	2.5	239.5	0.08	1.13	1.24	117
QC																		
DS11	15.12	155.94	147.63	357.4	1704	83.9	14.3	1079	3.27	46.1	2.8	53.7	8.7	72.7	2.51	6.88	13.02	50
DS11	15.24	159.26	144.16	354.8	1807	84.5	14	1058	3.2	44.8	2.9	113.5	8.4	69.7	2.39	7.81	12.3	48
Blank	<0.01	<0.01	0.01	<0.1	2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	0.01	<0.02	<0.02	<1
Blank	<0.01	0.04	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	0.2	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<1
Expected Values	13.9	156	138	345	1710	81.9	14.2	1055	3.21	42.8	2.59	80	7.65	67.3	2.37	7.2	12.2	50
Tolerance %	25	15	20	15	25	15	18	15	11	20	30	300	26	30	20	30	30	20

CLIENT
Project
SGS Project #
Test
Date

Sample ID	**Ca**	**P**	**La**	**Cr**	**Mg**	**Ba**	**Ti**	**B**	**Al**	**Na**	**K**	**W**	**Sc**	**Tl**	**S**	**Hg**	**Se**	**Te**	**Ga**
	%	**%**	**ppm**	**ppm**	**%**	**ppm**	**%**	**ppm**	**%**	**%**	**%**	**ppm**	**ppm**	**ppm**	**%**	**ppb**	**ppm**	**ppm**	**ppm**
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
HC-1	4.52	0.118	19.7	56	1.91	63.2	0.047	<20	0.98	0.009	0.21	1	7.5	0.05	0.2	123	<0.1	<0.02	4.4
HC-2	1.27	0.133	13.4	93.6	1.78	45.9	0.217	<20	2.26	0.039	0.14	1.1	5.7	0.03	0.83	91	0.2	0.07	7
HC-3	3.97	0.043	5.7	148.6	1.37	19.3	0.176	<20	1.51	0.033	0.08	1	10.8	0.02	0.16	233	0.4	0.09	8
HC-4	3.67	0.046	5.8	87.4	0.47	38.7	0.263	<20	0.74	0.021	0.18	4	6.5	0.04	2.32	846	2.2	0.17	4.2
176414	5.56	0.152	471.1	65.9	1.97	67.9	0.004	<20	0.42	0.004	0.31	3.6	14.6	0.05	0.04	734	0.7	0.12	2.1
179639	1.74	0.102	5.2	50.3	1.63	49.6	0.005	<20	2.22	0.035	0.17	0.6	7.1	0.04	0.53	60	0.4	0.41	9.7
251005	5.43	0.042	7.3	155.5	2.62	18	0.262	<20	3.41	0.005	0.16	5.5	13.8	0.05	1.1	515	1.7	0.36	10.2
293830	5.76	0.041	7.3	52.5	2.66	33.1	0.002	<20	0.52	<0.001	0.33	0.5	8.5	0.09	0.43	124	0.8	0.09	1.2
Q251366	2.37	0.086	7.1	39.3	0.7	204.5	0.002	<20	0.36	0.036	0.25	19.9	3.3	0.06	0.18	210	<0.1	<0.02	1.5
Q547884	2.83	0.084	19.6	64.5	0.68	204.8	0.003	<20	0.36	0.041	0.24	3.7	2.3	0.05	0.03	66	<0.1	<0.02	1.2
R324155	4.61	0.166	26.5	105.7	2.23	77.5	0.143	<20	2.03	0.032	0.1	3.5	12.3	0.03	0.77	541	1.4	0.34	10.2
QC																			
DS11	1.15	0.073	19.7	59.4	0.87	409.9	0.101	<20	1.22	0.075	0.43	3.1	3.2	5.27	0.28	312	2.2	4.81	5.5
DS11	1.07	0.072	18.8	61.2	0.86	376.7	0.1	<20	1.21	0.075	0.42	2.9	3.2	4.89	0.26	258	2.1	4.51	5.3
Blank	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	0.2	<0.02	<0.02	<5	<0.1	<0.02	<0.1
Blank	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	7	<0.1	<0.02	<0.1
Expected Values	1.06	0.070	18.6	61.5	0.85	417	0.098	BDL	1.13	0.069	0.40	2.9	3.1	4.9	0.28	300	1.9	4.56	4.7
Tolerance %	15	20	30	20	12	20	28	BDL	16	20	15	35	24	20	15	30	40	25	20

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test :Metals by Multi acid digestion with an ICP-MS/OES
Date :January 25/2022

Sample ID	Ag mg/kg	Al %	Ba mg/kg	Ca %	Cr mg/kg	Cu mg/kg	Fe %	K %	Li mg/kg	Mg %	Mn mg/kg	Na %	Ni mg/kg	P %	S %	Sr mg/kg	Ti %	V mg/kg	Zn mg/kg	Zr mg/kg	As mg/kg	Be mg/kg	Bi mg/kg	Cd mg/kg	Ce mg/kg
Method Code	IMS40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
LOD	0.02	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2	1	0.5	1	0.1	0.04	0.02	0.05
CAOND159634	3.86	6.17	96	7.5	148	2898	7.2	1.42	34	3.46	700	0.7	98	0.04	0.32	112	0.41	273	30	41.9	7	0.5	1.42	0.06	16.59
CAOND159652	0.07	7.30	151	5.59	223	612	7.95	1.33	23	4.75	829	2.21	104	0.03	0.07	218	0.63	331	41	53.4	11	0.5	0.24	0.03	11.84
CAOND163777	0.05	7.91	71	4.91	261	46.9	7.29	1.1	21	5.1	1016	2.56	114	0.03	0.15	195	0.48	282	43	44.4	18	0.4	0.06	<0.02	8.99
CAOND163784	0.04	8.18	33	4.51	285	43.2	7.45	0.53	34	5.1	980	3.01	113	0.03	0.04	104	0.55	282	49	49.1	6	0.4	0.06	<0.02	23.89
CAOND163810	0.06	7.50	276	3.26	71	395	7.93	1.58	16	3.07	761	3.64	38	0.05	0.05	134	0.81	433	34	64.2	11	0.5	0.09	<0.02	13.63
CAOND163856	0.99	6.64	436	3.84	80	9029	10.56	2.21	23	2.93	714	1.97	68	0.04	0.95	81.8	0.62	306	39	100	39	0.5	0.93	0.03	22.11
CAOND163898	0.63	8.25	103	3.86	336	264	7.51	1.05	37	5.06	718	2.85	119	0.03	0.03	112	0.56	288	43	61.8	5	0.6	0.56	<0.02	13.08
CAOND164896	0.10	7.44	61	5.39	128	135	8.32	0.73	22	4.64	1177	1.64	85	0.04	0.15	193	0.66	354	53	53.9	13	0.4	0.08	0.02	13.43
CAOND164897	0.09	7.35	63	5.59	112	133	8.43	0.68	22	4.39	1223	1.58	80	0.04	0.14	211	0.68	351	61	52.2	12	0.5	0.07	0.03	13.64
CAOND164912	0.08	7.24	226	3.82	202	71.8	7.71	1.33	24	4.47	830	2.79	88	0.03	0.17	153	0.55	293	46	45.9	6	0.6	0.5	<0.02	11.33
CAOND164938	0.04	8.22	40	5.45	212	111	7.12	0.5	32	4.79	888	3.15	100	0.03	0.06	226	0.46	258	45	46.1	7	0.4	0.12	<0.02	10.44
CAOND165224	0.42	4.89	549	3.74	23	3174	>15.00	2.55	15	1.79	486	1.33	84	0.04	0.99	57.5	0.48	350	26	41.2	13	0.7	3.31	<0.02	16.67
CAOND165226	0.91	6.13	500	3.47	36	2858	11.69	2.39	16	2.22	519	2.19	71	0.05	2.11	65.4	0.68	366	30	64	19	0.6	10.6	0.03	17.03
CAOND165262	0.79	6.88	151	4.41	31	664	7.04	1.64	21	2.65	543	2.07	35	0.05	0.09	123	0.41	385	27	56	9	0.6	0.74	<0.02	20.16
CAOND165292	0.19	7.44	1221	2.48	12	101	2.2	4.5	4	1.07	386	2.69	13	0.08	0.04	176	0.09	64	23	54.1	4	1.1	0.37	0.02	37.5
CAOND167536	0.03	6.86	59	4.47	87	69.1	7.79	1.13	21	2.8	885	2.66	58	0.04	0.04	158	0.3	336	45	39.6	8	0.7	0.11	0.04	22.93
CAOND167549	0.10	7.39	92	5.06	226	132	7.7	0.81	25	5.13	1237	1.87	132	0.03	0.06	225	0.56	298	70	48	14	0.4	<0.04	0.05	11.18
CAOND167706	0.13	7.03	66	4.84	90	341	7.16	0.65	7	2.97	978	3.8	57	0.05	0.07	152	0.71	344	34	85.5	9	0.6	0.12	<0.02	19.85
CAOND167723	0.90	6.73	29	6.86	134	6719	6.87	0.41	34	2.95	897	2.5	82	0.03	0.77	89.2	0.48	259	34	39.6	14	0.6	0.22	<0.02	11.14
CAOND168748	0.12	7.16	34	5.29	103	134	6.99	1.97	40	3.44	937	0.47	67	0.04	0.07	43.8	0.67	350	41	89.6	13	0.9	0.18	0.03	15.94
CAOND168764	0.09	7.25	51	5.16	89	67.6	7.11	0.53	15	3.26	1101	2.53	60	0.05	0.13	257	0.73	353	39	71.3	14	0.7	0.1	<0.02	21.15
CAOND168782	0.31	6.56	72	7.25	78	343	6.28	0.79	11	2.5	2073	2.03	44	0.04	0.1	278	0.58	326	42	46.6	12	2.1	0.33	0.03	20.23
CAOND169332	0.24	7.32	113	4.41	33	638	8.13	0.47	18	2.72	850	4.15	30	0.05	0.28	181	0.82	428	38	60.8	19	0.5	0.24	<0.02	7.91
CAOND169343	0.90	7.19	474	3.79	29	3556	6.66	1.32	10	2.62	873	4.23	33	0.06	0.34	188	0.77	396	40	61.6	37	0.8	0.29	0.03	13.96
CAOND183467	0.06	7.36	177	4.72	152	161	7.64	1.15	17	4.42	884	2.53	88	0.04	0.14	190	0.69	342	50	69.9	11	0.7	0.76	<0.02	18.78
CAOND183477	0.07	7.14	81	5.39	189	234	7.67	0.53	24	4.24	990	2.74	97	0.03	0.1	224	0.61	340	47	44.9	10	0.5	0.33	<0.02	10.6
CAOND188865	0.08	7.00	100	5.26	89	126	8.25	1.63	16	4.13	914	1.75	70	0.04	0.09	148	0.69	355	35	62.1	11	0.5	0.09	<0.02	16.37
CAOND188887	0.16	7.33	235	2.98	195	269	8.43	1.47	21	4.36	619	3	84	0.03	0.03	174	0.54	291	32	54.7	12	0.5	0.15	<0.02	16.77
CAOND188908	0.06	7.92	648	2.88	15	100	2.16	3.62	10	0.69	262	3.04	12	0.08	0.06	199	0.12	63	25	55.6	4	1.2	0.19	0.03	37.18
DUP																									
CAOND183467	0.07	7.41	174	4.71	177	160	7.64	1.15	17	4.42	880	2.55	90	0.04	0.15	188	0.68	330	50	66.8	12	0.7	0.77	<0.02	15.93
QC																									
OREAS 601b	49.24	6.3	279	0.84	20	983	2.17	2.34	21	0.1	212	1.86	6	0.03	1.35	223	0.12	12	303	166	272	2.2	16.91	1.99	67.73
Expected Values	50.1	6.63	BDL	0.887	23.7	0.101	2.29	2.41	22.6	996	222	1.90	6.54	292	1.50	241	0.135	12.1	318	186	284	2.24	18.0	2.05	70
Tolerance (%)	10.4	10.1		14.9	37.6	6.79	10.7	9.40	26.3	20.0	11.1	14.3	30.9	15.1	7.20	14.7	11.8	21.7	5.55	17.0	19.2	44.2	19.0	16.3	35.5
OREAS 905	0.57	7.45	2706	0.58	13	1547	4.08	3	20	0.29	365	2.49	9	0.03	0.07	155	0.12	10	136	243	37	3.3	5.9	0.36	94.91
Expected Values	0.518	7.42	2699	0.590	19.2	0.1533	4.08	2.88	20.0	0.276	380	2.40	9.54	0.028	0.066	157	0.122	10.1	138	252	34.7	3.04	5.72	0.36	92
Tolerance (%)	55.1	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6	14.5	13.7	15.0	31.2	17.7	37.7	14.0

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Co mg/kg	Cs mg/kg	Ga mg/kg	Hf mg/kg	In mg/kg	La mg/kg	Lu mg/kg	Mo mg/kg	Nb mg/kg	Pb mg/kg	Rb mg/kg	Sb mg/kg	Sc mg/kg	Se mg/kg	Sn mg/kg	Ta mg/kg	Tb mg/kg	Te mg/kg	Th mg/kg	Tl mg/kg	U mg/kg	W mg/kg	Y mg/kg	Yb mg/kg
Method Code	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
LOD	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
CAOND159634	30	3	17.1	1.33	0.09	10.1	0.31	370	2	1.8	98.5	8.78	33.2	<2	0.6	0.18	0.51	0.2	0.3	0.34	0.5	5.6	17.8	2
CAOND159652	36.2	2	19	1.76	0.07	4.8	0.39	10.97	3.2	1.5	82.2	6.43	43.3	<2	0.8	0.27	0.63	<0.05	0.3	0.28	0.61	11.8	23.2	2.5
CAOND163777	59.3	2	19	1.6	0.06	3.5	0.4	0.23	3.1	1.7	61.6	4.32	40.7	<2	0.6	0.25	0.66	<0.05	0.3	0.34	0.08	1.1	25.9	2.6
CAOND163784	45.3	1	21.9	1.67	0.05	9.4	0.35	1.49	3.6	0.6	28.1	1.94	37.7	<2	0.6	0.39	0.74	<0.05	0.3	0.14	0.18	2.4	24.4	2.3
CAOND163810	45.3	<1	21.2	2.11	0.06	6.7	0.47	3.36	4	0.9	56.8	6.1	49.1	<2	1	0.32	0.76	<0.05	0.6	0.31	0.6	5.6	29	3.1
CAOND163856	45.7	<1	22.6	3.3	0.18	12	0.72	35.93	5.6	1.3	76.6	13.59	34.6	4	1.4	0.39	1.1	0.18	0.6	0.37	1.2	12.4	40.2	4.7
CAOND163898	63.2	2	21.8	2	0.05	6.4	0.44	1.37	3.7	0.8	65.9	4.12	44.3	<2	0.8	0.34	0.72	0.15	0.3	0.27	0.38	3.3	27.2	2.9
CAOND164896	46.4	1	20.2	1.94	0.08	5.2	0.5	0.15	4.2	1.6	45.3	3.76	45.5	<2	0.8	0.29	0.92	<0.05	0.4	0.27	0.11	1	33.1	3.4
CAOND164897	49	2	21.5	1.92	0.07	5.3	0.5	0.27	4.4	1.6	45	4.21	48	<2	0.8	0.29	0.91	<0.05	0.4	0.26	0.1	0.8	33.4	3.4
CAOND164912	56.2	2	18.8	1.62	0.07	4.7	0.41	0.8	3.5	0.8	88.3	3.81	42.4	<2	0.9	0.26	0.74	0.11	0.3	0.41	0.14	12.9	26.4	2.8
CAOND164938	43.5	1	20	1.58	0.06	4.6	0.36	1.79	3	1	33.3	2.08	36.7	<2	0.6	0.27	0.63	<0.05	0.3	0.17	0.12	2.7	23.1	2.4
CAOND165224	37.3	<1	19.5	1.38	0.06	10.5	0.34	1353	2.6	1.7	88.6	4.83	31.1	3	1.6	0.17	0.55	0.52	0.3	0.35	0.89	23.5	19.3	2.2
CAOND165226	61.8	1	20.6	2.08	0.07	9.9	0.45	123	3.8	1.4	108	5.52	37.2	6	1.6	0.26	0.73	1.34	0.5	0.39	1.15	26.6	26.7	2.9
CAOND165262	29.6	3	20.8	1.77	0.06	12.3	0.37	29.6	1.8	3.7	119	6.91	44.3	<2	0.8	0.13	0.55	0.1	0.5	0.35	0.74	8.9	20.2	2.3
CAOND165292	6.8	4	20.1	1.78	0.02	19.5	0.1	0.53	1.7	2.5	167	3.75	6.7	<2	0.6	0.11	0.29	0.1	3.1	0.75	0.86	9	6.7	0.6
CAOND167536	32.1	3	20.9	1.08	0.08	9	0.31	0.43	2.6	1.5	64.1	4.29	38.9	<2	0.8	0.22	0.51	<0.05	0.5	0.35	0.11	3.6	12.4	1.9
CAOND167549	48	2	18.7	1.72	0.07	4.3	0.42	0.49	3.5	1.5	30.9	7.31	40.2	<2	0.7	0.24	0.74	<0.05	0.3	0.19	0.09	0.5	27	2.8
CAOND167706	40.4	<1	20.2	3.26	0.08	7.9	0.73	1.49	6.7	1.1	34.3	2.98	45.1	<2	1.3	0.43	1.38	<0.05	0.6	0.19	0.25	2.3	58.3	4.9
CAOND167723	45.1	<1	14.9	1.39	0.1	4.6	0.37	1.49	2.9	0.6	19	2.92	36.9	2	0.6	0.2	0.69	0.15	0.3	0.11	0.12	32.8	24.1	2.5
CAOND168748	39.9	5	22.1	2.94	0.11	6.6	0.58	1.62	5.9	0.8	170	6.26	36	<2	1	0.42	0.81	<0.05	0.6	0.65	0.42	24.2	29.7	3.7
CAOND168764	35.7	<1	20.7	2.75	0.09	8.5	0.68	0.1	6.6	1.9	25.3	6.04	41.6	2	1.2	0.44	1.34	<0.05	0.6	0.14	0.17	1.5	56.3	4.7
CAOND168782	28.9	<1	18.1	1.97	0.12	8	0.67	0.39	5.3	1.6	30.3	9.19	36.2	<2	1	0.36	1.18	<0.05	0.5	0.19	0.15	3	44	4.5
CAOND169332	59.9	<1	18.7	2.02	0.06	3.1	0.42	2.67	4	1.2	11.9	4.8	44.6	<2	0.9	0.29	0.67	0.06	0.5	0.05	0.43	3.1	25.1	2.7
CAOND169343	50.1	<1	17.7	2.06	0.11	6.4	0.46	13.34	4.3	1.9	35.6	9.32	44.3	2	1	0.3	0.78	0.08	0.6	0.18	0.77	3.3	30.6	3.1
CAOND183467	42.1	1	20	2.39	0.06	8.2	0.57	5.53	4.8	1	60	3.08	41.7	<2	0.8	0.36	0.99	<0.05	0.5	0.21	0.23	10.9	35.1	3.8
CAOND183477	43	<1	18.1	1.48	0.07	4.3	0.38	0.98	3.2	1	28	6.79	40.2	<2	0.7	0.22	0.66	0.06	0.3	0.11	0.14	2.7	23.9	2.5
CAOND188865	42.4	3	20.2	2.23	0.09	6.5	0.55	0.13	4.6	1.2	134	3.09	45.7	<2	0.8	0.34	0.99	<0.05	0.4	0.6	0.12	1.7	35.1	3.7
CAOND188887	65.8	2	20.3	1.88	0.08	8.6	0.43	1.94	3.7	0.8	84.4	5.43	41.9	<2	0.8	0.27	0.73	0.11	0.3	0.36	0.31	44.5	28.1	2.9
CAOND188908	10.8	6	20.8	1.8	<0.02	19.2	0.09	0.38	3	2.2	176	3.06	6.6	<2	0.6	0.2	0.28	<0.05	3.2	0.69	1.06	6.8	6.9	0.6
DUP																								
CAOND183467	45.7	1	21.2	2.34	0.07	6.6	0.57	6.26	5	1.1	63.2	3.16	43.6	2	0.9	0.34	0.98	<0.05	0.5	0.22	0.21	15.2	37.3	3.7
QC																								
OREAS 601b	2.8	5	23.1	4.85	0.46	32.9	0.07	4.7	14	302	93.2	22.67	3.7	8	3.2	1.18	0.53	12.84	11.8	1.43	4.49	6.6	10.9	0.5
Expected Values	2.97	4.88	23.4	5.09	0.47	33.5	0.0731	5.22	14.4	318	98	22.9	3.77	10.6	3.36	1.11	0.52	12.6	11.9	1.44	4.64	6.13	11.1	0.54
Tolerance (%)	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
OREAS 905	15.4	7	28.4	6.97	0.71	51.1	0.1	3.12	19.1	29.3	147	2.15	5.8	3	4.5	1.49	0.8	0.06	14.3	0.71	4.94	2.8	17.1	0.7
Expected Values	14.8	6.78	25.1	6.84	0.64	46.0	0.10	3.27	18.1	30.4	138	1.95	4.90	2.84	3.96	1.34	0.77	0.088	14.6	0.72	4.97	2.78	15.7	0.68
Tolerance (%)	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : 13 Apr 2022

Sample ID	Ag mg/kg	Al %	Ba mg/kg	Ca %	Cr mg/kg	Cu mg/kg	Fe %	K %	Li mg/kg	Mg %	Mn mg/kg	Na %	Ni mg/kg	P %	S %	Sr mg/kg	Ti %	V mg/kg	Zn mg/kg	Zr mg/kg	As mg/kg	Be mg/kg	Bi mg/kg	Cd mg/kg	Ce mg/kg	Co mg/kg	Cs mg/kg	Ga mg/kg
Method Code	IMS40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
LOD	0.02	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2	1	0.5	1	0.1	0.04	0.02	0.05	0.1	1	0.1
CAOND128083	<0.02	6.94	66	4.14	81	79	7.36	0.69	14	3.29	1121	2.74	70	0.04	0.08	287	0.66	324	43	98.6	20	0.6	0.13	<0.02	18.08	36.3	1	19.4
CAOND128098	<0.02	6.52	25	5.9	66	193	6.31	0.3	29	2.98	948	2.96	54	0.04	0.07	94.8	0.68	295	44	102	5	0.6	0.1	<0.02	17.82	29.6	<1	18.5
CAOND128133	<0.02	6.88	13	4.87	127	150	7.08	0.19	40	4.55	938	2.19	89	0.03	0.13	76.1	0.58	276	47	61.2	9	0.4	0.13	<0.02	8.38	42.5	<1	16.5
CAOND128147	<0.02	7.17	44	4.16	229	359	6.94	0.83	33	4.76	679	2.66	108	0.02	0.06	85.5	0.5	247	39	56.5	3	0.4	0.07	<0.02	13.13	43.3	1	16.9
CAOND128163	0.03	5.79	84	6.95	191	1194	5.97	1.25	22	3.9	723	2.16	99	0.02	0.13	138	0.37	198	28	43.6	18	0.3	0.27	<0.02	6.99	71.1	<1	14.7
CAOND128183	1.84	2.49	124	>15.00	6	257	1.45	1.11	13	0.95	1128	0.08	16	0.02	0.13	266	0.06	50	11	19.4	4	0.5	7.37	0.24	28.99	15.7	2	6.4
CAOND128192	<0.02	7.6	339	3.44	12	3.3	2.07	2.67	11	0.84	261	2.97	11	0.07	0.03	176	0.17	60	21	60.6	3	1.2	0.08	<0.02	42.63	6.5	6	19.7
CAOND130898	<0.02	6.88	91	4.99	176	118	7.63	1.16	24	4.38	1036	1.7	111	0.03	0.1	232	0.6	299	41	51.1	20	0.4	0.05	<0.02	9.38	46.6	2	17
CAOND130912	0.1	6.77	1107	4.9	102	625	6.22	3.4	24	3.66	782	1.47	63	0.2	0.07	209	0.39	167	50	127	6	1.7	0.12	<0.02	54.6	25.8	1	17.2
CAOND130922	<0.02	7.28	251	5.09	194	132	8.61	1.22	19	3.93	906	2.54	89	0.03	0.02	367	0.67	318	49	62.3	11	0.7	0.21	<0.02	11.82	45	2	18.6
CAOND130939	0.02	6.98	70	5.17	166	481	7.64	0.5	39	3.78	882	2.41	92	0.03	0.19	112	0.63	301	54	57.4	8	1.2	0.15	<0.02	13.05	51.7	1	17.3
CAOND130973	0.18	7.77	1232	2.6	25	567	2.88	4.02	13	1.63	411	3.28	21	0.09	0.08	263	0.26	93	33	74.1	6	1	0.07	<0.02	40.7	14.3	1	19.6
CAOND135432	<0.02	7.33	112	4.11	126	599	8.49	0.78	17	3.51	809	3.5	73	0.04	0.16	217	0.76	342	46	74.5	26	0.5	0.27	<0.02	26.17	59.3	<1	19.7
CAOND135447	<0.02	7.21	118	4.99	59	587	7.75	0.6	10	2.88	835	3.96	43	0.04	0.06	249	0.78	368	33	62.2	17	0.4	0.2	<0.02	14.46	33.9	<1	18.1
CAOND135493	<0.02	7.45	188	3.57	39	168	6.48	1.11	14	3.15	836	4.05	33	0.05	0.02	164	0.87	408	35	75.8	13	0.5	0.83	<0.02	15.18	44.7	<1	18.4
CAOND135669	0.13	6.67	241	3.26	32	408	12.73	0.77	20	2.31	1183	1.98	36	0.04	1.9	312	0.79	382	36	53.7	21	0.5	0.74	<0.02	17.53	52.7	<1	19.3
CAOND135691	<0.02	7.13	72	5.16	159	82.9	8.1	0.7	23	4.15	1220	1.86	92	0.03	0.09	220	0.62	319	48	54.2	14	0.4	0.04	<0.02	15.2	45.7	1	18.8
CAOND135702	<0.02	7.24	96	5.47	175	112	7.95	1.12	19	4.14	1073	1.86	93	0.04	0.1	223	0.67	324	43	59	14	0.5	0.11	<0.02	12.68	45.8	2	18.3
CAOND135719	<0.02	7.55	63	5.49	184	165	7.48	0.68	22	4.08	1187	2.51	105	0.04	0.13	245	0.67	318	48	60.2	16	0.4	0.07	<0.02	12.48	48	1	17.4
CAOND136961	0.15	8.55	42	4.23	155	42.3	7.4	0.25	48	3.62	1077	4.27	96	0.05	2.07	233	0.59	237	54	57.9	11	0.7	2.03	0.02	12.85	87.9	<1	18.8
CAOND143739	<0.02	7.13	68	5.17	89	104	8.01	1.07	14	3.33	1140	2.59	67	0.04	0.05	229	0.73	333	43	107	11	0.6	0.19	<0.02	19.47	38.1	2	21
CAOND143752	<0.02	7.09	72	4.88	79	145	6.93	0.97	10	2.99	1089	3.48	63	0.04	0.14	267	0.71	338	35	107	12	0.7	0.18	<0.02	22.2	38.8	1	19.1
CAOND143769	0.04	6.84	109	2.92	77	657	8.19	1.12	22	3.08	784	3.29	64	0.04	0.08	71.1	0.71	302	41	113	12	0.6	0.18	<0.02	19.55	94.2	<1	21.7
CAOND143779	<0.02	7.5	105	5.24	158	168	7.64	1.06	20	4.26	1202	2.39	96	0.03	0.18	240	0.56	282	46	58.2	11	0.5	0.12	<0.02	11.93	44.7	2	18.2
CAOND147295	<0.02	7.21	240	3.64	55	25.7	8.08	1.04	20	3.63	1020	2.7	43	0.05	0.01	209	0.81	397	70	68.4	13	0.4	0.08	<0.02	16.26	35.3	<1	19.6
CAOND147309	<0.02	7.13	138	4.56	133	28.6	7.63	0.6	27	4.02	937	2.3	84	0.04	0.27	226	0.68	314	56	79.8	15	0.7	0.12	<0.02	15.67	41.8	1	18.6
CAOND147365	0.07	7.15	162	5.76	206	717	7.65	0.7	16	4.09	966	2.06	99	0.04	0.23	284	0.63	321	53	56.2	15	0.4	0.11	0.02	11.39	52.9	1	17.3
CAOND147376	<0.02	7.67	58	3.91	202	209	6.72	0.35	35	3.35	685	3.43	101	0.03	0.05	122	0.67	295	55	57.3	6	0.5	0.08	<0.02	13.1	37.1	<1	17.6
CAOND147387	<0.02	7.29	147	5	158	266	8.28	0.83	19	4.15	875	3.09	101	0.03	0.03	288	0.67	324	47	60.3	7	0.8	0.33	0.02	16.82	38.7	<1	18.4
CAOND147404	0.02	7.19	182	6.21	175	109	8.13	1	16	3.74	964	2.57	99	0.04	0.02	347	0.66	320	41	54.1	14	0.4	0.42	<0.02	9.69	37.8	1	17.7
CAOND152411	<0.02	7.24	57	5.57	176	175	7.69	0.78	25	4.41	987	2.35	93	0.04	0.09	266	0.65	311	44	63.1	15	0.5	0.3	0.02	11.03	44	<1	18
CAOND152417	0.25	7.44	99	5.41	159	349	7.8	0.96	16	4.22	944	2.63	95	0.04	0.1	240	0.67	318	45	66.7	13	0.4	0.89	<0.02	12.43	44.8	1	18
CAOND152424	0.02	7.41	73	5.03	191	513	7.37	0.72	22	4.63	925	2.6	107	0.03	0.11	217	0.66	326	48	59.8	17	0.5	0.22	<0.02	11.15	49	<1	18
CAOND152437	0.06	7.51	60	3.76	193	870	8.93	1	60	6	980	1.54	103	0.06	0.11	70	0.71	304	79	76.9	6	0.6	0.24	<0.02	14.05	42.6	<1	21.7
CAOND160691	0.15	6.69	137	4.12	76	536	7.41	1.19	7	2.79	762	3.82	58	0.04	0.08	212	0.68	305	31	117	9	0.8	2.49	<0.02	19.65	40.8	1	18.5
CAOND160704	0.96	6.61	123	4.48	68	1347	7.06	1.25	13	2.98	917	3.49	68	0.04	0.14	140	0.65	304	40	101	4	0.7	2.31	<0.02	37.33	43.6	<1	20.7
CAOND160721	<0.02	6.89	95	4.68	77	330	7.23	1.84	14	3.57	903	2.47	63	0.04	0.08	219	0.72	323	37	114	12	0.6	0.65	<0.02	16.43	46.2	4	19.2
CAOND160761	<0.02	7.49	136	3.41	122	58.9	8.1	1.82	27	4.48	884	2.47	87	0.03	0.02	160	0.67	325	41	67.7	10	0.5	0.05	<0.02	13.31	48.7	2	18.4
CAOND160774	0.05	7.97	67	5.34	203	104	7.92	1.09	20	4.47	1249	2.28	85	0.03	0.06	216	0.52	261	51	60.5	9	0.4	<0.04	<0.02	13.53	45	3	17.3
CAOND160788	0.16	7.98	75	5.12	220	352	7.72	1.01	25	4.65	1010	2.09	88	0.03	0.12	180	0.51	251	49	57.1	10	0.3	<0.04	<0.02	13.8	46.3	3	18.1
CAOND162504	0.08	7.28	154	4.57	80	1879	7.66	0.84	10	3.22	829	3.45	46	0.05	0.21	175	0.67	308	39	123	8	0.6	0.44	<0.02	22.18	61.7	<1	18
CAOND162513	0.14	7.43	194	4.76	73	420	7.47	0.92	11	3.91	1082	3.09	57	0.04	0.05	214	0.67	318	49	121	9	0.6	0.33	<0.02	37.85	59.4	1	20.8
CAOND162549	0.11	7.31	274	4.68	31	135	7.95	0.97	8	2.5	862	3.65	25	0.05	0.03	229	0.79	384	36	69.3	8	0.6	0.29	<0.02	22.77	45.9	<1	18.7
CAOND162569	<0.02	8.35	189	2.82	15	3.3	2.21	1.3	8	0.92	249	4.4	9	0.08	0.02	278	0.18	61	25	62.2	2	1.1	<0.04	<0.02	51.55	9.4	2	18.2
CAOND163334	0.63	6.96	118	4.27	82	1573	8.01	0.76	9	2.97	806	3.85	46	0.04	0.17	125	0.68	305	38	122	7	0.7	12.52	0.03	23.11	50	<1	18
CAOND163343	0.15	7.52	86	5.03	68	208	7.05	0.73	7	3.13	900	3.35	53	0.05	0.12	248	0.7	328	40	125	12	0.6	0.36	<0.02	26.7	37.4	1	18.6
CAOND163353	0.17	7.39	51	3.33	78	177	9.06	0.36	14	3.32	734	3.87	50	0.05	0.13	96.7	0.68	314	41	125	9	0.8	0.3	<0.02	19.22	73.4	<1	20.4
CAOND163396	0.4	7.22	106	5.39	81	135	8.18	0.91	14	3.65	1137	2.75	51	0.05	0.26	265	0.71	314	55	117	15	0.6	0.1	<0.02	25.04	42.8	1	20.6
CAOND163405	0.09	7.47	149	4.69	86	60.1	8.5	1.18	18	3.61	1121	2.29	51	0.05	0.09	286	0.73	335	53	126	13	0.7	0.08	<0.02	27.81	38.7	2	21.1
CAOND163421	0.11	7.97	194	4.19	33	97.3	8.2	1.64	18	3.53	931	2.61	29	0.05	0.26	267	0.89	430	47	70.9	26	0.4	0.14	<0.02	21.29	42.6	2	21.4
CAOND163433	0.25	7.88	112	4.23	34	65.5	8.76	0.99	20	3.42	1033	3.24	29	0.05	0.32	220	0.93	438	53	70.8	20	0.4	0.14	<0.02	25.53	41.1	<1	24.2
CAOND163446	0.41	6.88	14	5.56	25	218	7.13	0.09	27	2.46	830	2.73	24	0.05	0.09	105	0.75	361	37	62.1	7	0.8	0.19	<0.02	14.11	27.6	<1	16.7
CAOND163796	0.07	6.88	43	7.12	74	90.6	7.4	0.71	26	2.68	901	2.19	48	0.04	0.19	154	0.65	286	46	105	13	0.3	0.11	<0.02	25.58	41.7	<1	17.6
CAOND163824	0.26	7.45	230	3.32	33	288	7.1	1.01	11	2.65	835	3.89	26	0.05	0.22	160	0.82	387	38	69.7	19	0.5	0.21	<0.02	20.95	58.5	<1	18.4
CAOND163834	0.12	7.12	70	4.74	31	1093	7.49	0.81	22	2.43	837	2.66	28	0.05	0.16	157	0.67	361	26	53.6	43	0.6	0.1	<0.02	22.15	37.2	2	19.8
CAOND163908	0.11	8.08	106	3.73	12	60.1	2.46	0.92	13	1.15	426	4.4	10	0.08	0.08	324	0.17	67	28	61.2	4	0.9	0.08	0.04	53.83	10.6	3	18
CAOND163918	0.34	8.52	1148	1.97	16	698	2.54	2.95	10	0.98	300	3.62	10	0.08	0.11	392	0.2	60	38	63.5	6	1.3	0.96	0.04	55.4	9.7	2	20
CAOND164779	0.31	7.61	256	3.96	35	1884	9.71	2.07	37	3.29	649	0.07	35	0.05	0.23	26.5	0.8	427	44	78.5	16	0.9	0.62	0.03	27.75	40.7	4	25.9
CAOND164923	0.11	6.92	736	5.79	184	32.7	6.56	2.25	13	4	946	2.44	37	0.23	0.02	504	0.49	188	62	177	9	2.1	0.27	0.06	111	32.2	1	18.5
CAOND164932	0.04	7.99	107	5.07	207	100	7.54	1.11	20	4.75	933	2.49	88	0.03	0.05	206	0.49	253	39	57	8	0.4	0.13	<0.02	15.12	45.3	2	16.8
CAOND164955	0.03	8.23	80	5.14	166	179	7.02	2.21	19	4.21	716	2.25	78	0.03	0.06	213	0.52	250	33	56.5	8	0.4	0.24	<0.02	13.41	42.4	5	17.3
CAOND165195	0.44	7.57	43	5.44	231	109	7.84	0.76	21	4.84	1120	1.86	112	0.03	0.08	172	0.51	265	44	60.1	17	0.3	0.07	<0.02	13.99	50	2	17
CAOND165203	0.17	7.54	98	5.09	184	82.5	7.76	1.36	25	4.91	1111	1.94	110	0.03	0.05	166	0.53	265	47	61.9	11	0.5	0.06	<0.02	11.07	42.6	2	16.8
CAOND165558	8.58	7.27	202	5.05	131	1675	8.1	1.67	22	3.34	726	2.24	72	0.04	0.21	110	0.59	283	33	83.4	9	0.6	0.33	<0.02	18.06	40.5	3	18.8
CAOND165612	0.33	7.41	383	4.16	30	987	9.31	1.73	15	2.55	771	3.32	28	0.05	0.09	126	0.79	385	31	66.1	8	0.5	1.65	<0.02	36.12	44.7	1	19.2
CAOND166348	0.04	7.93	105	4.76	195	118	8.19	0.8	24	4.67	1214	2.35	85	0.04	0.16	203	0.58	289	68	64.3	13	0.5	0.42	0.02	15.79	49.1	1	18.6
CAOND168893	<0.02	7.27	260	4.95	57	12.2	6.35	1.15	17	3.2	1187	2.55	46	0.05	<0.01	409	0.55	234	41	75.2	9	0.6	0.21	<0.02	36.01	29.4	1	18.1
CAOND169457	0.16	7.63	61	5.31	141	70	7.78	0.39	18	1.99	1403	3.18	71	0.04	0.06	227	0.62	304	47	55.5	12	0.4	0.95	<0.02	14.55	48.4	1	19.2
CAOND175906	0.08	9.12	546	2.48	23	58.1	3.58	2.8	13	0.87	231	2.23	15	0.1	0.02	146	0.33	107	26	135	3	1.1	0.11	<0.02	41.89	17.8	7	23.6

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : 13 Apr 2022

Sample ID	Ag mg/kg	Al %	Ba mg/kg	Ca %	Cr mg/kg	Cu mg/kg	Fe %	K %	Li mg/kg	Mg %	Mn mg/kg	Na %	Ni mg/kg	P %	S %	Sr mg/kg	Ti %	V mg/kg	Zn mg/kg	Zr mg/kg	As mg/kg	Be mg/kg	Bi mg/kg	Cd mg/kg	Ce mg/kg	Co mg/kg	Cs mg/kg	Ga mg/kg
Method Code	IMS40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
CAOND175938	0.25	8.79	805	2.9	22	297	2.76	2.2	3	0.9	306	3.59	14	0.1	0.12	213	0.36	96	17	135	5	0.8	0.11	0.03	40.07	17.9	5	21.7
CAOND179977	0.39	8.53	999	3.74	98	495	6.11	1.64	14	1.13	321	4.1	43	0.17	0.21	487	0.56	185	22	149	8	1.2	0.13	0.05	73.44	27	3	28.3
CAOND181514	0.03	7.68	329	6.12	62	15.8	6.33	1.29	30	1.95	785	2.25	44	0.11	0.03	405	0.36	149	46	116	4	0.7	0.12	0.03	48.29	33.4	3	19.6
CAOND184563	<0.02	7.72	94	5.22	200	102	7.57	0.64	34	4.7	1157	2.12	87	0.03	0.1	217	0.51	245	61	52.3	8	0.4	<0.04	0.03	13.45	45	2	17.6
CAOND185519	0.1	7.76	112	3.22	108	108	8.2	1.54	26	3.54	954	2.06	66	0.04	0.03	144	0.7	312	43	96.8	12	0.5	0.14	<0.02	22.09	43.1	4	21.6
CAOND186035	0.04	7.25	105	5.6	68	197	7.6	0.78	13	3.13	956	2.61	48	0.04	0.07	349	0.69	316	39	113	13	0.6	0.28	<0.02	26.1	38.8	<1	20.6
CAOND186041	0.02	7.23	165	4.85	73	99.6	7.99	1.18	14	3.04	879	2.4	49	0.05	0.02	263	0.68	315	37	120	7	0.6	0.17	<0.02	25.85	32.9	1	19.7
CAOND186416	0.17	7.57	171	4.41	88	1111	8.67	2.31	14	3.07	873	2.24	70	0.05	0.27	199	0.69	325	33	126	26	0.7	0.17	<0.02	23.52	62.9	3	21.1
CAOND186418	0.49	7.11	254	3.42	88	1135	11.74	1.89	20	3.02	685	1.9	62	0.04	1.03	185	0.63	304	37	118	78	0.6	0.45	<0.02	23.41	255	2	21.1
CAOND186426	0.11	7.43	170	4.86	75	65.8	7.17	1.71	11	3.02	973	2.71	62	0.05	0.14	189	0.65	330	37	129	13	0.6	0.13	<0.02	22.23	37	1	19.5
CAOND186541	0.07	7.43	1402	4.56	55	70.1	7.97	0.92	18	3.24	1102	3.07	49	0.04	0.05	313	0.71	371	50	68.2	9	0.5	0.17	<0.02	13.44	31.5	1	17.9
CAOND186548	0.04	6.57	95	6.56	39	150	7.15	1.14	18	2.42	1216	1.89	38	0.04	0.14	299	0.61	332	41	62	9	0.5	0.15	0.03	12.12	24.5	2	15.8
CAOND186553	0.05	7.42	509	4.96	62	69.4	8.34	1.5	21	2.93	1027	2.7	39	0.15	0.01	236	0.52	273	45	126	8	1.7	0.11	<0.02	75.47	21.8	<1	17.2
CAOND186834	0.33	8.08	138	5.42	132	498	6.36	0.98	29	2.86	1371	3.41	87	0.04	0.26	309	0.56	279	61	61.8	28	0.4	1.04	<0.02	14.85	52.2	<1	18.9
CAOND186840	0.21	8.71	89	6.89	164	128	6.7	0.96	33	2.59	1057	3.03	91	0.04	0.24	481	0.62	303	38	55.5	54	0.2	0.91	0.02	11.57	46.2	<1	18.9
CAOND187492	0.07	7.38	81	5.55	78	218	8.88	1.37	18	3.84	876	1.86	75	0.04	0.09	152	0.71	343	33	93.4	10	0.5	0.15	<0.02	17.35	50.7	4	20
CAOND187498	0.05	7.56	145	5.19	133	127	8.23	2.08	18	4.11	935	1.97	89	0.03	0.06	158	0.6	301	34	73.8	8	0.5	0.08	<0.02	13.81	40.9	4	18.6
CAOND187628	0.03	7.81	147	3.92	30	13.5	7.3	1	17	3.01	1194	3.72	29	0.05	<0.01	329	0.84	413	46	66.8	13	0.5	0.44	<0.02	13.89	36.9	<1	19.4
CAOND187636	0.05	8.07	255	2.83	13	397	2.27	2.17	12	0.84	281	3.78	12	0.05	0.08	206	0.16	54	18	48.9	6	1.1	0.04	<0.02	22.25	8.9	4	19.8
CAOND188616	0.03	6.64	67	4.21	78	162	8.25	0.76	40	3.39	822	1.66	72	0.03	0.06	79	0.56	297	40	79.6	6	0.4	0.07	<0.02	10.58	45.9	2	18.2
CAOND188623	0.14	7.48	126	5.18	128	241	8.72	0.79	14	3.83	999	3.23	87	0.03	0.03	248	0.57	297	41	70.2	8	0.5	0.28	<0.02	25.05	61	<1	18.9
CAOND188631	0.04	7.68	57	5.4	130	131	8.09	0.58	25	4.57	1403	2.31	100	0.03	0.12	150	0.52	285	57	61.5	12	0.6	0.07	0.02	12.57	42.6	1	18.2
CAOND188640	1.68	5.69	21	6.58	106	101	5.91	1.37	28	3.3	667	0.05	68	0.02	0.06	113	0.34	202	27	46.8	25	0.9	1.04	0.12	5.95	35.9	4	13
CAOND188895	0.16	7.56	193	3.83	146	346	8.06	1.54	16	3.76	626	3.5	86	0.03	0.04	175	0.52	258	27	66.9	6	0.5	4.52	<0.02	12.2	54.4	2	18
CAOND188916	0.03	7.94	567	2.82	11	14.7	2.2	3.35	10	0.98	251	3.07	11	0.08	0.06	149	0.13	63	22	60.5	5	1	0.34	<0.02	43.52	10.9	5	18.8
CAOND189446	0.15	7.94	81	4.43	172	102	7.4	1.9	20	4.13	803	2.61	91	0.03	0.02	165	0.51	275	30	60.9	8	0.4	0.66	<0.02	10.95	39.5	4	18
CAOND189719	0.03	7.25	65	6.9	104	122	7.46	0.88	27	2.47	1005	2.99	85	0.04	0.07	165	0.62	312	41	48.2	4	0.5	0.11	0.04	10.67	29.1	2	16.5
CAOND191002	0.05	7.15	101	6.18	209	141	7.22	1.09	42	4.11	1219	1.77	102	0.03	0.1	92.1	0.51	257	57	60.9	7	0.4	0.09	0.03	10.52	41	2	16.1
CAOND191005	0.04	7.28	136	5.63	127	126	7.48	1.23	39	4.1	1117	1.8	83	0.05	0.07	99.2	0.54	283	55	73.3	7	0.6	0.11	0.02	20.5	38.3	2	17.3
CAOND191008	0.14	6.07	52	7.95	57	204	7.04	0.86	29	3.01	1180	1.46	56	0.04	0.07	192	0.55	235	41	94.4	7	0.5	0.16	0.04	19.02	37.1	2	15.6
CAOND191089	0.07	8.15	669	3.11	15	11.2	2.22	2.6	13	0.98	311	3.06	11	0.05	0.24	302	0.16	52	21	46.6	10	1	0.16	<0.02	25.73	11.2	6	20.8
CAOND191157	0.06	7.14	193	6.84	219	333	7.3	1.62	21	4.29	1807	1.65	120	0.02	0.04	246	0.43	236	53	55.9	7	1.5	0.11	0.03	9.76	38.5	3	16
CAOND194796	0.04	8.31	52	5.69	111	38.3	6.31	0.35	18	2.65	1409	3.77	86	0.04	0.18	535	0.57	269	36	60.1	13	0.5	0.24	<0.02	12.11	33.4	<1	18.5
CAOND198933	0.19	8.42	224	5.3	136	285	7.36	0.89	16	3.02	716	2.61	88	0.04	0.07	318	0.57	284	36	59.1	9	0.6	0.24	0.02	16.07	30.4	1	20.4
CAOND200894	0.28	8.46	631	2.78	24	469	4.3	3.25	8	0.57	158	2.65	22	0.06	1.29	123	0.32	88	13	85	21	0.7	11.78	<0.02	20.82	52.1	6	20.9
CAOND200903	0.05	8.97	533	1.37	10	796	2.05	1.72	8	0.58	113	5.22	14	0.06	0.13	167	0.34	70	13	90	11	0.7	3.37	<0.02	24.11	17.3	3	20.4
KLUB11_180W2_179564	0.04	8.43	363	4.55	24	81.6	4.61	1.03	18	1.25	599	3.51	21	0.09	0.24	464	0.4	97	28	132	18	0.7	0.13	0.02	29.39	21.2	<1	20.8
KLUB11_180W2_179592	0.02	8.32	158	6.41	22	3.7	5.47	0.74	25	0.98	677	2.49	14	0.08	0.03	675	0.36	111	20	116	15	0.7	0.19	0.04	41.03	11.6	<1	24.5
KLUB11_180W2_179597	0.21	8.83	271	2.7	29	41.6	5	3.29	31	0.68	381	0.69	24	0.09	2.99	290	0.42	100	13	141	17	1.4	1.09	0.03	38.3	23.8	6	21.6
KLUB12_207_256263	<0.02	8	1032	4.62	109	3.5	6.99	2.62	20	3.8	774	2.86	54	0.23	0.09	483	0.45	219	52	131	11	1.9	0.05	0.03	104	27.2	1	20.6
KLUB12_207_256280	0.09	7.64	879	6.96	120	3.2	6.55	2.17	22	3.35	812	3.03	43	0.21	0.68	399	0.39	201	48	124	6	1.6	0.05	0.02	96.59	25.5	1	18.6
KLUB12_207W1_256537	0.29	8.21	360	6.42	188	588	6.92	1.82	13	3.07	1064	2.18	103	0.04	1.81	367	0.52	272	63	55.5	19	0.6	0.29	0.05	14.63	52.7	1	19.1
KLUB12_207W1_256548	0.28	8.38	362	4.34	16	617	4.68	1.29	10	1.09	486	3.44	16	0.07	2.09	358	0.34	119	35	108	8	0.8	0.29	0.02	26.88	27.8	2	21.9
KLUB12_210W1_248885	0.05	8.8	223	2.9	23	143	3.02	0.61	23	1.32	338	5.35	18	0.1	0.1	286	0.4	102	20	141	6	0.8	<0.04	0.03	31.3	11.2	2	21.3
KLUB12_210W1_248895	0.02	9.03	458	3.12	23	253	3.76	2.14	29	1.46	390	3.86	18	0.09	0.04	167	0.36	102	23	135	4	0.7	0.04	<0.02	25.67	19.8	5	21.6
KLUB12_222_257822	0.09	9.06	294	2.47	8	63.4	2.2	1.09	12	0.71	246	5.12	6	0.08	0.02	255	0.41	125	20	102	6	0.7	0.06	0.02	32.99	8.3	2	24.3
KLUB12_222_257834	0.05	8.75	235	3.36	7	89	3.68	0.83	18	0.75	335	3.59	5	0.08	0.33	302	0.38	120	22	97.5	7	0.8	0.13	<0.02	34.15	16.9	1	24.4
KLUB12_223_251189	2.02	7.11	79	6.29	100	7075	6.26	0.8	26	2.38	1183	2.92	81	0.03	0.86	240	0.51	273	45	42.7	30	0.5	0.67	0.04	13.77	56.7	4	20.3
KLUB12_223_251197	0.52	8.04	88	5.99	123	904	6.42	0.73	14	2.41	1161	3.06	79	0.04	0.16	571	0.63	298	45	56.7	32	0.5	0.53	0.04	32.79	47.3	<1	21.2
DUP																												
KLUB12_222_257822	0.05	8.41	279	2.47	7	61.7	2.24	1.15	14	0.69	243	5.48	6	0.08	0.03	257	0.4	123	18	99.5	6	0.7	0.06	<0.02	32.14	9	2	23.6
CAOND163834	0.16	7.2	70	5.01	31	1122	7.84	0.83	23	2.43	836	2.81	29	0.05	0.18	165	0.71	375	25	55.4	59	0.5	0.12	<0.02	22.54	52.7	2	19.2
KLUB12_210W1_248885	0.05	8.87	224	2.92	22	148	3.03	0.61	23	1.32	335	5.37	18	0.1	0.1	286	0.4	100	19	142	6	0.7	<0.04	0.02	31.31	10.9	2	20.7
CAOND128183																												
QC																												
OREAS 905	0.64	7	2576	0.55	14	1535	3.92	2.84	20	0.26	372	2.39	8	0.03	0.07	156	0.12	9	139	248	37	3	5.78	0.36	91.02	15.7	8	27.1
OREAS 905	0.58	7.49	2520	0.58	11	1555	4.15	2.74	19	0.26	371	2.31	8	0.03	0.07	151	0.11	9	139	242	36	3	5.74	0.36	90.42	15.4	8	26.3
OREAS 905	0.52	7.64	2604	0.6	12	1609	4.17	3.02	21	0.26	380	2.45	9	0.03	0.07	155	0.11	9	136	255	38	2.9	5.97	0.38	95.96	14.6	8	26.3
OREAS 70b																												
Expected Values	0.518	7.42	2699	0.59	19.2	1533	4.08	2.88	20	0.276	380	2.4	9.54	0.028	0.066	157	0.122	10.1	138	252	34.7	3.04	5.72	0.36	92	14.8	6.78	25.1
Tolerance (%)	21.79	10.9	10.63	15.33	32.59	10.61	11.2	11.49	25.35	21.07	12	11.69	44.22	66.35	38.63	11.42	35.97	45.9	12.55	11.08	18.82	20.05	12.48	27.13	10.68	12.42	37.97	11.64
OREAS 601b	49.8	6.34	890	0.84	18	996	2.15	2.36	23	0.1	224	1.88	5	0.03	1.43	240	0.13	11	311	177	270	2.1	16.82	2.12	67.51	3	5	22.4
OREAS 601b	50.66	6.56	1886	0.9	17	1031	2.27	2.31	22	0.09	225	1.83	5	0.03	1.47	235	0.12	11	307	186	277	2.3	17.78	2.09	69.56	3.2	5	23.3
OREAS 601b	47.67	6.4	1413	0.85	21	1002	2.23	2.37	21	0.09	222	1.82	7	0.03	1.44	226	0.12	12	319	189	294	2.2	17.99	2.09	69.62	3.2	5	23.8
Expected Values	49.2	6.3	#N/A	1.31	42	1010	2.48	2.1	20.5	0.389	480	1.45	24.3	0.047	1.07	230	0.18	25.6	1330	155	307	2.07	20.9	7.86	63	5.14	6.72	20.4
Tolerance (%)	13.38	11.06	#N/A	13.01	17.34	10.64	11.51	12.12	24.97	16.41	11.69	12.45	16.38	44.16	12.94	11.01	25	34.7	10.78	11.42	11.36	25	11.06	11.26	10.74	15.97	61.73	11.89

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Hf mg/kg	In mg/kg	La mg/kg	Lu mg/kg	Mo mg/kg	Nb mg/kg	Pb mg/kg	Rb mg/kg	Sb mg/kg	Sc mg/kg	Se mg/kg	Sn mg/kg	Ta mg/kg	Tb mg/kg	Te mg/kg	Th mg/kg	Tl mg/kg	U mg/kg	W mg/kg	Y mg/kg	Yb mg/kg	Ca %
Method Code	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	ICP95A50
LOD	0.02	0.02	0.1	0.01	0.05	0.1	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1	0.007
CAOND128083	2.91	0.08	6.5	0.7	0.73	5.8	2.6	41.1	13.43	35.8	<2	1	0.37	1.08	<0.05	0.6	0.17	0.18	3.1	43	4.5	
CAOND128098	2.85	0.06	6.5	0.66	0.74	5.9	1.2	13.1	3.91	32.5	<2	1.1	0.37	1.1	<0.05	0.6	0.06	0.19	10.2	41.6	4.4	
CAOND128133	1.73	0.05	2.6	0.42	0.58	3.5	1.1	7.9	3.77	33	<2	0.7	0.22	0.69	<0.05	0.3	0.04	0.11	3.1	26.6	2.9	
CAOND128147	1.72	0.05	5.6	0.37	0.72	3	1	34.6	3.19	31.3	<2	0.6	0.18	0.53	<0.05	0.3	0.17	0.21	3.1	20.5	2.4	
CAOND128163	1.31	0.04	3.1	0.3	1.66	2.1	1.1	53.9	8.16	25.3	<2	0.5	0.15	0.4	0.06	0.2	0.27	0.34	8	15.7	1.9	
CAOND128183	0.65	0.06	13	0.22	747	1	11.1	56	4.96	8.5	<2	<0.3	0.07	0.74	0.19	1	0.44	0.4	5	24.6	1.7	17.996
CAOND128192	1.94	<0.02	20.8	0.09	3.86	3.9	2.3	158	5.39	5.9	<2	0.7	0.21	0.27	<0.05	3.4	0.59	0.91	34	7.3	0.6	
CAOND130898	1.6	0.06	3.4	0.37	0.58	3	2.3	71.1	4.45	35.7	<2	0.6	0.18	0.59	<0.05	0.3	0.29	0.09	1.3	23.3	2.5	
CAOND130912	3.48	0.06	24.8	0.22	1.65	3.8	2.7	98.6	4.78	21.7	<2	1.2	0.22	0.63	<0.05	4.6	0.46	1.39	1.4	15.6	1.4	
CAOND130922	1.96	0.08	4.3	0.42	2.98	3.4	2.3	64.9	14.16	37.4	<2	0.7	0.21	0.65	<0.05	0.3	0.25	0.39	1.9	25.1	2.7	
CAOND130939	1.71	0.07	5.6	0.36	3.08	3.1	1.6	27.6	7.15	35	<2	0.7	0.2	0.56	0.08	0.3	0.1	0.4	17.8	21.2	2.3	
CAOND130973	2.44	0.03	19.6	0.14	3.92	3.6	3.2	110	3.27	11	<2	0.8	0.22	0.33	<0.05	2.7	0.53	0.97	2.3	9.6	0.9	
CAOND135432	2.41	0.1	11.1	0.5	0.69	4.5	1.6	28.7	10.96	38.6	<2	0.8	0.28	0.86	<0.05	0.5	0.12	0.23	3.2	32.7	3.4	
CAOND135447	1.9	0.08	5.8	0.4	0.99	3.7	1.8	24	15.25	38.1	<2	0.7	0.23	0.64	<0.05	0.5	0.09	0.19	1.9	24.4	2.7	
CAOND135493	2.29	0.05	5.5	0.5	1.47	4.5	1.6	48	10.29	41.9	<2	0.8	0.29	0.76	0.05	0.6	0.19	0.32	21.9	29.9	3.3	
CAOND135669	1.57	0.09	7.1	0.45	0.85	3.8	2.8	26.2	13.97	38.3	2	0.8	0.22	0.7	0.23	0.5	0.14	0.2	2.8	28	3.1	
CAOND135691	1.78	0.07	5.9	0.44	0.39	3.6	2.2	38	3.6	36.6	<2	0.6	0.23	0.74	<0.05	0.4	0.18	0.1	0.8	27.8	2.9	
CAOND135702	1.98	0.06	4.6	0.44	0.44	3.7	2.3	79	4	37.8	<2	0.6	0.23	0.72	<0.05	0.4	0.36	0.1	1	27.3	3	
CAOND135719	1.91	0.06	4.5	0.41	0.33	3.7	2.2	49.2	2.58	37.6	<2	0.7	0.23	0.68	<0.05	0.3	0.23	0.1	1.1	26.4	2.7	
CAOND136961	1.69	0.05	5.7	0.23	0.45	3.2	2.5	20.1	2.01	36.7	<2	0.7	0.22	0.41	0.62	0.8	0.08	0.34	4.7	13.4	1.5	
CAOND143739	3.22	0.09	7	0.75	0.56	6.4	1.9	77.4	6.72	37.4	<2	1.1	0.4	1.2	<0.05	0.6	0.38	0.18	2.2	46.8	5	
CAOND143752	3.13	0.1	7.9	0.73	0.47	6.2	1.6	52.4	7.8	36	<2	1.1	0.38	1.18	<0.05	0.6	0.27	0.18	6.3	45.5	4.9	
CAOND143769	3.49	0.05	7.7	0.75	2.86	6.2	1.3	46.8	3.6	34.9	<2	1.1	0.38	1.16	<0.05	0.6	0.23	0.4	4.9	44.4	4.9	
CAOND143779	1.87	0.07	4.4	0.45	0.35	3.5	1.8	72.6	4.25	35.6	<2	0.6	0.22	0.71	<0.05	0.4	0.34	0.1	1.6	27.3	3	
CAOND147295	2.01	0.06	6.1	0.44	0.44	4.2	2.2	49.8	6.71	42.1	<2	0.7	0.26	0.74	<0.05	0.5	0.21	0.15	3.3	28	3	
CAOND147309	2.33	0.06	5.8	0.53	0.38	4.7	2	40.8	4.83	36.7	<2	0.8	0.29	0.9	0.07	0.5	0.17	0.14	1.5	33.3	3.6	
CAOND147365	1.76	0.08	4.5	0.4	2.45	3.1	3.7	39.6	8.37	37.2	<2	0.6	0.19	0.62	0.05	0.3	0.14	0.23	2.1	23.9	2.6	
CAOND147376	1.91	0.05	6.2	0.37	0.81	3.1	1.3	23.1	1.92	38.1	<2	0.7	0.21	0.48	<0.05	0.3	0.08	0.37	7.5	17.6	2.3	
CAOND147387	1.92	0.11	7.3	0.43	12.12	3.1	1.9	36.1	6.9	37	<2	0.8	0.2	0.68	<0.05	0.3	0.14	0.57	9.5	25.8	2.8	
CAOND147404	1.75	0.07	3.4	0.39	0.93	3.1	2.1	53.3	8.57	36.1	<2	0.7	0.19	0.62	<0.05	0.3	0.2	0.23	8	23.5	2.6	
CAOND152411	2	0.06	3.8	0.43	11.88	3.5	2.4	29.1	5.99	36.1	<2	0.7	0.22	0.68	<0.05	0.4	0.12	0.18	3.6	25.9	2.9	
CAOND152417	2.11	0.07	4.3	0.46	3.66	3.6	1.9	61.9	7.18	36.6	<2	0.7	0.23	0.7	0.1	0.3	0.23	0.23	3.3	27.3	3	
CAOND152424	1.89	0.07	3.9	0.42	0.89	3.4	2	43.7	7.59	39.1	<2	0.7	0.21	0.64	<0.05	0.3	0.17	0.21	3.2	24.8	2.7	
CAOND152437	2.43	0.06	6.3	0.41	13.83	3.9	1.6	19.9	3.31	37.3	<2	0.8	0.24	0.59	<0.05	0.8	0.07	0.75	8	21.8	2.5	
CAOND160691	3.69	0.09	9.1	0.78	37.51	6.1	2.3	71.5	5.41	34.6	<2	1.4	0.37	1.13	0.11	0.6	0.29	1.07	2.8	44.7	5	
CAOND160704	3.06	0.11	14.6	0.68	3.14	5.8	1.3	67.3	3.07	34	<2	1.1	0.35	1.14	0.86	0.7	0.28	0.25	51.9	41.7	4.4	
CAOND160721	3.39	0.08	5.5	0.76	1.28	6.2	1.9	146	9.07	35.6	<2	1	0.38	1.17	<0.05	0.6	0.59	0.2	3.2	45.5	5	
CAOND160761	2.04	0.07	4.8	0.48	0.28	4.1	1.6	103	8.96	39	<2	0.7	0.25	0.78	<0.05	0.4	0.44	0.13	3.9	29.7	3.2	
CAOND160774	1.75	0.06	3.9	0.39	0.38	3.3	1.6	99.3	6.31	32.4	<2	0.6	0.22	0.69	<0.05	0.3	0.36	0.08	0.6	24.5	2.3	
CAOND160788	1.64	0.06	4	0.38	0.52	3.4	1.5	79.7	8.1	32.2	<2	0.6	0.21	0.67	<0.05	0.3	0.3	0.1	8.8	24.1	2.2	
CAOND162504	3.61	0.09	6.1	0.74	2.64	6.2	1.3	40.4	3.8	33.2	2	1.2	0.36	1.31	<0.05	0.6	0.15	0.42	6.5	45.5	4.4	
CAOND162513	3.9	0.09	13.1	0.81	2.41	6.3	2.1	66.6	5.03	33.6	<2	1.1	0.36	1.27	<0.05	0.6	0.22	0.87	4.4	44.6	4.5	
CAOND162549	2.15	0.05	7.9	0.46	2.47	4.1	1.5	48	5.24	35.9	<2	0.9	0.24	0.8	<0.05	0.6	0.17	0.59	4.4	27.6	2.6	
CAOND162569	2.01	<0.02	18.7	0.1	2.27	4.5	2.4	72.4	1.65	5.6	<2	0.6	0.23	0.32	<0.05	3.4	0.19	1.04	2.8	6.9	0.5	
CAOND163334	3.74	0.09	7.1	0.77	14.86	6.2	1.7	44.3	3.3	32.7	3	1.2	0.35	1.26	0.33	0.6	0.15	0.62	6.6	44.8	4.4	
CAOND163343	3.73	0.09	7.7	0.74	1.45	6.4	1.9	56	5.38	33.8	2	1.1	0.37	1.32	<0.05	0.7	0.19	0.17	2.8	44.2	4.3	
CAOND163353	3.98	0.07	5.6	0.81	3.22	6.4	1.2	23.6	3.54	31.8	2	1.2	0.36	1.33	0.07	0.7	0.07	0.93	2.9	46.7	4.6	
CAOND163396	3.44	0.09	7.1	0.76	1.07	6.6	1.8	56.9	7.09	34.4	2	1.1	0.37	1.34	<0.05	0.7	0.23	0.17	2.9	47.5	4.5	
CAOND163405	3.68	0.09	7.8	0.78	0.64	6.8	1.8	93.6	7.23	34.9	<2	1.1	0.39	1.42	<0.05	0.7	0.35	0.18	3.3	49.9	4.7	
CAOND163421	2.17	0.06	6.5	0.43	0.75	4.5	1.7	111	5.33	41.5	<2	0.7	0.27	0.8	<0.05	0.6	0.44	0.16	3.7	27	2.6	
CAOND163433	2.24	0.06	8	0.43	1.9	4.6	1.3	55.6	5.6	42.8	<2	0.6	0.26	0.78	<0.05	0.7	0.23	0.15	4.6	27.2	2.7	
CAOND163446	1.75	0.05	4.2	0.36	0.53	3.7	0.9	5.8	2.24	34	<2	0.6	0.21	0.57	<0.05	0.5	<0.02	0.18	35.4	19.5	2	
CAOND163796	2.82	0.07	7.2	0.62	0.51	6	1.3	30.5	5.42	31.5	<2	1	0.33	1.14	<0.05	0.6	0.14	0.15	55.4	39.6	3.7	
CAOND163824	2.11	0.06	6.4	0.46	1.27	4.2	1.1	46.5	9.34	38.9	<2	0.8	0.25	0.79	<0.05	0.6	0.17	0.31	9.4	28	2.6	
CAOND163834	1.46	0.07	7.9	0.26	1.3	3.3	1.6	66.3	12.95	36.5	<2	0.7	0.19	0.48	<0.05	0.5	0.18	0.26	13.9	12.5	1.4	
CAOND163908	2	0.02	19.9	0.1	0.46	4.1	2.1	72.9	5.7	6	<2	0.7	0.21	0.39	<0.05	3.4	0.21	1.03	11.7	9.1	0.6	
CAOND163918	2.07	0.03	20.9	0.11	20.28	4.6	5.8	112	7.74	6.1	<2	0.7	0.24	0.36	0.16	3.6	0.53	1.16	5.3	7.7	0.6	
CAOND164779	2.4	0.09	10.8	0.4	29.47	4	2.6	154	18.33	38.2	<2	1.2	0.23	0.52	<0.05	0.7	0.47	1.4	119	16.2	2	
CAOND164923	4.85	0.09	39.4	0.53	1.1	6.8	4.7	118	2.96	27.2	<2	1.4	0.34	1.37	<0.05	6.1	0.53	1.5	1.3	35.1	3	
CAOND164932	1.77	0.06	4.8	0.39	0.56	3.1	1.5	102	4.19	30.8	<2	0.6	0.18	0.67	<0.05	0.3	0.41	0.13	1.4	23.3	2.3	
CAOND164955	1.69	0.06	3.8	0.39	1.93	3.3	1.1	158	8.49	31.8	<2	0.6	0.19	0.7	<0.05	0.3	0.74	0.08	38.9	24.3	2.3	
CAOND165195	1.71	0.06	4	0.4	0.58	3.3	1.9	59	3.8	33.6	<2	0.6	0.19	0.72	<0.05	0.3	0.23	0.09	1.3	25.3	2.4	
CAOND165203	1.84	0.06	3.1	0.4	0.59	3.2	1.3	91.7	5.23	31.9	<2	0.6	0.19	0.7	<0.05	0.3	0.33	0.09	2.5	25.2	2.3	
CAOND165558	2.53	0.09	5.1	0.53	3.84	4.2	1	125	7.3	33.1	<2	0.9	0.24	0.86	0.07	0.4	0.39	0.44	133	29.8	3	
CAOND165612	2.08	0.06	14.2	0.48	4.88	3.8	1.5	76.9	7.31	37.5	<2	0.9	0.22	0.84	0.13	0.5	0.26	0.72	10.3	28.4	2.7	
CAOND166348	1.85	0.05	4.7	0.41	1.12	3.5	1.7	39.8	1.71	33.7	<2	0.6	0.21	0.73	0.07	0.4	0.12	0.12	1.4	25	2.4	
CAOND168893	2.37	0.08	12.9	0.54	0.49	5.7	1.8	64.8	5.18	26.9	<2	1.1	0.36	1.03	<0.05	1.1	0.32	0.34	0.9	33.7	3.1	
CAOND169457	1.6	0.08	4.2	0.36	0.84	3.3	1.1	34	11.5	37.3	<2	0.6	0.19	0.71	0.05	0.3	0.14	0.08	3.4	24.6	2.1	
CAOND175906	3.56	<0.02	14.5	0.23	1.09	5.2	2.1	119	10.33	14.8	<2	1	0.29	0.39	<0.05	1.4	0.59	0.39	8.6	9.7	1.2	

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Hf mg/kg	In mg/kg	La mg/kg	Lu mg/kg	Mo mg/kg	Nb mg/kg	Pb mg/kg	Rb mg/kg	Sb mg/kg	Sc mg/kg	Se mg/kg	Sn mg/kg	Ta mg/kg	Tb mg/kg	Te mg/kg	Th mg/kg	Tl mg/kg	U mg/kg	W mg/kg	Y mg/kg	Yb mg/kg	Ca %
Method Code	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	ICP95A50
CAOND175938	3.55	<0.02	14	0.24	1.74	5.8	2.9	106	14.18	12.5	<2	1	0.32	0.4	<0.05	1.4	0.39	0.48	17.6	10	1.3	
CAOND179977	4.09	0.03	32.7	0.32	32.46	7.1	2.6	119	2.78	23.6	<2	1.4	0.39	0.83	<0.05	2.6	0.32	1.21	5.4	23.7	1.8	
CAOND181514	2.87	0.04	20.5	0.21	0.7	3.9	1.9	75.5	4	17.9	<2	0.6	0.23	0.47	<0.05	1.8	0.3	0.39	3.1	9.7	1.1	
CAOND184563	1.63	0.06	3.8	0.37	0.46	3.1	1.4	37.2	5.33	29.8	<2	0.6	0.18	0.66	<0.05	0.3	0.18	0.08	0.6	23.7	2.2	
CAOND185519	2.84	0.08	6.2	0.6	0.46	5.5	1.2	126	6.42	34	<2	0.9	0.32	1.05	<0.05	0.5	0.5	0.14	4.2	36.9	3.5	
CAOND186035	3.23	0.1	7.3	0.68	0.56	6.3	2.4	41.8	5.75	35.5	<2	1.1	0.36	1.26	0.07	0.6	0.18	0.17	2.7	46.1	4.2	
CAOND186041	3.57	0.08	7.8	0.73	1.03	6.3	1.7	65.3	4.83	33.2	<2	1.1	0.35	1.27	<0.05	0.6	0.28	0.35	2.7	44.9	4.3	
CAOND186416	3.5	0.11	8.2	0.79	0.81	6.8	2	143	5.14	41	<2	1.2	0.45	1.32	0.05	0.7	0.68	0.22	6.6	48.8	5.1	
CAOND186418	3.48	0.1	9.2	0.75	2.76	6.2	2.4	109	3.85	39.1	<2	1.3	0.4	1.25	0.37	0.6	0.53	0.46	110	44.5	5	
CAOND186426	3.52	0.09	7.7	0.79	0.43	6.7	2.1	97	4.97	40.7	<2	1.2	0.42	1.33	<0.05	0.7	0.47	0.26	3.1	49	5.3	
CAOND186541	1.98	0.07	4.9	0.45	0.93	3.8	2	35.3	6.89	44.3	<2	0.8	0.24	0.74	<0.05	0.5	0.17	0.34	3.3	26.2	2.9	
CAOND186548	1.84	0.05	5	0.37	1.46	3.3	2.9	69.5	4.41	36.2	<2	0.8	0.22	0.54	<0.05	0.4	0.3	0.44	9.1	18.4	2.3	
CAOND186553	3.36	0.08	35.2	0.36	1.29	4.5	2.5	43.9	3.09	32.5	<2	1.1	0.26	0.99	<0.05	4.1	0.25	1.39	5.5	24.5	2.2	
CAOND186834	1.71	0.06	6.2	0.28	0.79	3.4	1.9	48.8	1.84	41.6	<2	0.6	0.25	0.52	0.07	0.7	0.29	0.2	1.5	18	1.8	
CAOND186840	1.45	0.06	4.5	0.25	0.49	3.1	3	39	5.62	46	<2	0.6	0.22	0.49	0.07	0.5	0.26	0.13	1	16.4	1.7	
CAOND187492	2.63	0.08	6.4	0.6	2.72	4.8	1.5	117	2.43	45.5	<2	0.9	0.3	1.01	<0.05	0.5	0.55	0.26	3.1	36.3	3.9	
CAOND187498	2.11	0.08	4.7	0.49	0.46	4	1.4	158	2.79	43.4	<2	0.8	0.25	0.85	0.06	0.4	0.72	0.12	2.8	32	3.3	
CAOND187628	1.96	0.07	5	0.47	0.62	4.4	1.9	33.3	12.95	49.2	<2	0.8	0.28	0.82	<0.05	0.6	0.19	0.17	3.5	30.6	3.2	
CAOND187636	1.76	0.02	10.3	0.08	1.53	2.4	1.4	143	4.13	6.7	<2	0.5	0.15	0.21	<0.05	1.4	0.63	0.52	5.4	5.4	0.5	
CAOND188616	2.1	0.06	3.7	0.47	2.59	3.9	1.1	59.3	2.47	38.5	<2	0.8	0.24	0.77	<0.05	0.4	0.25	0.23	13.2	27.2	3.1	
CAOND188623	2.09	0.09	12	0.5	1.33	3.8	2	38.7	7.49	42.9	<2	0.9	0.23	0.87	<0.05	0.4	0.19	0.29	5.4	30.4	3.3	
CAOND188631	1.88	0.07	4.5	0.45	0.81	3.7	1.8	34.6	3.75	44.1	<2	0.8	0.22	0.78	<0.05	0.4	0.17	0.09	1.1	27.9	3.1	
CAOND188640	1.46	0.05	2.2	0.31	510	2.1	12.3	102	9.1	27.8	<2	0.5	0.13	0.39	0.06	0.2	0.64	0.51	44.9	14.1	2	
CAOND188895	2.07	0.1	4.4	0.45	1.45	3.6	1.3	80.7	5.11	40	<2	0.9	0.21	0.72	0.15	0.4	0.37	0.25	3.1	26	2.9	
CAOND188916	1.92	<0.02	20.2	0.1	0.79	3.1	2.9	141	2.5	6.9	<2	0.7	0.17	0.3	<0.05	3.1	0.61	0.94	25.9	7.3	0.6	
CAOND189446	1.65	0.06	3.7	0.42	0.44	3.5	1.2	142	5.19	41.3	<2	0.6	0.21	0.73	<0.05	0.3	0.64	0.09	2.2	26.2	2.8	
CAOND189719	0.94	0.04	3.8	0.32	27.35	2.8	1.9	44.8	2.93	37.5	<2	0.6	0.18	0.49	<0.05	0.3	0.17	0.2	11.2	16.9	2	
CAOND191002	1.54	0.06	3.8	0.37	0.33	3.2	1	43.1	2.19	35.9	<2	0.6	0.21	0.65	<0.05	0.3	0.23	0.08	2.3	22.5	2.5	
CAOND191005	1.82	0.07	7.8	0.41	0.4	3.7	1.4	51.6	2.98	37.3	<2	0.7	0.22	0.77	<0.05	1	0.29	0.22	1.6	26	2.9	
CAOND191008	2.41	0.07	6.7	0.57	0.42	5.1	1.3	45.8	3.61	33.1	<2	1	0.31	0.99	0.05	0.5	0.24	0.17	26.8	33.5	3.8	
CAOND191089	1.64	<0.02	11.4	0.07	0.5	2.4	2	130	5.61	6.5	<2	0.5	0.14	0.21	0.06	1.5	0.62	0.53	2.9	5.3	0.5	
CAOND191157	1.64	0.06	3.4	0.39	1.36	2.9	1.6	114	7.78	36.3	<2	0.8	0.18	0.62	<0.05	0.3	0.56	0.17	1.8	22.5	2.5	
CAOND194796	1.73	0.04	5	0.25	0.68	3.2	2.1	16.2	5.2	42.7	<2	0.5	0.22	0.44	<0.05	0.7	0.09	0.19	1.5	16	1.7	
CAOND198933	1.61	0.06	6.9	0.29	5.44	3.3	3.2	37.8	5.18	44.6	<2	1.2	0.23	0.55	<0.05	0.6	0.12	0.43	6.3	18.5	1.9	
CAOND200894	2.4	0.05	9.2	0.19	13.42	5.3	3.1	206	3.2	12.5	<2	1.2	0.35	0.39	0.75	1.3	0.73	0.44	6.4	12.9	1.2	
CAOND200903	2.64	0.02	11.2	0.2	7.06	5.8	2.2	88.1	2.94	8.8	<2	1.1	0.39	0.37	0.57	1.4	0.33	0.74	11.5	11.7	1.2	
KLUB11_180W2_179564	3.06	0.06	12.4	0.3	0.91	7.1	5	29.4	6.49	15.9	<2	1.1	0.41	0.56	0.05	1.3	0.11	0.36	3.1	19.1	1.9	
KLUB11_180W2_179592	2.39	0.12	17.5	0.29	0.6	6.3	5.2	33.9	7.31	15.7	<2	1.1	0.38	0.74	<0.05	1.3	0.14	0.35	2.2	22.2	1.9	
KLUB11_180W2_179597	3.33	0.04	15.6	0.23	0.77	7.1	2.6	144	11.5	13.6	<2	1.2	0.42	0.37	0.09	1.4	0.79	0.35	15.9	9.3	1.4	
KLUB12_207_256263	3.62	0.04	48.1	0.26	7.87	5.8	4.8	66	1.89	31.7	<2	1.2	0.28	0.83	<0.05	5.7	0.28	1.81	10.4	19.7	1.7	
KLUB12_207_256280	3.43	0.05	44.3	0.24	6.37	5.3	5.3	58	1.28	29.2	<2	1.2	0.24	0.79	<0.05	5.8	0.23	1.86	32.2	17.9	1.5	
KLUB12_207W1_256537	1.46	0.09	5.8	0.31	8.16	3.1	3.7	80.9	2.14	41.9	2	1.1	0.2	0.54	0.11	0.7	0.29	0.25	3.1	19.5	2	
KLUB12_207W1_256548	3.11	0.04	11.4	0.32	2.18	5.5	4.2	58.8	1.41	17.8	3	1.3	0.37	0.57	0.09	1.5	0.21	0.52	13.1	18.6	2.1	
KLUB12_210W1_248885	3.77	0.02	12.7	0.32	0.8	7.4	2.7	28.8	4.12	16.6	<2	1.3	0.44	0.62	<0.05	1.5	0.11	0.61	1.9	19.2	2	
KLUB12_210W1_248895	3.6	<0.02	11.1	0.3	1.91	6	1.7	89.5	3.57	16	<2	0.9	0.39	0.43	<0.05	1.4	0.39	0.5	2.3	13.4	1.7	
KLUB12_222_257822	3.05	<0.02	10.9	0.22	3.5	6	2	59.2	1.09	14.6	<2	0.9	0.37	0.44	<0.05	1.5	0.16	0.49	3	13.2	1.3	
KLUB12_222_257834	2.91	0.02	11.8	0.27	4.24	5.8	2.3	46.2	1.38	13.3	<2	1	0.35	0.52	<0.05	1.5	0.13	0.42	5	15.3	1.5	
KLUB12_223_251189	1.23	0.18	4.2	0.26	2.04	2.4	1.4	55.1	12.36	32.5	2	0.8	0.14	0.48	0.11	0.3	0.22	0.42	2.1	16.1	1.5	
KLUB12_223_251197	1.63	0.11	10.7	0.26	0.86	3.3	3.3	25	28.8	35.5	<2	0.6	0.21	0.57	0.11	0.6	0.11	0.16	1.7	17	1.5	
DUP																						
KLUB12_222_257822	2.95	<0.02	10.7	0.22	3.59	5.9	1.8	55.5	1.11	13.6	<2	0.9	0.36	0.43	<0.05	1.4	0.16	0.49	3	12.6	1.2	
CAOND163834	1.44	0.07	8	0.27	1.24	3.2	1.6	63.6	12.98	35.7	<2	0.7	0.19	0.45	<0.05	0.5	0.18	0.27	14.2	12	1.4	
KLUB12_210W1_248885	3.73	0.02	12.9	0.31	0.83	7.1	2.7	28.1	4	15.9	<2	1.2	0.43	0.6	<0.05	1.5	0.11	0.59	1.8	19.1	2	
CAOND128183																						17.993
QC																						
OREAS 905	7.1	0.67	32.9	0.1	3.31	18.9	29.7	126	1.93	4.5	3	4	1.31	0.83	0.08	13.2	0.68	4.88	2.6	15.3	0.6	
OREAS 905	6.94	0.66	35.6	0.1	3.36	19.2	32.7	126	1.96	4.8	2	4.3	1.28	0.84	0.06	14.2	0.64	4.69	2.6	15.7	0.6	
OREAS 905	7.26	0.67	46.6	0.1	3.49	19.8	31.8	143	1.96	5.4	3	4.5	1.46	0.85	0.09	14.4	0.72	4.81	3	16.3	0.7	
OREAS 70b																						3.055
Expected Values	6.84	0.64	46	0.1	3.27	18.1	30.4	138	1.95	4.9	2.84	3.96	1.34	0.77	0.088	14.6	0.72	4.97	2.78	15.7	0.68	0.092485
Tolerance (%)	11.34	19.55	11.13	42.42	14.85	12.07	15.18	10.93	17.88	30.16	96.39	33.84	27.7	30.19	86.38	14.39	18.51	13.36	27.26	12.3	37.9	2.150
OREAS 601b	5.02	0.47	32.4	0.07	4.98	15	217	104	23.17	3.4	7	3.2	1.04	0.56	12.82	11	1.37	4.3	5.6	10.8	0.4	
OREAS 601b	5.13	0.47	35.6	0.08	5.21	15.1	254	106	22.87	3.6	7	3.2	1.04	0.6	12.81	12.2	1.33	4.4	5.9	11.1	0.5	
OREAS 601b	5.23	0.48	33.7	0.08	5.61	15.6	299	95.3	22.66	4.1	9	3.6	1.16	0.55	12.49	11.9	1.44	4.41	6.5	11.3	0.5	
Expected Values	4.52	1.73	30.9	0.095	3.87	12.6	329	97	30.4	4.85	12	4.16	1.04	0.56	16	11.7	#N/A	4	5.8	11.2	0.68	
Tolerance (%)	11.71	13.58	11.43	45.16	14.11	12.75	10.9	11.1	10.96	43.72	69.66	32.73	24.86	38.3	11.36	15.37	#N/A	13.9	15.41	13.03	61.54	

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Multi Acid Digestion with ICP-OES/MS Finish
Date : March 17 / 2022

Sample ID	Ag ppm	Al %	Ba ppm	Ca %	Cr ppm	Cu %	Fe %	K %	Li ppm	Mg %	Mn ppm	Na %	Ni ppm	P %	S %	Sr ppm	Ti %
Method Code	ICM40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
LOD	0.02	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01
CAOND 128183 Duplicate	2.22	2.93	150	>15.00	9	453	1.66	1.3	13	0.97	996	0.09	18	0.03	0.2	201	0.06
CAOND 147365 Duplicate	0.13	7.70	182	6.06	198	881	8.23	0.84	16	4.21	971	1.99	95	0.04	0.23	281	0.64
CAOND 160704 Duplicate	0.44	6.89	127	4.81	82	1995	7.73	1.33	11	2.97	891	3.32	64	0.04	0.2	160	0.65
CAOND 164923 Duplicate	0.04	6.76	729	5.57	184	39.2	6.6	2.36	14	4.15	934	2.46	44	0.23	0.03	496	0.52
CAOND 186418 Duplicate	0.37	6.86	244	3.13	83	1227	11.01	1.83	18	3.03	638	1.86	62	0.04	0.81	169	0.67
CAOND 200894 Duplicate	0.19	8.47	720	2.39	25	226	3.38	3.5	8	0.64	147	2.38	19	0.06	0.66	110	0.36
KLUB12_207_256280-Dup	0.06	7.37	837	6.26	127	3.4	6.39	2.03	21	3.33	778	2.95	41	0.21	0.42	336	0.42
DUP																	
CAOND 147365 Duplicate	0.12	7.39	173	6.17	214	839	8.01	0.8	16	4.14	949	2	97	0.04	0.24	284	0.66
QC																	
OREAS 601b		6.47	3285	0.84	21	1008	2.25	2.41	22	0.1	222	1.84	7	0.03	1.54	237	0.13
Expected Values		6.63	BDL	0.887	23.7	0.101	2.29	2.41	22.6	996	222	1.900	6.54	292	1.5	241.0	0.135
Tolerance (%)		10.10		14.90	37.60	6.79	10.70	9.40	26.30	20.00	11.10	14.30	30.90	15.10	7.20	14.70	11.8
OREAS 905	0.53	7.34	2539	0.56	13	1544	4.06	2.96	20	0.26	359	2.37	9	0.03	0.07	154	0.12
Expected Values	0.518	7.42	2699	0.59	19.2	0.1533	4.08	2.88	20	0.276	380	2.400	9.54	0.028	0.066	157.0	0.122
Tolerance (%)	55.10	10.70	14	14.20	49.10	11.90	11.50	12.10	23.90	17.20	13.00	14.10	26.50	24.60	29.40	12.50	15.4

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Sample ID	**V** *ppm*	**Zn** *ppm*	**Zr** *ppm*	**As** *ppm*	**Be** *ppm*	**Bi** *ppm*	**Cd** *ppm*	**Ce** *ppm*	**Co** *ppm*	**Cs** *ppm*	**Ga** *ppm*	**Hf** *ppm*	**In** *ppm*	**La** *ppm*	**Lu** *ppm*	**Mo** *ppm*	**Nb** *ppm*
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
LOD	2	1	0.5	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
CAOND 128183 Duplicate	57	13	24.5	5	0.5	10.05	0.32	37.15	21.4	2	8.2	0.76	0.07	12.6	0.22	767	1.1
CAOND 147365 Duplicate	318	51	60.6	15	0.4	0.13	0.03	13.85	58.4	1	20.2	1.79	0.08	4	0.38	4.92	3
CAOND 160704 Duplicate	315	38	116	6	0.6	4.06	<0.02	32.26	45.7	1	23.5	3.4	0.12	9.2	0.73	5.35	5.6
CAOND 164923 Duplicate	184	63	175	8	1.9	0.25	0.12	103	34.1	1	20.7	4.9	0.09	34.6	0.52	1.21	6.2
CAOND 186418 Duplicate	309	35	118	57	0.5	0.24	<0.02	28.06	225	2	24	3.51	0.09	8.7	0.71	2.9	5.7
CAOND 200894 Duplicate	94	12	82.2	16	0.7	12.76	<0.02	26.7	44	6	22.3	2.42	0.05	9.2	0.2	10.91	4.9
KLUB12_207_256280-Dup	198	47	124	7	1.3	0.07	0.03	89.17	25.2	1	18.7	3.38	0.05	39.8	0.22	7.18	4.9
DUP																	
CAOND 147365 Duplicate	318	51	60.7	16	0.4	0.13	0.03	14.16	59.5	1	20.2	1.81	0.07	4	0.4	4.06	3
QC																	
OREAS 601b	12	333	190														
Expected Values	12.1	318	186														
Tolerance (%)	21.7	5.55	17.00														
OREAS 905	9	135	248	34	2.5	5.51	0.35	92.65	13.5	7	26.1	6.95	0.63	42.8	0.1	3.3	17.2
Expected Values	10.1	138	252	34.7	3.04	5.72	0.36	92	14.80	6.78	25.1	6.84	0.64	46	0.1	3.27	18.100
Tolerance (%)	28.6	14.50	13.70	15.00	31.20	17.70	37.70	14	16.30	18	12.20	16.5	22.3	19.4	43.40	24	18.10

CLIENT
PROJECT
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Test
Date

Sample ID	**Pb** ***ppm***	**Rb** ***ppm***	**Sb** ***ppm***	**Sc** ***ppm***	**Se** ***ppm***	**Sn** ***ppm***	**Ta** ***ppm***	**Tb** ***ppm***	**Te** ***ppm***	**Th** ***ppm***	**Tl** ***ppm***	**U** ***ppm***	**W** ***ppm***	**Y** ***ppm***	**Yb** ***ppm***
Method Code	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12	IMS40Q12
LOD	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
CAOND 128183 Duplicate	11.9	77.5	5.44	11	<2	0.3	0.07	0.75	0.25	1.2	0.52	0.44	5.2	24.3	1.4
CAOND 147365 Duplicate	3.8	53.4	8.79	38.2	<2	0.6	0.19	0.65	0.07	0.3	0.15	0.22	1.8	23.5	2.1
CAOND 160704 Duplicate	1.2	79.9	3.94	33.3	3	1	0.34	1.21	1.73	0.6	0.29	0.27	50.6	42.3	4.1
CAOND 164923 Duplicate	4.1	102	2.96	27.4	<2	1.4	0.34	1.28	<0.05	6.1	0.53	1.51	1.7	34.9	2.9
CAOND 186418 Duplicate	1.6	103	3.71	32.1	2	1.2	0.36	1.21	0.23	0.6	0.47	0.39	77.7	42.2	4.1
CAOND 200894 Duplicate	3.1	209	3.07	9.7	<2	1.1	0.34	0.39	0.56	1.3	0.74	0.43	6.3	12.7	1.1
KLUB12_207_256280-Dup	4.4	62.7	1.31	20.3	<2	1.2	0.22	0.76	<0.05	5.6	0.2	1.75	24.9	16.5	1.2
DUP															
CAOND 147365 Duplicate	3.7	52.1	8.48	36.9	<2	0.6	0.2	0.66	0.07	0.3	0.15	0.23	1.9	23.8	2.2
QC															
OREAS 601b															
Expected Values															
Tolerance (%)															
OREAS 905	28.7	124	1.95	3.9	2	3.9	1.27	0.82	0.08	13.9	0.67	4.67	2.9	14.9	0.6
Expected Values	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.088	14.6	0.72	4.97	2.78	15.7	0.68
Tolerance (%)	20.70	13.8	19.70	28.2	34.00	20.50	18.5	27.1	58.3	15.60	22.90	18.40	18.8	15.40	21.2

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 12-Sep-22
Report date: 4-Nov-22
Sample receipt date: 08-Sep-22
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 17

Report Distribution

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Special notes:

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 12-Sep-22
Report date: 31-Oct-22

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
Mafic Syenite	7.740	534	3.67	63	735.0	5.33	1.95	17	1.79	494	2.77	57.0	0.14	0.48	254	0.45	174
Crowded Porphyry	7.760	556	2.86	16	336.0	2.65	2.15	13	1.18	324	3.16	18.0	0.08	0.16	258	0.17	75
High Sulfur	7.690	537	3.37	55	824.0	5.08	1.67	15	1.48	450	3.14	52.0	0.11	1.08	276	0.36	152
Basalt	6.750	226	4.87	150	564.0	8.26	1.15	22	3.16	851	2.21	86.0	0.04	0.23	177	0.57	295
Gabbro	7.150	210	4.58	171	265.0	7.89	1.28	21	3.86	849	2.23	95.0	0.04	0.08	193	0.52	267
Duplicates																	
High Sulfur	7.740	536	3.41	56	807.0	5.07	1.67	15	1.48	448	3.16	51.0	0.11	1.10	278	0.36	154
QA/QC																	
Blank	<0.01	<1	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<2
Certified standards																	
OREAS 601b	6.370	736	0.86	20	1012.0	2.3	2.34	21	0.09	208	1.80	7.0	0.03	1.48	228	0.12	11
OREAS 905	7.190	2642	0.57	15	1545.0	4.1	2.86	20	0.27	362	2.28	9.0	0.03	0.07	150	0.11	9

3260 Production Way
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SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 11-Apr-22
Report date: 20-Apr-22

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
Sample ID																	
Mafic Syenite	31	115	0.14	6	1	0.38	<0.02	46.17	33.3	3	19.9	3.00	0.04	21.4	0.26	14.180	6.0
Crowded Porphyry	27	64	0.13	6	1.2	0.61	0.16	40.36	12.7	3	19.4	2.07	0.03	18.3	0.12	243.000	3.1
High Sulfur	29	92	0.22	10	0.9	0.49	0.03	44.33	32.5	2	19.3	2.59	0.04	19.9	0.25	19.470	4.2
Basalt	40	52	0.28	13	0.5	0.55	0.04	18.33	41.7	2	17.1	1.64	0.07	7.8	0.42	23.620	3.7
Gabbro	41	54	0.05	8	0.5	0.57	<0.02	16.15	42.4	2	17.5	1.80	0.07	5.9	0.42	4.190	3.5
Duplicates																	
High Sulfur	30	93	0.23	13	0.9	0.44	0.04	43.91	38.6	2	19.9	2.66	0.03	19.7	0.26	21.700	4.4
QA/QC																	
Blank	<1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01	<0.05	<0.1
Certified standards																	
OREAS 601b	319	174	50.40	289	2.3	17.32	2.07	71.05	2.9	5	23.0	5.07	0.46	34.9	0.07	5.170	14.6
OREAS 905	138	243	0.44	34	2.9	5.96	0.36	90.45	14.8	7	25.7	6.85	0.64	42.6	0.1	3.280	18.9

3260 Production Way
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Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: #REF!
SGS project #: #REF!

Work order date: 11-Apr-22
Report date: 20-Apr-22

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
Sample ID															
Mafic Syenite	3.4	81.3	4.0	21.2	<2	1.1	0.58	0.6	0.08	2.50	0.4	0.9	7	16.80	1.70
Crowded Porphyry	4.3	93.4	4.1	9	<2	0.7	0.23	0.3	0.10	2.80	0.5	0.9	7.2	7.60	0.70
High Sulfur	4	71.3	3.3	18.8	<2	0.9	0.32	0.5	0.23	2.30	0.3	0.8	16.2	14.20	1.50
Basalt	2.7	63.5	6.1	35.1	<2	0.8	0.28	0.6	0.07	0.60	0.3	0.3	5.8	25.10	2.70
Gabbro	2.7	74.5	4.7	36.4	<2	0.8	0.25	0.6	0.09	0.60	0.3	0.3	9.1	24.40	2.60
Duplicates															
High Sulfur	4	73.2	3.4	19.3	<2	0.9	0.34	0.5	0.20	2.30	0.3	0.8	16	14.70	1.50
QA/QC															
Blank	1.2	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1
Certified standards															
OREAS 601b	298	92.1	22.7	4	11	3.3	0.97	0.5	13.30	11.90	1.5	4.5	6	10.90	0.50
OREAS 905	32.9	138	2.0	5.5	3	4.1	1.47	0.8	0.12	14.80	0.7	5.0	2.8	15.80	0.70

3260 Production Way
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Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
	Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
	Expected value															
	Tolerance (%)															
	Expected value															
	Tolerance (%)															

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 20619-PR2
SGS project #: 1905-11-07

Work order date: 24-Jul-25
Report date: 8-Sep-25
Sample receipt date: Jun-25
Version: Final

Customer details

Name:	Timo krichner
Address:	Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 23

Report Distribution

Name	Email
Timo krichner	

Special notes:

Composite HC11 prepared using equal quantities of
CAOND270714
CAOND270704
CAOND270679

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR2
SGS project #: 2138

Work order date: 24-Jul-25
Report date: 8-Sep-25

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2	1	0.5	0.02	1	0.1	0.04	0.02	0.05
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	2500	10000	10000	1000
Sample ID																									
NEB-2025-001 CAOND270687	6.440	82	6.91	116	560.0	4.49	2.84	17	2.73	556	0.09	50.0	0.02	0.06	48.6	0.33	250	23	68	0.11	3	0.7	0.52	<0.02	19.18
NEB-2025-002 CAOND270688	8.200	60	5.26	261	224.0	6.01	0.98	15	4.42	869	2.72	81.0	0.02	0.05	118	0.42	257	39	43	0.04	6	0.3	0.06	<0.02	8.56
NEB-2025-003 CAOND270700	9.710	11	0.35	83	5.1	3.72	0.23	23	3.40	166	5.80	46.0	0.09	<0.01	36.6	0.25	203	27	63	0.04	1	0.5	0.08	<0.02	3.56
NEB-2025-004 CAOND245043	7.800	146	3.65	41	4.5	3.05	0.77	13	1.86	473	4.69	20.0	0.10	0.01	336	0.29	107	37	87	0.76	3	1.3	0.15	<0.02	38.41
NEB-2025-005 CAOND245044	7.880	470	2.77	22	4.0	1.84	2.21	11	0.92	268	3.29	12.0	0.05	0.11	348	0.14	48	28	35	0.03	2	1	0.06	<0.02	17.54
NEB-2025-006 CAOND270698	8.080	158	2.24	12	3.4	1.87	2.11	4	0.66	269	3.94	10.0	0.05	0.02	128	0.12	42	24	51	<0.02	2	1.2	<0.04	<0.02	28.78
NEB-2025-007 CAOND270695	6.360	35	6.42	46	112.0	10.7	0.14	13	2.96	1876	1.58	60.0	0.10	0.13	147	1.08	390	107	57	0.03	10	0.4	<0.04	0.04	12.4
NEB-2025-008 CAOND245050	6.740	33	5.07	136	71.8	9.03	0.17	24	3.54	1300	1.80	73.0	0.10	0.11	45.6	0.88	334	74	35	<0.02	9	0.7	0.08	0.04	8.33
NEB-2025-009 CAOND270692	5.710	131	6.88	18	228.0	10.05	1.36	22	2.45	1076	0.05	43.0	0.06	1.02	34.7	0.71	424	52	31	0.10	42	0.7	1.70	<0.02	30.95
NEB-2025-010 CAOND270693	6.410	186	2.89	11	62.6	10.04	1.54	24	4.12	513	0.15	35.0	0.06	0.17	27.1	0.65	471	44	58	<0.02	15	0.8	0.16	<0.02	19.55
NEB-2025-011 CAOND270694	6.850	146	3.47	86	92.7	8.2	0.86	11	3.14	935	3.39	55.0	0.05	0.01	138	0.62	293	63	50	0.07	5	0.7	<0.04	0.07	24.92
NEB-2025-012 CAOND245049	7.500	70	5.06	190	653.0	7.69	0.61	14	4.21	681	2.77	74.0	0.02	0.09	156	0.48	294	33	45	0.10	7	0.3	0.16	0.17	11.39
NEB-2025-013 CAOND245047	6.650	26	6.36	132	131.0	9	0.1	16	2.91	1661	1.86	67.0	0.11	0.26	122	0.92	345	102	57	0.03	9	0.6	<0.04	0.03	12.54
NEB-2025-014 CAOND245048	7.210	17	5.72	130	108.0	8.88	0.03	13	2.55	1387	2.46	80.0	0.10	0.23	193	0.99	374	89	51	0.03	9	0.5	0.06	0.04	16.84
NEB-2025-015 CAOND245046	6.470	54	4.4	85	75.6	8.12	0.58	8	3.04	951	3.70	55.0	0.04	0.01	117	0.67	307	52	35	0.02	4	0.6	<0.04	0.03	19.75
NEB-2025-016 CAOND270696	6.110	35	5.59	25	174.0	12.37	0.19	11	3.38	1621	1.56	59.0	0.09	0.14	139	1.19	566	104	55	0.04	9	0.4	<0.04	0.04	10.13
NEB-2025-017 CAOND270697	6.490	26	5.19	102	3315.0	7.11	0.14	20	3.36	591	2.93	68.0	0.02	0.49	107	0.47	275	32	76	0.52	5	0.4	0.29	0.06	12.4
NEB-2025-018 CAOND245042	6.800	28	3.01	40	199.0	8.44	0.22	27	3.93	814	2.82	31.0	0.05	0.04	69.3	0.75	368	56	55	0.06	4	0.8	0.10	<0.02	14.97
NEB-2025-019 CAOND245045	7.300	34	4.31	206	1607.0	8.37	0.54	17	2.99	561	3.49	72.0	0.02	0.17	83.3	0.43	277	26	34	0.06	3	0.3	0.13	<0.02	9.01
NEB-2025-020 CAOND245041	7.160	40	4.46	187	67.8	7.45	0.39	28	4.48	1004	2.69	94.0	0.03	0.03	66.1	0.49	258	51	35	<0.02	4	0.5	<0.04	<0.02	9.19
NEB-2025-021 CAOND270714	7.990	47	5.83	128	143.0	8.6	0.3	35	4.83	1364	2.10	129.0	0.03	0.13	141	0.65	293	70	27	0.04	23	0.2	<0.04	0.04	6.58
NEB-2025-022 CAOND270711	6.050	21	6.22	36	80.9	11.2	0.13	26	2.73	2490	1.25	48.0	0.12	0.19	28.8	1.28	426	117	77	0.04	37	0.4	<0.04	<0.02	12.84
NEB-2025-023 CAOND270710	6.740	14	4.5	41	123.0	8.63	0.1	23	2.59	1799	2.48	50.0	0.10	0.26	27.5	1.01	314	94	94	0.03	19	0.6	<0.04	0.03	18.32
NEB-2025-024 CAOND270709	6.570	27	4.71	94	33.8	7.34	0.16	37	3.58	515	2.54	59.0	0.04	0.02	61.6	0.60	290	48	36	0.03	3	0.5	<0.04	<0.02	16.94
NEB-2025-025 CAOND270708	7.910	136	1.89	35	442.0	2.84	0.69	13	1.71	211	4.56	23.0	0.07	0.02	148	0.18	86	19	66	0.19	2	0.8	0.22	<0.02	35.69
NEB-2025-026 CAOND270707	7.060	122	4.01	49	14.1	4.19	1.25	25	2.99	410	2.18	45.0	0.06	<0.01	67.3	0.43	231	38	60	0.08	3	0.8	0.13	<0.02	17.1
NEB-2025-027 CAOND270712	6.730	66	7.93	148	94.7	6.11	1.96	33	3.77	797	0.75	85.0	0.01	0.05	117	0.32	220	32	35	0.03	2	0.7	0.08	0.03	8.78
NEB-2025-028 CAOND270713	7.250	36	3.66	206	5469.0	8.87	0.22	20	4.11	766	2.79	138.0	0.04	0.37	105	0.41	284	44	48	2.26	3	0.5	0.84	<0.02	23.12
NEB-2025-029 CAOND270718	6.770	34	6.25	124	140.0	8.46	0.79	29	2.97	1696	1.67	79.0	0.09	0.24	85.4	0.93	327	93	42	0.04	8	0.6	0.13	<0.02	20.5
NEB-2025-030 CAOND270699	7.240	106	4.78	18	17.7	2.02	2.2	8	1.04	765	3.03	17.0	0.07	0.02	63.9	0.10	61	12	52	0.04	2	0.8	0.05	<0.02	50.06
NEB-2025-031 CAOND270719	4.460	54	7.28	75	65.0	6.75	1.02	27	2.00	746	0.49	37.0	0.08	0.12	40.3	0.41	272	40	41	0.06	8	0.8	0.49	<0.02	32.52
NEB-2025-032 CAOND270706	7.090	41	6.79	111	115.0	8.78	0.31	20	2.60	1791	1.47	78.0	0.10	0.20	226	0.98	352	94	50	0.03	6	0.4	<0.04	0.04	13.74
NEB-2025-033 CAOND270705	7.240	30	6.66	156	139.0	8.79	0.14	15	2.28	1579	1.85	80.0	0.10	0.24	258	1.02	374	78	44	0.03	6	0.5	<0.04	0.04	10.96
NEB-2025-034 CAOND270704	6.190	163	6.43	56	143.0	9.36	1.65	19	2.64	1379	0.56	51.0	0.07	0.72	74.5	0.47	363	74	37	0.08	31	0.8	0.15	0.05	15.29
NEB-2025-035 CAOND270703	5.840	117	6.83	14	943.0	10	1.47	22	2.23	727	0.69	41.0	0.06	0.74	58.8	0.54	431	35	56	0.27	27	0.6	0.23	<0.02	14.97
NEB-2025-036 CAOND270701	7.100	470	2.92	47	37.0	3.47	2.6	5	1.41	484	3.70	23.0	0.06	<0.01	232	0.20	91	29	47	0.06	3	0.9	0.06	<0.02	21.35
NEB-2025-037 CAOND270702	7.260	383	2.24	19	38.7	2.06	2.33	6	0.79	293	3.81	12.0	0.05	<0.01	236	0.13	55	23	32	0.11	1	1	0.10	<0.02	14.76
NEB-2025-038 CAOND270715	7.260	118	5.9	91	33.7	4.67	0.85	24	2.90	822	3.12	28.0	0.15	0.11	69	0.35	145	61	106	0.03	2	1.1	<0.04	0.03	47.7
NEB-2025-039 CAOND270716	6.460	31	4.2	107	124.0	7.31	0.36	18	3.17	796	3.21	58.0	0.04	0.02	91.3	0.56	267	64	51	0.06	3	0.6	0.05	0.04	22
NEB-2025-040 CAOND270717	7.240	158	2.42	14	442.0	2.31	1.39	7	0.72	263	4.40	11.0	0.06	0.32	149	0.10	54	18	42	0.29	1	0.9	0.21	<0.02	31.48
NEB-2025-041 CAOND270684	7.850	145	3.83	23	68.1	2.15	0.91	9	1.05	272	4.68	23.0	0.06	0.03	145	0.18	74	15	57	0.07	2	0.7	0.31	0.04	21.24
NEB-2025-042 CAOND270677	6.570	86	5.6	15	183.0	9.5	2.1	14	1.87	641	0.14	37.0	0.06	0.21	42.7	0.70	498	21	47	0.03	9	0.7	0.13	<0.02	17.29
NEB-2025-043 CAOND270676	7.520	444	2.92	21	20.3	3.26	2.43	6	1.03	467	3.89	14.0	0.07	0.02	262	0.21	83	34	51	0.03	1	1.1	<0.04	0.03	31.91
NEB-2025-044 CAOND270678	5.940	47	5.74	22	84.5	10.98	0.26	12	2.68	1654	1.90	33.0	0.13	0.17	105	1.29	422	104	56	0.04	10	0.6	0.29	0.05	18.17
NEB-2025-045 CAOND270680	5.720	42	6.11	19	79.0	11.02	0.19	16	2.89	1335	1.59	34.0	0.13	0.05	78.1	1.10	377	88	54	0.03	5	0.5	<0.04	0.04	13.86
NEB-2025-046 CAOND270682	6.600	23	5.71	34	101.0	11.28	0.11	17	4.12	1599	1.34	79.0	0.10	0.16	129	1.04	388	107	48	0.03	15	0.4	<0.04	0.06	10.3
NEB-2025-047 CAOND270679	6.820	13	5.19	146	462.0	8.92	0.1	21	2.82	1583	2.35	79.0	0.10	0.25	38.1	0.97	343	87	41	0.02	17	0.5	0.09	0.03	9.57
NEB-2025-048 CAOND270689	6.900	276	2.55	20	33.3	1.82	2.21	5	1.13	337	2.72	11.0	0.05	0.03	135	0.10	50	20	32	0.09	1	0.9	0.14	0.02	21.58
NEB-2025-049 CAOND270690	6.920	945	3.6	101	18.4	3.47	2.9	17	2.35	684	2.75	35.0	0.11	0.08	464	0.17	86	48	100	0.02	3	1.9	0.11	0.05	65.71
NEB-2025-050 CAOND270691	7.200	189	5.76	46	2.5	1.64	1.07	16	2.79	518	3.99	11.0	0.20	0.02	517	0.31	92	27	76	<0.02	6	1.6	0.05	0.03	31.65
Duplicates																									
*Rep NEB-2025-013 CAOND245047	6.620	26	6.3	135	130.0	9.02	0.1	16	2.92	1661	1.86	67.0	0.11	0.26	120	0.92	343	103	55	0.03	9	0.6	<0.04	0.02	12.64
*Rep NEB-2025-041 CAOND270684	7.890	147	3.84	25	70.9	2.17	0.92	11	1.05	275	4.72	23.0	0.06	0.03	145	0.18	74	15	57	0.07	2	0.7	0.32	0.04	22.18
QA/QC																									
*Blk BLANK	<0.01	<1	<0.01	<1	1.1	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<2	1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05
Certified standards																									
*Std OREAS 609b	6.620	583	0.9	13	4923.0	2.93	2.66	31	0.14	218	1.87	7.0	0.04	2.30	210	0.12	14	1327	172	24.08	1469	2.4	107.00	8.29	75.07
*Std OREAS 681	7.880	398	5.68	1636	271.0	7.36	1.41	14	5.15	1252	1.64	463.0	0.15	0.11	452	0.56	250	87	52	0.13	1	1.4	0.09	0.07	42

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Test	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	1000	1000	500	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
Sample ID																								
NEB-2025-001 CAOND270687	24.6	2	15.0	2.14	0.06	10.9	0.32	17.820	2.2	1.3	111	4.6	38.2	<2	0.3	0.14	0.4	0.15	0.40	0.5	0.5	31.3	12.30	2.00
NEB-2025-002 CAOND270688	41	2	15.5	1.33	0.05	3.3	0.35	1.730	2.4	1.2	64.2	1.8	40.1	<2	<0.3	0.17	0.5	<0.05	0.30	0.3	0.1	1.8	19.80	2.40
NEB-2025-003 CAOND270700	21.5	<1	17.4	2.29	<0.02	1.7	0.1	6.530	2.4	1.7	3	0.4	21.8	<2	0.5	0.19	0.2	<0.05	2.20	0.0	0.5	6.7	3.80	0.60
NEB-2025-004 CAOND245043	13.6	<1	17.5	2.52	0.03	17.2	0.15	9.770	6.2	3.2	32.5	0.7	13.2	<2	0.7	0.38	0.4	<0.05	3.70	0.1	1.2	35.3	9.60	1.00
NEB-2025-005 CAOND245044	6.6	2	19.5	1.32	<0.02	8	0.05	3.000	1.9	3.5	90.3	1.4	6.1	<2	<0.3	0.12	0.2	<0.05	1.20	0.2	0.5	9.5	3.50	0.30
NEB-2025-006 CAOND270698	6.2	2	20.3	1.63	<0.02	14.1	0.06	0.670	2.6	2.6	65.5	1.0	4.2	<2	<0.3	0.16	0.2	<0.05	2.10	0.2	0.8	5.9	3.70	0.40
NEB-2025-007 CAOND270695	50.8	<1	18.2	1.73	0.08	4.8	0.36	0.530	3.7	1.2	3.7	0.6	44.8	<2	<0.3	0.23	0.7	<0.05	0.30	0.0	0.1	0.1	23.50	2.40
NEB-2025-008 CAOND245050	43.2	<1	16.8	1.08	0.05	3	0.24	0.940	2.7	0.7	8	0.8	42.9	<2	<0.3	0.19	0.5	<0.05	<0.2	0.0	0.1	1.4	16.90	1.70
NEB-2025-009 CAOND270692	61.2	2	16.8	1.11	0.13	14.3	0.3	3.450	2.6	2.2	60.7	1.8	34.1	<2	1.8	0.18	0.6	0.98	0.30	0.4	0.2	13.1	13.50	1.80
NEB-2025-010 CAOND270693	54.6	2	19.9	1.91	0.06	9	0.31	1.080	2.3	1.2	67.7	3.0	39.7	<2	0.5	0.15	0.5	<0.05	0.40	0.4	0.2	29.5	10.90	1.80
NEB-2025-011 CAOND270694	35.8	<1	18.8	1.80	0.07	10.4	0.68	6.170	5.5	1.7	22.5	2.0	36.1	<2	0.4	0.34	1.1	<0.05	1.40	0.1	0.4	2.5	38.00	4.60
NEB-2025-012 CAOND245049	63.8	<1	16.4	1.50	0.06	5	0.38	7.820	2.6	1.2	28	3.5	43.6	<2	<0.3	0.17	0.6	0.07	0.30	0.1	0.2	2.6	21.90	2.60
NEB-2025-013 CAOND245047	46.4	<1	17.6	1.52	0.06	4.9	0.3	0.510	3.1	1.4	2.1	1.5	44.9	<2	<0.3	0.19	0.6	<0.05	0.40	<0.02	0.1	1.7	19.20	2.00
NEB-2025-014 CAOND245048	51.5	<1	18.0	1.44	0.06	7.4	0.27	0.390	3.0	1.2	0.8	2.8	48.6	<2	<0.3	0.20	0.6	<0.05	<0.2	<0.02	0.1	0.4	19.10	1.90
NEB-2025-015 CAOND245046	35	<1	18.1	1.49	0.06	7.2	0.74	10.830	5.7	1.6	14.7	2.0	35.8	<2	0.6	0.35	1.2	<0.05	0.60	0.1	0.2	2.4	41.80	5.00
NEB-2025-016 CAOND270696	53.7	<1	19.1	1.60	0.07	3.7	0.38	0.590	3.5	2	5	0.4	48.7	<2	<0.3	0.22	0.7	<0.05	0.20	0.0	0.1	0.1	22.10	2.40
NEB-2025-017 CAOND270697	31.4	<1	16.2	2.40	0.06	4.9	0.38	238.000	3.7	1.6	3.6	2.2	35.6	<2	1.2	0.23	0.5	0.14	0.40	<0.02	0.7	8.3	13.60	2.20
NEB-2025-018 CAOND245042	32.9	<1	16.8	1.70	0.04	6	0.42	9.090	3.7	1.3	8.3	1.2	38.1	<2	<0.3	0.23	0.7	<0.05	0.80	<0.02	0.3	2.3	23.30	2.70
NEB-2025-019 CAOND245045	43	<1	13.9	1.04	0.04	3.8	0.28	31.950	1.6	0.6	12.9	1.4	38.9	<2	<0.3	0.10	0.5	0.07	<0.2	0.1	0.1	2.7	15.40	1.90
NEB-2025-020 CAOND245041	37.5	<1	15.3	1.08	0.03	3.4	0.39	3.510	2.7	0.9	15.9	1.1	35.2	<2	<0.3	0.18	0.6	<0.05	0.30	0.1	0.1	2.4	21.90	2.60
NEB-2025-021 CAOND270714	50.7	<1	16.0	0.86	0.04	2.5	0.16	0.310	2.5	0.9	9	0.7	38	<2	<0.3	0.17	0.3	<0.05	<0.2	0.1	<0.05	0.3	10.10	1.00
NEB-2025-022 CAOND270711	48.1	<1	17.6	2.11	0.06	4.7	0.41	0.320	4.5	0.8	2.4	0.4	40.7	<2	<0.3	0.29	0.7	<0.05	0.30	0.0	0.1	0.5	25.00	2.70
NEB-2025-023 CAOND270710	43.5	<1	18.0	2.48	0.06	6.8	0.37	0.700	5.0	1.1	3.1	0.4	35.7	<2	<0.3	0.32	0.7	<0.05	0.90	<0.02	0.3	0.9	24.30	2.60
NEB-2025-024 CAOND270709	33.2	<1	16.9	1.31	0.04	6.4	0.36	6.640	4.7	1.4	4.8	2.0	34.8	<2	0.4	0.29	0.5	<0.05	0.50	<0.02	0.2	9.3	12.30	2.20
NEB-2025-025 CAOND270708	13.1	<1	19.0	2.05	<0.02	16.1	0.11	5.620	2.5	1.4	23.9	0.9	10.3	<2	<0.3	0.15	0.3	0.10	2.20	0.1	0.8	6.9	6.50	0.70
NEB-2025-026 CAOND270707	23.1	2	19.2	2.13	0.03	7.2	0.26	15.330	3.7	1.5	46.4	3.1	23.9	<2	0.9	0.22	0.4	<0.05	1.10	0.2	0.5	10.8	10.10	1.60
NEB-2025-027 CAOND270712	32	3	13.1	1.22	0.04	3.7	0.25	9.500	1.9	1.6	82.7	8.3	32.3	<2	0.4	0.12	0.3	<0.05	0.20	0.4	0.2	20.2	8.80	1.40
NEB-2025-028 CAOND270713	43.1	<1	16.3	1.56	0.08	12.5	0.38	123.000	2.4	1.6	7.1	5.1	34.7	4	0.8	0.15	0.6	0.35	0.80	0.0	0.5	4.2	19.70	2.30
NEB-2025-029 CAOND270718	53.5	<1	16.6	1.23	0.06	9	0.28	1.010	2.8	0.9	6.3	1.3	42.5	<2	<0.3	0.18	0.6	<0.05	<0.2	<0.02	0.1	13.5	18.00	1.90
NEB-2025-030 CAOND270699	10.1	1	16.7	1.68	0.04	23.8	0.14	1.350	2.0	1.4	50.2	1.4	5.8	<2	<0.3	0.12	0.4	<0.05	2.50	0.2	0.8	8.5	9.70	1.00
NEB-2025-031 CAOND270719	32.4	1	11.8	1.22	0.06	15.3	0.27	3.420	1.8	1.7	26.7	1.3	23.7	<2	0.4	0.11	0.6	<0.05	0.80	0.2	0.3	4.2	14.60	1.60
NEB-2025-032 CAOND270706	51.6	<1	18.2	1.50	0.06	5.4	0.28	0.430	3.0	1.4	4.1	1.4	45.5	<2	<0.3	0.19	0.6	<0.05	<0.2	<0.02	0.1	1.1	18.60	1.90
NEB-2025-033 CAOND270705	52.3	<1	18.4	1.41	0.06	4.2	0.27	0.420	3.1	1.5	2.3	1.7	47.4	<2	<0.3	0.21	0.6	<0.05	0.20	<0.02	0.1	0.9	18.90	1.90
NEB-2025-034 CAOND270704	47.8	2	16.5	1.12	0.10	6.7	0.23	3.240	1.6	2.6	68.2	1.9	36.2	<2	0.9	0.12	0.4	0.06	0.40	0.4	0.2	4.9	10.30	1.40
NEB-2025-035 CAOND270703	135	2	18.1	1.64	0.09	6.7	0.37	2.190	2.0	1.4	67	3.2	35.2	<2	0.5	0.13	0.5	0.07	0.30	0.4	0.3	11.8	11.50	2.00
NEB-2025-036 CAOND270701	12	<1	17.2	1.52	0.02	10.1	0.1	3.100	2.3	1.8	44.5	0.6	9.7	<2	0.4	0.13	0.2	<0.05	1.70	0.2	0.6	2.5	6.10	0.70
NEB-2025-037 CAOND270702	6.5	<1	18.6	1.14	<0.02	7	0.05	5.540	1.7	1.8	51.6	0.6	5.1	<2	<0.3	0.11	0.2	<0.05	1.10	0.1	0.4	4.7	3.40	0.30
NEB-2025-038 CAOND270715	22.9	1	17.0	2.88	0.04	20.4	0.2	0.450	3.7	1.7	35.2	0.4	18.5	<2	0.9	0.27	0.5	<0.05	3.20	0.2	1.0	1.1	12.90	1.30
NEB-2025-039 CAOND270716	30.8	<1	17.0	1.59	0.05	8.4	0.64	33.450	4.8	5.1	8.8	3.2	31.5	<2	1.1	0.33	0.9	<0.05	0.70	0.0	0.4	4.5	30.00	4.10
NEB-2025-040 CAOND270717	6.8	<1	18.0	1.38	0.02	13.8	0.08	8.620	1.8	1.9	35.5	1.4	5.2	<2	0.5	0.12	0.2	0.10	1.90	0.1	0.6	4.6	5.00	0.50
NEB-2025-041 CAOND270684	10.4	1	17.9	1.72	0.02	10	0.08	224.000	1.6	1.3	39.1	1.6	6.2	<2	0.5	0.11	0.2	0.08	1.20	0.2	0.5	2.8	5.30	0.50
NEB-2025-042 CAOND270677	52.1	3	20.3	1.35	0.10	6.8	0.31	2.090	3.0	1	79.3	6.6	41.7	<2	0.8	0.19	0.4	0.06	0.40	0.4	0.2	18.6	10.90	1.80
NEB-2025-043 CAOND270676	10.6	<1	19.2	1.65	0.03	13.9	0.1	1.400	3.0	2.4	43.5	0.9	7.7	<2	0.7	0.17	0.3	<0.05	2.40	0.2	0.8	5.3	6.20	0.60
NEB-2025-044 CAOND270678	47.7	2	18.7	1.82	0.09	6.6	0.43	2.310	4.7	1.8	6.5	1.1	44	<2	0.5	0.29	0.8	<0.05	0.30	0.0	0.1	1.7	26.00	2.90
NEB-2025-045 CAOND270680	45.8	<1	18.1	1.54	0.08	4.7	0.46	0.480	4.3	1	4.1	0.8	42.8	<2	0.3	0.29	0.8	<0.05	0.30	0.0	0.1	1.9	27.10	3.10
NEB-2025-046 CAOND270682	56	<1	17.7	1.42	0.08	3.6	0.34	0.480	3.4	1.1	2.9	1.7	42	<2	0.5	0.23	0.6	<0.05	0.20	0.0	0.1	0.3	19.70	2.30
NEB-2025-047 CAOND270679	53	<1	16.5	1.30	0.07	3.2	0.28	0.680	3.0	1	5.1	0.8	42.5	<2	0.5	0.21	0.5	<0.05	0.20	0.0	0.1	2	16.60	1.80
NEB-2025-048 CAOND270689	7	2	17.0	1.15	<0.02	9.5	0.06	1.190	1.4	3.5	57.5	3.4	5.3	<2	0.4	0.09	0.2	<0.05	1.10	0.2	0.4	15.3	4.20	0.40
NEB-2025-049 CAOND270690	17.5	3	18.0	2.86	0.04	30	0.18	1.340	2.8	5.7	103	2.1	12.1	<2	0.8	0.19	0.5	<0.05	5.00	0.5	1.8	2.6	12.60	1.20
NEB-2025-050 CAOND270691	6.1	<1	15.4	2.12	0.05	11.8	0.15	1.570	6.6	3	28.8	0.9	18.7	<2	0.9	0.37	0.4	<0.05	2.80	0.1	0.7	6.1	10.20	1.00
Duplicates																								
*Rep NEB-2025-013 CAOND245047	48.6	<1	17.6	1.56	0.07	5	0.3	0.480	3.2	1.4	2.1	1.5	45.1	<2	<0.3	0.19	0.6	<0.05	0.40	<0.02	0.1	1.7	18.90	2.00
*Rep NEB-2025-041 CAOND270684	10.6	1	18.2	1.64	0.02	10.6	0.08	228.000	1.6	1.8	39.8	1.7	6.4	<2	0.5	0.10	0.2	0.06	1.20	0.2	0.4	2.9	5.30	0.50
QA/QC																								
*Blk BLANK	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01	<0.05	<0.1	<0.5	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1
Certified standards																								
*Std OREAS 609b	5.3	6	21.7	4.86	2.09	36.2	0.08	5.560	14.1	443	106	167.0	3.7	14	11.9	1.04	0.6	22.42	12.30	1.4	4.2	4.2	11.60	0.60
*Std OREAS 681	49.7	4	16.7	1.62	0.04	18.8	0.3	1.530	6.3	10.3	76.8	0.4	27.4	<2	1.9	0.46	0.6	0.17	6.50	0.2	1.4	1.1	17.30	2.00

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SGS

Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7
OREAS 609B	Expected value	6.71		0.939	19.9	4980	2.89	2.53	30.9	0.147	230	1.91	7.35	0.033	2.27	219	0.122	14.4
	Tolerance (%)	10.37		11.33	<=28	10.03	10.87	10.99	18.09	13.40	12.17	10.65	44.01	17.58	10.55	10.57	12.05	44.72
OREAS 681	Expected value	7.91	442	5.98	1642	264	7.47	1.35	13	5.19	1310	1.61	503	0.141	0.109	478	0.588	253
	Tolerance (%)	10.32	10.57	10.21	15.15	10.47	10.33	11.85	29.23	10.10	10.38	10.78	10.50	11.77	21.47	10.26	10.43	11.98

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
	Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7
OREAS 609B	Expected value	1,308	181	24.6	1,500	2.43	110	8.16	71	5.43	5.28	23	5	2.05	35.3	0.083	5.54	14.6
	Tolerance (%)	10.19	10.69	10.20	10.17	15.14	10.02	10.61	10.18	14.60	12.37	10.54	11.00	10.61	10.35	40.12	12.26	11.71
OREAS 681	Expected value	88	58	0.118		1.41	0.098		40.6	51	4.02	17.6	1.7	0.042	18.8	0.27	1.38	6.17
	Tolerance (%)	12.84	12.16	52.37		18.87	35.51		10.31	10.49	13.11	10.71	12.94	39.76	10.66	19.26	19.06	14.05

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
OREAS 609B	Expected value	448	109	158	3.73	15.5	11.6	1.07	0.57	21.5	12.2		4.26	4.42	11.4	0.56
	Tolerance (%)	10.28	10.23	10.08	16.70	26.13	14.31	26.68	31.93	10.58	10.20		12.93	20.66	12.19	54.64
OREAS 681	Expected value	10.2	80	0.24	27.7		1.89	0.42	0.58		6.55		1.44	1.09	17.5	1.77
	Tolerance (%)	22.25	10.31	62.08	10.90		36.46	44.76	31.55		10.38		18.68	37.94	11.43	24.12

3260 Production Way
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Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 26-Sep-22
Sample receipt date: in house
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 14, 15

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Special notes:

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

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Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
HC-7 Basalt (Open Pit)	6.890	163	4.55	102	125.0	7.88	1.04	16	3.67	938	2.51	67.0	0.04	0.18	197	0.70	327
HC-8 Crowded Porphyry	6.250	728	7.03	10	284.0	2.27	2.56	11	1.17	533	2.00	14.0	0.06	0.16	245	0.15	69
HC-9 Mafic Intrusive Rock	7.100	58	4.97	169	171.0	7.6	0.66	22	4.32	1030	2.18	91.0	0.03	0.09	153	0.56	283
HC-10 Mixed PAG	7.630	394	4.28	62	456.0	7.21	1.61	11	1.81	710	2.27	41.0	0.05	1.93	285	0.50	223
Duplicates																	
HC-9 Mafic Intrusive Rock	7.080	56	4.98	175	172.0	7.56	0.65	22	4.31	1032	2.14	92.0	0.03	0.09	153	0.56	287
QA/QC																	
Blank	<0.01	<1	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<2
Certified standards																	
OREAS 601B	6.390	685	0.86	15	1013.0	2.31	2.37	21	0.10	209	1.80	6.0	0.03	1.49	232	0.13	12
OREAS 905	7.150	2641	0.56	18	1529.0	4.12	2.86	19	0.27	371	2.27	12.0	0.03	0.07	150	0.12	10

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Report date: 20-Apr-22

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
Sample ID																	
HC-7 Basalt (Open Pit)	50	105	0.16	11	0.7	0.16	<0.02	21.46	50.1	1	20.6	3.77	0.09	8.6	0.8	0.930	6.7
HC-8 Crowded Porphyry	23	46	0.86	7	0.8	2.92	0.15	28.63	14.9	3	16.3	1.66	0.04	13.7	0.15	328.000	2.3
HC-9 Mafic Intrusive Rock	49	56	0.07	9	0.4	0.07	<0.02	12.99	45.7	1	18.4	2.11	0.07	4.9	0.45	1.100	3.8
HC-10 Mixed PAG	39	71	0.35	16	0.6	2.33	0.03	21.1	49.2	2	21.2	2.46	0.08	9.2	0.37	5.610	4.4
Duplicates																	
HC-9 Mafic Intrusive Rock	50	56	0.11	11	0.5	0.07	<0.02	12.52	46.6	1	18.5	2.08	0.07	4.6	0.43	1.040	3.7
QA/QC																	
Blank	<1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01	<0.05	<0.1
Certified standards																	
OREAS 601B	320	180	50.12	288	2.5	16.43	2.06	72.78	3.1	5	24.0	5.60	0.51	37	0.07	5.210	15.2
OREAS 905	137	247	0.71	32	3.3	5.38	0.36	95.62	16	7	26.1	7.27	0.69	47.1	0.1	3.660	19.4

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Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
Sample ID															
HC-7 Basalt (Open Pit)	3.7	68.9	5.5	44.4	<2	1.1	0.42	1.3	<0.05	0.70	0.3	0.5	2.6	47.40	4.80
HC-8 Crowded Porphyry	5.3	109	5.1	10.3	<2	0.6	0.15	0.5	0.10	1.90	0.6	0.7	3.5	14.50	1.00
HC-9 Mafic Intrusive Rock	1.4	43.1	3.4	41.4	<2	0.7	0.25	0.8	<0.05	0.40	0.2	0.1	1.7	26.90	2.80
HC-10 Mixed PAG	3.2	95.6	5.5	32.4	2	1.1	0.31	0.6	0.30	1.10	0.3	0.4	9.1	22.20	2.20
Duplicates															
HC-9 Mafic Intrusive Rock	1.3	43.4	3.6	43.3	<2	0.7	0.24	0.8	<0.05	0.40	0.2	0.1	1.7	28.50	2.80
QA/QC															
Blank	<0.5	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1
Certified standards															
OREAS 601B	285	97.3	25.0	4.4	9	3.7	1.23	0.6	12.10	12.40	1.4	4.8	6.4	11.80	0.50
OREAS 905	27.9	145	2.1	6	3	4.3	1.49	0.9	0.08	14.50	0.7	5.2	2.9	16.40	0.60

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Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
	Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
	Expected value															
	Tolerance (%)															
	Expected value															
	Tolerance (%)															

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Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 13

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Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

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Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
CAOND168764	7.110	38	4.98	82	81.3	7.09	0.48	16	3.20	1106	2.21	53.0	0.04	0.15	251	0.69	313
CAOND169343	7.340	418	4.2	24	2988.0	6.72	1.18	9	2.45	925	4.12	28.0	0.05	0.32	209	0.82	362
CAOND188908	8.270	608	3.11	14	162.0	2.2	3.82	11	0.71	271	3.20	9.0	0.08	0.08	210	0.15	61
CAOND164896	7.170	48	5.52	112	133.0	8.4	0.68	23	4.37	1149	1.58	70.0	0.04	0.17	197	0.68	310
CAOND169332	7.270	100	4.06	32	653.0	7.78	0.47	20	2.79	879	3.66	28.0	0.05	0.36	167	0.80	387
Duplicates																	
CAOND164896	7.170	46	5.45	113	130.0	8.35	0.66	23	4.36	1146	1.56	72.0	0.04	0.18	193	0.67	326
QA/QC																	
Blank	<0.01	<1	<0.01	<1	0.6	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<2
Certified standards																	
OREAS 905	7.620	2681	0.58	10	1584.0	3.99	3.06	21	0.27	367	2.50	8.0	0.03	0.08	157	0.12	9
OREAS 601B	6.720	1404	0.86	15	1017.0	2.19	2.5	24	0.10	218	1.97	6.0	0.03	1.54	241	0.13	11

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Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
Sample ID																	
CAOND168764	41	106	0.04	14	0.6	0.10	0.02	23.3	37.2	<1	20.3	2.82	0.09	8.7	0.7	0.350	6.9
CAOND169343	37	74	0.54	38	0.9	0.28	0.03	16.44	51.4	<1	16.9	2.30	0.10	6.8	0.51	10.990	4.5
CAOND188908	21	62	0.03	4	1.2	0.37	0.02	46.66	10.1	6	20.9	2.08	<0.02	21.8	0.1	0.740	3.9
CAOND164896	50	71	0.08	14	0.4	0.07	<0.02	14.02	44.2	2	19.5	2.08	0.07	5	0.52	0.300	4.1
CAOND169332	39	69	0.14	19	0.5	0.27	0.02	8.83	63.1	<1	18.8	2.12	0.07	3.2	0.44	2.470	4.0
Duplicates																	
CAOND164896	49	71	0.05	14	0.4	0.07	0.03	13.8	44.2	1	19.4	2.02	0.08	4.9	0.52	0.290	4.1
QA/QC																	
Blank	<1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01	<0.05	<0.1
Certified standards																	
OREAS 905	131	247	0.57	35	2.9	5.90	0.38	92.99	15.1	7	26.4	7.40	0.69	44.5	0.1	3.430	16.0
OREAS 601B	300	189	49.59	275	2.3	17.20	2.08	69.42	3	5	24.0	5.36	0.48	34.5	0.07	5.300	13.7

3260 Production Way
Burnaby - British Columbia - V5A 4W4
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SGS proposal: 19195-PR1 COS1
SGS project #: 2138

Sample receipt date: 17-Jun-22
Report date: 4-Jul-22

Version: Final

Metals - Multi-Acid Digestion with ICP-OES/MS Finish

Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
Sample ID															
CAOND168764	2.2	25.8	5.6	35.8	3	1.1	0.41	1.2	<0.05	0.60	0.1	0.2	1.3	44.20	4.70
CAOND169343	2.6	34.1	9.1	38.8	3	1	0.28	0.8	0.07	0.70	0.2	0.8	4	28.40	3.30
CAOND188908	3	172	3.4	6.3	<2	0.7	0.21	0.3	0.08	3.50	0.7	1.2	10.1	6.90	0.60
CAOND164896	2.3	48.4	4.0	39.3	<2	0.8	0.25	0.8	0.06	0.40	0.3	0.1	0.7	31.20	3.40
CAOND169332	1.6	12.3	4.7	39.2	<2	0.8	0.27	0.6	<0.05	0.50	0.1	0.4	3.7	22.90	2.70
Duplicates															
CAOND164896	1.9	47	3.8	39.2	<2	0.8	0.27	0.8	0.05	0.40	0.3	0.1	0.7	31.20	3.40
QA/QC															
Blank	<0.5	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1
Certified standards															
OREAS 905	32.4	139	1.9	5	3	4.3	0.76	0.8	<0.05	14.70	0.7	5.1	2.7	15.80	0.70
OREAS 601B	297	97.1	23.1	3.7	12	3.5	0.84	0.5	12.12	11.60	1.5	4.5	6.1	11.00	0.50

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Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	2
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.02	0.1	0.01	0.05	0.1
	Upper detection	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7
	Expected value																	
	Tolerance (%)																	
	Expected value																	
	Tolerance (%)																	

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4
	Expected value															
	Tolerance (%)															
	Expected value															
	Tolerance (%)															

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : March 7/ 2022

Leachate Analysis

Sample ID			CAOND169332	CAOND188908	CAOND163784	Blank
Parameter	**Method**	**Units**				
Volume Nanopure Water		mL	750	750	750	750
Sample Weight		g	250	250	250	250
pH	meter		8.18	8.18	8.28	5.33
Redox	meter	mV	285	274	274	
Conductivity	meter	uS/cm	80	83	87	1.04
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.0	0.9	0.8	
Alkalinity	titration	mg CaCO3/L	34.7	35.4	37.9	
Chloride		mg/L	< 1	< 1	< 1	
Fluride		mg/L	< 0.06	< 0.06	< 0.06	
Sulphate	IC	mg/L	1.3	4.6	2.7	
Ion Balance						
Major Anions	Calc	meq/L	0.7217	0.8032	0.8139	
Major Cations	Calc	meq/L	0.8440	0.8586	0.8580	
Difference	Calc	meq/L	-0.1223	-0.0553	-0.0441	
Balance (%)	Calc	%	-1.69	-1.72	-1.72	
Dissolved Metals						
Hardness CaCO3		mg/L	34.1	34.8	29.2	
Aluminum Al	ICP-MS	mg/L	0.311	0.346	0.351	
Antimony Sb	ICP-MS	mg/L	< 0.0009	0.0024	0.0023	
Arsenic As	ICP-MS	mg/L	0.0004	0.0022	0.0089	
Barium Ba	ICP-MS	mg/L	0.00121	0.0153	0.120	
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	
Boron B	ICP-MS	mg/L	0.021	0.014	0.015	
Cadmium Cd	ICP-MS	mg/L	< 0.000003	< 0.000003	< 0.000003	
Calcium Ca	ICP-MS	mg/L	11.2	11.7	9.90	
Chromium Cr	ICP-MS	mg/L	0.00031	< 0.00008	< 0.00008	
Cobalt Co	ICP-MS	mg/L	0.000010	0.000015	0.000021	
Copper Cu	ICP-MS	mg/L	0.0002	0.0004	0.0004	
Iron Fe	ICP-MS	mg/L	< 0.007	< 0.007	< 0.007	
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	
Lithium Li	ICP-MS	mg/L	0.0002	0.0006	0.0009	
Magnesium Mg	ICP-MS	mg/L	1.46	1.36	1.10	
Manganese Mn	ICP-MS	mg/L	0.00092	0.00161	0.00272	
Mercury Hg	ICP-MS	ug/L	< 0.01	< 0.01	< 0.01	
Molybdenum Mo	ICP-MS	mg/L	0.00100	0.00092	0.00536	
Nickel Ni	ICP-MS	mg/L	< 0.0001	< 0.0001	0.0001	
Phosphorus P	ICP-MS	mg/L	< 0.003	0.008	0.013	
Potassium K	ICP-MS	mg/L	0.828	0.459	4.57	
Selenium Se	ICP-MS	mg/L	0.00014	0.00047	0.00030	
Silicon Si	ICP-MS	mg/L	1.66	1.90	2.09	
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	
Sodium Na	ICP-MS	mg/L	2.37	2.49	2.56	
Strontium Sr	ICP-MS	mg/L	0.0370	0.0675	0.149	
Sulphur (S)	ICP-MS	mg/L	< 1	2	1	
Thallium Tl	ICP-MS	mg/L	< 0.000005	< 0.000005	0.000009	
Tin Sn	ICP-MS	mg/L	< 0.00006	0.00014	0.00010	
Titanium Ti	ICP-MS	mg/L	0.00011	0.00023	< 0.00005	
Uranium U	ICP-MS	mg/L	0.000002	0.000013	0.000210	
Vanadium V	ICP-MS	mg/L	0.00502	0.01028	0.00183	
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 12-Sep-22
Report date: 4-Nov-22
Sample receipt date: 08-Sep-22
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 17

Report Distribution

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Special notes:

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SGS proposal: 19195-PR1
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Work order date: 12-Sep-22
Report date: 4-Nov-22

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

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SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 12-Sep-22
Report date: 12-Oct-22

Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			Mafic Syenite	Crowded Porphyry	High Sulfur	Basalt	Gabbro	Blank
Parameter	**Method**	**Units**						
Volume Nanopure Water		mL	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	-
pH	meter		7.72	8.03	7.69	8.05	8.19	5.95
Redox	meter	mV	268	287	325	318	315	-
Conductivity	meter	uS/cm	468	169	1137	134	80	2.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.6	1.1	2.1	1.1	0.8	-
Alkalinity	titration	mg CaCO3/L	21.1	33.8	23.6	37.5	35.9	-
Chloride		mg/L	< 1	< 1	1	< 1	< 1	-
Fluoride		mg/L	< 0.06	< 0.06	< 0.06	< 0.06	0.15	-
Sulphate	IC	mg/L	185.6	38.7	630.5	22.3	3.1	-
Ion Balance								
Major Anions	Calc	meq/L	4.29	1.48	13.64	1.22	0.79	
Major Cations	Calc	meq/L	4.47	1.59	12.54	1.37	0.84	
Difference	Calc	meq/L	-0.19	-0.11	1.09	-0.15	-0.04	
Balance (%)	Calc	%	-2.1%	-3.6%	4.2%	-5.9%	-2.8%	
Dissolved Metals								
Hardness CaCO3		mg/L	208	66	612.0	58.9	31.2	-
Aluminum Al	ICP-MS	mg/L	0.261	0.373	0.169	0.32	0.314	-
Antimony Sb	ICP-MS	mg/L	0.0028	0.0044	0.0031	0.0039	0.0024	-
Arsenic As	ICP-MS	mg/L	0.0011	0.0065	0.0013	0.0017	0.0015	-
Barium Ba	ICP-MS	mg/L	0.0368	0.0714	0.04400	0.0143	0.01940	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.028	0.021	0.035	0.027	0.028	-
Cadmium Cd	ICP-MS	mg/L	0.000004	0.000086	0.000003	0.000004	< 0.000003	-
Calcium Ca	ICP-MS	mg/L	79.3	22.8	242.0	20.3	9.7	-
Chromium Cr	ICP-MS	mg/L	< 0.00008	< 0.00008	< 0.00008	< 0.00008	0.00017	-
Cobalt Co	ICP-MS	mg/L	0.000031	0.000038	0.000103	0.000014	0.000024	-
Copper Cu	ICP-MS	mg/L	0.0003	0.0004	0.0002	0.0002	0.0005	-
Iron Fe	ICP-MS	mg/L	< 0.007	< 0.007	< 0.007	< 0.007	0.017	-
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0009	0.0009	0.0025	0.0005	0.0005	-
Magnesium Mg	ICP-MS	mg/L	2.45	2.22	2.08	2.01	1.71	-
Manganese Mn	ICP-MS	mg/L	0.00955	0.00646	0.01870	0.00335	0.00115	-
Mercury Hg	CVAAS	ug/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.0094	0.477	0.01190	0.00917	0.00258	-
Nickel Ni	ICP-MS	mg/L	0.0001	0.0001	0.0003	< 0.0001	< 0.0001	-
Phosphorus P	ICP-MS	mg/L	< 0.003	< 0.003	0.007	< 0.003	< 0.003	-
Potassium K	ICP-MS	mg/L	3.58	3.21	3.270	1.53	1.900	-
Selenium Se	ICP-MS	mg/L	0.00023	0.0008	0.00031	0.00039	0.00022	-
Silicon Si	ICP-MS	mg/L	1.4	1.53	1.34	1.65	2.01	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	3.88	2.66	3.40	2.33	2.67	-
Strontium Sr	ICP-MS	mg/L	0.729	0.622	1.3700	0.231	0.1130	-
Sulphur (S)	ICP-MS	mg/L	67	13	210.0	8	< 1	-
Thallium Tl	ICP-MS	mg/L	0.00001	0.000019	0.000009	< 0.000005	0.000005	-
Tin Sn	ICP-MS	mg/L	0.00073	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	< 0.00005	0.00016	0.00006	0.00026	0.00145	-
Uranium U	ICP-MS	mg/L	0.000119	0.000242	0.000220	0.000013	0.000005	-
Vanadium V	ICP-MS	mg/L	0.00174	0.00143	0.00105	0.00326	0.00881	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 20619-PR2
SGS project #: 1905-11-07

Work order date: 24-Jul-25
Report date: 8-Sep-25
Sample receipt date: Jun-25
Version: Final

Customer details

Name:	Timo krichner
Address:	Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 23

Report Distribution

Name	Email
Timo krichner	

Special notes:

Composite HC11 prepared using equal quantities of
CAOND270714
CAOND270704
CAOND270679

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR2 Work order date: 24-Jul-25
SGS project #: 2138 Report date: 8-Sep-25

Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			NEB-2025-012	NEB-2025-015	NEB-2025-025	FB-7	HC-11	Blank
Parameter	**Method**	**Units**						
Volume Nanopure Water		mL	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	-
pH	meter		7.98	8.18	8.11	8.07	8.15	5.64
Redox	meter	mV	283	293	310	319	304	-
Conductivity	meter	uS/cm	67	68	73	91	84	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	0.7	0.5	0.8	0.7	0.8	-
Alkalinity	titration	mg CaCO3/L	29.2	27.7	31.2	33.9	35.7	-
Chloride		mg/L	< 1	< 1	< 1	< 1	< 1	-
Fluoride		mg/L	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06	-
Sulphate	IC	mg/L	2.3	4.2	3.8	9.4	4.1	-
Ion Balance								
Major Anions	Calc	meq/L	0.63	0.64	0.70	0.87	0.80	
Major Cations	Calc	meq/L	0.71	0.71	0.75	0.96	0.89	
Difference	Calc	meq/L	-0.08	-0.07	-0.05	-0.08	-0.09	
Balance (%)	Calc	%	-6.2%	-5.4%	-3.5%	-4.5%	-5.3%	
Dissolved Metals								
Hardness CaCO3		mg/L	25.9	27.5	27.2	40.3	35.1	-
Aluminum Al	ICP-MS	mg/L	0.232	0.169	0.261	0.216	0.181	-
Antimony Sb	ICP-MS	mg/L	< 0.0009	< 0.0009	< 0.0009	< 0.0009	< 0.0009	-
Arsenic As	ICP-MS	mg/L	0.0013	0.0015	0.0021	0.002	0.0022	-
Barium Ba	ICP-MS	mg/L	0.00037	0.00109	0.03140	0.00873	0.00700	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.075	0.047	0.026	0.02	0.087	-
Cadmium Cd	ICP-MS	mg/L	< 0.000003	0.000003	0.000003	0.000009	0.000003	-
Calcium Ca	ICP-MS	mg/L	9.17	9.16	9.4	13.2	11.4	-
Chromium Cr	ICP-MS	mg/L	0.0001	< 0.00008	< 0.00008	< 0.00008	< 0.00008	-
Cobalt Co	ICP-MS	mg/L	0.000029	0.000023	0.000013	0.000035	0.000035	-
Copper Cu	ICP-MS	mg/L	0.004	0.002	0.0100	0.004	0.0010	-
Iron Fe	ICP-MS	mg/L	0.009	0.013	0.017	0.014	< 0.007	-
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0004	0.0003	0.0004	0.0006	0.0004	-
Magnesium Mg	ICP-MS	mg/L	0.74	1.13	0.90	1.82	1.60	-
Manganese Mn	ICP-MS	mg/L	0.00122	0.00195	0.00372	0.00814	0.00521	-
Mercury Hg	CVAAS	ug/L	0.01	< 0.01	0.01	0.01	< 0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.0004	0.0021	0.00430	0.0247	0.00660	-
Nickel Ni	ICP-MS	mg/L	0.0004	0.0002	< 0.0001	0.0002	0.0001	-
Phosphorus P	ICP-MS	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	-
Potassium K	ICP-MS	mg/L	0.752	0.792	2.660	1.75	1.920	-
Selenium Se	ICP-MS	mg/L	0.00016	0.00013	0.00009	0.00034	0.00029	-
Silicon Si	ICP-MS	mg/L	1.62	2.18	1.60	1.08	1.58	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	2.92	2.48	2.36	1.44	2.10	-
Strontium Sr	ICP-MS	mg/L	0.0574	0.127	0.1040	0.326	0.0776	-
Sulphur (S)	ICP-MS	mg/L	< 5	< 5	< 5	< 5	< 5	-
Thallium Tl	ICP-MS	mg/L	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	0.0006	0.001	0.0014	0.0009	0.0002	-
Uranium U	ICP-MS	mg/L	0.000003	0.00002	0.000137	0.000122	0.000033	-
Vanadium V	ICP-MS	mg/L	0.00945	0.015	0.00284	0.00354	0.00526	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 18-Aug-22
Report date: 26-Sep-22
Sample receipt date: in house
Version: Final

Customer details

Name:	Sarah Morin
Address:	Agnico Eagle

Project reference: Upper Beaver

P.O. number: OL-1-71778

COC:

ANALYSIS REPORT

SGS WO: 14, 15

Report Distribution

Name	Email
Timo Kirchner	timo.kirchner@lorax.ca
Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

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Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1 Work order date: 18-Aug-22
SGS project #: 2138 Report date: 26-Sep-22

Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			HC 7 - Basalt (Open Pit)	HC 8 - Crowded Porphyry	HC 9 - Mafic Instrusive	HC 10 - Mixed PAG	Blank
Parameter	**Method**	**Units**					
Volume Nanopure Water		mL	750	750	750	750	750
Sample Weight		g	250	250	250	250	-
pH	meter		8.09	8.12	8.22	8.02	6.05
Redox	meter	mV	368	322	330	315	-
Conductivity	meter	uS/cm	71	113	77	143	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.4	1.8	1.4	1.8	-
Alkalinity	titration	mg CaCO3/L	31.9	36.0	36.6	38.0	-
Chloride		mg/L	< 1	4	< 1	< 1	-
Fluoride		mg/L	< 0.06	< 0.06	< 0.06	< 0.06	-
Sulphate	IC	mg/L	1.8	9.2	1.6	27.6	-
Ion Balance							
Major Anions	Calc	meq/L	0.68	1.02	0.76	1.34	
Major Cations	Calc	meq/L	0.75	1.14	0.84	1.38	
Difference	Calc	meq/L	-0.07	-0.12	-0.08	-0.04	
Balance (%)	Calc	%	-5.2%	-5.5%	-4.9%	-1.7%	
Dissolved Metals							
Hardness CaCO3		mg/L	30.2	45.6	32.4	59	-
Aluminum Al	ICP-MS	mg/L	0.2	0.209	0.233	0.189	-
Antimony Sb	ICP-MS	mg/L	0.0013	0.0107	0.0015	0.0031	-
Arsenic As	ICP-MS	mg/L	0.0016	0.0125	0.0016	0.0033	-
Barium Ba	ICP-MS	mg/L	0.00968	0.0149	0.00096	0.00999	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	0.00007	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.033	0.019	0.031	0.029	-
Cadmium Cd	ICP-MS	mg/L	< 0.000003	0.000343	0.000003	0.000006	-
Calcium Ca	ICP-MS	mg/L	10	15.2	10.4	21.4	-
Chromium Cr	ICP-MS	mg/L	0.00011	< 0.00008	0.00019	0.00012	-
Cobalt Co	ICP-MS	mg/L	0.000007	0.000125	< 0.000004	0.000078	-
Copper Cu	ICP-MS	mg/L	0.0005	0.0015	0.0002	0.001	-
Iron Fe	ICP-MS	mg/L	0.007	< 0.007	< 0.007	< 0.007	-
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0003	0.0007	0.0005	0.0007	-
Magnesium Mg	ICP-MS	mg/L	1.26	1.86	1.54	1.36	-
Manganese Mn	ICP-MS	mg/L	0.00126	0.00499	0.00090	0.00615	-
Mercury Hg	CVAAS	ug/L	< 0.01	< 0.01	< 0.01	< 0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.00192	1.68	0.01300	0.00545	-
Nickel Ni	ICP-MS	mg/L	< 0.0001	0.0002	< 0.0001	0.0004	-
Phosphorus P	ICP-MS	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	-
Potassium K	ICP-MS	mg/L	0.857	2.53	1.080	2.2	-
Selenium Se	ICP-MS	mg/L	0.00062	0.0057	0.00042	0.00157	-
Silicon Si	ICP-MS	mg/L	1.96	1.37	1.78	1.31	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	2.07	2.19	3.08	2.39	-
Strontium Sr	ICP-MS	mg/L	0.0618	0.233	0.0626	0.423	-
Sulphur (S)	ICP-MS	mg/L	< 1	3	< 1	10	-
Thallium Tl	ICP-MS	mg/L	< 0.000005	0.000093	< 0.000005	< 0.000005	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	0.0005	0.00058	0.00036	0.0003	-
Uranium U	ICP-MS	mg/L	0.000027	0.000093	< 0.000002	0.000014	-
Vanadium V	ICP-MS	mg/L	0.0093	0.00242	0.01090	0.00249	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	-

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 2-Feb-23
Report date: 3-Apr-23
Sample receipt date: inhouse
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax for Agnico

Project reference: Upper Beaver

P.O. number: ol-1071778

COC:

ANALYSIS REPORT

SGS WO: 19

Report Distribution

Name	Email
Timo Kirchner	timo.kirchner@lorax.ca
Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

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AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 2-Feb-23
Report date: 3-Apr-23

Version: Final

Whole Rock Analysis - XRF

Sample ID	Al2O3 %	BaO %	CaO %	Fe2O3 %	K2O %	MgO %	Mn3O4 %	Na2O %	P2O5 %	SiO2 %	TiO2 %	V2O5 %	Sum %	LOI %
Method Code	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	XRF72	PHY01V
LOD	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-10
CAOND136961	16.04	<0.01	6.56	11.35	0.27	6.26	0.15	5.37	0.12	43.83	1.09	0.05	95.02	6.20124
CAOND164897	13.34	<0.01	8.59	13.15	0.76	7.23	0.18	1.94	0.08	50.53	1.19	0.06	97.37	3.01879
CAOND128163	11.34	0.02	11.16	9.74	1.47	7.05	0.11	2.72	0.05	45.53	0.68	0.04	90.21	9.76
CAOND157957	14.1	0.07	6.65	3.35	2.05	1.62	0.04	3.75	0.16	60.47	0.34	0.01	93.55	6.51935
KLUB12_223_251189	13.46	0.01	10.26	10.47	0.95	4.3	0.18	3.85	0.07	44.02	0.94	0.06	90.68	8.6774
DUP														
CAOND136961	16	<0.01	6.4	11.33	0.27	6.21	0.15	5.39	0.12	43.7	1.08	0.04	94.86	
CAOND128163														9.7320
Blank	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	0.02	
QC														
OREAS 70B	7.16	0.02	4.3	7.98	0.71	22.49	0.16	1.03	0.05	48.42	0.3	0.01	93.54	6.76135

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Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 3-Feb-23
Report date: 3-Apr-23

Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			CAOND136961	CAOND164897	CAOND128163	CAOND157957	Blank
Parameter	**Method**	**Units**					
Volume Nanopure Water		mL	750	750	750	750	750
Sample Weight		g	250	250	250	250	-
pH	meter		7.78	8.03	8.03	7.51	5.79
Redox	meter	mV	361	326	337	378	-
Conductivity	meter	uS/cm	122	79	95	2379	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	2.8	2.4	2.3	4.4	-
Alkalinity	titration	mg CaCO3/L	36.9	38.9	38.3	26.2	-
Chloride		mg/L	2	< 1	< 1	13	-
Fluoride		mg/L	< 0.06	< 0.06	< 0.06	< 0.06	-
Sulphate	IC	mg/L	15.5	1.7	6.9	1724.4	-
Ion Balance							
Major Anions	Calc	meq/L	1.12	0.81	0.91	36.81	
Major Cations	Calc	meq/L	1.25	0.85	1.01	32.37	
Difference	Calc	meq/L	-0.13	-0.04	-0.10	4.44	
Balance (%)	Calc	%	-5.6%	-2.2%	-5.2%	6.4%	
Dissolved Metals							
Hardness CaCO3		mg/L	53	36.2	41.8	1560	-
Aluminum Al	ICP-MS	mg/L	0.185	0.15	0.108	0.031	-
Antimony Sb	ICP-MS	mg/L	0.0032	< 0.0009	0.0022	0.0042	-
Arsenic As	ICP-MS	mg/L	0.0086	0.0007	0.0023	0.0048	-
Barium Ba	ICP-MS	mg/L	0.0056	0.00291	0.00265	0.0375	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.036	0.028	0.027	0.034	-
Cadmium Cd	ICP-MS	mg/L	0.000003	< 0.000003	< 0.000003	0.000016	-
Calcium Ca	ICP-MS	mg/L	18.4	12.4	13.5	617	-
Chromium Cr	ICP-MS	mg/L	< 0.00008	< 0.00008	< 0.00008	< 0.00008	-
Cobalt Co	ICP-MS	mg/L	0.00002	< 0.000004	0.000005	0.000009	-
Copper Cu	ICP-MS	mg/L	< 0.0002	< 0.0002	0.0010	< 0.0002	-
Iron Fe	ICP-MS	mg/L	< 0.007	< 0.007	< 0.007	< 0.007	-
Lead Pb	ICP-MS	mg/L	0.0002	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0011	0.0008	0.0003	0.0019	-
Magnesium Mg	ICP-MS	mg/L	1.7	1.26	1.95	3.74	-
Manganese Mn	ICP-MS	mg/L	0.00484	0.00189	0.00146	0.0345	-
Mercury Hg	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Molybdenum Mo	ICP-MS	mg/L	0.00574	0.00113	0.00086	0.0312	-
Nickel Ni	ICP-MS	mg/L	< 0.0001	< 0.0001	< 0.0001	0.0002	-
Phosphorus P	ICP-MS	mg/L	0.009	0.009	0.019	0.013	-
Potassium K	ICP-MS	mg/L	0.336	1.06	0.961	19.6	-
Selenium Se	ICP-MS	mg/L	0.00299	0.00026	0.00028	0.00019	-
Silicon Si	ICP-MS	mg/L	1.59	1.88	1.77	2.67	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	3.29	1.7	2.86	15.8	-
Strontium Sr	ICP-MS	mg/L	0.268	0.0243	0.2260	3.01	-
Sulphur (S)	ICP-MS	mg/L	6	1	3.0	524	-
Thallium Tl	ICP-MS	mg/L	< 0.000005	0.000005	0.000005	0.000018	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	0.00009	-
Titanium Ti	ICP-MS	mg/L	< 0.00005	0.00012	< 0.00005	< 0.00005	-
Uranium U	ICP-MS	mg/L	0.000002	0.000012	0.000009	0.000915	-
Vanadium V	ICP-MS	mg/L	0.00285	0.0038	0.00936	0.00054	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	-

CLIENT : Lorax
Project : Upper Beaver / Upper Canada (Project # A506)
SGS Project # : 1846
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : January 17, 2019
Leachate Analysis

Sample ID			HC 1	HC 2	HC 3	HC 4	176414	179639	251005	293830	Q251366	Q547884	R324155	Blank
Parameter	**Method**	**Units**												
Volume Nanopure Water		mL	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	250	250	250	250	250	250	-
pH	meter		7.56	8.03	8.09	8.01	8.15	8.01	8.06	8.00	8.05	8.09	8.04	6.64
Redox	meter	mV	369	332	332	333	338	329	340	348	352	353	351	435
Conductivity	meter	uS/cm	624	82	68	103	116	106	89	120	96	86	79	<1
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	2.6	1.5	1.2	1.7	1.2	1.7	1.5	2.0	1.5	1.3	1.3	2.9
Alkalinity	titration	mg CaCO3/L	28.4	28.4	29.2	35.3	45.8	33.6	34.8	36.6	35.8	35.7	28.8	1.2
Chloride	Colour	mg/L	1	2	1	3	2	2	2	3	2	2	1	< 1
Fluoride	IC	mg/L	0.07	< 0.06	< 0.06	0.06	0.08	0.06	< 0.06	0.09	0.06	< 0.06	< 0.06	< 0.06
Sulphate	Turbidity	mg/L	228	6	2	6	3	7	4	8	5	3	5	<2
Ion Balance														
Major Anions	Calc	meq/L	5.35	0.75	0.65	0.92	1.04	0.88	0.84	0.99	0.88	0.83	0.71	#N/A
Major Cations	Calc	meq/L	6.10	0.80	0.72	1.00	1.14	1.02	0.91	1.14	0.97	0.92	0.81	#N/A
Difference	Calc	meq/L	-0.75	-0.06	-0.07	-0.08	-0.10	-0.14	-0.07	-0.15	-0.09	-0.08	-0.10	#N/A
Balance (%)	Calc	%	-6.6%	-3.6%	-4.9%	-4.2%	-4.8%	-7.5%	-4.3%	-7.0%	-4.8%	-4.7%	-6.6%	#N/A
Dissolved Metals														
Hardness CaCO3		mg/L	294	30.3	29.2	41.5	45.4	38.7	38.2	46.7	36.2	34.4	31.1	< 0.05
Aluminum Al	ICP-MS	mg/L	0.106	0.304	0.321	0.243	0.238	0.291	0.322	0.152	0.311	0.329	0.315	< 0.001
Antimony Sb	ICP-MS	mg/L	0.0073	0.0037	0.0031	0.0045	0.0089	0.0019	0.0090	0.0049	0.0024	0.0026	0.0049	< 0.0002
Arsenic As	ICP-MS	mg/L	0.0043	0.0012	0.0016	0.0078	0.0062	0.0042	0.0072	0.0020	0.0030	0.0017	0.0007	< 0.0002
Barium Ba	ICP-MS	mg/L	0.0315	0.00306	0.00587	0.00450	0.00469	0.00344	0.00302	0.00270	0.0445	0.124	0.0958	0.00003
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	0.000018
Bismuth Bi	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	0.000009	< 0.000007	0.000017	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007
Boron B	ICP-MS	mg/L	0.027	0.040	0.018	0.024	0.023	0.032	0.033	0.029	0.022	0.008	0.020	< 0.002
Cadmium Cd	ICP-MS	mg/L	< 0.000003	< 0.000003	< 0.000003	< 0.000003	0.000011	< 0.000003	0.000020	0.000135	< 0.000003	< 0.000003	< 0.000003	< 0.000003
Calcium Ca	ICP-MS	mg/L	112	10.4	10.2	14.7	12.6	12.6	13.8	13.3	10.6	10.5	11.2	0.01
Chromium Cr	ICP-MS	mg/L	0.00003	0.00005	0.00006	0.00005	0.00005	0.00010	0.00008	0.00007	0.00008	0.00006	0.00005	< 0.00003
Cobalt Co	ICP-MS	mg/L	0.000291	0.000038	0.000017	0.000370	0.000172	0.000082	0.000055	0.000274	0.000103	0.000033	< 0.000004	< 0.000004
Copper Cu	ICP-MS	mg/L	0.00265	0.00216	0.00281	0.00320	0.00228	0.00252	0.00220	0.00283	0.00516	0.00130	0.00192	0.00096
Iron Fe	ICP-MS	mg/L	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	0.010	< 0.007	0.008	0.008	< 0.007	< 0.007	< 0.007
Lead Pb	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00001	< 0.00001	0.00004
Lithium Li	ICP-MS	mg/L	0.0011	0.0009	0.0006	0.0010	0.0029	0.0007	0.0005	0.0015	0.0010	0.0008	0.0005	< 0.0001
Magnesium Mg	ICP-MS	mg/L	3.21	1.09	0.923	1.16	3.41	1.76	0.934	3.27	2.37	2.02	0.777	0.001
Manganese Mn	ICP-MS	mg/L	0.0357	0.00424	0.00249	0.00504	0.00823	0.00410	0.00383	0.0148	0.0168	0.00849	0.00233	0.00002
Mercury Hg	ICP-MS	ug/L	< 0.01	< 0.01	< 0.01	0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Molybdenum Mo	ICP-MS	mg/L	0.0189	0.00123	0.0173	0.00222	0.0381	0.0118	0.0846	0.479	0.00979	0.00240	0.00878	0.00006
Nickel Ni	ICP-MS	mg/L	0.0017	< 0.0001	0.0002	0.0004	0.0014	0.0003	0.0002	0.0003	0.0005	0.0002	0.0001	0.0003
Phosphorus P	ICP-MS	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Potassium K	ICP-MS	mg/L	4.04	1.33	1.17	2.98	5.33	2.92	2.20	5.41	3.97	3.32	1.04	0.003
Selenium Se	ICP-MS	mg/L	0.00014	0.00012	0.00033	0.00151	0.00097	0.00128	0.00053	0.00153	0.00019	0.00016	0.00028	< 0.00004
Silicon Si	ICP-MS	mg/L	1.13	1.33	1.40	1.38	1.23	1.61	1.17	1.32	1.62	1.46	1.16	< 0.02
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Sodium Na	ICP-MS	mg/L	1.81	2.95	1.58	1.49	1.55	3.19	1.17	1.04	2.40	2.35	2.66	0.01
Strontium Sr	ICP-MS	mg/L	2.38	0.0501	0.115	0.0864	0.139	0.0787	0.0851	0.193	0.136	0.403	0.327	0.00004
Sulphur (S)	ICP-MS	mg/L	97.9	1.6	< 0.1	3.0	0.3	2.7	0.8	3.0	1.3	0.9	1.4	< 0.1
Thallium Tl	ICP-MS	mg/L	0.000008	< 0.000005	< 0.000005	< 0.000005	< 0.000005	< 0.000005	0.000009	0.000014	< 0.000005	< 0.000005	< 0.000005	< 0.000005
Tin Sn	ICP-MS	mg/L	0.00022	0.00017	0.00016	0.00009	0.00010	0.00012	0.00011	0.00012	0.00009	0.00014	0.00007	0.00007
Titanium Ti	ICP-MS	mg/L	< 0.00005	0.00031	0.00020	0.00021	0.00007	0.00051	0.00020	0.00045	0.00030	0.00012	0.00008	< 0.00005
Uranium U	ICP-MS	mg/L	0.000385	0.000011	0.000010	0.000066	0.000727	0.000067	0.000027	0.000289	0.000288	0.000583	0.000006	< 0.000002
Vanadium V	ICP-MS	mg/L	0.00044	0.00158	0.00396	0.00217	0.00240	0.00150	0.00221	0.00128	0.00163	0.00128	0.00187	< 0.00001
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

Appendix B5: Reject Duplicate and Core Variability Lab Files

Sample ID	Paste pH	TIC	CaNP	S(T)	S(SO4)	S(S-2)	AP	Modified NP			Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe
	pH	%		%	%	%					ppb	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%
Q547757	9.06	0.17	14.2	0.405	<0.01	0.405	12.7	18.4			468	1.23	9.9	440	<20	8.3	0.11	1.33	<0.01	56.4	169.7	1771.86	4.56
Q547757D	9.03	0.15	12.5	0.37	<0.01	0.37	11.6	17.5			455	1.31	8.3	471	<20	8.7	0.1	1.3	<0.01	41.1	173.8	2261.73	4.76
RPD		*13%*	*13%*	*9%*		*9%*	*9%*	*5%*			*3%*	*6%*	*18%*	*7%*	*0%*	*5%*	*10%*	*2%*	*0%*	*31%*	*2%*	*24%*	*4%*
255156	9.22	1.38	115	0.166	<0.01	0.166	5.2	123.9			281	2.13	3.7	1805	<20	7	6.71	4.69	0.26	27.6	211.4	1156.96	6.15
255156D	9.18	1.38	115	0.157	<0.01	0.157	4.9	121.9			364	2.1	3.5	2433	<20	6.7	6.12	4.63	0.24	27.7	205.7	1168.53	6.12
RPD		*0%*	*0%*	*6%*		*6%*	*6%*	*2%*			*26%*	*1%*	*6%*	*30%*	*0%*	*4%*	*9%*	*1%*	*8%*	*0%*	*3%*	*1%*	*0%*
257809	8.71	0.23	19.2	0.399	0.43	<0.01	<0.3	23.6			153	0.81	2.8	1441	<20	7.1	0.22	1.72	0.25	6.3	62.3	13.14	0.92
257809D	8.73	0.2	16.7	0.392	0.4	<0.01	<0.3	21.5			221	0.78	2.5	2220	<20	6.8	0.1	1.62	0.29	6.1	66.2	6.54	0.87
RPD		*14%*	*14%*	*2%*	*7%*			*9%*			*36%*	*4%*	*11%*	*43%*	*0%*	*4%*	*75%*	*6%*	*15%*	*3%*	*6%*	*67%*	*6%*
265848	9.17	0.83	69.2	0.026	<0.01	0.026	0.8	75.3			201	1.13	2.5	790	<20	27.2	1.11	3.16	0.03	12	45.1	200.16	1.96
265848D	9.13	0.83	69.2	0.029	<0.01	0.029	0.9	74.9			214	1.15	2.5	1005	<20	28.9	1.14	3.23	0.03	11.7	45.3	219.92	1.9
RPD		*0%*	*0%*	*11%*		*11%*	*11%*	*1%*			*6%*	*2%*	*0%*	*24%*	*0%*	*6%*	*3%*	*2%*	*0%*	*3%*	*0%*	*9%*	*3%*
88256	8.32	0.94	78.3	0.83	0.41	0.42	13.1	83.6			510	2.25	1.9	2003	<20	47.8	1.32	3.91	0.35	39.5	72.9	4662.12	10.96
88256D	8.31	0.91	75.8	0.866	0.41	0.456	14.3	81.7			530	2.21	1.7	1940	<20	45.6	1.31	3.7	0.43	40.4	71.1	4743.19	10.84
RPD		*3%*	*3%*	*4%*	*0%*	*8%*	*8%*	*2%*			*4%*	*2%*	*11%*	*3%*	*0%*	*5%*	*1%*	*6%*	*21%*	*2%*	*3%*	*2%*	*1%*
95865	8.46	0.44	36.7	0.304	0.01	0.294	9.2	39.6			210	0.89	0.5	216	<20	17.3	3.66	1.58	5.55	5.4	120.4	3.82	1.46
95865D	8.4	0.5	41.7	0.316	0.01	0.306	9.6	44.7			307	0.92	0.4	1649	<20	17.3	4.09	1.85	6.04	5.7	138.9	5.59	1.5
RPD		*13%*	*13%*	*4%*	*0%*	*4%*	*4%*	*12%*			*38%*	*3%*	*22%*	*154%*	*0%*	*0%*	*11%*	*16%*	*8%*	*5%*	*14%*	*38%*	*3%*
176414	8.84	3.4	283.3	0.05	<0.01	0.05	1.6	197.2	123.7		1457	0.42	4.5	23457.7	<20	67.9	3.7	5.56	0.24	13.6	65.9	207.91	5.42
176414_reject	9.29	3.6	300	0.07	0.04	0.03	0.9	234.2	249.8		1004	0.3	6.5	15103.1	<20	60	5.6	6.4	0.29	12.6	72.9	318.85	4.26
RPD			*6%*	*31%*		*52%*		*17%*	*68%*	*#DIV/0!*	*37%*	*33%*	*36%*	*43%*	*#VALUE!*	*12%*	*41%*	*14%*	*19%*	*8%*	*10%*	*42%*	*24%*
179639	9.16	0.45	37.5	0.51	<0.01	0.51	16	41.8	2.6		260	2.22	4.7	2006.4	<20	49.6	1.71	1.74	0.02	42.6	50.3	13.18	4.31
179639_reject	8.88	0.24	20	0.905	0.01	0.895	28	25.6	0.9		704	2.03	9.1	10646.1	<20	37.3	2.18	0.99	<0.01	65.2	44.3	40.44	4.11
RPD			*61%*	*56%*		*55%*		*48%*	*96%*	*#DIV/0!*	*92%*	*9%*	*64%*	*137%*	*#VALUE!*	*28%*	*24%*	*55%*	*67%*	*42%*	*13%*	*102%*	*5%*
251005	8.83	1.54	128.3	1.14	<0.01	1.14	35.6	133.3	3.7		1480	3.41	42.2	2678	<20	18	1.56	5.43	0.39	119.5	155.5	4083.06	8.35
251005_reject	8.32	1.41	117.5	1.48	0.05	1.43	44.7	124	2.8		2016	3.59	56.2	4024.4	<20	23.9	2.49	5.71	0.79	103.1	162.2	5247.29	9.63
RPD			*9%*	*26%*		*23%*		*7%*	*30%*	*#DIV/0!*	*31%*	*5%*	*28%*	*40%*	*#VALUE!*	*28%*	*46%*	*5%*	*68%*	*15%*	*4%*	*25%*	*14%*
251366	9.35	1.07	89.2	0.19	<0.01	0.19	6	77.7	13		552	0.36	2.1	724.6	<20	204.5	0.14	2.37	0.02	11.1	39.3	1156.06	2.06
251366_reject	9.11	1.05	87.5	0.199	0.02	0.179	5.6	75.2	13.4		303	0.36	2.1	313.3	<20	265.1	0.16	2.41	0.03	11.1	30.6	1509.68	1.88
RPD			*2%*	*4%*		*6%*		*3%*	*3%*	*#DIV/0!*	*58%*	*0%*	*0%*	*79%*	*#VALUE!*	*26%*	*13%*	*2%*	*40%*	*0%*	*25%*	*27%*	*9%*
293830	8.91	3.48	290	0.47	<0.01	0.47	14.6	240.6	16.5		424	0.52	12.6	1297.6	<20	33.1	1.6	5.76	0.23	43.6	52.5	414.6	3.45
293830_reject	9.12	3.47	289.2	0.309	<0.01	0.309	9.7	248.5	25.7		427	0.48	8.5	1640	<20	30.8	0.71	6.27	0.13	34.6	38.6	269.41	3.01
RPD			*0%*	*41%*		*41%*		*3%*	*44%*	*#DIV/0!*	*1%*	*8%*	*39%*	*23%*	*#VALUE!*	*7%*	*77%*	*8%*	*56%*	*23%*	*31%*	*42%*	*14%*
Q547884	9.36	1.16	96.7	0.05	<0.01	0.05	1.5	85.7	57.1		18	0.36	1.2	50.8	<20	204.8	0.05	2.83	0.01	7.5	64.5	8.21	1.17
Q547884_reject	9.71	1.12	93.3	0.034	<0.01	0.034	1.1	86.9	81.8		8	0.29	0.9	88.5	<20	171.3	0.03	2.49	<0.01	7.3	38.9	2.8	1.01
RPD			*4%*	*34%*		*34%*		*1%*	*35%*	*#DIV/0!*	*77%*	*22%*	*29%*	*54%*	*#VALUE!*	*18%*	*50%*	*13%*	*0%*	*3%*	*50%*	*98%*	*15%*
R324155	9.13	1.26	105	0.9	<0.01	0.9	28.3	112	4		2897	2.03	5.4	320.1	<20	77.5	1.24	4.61	0.08	52.9	105.7	4827.66	5.58
R324155_reject	8.51	1.26	105	1.48	0.04	1.44	45	113.9	2.5		51926	2.15	7.3	87497.1	<20	44.3	1.93	5.04	0.11	60.7	97	8938.16	6.83
RPD			*0%*	*48%*		*46%*		*2%*	*44%*	*#DIV/0!*	*179%*	*6%*	*30%*	*199%*	*#VALUE!*	*55%*	*44%*	*9%*	*32%*	*14%*	*9%*	*60%*	*20%*
HC-1	8.03	2.23	185.8	0.23	0.15	0.08	2.3	155.4	22.1		387	0.98	3.5	685.6	<20	63.2	0.09	4.52	0.06	19.6	56	313.06	3.54
HC 1_reject	9.01	2.14	177.92	0.33	0.17	0.17	5.2	163.2	55.45		587	0.92	3.9	2670.8	20	61.35	0.14	4.44	0.05	21.05	54.1	1424.56	3.39
RPD			*4%*	*37%*		*76%*		*5%*	*86%*	*#DIV/0!*	*41%*	*6%*	*11%*	*118%*	*#VALUE!*	*3%*	*43%*	*2%*	*29%*	*7%*	*3%*	*128%*	*4%*
HC-2	9.14	0.05	4.2	0.89	0.01	0.88	27.5	11.2	0.4		148	2.26	10.2	132	<20	45.9	0.31	1.27	<0.01	91.1	93.6	384.2	4.39
HC 2_reject	8.94	0.03	2.5	0.945	0.01	0.935	29.2	10.7	0.4		156	2.15	8.1	85.8	<20	23.5	0.27	0.99	<0.01	78.5	67.9	133.43	4.22
RPD			*50%*	*6%*		*6%*		*5%*	*10%*	*#DIV/0!*	*5%*	*5%*	*23%*	*42%*	*#VALUE!*	*65%*	*14%*	*25%*	*#VALUE!*	*15%*	*32%*	*97%*	*4%*
HC-3	9.24	1.1	91.7	0.17	<0.01	0.17	5.3	94.1	17.6		1093	1.51	5.3	1494	<20	19.3	6.08	3.97	0.24	22.7	148.6	644.23	7.73
HC 3_reject	9.01	1.23	102.5	0.21	0.01	0.21	6.52	105.65	16.16		623.5	1.49	4.9	5085.6	20	15.3	1.56	4.43	0.28	24.15	115.45	885.71	7.03
RPD			*11%*	*20%*		*20%*		*12%*	*9%*	*#DIV/0!*	*55%*	*1%*	*8%*	*109%*	*#VALUE!*	*23%*	*118%*	*11%*	*14%*	*6%*	*25%*	*32%*	*10%*
HC-4	8.92	0.98	81.7	2.47	0.02	2.45	76.6	83.2	1.1		675	0.74	55.8	738	<20	38.7	2.93	3.67	0.03	336.8	87.4	3650.17	8.1
HC 4_reject	8.42	0.82	68.3	3.14	0.07	3.07	95.9	70.6	0.7		578	0.85	62	530.1	<20	45.5	2.93	3.37	0.02	459.4	60.9	1711.46	8.6
RPD			*18%*	*24%*		*22%*		*16%*	*38%*	*#DIV/0!*	*15%*	*14%*	*11%*	*33%*	*#VALUE!*	*16%*	*0%*	*9%*	*40%*	*31%*	*36%*	*72%*	*6%*

Appendix B5: Reject Duplicate and Core Variability Lab Files

Sample ID	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P	Pb	S	Sb	Sc	Se	Sr	Te	Th	Ti	Tl	U	V	W	Zn
	ppm	ppb	%	ppm	%	ppm	ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
Q547757	4.7	97	0.03	1.1	1.25	286	2.42	0.043	58.8	0.028	0.4	0.4	2.75	4.2	0.4	33.7	0.1	<0.1	0.474	<0.02	0.1	134	1.5	17
Q547757D	4.6	86	0.03	1.1	1.31	306	2.68	0.049	60.4	0.03	0.39	0.35	2.58	4.5	0.5	34.6	0.08	<0.1	0.497	<0.02	0.1	140	1.3	19.1
RPD	*2%*	*12%*	*0%*	*0%*	*5%*	*7%*	*10%*	*13%*	*3%*	*7%*	*3%*	*13%*	*6%*	*7%*	*22%*	*3%*	*22%*	*0%*	*5%*	*0%*	*0%*	*4%*	*14%*	*12%*
255156	10.2	188	0.04	24.7	2.34	631	202.31	0.031	73.6	0.028	1.58	0.17	1.56	15.2	0.5	49.8	0.19	0.2	0.382	<0.02	0.4	243	1.8	26.6
255156D	10	198	0.04	21.2	2.33	620	200.7	0.03	72.8	0.029	1.45	0.18	1.65	15.8	0.7	48	0.26	0.2	0.364	<0.02	0.4	240	1.7	28.7
RPD	*2%*	*5%*	*0%*	*15%*	*0%*	*2%*	*1%*	*3%*	*1%*	*4%*	*9%*	*6%*	*6%*	*4%*	*33%*	*4%*	*31%*	*0%*	*5%*	*0%*	*0%*	*1%*	*6%*	*8%*
257809	4.5	23	0.04	15.6	0.82	176	217.21	0.066	24	0.078	0.83	0.43	0.24	4.1	<0.1	72	<0.02	0.7	0.17	<0.02	0.4	54	8.6	16.6
257809D	4.3	37	0.03	15.9	0.8	165	209.85	0.057	23.3	0.076	0.82	0.42	0.24	3.7	<0.1	71.6	<0.02	0.7	0.163	<0.02	0.4	52	14.1	15.2
RPD	*5%*	*47%*	*29%*	*2%*	*2%*	*6%*	*3%*	*15%*	*3%*	*3%*	*1%*	*2%*	*0%*	*10%*	*0%*	*1%*	*0%*	*0%*	*4%*	*0%*	*0%*	*4%*	*48%*	*9%*
265848	6.7	1019	0.1	9	1.31	375	17.99	0.048	32.2	0.078	0.58	0.02	0.51	2.8	<0.1	77.2	0.03	0.8	0.108	0.02	0.2	49	18.1	22.8
265848D	6.5	1122	0.1	9.5	1.32	391	18.12	0.053	32.3	0.075	0.59	0.03	0.51	2.7	<0.1	77.8	<0.02	0.8	0.11	0.02	0.2	51	17.5	23
RPD	*3%*	*10%*	*0%*	*5%*	*1%*	*4%*	*1%*	*10%*	*0%*	*4%*	*2%*	*40%*	*0%*	*4%*	*0%*	*1%*	*40%*	*0%*	*2%*	*0%*	*0%*	*4%*	*3%*	*1%*
88256	15	457	0.04	53.8	2.46	524	282.77	0.028	208.9	0.126	1.54	0.76	1.03	13.5	2.3	166.2	0.36	1	0.064	<0.02	0.5	184	2.1	60.2
88256D	12.9	402	0.03	51.2	2.3	489	260.59	0.028	201.9	0.12	1.56	0.74	1	13.2	1.8	150.5	0.34	1	0.061	<0.02	0.5	178	3	56.7
RPD	*15%*	*13%*	*29%*	*5%*	*7%*	*7%*	*8%*	*0%*	*3%*	*5%*	*1%*	*3%*	*3%*	*2%*	*24%*	*10%*	*6%*	*0%*	*5%*	*0%*	*0%*	*3%*	*35%*	*6%*
95865	6	170	0.02	2.5	0.99	139	>2000	0.026	42	0.052	4.74	0.31	0.25	4	2.2	22.7	0.59	0.3	0.002	<0.02	0.1	97	0.1	18.8
95865D	6.5	223	0.02	2.6	1.03	157	>2000	0.027	44.2	0.059	5.33	0.35	0.29	4.6	2.7	26.9	0.68	0.4	0.002	<0.02	0.2	100	0.1	16.7
RPD	*8%*	*27%*	*0%*	*4%*	*4%*	*12%*	*0%*	*4%*	*5%*	*13%*	*12%*	*12%*	*15%*	*14%*	*20%*	*17%*	*14%*	*29%*	*0%*	*0%*	*67%*	*3%*	*0%*	*12%*
176414	2.1	734	0.31	471.1	1.97	656	181.92	0.004	39.7	0.152	2.3	0.04	1.45	14.6	0.7	335.2	0.12	2.6	0.004	0.05	0.8	66	3.6	19.8
176414_reject	2.6	784	0.24	434.1	2.06	657	171.36	0.006	33.1	0.142	2.64	0.06	1.84	14.4	0.6	345.9	0.24	2	0.003	0.04	1	65	2.2	16
RPD	*21%*	*7%*	*25%*	*8%*	*4%*	*0%*	*6%*	*40%*	*18%*	*7%*	*14%*	*40%*	*24%*	*1%*	*15%*	*3%*	*67%*	*26%*	*29%*	*22%*	*22%*	*2%*	*48%*	*21%*
179639	9.7	60	0.17	5.2	1.63	245	7.77	0.035	24.2	0.102	1.29	0.53	0.2	7.1	0.4	31.7	0.41	0.6	0.005	0.04	<0.1	64	0.6	34.9
179639_reject	9.1	195	0.14	3.1	1.64	176	10.36	0.026	22.9	0.09	1.09	0.92	0.23	5.3	0.5	22.6	0.6	0.3	0.004	0.03	<0.1	63	1.2	31.2
RPD	*6%*	*106%*	*19%*	*51%*	*1%*	*33%*	*29%*	*30%*	*6%*	*13%*	*17%*	*54%*	*14%*	*29%*	*22%*	*34%*	*38%*	*67%*	*22%*	*29%*	*#VALUE!*	*2%*	*67%*	*11%*
251005	10.2	515	0.16	7.3	2.62	1033	387.14	0.005	102.9	0.042	2.07	1.1	2.64	13.8	1.7	78.9	0.36	0.1	0.262	0.05	0.3	186	5.5	71.2
251005_reject	11.3	634	0.19	11	2.78	1000	563.51	0.002	125.8	0.046	2.68	1.42	2.48	12.9	2.5	82.7	0.47	0.1	0.246	0.08	0.4	187	7.8	71.3
RPD	*10%*	*21%*	*17%*	*40%*	*6%*	*3%*	*37%*	*86%*	*20%*	*9%*	*26%*	*25%*	*6%*	*7%*	*38%*	*5%*	*27%*	*0%*	*6%*	*46%*	*29%*	*1%*	*35%*	*0%*
251366	1.5	210	0.25	7.1	0.7	287	3.78	0.036	8.7	0.086	0.87	0.18	0.53	3.3	<0.1	139	<0.02	0.7	0.002	0.06	0.2	13	19.9	11.6
251366_reject	1.5	175	0.25	8.2	0.68	262	4.64	0.04	9	0.081	0.75	0.21	0.48	3	<0.1	137.7	0.03	0.5	0.003	0.05	0.2	12	44.4	13.5
RPD	*0%*	*18%*	*0%*	*14%*	*3%*	*9%*	*20%*	*11%*	*3%*	*6%*	*15%*	*15%*	*10%*	*10%*	*#VALUE!*	*1%*	*#VALUE!*	*33%*	*40%*	*18%*	*0%*	*8%*	*76%*	*15%*
293830	1.2	124	0.33	7.3	2.66	1038	154.9	<0.001	30.5	0.041	5.5	0.43	0.67	8.5	0.8	473.2	0.09	0.3	0.002	0.09	0.1	21	0.5	29.9
293830_reject	1.1	117	0.32	10.7	2.63	975	70.68	0.005	25.7	0.065	3.69	0.31	0.45	8	0.5	472.8	0.04	0.4	0.002	0.08	0.1	18	0.4	25.5
RPD	*9%*	*6%*	*3%*	*38%*	*1%*	*6%*	*75%*	*#VALUE!*	*17%*	*45%*	*39%*	*32%*	*39%*	*6%*	*46%*	*0%*	*77%*	*29%*	*0%*	*12%*	*0%*	*15%*	*22%*	*16%*
Q547884	1.2	66	0.24	19.6	0.68	461	2.62	0.041	5.9	0.084	1.21	0.03	0.58	2.3	<0.1	103.6	<0.02	2.8	0.003	0.05	0.6	10	3.7	15.3
Q547884_reject	0.9	62	0.19	15	0.6	409	1.8	0.031	5.4	0.071	0.73	0.04	0.38	2.5	<0.1	85.4	<0.02	2.1	0.001	0.04	0.4	8	0.8	11.6
RPD	*29%*	*6%*	*23%*	*27%*	*13%*	*12%*	*37%*	*28%*	*9%*	*17%*	*49%*	*29%*	*42%*	*8%*	*#VALUE!*	*19%*	*#VALUE!*	*29%*	*100%*	*22%*	*40%*	*22%*	*129%*	*28%*
R324155	10.2	541	0.1	26.5	2.23	474	48.63	0.032	49.2	0.166	1.46	0.77	1.13	12.3	1.4	239.5	0.34	2.5	0.143	0.03	0.4	117	3.5	35.6
R324155_reject	10.8	16979	0.07	27.6	2.38	460	62.11	0.027	58.4	0.161	1.51	1.28	1.09	12.8	2	228.7	0.43	2.9	0.131	0.03	0.4	121	0.7	39.3
RPD	*6%*	*188%*	*35%*	*4%*	*7%*	*3%*	*24%*	*17%*	*17%*	*3%*	*3%*	*50%*	*4%*	*4%*	*35%*	*5%*	*23%*	*15%*	*9%*	*0%*	*0%*	*3%*	*133%*	*10%*
HC-1	4.4	123	0.21	19.7	1.91	550	9.29	0.009	29.9	0.118	1.47	0.2	1.14	7.5	<0.1	226.9	<0.02	2.8	0.047	0.05	0.5	51	1	33.5
HC 1_reject	4.2	122.5	0.17	14.65	1.87	511	15.77	0.01	30.35	0.09	1.08	0.31	0.96	7.5	0.2	201.4	0.04	1.85	0.05	0.04	0.35	50.5	0.95	30.35
RPD	*5%*	*0%*	*24%*	*29%*	*2%*	*7%*	*52%*	*33%*	*1%*	*26%*	*31%*	*43%*	*18%*	*0%*	*#VALUE!*	*12%*	*#VALUE!*	*41%*	*6%*	*35%*	*35%*	*1%*	*5%*	*10%*
HC-2	7	91	0.14	13.4	1.78	522	2.39	0.039	62.6	0.133	1.71	0.83	2.02	5.7	0.2	115.7	0.07	1.4	0.217	0.03	0.2	64	1.1	43.2
HC 2_reject	6	76	0.08	9.7	1.85	540	1.21	0.023	61.4	0.109	1.06	0.89	1.64	4.4	<0.1	83.9	0.06	0.9	0.173	<0.02	<0.1	58	0.6	39.8
RPD	*15%*	*18%*	*55%*	*32%*	*4%*	*3%*	*66%*	*52%*	*2%*	*20%*	*47%*	*7%*	*21%*	*26%*	*67%*	*32%*	*15%*	*43%*	*23%*	*40%*	*67%*	*10%*	*59%*	*8%*
HC-3	8	233	0.08	5.7	1.37	392	240.66	0.033	81.8	0.043	2.23	0.16	1.65	10.8	0.4	109.5	0.09	0.4	0.176	0.02	<0.1	204	1	21.4
HC 3_reject	6.85	431	0.09	5.15	1.26	382	238.58	0.02	82.6	0.04	0.83	0.19	1.58	9.6	0.25	108.05	0.3	0.25	0.11	0.03	0.1	157	1.6	19.2
RPD	*15%*	*60%*	*12%*	*10%*	*8%*	*3%*	*1%*	*44%*	*1%*	*16%*	*92%*	*17%*	*5%*	*12%*	*46%*	*1%*	*108%*	*46%*	*47%*	*22%*	*#VALUE!*	*26%*	*46%*	*11%*
HC-4	4.2	846	0.18	5.8	0.47	271	11.09	0.021	65.8	0.046	0.93	2.32	2.21	6.5	2.2	41	0.17	0.3	0.263	0.04	0.2	128	4	20.9
HC 4_reject	4.5	779	0.2	8.8	0.57	273	5.06	0.019	68.2	0.051	0.73	2.98	2.07	6.7	2.4	36.7	0.24	0.3	0.255	0.05	0.2	121	1.9	23.4
RPD	*7%*	*8%*	*11%*	*41%*	*19%*	*1%*	*75%*	*10%*	*4%*	*10%*	*24%*	*25%*	*7%*	*3%*	*9%*	*11%*	*34%*	*0%*	*3%*	*22%*	*0%*	*6%*	*71%*	*11%*

Appendix C: Tailings Static Test Data

Appendix C1: Mineralogy Laboratory Files

Appendix C2: Particle Size Distribution

Appendix C3: Acid Base Accounting, Metal Concentration, and Shake Flask Extraction Laboratory Files

AGNICO EAGLE

TIMA DATA

prepared for:

2138 Upper Beaver (Agnico)

Custom MIN
MI7010-AUG25
September 15, 2025

Prepared by:

Logan Jameson
Senior Mineralogist

Reviewed by:

Lain Glossop
Senior Mineralogist

Method Summary

Quantitative TIMA Analysis:

The mineralogical analysis was conducted with the TIMA-X technology. TIMA-X is an acronym for TESCAN Integrated Mineral Analyzer, which is one of the newest Automated Scanning Electron Microscopy (ASEM) instruments on the market. It is based on four Energy Dispersive X-Ray (EDX) silicon drift detectors (SDD) attached to a TESCAN MIRA (field-emission gun – FEG) platform, which also includes backscattered electron (BSE) and secondary electron (SE) detectors. The TIMA system utilizes both the EDX and BSE signals to identify minerals at each measurement point (or each homogenous segment of a grain, depending upon the analysis mode). It is optimized to deal with rapidly acquired low-count spectra. These EDX (and BSE) spectra (and BSE data) are compared to entries in a mineral library on a first match principle to identify the mineral phase, where this mineral library is based on theoretical mineral/phase composition or created by the user based on BSE, X-ray spectral windows counts, and/or ratios.

It must be noted, that due to the difference in grain size, all size fractions contain particles that are close to the measurement area (~3 µm) and the spacing of the measurement points and therefore can encounter less precision in the measurements. In addition, the X-ray beam can scatter at the edges of particles and can lead to inaccurate analytical results. As the particles become smaller, the edges constitute a more significant percentage of the total particle mass. Therefore, some bias might be introduced, especially in the fine fraction, and caution is advised in interpreting the results in this particular fraction.

The limit of detection for any element within a phase is >1-2 wt% or 10,000 - 20,000 ppm by automated SEM-based EDS methods. Any elements that are present below this level are likely not to be detected. Accurate element reconciliation between TIMA calculated values and geochemical assay values is not possible for elements that are distributed in phases where the level of the element does not exceed 10,000 - 20,000 PPM. Many minerals display compositional variation with solid solutions between end members. Therefore, in order to balance the TIMA calculated assay to direct chemical assay more accurately, EMPA is recommended to quantify the mineral chemistries in the sample.

If geochemical assays have not been conducted by SGS, we cannot guarantee that values provided by another lab are representative of the material that was analyzed by SGS.

It is not possible to distinguish chemically similar phases by any EDS-based SEM system (eg. magnetite and hematite). X-ray diffraction is required to speciate chemically similar minerals, or polymorphs properly.

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TIMA Analysis Definitions

Liberation and Associations

Pure – A particle that has 100% volume of mineral of interest.
Free- A particle that has ≥ 95% volume of mineral of interest or ≥ 90% volume of mineral of interest, depending on project.
Liberated - A particle that has ≤ 95% - ≥80% volume of mineral of interest or ≤ 90% - ≥80%, depending on project.
Binary Associations- A particle that has ≥ 90 area% of the two minerals of interest or ≥ 95 area% of the two minerals of interest, depending on project.
Binary/Ternary Associations- A particle that has ≥ 90% volume of three minerals of interest or ≥ 95% volume of three minerals of interest (depending on project) either individually or grouped.
Complex - Particles that do not fall into the above categories

Exposure

Exposure values are calculated as the free surface % (% of the grain surface that is exposed to atmosphere) of each grain of the mineral of interest.

The 30% exposure value is considered an empirical threshold above which minerals may float. Minerals with less than 30% exposure might not float, but if they are recovered, then they will dilute the grade of the sulphide concentrate.

Grain Size

The grain size report serves to study the distribution of the grain size of a specific phase; within the TIMA software, it is defined as equivalent circle diameter (d). It is the diameter of a circle that has the same area (A) as the particle (or grain). The diameter is defined in pixels and then multiplied by pixel spacing (Ps) to obtain size in micrometres. The precise definition is described in the following formula: $d=2\cdot\sqrt{(A/\pi)}\cdot Ps$.

Mean Line Intercept

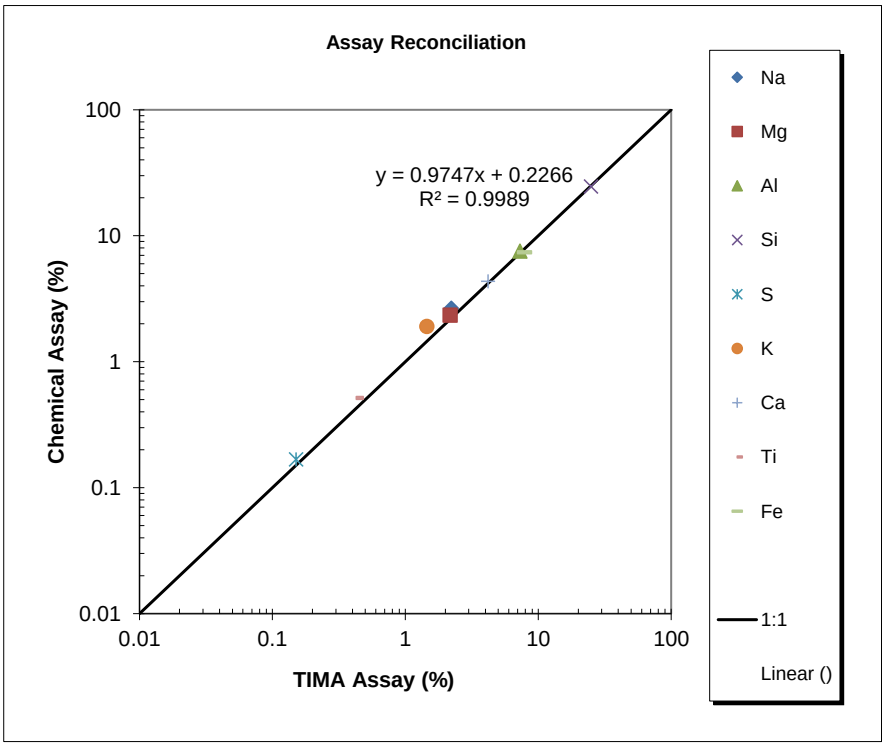
The value is calculated as weighted average of mean linear intercept lengths across the particle in four directions (horizontal – IH, vertical IV, Primary diagonal IPD and Counter-diagonal ICD). The weight for both IPD and ICD is 1/3 and for IH and IV is 1/6.

The mean line intercept length is calculated as area (A) of the particle (in pixels) divided by multiplication of number of linear intercepts (I) and distance between intercepts, which is 1 pixel for horizontal and vertical intercepts and $1/(\sqrt{2})$ pixels for diagonal and counter-diagonal intercepts, respectively.

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7010-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Assay Reconciliation



Sample	18806-03 Master CND
Element	**As Received**
Na TIMA Calculated	2.22
Na Chemical Assay	2.66
Mg TIMA Calculated	2.18
Mg Chemical Assay	2.35
Al TIMA Calculated	7.29
Al Chemical Assay	7.55
Si TIMA Calculated	25.0
Si Chemical Assay	24.6
S TIMA Calculated	0.15
S Chemical Assay	0.17
K TIMA Calculated	1.45
K Chemical Assay	1.91
Ca TIMA Calculated	4.19
Ca Chemical Assay	4.35
Ti TIMA Calculated	0.43
Ti Chemical Assay	0.52
Fe TIMA Calculated	7.88
Fe Chemical Assay	7.39

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7010-AUG25

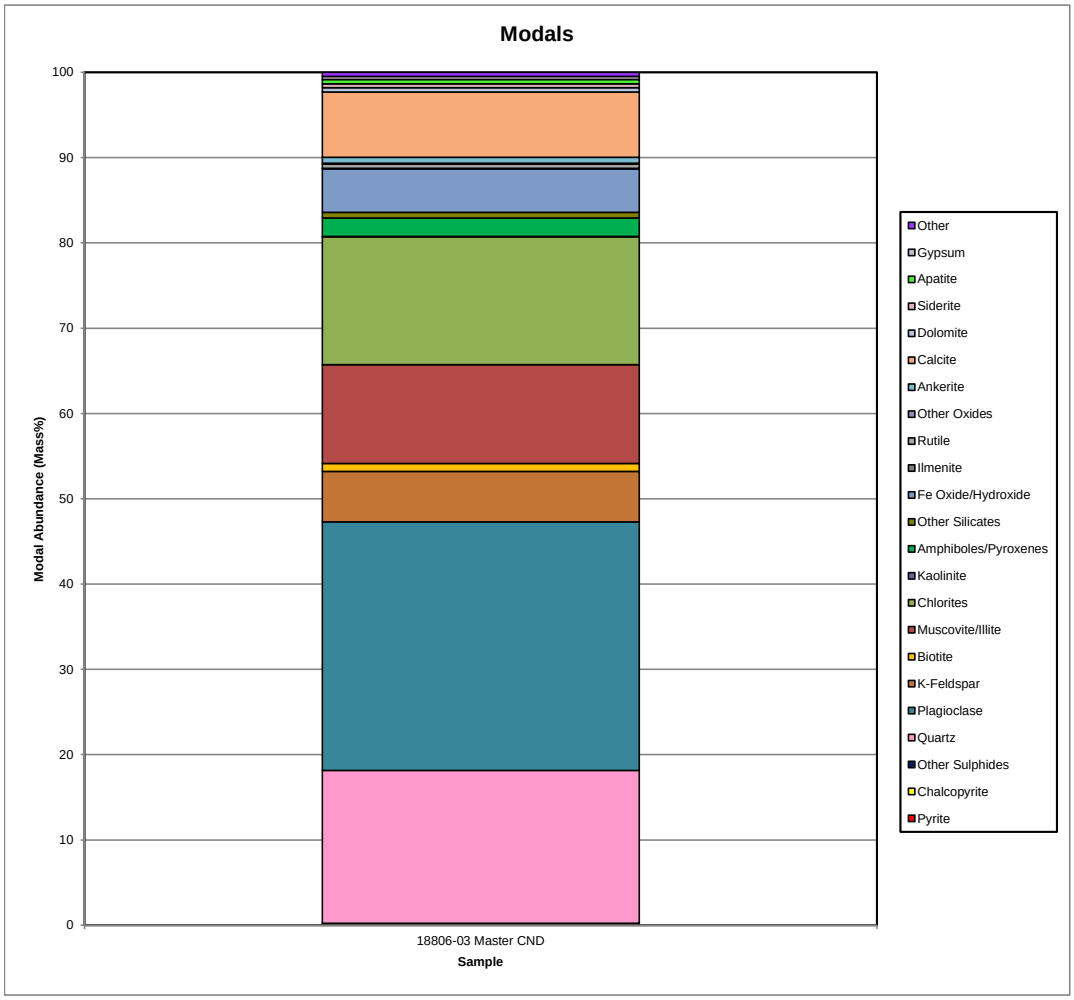
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Modals

Survey		**Custom MIN / MI7010-AUG25**
Project		**2138 Upper Beaver (Agnico)**
Sample		**18806-03 Master CND**
Fraction		**As Received**
Mass % of Size Fraction [%]		100.0
Median Particle Size (µm)		28
		Sample
Mineral Mass (%)	Pyrite	0.08
	Chalcopyrite	0.15
	Other Sulphides	0.00
	Quartz	17.9
	Plagioclase	29.2
	K-Feldspar	5.92
	Biotite	0.91
	Muscovite/Illite	11.6
	Chlorites	15.0
	Kaolinite	0.04
	Amphiboles/Pyroxenes	2.16
	Other Silicates	0.65
	Fe Oxide/Hydroxide	5.13
	Ilmenite	0.04
	Rutile	0.48
	Other Oxides	0.12
	Ankerite	0.70
	Calcite	7.64
	Dolomite	0.53
	Siderite	0.43
	Apatite	0.51
	Gypsum	0.35
	Other	0.49
	Total	100.0
Mean Line Intercept Length (µm)	Pyrite	7
	Chalcopyrite	5
	Other Sulphides	5
	Quartz	8
	Plagioclase	9
	K-Feldspar	9
	Biotite	5
	Muscovite/Illite	6
	Chlorites	6
	Kaolinite	7
	Amphiboles/Pyroxenes	9
	Other Silicates	7
	Fe Oxide/Hydroxide	8
	Ilmenite	6
	Rutile	6
	Other Oxides	6
	Ankerite	9
	Calcite	8
	Dolomite	10
	Siderite	7
	Apatite	7
	Gypsum	7
	Other	8

SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7010-AUG25

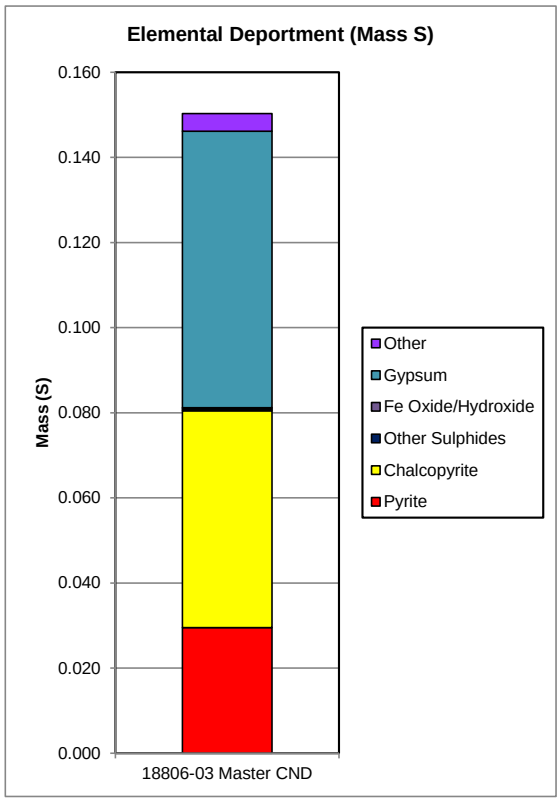
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)



SGS Canada Inc.
2138 Upper Beaver (Agnico)
Custom MIN
MI7010-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

S Deportment - Absolute



Mineral Name	18806-03 Master CND
Pyrite	0.03
Chalcopyrite	0.05
Other Sulphides	0.0004
Fe Oxide/Hydroxide	0.0003
Gypsum	0.06
Other	0.0042
Total	0.15

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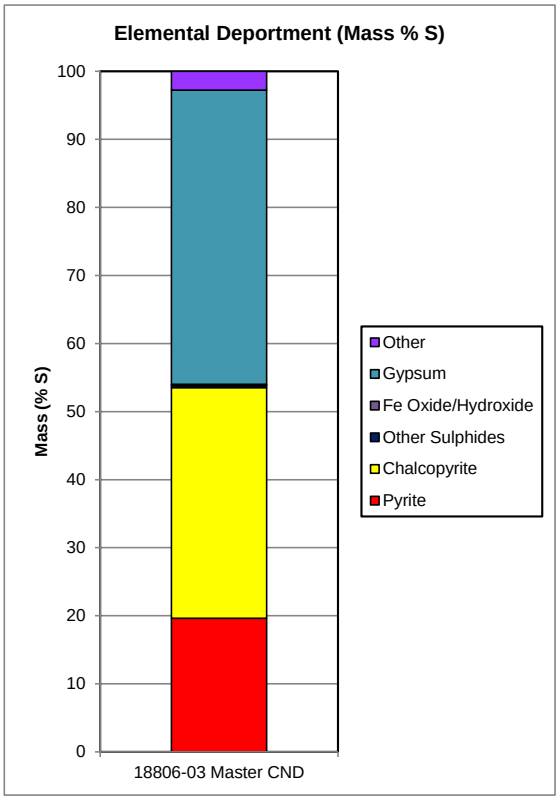
2138 Upper Beaver (Agnico)
Custom MIN
MI7010-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

S Deportment - Normalized



Mineral Name	18806-03 Master CND
Pyrite	19.63
Chalcopyrite	33.90
Other Sulphides	0.28
Fe Oxide/Hydroxide	0.20
Gypsum	43.21
Other	2.77
Total	100.00

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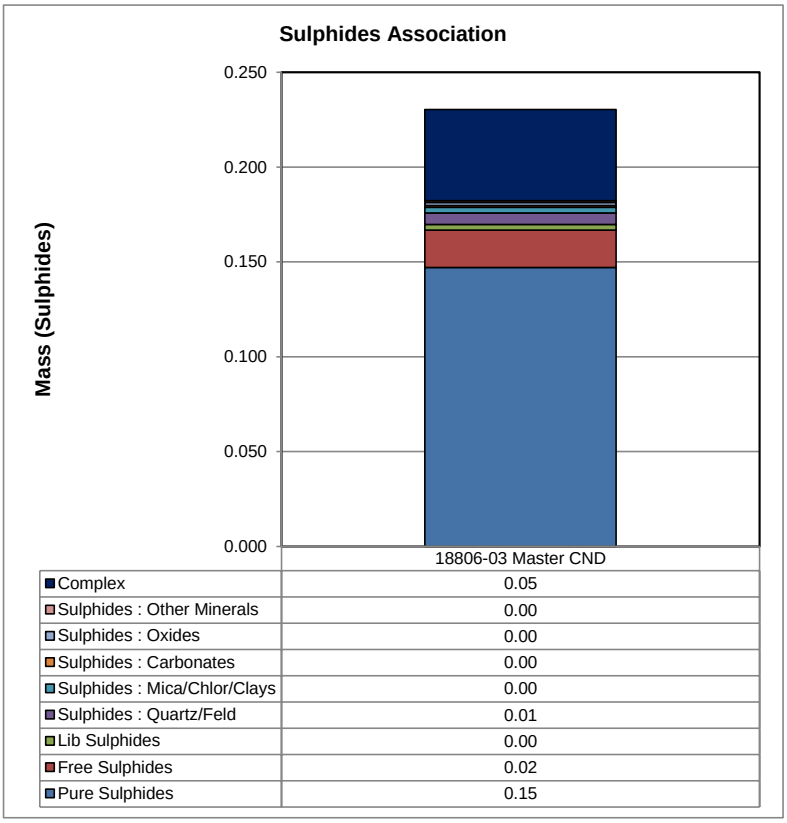
Custom MIN
MI7010-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Sulphides Association



Absolute Mass of Sulphides Across Samples

Mineral Name	18806-03 Master CND
Pure Sulphides	0.15
Free Sulphides	0.02
Lib Sulphides	0.00
Sulphides : Quartz/Feld	0.01
Sulphides : Mica/Chlor/Clays	0.00
Sulphides : Carbonates	0.00
Sulphides : Oxides	0.00
Sulphides : Other Minerals	0.00
Complex	0.05
Total	0.23

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2138 Upper Beaver (Agnico)
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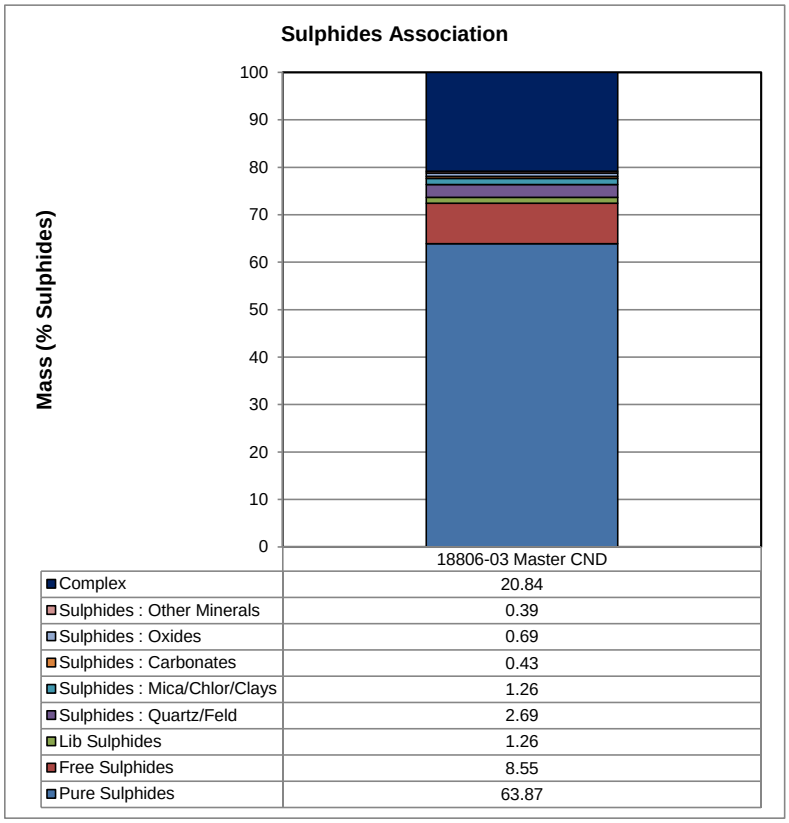
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Sulphides Association



Normalized Mass of Sulphides Across Samples

Mineral Name	18806-03 Master CND
Pure Sulphides	63.87
Free Sulphides	8.55
Lib Sulphides	1.26
Sulphides : Quartz/Feld	2.69
Sulphides : Mica/Chlor/Clays	1.26
Sulphides : Carbonates	0.43
Sulphides : Oxides	0.69
Sulphides : Other Minerals	0.39
Complex	20.84
Total	100.00

SGS Canada Inc.
2138 Upper Beaver (Agnico)
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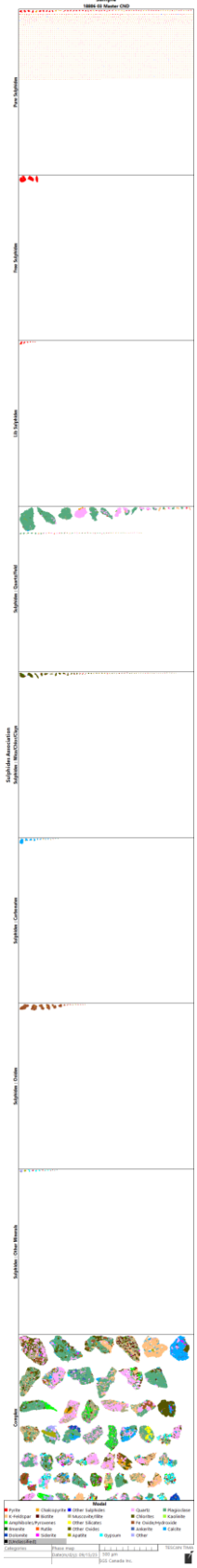
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyser)

Association Image Grid
Sample
18886-03 Master Chid



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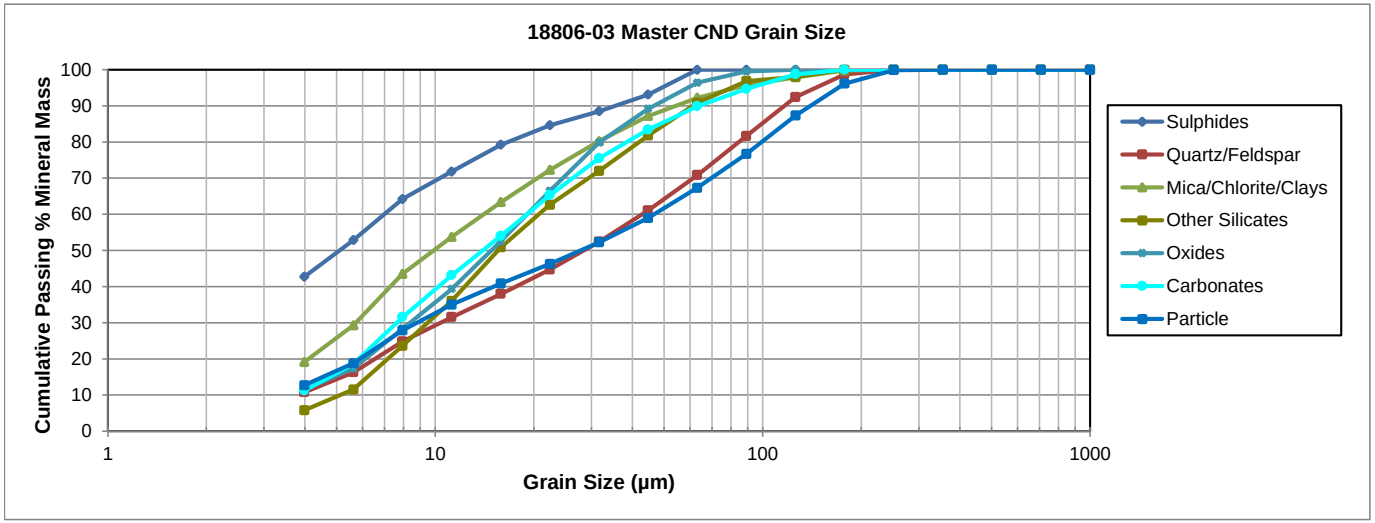
MI7010-AUG25

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer)

Cumulative Passing Grain Size Distribution



TIMA DATA

prepared for:

2138 Agnico Eagle - Upper Beaver

Gold Deportment

Custom MIN
MI7022-JAN22
January 20, 2026

Prepared by:

Ben Eaton/Lain Glossop

Reviewed by:

Lain Glossop
Senior Mineralogist

QT-CA-MIN-MET-MN-I01 rev 0.1

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Member of the SGS Group (SGS SA)

Method Summary

Quantitative TIMA Analysis:

The mineralogical analysis was conducted with the TIMA-X technology. TIMA-X is an acronym for TESCAN Integrated Mineral Analyzer, which is one of the newest Automated Scanning Electron Microscopy (ASEM) instruments on the market. It is based on four Energy Dispersive X-Ray (EDX) silicon drift detectors (SDD) attached to a TESCAN MIRA (field-emission gun – FEG) platform, which also includes backscattered electron (BSE) and secondary electron (SE) detectors. The TIMA system utilizes both the EDX and BSE signals to identify minerals at each measurement point (or each homogenous segment of a grain, depending upon the analysis mode). It is optimized to deal with rapidly acquired low-count spectra. These EDX (and BSE) spectra (and BSE data) are compared to entries in a mineral library on a first match principle to identify the mineral phase, where this mineral library is based on theoretical mineral/phase composition or created by the user based on BSE, X-ray spectral windows counts, and/or ratios.

It must be noted, that due to the difference in grain size, all size fractions contain particles that are close to the measurement area (~3 µm) and the spacing of the measurement points and therefore can encounter less precision in the measurements. In addition, the X-ray beam can scatter at the edges of particles and can lead to inaccurate analytical results. As the particles become smaller, the edges constitute a more significant percentage of the total particle mass. Therefore, some bias might be introduced, especially in the fine fraction, and caution is advised in interpreting the results in this particular fraction.

The limit of detection for any element within a phase is >1-2 wt% or 10,000 - 20,000 ppm by automated SEM-based EDS methods. Any elements that are present below this level are likely not to be detected. Accurate element reconciliation between TIMA calculated values and geochemical assay values is not possible for elements that are distributed in phases where the level of the element does not exceed 10,000 - 20,000 PPM. Many minerals display compositional variation with solid solutions between end members. Therefore, in order to balance the TIMA calculated assay to direct chemical assay more accurately, EMPA is recommended to quantify the mineral chemistries in the sample.

If geochemical assays have not been conducted by SGS, we cannot guarantee that values provided by another lab are representative of the material that was analyzed by SGS.

It is not possible to distinguish chemically similar phases by any EDS-based SEM system (eg. magnetite and hematite). X-ray diffraction is required to speciate chemically similar minerals, or polymorphs properly.

Amorphous phases cannot be classified as minerals because one of the fundamental criteria for a substance to be considered a mineral is that it possesses a crystalline structure. A crystalline structure means the atoms are arranged in a highly ordered, repeating pattern that extends in three dimensions. This internal order is what gives minerals their characteristic physical properties, such as cleavage and consistent optical behavior.
In contrast, amorphous materials lack this long-range atomic order; their atoms are arranged randomly rather than in a regular lattice. While amorphous phases may share similar chemical compositions with certain minerals, the absence of crystallinity disqualifies them from being classified as minerals under the widely accepted definition by the International Mineralogical Association (IMA). In the event that there are phases present in a sample that do not fit the definition of a known mineral, the phase will be identified in the report with a name consisting of the elements present. Semi-quantitative EDS data for the phase can be provided.

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TIMA Analysis Definitions

Liberation and Associations

Pure – A particle that has 100% volume of mineral of interest.
Free- A particle that has ≥ 95% volume of mineral of interest or ≥ 90% volume of mineral of interest, depending on project.
Liberated - A particle that has ≤ 95% - ≥80% volume of mineral of interest or ≤ 90% - ≥80%, depending on project.
Binary Associations- A particle that has ≥ 90 area% of the two minerals of interest or ≥ 95 area% of the two minerals of interest, depending on project.
Binary/Ternary Associations- A particle that has ≥ 90% volume of three minerals of interest or ≥ 95% volume of three minerals of interest (depending on project) either individually or grouped.
Complex - Particles that do not fall into the above categories

Exposure

Exposure values are calculated as the free surface % (% of the grain surface that is exposed to atmosphere) of each grain of the mineral of interest.

The 30% exposure value is considered an empirical threshold above which minerals may float. Minerals with less than 30% exposure might not float, but if they are recovered, then they will dilute the grade of the sulphide concentrate.

Grain Size

The grain size report serves to study the distribution of the grain size of a specific phase; within the TIMA software, it is defined as equivalent circle diameter (d). It is the diameter of a circle that has the same area (A) as the particle (or grain). The diameter is defined in pixels and then multiplied by pixel spacing (Ps) to obtain size in micrometres. The precise definition is described in the following formula: $d=2\cdot\sqrt{(A/\pi)}\cdot Ps$.

Mean Line Intercept

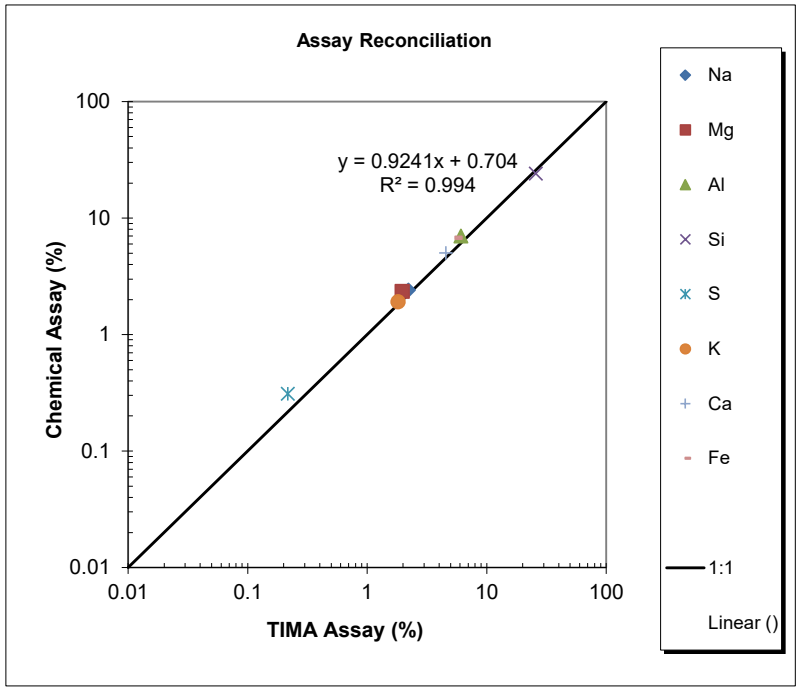
The value is calculated as weighted average of mean linear intercept lengths across the particle in four directions (horizontal – IH, vertical IV, Primary diagonal IPD and Counter-diagonal ICD). The weight for both IPD and ICD is 1/3 and for IH and IV is 1/6.

The mean line intercept length is calculated as area (A) of the particle (in pixels) divided by multiplication of number of linear intercepts (I) and distance between intercepts, which is 1 pixel for horizontal and vertical intercepts and $1/(\sqrt{2})$ pixels for diagonal and counter-diagonal intercepts, respectively.

SGS Canada Inc.
2138 Agnico Eagle - Upper Beaver
Custom MIN
MI7022-JAN22

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1

Assay Reconciliation



Sample	Detox Tails Slurry
Element	**As Rec'd**
Na TIMA Calculated	2.21
Na Chemical Assay	2.41
Mg TIMA Calculated	1.96
Mg Chemical Assay	2.36
Al TIMA Calculated	6.07
Al Chemical Assay	7.03
Si TIMA Calculated	25.7
Si Chemical Assay	24.2
S TIMA Calculated	0.22
S Chemical Assay	0.31
K TIMA Calculated	1.81
K Chemical Assay	1.92
Ca TIMA Calculated	4.55
Ca Chemical Assay	5.02
Fe TIMA Calculated	5.43
Fe Chemical Assay	6.78

SGS Canada Inc.
2138 Agnico Eagle - Upper Beaver
Custom MIN
MI7022-JAN22

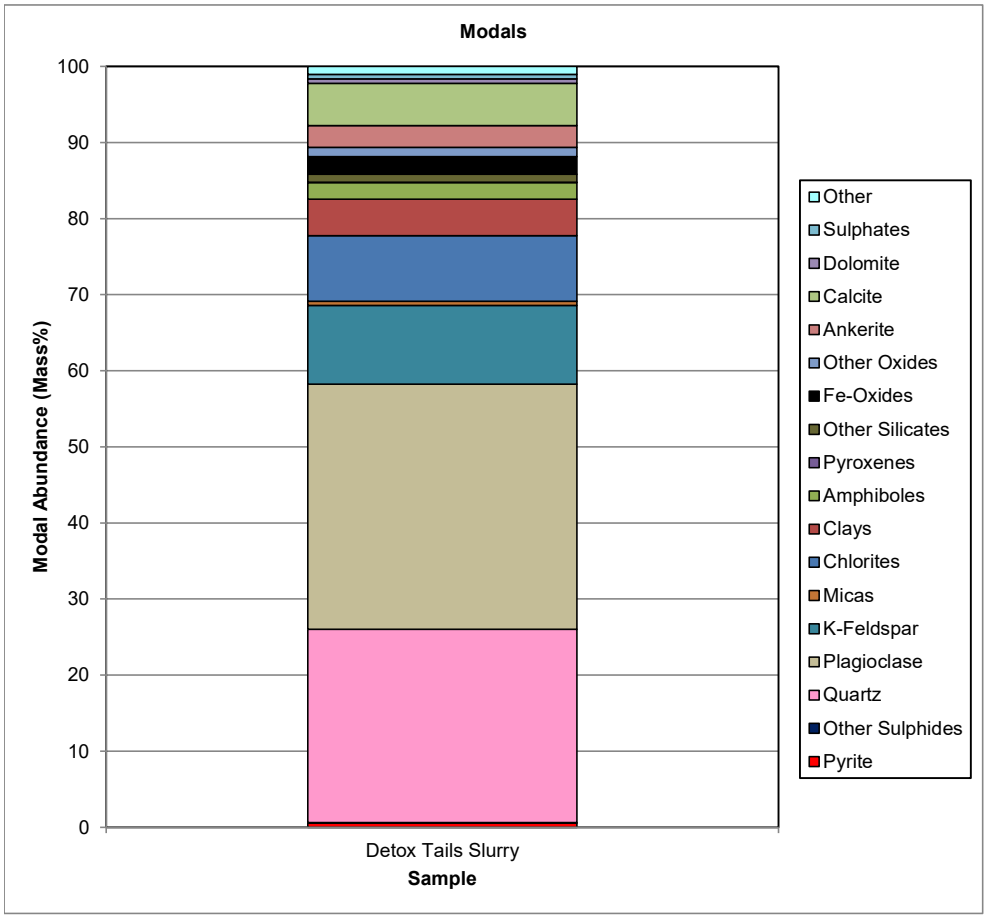
High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev

Modals

Survey		**Custom MIN / MI7022-JAN22**
Project		**2138 Agnico Eagle - Upper Beaver**
Sample		**Detox Tails Slurry**
Fraction		**As Rec'd**
Mass % of Size Fraction [%]		100.0
Median Particle Size (µm)		112
		Sample
Mineral Mass (%)	Pyrite	0.58
	Other Sulphides	0.04
	Quartz	25.4
	Plagioclase	32.3
	K-Feldspar	10.3
	Micas	0.53
	Chlorites	8.59
	Clays	4.84
	Amphiboles	2.16
	Pyroxenes	0.04
	Other Silicates	1.05
	Fe-Oxides	2.34
	Other Oxides	1.22
	Ankerite	2.83
	Calcite	5.58
	Dolomite	0.56
	Sulphates	0.61
	Other	1.04
	Total	100.0
Mean Line Intercept Length (µm)	Pyrite	9
	Other Sulphides	11
	Quartz	17
	Plagioclase	17
	K-Feldspar	14
	Micas	6
	Chlorites	11
	Clays	7
	Amphiboles	11
	Pyroxenes	6
	Other Silicates	10
	Fe-Oxides	11
	Other Oxides	8
	Ankerite	13
	Calcite	13
	Dolomite	9
	Sulphates	20
	Other	7

SGS Canada Inc.
2138 Agnico Eagle - Upper Beaver
Custom MIN
MI7022-JAN22

High Definition Mineralogical Analysis using TIMA (TESCAN Integrated Mineral Analyzer) - QT-CA-MIN-MET-MN-I01 rev 0.1



Size Analysis Report (MET group)

Malvern Panalytical

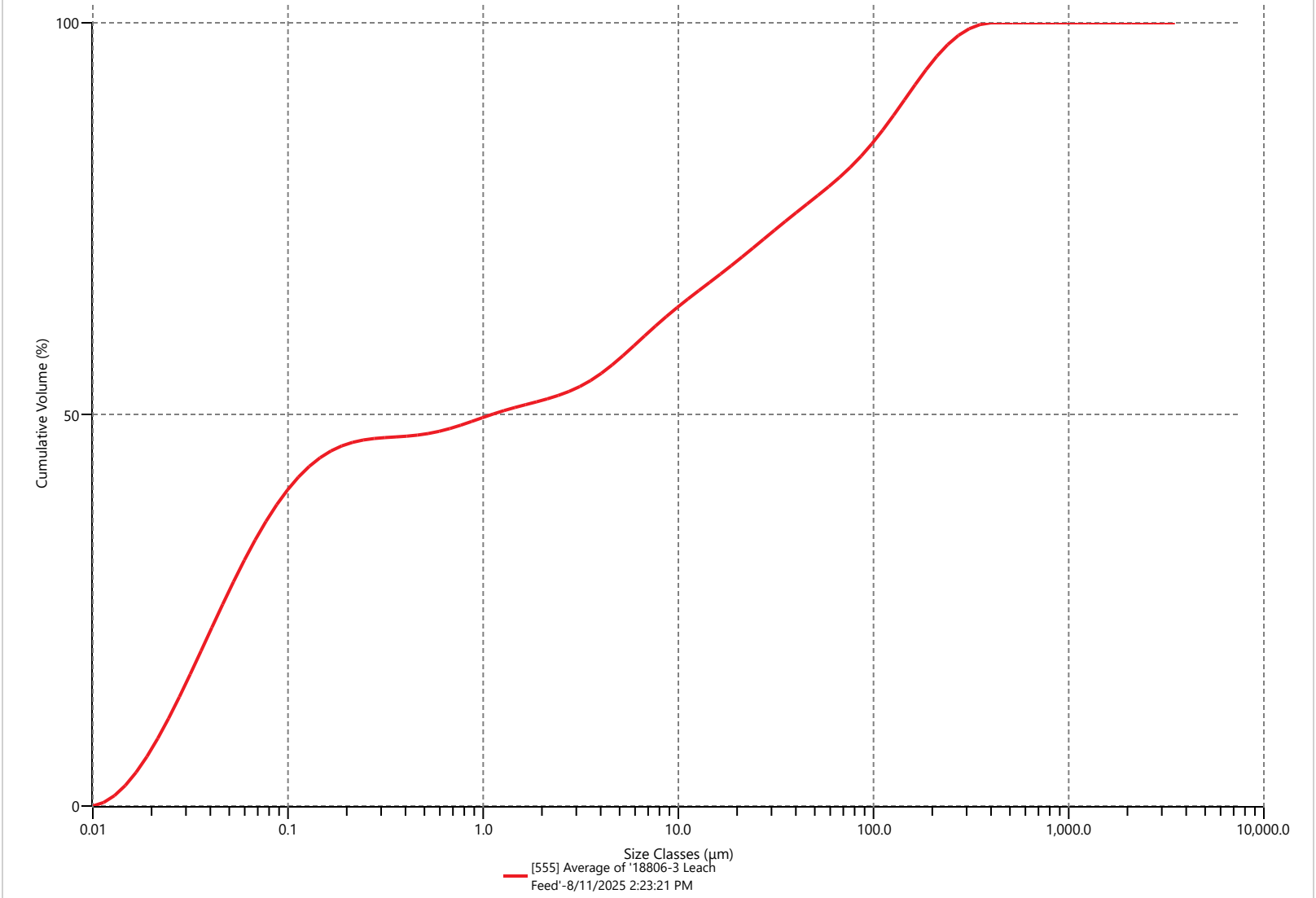
Sample Name	Average of '18806-3 Leach Feed'
SOP File Name	Default.msop
Dispersant Name	Water
Analysis Sensitivity	Normal

Laser Obscuration	13.45 %
Result Units	Volume
Result Source	Averaged
Dv (80)	65.1 µm

Operator Name	Shengmei_Yang2

Measurement Date	***8/11/2025***

Undersize



Size Analysis Report (MET group)

Malvern Panalytical

Result

Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0100	0.45	0.113	1.36	1.28	0.39	14.5	1.06	163	1.89	1850	0.00
0.0114	0.88	0.128	1.11	1.45	0.36	16.4	1.08	186	1.73	2100	0.00
0.0129	1.29	0.146	0.86	1.65	0.36	18.7	1.11	211	1.48	2390	0.00
0.0147	1.67	0.166	0.64	1.88	0.38	21.2	1.13	240	1.18	2710	0.00
0.0167	2.02	0.188	0.46	2.13	0.43	24.1	1.14	272	0.85	3080	0.00
0.0189	2.31	0.214	0.30	2.42	0.51	27.4	1.14	310	0.54	3500	
0.0215	2.56	0.243	0.19	2.75	0.62	31.1	1.13	352	0.22		
0.0244	2.75	0.276	0.12	3.12	0.77	35.3	1.11	400	0.00		
0.0278	2.89	0.314	0.09	3.55	0.93	40.1	1.10	454	0.00		
0.0315	2.97	0.357	0.09	4.03	1.07	45.6	1.09	516	0.00		
0.0358	2.99	0.405	0.14	4.58	1.18	51.8	1.12	586	0.00		
0.0407	2.96	0.460	0.20	5.21	1.25	58.9	1.18	666	0.00		
0.0463	2.88	0.523	0.28	5.92	1.27	66.9	1.29	756	0.00		
0.0526	2.75	0.594	0.36	6.72	1.25	76.0	1.43	859	0.00		
0.0597	2.58	0.675	0.43	7.64	1.21	86.4	1.59	976	0.00		
0.0679	2.38	0.767	0.47	8.68	1.15	98.1	1.75	1110	0.00		
0.0771	2.14	0.872	0.49	9.86	1.10	111	1.88	1260	0.00		
0.0876	1.89	0.991	0.47	11.2	1.06	127	1.96	1430	0.00		
0.0995	1.63	1.13	0.44	12.7	1.05	144	1.97	1630	0.00		

Size Analysis Report (MET group)

Malvern Panalytical

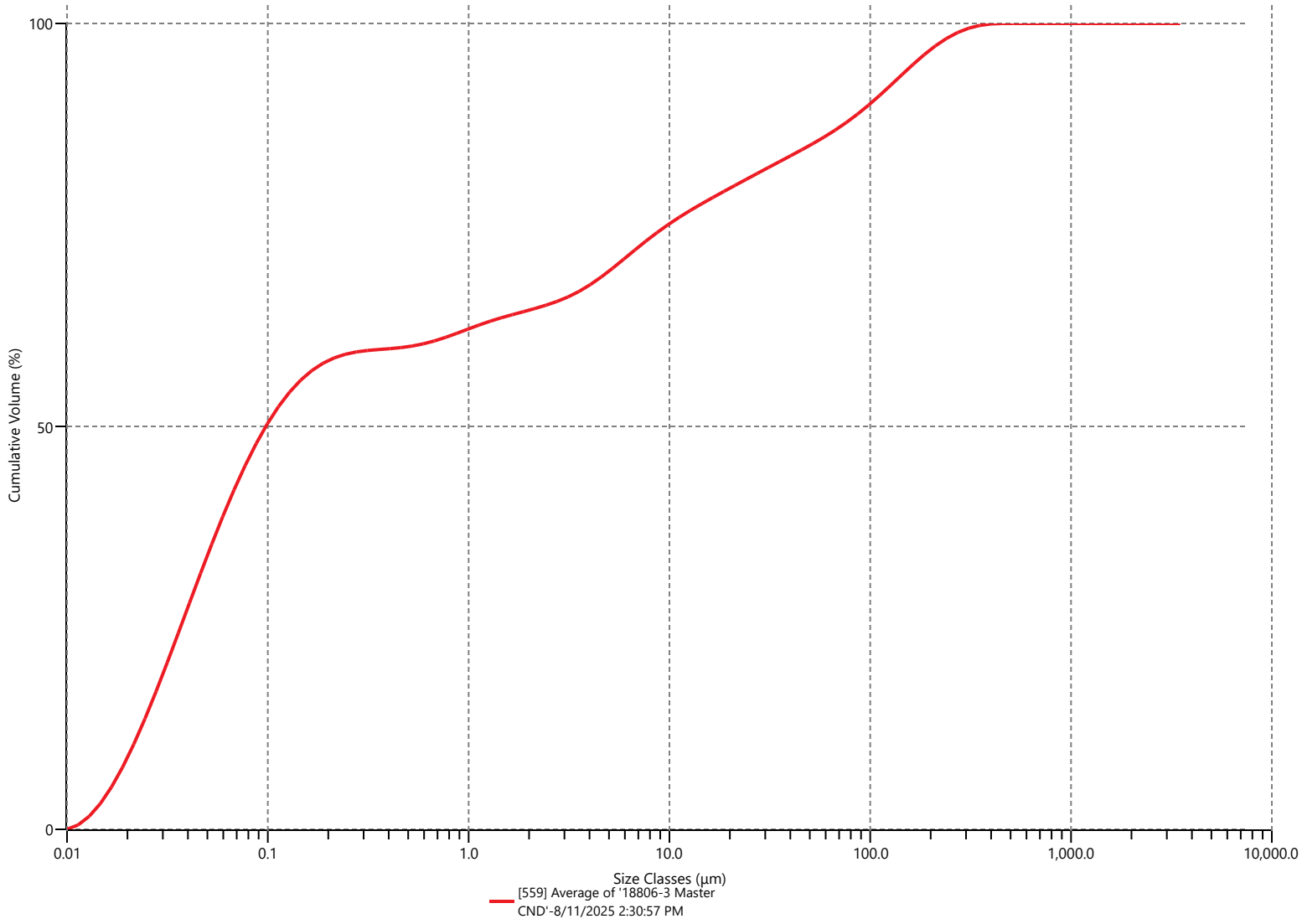
Sample Name	Average of '18806-3 Master CND'
SOP File Name	Default.msop
Dispersant Name	Water
Analysis Sensitivity	Normal

Laser Obscuration	30.21 %
Result Units	Volume
Result Source	Averaged
Dv (80)	21.6 µm

Operator Name	Shengmei_Yang2

Measurement Date	***8/11/2025***

Undersize



Size Analysis Report (MET group)

Malvern Panalytical

Result

Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0100	0.55	0.113	1.80	1.28	0.43	14.5	0.78	163	1.21	1850	0.00
0.0114	1.08	0.128	1.49	1.45	0.39	16.4	0.76	186	1.09	2100	0.00
0.0129	1.58	0.146	1.18	1.65	0.37	18.7	0.75	211	0.92	2390	0.00
0.0147	2.05	0.166	0.90	1.88	0.38	21.2	0.74	240	0.74	2710	0.00
0.0167	2.47	0.188	0.66	2.13	0.41	24.1	0.74	272	0.54	3080	0.00
0.0189	2.84	0.214	0.45	2.42	0.47	27.4	0.73	310	0.35	3500	
0.0215	3.15	0.243	0.29	2.75	0.56	31.1	0.73	352	0.19		
0.0244	3.39	0.276	0.18	3.12	0.69	35.3	0.73	400	0.05		
0.0278	3.57	0.314	0.12	3.55	0.83	40.1	0.74	454	0.00		
0.0315	3.68	0.357	0.10	4.03	0.96	45.6	0.77	516	0.00		
0.0358	3.72	0.405	0.13	4.58	1.06	51.8	0.81	586	0.00		
0.0407	3.69	0.460	0.19	5.21	1.13	58.9	0.87	666	0.00		
0.0463	3.61	0.523	0.27	5.92	1.14	66.9	0.94	756	0.00		
0.0526	3.46	0.594	0.36	6.72	1.11	76.0	1.03	859	0.00		
0.0597	3.27	0.675	0.44	7.64	1.06	86.4	1.13	976	0.00		
0.0679	3.02	0.767	0.50	8.68	0.99	98.1	1.21	1110	0.00		
0.0771	2.75	0.872	0.52	9.86	0.92	111	1.27	1260	0.00		
0.0876	2.45	0.991	0.51	11.2	0.85	127	1.30	1430	0.00		
0.0995	2.13	1.13	0.48	12.7	0.81	144	1.28	1630	0.00		

Size Analysis Report (MET group)

SGS Canada Inc

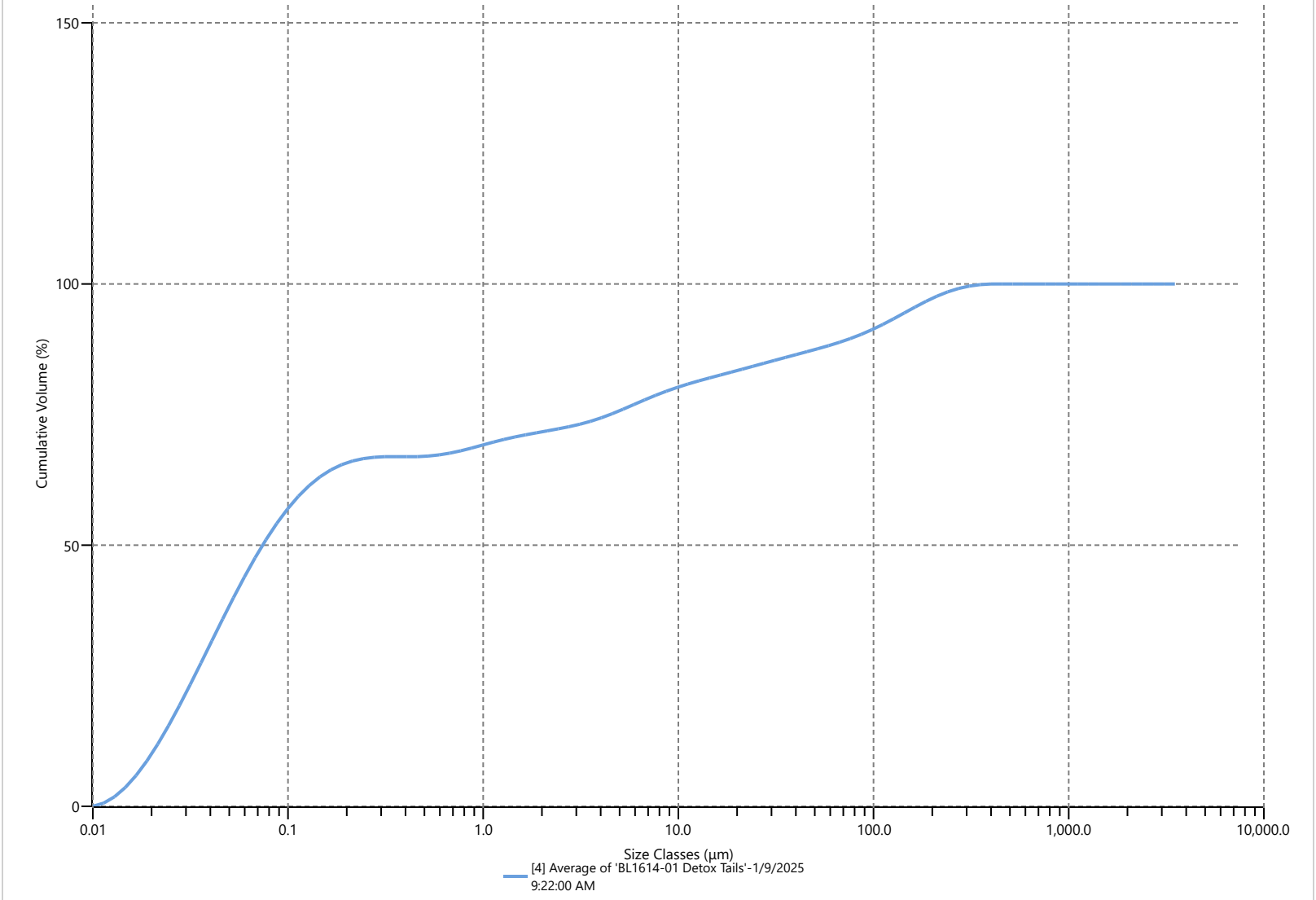
Sample Name	Average of 'BL1614-01 Detox Tails'
SOP File Name	Default.msop
Dispersant Name	Water
Analysis Sensitivity	Normal

Laser Obscuration	35.51 %
Result Units	Volume
Result Source	Averaged
Dv (80)	9.53 µm

Operator Name	rod_bulgin

Measurement Date	***1/9/2025***

Undersize



Size Analysis Report (MET group)

SGS Canada Inc

Result

Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0100	0.61	0.113	2.05	1.28	0.47	14.5	0.55	163	1.08	1850	0.00
0.0114	1.21	0.128	1.68	1.45	0.41	16.4	0.55	186	0.98	2100	0.00
0.0129	1.78	0.146	1.32	1.65	0.38	18.7	0.56	211	0.83	2390	0.00
0.0147	2.31	0.166	1.00	1.88	0.37	21.2	0.56	240	0.65	2710	0.00
0.0167	2.78	0.188	0.70	2.13	0.38	24.1	0.57	272	0.46	3080	0.00
0.0189	3.20	0.214	0.45	2.42	0.41	27.4	0.56	310	0.28	3500	
0.0215	3.55	0.243	0.26	2.75	0.47	31.1	0.56	352	0.12		
0.0244	3.83	0.276	0.12	3.12	0.57	35.3	0.55	400	0.00		
0.0278	4.03	0.314	0.00	3.55	0.68	40.1	0.55	454	0.00		
0.0315	4.16	0.357	0.00	4.03	0.78	45.6	0.56	516	0.00		
0.0358	4.21	0.405	0.00	4.58	0.86	51.8	0.59	586	0.00		
0.0407	4.18	0.460	0.12	5.21	0.90	58.9	0.64	666	0.00		
0.0463	4.09	0.523	0.22	5.92	0.90	66.9	0.71	756	0.00		
0.0526	3.93	0.594	0.34	6.72	0.86	76.0	0.80	859	0.00		
0.0597	3.71	0.675	0.44	7.64	0.80	86.4	0.90	976	0.00		
0.0679	3.44	0.767	0.52	8.68	0.72	98.1	1.00	1110	0.00		
0.0771	3.13	0.872	0.57	9.86	0.66	111	1.08	1260	0.00		
0.0876	2.78	0.991	0.57	11.2	0.60	127	1.13	1430	0.00		
0.0995	2.42	1.13	0.53	12.7	0.57	144	1.13	1630	0.00		

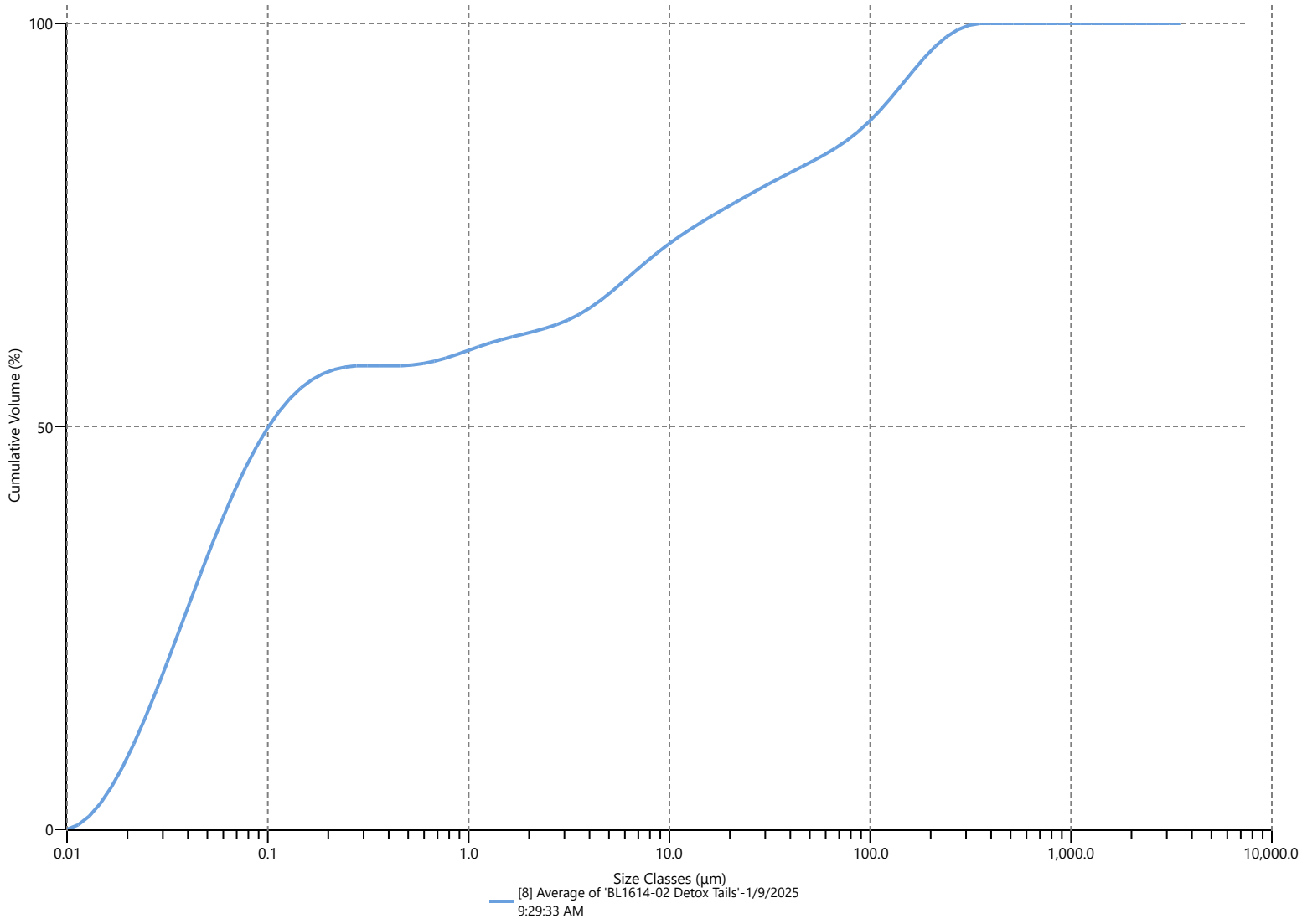
Size Analysis Report (MET group)

SGS Canada Inc

Malvern

Sample Name	Average of 'BL1614-02 Detox Tails'	**Laser Obscuration**	29.30 %
SOP File Name	Default.msop	**Result Units**	Volume
Dispersant Name	Water	**Result Source**	Averaged
Analysis Sensitivity	Normal	**Dv (80)**	30.8 µm
Operator Name	rod_bulgin	***Measurement Date***	***1/9/2025***

Undersize



Size Analysis Report (MET group)

SGS Canada Inc

Result

Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0100	0.55	0.113	1.67	1.28	0.40	14.5	0.83	163	1.62	1850	0.00
0.0114	1.08	0.128	1.34	1.45	0.36	16.4	0.81	186	1.44	2100	0.00
0.0129	1.59	0.146	1.03	1.65	0.34	18.7	0.79	211	1.18	2390	0.00
0.0147	2.06	0.166	0.75	1.88	0.35	21.2	0.78	240	0.87	2710	0.00
0.0167	2.48	0.188	0.51	2.13	0.39	24.1	0.77	272	0.55	3080	0.00
0.0189	2.85	0.214	0.31	2.42	0.45	27.4	0.75	310	0.24	3500	
0.0215	3.15	0.243	0.16	2.75	0.55	31.1	0.73	352	0.00		
0.0244	3.39	0.276	0.00	3.12	0.69	35.3	0.72	400	0.00		
0.0278	3.56	0.314	0.00	3.55	0.84	40.1	0.71	454	0.00		
0.0315	3.66	0.357	0.00	4.03	0.99	45.6	0.71	516	0.00		
0.0358	3.69	0.405	0.00	4.58	1.10	51.8	0.75	586	0.00		
0.0407	3.65	0.460	0.10	5.21	1.18	58.9	0.82	666	0.00		
0.0463	3.55	0.523	0.19	5.92	1.20	66.9	0.93	756	0.00		
0.0526	3.40	0.594	0.28	6.72	1.18	76.0	1.07	859	0.00		
0.0597	3.19	0.675	0.38	7.64	1.13	86.4	1.25	976	0.00		
0.0679	2.93	0.767	0.45	8.68	1.06	98.1	1.42	1110	0.00		
0.0771	2.64	0.872	0.49	9.86	0.99	111	1.57	1260	0.00		
0.0876	2.33	0.991	0.49	11.2	0.92	127	1.67	1430	0.00		
0.0995	2.00	1.13	0.45	12.7	0.86	144	1.69	1630	0.00		

TABLE E-
CYCLOSIZING ANALYSIS
BL1614-01J Detox Tailing

Product	Size (µm)		Weight % Retained	Cumulative % Passing
	Limiting	Effective		
35 Mesh	425	425	0.00	100.0
48 Mesh	300	300	0.30	99.7
65 Mesh	212	212	9.20	90.5
100 Mesh	150	150	28.40	62.1
150 Mesh	106	106	26.70	35.4
200 Mesh	75	75	16.50	18.9
270 Mesh	53	53	8.50	10.4
Cyclone 1	50	48	1.02	9.4
Cyclone 2	33	31	3.16	6.2
Cyclone 3	23	22	1.86	4.4
Cyclone 4	16	15	0.91	3.4
Cyclone 5	13	12	0.54	2.9
Total			100.00	**

Operating Conditions	Measured	Factor
Temperature (°C)	12.50	1.099
Specific Gravity	3.05	0.903
Flow Rate (mm)	180	1.012
Elutriation Time (min)	20	0.955
Overall Factor		0.959
K80 Size (microns)		**189**

Particle Size Distribution Plot

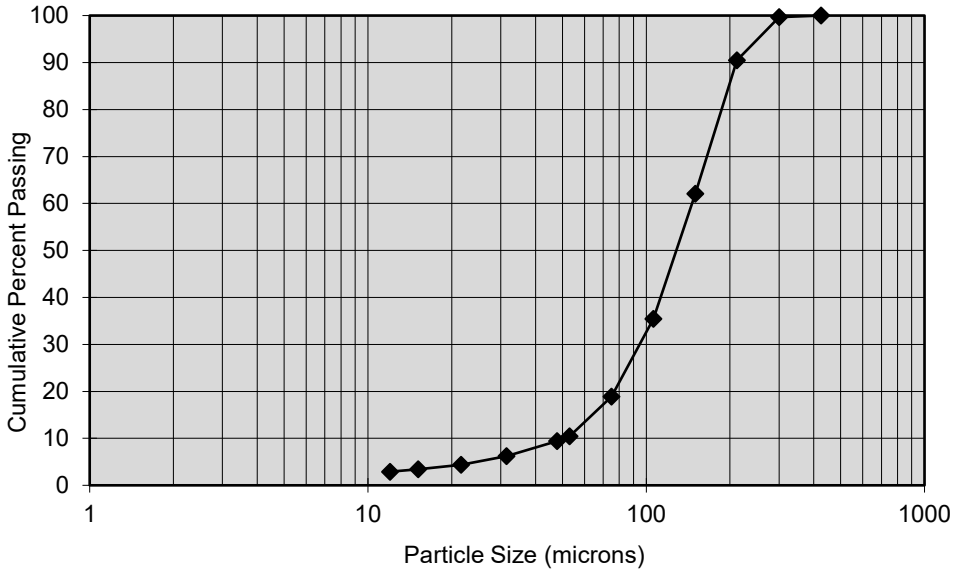


TABLE E-
CYCLOSIZING ANALYSIS
BL1614-02D Cyanide Detox Tailing

Product	Size (µm)		Weight % Retained	Cumulative % Passing
	Limiting	Effective		
35 Mesh	425	425	0.00	100.0
48 Mesh	300	300	0.10	99.9
65 Mesh	212	212	1.20	98.7
100 Mesh	150	150	10.60	88.1
150 Mesh	106	106	13.80	74.3
200 Mesh	75	75	11.20	63.1
270 Mesh	53	53	7.90	55.2
Cyclone 1	50	50	1.06	54.1
Cyclone 2	33	33	5.75	48.4
Cyclone 3	23	23	6.68	41.7
Cyclone 4	16	16	6.01	35.7
Cyclone 5	13	13	4.45	31.3
Total			100.00	**

Operating Conditions	Measured	Factor
Temperature (°C)	12.50	1.099
Specific Gravity	2.89	0.943
Flow Rate (mm)	180	1.012
Elutriation Time (min)	20	0.955
Overall Factor		1.002
K80 Size (microns)		**123**

Particle Size Distribution Plot

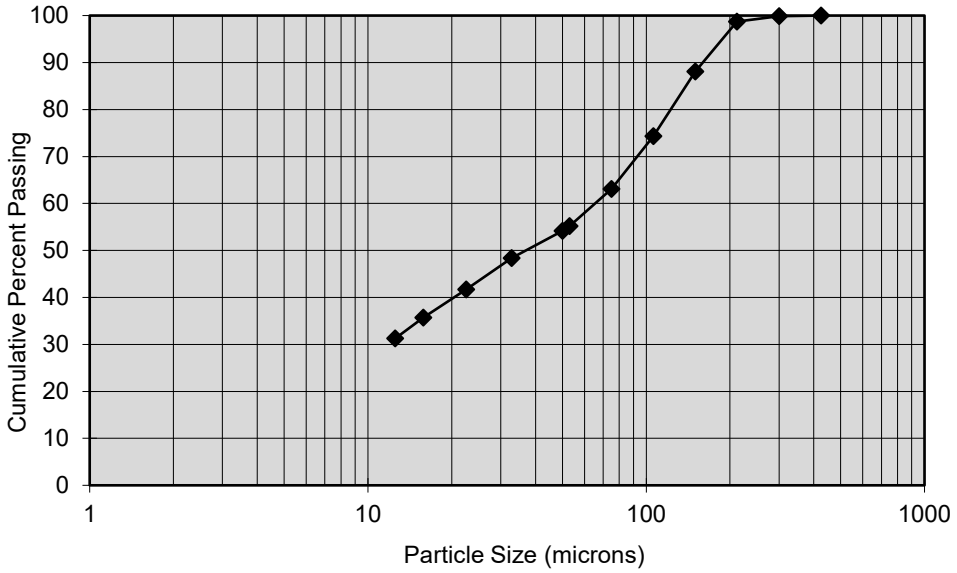
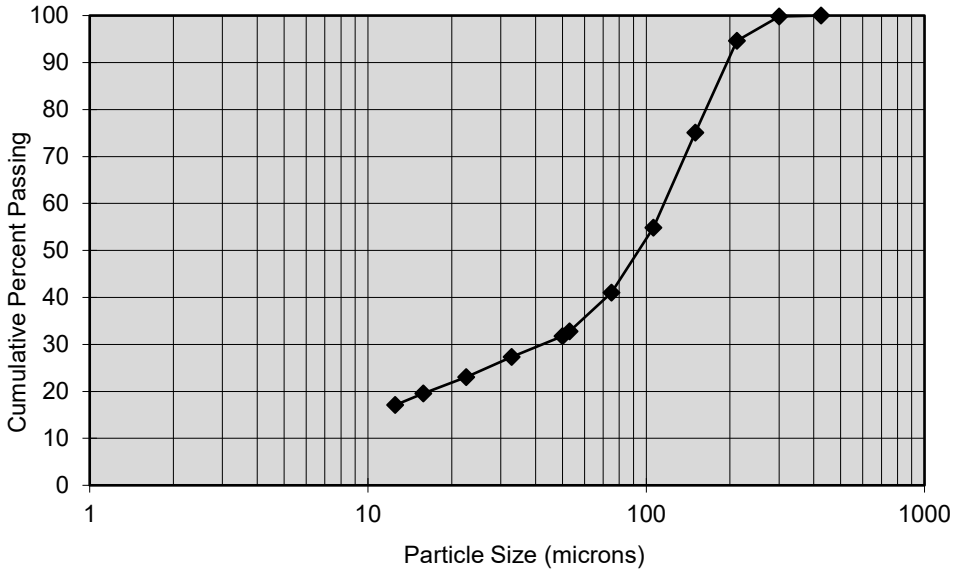


TABLE E-
CYCLOSIZING ANALYSIS
BL1614-02D Cyanide Detox Tailing

Product	Size (µm)		Weight % Retained	Cumulative % Passing
	Limiting	Effective		
35 Mesh	425	425	0.00	100.0
48 Mesh	300	300	0.20	99.8
65 Mesh	212	212	5.20	94.6
100 Mesh	150	150	19.50	75.1
150 Mesh	106	106	20.25	54.9
200 Mesh	75	75	13.85	41.0
270 Mesh	53	53	8.20	32.8
Cyclone 1	50	50	1.04	31.8
Cyclone 2	33	33	4.46	27.3
Cyclone 3	23	23	4.27	23.0
Cyclone 4	16	16	3.46	19.6
Cyclone 5	13	13	2.50	17.1
Total			100.00	**

Operating Conditions	Measured	Factor
Temperature (°C)	12.50	1.099
Specific Gravity	2.89	0.943
Flow Rate (mm)	180	1.012
Elutriation Time (min)	20	0.955
Overall Factor		1.002
K80 Size (microns)		**123**

Particle Size Distribution Plot



Size Analysis Report (MET group)

SGS Canada Inc

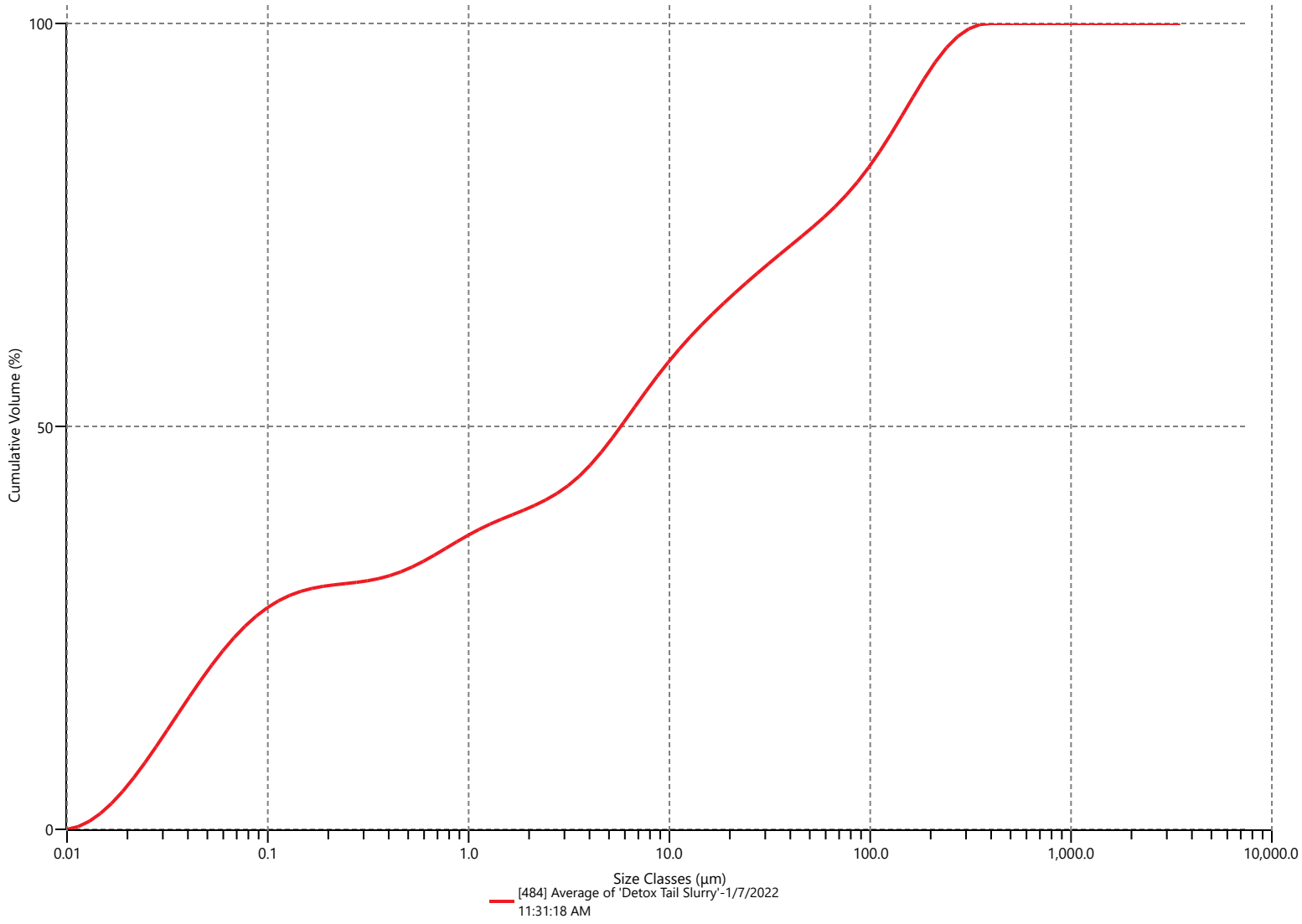
Sample Name	Average of 'Detox Tail Slurry'
SOP File Name	Default.msop
Dispersant Name	Water
Analysis Sensitivity	Normal

Laser Obscuration	24.09 %
Result Units	Volume
Result Source	Averaged
Dv (80)	84.2 µm

Operator Name	Shengmei_Yang2

Measurement Date	***1/7/2022***

Undersize



Size Analysis Report (MET group)

SGS Canada Inc

Result

Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In	Size (µm)	% Volume In
0.0100	0.34	0.113	0.67	1.28	0.60	14.5	1.38	163	2.26	1850	0.00
0.0114	0.66	0.128	0.50	1.45	0.56	16.4	1.32	186	2.08	2100	0.00
0.0129	0.97	0.146	0.36	1.65	0.56	18.7	1.27	211	1.78	2390	0.00
0.0147	1.25	0.166	0.26	1.88	0.60	21.2	1.23	240	1.39	2710	0.00
0.0167	1.49	0.188	0.19	2.13	0.68	24.1	1.20	272	0.95	3080	0.00
0.0189	1.70	0.214	0.15	2.42	0.80	27.4	1.17	310	0.54	3500	
0.0215	1.86	0.243	0.16	2.75	0.96	31.1	1.15	352	0.13		
0.0244	1.98	0.276	0.20	3.12	1.17	35.3	1.13	400	0.00		
0.0278	2.06	0.314	0.27	3.55	1.40	40.1	1.14	454	0.00		
0.0315	2.08	0.357	0.37	4.03	1.61	45.6	1.16	516	0.00		
0.0358	2.07	0.405	0.48	4.58	1.78	51.8	1.22	586	0.00		
0.0407	2.01	0.460	0.59	5.21	1.89	58.9	1.31	666	0.00		
0.0463	1.91	0.523	0.70	5.92	1.94	66.9	1.44	756	0.00		
0.0526	1.78	0.594	0.77	6.72	1.92	76.0	1.61	859	0.00		
0.0597	1.62	0.675	0.82	7.64	1.85	86.4	1.80	976	0.00		
0.0679	1.44	0.767	0.83	8.68	1.76	98.1	1.99	1110	0.00		
0.0771	1.25	0.872	0.80	9.86	1.65	111	2.16	1260	0.00		
0.0876	1.05	0.991	0.74	11.2	1.55	127	2.29	1430	0.00		
0.0995	0.85	1.13	0.66	12.7	1.45	144	2.33	1630	0.00		

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : Februray 3/2022

Sample ID	Paste pH	TIC %	CaCO3 NP	C %	S(T) %	S(SO4) %	S (sulfide) %	AP	Modified NP	Net Modified NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.20	0.01	#N/A	0.005	0.005	0.01		#N/A		#N/A	#N/A
Detoxified Tail Slurry	8.68	1.38	115.0	1.429	0.311	0.1	0.211	6.59	110.0	103.4	Slight
Duplicates											
Detoxified Tail Slurry	8.68			1.470	0.314				109.9		Slight
QC											
GS314-2				5.065	2.679						
RTS-3A						0.89					
SY4		0.91									
OREAS 278											
Expected Values		0.91		5.15	2.56	0.98			46.0		Slight
Tolerance +/-		0.07		0.27	0.14	0.12			10.1		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET Modified NP = Modified NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish.

Sulfide by calculation

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : Februray 3/2022

Sample ID	Ag mg/kg	Al %	Ba ppm	Ca %	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Na %	Ni ppm	P %	S %	Sr ppm	Ti %
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01
Detoxified Tail Slurry	0.2	2.01	242	5.06	221	697	6.6	0.18	21	2.26	638	0.08	117	0.1	0.32	188	0.15
QC																	
OREAS 260	0.14	1.38	150	0.88	50	48.5	3.74	0.3	22	0.62	457	0.09	77	0.04	0.07	15.3	<0.01
Expected Values	0.146	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.593	450	0.082	75	0.04	0.077	14.8	BDL
Tolerance (%)	30.77	12.80	20.12	14.46	16.31	13.55	11.33	23.08	24.25	14.55	11.76	46.15	14.29	66.67	66.67	20.32	BDL
OREAS 502C	0.83	1.99	381	1.04	65	7581	4.44	1.04	30	1.17	362	0.18	35	0.1	0.72	66.2	0.34
Expected Values	0.796	2.07	383	1.09	66.0	7790	4.45	1.07	30.9	1.21	380	0.192	36.4	0.096	0.821	66.0	BDL
Tolerance (%)	13.14	11.21	13.26	12.29	13.79	10.02	10.56	12.34	18.09	12.07	11.32	23.02	16.87	23.02	13.05	11.89	

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	V ppm	Zn ppm	Zr ppm	As ppm	Be ppm	Bi ppm	Cd ppm	Ce ppm	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	1	1	0.5	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Detoxified Tail Slurry	140	36	16.9	7	0.4	2.25	0.05	26.01	27	0.5	9.4	0.1	0.52	0.51	0.03	13.7	0.14
QC																	
OREAS 260	22	133	13.6	12	1.3	0.53	0.21	63.01	31.9	3.11	4.8	<0.1	0.46	0.05	0.03	31	0.14
Expected Values	22.0	125	12.6	12.5	1.24	0.54	0.21	55	32.10	3.12	5.05	BDL	0.33	0.047	0.027	28.1	0.140
Tolerance (%)	23.9	12.77	#N/A	35.29	35.07	20.41	27.03	#N/A	11.39	#N/A	16.04	BDL	#N/A	#N/A	90.91	#N/A	33.33
OREAS 502C	108	95	9.6	60	0.5	0.69	0.33	57.23	13.1	9.15	9.2	0.3	0.44	0.07	0.06	28.5	0.21
Expected Values	110.0	102	BDL	59	0.53	0.68	BDL	59	13.50	9.02	8.67	BDL	0.41	BDL	0.061	29.4	0.220
Tolerance (%)	12.3	12.45		14.24	57.17	17.35		10.21	11.85	11.39	12.88		40.49		91.97	10.85	21.36

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Detoxified Tail Slurry	101	0.12	3.3	10.5	2.61	10.4	<1	0.4	<0.05	0.36	0.16	1	0.05	0.42	12.2	9.52	0.9
QC																	
OREAS 260	0.48	<0.05	30.2	21.5	1.32	3	<1	0.5	<0.05	0.52	0.09	11.6	0.22	1.33	0.1	11.94	0.9
Expected Values	0.43	BDL	30.7	21.2	1.32	3.39	BDL	0.62	BDL	0.52	0.081	11.30	0.22	1.29	BDL	11.7	0.99
Tolerance (%)	49.28	BDL	12.35	#N/A	21.85	19.06	BDL	#N/A	BDL	21.28	89.66	13.01	37.84	21.46	BDL	11.76	42.94
OREAS 502C	213	2.15	11.4	124	4.75	7.9	3	2.7	<0.05	0.55	0.55	18	0.68	4.46	3.1	15.97	1.4
Expected Values	223.00	BDL	11.1	124.0	4.78	7.28	BDL	2.71	0.009	0.58	0.47	17.60	0.34	4.53	2.98	16.1	1.51
Tolerance (%)	10.06		14.50	10.4	12.62	13.43		37.68	1398.9	18.62	36.60	11.42	17.35	12.76	18.39	10.78	26.56

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Date :February 3/2022

Leachate Analysis

Sample ID			Detoxified Tail Slurry
Parameter	**Method**	**Units**	
Volume Nanopure Water		mL	600
pH	meter		8.30
Redox	meter	mV	192
Conductivity	meter	uS/cm	12491
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.9
Alkalinity	titration	mg CaCO3/L	522.5
Chloride		mg/L	12
Fluride		mg/L	0.29
Nitrite (as N)		as N mg/L	0.60
Nitrate (as N)		as N mg/L	< 0.6
Dissolved Organic Carbon		mg/L	37
Ammonia+Ammonium (N)		as N mg/L	11.7
Cyanide (total)		mg/L	< 0.1
Cyanide (WAD)		mg/L	< 0.1
Cyanate		mg/L	610
Cyanide (free)		mg/L	< 0.05
Phosphorus (total reactive)		mg/L	< 0.3
Sulphate	Turbidity	mg/L	5121
Dissolved Metals			
Hardness CaCO3		mg/L	964
Aluminum Al	ICP-MS	mg/L	0.02
Antimony Sb	ICP-MS	mg/L	0.213
Arsenic As	ICP-MS	mg/L	< 0.002
Barium Ba	ICP-MS	mg/L	0.0267
Beryllium Be	ICP-MS	mg/L	< 0.00007
Bismuth Bi	ICP-MS	mg/L	< 0.0001
Boron B	ICP-MS	mg/L	0.13
Cadmium Cd	ICP-MS	mg/L	0.00010
Calcium Ca	ICP-MS	mg/L	372
Chromium Cr	ICP-MS	mg/L	0.0062
Cobalt Co	ICP-MS	mg/L	0.0543
Copper Cu	ICP-MS	mg/L	2.48
Iron Fe	ICP-MS	mg/L	< 0.07
Lead Pb	ICP-MS	mg/L	< 0.0009
Lithium Li	ICP-MS	mg/L	0.005
Magnesium Mg	ICP-MS	mg/L	8.35
Manganese Mn	ICP-MS	mg/L	0.0061
Mercury Hg	ICP-MS	ug/L	1.42
Molybdenum Mo	ICP-MS	mg/L	1.98
Nickel Ni	ICP-MS	mg/L	< 0.001
Phosphorus P	ICP-MS	mg/L	0.15
Potassium K	ICP-MS	mg/L	86.8
Selenium Se	ICP-MS	mg/L	0.0316
Silicon Si	ICP-MS	mg/L	3.5
Silver Ag	ICP-MS	mg/L	< 0.0005
Sodium Na	ICP-MS	mg/L	3170
Strontium Sr	ICP-MS	mg/L	4.11
Sulphur (S)	ICP-MS	mg/L	2450
Thallium Tl	ICP-MS	mg/L	< 0.00005
Tin Sn	ICP-MS	mg/L	< 0.0006
Titanium Ti	ICP-MS	mg/L	< 0.0005
Uranium U	ICP-MS	mg/L	0.00026
Vanadium V	ICP-MS	mg/L	0.0034
Zinc Zn	ICP-MS	mg/L	< 0.02
Zirconium Zr	ICP-MS	mg/L	< 0.02

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : February 3/2022

Leachate Analysis

Sample ID			Detoxified tails solids	Blank
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	750	750
Sample Weight		g	250	250
pH	meter		7.77	5.51
Redox	meter	mV	135	
Conductivity	meter	uS/cm	2339	2.41
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	2.9	
Alkalinity	titration	mg CaCO3/L	32.3	
Chloride		mg/L	< 2	
Fluride		mg/L	0.15	
Nitrite (as N)		as N mg/L	0.07	
Nitrate (as N)		as N mg/L	< 0.06	
Dissolved Organic Carbon		mg/L	5	
Ammonia+Ammonium (N)		as N mg/L	0.7	
Phosphorus (total reactive)		mg/L	< 0.03	
Cyanide (total)		mg/L	0.13	
Cyanide (WAD)		mg/L	< 0.01	
Cyanate		mg/L	1.7	
Cyanide (free)		mg/L	< 0.005	
Sulphate	Turbidity	mg/L	1228.7	
Ion Balance				
Major Anions	Calc	meq/L	26.26	
Major Cations	Calc	meq/L	26.34	
Difference	Calc	meq/L	-0.09	
Balance (%)	Calc	%	-0.2%	
Dissolved Metals				
Hardness CaCO3		mg/L	1060	
Aluminum Al	ICP-MS	mg/L	0.043	
Antimony Sb	ICP-MS	mg/L	0.0409	
Arsenic As	ICP-MS	mg/L	0.0026	
Barium Ba	ICP-MS	mg/L	0.0389	
Beryllium Be	ICP-MS	mg/L	< 0.000007	
Bismuth Bi	ICP-MS	mg/L	< 0.00001	
Boron B	ICP-MS	mg/L	0.050	
Cadmium Cd	ICP-MS	mg/L	0.000028	
Calcium Ca	ICP-MS	mg/L	419	
Chromium Cr	ICP-MS	mg/L	0.00021	
Cobalt Co	ICP-MS	mg/L	0.004114	
Copper Cu	ICP-MS	mg/L	0.0033	
Iron Fe	ICP-MS	mg/L	0.048	
Lead Pb	ICP-MS	mg/L	0.00022	
Lithium Li	ICP-MS	mg/L	0.0050	
Magnesium Mg	ICP-MS	mg/L	3.42	
Manganese Mn	ICP-MS	mg/L	0.0147	
Mercury Hg	ICP-MS	ug/L	1.10	
Molybdenum Mo	ICP-MS	mg/L	0.0847	
Nickel Ni	ICP-MS	mg/L	0.0007	
Phosphorus P	ICP-MS	mg/L	0.016	
Potassium K	ICP-MS	mg/L	11.3	
Selenium Se	ICP-MS	mg/L	0.00320	
Silicon Si	ICP-MS	mg/L	3.22	
Silver Ag	ICP-MS	mg/L	< 0.00005	
Sodium Na	ICP-MS	mg/L	110	
Strontium Sr	ICP-MS	mg/L	2.70	
Sulphur (S)	ICP-MS	mg/L	381	
Thallium Tl	ICP-MS	mg/L	0.000014	
Tin Sn	ICP-MS	mg/L	0.00012	
Titanium Ti	ICP-MS	mg/L	< 0.00005	
Uranium U	ICP-MS	mg/L	0.000872	
Vanadium V	ICP-MS	mg/L	0.00230	
Zinc Zn	ICP-MS	mg/L	< 0.002	
Zirconium Zr	ICP-MS	mg/L	< 0.002	

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : Februray 3/2022

Sample ID	Paste pH	TIC %	CaCO3 NP	C %	S(T) %	S(SO4) %	S (sulfide) %	AP	Modified NP	Net Modified NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.20	0.01	#N/A	0.005	0.005	0.01		#N/A		#N/A	#N/A
Detoxified Tail Slurry	8.68	1.38	115.0	1.429	0.311	0.1	0.211	6.59	110.0	103.4	Slight
Duplicates											
Detoxified Tail Slurry	8.68			1.470	0.314				109.9		Slight
QC											
GS314-2				5.065	2.679						
RTS-3A						0.89					
SY4		0.91									
OREAS 278											
Expected Values		0.91		5.15	2.56	0.98			46.0		Slight
Tolerance +/-		0.07		0.27	0.14	0.12			10.1		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET Modified NP = Modified NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish.

Sulfide by calculation

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : Februray 3/2022

Sample ID	Ag mg/kg	Al %	Ba ppm	Ca %	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Na %	Ni ppm	P %	S %	Sr ppm	Ti %
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01
Detoxified Tail Slurry	0.2	2.01	242	5.06	221	697	6.6	0.18	21	2.26	638	0.08	117	0.1	0.32	188	0.15
QC																	
OREAS 260	0.14	1.38	150	0.88	50	48.5	3.74	0.3	22	0.62	457	0.09	77	0.04	0.07	15.3	<0.01
Expected Values	0.146	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.593	450	0.082	75	0.04	0.077	14.8	BDL
Tolerance (%)	30.77	12.80	20.12	14.46	16.31	13.55	11.33	23.08	24.25	14.55	11.76	46.15	14.29	66.67	66.67	20.32	BDL
OREAS 502C	0.83	1.99	381	1.04	65	7581	4.44	1.04	30	1.17	362	0.18	35	0.1	0.72	66.2	0.34
Expected Values	0.796	2.07	383	1.09	66.0	7790	4.45	1.07	30.9	1.21	380	0.192	36.4	0.096	0.821	66.0	BDL
Tolerance (%)	13.14	11.21	13.26	12.29	13.79	10.02	10.56	12.34	18.09	12.07	11.32	23.02	16.87	23.02	13.05	11.89	

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	V ppm	Zn ppm	Zr ppm	As ppm	Be ppm	Bi ppm	Cd ppm	Ce ppm	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	1	1	0.5	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Detoxified Tail Slurry	140	36	16.9	7	0.4	2.25	0.05	26.01	27	0.5	9.4	0.1	0.52	0.51	0.03	13.7	0.14
QC																	
OREAS 260	22	133	13.6	12	1.3	0.53	0.21	63.01	31.9	3.11	4.8	<0.1	0.46	0.05	0.03	31	0.14
Expected Values	22.0	125	12.6	12.5	1.24	0.54	0.21	55	32.10	3.12	5.05	BDL	0.33	0.047	0.027	28.1	0.140
Tolerance (%)	23.9	12.77	#N/A	35.29	35.07	20.41	27.03	#N/A	11.39	#N/A	16.04	BDL	#N/A	#N/A	90.91	#N/A	33.33
OREAS 502C	108	95	9.6	60	0.5	0.69	0.33	57.23	13.1	9.15	9.2	0.3	0.44	0.07	0.06	28.5	0.21
Expected Values	110.0	102	BDL	59	0.53	0.68	BDL	59	13.50	9.02	8.67	BDL	0.41	BDL	0.061	29.4	0.220
Tolerance (%)	12.3	12.45		14.24	57.17	17.35		10.21	11.85	11.39	12.88		40.49		91.97	10.85	21.36

CLIENT
PROJECT
SGS Project #
Test
Date

Sample ID	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Detoxified Tail Slurry	101	0.12	3.3	10.5	2.61	10.4	<1	0.4	<0.05	0.36	0.16	1	0.05	0.42	12.2	9.52	0.9
QC																	
OREAS 260	0.48	<0.05	30.2	21.5	1.32	3	<1	0.5	<0.05	0.52	0.09	11.6	0.22	1.33	0.1	11.94	0.9
Expected Values	0.43	BDL	30.7	21.2	1.32	3.39	BDL	0.62	BDL	0.52	0.081	11.30	0.22	1.29	BDL	11.7	0.99
Tolerance (%)	49.28	BDL	12.35	#N/A	21.85	19.06	BDL	#N/A	BDL	21.28	89.66	13.01	37.84	21.46	BDL	11.76	42.94
OREAS 502C	213	2.15	11.4	124	4.75	7.9	3	2.7	<0.05	0.55	0.55	18	0.68	4.46	3.1	15.97	1.4
Expected Values	223.00	BDL	11.1	124.0	4.78	7.28	BDL	2.71	0.009	0.58	0.47	17.60	0.34	4.53	2.98	16.1	1.51
Tolerance (%)	10.06		14.50	10.4	12.62	13.43		37.68	1398.9	18.62	36.60	11.42	17.35	12.76	18.39	10.78	26.56

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Date : 7 March 2022

Leachate Analysis

Sample ID			Detoxified Tail Slurry	Detoxified Tail Slurry after 8 weeks
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	600	600
pH	meter		8.30	8.13
Redox	meter	mV	192	173
Conductivity	meter	uS/cm	12491	14624
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.9	7.1
Alkalinity	titration	mg CaCO3/L	522.5	396.4
Chloride		mg/L	12	16
Fluride		mg/L	0.29	0.31
Nitrite (as N)		as N mg/L	0.60	1.14
Nitrate (as N)		as N mg/L	< 0.6	<0.6
Dissolved Organic Carbon		mg/L	37	177
Ammonia+Ammonium (N)		as N mg/L	11.7	30.8
Cyanide (total)		mg/L	< 0.1	< 0.1
Cyanide (WAD)		mg/L	< 0.1	0.02
Cyanate		mg/L	610	490
Cyanide (free)		mg/L	< 0.05	0.021
Phosphorus (total reactive)		mg/L	< 0.3	< 0.03
Sulphate	Turbidity	mg/L	5121	8094
Dissolved Metals				
Hardness CaCO3		mg/L	964	1420
Aluminum Al	ICP-MS	mg/L	0.02	0.028
Antimony Sb	ICP-MS	mg/L	0.213	0.224
Arsenic As	ICP-MS	mg/L	< 0.002	0.0080
Barium Ba	ICP-MS	mg/L	0.0267	0.0161
Beryllium Be	ICP-MS	mg/L	< 0.00007	< 0.000007
Bismuth Bi	ICP-MS	mg/L	< 0.0001	< 0.00001
Boron B	ICP-MS	mg/L	0.13	0.202
Cadmium Cd	ICP-MS	mg/L	0.00010	0.000612
Calcium Ca	ICP-MS	mg/L	372	534
Chromium Cr	ICP-MS	mg/L	0.0062	0.00049
Cobalt Co	ICP-MS	mg/L	0.0543	0.0387
Copper Cu	ICP-MS	mg/L	2.48	0.268
Iron Fe	ICP-MS	mg/L	< 0.07	0.019
Lead Pb	ICP-MS	mg/L	< 0.0009	< 0.00009
Lithium Li	ICP-MS	mg/L	0.005	0.0105
Magnesium Mg	ICP-MS	mg/L	8.35	21.0
Manganese Mn	ICP-MS	mg/L	0.0061	0.0274
Mercury Hg	ICP-MS	ug/L	1.42	0.14
Molybdenum Mo	ICP-MS	mg/L	1.98	2.21
Nickel Ni	ICP-MS	mg/L	< 0.001	0.0004
Phosphorus P	ICP-MS	mg/L	0.15	0.175
Potassium K	ICP-MS	mg/L	86.8	99.9
Selenium Se	ICP-MS	mg/L	0.0316	0.00955
Silicon Si	ICP-MS	mg/L	3.5	4.63
Silver Ag	ICP-MS	mg/L	< 0.0005	0.00021
Sodium Na	ICP-MS	mg/L	3170	3060
Strontium Sr	ICP-MS	mg/L	4.11	8.11
Sulphur (S)	ICP-MS	mg/L	2450	2780
Thallium Tl	ICP-MS	mg/L	< 0.00005	0.000133
Tin Sn	ICP-MS	mg/L	< 0.0006	0.00056
Titanium Ti	ICP-MS	mg/L	< 0.0005	0.00122
Uranium U	ICP-MS	mg/L	0.00026	0.00402
Vanadium V	ICP-MS	mg/L	0.0034	0.00462
Zinc Zn	ICP-MS	mg/L	< 0.02	< 0.002
Zirconium Zr	ICP-MS	mg/L	< 0.02	< 0.002

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : February 3/2022

Leachate Analysis

Sample ID			Detoxified tails solids	Blank
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	750	750
Sample Weight		g	250	250
pH	meter		7.77	5.51
Redox	meter	mV	135	
Conductivity	meter	uS/cm	2339	2.41
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	2.9	
Alkalinity	titration	mg CaCO3/L	32.3	
Chloride		mg/L	< 2	
Fluride		mg/L	0.15	
Nitrite (as N)		as N mg/L	0.07	
Nitrate (as N)		as N mg/L	< 0.06	
Dissolved Organic Carbon		mg/L	5	
Ammonia+Ammonium (N)		as N mg/L	0.7	
Phosphorus (total reactive)		mg/L	< 0.03	
Cyanide (total)		mg/L	0.13	
Cyanide (WAD)		mg/L	< 0.01	
Cyanate		mg/L	1.7	
Cyanide (free)		mg/L	< 0.005	
Sulphate	Turbidity	mg/L	1228.7	
Ion Balance				
Major Anions	Calc	meq/L	26.26	
Major Cations	Calc	meq/L	26.34	
Difference	Calc	meq/L	-0.09	
Balance (%)	Calc	%	-0.2%	
Dissolved Metals				
Hardness CaCO3		mg/L	1060	
Aluminum Al	ICP-MS	mg/L	0.043	
Antimony Sb	ICP-MS	mg/L	0.0409	
Arsenic As	ICP-MS	mg/L	0.0026	
Barium Ba	ICP-MS	mg/L	0.0389	
Beryllium Be	ICP-MS	mg/L	< 0.000007	
Bismuth Bi	ICP-MS	mg/L	< 0.00001	
Boron B	ICP-MS	mg/L	0.050	
Cadmium Cd	ICP-MS	mg/L	0.000028	
Calcium Ca	ICP-MS	mg/L	419	
Chromium Cr	ICP-MS	mg/L	0.00021	
Cobalt Co	ICP-MS	mg/L	0.004114	
Copper Cu	ICP-MS	mg/L	0.0033	
Iron Fe	ICP-MS	mg/L	0.048	
Lead Pb	ICP-MS	mg/L	0.00022	
Lithium Li	ICP-MS	mg/L	0.0050	
Magnesium Mg	ICP-MS	mg/L	3.42	
Manganese Mn	ICP-MS	mg/L	0.0147	
Mercury Hg	ICP-MS	ug/L	1.10	
Molybdenum Mo	ICP-MS	mg/L	0.0847	
Nickel Ni	ICP-MS	mg/L	0.0007	
Phosphorus P	ICP-MS	mg/L	0.016	
Potassium K	ICP-MS	mg/L	11.3	
Selenium Se	ICP-MS	mg/L	0.00320	
Silicon Si	ICP-MS	mg/L	3.22	
Silver Ag	ICP-MS	mg/L	< 0.00005	
Sodium Na	ICP-MS	mg/L	110	
Strontium Sr	ICP-MS	mg/L	2.70	
Sulphur (S)	ICP-MS	mg/L	381	
Thallium Tl	ICP-MS	mg/L	0.000014	
Tin Sn	ICP-MS	mg/L	0.00012	
Titanium Ti	ICP-MS	mg/L	< 0.00005	
Uranium U	ICP-MS	mg/L	0.000872	
Vanadium V	ICP-MS	mg/L	0.00230	
Zinc Zn	ICP-MS	mg/L	< 0.002	
Zirconium Zr	ICP-MS	mg/L	< 0.002	

SGS proposal: 18806-PR5
SGS project #: 2138

Work order date: 24-Jul-25
Report date: 25-Aug-25
Sample receipt date: Jul-25
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 24

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

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Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07C1	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
18806-3 Leach Feed	0.085	0.02	0.065	NA	2.0
18806-3 Master CND	0.168	0.09	0.078	NA	2.4
Duplicates					
18806-3 Master CND		0.09			
QA/QC					
Blank	0.012	<0.01			
Certified standards					
GS-314-2	2.565				
RTS-3a		0.91			

SGS proposal: 18806-PR5
SGS project #: 2138

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ABA Report

Test Units	C(T) %	TIC %	CaCO3 NP kg CaCO3/t	Modified NP kg CaCO3/t	Net Modified NP kg CaCO3/t	Fizz Test	Paste pH
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01					0.2
Sample ID							
18806-3 Leach Feed	1.158	1.09	90.8	95.4	93.4	Moderate	8.64
18806-3 Master CND	1.169	1.08	90.0	97.0	94.6	Slight	8.59
Duplicates							
18806-3 Leach Feed				95.5		Moderate	8.56
QA/QC							
Blank		<0.01					
Certified standards							
NBM-1				43.3			
TIC-L1		0.14					

3260 Production Way
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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
18806-3 Leach Feed	1.84	152	3.47	153	311	5.94	0.11	14	1.81	433	0.04	86	0.09	0.09	99.4	0.11	121
18806-3 Master CND	1.90	163	3.74	162	369	6.04	0.12	15	1.88	448	0.08	90	0.09	0.19	102	0.11	125
QA/QC																	
*Blk BLANK	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
*Std OREAS 601b	0.58	551	0.56	23	1002	1.89	0.21	7	0.04	187	0.07	6	0.02	0.79	32.1	0.02	4
*Std OREAS 151C	1.93	430	0.39	51	2362	2.92	0.91	35	0.69	274	0.13	18	0.06	0.71	32.9	0.23	62

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
18806-3 Leach Feed	25	12.6	0.15	4	0.4	1.2	0.01	23.24	26.5	0.27	8.3	<0.1	0.35	0.29	<0.02	12.1	0.1
18806-3 Master CND	27	13.3	0.13	4	0.4	1.1	<0.01	23.2	27.8	0.28	8.6	<0.1	0.35	0.29	<0.02	12.2	0.1
QA/QC																	
*Blk BLANK	<1	<0.5	0.02	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
*Std OREAS 601b	262	33.7	48.83	293	0.4	18.1	2	39.28	2.7	1.02	3.3	<0.1	1.00	0.21	0.39	19.7	0.02
*Std OREAS 151C	89	5.7	1.00	24	1.4	6.2	0.2	30.46	7.9	8.13	8.9	<0.1	0.23	0.04	0.09	14	0.09

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
18806-3 Leach Feed	44.68	0.08	1.1	6	1.1	8.7	<1	0.4	<0.05	0.3	0.09	0.8	0.03	0.30	46	8.18	0.7
18806-3 Master CND	47.34	0.07	1.3	6.4	1.1	9	<1	0.4	<0.05	0.3	0.10	0.8	0.04	0.33	43.2	8.31	0.7
QA/QC																	
*Blk BLANK	<0.05	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
*Std OREAS 601b	4	0.99	242	11.8	17.3	0.9	9	1.1	<0.05	0.3	12.86	7.0	1.13	2.25	1.8	5.15	0.2
*Std OREAS 151C	56.09	0.91	19.1	90.1	1.2	7.2	5	3.6	<0.05	0.4	1.25	6.1	0.60	2.79	5.6	10.20	0.6

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Supernatant analysis

Sample ID			18806-3 Leach Feed Supernatant	18806-3 Master CND Supernatant
Parameter	**Method**	**Units**		
pH	meter		7.9	7.8
Redox	meter	mV	373.16	290.21
Conductivity	meter	uS/cm	199.7	1175.3
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	0.84	1.33
Alkalinity	titration	mg CaCO3/L	21.95	20.7
Chloride	Photometry	mg/L	6	7.6
Nitrate (N)	ISE	mg/L	< 0.3	< 0.3
Nitrite (N)		as N mg/L	< 0.6	< 0.6
Fluoride		as N mg/L	0.15	0.24
Dissolved Organic Carbon		as N mg/L	2	62
Ammonia+Ammonium (N)		mg/L	< 0.1	11.3
Cyanide (total)		mg/L	< 0.01	0.02
Cyanide (WAD)		mg/L	< 0.01	< 0.01
Cyanide (free)		mg/L	< 0.005	0.006
Cyanate		mg/L	< 1	426
Thiocyanate		mg/L	< 2	66
Total Reactive Phosphorous (o-phosphate as P)			< 0.03	< 0.03
Sulphate	IC	mg/L	871	4498
Ion Balance				
Major Anions	Calc	meq/L	18.76	105.63
Major Cations	Calc	meq/L	19.08	92.02
Difference	Calc	meq/L	-0.32	13.62
Balance (%)	Calc	%	-0.8%	6.9%
Dissolved Metals				
Hardness		mg/L as CaCO3	886	1240
Aluminum	ICP-MS	mg/L	0.02	0.03
Antimony	ICP-MS	mg/L	< 0.009	0.021
Arsenic	ICP-MS	mg/L	0.006	0.012
Barium	ICP-MS	mg/L	0.0175	0.025
Beryllium	ICP-MS	mg/L	< 0.00007	< 0.00007
Bismuth	ICP-MS	mg/L	< 0.0001	< 0.0001
Boron	ICP-MS	mg/L	0.09	0.05
Cadmium	ICP-MS	mg/L	0.00016	0.00029
Calcium	ICP-MS	mg/L	302	483
Chromium	ICP-MS	mg/L	< 0.0008	0.0077
Cobalt	ICP-MS	mg/L	0.00034	0.0343
Copper	ICP-MS	mg/L	< 0.01	0.33
Iron	ICP-MS	mg/L	< 0.07	< 0.07
Lead	ICP-MS	mg/L	< 0.0009	< 0.0009
Lithium	ICP-MS	mg/L	0.004	0.005
Magnesium	ICP-MS	mg/L	32.2	7.13
Manganese	ICP-MS	mg/L	0.051	0.011
Mercury (total)	CVAAS	ug/L	< 0.1	< 0.1
Molybdenum	ICP-MS	mg/L	0.312	0.654
Nickel	ICP-MS	mg/L	< 0.001	< 0.001
Phosphorus	ICP-MS	mg/L	0.14	0.09
Potassium	ICP-MS	mg/L	15.5	62.6
Selenium	ICP-MS	mg/L	0.0007	0.0059
Silicon	ICP-MS	mg/L	4	3.8
Silver	ICP-MS	mg/L	< 0.0005	< 0.0005
Sodium	ICP-MS	mg/L	19	1490
Strontium	ICP-MS	mg/L	4.46	3.93
Sulfur	ICP-MS	mg/L	291	1500
Thallium	ICP-MS	mg/L	< 0.00005	0.00009
Tin	ICP-MS	mg/L	< 0.0006	< 0.0006
Titanium	ICP-MS	mg/L	< 0.001	< 0.001
Uranium	ICP-MS	mg/L	0.0015	0.00058
Vanadium	ICP-MS	mg/L	0.0015	0.0091
Zinc	ICP-MS	mg/L	< 0.02	< 0.02
Zirconium	ICP-MS	mg/L	< 0.02	< 0.02

Shake Flask Extraction Report

Leachate Analysis

Sample ID			18806-3 Leach Feed	18806-3 Master CND	Blank
Parameter	**Method**	**Units**			
Volume Nanopure Water		mL	750	750	750
Sample Weight		g	250	250	-
pH	meter		7.90	7.80	5.70
Redox	meter	mV	373	290	-
Conductivity	meter	uS/cm	200	1175	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	0.8	1.3	-
Alkalinity	titration	mg CaCO3/L	22.0	20.7	-
Chloride		mg/L	< 2	< 2	-
Nitrite (as N)		as N mg/L	< 0.3	< 0.3	
Nitrate (as N)		as N mg/L	< 0.6	< 0.6	
Fluoride		mg/L	0.1	0.06	-
Dissolved Organic Carbon		mg/L	1	2	
Ammonia+Ammonium (N)		as N mg/L	0.1	0.4	
Total Reactive Phosphorous (o-phosph		mg/L	< 0.03	< 0.03	
Cyanide (total)		mg/L	< 0.01	0.09	
Cyanide (WAD)		mg/L	< 0.01	< 0.01	
Cyanide (free)		mg/L	< 0.005	0.005	
Cyanate		mg/L	< 1	2	
Thiocyanate		mg/L	< 2	3	
Sulphate	IC	mg/L	60.4	562.8	-
Ion Balance					
Major Anions	Calc	meq/L	1.70	12.24	
Major Cations	Calc	meq/L	1.88	11.46	
Difference	Calc	meq/L	-0.18	0.78	
Balance (%)	Calc	%	-5.0%	3.3%	
Dissolved Metals					
Hardness CaCO3		mg/L	83.6	369	-
Aluminum Al	ICP-MS	mg/L	0.156	0.078	-
Antimony Sb	ICP-MS	mg/L	0.0018	0.0043	-
Arsenic As	ICP-MS	mg/L	0.0015	0.0015	-
Barium Ba	ICP-MS	mg/L	0.0805	0.0272	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	0.00002	0.00001	-
Boron B	ICP-MS	mg/L	0.012	0.011	-
Cadmium Cd	ICP-MS	mg/L	0.000128	0.000027	-
Calcium Ca	ICP-MS	mg/L	29.8	145	-
Chromium Cr	ICP-MS	mg/L	< 0.00008	0.00018	-
Cobalt Co	ICP-MS	mg/L	0.000026	0.000678	-
Copper Cu	ICP-MS	mg/L	< 0.001	0.002	-
Iron Fe	ICP-MS	mg/L	0.044	0.053	-
Lead Pb	ICP-MS	mg/L	0.00043	0.00015	-
Lithium Li	ICP-MS	mg/L	0.0009	0.0018	-
Magnesium Mg	ICP-MS	mg/L	2.21	1.57	-
Manganese Mn	ICP-MS	mg/L	0.00288	0.00435	-
Mercury Hg	CVAAS	ug/L	< 0.01	0.03	-
Molybdenum Mo	ICP-MS	mg/L	0.0216	0.0519	-
Nickel Ni	ICP-MS	mg/L	< 0.0001	< 0.0001	-
Phosphorus P	ICP-MS	mg/L	0.034	0.006	-
Potassium K	ICP-MS	mg/L	3.13	7.27	-
Selenium Se	ICP-MS	mg/L	0.0002	0.00135	-
Silicon Si	ICP-MS	mg/L	2.14	2.79	-
Silver Ag	ICP-MS	mg/L	< 0.00005	0.00006	-
Sodium Na	ICP-MS	mg/L	1.98	88.5	-
Strontium Sr	ICP-MS	mg/L	0.658	0.829	-
Sulphur (S)	ICP-MS	mg/L	20	181	-
Thallium Tl	ICP-MS	mg/L	0.000016	0.000023	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	< 0.0001	< 0.0001	-
Uranium U	ICP-MS	mg/L	0.000035	0.000203	-
Vanadium V	ICP-MS	mg/L	0.00241	0.00352	-
Zinc Zn	ICP-MS	mg/L	0.023	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	-

ANALYSIS REPORT

ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP Method 1996	Modified NP	Modified with Siderite Correction NP
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t
	Method Code	CSA06V	CSA07V	CSA07D	Calc.	CSA06V	CSB02V	CSB02V		Modified	
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005		0.5	
GGC-07	Expected value	0.51				0.56					
	Tolerance (+/-)	0.09				0.09					
HCC-1	Expected value	33.92									
	Tolerance (+/-)	5.04									
RTS-3a	Expected value		0.98	1.34							
	Tolerance (+/-)		0.12	0.35							
OREAS 278	Expected value				0.699						
	Tolerance (+/-)				0.06						
NBM-1	Expected value								38.67	42.07	50.27
	Tolerance (+/-)								3.55	3.72	2.31
TIC-L1	Expected value						0.13	0.477			
	Tolerance (+/-)						0.02	0.78			
GS314-2	Expected value	2.56				5.15					
	Tolerance (+/-)	0.14				0.27					
GS915-8	Expected value	0.13				0.07					
	Tolerance (+/-)	0.02				0.02					
OREAS 550	Expected value	0.220				4.110					
	Tolerance (+/-)	0.004				0.22					
SX35-13	Expected value						11.954				
	Tolerance (+/-)						0.626				
SY4	Expected value						0.95				
	Tolerance (+/-)						0.06				

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Sobek With Siderite NP kg CaCO3/t	Fizz Test	Paste pH
	Sobek	Sobek 0.2
57.6	Slight	
1.3		

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000
OREAS 501b	Expected value	1.99	369	0.966	85	2580	4.08	1.08	31.7	1.21	393	0.167	37.5	0.1	0.364	60	0.338	110	80	10.9	0.721	18.6	0.49	1.6
	Tolerance (%)	11.26%	13.39%	12.59	12.94%	10.05%	10.61%	12.31%	17.89%	12.07%	11.27%	24.97%	16.67%	22.5%	16.87%	12.08%	17.4%	12.27%	13.12%	21.47%	13.47%	23.44%	61.02%	13.12%
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59

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SGS

Metals - Aqu

CRM	Test	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02
	Upper detection	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000
OREAS 501b	Expected value		61	14.9	9.93	8.7	0.2	0.43		0.19	29.3	0.21	97		9.42	126	0.49	7.08	2.78	4.65			0.078	17.9	
	Tolerance (%)		10.2%	11.68%	11.26%	12.87%	135%	39.07%		36.32%	10.85%	21.9%	10.13%		15.31%	10.4%	35.51%	13.53%	99.93%	26.13%			170.26%	11.4%	
OREAS 502C	Expected value	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67
	Tolerance (%)		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0
OREAS 503D	Expected value	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66
	Tolerance (%)		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1
OREAS 260	Expected value	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2
	Tolerance (%)	24.3		12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5
OREAS 920	Expected value	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15
	Tolerance (%)	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7
OREAS 209	Expected value	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04
	Tolerance (%)		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4
OREAS 905	Expected value	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11
	Tolerance (%)	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3
OREAS 261	Expected value	0.27		31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28
	Tolerance (%)	19.3		10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9
OREAS 263	Expected value	0.27		31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53
	Tolerance (%)	19.3		10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4
OREAS 235	Expected value	0.033	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6
	Tolerance (%)	86	10	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18
OREAS 151b	Expected value	0.58	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12
	Tolerance (%)	14	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7
OREAS 609b	Expected value	7.93	34	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009
	Tolerance (%)	10.32	10.15	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78
OREAS 607b	Expected value	3.16	41.6	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41
	Tolerance (%)	10.79	10.12	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20
OREAS 610	Expected value	12.3	13.7	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49
	Tolerance (%)	10.20	10.36	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36
OREAS 501c	Expected value		64	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3	
	Tolerance (%)		10.08	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65	
OREAS 601c	Expected value	2.7	34.7	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20
	Tolerance (%)	10.93	10.14	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17
OREAS 624	Expected value	125	24	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9	
	Tolerance (%)	10.02	10.52	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62	
OREAS 601b	Expected value	2.04	38.5	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08
	Tolerance (%)	11.23	10.32	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63
OREAS 623	Expected value	52	36.4	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26
	Tolerance (%)	10.05	10.34	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23
OREAS 603c	Expected value	30.4	30.7	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68
	Tolerance (%)	10.08	10.16	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36
OREAS 523	Expected value			698.000							233		293		27.4			6.41		9.88					
	Tolerance (%)			10.36							10.54		10.85		28.25			29.50		263.04					

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Metals - Aqu

CRM	Test	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.1	0.05	0.1
	Upper detection	10000	10000	10000	100
OREAS 501b	Expected value	4.56	2.34	16.6	1.5
	Tolerance (%)	12.74%	20.68%	10.75%	0.3
OREAS 502C	Expected value	4.53	2.98	16.1	1.51
	Tolerance (%)	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	4.35	1.91	16.9	1.47
	Tolerance (%)	21.7	49.2	17.7	13.4
OREAS 260	Expected value	1.29	0.063	11.70	0.99
	Tolerance (%)	39.5	33.3	30.8	29.4
OREAS 920	Expected value	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	38.5		46.9	
OREAS 209	Expected value	0.43	0.36	12.98	0.93
	Tolerance (%)	29.9	51.4	15.2	17.3
OREAS 905	Expected value	2.37	<1	7.08	0.27
	Tolerance (%)	24.6		20.8	44.4
OREAS 261	Expected value	1.29	0.09	11.70	0.98
	Tolerance (%)	19.7	281.7	11.1	35.5
OREAS 263	Expected value	1.28		12.00	0.99
	Tolerance (%)	19.8		11.0	35.3
OREAS 235	Expected value	1.55	0.45	9.47	0.85
	Tolerance (%)	18	38	11	39
OREAS 151b	Expected value	0.60		10.40	0.93
	Tolerance (%)	30.8		11.2	36.9
OREAS 609b	Expected value	2.04	1.81	5.22	0.21
	Tolerance (%)	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	2.23	0.58	5.77	0.21
	Tolerance (%)	15.61	31.55	12.17	129.05
OREAS 610	Expected value	1.12	3.58	3.09	
	Tolerance (%)	21.16	13.49	14.05	
OREAS 501c	Expected value	4.87	2.96		
	Tolerance (%)	12.57	14.22		
OREAS 601c	Expected value	2.04	1.16	5.1	0.23
	Tolerance (%)	16.13	20.78	12.45	118.70
OREAS 624	Expected value	0.74	2.73	6.59	0.84
	Tolerance (%)	26.89	19.16	11.90	39.76
OREAS 601b	Expected value	2.22	1.86	5.34	0.2
	Tolerance (%)	15.63	23.44	33.41	135.00
OREAS 623	Expected value	1.43	2.62	7.43	
	Tolerance (%)	18.74	19.54	11.68	
OREAS 603c	Expected value	2.19	2.99	5.55	0.22
	Tolerance (%)	15.71	14.18	12.25	123.64
OREAS 523	Expected value		160	14.8	
	Tolerance (%)		25.62	18.45	

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CLIENT	**: Agnico- Eagle**
PROJECT	**: Upper Beaver**
SGS Project #	**: 2138**
Test	**: Multi-addition Net Acid Generation (NAG) Test**
Sample Weight	**: 2.50 g**
NAG Solution	**: 17.5% H2O2 adjusted to pH 5.25 with 1N NaOH, added stage wise as per method**
Date	**: March 21/ 2022**

NAG Tests

Sample ID	NAG pH after reaction
Detoxified tail Slurry	6.71
Blank	4.73

Multi-Addition NAG Test Method
Day 1: Add **100 mL** H_2O_2. Allow sample to react until fizz stops. Gently boil sample for 2-4 hours. Cool overnight.
Day 2: Add **100 mL** H_2O_2. Allow sample to react until fizz stops. Gently boil sample for 2-4 hours. Cool overnight.
Day 3: Add **50 mL** H_2O_2. Allow sample to react until fizz stops. Gently boil sample for 2-4 hours. Cool overnight.
Day 4: Measure NAG pH of the cooled solution.

SGS proposal: 20619-PR1
SGS project #: 2434

Work order date: 12-Dec-24
Report date: 5-Feb-25
Sample receipt date: 06-Dec-24
Version: Final

Customer details

Name:	Timo Kirchner
Address:	

Project reference: Upper Beaver Ove

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 3

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 20619-PR1 Work order date: 12-Dec-24
SGS project #: 2434 Report date: 29-Jan-25

Version: Final

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07C1	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
BL1614-01 Detox Tails	0.069	0.03	0.039	NA	1.2
BL1614-02 Detox Tails	0.122	0.10	0.022	NA	0.7
BL1614-01 Cleaner Tails	1.085	0.03	1.055	NA	33.0
BL1614-02 Cleaner Tails	1.739	0.06	1.679	NA	52.5
BL1614-01 Rougher Tails	0.069	0.04	0.029	NA	0.9
Duplicates					
BL1614-02 Detox Tails		0.1			
BL1614-01 Detox Tails	0.07				
QA/QC					
Blank	0.009	<0.01			
Certified standards					
GS-314-2	2.604				
RTS-3a		0.97			

SGS proposal: 20619-PR1 Work order date: 12-Dec-24
SGS project #: 2434 Report date: 29-Jan-25

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	Modified NP	Net Modified NP	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01		0.5			0.2
Sample ID							
BL1614-01 Detox Tails	1.238	1.16	96.7	100.1	98.9	Slight	8.70
BL1614-02 Detox Tails	1.117	1.07	89.2	88.2	87.5	Moderate	8.41
BL1614-01 Cleaner Tails	3.039	2.96	246.7	253.6	220.7	Strong	8.08
BL1614-02 Cleaner Tails	2.301	2.19	182.5	179.9	127.5	Moderate	8.06
BL1614-01 Rougher Tails	1.135	1.07	89.2	94.0	93.1	Slight	8.43
Duplicates							
BL1614-01 Detox Tails	1.228			99.1		Slight	8.68
BL1614-01 Rougher Tails		1.09					
QA/QC							
Blank	0.007	<0.01					
Certified standards							
NBM-1				41.2		Slight	
TIC-L1		0.12					
GS-314-2	5.000						

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SGS proposal: 20619-PR1
SGS project #: 2434

Work order date: 12-Dec-24
Report date: 29-Jan-25

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
BL1614-01 Detox Tails	2.05	133	3.75	75	367	6.5	0.11	16	2.08	515	0.05	48	0.07	0.07	77	0.22	164
BL1614-02 Detox Tails	1.41	420	3.22	52	290	4.73	0.16	10	1.47	415	0.05	51	0.12	0.13	248	0.07	64
BL1614-01 Cleaner Tails	2.08	166	8.92	138	6582	6.01	0.14	16	2.01	852	0.04	87	0.06	1.16	154	0.19	154
BL1614-02 Cleaner Tails	1.48	346	6.36	139	7078	6.1	0.22	10	1.46	686	0.04	107	0.11	1.78	369	0.07	65
BL1614-01 Rougher Tails	2.02	133	3.52	77	249	6.5	0.1	15	2.07	498	0.03	49	0.07	0.07	78.1	0.22	171
Duplicates																	
BL1614-01 Cleaner Tails	2.07	165	8.85	137	6571	6.03	0.14	16	2.01	852	0.04	87	0.06	1.16	153	0.19	154
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 235	2.49	90	0.19	98	23	3.22	1	30	1.23	205	0.07	54	0.05	0.08	15.1	0.14	64
OREAS 609b	0.68	228	0.74	17	4797	2.29	0.26	6	0.07	200	0.06	7	0.02	1.77	36.4	<0.01	5

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Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
BL1614-01 Detox Tails	42	14.4	0.19	5	0.4	1.5	0.04	23.34	24.6	0.45	8.9	<0.1	0.51	0.32	0.03	11.8	0.16
BL1614-02 Detox Tails	30	9.8	0.19	2	0.3	0.2	0.02	42.06	15	0.44	5.8	<0.1	0.32	0.14	<0.02	20.4	0.07
BL1614-01 Cleaner Tails	85	18.7	1.95	58	0.4	16.9	0.35	33.05	68.7	0.62	9.7	<0.1	0.58	2.97	0.11	17.5	0.22
BL1614-02 Cleaner Tails	35	14.6	1.73	14	0.4	3.0	0.09	58.18	56	0.62	6.3	<0.1	0.41	0.63	0.08	28.6	0.1
BL1614-01 Rougher Tails	28	14.8	0.15	4	0.4	1.1	<0.01	22.37	24.2	0.44	9.3	<0.1	0.51	0.27	0.03	11.7	0.15
Duplicates																	
BL1614-01 Cleaner Tails	82	18.7	2.12	56	0.4	18.5	0.31	33.69	68	0.59	9.2	<0.1	0.57	2.89	0.10	17	0.22
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 235	72	26.0	0.14	331	1.2	0.3	0.02	60.39	11.9	7.40	7.4	<0.1	0.79	<0.01	0.02	30.1	0.13
OREAS 609b	1229	33.9	22.65	1432	0.6	115.0	8.28	34.5	4.7	1.41	4.4	0.1	0.98	0.53	2.13	17.3	0.03

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Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																	
BL1614-01 Detox Tails	46.42	0.15	5	7.3	3.3	12.3	<1	0.5	<0.05	0.4	0.12	0.7	0.04	0.38	19.1	11.33	1.1
BL1614-02 Detox Tails	30.79	0.12	2.3	9	1.3	5.9	<1	<0.3	<0.05	0.3	<0.05	1.1	0.04	0.29	19.9	6.03	0.5
BL1614-01 Cleaner Tails	429.00	0.14	28.1	10	29.1	16.1	2	1.3	<0.05	0.5	1.50	0.9	0.16	0.55	42.3	14.73	1.4
BL1614-02 Cleaner Tails	236.00	0.19	5.8	12.6	2.9	7.7	1	0.7	<0.05	0.4	0.70	1.2	0.09	0.38	34.1	8.30	0.7
BL1614-01 Rougher Tails	42.78	0.16	1.2	7	2.4	12.1	<1	0.5	<0.05	0.4	0.05	0.8	0.03	0.36	20.5	11.41	1.1
Duplicates																	
BL1614-01 Cleaner Tails	431.00	0.13	26.5	9.7	27.5	15.8	3	1.2	<0.05	0.5	1.47	0.9	0.15	0.60	31.4	14.28	1.4
QA/QC																	
Blank	0.09	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																	
OREAS 235	1	0.74	8.7	90.5	238.0	5.9	<1	1.3	<0.05	0.5	<0.05	12.8	0.62	1.52	0.4	9.35	0.9
OREAS 609b	5.19	0.60	381	13.8	133.0	1	13	9.5	<0.05	0.3	22.50	6.2	0.95	2.02	2	5.25	0.2

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SGS proposal: 20619-PR1
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Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			BL1614-01 Detox Tails	BL1614-02 Detox Tails	BL1614-01 Cleaner Tails	BL1614-02 Cleaner Tails	BL1614-01 Rougher Tails	Blank
Parameter	**Method**	**Units**						
Volume Nanopure Water		mL	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	-
pH	meter		8.1	7.87	8.04	7.98	7.96	5.64
Redox	meter	mV	230	218	213	235	257	-
Conductivity	meter	uS/cm	485	1073	357	524	336	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.3	2.5	1.8	1.7	1.7	-
Alkalinity	titration	mg CaCO3/L	45.2	38.9	60.7	50.4	40.8	-
Chloride		mg/L	< 2	< 2	< 2	< 2	< 2	-
Nitrite (as N)		as N mg/L	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	
Nitrate (as N)		as N mg/L	< 0.6	< 0.6	< 0.6	< 0.6	< 0.6	
Fluoride		mg/L	0.15	< 0.06	0.06	0.09	< 0.06	-
Dissolved Organic Carbon		mg/L	3	2	16.00	9	2.00	
Ammonia+Ammonium (N)		as N mg/L	2.1	1.6	0.80	0.2	< 0.1	
Cyanide (total)		mg/L	0.19	0.05	< 0.01	< 0.01	< 0.01	
Cyanide (WAD)		mg/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01	
Cyanide (free)		mg/L	0.012	0.008	< 0.005	< 0.005	< 0.005	
Cyanate		mg/L	< 1	< 1	< 1	< 1	< 1	
Thiocyanate		mg/L	4.8	< 2	< 2	< 2	< 2	
Sulphate	IC	mg/L	187.4	571.4	111.4	216.3	128.2	-
Ion Balance								
Major Anions	Calc	meq/L	4.90	12.68	3.54	5.52	3.49	
Major Cations	Calc	meq/L	4.25	10.83	3.32	5.42	3.04	
Difference	Calc	meq/L	0.65	1.85	0.22	0.10	0.45	
Balance (%)	Calc	%	7.1%	7.9%	3.1%	0.9%	6.8%	
Dissolved Metals								
Hardness CaCO3		mg/L	79.9	400	138.0	234	134.0	-
Aluminum Al	ICP-MS	mg/L	0.078	0.061	0.028	0.03	0.049	-
Antimony Sb	ICP-MS	mg/L	0.0208	0.0014	0.0222	0.0021	0.0039	-
Arsenic As	ICP-MS	mg/L	0.0017	0.0004	0.0033	0.0004	0.0006	-
Barium Ba	ICP-MS	mg/L	0.0177	0.0265	0.08710	0.0516	0.02900	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	0.000007	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.016	0.016	0.045	0.034	0.025	-
Cadmium Cd	ICP-MS	mg/L	0.000021	0.000005	0.000130	0.000018	0.000010	-
Calcium Ca	ICP-MS	mg/L	25.9	149	42.1	73.2	49.0	-
Chromium Cr	ICP-MS	mg/L	< 0.00008	0.0001	0.00063	0.00117	0.00067	-
Cobalt Co	ICP-MS	mg/L	0.00257	0.000181	0.000132	0.000134	0.000011	-
Copper Cu	ICP-MS	mg/L	0.01	0.005	0.0040	0.002	< 0.001	-
Iron Fe	ICP-MS	mg/L	0.071	0.019	< 0.007	< 0.007	< 0.007	-
Lead Pb	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0016	0.0033	0.0053	0.0066	0.0011	-
Magnesium Mg	ICP-MS	mg/L	3.7	7.08	7.94	12.4	2.73	-
Manganese Mn	ICP-MS	mg/L	0.00292	0.0226	0.00624	0.0176	0.00446	-
Mercury Hg	CVAAS	ug/L	< 0.01	< 0.01	0.38	0.05	< 0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.0756	0.0172	0.37700	0.0844	0.03570	-
Nickel Ni	ICP-MS	mg/L	< 0.0001	0.0003	0.0007	0.0005	0.0002	-
Phosphorus P	ICP-MS	mg/L	0.108	0.036	1.59	1.11	0.16	-
Potassium K	ICP-MS	mg/L	4.46	6.08	5.480	8.96	4.980	-
Selenium Se	ICP-MS	mg/L	0.00065	0.00031	0.00456	0.00158	0.00036	-
Silicon Si	ICP-MS	mg/L	1.82	1.6	2.40	1.73	1.67	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	54.4	56.9	7.62	9.55	4.96	-
Strontium Sr	ICP-MS	mg/L	0.303	2.39	0.5660	2.92	0.5490	-
Sulphur (S)	ICP-MS	mg/L	54	163	32.0	64	35.0	-
Thallium Tl	ICP-MS	mg/L	0.000012	0.000009	0.000076	0.000047	0.000009	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	0.0002	0.00008	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	< 0.0001	< 0.0001	0.0002	0.0002	< 0.0001	-
Uranium U	ICP-MS	mg/L	0.000064	0.000115	0.000188	0.000105	0.000054	-
Vanadium V	ICP-MS	mg/L	0.00108	0.00022	0.00065	0.00014	0.00054	-
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

SGS proposal: 19636-PR1-R1
SGS project #: 2214

Work order date: 12-Dec-24
Report date: 29-Jan-25

Version: Final

Supernatant analysis

Sample ID			BL1614-01 Detox Tails Supernatant	BL1614-02 Detox Tails Supernatant
Parameter	**Method**	**Units**		
pH	meter		8.16	8.2
Redox	meter	mV	263.98	231.16
Conductivity	meter	uS/cm	5646	6149.9
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.15	4.4
Alkalinity	titration	mg CaCO3/L	90.7	119.87
Chloride	Photometry	mg/L	10	9.8
Fluoride	ISE	mg/L	0.11	0.14
Nitrite (as N)		as N mg/L	0.75	1.38
Nitrate (as N)		as N mg/L	< 0.6	< 0.6
Ammonia+Ammonium (N)		as N mg/L	32.5	40.5
Dissolved Organic Carbon		mg/L	47	55
Cyanide (total)		mg/L	0.03	0.17
Cyanide (WAD)		mg/L	< 0.01	0.01
Cyanide (free)		mg/L	0.005	0.013
Cyanate		mg/L	240	290
Thiocyanate		mg/L	90	49
Sulphate	IC	mg/L	3340	3651
Ion Balance				
Major Anions	Calc	meq/L	79.00	86.59
Major Cations	Calc	meq/L	69.27	78.32
Difference	Calc	meq/L	9.74	8.28
Balance (%)	Calc	%	6.6%	5.0%
Dissolved Metals				
Hardness		mg/L as CaCO3	1080	1340
Aluminum (dissolved)	ICP-MS	mg/L	0.036	0.037
Antimony (dissolved)	ICP-MS	mg/L	0.0629	0.0067
Arsenic (dissolved)	ICP-MS	mg/L	0.0013	0.0006
Barium (dissolved)	ICP-MS	mg/L	0.0103	0.00773
Beryllium (dissolved)	ICP-MS	mg/L	< 0.000007	< 0.000007
Bismuth (dissolved)	ICP-MS	mg/L	< 0.00001	< 0.00001
Boron (dissolved)	ICP-MS	mg/L	0.043	0.05
Cadmium (dissolved)	ICP-MS	mg/L	0.000418	0.000144
Calcium (dissolved)	ICP-MS	mg/L	388	481
Chromium (dissolved)	ICP-MS	mg/L	0.00081	0.00043
Cobalt (dissolved)	ICP-MS	mg/L	0.0587	0.0201
Copper (dissolved)	ICP-MS	mg/L	0.016	0.023
Iron (dissolved)	ICP-MS	mg/L	0.04	0.1
Lead (dissolved)	ICP-MS	mg/L	< 0.00009	< 0.00009
Lithium (dissolved)	ICP-MS	mg/L	0.0028	0.0034
Magnesium (dissolved)	ICP-MS	mg/L	26.2	33.9
Manganese (dissolved)	ICP-MS	mg/L	0.012	0.0192
Mercury (total)	CVAAS	ug/L	0.06	0.01
Molybdenum (dissolved)	ICP-MS	mg/L	0.883	0.276
Nickel (dissolved)	ICP-MS	mg/L	0.0162	0.0133
Phosphorus (dissolved)	ICP-MS	mg/L	0.519	0.353
Potassium (dissolved)	ICP-MS	mg/L	38	57
Selenium (dissolved)	ICP-MS	mg/L	0.00459	0.00244
Silicon (dissolved)	ICP-MS	mg/L	2.72	2.63
Silver (dissolved)	ICP-MS	mg/L	< 0.00005	< 0.00005
Sodium (dissolved)	ICP-MS	mg/L	1020	1080
Strontium (dissolved)	ICP-MS	mg/L	2.95	7.94
Sulfur (dissolved)	ICP-MS	mg/L	1070	1160
Thallium (dissolved)	ICP-MS	mg/L	0.00012	0.000059
Tin (dissolved)	ICP-MS	mg/L	0.0001	0.00008
Titanium (dissolved)	ICP-MS	mg/L	0.00044	0.00018
Uranium (dissolved)	ICP-MS	mg/L	0.000648	0.000852
Vanadium (dissolved)	ICP-MS	mg/L	0.00096	0.00044
Zinc (dissolved)	ICP-MS	mg/L	0.018	0.02
Zirconium (dissolved)	ICP-MS	mg/L	< 0.002	< 0.002

SGS

ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	CSA07D	Calc.	CSA06V	CSB02V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005	0.5				0.2
GGC-07	Expected value	0.51				0.56							
	Tolerance (+/-)	0.09				0.09							
HCC-1	Expected value	33.92											
	Tolerance (+/-)	5.04											
RTS-3a	Expected value		0.98	1.34									
	Tolerance (+/-)		0.12	0.35									
OREAS 278	Expected value				0.699								
	Tolerance (+/-)				0.06								
NBM-1	Expected value								41.92	53.21	57.6	Slight	
	Tolerance (+/-)								3.04	3.3	1.3		
TIC-L1	Expected value						0.13	0.477					
	Tolerance (+/-)						0.02	0.78					
GS314-2	Expected value	2.56				5.15							
	Tolerance (+/-)	0.14				0.27							
GS915-8	Expected value	0.13				0.07							
	Tolerance (+/-)	0.02				0.02							
OREAS 550	Expected value	0.220				4.110							
	Tolerance (+/-)	0.004				0.22							
SX35-13	Expected value						11.954						
	Tolerance (+/-)												
SY4	Expected value						0.95						
	Tolerance (+/-)						0.06						

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000	1000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68	BDL	59
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5		16.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4	BDL	62
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1		21.0
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7	24.3	
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3		18.2
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59	0.27	
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5	19.3	
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57	0.27	
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8	19.3	
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33	0.033	57
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18	86	10
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40	0.58	16.2
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16	14	10.3
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109	7.93	34
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02	10.32	10.15
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4	3.16	41.6
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19	10.79	10.12
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220	12.3	13.7
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01	10.20	10.36
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7		64
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57		10.08
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3	2.7	34.7
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12	10.93	10.14
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5	125	24
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24	10.02	10.52
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18	2.04	38.5
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28	11.23	10.32
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9	52	36.4
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30	10.05	10.34
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90	30.4	30.7
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03	10.08	10.16
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5		
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59		

SGS

Metals - Aqua R

CRM	Test	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3
OREAS 235	Expected value	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6	1.55	0.45	9.47	0.85
	Tolerance (%)	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18	18	38	11	39
OREAS 151b	Expected value	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12	0.60		10.40	0.93
	Tolerance (%)	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7	30.8		11.2	36.9
OREAS 609b	Expected value	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009	2.04	1.81	5.22	0.21
	Tolerance (%)	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41	2.23	0.58	5.77	0.21
	Tolerance (%)	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20	15.61	31.55	12.17	129.05
OREAS 610	Expected value	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49	1.12	3.58	3.09	
	Tolerance (%)	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36	21.16	13.49	14.05	
OREAS 501c	Expected value	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3		4.87	2.96		
	Tolerance (%)	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65		12.57	14.22		
OREAS 601c	Expected value	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20	2.04	1.16	5.1	0.23
	Tolerance (%)	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17	16.13	20.78	12.45	118.70
OREAS 624	Expected value	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9		0.74	2.73	6.59	0.84
	Tolerance (%)	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62		26.89	19.16	11.90	39.76
OREAS 601b	Expected value	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08	2.22	1.86	5.34	0.2
	Tolerance (%)	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63	15.63	23.44	33.41	135.00
OREAS 623	Expected value	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26	1.43	2.62	7.43	
	Tolerance (%)	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23	18.74	19.54	11.68	
OREAS 603c	Expected value	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68	2.19	2.99	5.55	0.22
	Tolerance (%)	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36	15.71	14.18	12.25	123.64
OREAS 523	Expected value	698.000							233		293		27.4			6.41		9.88							160	14.8	
	Tolerance (%)	10.36							10.54		10.85		28.25			29.50		263.04							25.62	18.45	

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CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Characterization of Supernatant Solution**
Date : **September 18, 2019**

Leachate Analysis

Sample ID			**BL 465-03 Rougher Tails**
Parameter	**Method**	**Units**	
pH	meter		7.96
Redox	meter	mV	273
Conductivity	meter	uS/cm	6077
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	7.4
Alkalinity	titration	mg CaCO3/L	87.8
Chloride	Colour	mg/L	8.5
Fluoride	IC	mg/L	0.19
Cyanide (Total)		mg/L	0.11
Cyanide (WAD)		mg/L	0.01
Cyanide (Free)		mg/L	< 0.2
Cyanate		mg/L	110
Nitrate (as N)	IC	mg/L	< 0.6
Nitrite (as N)	IC	mg/L	0.48
Ammonia+Ammonium (as N)		mg/L	51.4
Sulphate	Turbidity	mg/L	2525
Ion Balance			
Major Anions	Calc	meq/L	57.27
Major Cations	Calc	meq/L	55.52
Difference	Calc	meq/L	1.75
Balance (%)	Calc	%	1.6%
Dissolved Metals			
Hardness CaCO3		mg/L	661
Aluminum Al	ICP-MS	mg/L	0.030
Antimony Sb	ICP-MS	mg/L	0.0205
Arsenic As	ICP-MS	mg/L	0.0018
Barium Ba	ICP-MS	mg/L	0.0166
Beryllium Be	ICP-MS	mg/L	< 0.000007
Bismuth Bi	ICP-MS	mg/L	< 0.000007
Boron B	ICP-MS	mg/L	0.066
Cadmium Cd	ICP-MS	mg/L	0.000226
Calcium Ca	ICP-MS	mg/L	210
Chromium Cr	ICP-MS	mg/L	< 0.00008
Cobalt Co	ICP-MS	mg/L	0.0539
Copper Cu	ICP-MS	mg/L	0.0137
Iron Fe	ICP-MS	mg/L	0.029
Lead Pb	ICP-MS	mg/L	0.00002
Lithium Li	ICP-MS	mg/L	0.0048
Magnesium Mg	ICP-MS	mg/L	33.3
Manganese Mn	ICP-MS	mg/L	0.00383
Mercury Hg	ICP-MS	ug/L	0.02
Molybdenum Mo	ICP-MS	mg/L	0.703
Nickel Ni	ICP-MS	mg/L	0.0005
Phosphorus P	ICP-MS	mg/L	0.076
Potassium K	ICP-MS	mg/L	42.4
Selenium Se	ICP-MS	mg/L	0.00312
Silicon Si	ICP-MS	mg/L	3.56
Silver Ag	ICP-MS	mg/L	< 0.00005
Sodium Na	ICP-MS	mg/L	946
Strontium Sr	ICP-MS	mg/L	2.71
Sulphur (S)	ICP-MS	mg/L	1000
Thallium Tl	ICP-MS	mg/L	0.000061
Tin Sn	ICP-MS	mg/L	0.00358
Titanium Ti	ICP-MS	mg/L	0.00021
Uranium U	ICP-MS	mg/L	0.00165
Vanadium V	ICP-MS	mg/L	0.00158
Zinc Zn	ICP-MS	mg/L	< 0.002
Zirconium Zr	ICP-MS	mg/L	< 0.002

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Size Fraction Analysis**
Date : **September 9, 2019**

BL416 + BL 465 Composite

Sieve Designation	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+60	0.250	2.30	2.3%	2.3%
- 60 +100	0.150	18.80	19.0%	21.3%
-100 + 140	0.106	18.60	18.8%	40.1%
-140 + 200	0.075	18.10	18.3%	58.3%
-200 + 270	0.053	12.20	12.3%	70.6%
-270 + 325	0.045	25.40	25.6%	96.3%
-325	-0.045	3.70	3.7%	100.0%
TOTAL		99.10	100.0%	

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Modified Acid-Base Accounting**
Date : **September 18, 2019**

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	AP	Modified NP	Net Modified NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.2	0.01	#N/A	0.005	0.01	#N/A	#N/A	0.5	#N/A	#N/A
BL465-03 Rougher Tails	8.78	1.35	112.5	0.058	0.03	0.03	0.9	112.9	112.0	Slight
Duplicates										
BL465-03 Rougher Tails	8.80	1.37		0.05	0.03			113.4		Slight
QC										
GTS-2A				0.337						
RTS-3A					1.01					
SY4		0.92								
NBM-1								41.4		Slight
Blank		<0.01		<0.005	<0.01					
Expected Values		0.91		0.341	0.98			40.4		Slight
Tolerance (+/-)		0.07		0.030	0.12			2.2		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the calculated sulphide sulphur content: S(T) - S(SO4).

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET Modified NP = Modified NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish

CLIENT : Lorax
Project : Upper Beaver / Upper Canada (Project # A506)
SGS Project # : 1846
Test : Low-Level Metals by Aqua Regia Digestion with ICP-MS Finish
Date : September 9, 2019

Sample ID	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2
BL465-03 Rougher Tails	48.08	285.82	2.47	37.6	68	112.7	26.4	553	5.82	5.2	0.4	115.1
QC												
DS11	14.32	152.51	134.21	341.1	1749	80.2	13.7	1041	3.08	42.1	2.4	50.9
Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2
Expected Values	13.9	156	138	345	1710	81.9	14.2	1055	3.21	42.8	2.59	80
Tolerance %	25	15	20	15	25	15	18	15	11	20	30	300

Sample ID	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5
BL465-03 Rougher Tails	1.3	100.6	0.06	1.65	1.15	159	3.96	0.074	15.1	248.7	2.31	128.4
QC												
DS11	8.1	67	2.18	7.45	11.75	47	1.02	0.068	18.2	57.4	0.85	407.3
Blank	<0.1	0.6	<0.01	<0.02	<0.02	<1	0.02	<0.001	<0.5	<0.5	<0.01	<0.5
Expected Values	7.65	67.3	2.37	7.2	12.2	50	1.06	0.070	18.6	61.5	0.85	417
Tolerance %	26	30	20	30	30	20	15	20	30	20	12	20

Sample ID	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
BL465-03 Rougher Tails	0.145	<20	1.95	0.064	0.14	16.3	11.8	0.03	0.03	234	0.4	0.12	8.2
QC													
DS11	0.099	<20	1.2	0.073	0.41	3.3	3.1	4.83	0.27	266	2.4	4.66	5
Blank	<0.001	<20	<0.01	<0.001	0.02	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
Expected Values	0.098	BDL	1.13	0.069	0.40	2.9	3.1	4.9	0.28	300	1.9	4.56	4.7
Tolerance %	28	BDL	16	20	15	35	24	20	15	30	40	25	20

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio**
Date : **October 17, 2019**

Leachate Analysis

Sample ID			**BL 465-03 Rougher Tails**	**Blank**
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	750	750
Sample Weight		g	250	-
pH	meter		7.85	6.16
Redox	meter	mV	325	521
Conductivity	meter	uS/cm	558	<1
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.1	4.4
Alkalinity	titration	mg CaCO3/L	36.4	1.0
Chloride	Colour	mg/L	4	< 1
Fluoride	IC	mg/L	0.18	< 0.06
Cyanide (Total)		mg/L	0.72	< 0.01
Cyanide (WAD)		mg/L	0.03	< 0.01
Cyanide (Free)		mg/L	< 0.2	< 0.2
Cyanate		mg/L	< 1	< 1
Nitrate (as N)		mg/L	< 0.6	< 0.6
Nitrite (as N)		mg/L	< 0.3	< 0.3
Ammonia+Ammonium (N)		mg/L	0.3	< 0.1
Sulphate	Turbidity	mg/L	193	<2
Ion Balance				
Major Anions	Calc	meq/L	4.90	#N/A
Major Cations	Calc	meq/L	5.11	#N/A
Difference	Calc	meq/L	-0.21	#N/A
Balance (%)	Calc	%	-2.1%	#N/A
Dissolved Metals				
Hardness CaCO3		mg/L	68.9	< 0.05
Aluminum Al	ICP-MS	mg/L	0.084	< 0.001
Antimony Sb	ICP-MS	mg/L	0.0083	< 0.0009
Arsenic As	ICP-MS	mg/L	0.0030	< 0.0002
Barium Ba	ICP-MS	mg/L	0.0421	0.00003
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007
Bismuth Bi	ICP-MS	mg/L	< 0.000007	< 0.000007
Boron B	ICP-MS	mg/L	0.031	< 0.002
Cadmium Cd	ICP-MS	mg/L	0.000014	< 0.000003
Calcium Ca	ICP-MS	mg/L	20.7	< 0.01
Chromium Cr	ICP-MS	mg/L	< 0.00008	< 0.00008
Cobalt Co	ICP-MS	mg/L	0.00305	0.000006
Copper Cu	ICP-MS	mg/L	0.0080	0.0007
Iron Fe	ICP-MS	mg/L	0.280	< 0.007
Lead Pb	ICP-MS	mg/L	< 0.00001	0.00006
Lithium Li	ICP-MS	mg/L	0.0022	0.0003
Magnesium Mg	ICP-MS	mg/L	4.20	< 0.001
Manganese Mn	ICP-MS	mg/L	0.00315	0.00006
Mercury Hg	ICP-MS	ug/L	0.01	< 0.01
Molybdenum Mo	ICP-MS	mg/L	0.0542	0.00086
Nickel Ni	ICP-MS	mg/L	< 0.0001	< 0.0001
Phosphorus P	ICP-MS	mg/L	0.004	< 0.003
Potassium K	ICP-MS	mg/L	4.83	< 0.003
Selenium Se	ICP-MS	mg/L	0.00046	< 0.00004
Silicon Si	ICP-MS	mg/L	3.53	0.24
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005
Sodium Na	ICP-MS	mg/L	82.4	0.02
Strontium Sr	ICP-MS	mg/L	0.426	0.00003
Sulphur (S)	ICP-MS	mg/L	69.9	< 0.3
Thallium Tl	ICP-MS	mg/L	< 0.000005	< 0.000005
Tin Sn	ICP-MS	mg/L	0.00225	0.00032
Titanium Ti	ICP-MS	mg/L	0.00008	< 0.00005
Uranium U	ICP-MS	mg/L	0.000175	0.000003
Vanadium V	ICP-MS	mg/L	0.00255	< 0.00001
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Modified Acid-Base Accounting**
Date : **March 27, 2020**

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	AP	Modified NP	Net Modified NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.2	0.01	#N/A	0.005	0.01	#N/A	#N/A	0.5	#N/A	#N/A
BL 416 Comp	8.25	1.29	107.5	0.367	0.19	0.18	5.5	103.6	98.1	Moderate
BL 465 Comp	8.70	1.35	112.5	0.182	0.02	0.16	5.1	114.2	109.1	Moderate
Duplicates										
BL 416 Comp	8.35							104.1		Moderate
BL 465 Comp		1.34		0.188	0.02					
QC										
AMIS 0282					0.17					
Expected Values					0.17					
Tolerance (+/-)					0.04					
TIC-L1		0.12								
Expected Values		0.1325								
Tolerance (+/-)		0.02								
GTS-2A				0.342						
RTS-3A					1.04					
SY4		0.9								
NBM-1								40.8		Slight
Blank		<0.01		<0.005	<0.01					
Expected Values		0.91		0.341	0.98			40.4		Slight
Tolerance (+/-)		0.07		0.030	0.12			2.2		

Note:

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Low-Level Metals by Aqua Regia Digestion with ICP-MS Finish**
Date : **March 27, 2020**

Sample ID	**Mo ppm**	**Cu ppm**	**Pb ppm**	**Zn ppm**	**Ag ppb**	**Ni ppm**	**Co ppm**	**Mn ppm**	**Fe %**	**As ppm**	**U ppm**	**Au ppb**	**Th ppm**	**Sr ppm**	**Cd ppm**	**Sb ppm**	**Bi ppm**	**V ppm**	**Ca %**
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2	0.1	0.5	0.01	0.02	0.02	2	0.01
BL 416 Comp	98.53	564.83	6.57	34.3	308	81.8	19.1	443	4.26	6.4	0.3	142.7	0.9	208.8	0.18	1.1	0.41	50	4.05
BL 465 Comp	73.61	442.28	4.02	41.5	114	124	35	607	6.51	9.8	0.4	109.9	1.3	119.6	0.14	1.36	1.86	154	4.33
QC																			
DS11	15.76	154.41	147.18	354	1861	83.4	14.5	1030	3.24	42	2.6	67.7	8	72.6	2.52	6.4	11.94	50	1.08
Expected Values	13.9	156	138	345	1710	81.9	14.2	1055	3.21	42.8	2.59	80	7.65	67.3	2.37	7.2	12.2	50	1.06
Tolerance %	25	15	20	15	25	15	18	15	11	20	30	300	26	30	20	30	30	20	15
OREAS 262	0.68	117.76	60.91	159.5	469	68.3	28.4	554	3.44	35.3	1.3	56.4	9.9	36.4	0.71	1.96	1.07	22	3.01
Expected Values	0.68	118	56	154	450	62	26.9	530	3.28	35.8	1.22	65	9.33	36	0.61	3.39	1.03	22.5	2.98
Tolerance %	20	15	15	15	15	15	15	15	10	15	25	35	20	20	25	60	25	15	10
Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01

CLIENT
Project
SGS Project #
Test
Date

Sample ID	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.001	0.5	0.5	0.01	0.5	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
BL 416 Comp	0.101	12	118.9	1.38	286.3	0.022	<20	1.15	0.045	0.09	12.4	4.7	0.03	0.37	430	<0.1	0.07	4.6
BL 465 Comp	0.087	15.6	243.9	2.51	131.3	0.139	<20	1.99	0.05	0.07	16.7	12.2	0.04	0.19	277	<0.1	0.1	9.5
QC																		
DS11	0.074	20	61.6	0.87	447.3	0.099	<20	1.21	0.077	0.41	2.9	3.3	5.14	0.29	312	2.1	4.76	5.2
Expected Values	0.070	18.6	61.5	0.85	417	0.098	BDL	1.13	0.069	0.40	2.9	3.1	4.9	0.28	300	1.9	4.56	4.7
Tolerance %	20	30	20	12	20	28	BDL	16	20	15	35	24	20	15	30	40	25	20
OREAS 262	0.04	18.1	44.9	1.23	261.8	0.003	<20	1.34	0.073	0.33	<0.1	3.2	0.48	0.27	161	0.1	0.25	4.1
Expected Values	0.040	15.9	41.7	1.17	248	0.003	BDL	1.20	0.071	0.312	BDL	3.24	0.47	0.25	170	0.40	0.23	3.73
Tolerance %	18	30	18	10	15	25	BDL	25	10	20	BDL	20	15	18	30	150	30	44
Blank	<0.001	<0.5	<0.5	<0.01	<0.5	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio**
Date : **March 27, 2020**

Leachate Analysis

Sample ID			**BL 416 Comp**	**BL 465 Comp**	**Blank**
Parameter	**Method**	**Units**			
Volume Nanopure Water		mL	750	750	750
Sample Weight		g	250	250	-
pH	meter		7.35	8.07	5.74
Redox	meter	mV	256	223	280
Conductivity	meter	uS/cm	1425	741	<1
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.6	2.0	3.0
Alkalinity	titration	mg CaCO3/L	29.9	39.3	0.7
Chloride	Colour	mg/L	4	2	< 1
Fluoride	IC	mg/L	0.14	0.18	< 0.06
Sulphate	Turbidity	mg/L	614	250	<2
Ion Balance					
Major Anions	Calc	meq/L	13.53	6.06	#N/A
Major Cations	Calc	meq/L	16.26	6.43	#N/A
Difference	Calc	meq/L	-2.73	-0.37	#N/A
Balance (%)	Calc	%	-9.2%	-2.9%	#N/A
Dissolved Metals					
Hardness CaCO3		mg/L	613	83.8	0.19
Aluminum Al	ICP-MS	mg/L	0.059	0.085	< 0.001
Antimony Sb	ICP-MS	mg/L	< 0.0009	< 0.0009	< 0.0009
Arsenic As	ICP-MS	mg/L	0.0003	0.0029	< 0.0002
Barium Ba	ICP-MS	mg/L	0.0312	0.0276	0.00010
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007
Bismuth Bi	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007
Boron B	ICP-MS	mg/L	0.036	0.047	< 0.002
Cadmium Cd	ICP-MS	mg/L	0.000019	0.000036	< 0.000003
Calcium Ca	ICP-MS	mg/L	236	25.0	0.07
Chromium Cr	ICP-MS	mg/L	0.00028	0.00026	< 0.00008
Cobalt Co	ICP-MS	mg/L	0.00144	0.00398	< 0.000004
Copper Cu	ICP-MS	mg/L	0.0033	0.0431	0.0008
Iron Fe	ICP-MS	mg/L	0.221	0.162	< 0.007
Lead Pb	ICP-MS	mg/L	0.00001	< 0.00001	0.00011
Lithium Li	ICP-MS	mg/L	0.0016	0.0015	< 0.0001
Magnesium Mg	ICP-MS	mg/L	5.85	5.20	0.004
Manganese Mn	ICP-MS	mg/L	0.0181	0.00400	0.00038
Mercury Hg	ICP-MS	ug/L	0.59	0.03	< 0.01
Molybdenum Mo	ICP-MS	mg/L	0.0633	0.114	< 0.00004
Nickel Ni	ICP-MS	mg/L	0.0022	0.0002	< 0.0001
Phosphorus P	ICP-MS	mg/L	0.247	0.011	< 0.003
Potassium K	ICP-MS	mg/L	7.91	6.62	< 0.003
Selenium Se	ICP-MS	mg/L	0.00059	0.00066	< 0.00004
Silicon Si	ICP-MS	mg/L	1.89	2.85	< 0.02
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005
Sodium Na	ICP-MS	mg/L	85.8	105	< 0.01
Strontium Sr	ICP-MS	mg/L	2.63	0.403	0.00014
Sulphur (S)	ICP-MS	mg/L	266	101	< 0.3
Thallium Tl	ICP-MS	mg/L	0.000005	0.000005	< 0.000005
Tin Sn	ICP-MS	mg/L	0.00133	0.00099	< 0.00006
Titanium Ti	ICP-MS	mg/L	0.00017	0.00017	0.00012
Uranium U	ICP-MS	mg/L	0.000593	0.000149	< 0.000002
Vanadium V	ICP-MS	mg/L	0.00016	0.00234	< 0.00001
Zinc Zn	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Modified Acid-Base Accounting**
Date : **July 5, 2019**

Sample ID	**Paste pH**	**TIC %**	**CaCO3 NP**	**S(T) %**	**S(SO4) %**	**S(S-2) %**	**AP**	**Modified NP**	**Net Modified NP**	**Fizz Test**
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.2	0.01	#N/A	0.005	0.01	#N/A	#N/A	0.5	#N/A	#N/A
BL 416-MTCP-001	8.34	1.31	109.2	0.933	0.32	0.61	19.2	102.1	82.9	Moderate
Duplicates										
BL 416-MTCP-001	8.37	1.31		0.923	0.32			101.7		Moderate
QC										
GTS-2A				0.316						
RTS-3A					0.95					
SY4		0.91								
NBM-1								41.8		
Blank		<0.01		0.006	<0.01					
Expected Values		0.91		0.341	0.98			40.4		
Tolerance (+/-)		0.07		0.030	0.12			2.2		

Note:

CLIENT : Lorax
Project : Upper Beaver / Upper Canada (Project # A506)
SGS Project # : 1846
Test : Low-Level Metals by Aqua Regia Digestion with ICP-MS Finish
Date : July 5, 2019

Sample ID	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2
BL 416-MTCP-001 **Duplicate**	164.29	3622.9	12.19	51.7	1877	43.5	25.2	422	4.47	6.6	0.4	7069.1
BL 416-MTCP-001 **QC**	158.24	3586.86	11.57	52.5	1517	44	23.9	411	4.46	6.7	0.4	3456
DS11	13.12	147.95	129.16	330.1	1513	78.4	13.6	999	2.95	42.4	2.3	56.8
DS11	15.67	158.91	143.8	342.5	1597	83.1	15.5	1048	3.11	43.6	2.8	73
Blank	<0.01	<0.01	0.03	<0.1	<2	<0.1	<0.1	<1	<0.01	<0.1	<0.1	<0.2
Blank	<0.01	<0.01	<0.01	<0.1	<2	<0.1	<0.1	<1	<0.01	0.1	<0.1	<0.2
Expected Values	13.9	156	138	345	1710	81.9	14.2	1055	3.21	42.8	2.59	80
Tolerance %	25	15	20	15	25	15	18	15	11	20	30	300

Sample ID	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5
BL 416-MTCP-001 **Duplicate**	1.6	208.4	0.28	4.21	0.6	54	4.02	0.096	11.3	80.1	1.32	311.1
BL 416-MTCP-001 **QC**	1	215.3	0.27	4.05	0.62	54	4.04	0.097	10.9	87.1	1.32	300.9
DS11	7.4	62	2.26	7.28	10.72	46	1.02	0.068	17	57.7	0.82	409
DS11	8.6	67.4	2.35	6.91	11.64	51	1.1	0.072	19.5	62.6	0.89	429.9
Blank	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5
Blank	<0.1	<0.5	<0.01	<0.02	<0.02	<1	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5
Expected Values	7.65	67.3	2.37	7.2	12.2	50	1.06	0.070	18.6	61.5	0.85	417
Tolerance %	26	30	20	30	30	20	15	20	30	20	12	20

Sample ID	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
BL 416-MTCP-001 **Duplicate**	0.025	<20	1.26	0.028	0.22	21.6	4.7	0.05	0.91	812	0.7	0.13	4.8
BL 416-MTCP-001 **QC**	0.024	<20	1.27	0.028	0.22	19.9	4.7	0.05	0.91	628	0.7	0.12	4.8
DS11	0.089	<20	1.11	0.065	0.39	3.3	3	4.72	0.27	257	2	4.25	4.7
DS11	0.098	<20	1.23	0.074	0.41	2.6	3.3	5.14	0.29	249	2.2	4.62	4.9
Blank	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	<5	<0.1	<0.02	<0.1
Blank	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	0.02	<0.02	<5	<0.1	<0.02	<0.1
Expected Values	0.098	BDL	1.13	0.069	0.40	2.9	3.1	4.9	0.28	300	1.9	4.56	4.7
Tolerance %	28	BDL	16	20	15	35	24	20	15	30	40	25	20

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Modified Acid-Base Accounting**
Date : **March 25, 2019**

Sample ID	**Paste pH**	**TIC %**	**CaCO3 NP**	**S(T) %**	**S(SO4) %**	**S(S-2) %**	**AP**	**Modified NP**	**Net Modified NP**	**Fizz Test**
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07V	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.2	0.01	#N/A	0.005	0.01	#N/A	#N/A	0.5	#N/A	#N/A
BL 416 (400-1200 m)	8.48	1.33	110.8	0.205	0.18	0.03	0.8	107.5	106.7	Moderate
Duplicates										
BL 416 (400-1200 m)	8.46	1.32		0.2	0.18			108.5		Moderate
QC										
GTS-2A				0.323						
RTS-3A					0.93					
SY4		0.91								
NBM-1								40.8		
Blank		<0.01		<0.005	<0.01					
Expected Values		0.91		0.341	0.98			40.4		
Tolerance (+/-)		0.07		0.030	0.12			2.2		

Note:
AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the calculated sulphide sulphur content: S(T) - S(SO4).
NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.
NET Modified NP = Modified NP - AP
Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.
Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish

CLIENT : Lorax
Project : Upper Beaver / Upper Canada (Project # A506)
SGS Project # : 1846
Test : Low-Level Metals by Aqua Regia Digestion with ICP-MS Finish
Date : March 25, 2019

Sample ID	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppb	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppb
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.01	0.01	0.01	0.1	2	0.1	0.1	1	0.01	0.1	0.1	0.2
BL 416 (400-1200 m)	61.32	211.9	12.63	37.5	197	65.4	10.8	432	3.88	2.9	0.3	165.2
Duplicate												
BL 416 (400-1200 m)	60.27	216.66	12.69	38.9	210	70.5	11.2	448	3.91	3.2	0.3	306.3
QC												
DS11	12.89	143.46	138	319.8	1755	73.8	12.5	970	3.06	41.2	2.6	124.9
Blank	<0.01	0.05	<0.01	<0.1	7	<0.1	<0.1	1	<0.01	0.1	<0.1	<0.2
Expected Values	13.9	156	138	345	1710	81.9	14.2	1055	3.21	42.8	2.59	80
Tolerance %	25	15	20	15	25	15	18	15	11	20	30	300

Sample ID	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.1	0.5	0.01	0.02	0.02	2	0.01	0.001	0.5	0.5	0.01	0.5
BL 416 (400-1200 m)	1.2	204.8	0.1	0.87	0.21	50	3.72	0.106	13.3	121.3	1.27	302
Duplicate												
BL 416 (400-1200 m)	1	212.4	0.14	0.87	0.21	50	3.84	0.097	12.6	121.7	1.29	308.9
QC												
DS11	7.7	66.7	2.28	6.22	11.77	48	1.02	0.072	16.7	52.8	0.8	396.7
Blank	<0.1	<0.5	<0.01	<0.02	0.05	<1	<0.01	<0.001	<0.5	<0.5	<0.01	<0.5
Expected Values	7.65	67.3	2.37	7.2	12.2	50	1.06	0.070	18.6	61.5	0.85	417
Tolerance %	26	30	20	30	30	20	15	20	30	20	12	20

Sample ID	Ti %	B ppm	Al %	Na %	K %	W ppm	Sc ppm	Tl ppm	S %	Hg ppb	Se ppm	Te ppm	Ga ppm
Method Code	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250	AQ250
LOD	0.001	20	0.01	0.001	0.01	0.1	0.1	0.02	0.02	5	0.1	0.02	0.1
BL 416 (400-1200 m)	0.021	<20	1.17	0.059	0.16	11.6	4.6	0.03	0.2	324	<0.1	0.05	4.3
Duplicate													
BL 416 (400-1200 m)	0.021	<20	1.17	0.059	0.16	12.1	4.4	0.03	0.21	370	<0.1	0.04	4.3
QC													
DS11	0.085	<20	1.08	0.067	0.38	2.4	2.9	4.62	0.28	262	2	4.42	4.6
Blank	<0.001	<20	<0.01	<0.001	<0.01	<0.1	<0.1	<0.02	<0.02	7	<0.1	<0.02	<0.1
Expected Values	0.098	BDL	1.13	0.069	0.40	2.9	3.1	4.9	0.28	300	1.9	4.56	4.7
Tolerance %	28	BDL	16	20	15	35	24	20	15	30	40	25	20

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio**
Date : **May 7, 2019**

Leachate Analysis

Sample ID			**BL 416 (400-1200 m)**	**Blank**
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	750	750
Sample Weight		g	250	-
pH	meter		7.64	5.99
Redox	meter	mV	250	404
Conductivity	meter	uS/cm	1664	<1
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	3.0	2.4
Alkalinity	titration	mg CaCO3/L	30.8	0.6
Chloride	Colour	mg/L	4	< 1
Fluoride	IC	mg/L	0.10	< 0.06
Cyanide (Total)		mg/L	0.36	-
Cyanide (WAD)		mg/L	0.05	-
Cyanide (Free)		mg/L	< 0.005	-
Cyanate		mg/L	3.2	-
Nitrate (as N)	IC	mg/L	< 0.06	-
Nitrite (as N)	IC	mg/L	0.05	-
Ammonia+Ammonium (as N)		mg/L	0.7	-
Sulphate	Turbidity	mg/L	949	<2
Ion Balance				
Major Anions	Calc	meq/L	20.61	#N/A
Major Cations	Calc	meq/L	20.15	#N/A
Difference	Calc	meq/L	0.46	#N/A
Balance (%)	Calc	%	1.1%	#N/A
Dissolved Metals				
Hardness CaCO3		mg/L	792	< 0.05
Aluminum Al	ICP-MS	mg/L	0.084	< 0.001
Antimony Sb	ICP-MS	mg/L	0.0095	< 0.0009
Arsenic As	ICP-MS	mg/L	0.0003	< 0.0002
Barium Ba	ICP-MS	mg/L	0.03529	0.00005
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007
Bismuth Bi	ICP-MS	mg/L	< 0.000007	< 0.000007
Boron B	ICP-MS	mg/L	0.040	0.004
Cadmium Cd	ICP-MS	mg/L	0.000021	< 0.000003
Calcium Ca	ICP-MS	mg/L	309	0.02
Chromium Cr	ICP-MS	mg/L	0.00013	< 0.00008
Cobalt Co	ICP-MS	mg/L	0.000789	0.000016
Copper Cu	ICP-MS	mg/L	0.0057	0.0013
Iron Fe	ICP-MS	mg/L	0.078	< 0.007
Lead Pb	ICP-MS	mg/L	0.00003	0.00007
Lithium Li	ICP-MS	mg/L	0.0028	0.0003
Magnesium Mg	ICP-MS	mg/L	4.93	0.001

Manganese Mn	ICP-MS	mg/L	0.0235	0.00004
Mercury Hg	ICP-MS	ug/L	0.34	< 0.01
Molybdenum Mo	ICP-MS	mg/L	0.0312	0.00122
Nickel Ni	ICP-MS	mg/L	0.0010	< 0.0001
Phosphorus P	ICP-MS	mg/L	0.146	< 0.003
Potassium K	ICP-MS	mg/L	8.74	< 0.003
Selenium Se	ICP-MS	mg/L	0.00044	< 0.00004
Silicon Si	ICP-MS	mg/L	2.26	0.03
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005
Sodium Na	ICP-MS	mg/L	91.8	0.10
Strontium Sr	ICP-MS	mg/L	3.57	0.00021
Sulphur (S)	ICP-MS	mg/L	317	< 0.3
Thallium Tl	ICP-MS	mg/L	< 0.000005	< 0.000005
Tin Sn	ICP-MS	mg/L	0.00300	< 0.00006
Titanium Ti	ICP-MS	mg/L	0.00011	< 0.00005
Uranium U	ICP-MS	mg/L	0.000979	0.000003
Vanadium V	ICP-MS	mg/L	0.00033	< 0.00001
Zinc Zn	ICP-MS	mg/L	< 0.002	0.003
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002

CLIENT : **Lorax**
Project : **Upper Beaver / Upper Canada (Project # A506)**
SGS Project # : **1846**
Test : **Characterization of Supernatant Solution**
Date : **July 8, 2019**

Leachate Analysis

Sample ID			**BL 416 (400-1200 m)**	**BL 416 (400-1200 m)**
Parameter	**Method**	**Units**	**March 26,2019**	**May 9,2019**
pH	meter		7.99	8.19
Redox	meter	mV	257	305
Conductivity	meter	uS/cm	5795	6607
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	5.1	0.6
Alkalinity	titration	mg CaCO3/L	63.0	98.8
Chloride	Colour	mg/L	43	37
Fluoride	IC	mg/L	0.23	0.22
Cyanide (Total)		mg/L	0.07	0.04
Cyanide (WAD)		mg/L	0.03	0.01
Cyanide (Free)		mg/L	< 0.005	0.01
Cyanate		mg/L	140	38
Nitrate (as N)	IC	mg/L	0.06	< 0.6
Nitrite (as N)	IC	mg/L	0.08	< 0.3
Ammonia+Ammonium (as N)		mg/L	3.7	11.4
Sulphate	Turbidity	mg/L	3063	3248
Ion Balance				
Major Anions	Calc	meq/L	69.65	71.62
Major Cations	Calc	meq/L	69.68	76.26
Difference	Calc	meq/L	-0.03	-4.65
Balance (%)	Calc	%	0.0%	-3.1%
Dissolved Metals				
Hardness CaCO3		mg/L	1270	1400
Aluminum Al	ICP-MS	mg/L	0.047	0.048
Antimony Sb	ICP-MS	mg/L	0.0136	0.0139
Arsenic As	ICP-MS	mg/L	0.0008	0.0009
Barium Ba	ICP-MS	mg/L	0.0133	0.0125
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007
Bismuth Bi	ICP-MS	mg/L	0.000008	< 0.000007
Boron B	ICP-MS	mg/L	0.087	0.088
Cadmium Cd	ICP-MS	mg/L	0.000193	0.000546
Calcium Ca	ICP-MS	mg/L	486	535
Chromium Cr	ICP-MS	mg/L	0.00017	0.00012
Cobalt Co	ICP-MS	mg/L	0.0387	0.0380
Copper Cu	ICP-MS	mg/L	0.126	0.116
Iron Fe	ICP-MS	mg/L	0.018	0.016
Lead Pb	ICP-MS	mg/L	0.00367	0.00145
Lithium Li	ICP-MS	mg/L	0.0028	0.0034
Magnesium Mg	ICP-MS	mg/L	13.1	15.3
Manganese Mn	ICP-MS	mg/L	0.0502	0.0337
Mercury Hg	ICP-MS	ug/L	0.18	0.03

Molybdenum Mo	ICP-MS	mg/L	0.370	0.372
Nickel Ni	ICP-MS	mg/L	0.0028	0.0027
Phosphorus P	ICP-MS	mg/L	0.224	0.200
Potassium K	ICP-MS	mg/L	43.3	45.6
Selenium Se	ICP-MS	mg/L	0.00323	0.00322
Silicon Si	ICP-MS	mg/L	2.24	1.86
Silver Ag	ICP-MS	mg/L	< 0.0005	< 0.00005
Sodium Na	ICP-MS	mg/L	990	1080
Strontium Sr	ICP-MS	mg/L	8.57	8.00
Sulphur (S)	ICP-MS	mg/L	1910	1190
Thallium Tl	ICP-MS	mg/L	0.000042	0.000055
Tin Sn	ICP-MS	mg/L	0.0302	0.03055
Titanium Ti	ICP-MS	mg/L	0.00045	0.00020
Uranium U	ICP-MS	mg/L	0.00246	0.00216
Vanadium V	ICP-MS	mg/L	0.00031	0.00029
Zinc Zn	ICP-MS	mg/L	0.003	0.005
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002

Appendix D: Overburden Static Test Data

AGNICO EAGLE

Report No. CA14363-AUG21
Customer Agnico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-055	UB20-GTTP-094	UB20-GTTP-101	UB20-GTTP-115	UB20-GTTP-139	UB20-GTTP-140	UB20-GTTP-141	UB20-GTTP-151	UB20-GTTP-091	UB20-GTTP-P060	UB20-GTTP-P021	UB20-GTTP-095	UB20-GTTP-145	UB20-GTTP-P008
Sample Date/Time																			
Analysis	**Units**																		
Sample weight	g	01-Sep-21	6:15	02-Sep-21	11:43	1.50	1.54	1.50	1.53	1.50	1.49	1.49	1.51	1.48	NSS	1.54	1.50	1.51	1.54
Vol H2O2	mL	01-Sep-21	6:15	02-Sep-21	11:43	150	150	150	150	150	150	150	150	150	NSS	150	150	150	150
Final pH	no unit	01-Sep-21	6:15	02-Sep-21	11:43	6.81	5.35	5.85	6.82	10.45	7.10	6.46	6.80	6.68	NSS	7.56	6.21	5.25	8.39
NaOH	Normality	01-Sep-21	6:15	02-Sep-21	11:43	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	NSS	0.10	0.10	0.10	0.10
Vol NaOH to PH 4.5	mL	01-Sep-21	6:15	02-Sep-21	11:43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NSS	0.00	0.00	0.00	0.00
Vol NaOH to PH 7.0	mL	01-Sep-21	6:15	02-Sep-21	11:43	0.19	1.52	1.53	0.20	0.00	0.00	0.24	0.12	0.12	NSS	0.00	0.77	1.28	0.00
NAG (pH 4.5)	kg H2SO4/tonne	01-Sep-21	6:15	02-Sep-21	11:43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	NSS	0.0	0.0	0.0	0.0
NAG (pH 7.0)	kg H2SO4/tonne	01-Sep-21	6:15	02-Sep-21	11:43	0.6	4.8	5.0	0.6	0.0	0.0	0.8	0.4	0.4	NSS	0.0	2.5	4.2	0.0

Notes
NAG = (49 x Vol. of base x N of base)/sample weight
kg H2SO4/tonne

Report No. CA14364-AUG21
Customer ico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Completed Date	Completed Time	UB20-GTTP-139	UB20-GTTP-P060	UB20-GTTP-P021	UB20-GTTP-095	UB20-GTTP-P008
Sample Date/Time										
Analysis	**Units**									
Sample weight	g	31-Aug-21	12:45	01-Sep-21	15:44	250	90	250	250	250
Volume D.I. Water	mL	31-Aug-21	12:45	01-Sep-21	15:44	750	900	750	750	750
Final pH	no unit	01-Sep-21	12:45	01-Sep-21	15:44	6.87	5.96	6.71	5.47	8.30
pH	No unit	02-Sep-21	9:55	02-Sep-21	16:13	8.05	6.58	7.72	5.78	7.98
Conductivity	uS/cm	02-Sep-21	9:55	02-Sep-21	16:13	589	660	192	40	114
Alkalinity	mg/L as CaCO3	02-Sep-21	9:55	02-Sep-21	16:13	274	4	41	< 2	51
Sulphate	mg/L	02-Sep-21	19:23	03-Sep-21	10:20	25	310	55	< 2	< 2
Mercury	mg/L	02-Sep-21	11:00	02-Sep-21	15:49	< 0.00001	< 0.00001	0.00003	< 0.00001	0.00001
Silver	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Aluminum	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.076	0.167	0.268	0.279	0.483
Arsenic	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0008	0.0018	0.0125	0.0004	0.0033
Barium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0260	0.0312	0.0230	0.0155	0.00744
Boron	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.017	0.052	0.035	0.017	0.027
Beryllium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.000007	0.000008	0.000011	0.000024	0.000015
Bismuth	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Calcium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	129	157	25.8	3.02	17.3
Cadmium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.000024	0.000039	0.000043	0.000039	0.000006
Cobalt	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.000350	0.000486	0.000742	0.000215	0.000196
Chromium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.00052	0.00030	0.00144	0.00089	0.00107
Copper	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0034	0.0053	0.0335	0.0006	0.0035
Iron	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.026	0.036	0.336	0.103	0.295
Potassium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	2.14	1.10	2.31	1.69	1.08
Lithium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0007	0.0004	0.0008	0.0004	0.0008
Magnesium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	18.0	6.42	6.76	1.17	3.99
Manganese	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0159	0.0150	0.0901	0.0146	0.00471
Molybdenum	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.00104	0.00359	0.00607	0.00041	0.00443
Sodium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	3.42	0.48	4.60	0.70	2.20
Nickel	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.0013	0.0008	0.0019	0.0003	0.0008
Lead	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.00009	< 0.00009	0.00328	0.00014	0.00033
Antimony	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.0009	0.0011	0.0016	< 0.0009	< 0.0009
Selenium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.00104	0.00011	0.00035	0.00005	0.00013
Silicon	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	2.29	1.16	5.00	3.63	3.81
Tin	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.00006	< 0.00006	0.00013	0.00006	< 0.00006
Strontium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.151	0.299	0.0910	0.0205	0.0277
Titanium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.00252	0.00056	0.0181	0.0093	0.0209
Thallium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.000020	0.000031	0.000013	0.000014	0.000007
Uranium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.001407	0.000019	0.000105	0.000028	0.000335
Vanadium	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	0.00154	0.00104	0.00138	0.00061	0.00302
Zinc	mg/L	07-Sep-21	14:30	08-Sep-21	15:39	< 0.002	0.003	0.006	< 0.002	0.003

Report No. CA15373-SEP20
Customer ico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-094	UB20-GTTP-060	UB20-GTTP-100	UB20-GTTP-114	UB20-GTTP-101	UB20-GTTP-055	UB20-GTTP-108	UB20-GTTP-054	UB20-GTTP-095	UB20-GTTP-120	UB20-GTTP-106	UB20-GTTP-077	UB20-GTTP-104	UB20-GTTP-111	UB20-GTTP-151	UB20-GTTP-070	UB20-GTTP-103	UB20-GTTP-061	UB20-GTTP-121	UB20-GTTP-118
Sample Date/Time						16-Sep-20 08:30	16-Sep-20 09:30	16-Sep-20 10:15	14-Sep-20 09:00	16-Sep-20 12:00	16-Sep-20 13:00	14-Sep-20 10:00	16-Sep-20 14:15	16-Sep-20 15:00	15-Sep-20 08:00	14-Sep-20 11:00	17-Sep-20 08:30	15-Sep-20 09:15	14-Sep-20 12:00	15-Sep-20 11:30	17-Sep-20 09:45	15-Sep-20 12:30	17-Sep-20 13:30	12-Sep-20 08:30	12-Sep-20 09:30
Analysis	**Units**																							
Paste pH	no unit	05-Oct-20	8:41	07-Oct-20	10:29	5.64	6.62	7.40	7.35	5.46	6.30	7.58	6.94	6.10	7.32	6.23	6.97	7.79	6.69	5.55	7.08	7.76	6.88	7.47	7.00
Fizz Rate	no unit	05-Oct-20	8:41	07-Oct-20	10:29	1	1	3	4	1	3	4	4	1	1	1	1	4	3	1	1	4	1	1	2
Sample weight	g	05-Oct-20	8:41	07-Oct-20	10:29	2.00	2.01	2.00	2.04	2.01	2.06	1.99	2.00	2.05	2.03	2.02	2.01	2.01	2.02	2.03	1.98	2.02	2.05	2.00	2.01
HCl Added	mL	06-Oct-20	6:38	07-Oct-20	10:29	20.00	20.00	29.00	65.00	24.00	20.00	84.00	60.00	20.00	20.00	20.00	20.00	83.00	75.00	20.00	20.00	65.00	20.00	30.00	20.00
HCl	Normality	05-Oct-20	8:41	07-Oct-20	10:29	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH	Normality	05-Oct-20	8:41	07-Oct-20	10:29	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH to pH=8.3	mL	06-Oct-20	6:38	07-Oct-20	10:29	21.50	15.04	16.80	30.39	26.51	20.58	37.69	27.58	20.31	19.06	18.56	18.66	38.57	41.34	21.47	18.03	24.34	19.50	19.85	16.93
Final pH	no unit	06-Oct-20	6:38	07-Oct-20	10:29	1.16	1.58	1.87	1.74	1.63	1.44	1.57	1.68	1.25	1.43	1.38	1.42	1.58	1.67	1.50	1.45	1.72	1.42	1.81	1.43
NP	t CaCO3/1000 t	06-Oct-20	6:38	07-Oct-20	10:29	-3.7	12.3	30.5	84.8	-6.2	-1.4	116	81.0	-0.7	2.3	3.6	3.3	110	83.3	-3.6	5.0	101	1.2	25.4	7.6
AP	t CaCO3/1000 t	07-Oct-20	10:29	07-Oct-20	10:30	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Net NP	t CaCO3/1000 t	07-Oct-20	10:29	07-Oct-20	10:30	-4.95	11.0	29.2	83.6	-7.45	-2.65	115	79.8	-1.95	1.05	2.35	2.05	109	82.0	-4.85	3.75	99.4	-0.05	24.2	6.35
NP/AP	ratio	07-Oct-20	10:29	07-Oct-20	10:30	-2.96	9.84	24.4	67.8	-4.96	-1.12	93.1	64.8	-0.56	1.84	2.88	2.64	88.4	66.6	-2.88	4.00	80.6	0.96	20.3	6.08
Sulphur (total)	%	29-Sep-20	15:10	02-Oct-20	11:33	0.005	< 0.005	< 0.005	< 0.005	0.009	0.005	0.014	0.007	< 0.005	< 0.005	0.009	0.008	0.006	0.050	0.010	< 0.005	0.010	< 0.005	< 0.005	0.018
Acid Leachable SO4-S	%	02-Oct-20	11:31	02-Oct-20	11:33	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Sulphide	%	02-Oct-20	10:53	02-Oct-20	11:33	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Carbon (total)	%	29-Sep-20	15:10	01-Oct-20	16:04	1.65	1.39	0.955	3.80	2.88	1.42	4.03	3.64	0.882	0.385	2.80	0.496	1.96	11.9	1.70	0.534	1.90	1.06	0.602	0.847
Carbonate	%	01-Oct-20	15:13	01-Oct-20	16:04	< 0.025	0.739	1.39	4.24	< 0.025	< 0.025	6.38	4.16	< 0.025	< 0.025	0.405	0.030	5.65	5.20	< 0.025	0.160	5.23	0.140	0.984	0.230
Total Organic Carbon	%	01-Oct-20	15:13	02-Oct-20	14:55	1.65	1.24	0.676	2.95	2.88	1.42	2.75	2.81	0.886	0.388	2.72	0.490	0.830	10.9	1.70	0.502	0.854	1.03	0.405	0.801

Notes
*NP (Neutralization Potential)
= 50 x (N of HCL x Total HCL added - N NaOH x NaOH added)

Weight of Sample

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.04 will be calculated using a 0.04 value.

Report No.	**CA15373-SEP20**
Customer	**ico Eagle Mines Lim**
Attention	**Sarah Morin**
Reference	**P.O# OL-892384**
Works#	
Title	**Final Report**

Sample ID		UB20-GTTP-146	UB20-GTTP-109	UB20-GTTP-147	UB20-GTTP-115	UB20-GTTP-143	UB20-GTTP-145	UB20-GTTP-144	UB20-GTTP-152	UB20-GTTP-112	UB20-GTTP-110	UB20-GTTP-136	UB20-GTTP-135	UB20-GTTP-137	UB20-GTTP-138	UB20-GTTP-150	UB20-GTTP-142	UB20-GTTP-141	UB20-GTTP-140	UB20-GTTP-149	UB20-GTTP-148	UB20-GTTP-139	UB20-GTTP-119
Sample Date/Time		13-Sep-20 08:00	12-Sep-20 10:15	12-Sep-20 11:15	12-Sep-20 12:00	14-Sep-20 13:15	13-Sep-20 10:45	14-Sep-20 14:00	12-Sep-20 13:30	12-Sep-20 14:30	12-Sep-20 15:15	11-Sep-20 08:15	11-Sep-20 09:15	11-Sep-20 08:30	11-Sep-20 09:30	11-Sep-20 10:15	10-Sep-20 07:45	10-Sep-20 08:30	10-Sep-20 09:30	10-Sep-20 10:15	10-Sep-20 11:00	09-Sep-20 08:30	09-Sep-20 10:00
Analysis	**Units**																						
Paste pH	no unit	6.83	7.65	7.54	5.25	6.88	5.00	7.59	7.74	7.74	7.93	7.16	8.52	8.15	8.11	8.55	6.27	6.36	6.86	7.07	7.41	6.14	8.15
Fizz Rate	no unit	1	1	4	1	4	1	2	4	4	3	1	4	4	4	4	1	1	1	1	3	1	3
Sample weight	g	2.05	1.99	2.01	2.04	2.00	2.00	1.98	2.02	2.02	2.03	2.01	2.01	2.03	1.99	2.01	2.01	2.04	2.00	2.03	2.03	2.00	2.00
HCl Added	mL	20.00	26.00	68.00	20.00	55.00	20.00	20.00	54.00	40.00	53.00	20.00	65.00	54.00	65.00	40.00	20.00	20.00	20.00	20.00	57.00	20.00	52.00
HCl	Normality	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH	Normality	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH to pH=8.3	mL	19.18	18.62	26.32	22.03	30.65	21.78	16.38	27.63	15.87	20.29	18.85	24.92	27.32	27.17	21.92	19.68	19.17	19.72	19.11	26.37	20.23	20.19
Final pH	no unit	1.43	1.73	1.70	1.35	1.66	1.15	1.67	1.71	1.88	1.78	1.28	1.72	1.59	1.70	1.53	1.57	1.25	1.41	1.49	1.58	1.37	1.84
NP	t CaCO3/1000 t	2.0	18.5	104	-5.0	60.9	-4.5	9.1	65.3	59.7	80.6	2.9	99.7	65.7	95.0	45.0	0.8	2.0	0.7	2.2	75.4	-0.6	79.5
AP	t CaCO3/1000 t	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Net NP	t CaCO3/1000 t	0.75	17.2	102	-6.25	59.6	-5.75	7.85	64.0	58.4	79.4	1.65	98.4	64.4	93.8	43.8	-0.45	0.75	-0.55	0.95	74.2	-1.85	78.2
NP/AP	ratio	1.60	14.8	83.0	-4.00	48.7	-3.60	7.28	52.2	47.8	64.5	2.32	79.8	52.6	76.0	36.0	0.64	1.60	0.56	1.76	60.3	-0.48	63.6
Sulphur (total)	%	< 0.005	0.019	0.019	0.013	0.032	< 0.005	< 0.005	< 0.005	0.008	< 0.005	< 0.005	< 0.005	< 0.005	0.007	< 0.005	< 0.005	0.032	0.012	< 0.005	0.010	0.010	0.008
Acid Leachable SO4-S	%	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Sulphide	%	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Carbon (total)	%	0.511	4.61	3.76	2.52	5.48	1.65	0.275	1.37	2.74	2.00	0.295	1.23	1.03	1.42	0.551	1.15	0.638	1.27	0.312	2.11	1.20	1.08
Carbonate	%	< 0.025	1.03	5.37	< 0.025	3.43	< 0.025	0.265	2.96	3.17	4.11	0.080	5.07	3.15	4.69	2.10	< 0.025	< 0.025	< 0.025	< 0.025	3.89	4.08	< 0.025
Total Organic Carbon	%	0.513	4.40	2.68	2.52	4.79	1.65	0.222	0.777	2.11	1.18	0.279	0.216	0.400	0.481	0.131	1.15	0.640	1.27	0.315	1.33	0.383	1.08

Notes

*NP (Neutralization Potential)
= 50 x (N of HCL x Total HCL added - N NaOH

Weight of Sample

*AP (Acid Potential) = % Sulphide Sulphur x 31.
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalei
Samples with a % Sulphide value of <0.04 will b

Report No. CA15374-SEP20
Customer Agnico Eagle Mines Limited
Attention Sarah Morin
Reference P.O#OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-094	UB20-GTTP-060	UB20-GTTP-100	UB20-GTTP-114	UB20-GTTP-101	UB20-GTTP-055	UB20-GTTP-108	UB20-GTTP-054	UB20-GTTP-095	UB20-GTTP-120	UB20-GTTP-106	UB20-GTTP-077	UB20-GTTP-104	UB20-GTTP-111	UB20-GTTP-151	UB20-GTTP-070	UB20-GTTP-103	UB20-GTTP-061	UB20-GTTP-121	UB20-GTTP-118
Sample Date/Time						16-Sep-20 08:30	16-Sep-20 09:30	16-Sep-20 10:15	14-Sep-20 09:00	16-Sep-20 12:00	16-Sep-20 13:00	14-Sep-20 10:00	16-Sep-20 14:15	16-Sep-20 15:00	15-Sep-20 08:00	14-Sep-20 11:00	17-Sep-20 08:30	15-Sep-20 09:15	14-Sep-20 12:00	15-Sep-20 11:30	17-Sep-20 09:45	15-Sep-20 12:30	17-Sep-20 13:30	12-Sep-20 08:30	12-Sep-20 09:30
Analysis	**Units**																							
Silver	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Arsenic	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.8	1.4	1.6	1.6	2.3	1.3	1.3	1.5	0.7	1.3	0.6	2.8	1.5	0.8	1.2	1.3	3.2	1.2	1.6	1.3
Aluminum	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	5900	12000	16000	18000	21000	12000	9200	13000	6100	12000	6900	27000	17000	7500	13000	16000	25000	15000	21000	22000
Barium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	20	58	88	110	29	48	64	69	29	54	31	32	96	47	21	49	62	63	120	22
Beryllium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.11	0.33	0.40	0.43	0.25	0.28	0.29	0.29	0.16	0.25	0.18	0.22	0.44	0.23	0.14	0.22	0.27	0.31	0.51	0.17
Bismuth	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.09	0.18	0.19	0.20	0.14	0.13	0.13	0.20	< 0.09	0.11	< 0.09	< 0.09	0.19	< 0.09	0.11	0.12	0.16	0.14	0.22	< 0.09
Calcium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	1100	6300	12000	28000	4000	2700	37000	24000	1900	4600	5000	7300	37000	22000	2400	5100	68000	4300	11000	7400
Cadmium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.05	0.11	0.06	0.14	0.30	0.08	0.10	0.13	0.08	0.04	0.06	0.10	0.07	0.20	0.10	0.05	0.12	0.10	0.04	0.04
Cobalt	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	2.4	11	13	11	11	6.3	7.1	9.0	4.0	9.4	2.6	26	11	4.3	7.8	12	19	8.2	13	22
Chromium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	18	42	63	60	54	38	40	49	21	44	19	89	60	26	30	51	100	44	77	100
Copper	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	5.3	13	19	24	18	12	18	22	6.1	28	6.3	46	22	12	18	25	41	12	27	55
Iron	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	7200	18000	23000	23000	31000	16000	15000	19000	9000	19000	7400	47000	22000	9300	20000	33000	40000	18000	28000	39000
Potassium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	380	1500	2100	2200	500	1300	1700	1800	620	1000	510	720	2200	1100	400	740	3600	1100	2400	400
Lithium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	4	16	19	21	12	12	13	15	5	11	6	14	22	8	6	11	14	14	23	9
Magnesium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	1600	7500	11000	15000	8200	4500	15000	14000	2400	5900	2900	21000	16000	7900	5000	10000	34000	5700	13000	18000
Manganese	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	100	620	550	390	340	250	310	350	160	320	85	1100	440	180	200	700	750	240	550	630
Molybdenum	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.5	0.5	0.4	0.4	0.6	0.8	0.5	0.3	0.5	0.6	0.5	0.8	0.4	0.2	0.9	0.4	1.1	0.4	0.3	0.4
Nickel	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	7.8	22	34	34	30	21	23	27	12	27	8.6	56	35	15	20	27	64	26	42	52
Phosphorus	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	240	320	330	550	530	390	480	560	350	440	330	420	440	330	250	450	1100	300	400	340
Lead	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	3.6	7.3	7.4	7.2	5.2	5.4	4.4	7.4	2.6	3.7	3.1	1.6	6.8	2.5	3.5	3.8	5.6	5.4	7.4	2.0
Antimony	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6
Selenium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Tin	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.6	< 0.5
Strontium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	7.3	16	24	35	8.0	15	39	29	10	16	12	10	40	28	8.0	15	73	18	30	10
Titanium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	370	870	1100	810	1500	700	620	770	430	830	300	1500	990	360	1200	1000	1900	790	1300	2400
Thallium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.03	0.10	0.14	0.16	0.03	0.08	0.10	0.13	0.03	0.07	0.05	0.02	0.15	0.06	0.03	0.06	0.11	0.07	0.19	0.02
Uranium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	0.37	0.33	0.45	0.60	0.22	0.33	0.85	0.41	0.24	0.28	0.43	0.17	0.64	0.82	0.17	0.25	0.85	0.35	0.55	0.13
Vanadium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	15	38	45	40	75	30	28	35	17	37	13	110	43	18	55	65	80	35	53	110
Yttrium	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	2.2	3.4	5.8	7.6	3.9	3.9	6.4	6.1	3.0	6.9	2.8	8.0	7.7	4.7	3.0	5.8	14	4.5	8.7	7.4
Zinc	µg/g	01-Oct-20	11:00	02-Oct-20	12:57	8.2	49	41	48	48	28	28	41	13	28	11	58	45	18	21	42	74	37	49	48

Report No. CA15374-SEP20
Customer Agnico Eagle Mines
Attention Sarah Morin
Reference P.O#OL-892384
Works#
Title Final Report

Sample ID		UB20-GTTP-146	UB20-GTTP-109	UB20-GTTP-147	UB20-GTTP-115	UB20-GTTP-143	UB20-GTTP-145	UB20-GTTP-144	UB20-GTTP-152	UB20-GTTP-112	UB20-GTTP-110	UB20-GTTP-136	UB20-GTTP-135	UB20-GTTP-137	UB20-GTTP-138	UB20-GTTP-150	UB20-GTTP-142	UB20-GTTP-141	UB20-GTTP-140	UB20-GTTP-149	UB20-GTTP-148	UB20-GTTP-139	UB20-GTTP-119
Sample Date/Time		13-Sep-20 08:00	12-Sep-20 10:15	12-Sep-20 11:15	12-Sep-20 12:00	14-Sep-20 13:15	13-Sep-20 10:45	14-Sep-20 14:00	12-Sep-20 13:30	12-Sep-20 14:30	12-Sep-20 15:15	11-Sep-20 08:15	11-Sep-20 09:15	11-Sep-20 08:30	11-Sep-20 09:30	11-Sep-20 10:15	10-Sep-20 07:45	10-Sep-20 08:30	10-Sep-20 09:30	10-Sep-20 10:15	10-Sep-20 11:00	09-Sep-20 08:30	09-Sep-20 10:00
Analysis	**Units**																						
Silver	µg/g	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Arsenic	µg/g	1.2	1.0	1.7	2.1	1.2	1.1	1.6	1.8	1.4	1.3	1.1	1.5	1.6	1.4	0.7	1.4	1.0	0.9	1.4	1.5	1.3	1.3
Aluminum	µg/g	14000	12000	14000	15000	13000	6100	16000	18000	12000	13000	10000	15000	16000	17000	7800	17000	11000	14000	15000	12000	16000	16000
Barium	µg/g	76	68	96	32	78	17	85	120	61	83	61	94	99	100	47	81	46	130	82	62	92	30
Beryllium	µg/g	0.29	0.31	0.36	0.19	0.32	0.05	0.36	0.50	0.27	0.35	0.28	0.36	0.39	0.45	0.22	0.36	0.19	0.33	0.33	0.26	0.38	0.21
Bismuth	µg/g	0.14	0.12	0.21	0.15	0.13	0.14	0.17	0.23	0.11	0.15	0.11	0.17	0.19	0.20	0.09	0.17	0.12	0.12	0.16	0.15	0.17	0.09
Calcium	µg/g	4200	12000	33000	3000	24000	1100	6700	21000	22000	27000	3300	30000	20000	30000	15000	3600	2900	4200	4200	24000	26000	3700
Cadmium	µg/g	0.03	0.14	0.16	0.16	0.31	0.12	0.03	0.09	0.08	0.08	0.04	0.08	0.08	0.08	0.03	0.04	0.03	0.05	0.06	0.13	0.07	0.10
Cobalt	µg/g	9.1	6.4	9.6	11	8.3	3.4	12	13	9.1	9.2	7.1	11	12	12	6.2	11	8.3	8.8	10	11	12	12
Chromium	µg/g	46	38	54	45	45	19	61	67	44	49	33	64	62	67	35	56	34	43	55	51	61	46
Copper	µg/g	21	15	22	20	21	3.7	26	27	21	16	14	25	25	26	13	20	17	23	24	16	25	22
Iron	µg/g	19000	15000	20000	29000	16000	12000	24000	26000	19000	18000	14000	23000	23000	24000	13000	22000	17000	17000	21000	20000	24000	24000
Potassium	µg/g	990	970	2200	480	1600	480	1800	3000	1400	1600	1300	2300	2300	2600	1200	1300	640	1200	1500	1700	2500	550
Lithium	µg/g	12	13	17	11	14	2	16	24	12	17	9	19	21	22	9	17	8	12	15	14	20	9
Magnesium	µg/g	5900	6200	16000	7100	11000	1900	8800	15000	11000	12000	4400	17000	15000	17000	7700	7300	5300	5300	7000	13000	15000	8100
Manganese	µg/g	340	200	420	260	320	99	460	490	350	380	310	480	490	480	210	410	250	170	400	540	450	370
Molybdenum	µg/g	0.3	0.6	0.3	0.6	0.4	0.5	0.7	0.3	0.4	0.3	0.6	0.4	0.3	0.4	0.6	0.3	0.4	0.5	0.7	0.4	0.4	0.5
Nickel	µg/g	26	20	31	34	24	11	35	37	25	28	20	38	35	39	19	32	25	25	30	27	35	37
Phosphorus	µg/g	400	460	570	270	590	98	400	460	460	460	330	500	470	460	350	350	260	460	430	410	480	300
Lead	µg/g	4.8	4.8	7.4	5.7	4.6	5.4	5.6	8.4	4.0	5.8	4.0	5.8	6.3	7.3	3.3	6.4	4.0	4.1	5.3	6.4	6.1	3.4
Antimony	µg/g	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6
Sulfur	µg/g	55	310	270	200	490	89	48	69	160	130	36	40	72	150	26	83	520	210	48	200	190	160
Selenium	µg/g	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Tin	µg/g	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	0.6	0.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Strontium	µg/g	19	22	41	8.8	38	6.9	26	31	27	31	18	36	28	38	24	21	16	19	21	29	35	9.4
Titanium	µg/g	880	500	760	1400	550	1100	1200	1200	790	790	740	1100	1100	1200	670	1000	940	650	1000	870	1200	1200
Thallium	µg/g	0.07	0.08	0.15	0.03	0.11	0.03	0.13	0.18	0.09	0.12	0.09	0.16	0.15	0.18	0.06	0.12	0.04	0.09	0.12	0.11	0.16	0.03
Uranium	µg/g	0.32	4.6	0.66	0.17	0.90	0.19	0.35	0.51	0.33	0.62	0.38	0.44	0.44	1.0	0.31	0.38	0.24	0.62	0.36	1.0	1.2	0.21
Vanadium	µg/g	36	27	37	69	31	54	48	49	36	33	27	45	44	47	24	43	40	32	40	39	45	57
Yttrium	µg/g	6.4	5.8	7.9	2.8	8.3	1.3	7.9	8.2	6.2	7.1	5.9	8.1	7.8	9.2	5.2	6.7	3.6	7.8	7.9	5.0	8.2	4.1
Zinc	µg/g	28	25	43	45	48	11	41	54	31	34	21	44	44	49	22	35	22	29	35	43	48	33

Report No. CA15546-SEP20
Customer ıico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-P050	UB20-GTTP-P034	UB20-GTTP-P019	UB20-GTTP-P021	UB20-GTTP-P008
Sample Date/Time						24-Sep-20 08:30	24-Sep-20 09:15	24-Sep-20 10:00	24-Sep-20 10:30	24-Sep-20 11:15
Analysis	**Units**									
Paste pH	no unit	06-Oct-20	8:09	07-Oct-20	14:32	8.55	7.71	7.21	7.94	8.13
Fizz Rate	no unit	06-Oct-20	8:40	07-Oct-20	14:32	3	3	3	3	3
Sample weight	g	06-Oct-20	8:40	07-Oct-20	14:32	1.99	1.97	2.05	1.99	2.02
HCl Added	mL	07-Oct-20	6:39	07-Oct-20	14:32	20.00	25.30	20.00	20.00	20.00
HCl	Normality	06-Oct-20	8:40	07-Oct-20	14:32	0.10	0.10	0.10	0.10	0.10
NaOH	Normality	06-Oct-20	8:40	07-Oct-20	14:32	0.10	0.10	0.10	0.10	0.10
NaOH to pH=8.3	mL	07-Oct-20	6:39	07-Oct-20	14:32	12.81	18.28	17.60	16.75	13.12
Final pH	no unit	07-Oct-20	6:39	07-Oct-20	14:32	1.53	1.63	1.55	1.43	1.76
NP	t CaCO3/1000 t	07-Oct-20	6:39	07-Oct-20	14:32	18.1	17.8	5.9	8.2	17.0
AP	t CaCO3/1000 t	09-Oct-20	16:46	09-Oct-20	16:47	1.25	2.50	1.25	2.81	1.25
Net NP	t CaCO3/1000 t	09-Oct-20	16:46	09-Oct-20	16:47	16.8	15.3	4.65	5.39	15.8
NP/AP	ratio	09-Oct-20	16:46	09-Oct-20	16:47	14.5	7.12	4.72	2.92	13.6
Sulphur (total)	%	08-Oct-20	15:16	09-Oct-20	16:46	0.008	0.127	0.019	0.121	0.011
Acid Leachable SO4-S	%	09-Oct-20	15:51	09-Oct-20	16:46	< 0.04	0.05	< 0.04	< 0.04	< 0.04
Sulphide	%	09-Oct-20	15:49	09-Oct-20	16:46	< 0.04	0.08	< 0.04	0.09	< 0.04
Carbon (total)	%	08-Oct-20	15:16	09-Oct-20	11:22	0.203	4.66	1.88	1.56	0.448
Carbonate	%	09-Oct-20	10:44	09-Oct-20	11:22	0.560	0.629	0.135	0.130	0.620
		---	---	---	---	1	1	1	1	1

*NP (Neutralization Potential)

$$= \frac{50 \times (\text{N of HCL} \times \text{Total HCL added} - \text{N NaOH} \times \text{NaOH added})}{\text{Weight of Sample}}$$

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.02 will be calculated using a 0.02 value.

Report No. CA15547-SEP20
Customer ıico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-P050	UB20-GTTP-P034	UB20-GTTP-P019	UB20-GTTP-P021	UB20-GTTP-P008
Sample Date/Time						24-Sep-20 08:30	24-Sep-20 09:15	24-Sep-20 10:00	24-Sep-20 10:30	24-Sep-20 11:15
Analysis	**Units**									
Silver	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 1	< 1	< 1	< 1	< 1
Arsenic	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.91	2.0	1.2	4.1	0.93
Aluminum	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	9900	11000	13000	14000	12000
Barium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	36	66	87	50	51
Beryllium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.16	0.22	0.33	0.24	0.24
Bismuth	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 0.09	< 0.09	< 0.09	< 0.09	< 0.09
Calcium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	8100	11000	5500	5900	9400
Cadmium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.038	0.088	0.081	0.094	0.040
Cobalt	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	8.9	9.1	8.4	21	9.3
Chromium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	36	38	45	24	40
Copper	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	20	35	16	150	24
Iron	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	18000	19000	17000	44000	20000
Potassium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	880	1200	1800	1700	1300
Lithium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	6.6	8.3	13	7.2	7.9
Magnesium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	6800	7400	5900	11000	7300
Manganese	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	270	270	400	700	340
Molybdenum	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	1.0	3.9	0.95	1.9	1.1
Nickel	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	25	25	25	33	23
Phosphorus	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	300	330	390	460	350
Lead	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	2.2	3.2	6.5	15	3.6
Antimony	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 6	< 6	< 6	< 6	< 6
Sulfur	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	24	1000	170	310	140
Selenium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Tin	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 0.5	< 0.5	< 0.5	0.79	< 0.5
Strontium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	20	27	26	25	25
Titanium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	950	870	810	1900	1100
Thallium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.035	0.045	0.095	< 0.02	0.046
Uranium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.26	0.93	0.72	0.32	0.36
Vanadium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	39	39	32	83	43
Yttrium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	4.2	5.5	5.9	7.8	5.3
Zinc	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	22	32	37	76	27

Report No. CA15549-SEP20
Customer Agnico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-078	UB20-GTTP-081	UB20-GTTP-066	UB20-GTTP-083	UB20-GTTP-084	UB20-GTTP-091	UB20-GTTP-090	UB20-GTTP-086	UB20-GTTP-074	UB20-GTTP-P047	UB20-GTTP-P060	UB20-GTTP-P030	UB20-GTTP-P016	UB20-GTTP-P005	UB20-GTTP-P003	UB20-GTTP-P068
Sample Date/Time						21-Sep-20 12:20	21-Sep-20 13:00	21-Sep-20 14:50	21-Sep-20 15:50	21-Sep-20 16:30	22-Sep-20 09:10	22-Sep-20 10:30	22-Sep-20 13:00	23-Sep-20 08:00	23-Sep-20 10:00	23-Sep-20 10:30	23-Sep-20 11:15	23-Sep-20 12:00	23-Sep-20 12:45	23-Sep-20 13:40	24-Sep-20 07:50
Analysis	**Units**																				
Paste pH	no unit	15-Oct-20	7:05	15-Oct-20	9:49	8.17	7.27	8.18	6.30	6.24	5.11	5.75	7.38	7.26	8.03	6.17	7.54	8.07	7.63	7.53	6.95
Fizz Rate	no unit	13-Oct-20	9:15	15-Oct-20	9:49	2	1	2	1	1	1	1	2	3	4	1	2	4	4	4	3
Sample weight	g	13-Oct-20	9:15	15-Oct-20	9:49	2.00	2.02	2.00	2.02	1.99	2.04	2.00	1.98	1.99	1.99	1.99	1.98	2.03	2.02	2.00	2.01
HCl Added	mL	14-Oct-20	7:15	15-Oct-20	9:49	73.30	20.00	65.30	20.00	20.00	20.00	20.00	30.00	43.00	323.80	50.00	20.00	65.00	40.00	40.00	28.00
HCl	Normality	13-Oct-20	9:15	15-Oct-20	9:49	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH	Normality	13-Oct-20	9:15	15-Oct-20	9:49	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
NaOH to pH=8.3	mL	14-Oct-20	7:15	15-Oct-20	9:49	30.31	14.71	33.89	19.22	19.64	20.46	21.08	15.62	19.95	179	56.42	10.78	18.74	16.53	12.57	25.03
Final pH	no unit	14-Oct-20	7:15	15-Oct-20	9:49	1.62	1.87	1.57	1.44	1.30	1.18	1.26	1.81	1.61	1.52	1.87	1.91	1.83	1.72	1.86	1.61
NP	t CaCO3/1000 t	14-Oct-20	7:15	15-Oct-20	9:49	108	13.1	78.5	1.9	0.9	-1.1	-2.7	36.3	57.9	364	-16.1	23.3	114	58.1	68.6	7.4
AP	t CaCO3/1000 t	21-Oct-20	12:32	21-Oct-20	12:32	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.88	1.25	1.25	1.25	1.25	1.25	1.25
Net NP	t CaCO3/1000 t	21-Oct-20	12:32	21-Oct-20	12:32	106	11.8	77.2	0.65	-0.35	-2.35	-3.95	35.0	56.6	362	-17.35	22.0	113	56.8	67.4	6.15
NP/AP	ratio	21-Oct-20	12:32	21-Oct-20	12:32	86.0	10.5	62.8	1.52	0.72	-0.88	-2.16	29.0	46.3	194	-12.88	18.6	91.2	46.5	54.9	5.92
Sulphur (total)	%	19-Oct-20	13:54	21-Oct-20	12:32	0.009	< 0.005	< 0.005	< 0.005	< 0.005	0.005	< 0.005	< 0.005	0.005	0.120	0.059	0.025	< 0.005	< 0.005	0.009	0.007
Acid Leachable SO4-S	%	21-Oct-20	11:35	21-Oct-20	12:32	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	0.06	0.06	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Sulphide	%	21-Oct-20	9:44	21-Oct-20	12:32	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	0.06	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04	< 0.04
Carbon (total)	%	19-Oct-20	13:54	20-Oct-20	13:03	1.48	0.378	1.58	0.409	0.302	1.22	0.857	0.785	2.23	13.9	36.4	1.40	1.51	0.818	1.39	8.43
Carbonate	%	20-Oct-20	12:21	20-Oct-20	13:03	5.66	0.545	5.87	< 0.025	< 0.025	< 0.025	< 0.025	1.84	3.18	26.8	1.20	0.989	6.08	2.98	3.79	0.844

*NP (Neutralization Potential)
= 50 x (N of HCL x Total HCL added - N NaOH x NaOH added)

Weight of Sample

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.04 will be calculated using a 0.04 value.

Report No. CA15550-SEP20
Customer Agnico Eagle Mines Limited
Attention Sarah Morin
Reference P.O# OL-892384
Works#
Title Final Report

Sample ID		Analysis Start Date	Analysis Start Time	Analysis Completed Date	Analysis Completed Time	UB20-GTTP-078	UB20-GTTP-081	UB20-GTTP-066	UB20-GTTP-083	UB20-GTTP-084	UB20-GTTP-091	UB20-GTTP-090	UB20-GTTP-086	UB20-GTTP-074	UB20-GTTP-P047	UB20-GTTP-P060	UB20-GTTP-P030	UB20-GTTP-P016	UB20-GTTP-P005	UB20-GTTP-P003	UB20-GTTP-P068
Sample Date/Time						21-Sep-20 12:20	21-Sep-20 13:00	21-Sep-20 14:50	21-Sep-20 15:50	21-Sep-20 16:30	22-Sep-20 09:10	22-Sep-20 10:30	22-Sep-20 13:00	23-Sep-20 08:00	23-Sep-20 10:00	23-Sep-20 10:30	23-Sep-20 11:15	23-Sep-20 12:00	23-Sep-20 12:45	23-Sep-20 13:40	24-Sep-20 07:50
Analysis	**Units**																				
Silver	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1
Arsenic	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	1.6	1.9	2.0	1.6	1.4	1.7	1.5	1.8	1.6	2.0	1.6	1.5	1.5	1.4	1.2	2.3
Aluminum	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	19000	25000	19000	22000	20000	10000	14000	21000	13000	5200	13000	14000	15000	15000	11000	27000
Barium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	120	150	130	110	91	17	38	120	74	100	27	100	97	93	60	37
Beryllium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.42	0.70	0.48	0.50	0.44	0.064	0.25	0.49	0.30	0.16	0.41	0.40	0.42	0.41	0.24	0.33
Bismuth	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.12	0.18	0.13	0.14	< 0.09	< 0.09	< 0.09	0.13	0.099	< 0.09	< 0.09	< 0.09	0.092	< 0.09	< 0.09	1.8
Calcium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	35000	8200	37000	4800	3900	2400	1900	16000	20000	230000	34000	11000	40000	22000	23000	12000
Cadmium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.062	0.048	0.13	0.057	0.021	0.13	0.024	0.075	0.16	0.12	0.45	0.14	0.085	0.065	0.072	0.19
Cobalt	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	14	16	14	15	11	15	8.4	15	9.4	3.7	4.0	11	11	11	8.1	35
Chromium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	95	85	80	85	70	43	64	80	75	47	22	65	68	64	53	180
Copper	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	38	38	32	31	25	20	17	30	21	34	160	22	27	22	17	590
Iron	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	27000	30000	28000	28000	23000	37000	22000	27000	19000	9900	5500	21000	22000	20000	16000	64000
Potassium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	3000	2600	3400	2100	1300	370	520	2900	1900	1000	150	2400	2500	2100	1500	410
Lithium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	22	23	24	22	15	3.5	8.5	21	14	6.6	< 2	17	18	16	12	16
Magnesium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	19000	11000	19000	9900	7700	5900	4700	13000	12000	10000	860	10000	15000	11000	13000	24000
Manganese	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	550	620	550	560	400	470	230	630	470	530	85	360	430	400	290	620
Molybdenum	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.72	0.30	0.38	0.20	0.32	0.77	0.70	0.19	0.60	5.0	1.3	0.43	0.22	0.30	0.26	1.9
Nickel	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	52	47	44	47	38	21	22	42	30	14	11	33	34	31	25	59
Phosphorus	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	470	250	500	360	330	230	250	380	440	220	720	460	460	380	440	470
Lead	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	7.4	9.5	7.9	7.9	6.1	6.0	4.0	7.9	8.2	3.2	1.7	7.2	6.7	6.3	4.6	7.5
Antimony	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6	< 6
Selenium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7	1.7	< 0.7	< 0.7	< 0.7	< 0.7	< 0.7
Tin	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.62	0.71	0.60	0.63	< 0.5	< 0.5	< 0.5	0.58	< 0.5	< 0.5	< 0.5	< 0.5	0.53	< 0.5	< 0.5	< 0.5
Strontium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	47	34	49	36	28	8.2	13	36	30	450	79	28	84	31	29	18
Titanium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	1400	1600	1500	1500	1200	1800	920	1500	940	310	82	970	1200	1100	830	860
Thallium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.18	0.21	0.18	0.16	0.11	< 0.02	0.026	0.20	0.11	0.048	0.039	0.13	0.15	0.13	0.079	< 0.02
Uranium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	0.53	0.62	0.75	0.49	0.42	0.11	0.28	0.53	0.41	2.3	0.44	0.63	0.50	0.57	0.48	0.17
Vanadium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	53	57	55	54	46	110	41	54	38	16	9.1	39	43	39	32	170
Yttrium	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	8.7	9.8	8.9	7.5	7.2	3.1	5.0	8.0	5.2	3.5	13	7.5	8.4	7.3	5.6	11
Zinc	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	54	49	59	50	35	44	26	50	40	22	6.3	45	45	38	31	46
Sulfur	µg/g	14-Oct-20	20:25	16-Oct-20	13:21	22	49	430	11	< 10	21	17	130	240	4300	5700	580	60	11	170	1300

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Modified Acid Base Accounting
Date : February 14 /2022

Samples screened and -2mm fraction only tested

Sample ID	Paste pH	TIC %	CaCO3 NP	C(T) %	S(T) %	S(SO4) %	S (sulfide) %	AP	Modified NP	Net Modified NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA06V	CSA07C1	Calc.	Calc.	Modified	Calc.	Sobek
LOD	0.20	0.01	#N/A	0.005	0.005	0.01		#N/A		#N/A	#N/A
UB21-INFRA-GTTP-001-OB	7.97	0.90	75.0	0.999	0.006	<0.01	<0.01	<0.3	78.2	78.2	Slight
UB21-INFRA-GTTP-001-TP	4.99	<0.01	<0.8	10.41	0.040	0.03	0.01	0.31	-13.4	-13.7	None
UB21-INFRA-GTTP-002-OB	7.53	0.17	14.2	0.272	<0.005	<0.01	<0.01	<0.3	14.2	14.2	None
UB21-INFRA-GTTP-002-TP	6.26	<0.01	<0.8	0.709	0.009	<0.01	<0.01	<0.3	-1.4	-1.4	None
UB21-INFRA-GTTP-003	7.45	0.44	36.7	1.544	0.010	<0.01	<0.01	<0.3	31.7	31.7	None
UB21-INFRA-GTTP-004	7.97	0.80	66.7	0.939	0.008	<0.01	<0.01	<0.3	66.4	66.4	Slight
UB21-INFRA-GTTP-005	7.25	0.48	40.0	1.160	0.006	<0.01	<0.01	<0.3	37.8	37.8	Slight
UB21-INFRA-GTTP-006	7.36	0.24	20.0	0.405	<0.005	<0.01	<0.01	<0.3	21.0	21.0	None
UB21-OBSF-GTTP-001	7.56	0.15	12.5	0.537	<0.005	<0.01	<0.01	<0.3	11.6	11.6	None
UB21-OBSF-GTTP-002	8.23	1.12	93.3	1.384	<0.005	<0.01	<0.01	<0.3	93.5	93.5	Slight
UB21-OP-GTTP-001-OB	5.84	<0.01	<0.8	0.598	0.005	<0.01	<0.01	<0.3	-0.9	-0.9	None
UB21-OP-GTTP-001-TP	6.08	<0.01	<0.8	5.783	0.032	0.02	0.012	0.38	-2.6	-3.0	None
UB21-OP-GTTP-002-OB	7.97	0.18	15.0	0.364	<0.005	<0.01	<0.01	<0.3	16.7	16.7	None
UB21-OP-GTTP-002-TP	7.02	<0.01	<0.8	1.816	0.009	<0.01	<0.01	<0.3	2.7	2.7	None
UB21-OP-GTTP-003-OB	7.63	0.09	7.5	0.472	0.006	<0.01	<0.01	<0.3	8.5	8.5	None
UB21-OP-GTTP-003-TP	7.20	0.10	8.3	4.486	0.061	0.05	0.011	0.34	8.1	7.74	None
UB21-OP-GTTP-006-OB	6.89	<0.01	<0.8	0.424	0.005	<0.01	<0.01	<0.3	2.4	2.4	None
UB21-OP-GTTP-006-TP	6.68	<0.01	<0.8	1.761	0.016	<0.01	0.016	0.50	1.4	0.9	None
UB21-OP-GTTP-007-OB	8.47	1.83	152.5	1.997	0.018	<0.01	0.018	0.56	150.0	149.4	Slight
UB21-OP-GTTP-007-TP	6.81	0.25	20.8	29.893	0.349	0.1	0.249	7.78	4.0	-3.8	None
UB21-OP-GTTP-008-OB	6.39	<0.01	<0.8	5.183	0.041	0.01	0.031	0.97	-1.9	-2.8	None
UB21-OP-GTTP-008-TP	6.14	<0.01	<0.8	22.928	0.106	0.05	0.056	1.75	-7.7	-9.5	None
UB21-OP-GTTP-010	7.90	0.67	55.8	1.523	0.013	<0.01	0.013	0.41	54.0	53.6	Slight
UB21-OP-GTTP-012-OB	8.46	0.99	82.5	1.164	0.010	<0.01	0.01	0.31	76.7	76.4	Slight
UB21-OP-GTTP-012-TP	6.45	0.03	2.5	27.592	0.181	0.05	0.131	4.09	-9.2	-13.3	None
UB21-TSF-GTTP-001	6.48	<0.01	<0.8	0.383	<0.005	<0.01	<0.01	<0.3	-0.7	-0.7	None
UB21-TSF-GTTP-002	7.85	0.57	47.5	0.825	0.006	<0.01	<0.01	<0.3	48.3	48.3	Slight
UB21-TSF-GTTP-004	6.90	<0.01	<0.8	0.147	<0.005	<0.01	<0.01	<0.3	3.1	3.1	None
UB21-TSF-GTTP-005	6.25	<0.01	<0.8	0.126	<0.005	<0.01	<0.01	<0.3	-0.6	-0.6	None
UB21-TSF-GTTP-006	7.71	<0.01	<0.8	0.027	<0.005	<0.01	<0.01	<0.3	1.5	1.5	None
UB21-TSF-GTTP-007	7.39	<0.01	<0.8	0.161	<0.005	<0.01	<0.01	<0.3	2.5	2.5	None
UB21-TSF-GTTP-008	6.78	<0.01	<0.8	0.170	<0.005	<0.01	<0.01	<0.3	0.4	0.4	None
Duplicates											
UB21-INFRA-GTTP-001-OB	7.95		0.0						74.8		Slight
UB21-OP-GTTP-002-TP	6.81		0.0						4.6		None
UB21-OP-GTTP-003-OB	6.41								-1.5		None
UB21-OP-GTTP-010						<0.01					
UB21-TSF-GTTP-008						<0.01					
UB21-OP-GTTP-003-TP		0.09									
UB21-INFRA-GTTP-006				0.4	<0.005						
UB21-TSF-GTTP-008				0.168	<0.005						
QC											
GS314-2					5.044	2.515					
RTS-3A						0.95					
RTS-3A						0.96					
SY4		0.91									
NBM-1									40.9		Slight
Expected Values		0.91			2.56	0.98	0.699		46.0		Slight
Tolerance +/-		0.07			0.14	0.12	0.059		10.1		
TIC-L1		0.13									
GGC-07					0.558	0.502					
Expected Values		0.13			0.56	0.51					
Tolerance +/-		0.02			0.09	0.09					

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET Modified NP = Modified NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Sulphate Sulphur determined by 25% HCl Leach with S by ICP Finish.

Sulphide Sulphur by calculation

CLIENT :Agnico Eagle
PROJECT :Upper Beaver
SGS Project # :2138
Test : Metals by Aqua Regia Digestion with ICP-OES/MS Finish
Date : February 14 /2022

Samples screened and -2mm fraction only tested

Sample ID	Ag mg/kg	Al %	Ba ppm	Ca %	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Na %	Ni ppm	P %	S %	Sr ppm	Ti %	V ppm	Zn ppm	Zr ppm	As ppm	Be ppm	Bi ppm	Cd ppm	Ce ppm
Method Code	ICM21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.01	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	1	0.1	0.02	0.01	0.05
UB21-INFRA-GTTP-001-OB	<0.01	1.95	104	2.62	67	27.6	2.55	0.25	24	1.56	451	0.08	39	0.05	<0.01	46.8	0.16	55	46	17.5	<1	<0.1	<0.02	<0.01	2.59
UB21-INFRA-GTTP-001-TP	0.44	3.07	115	0.4	71	29.5	2.84	0.24	24	0.69	268	0.03	37	0.08	0.06	25.7	0.13	51	72	1.7	2	0.5	0.26	0.34	34.34
UB21-INFRA-GTTP-002-OB	0.19	1.57	82	0.84	54	19.7	2.02	0.18	17	0.77	378	0.05	32	0.03	<0.01	29.6	0.13	40	34	12.9	<1	0.3	0.1	0.03	46.3
UB21-INFRA-GTTP-002-TP	0.03	0.73	12	0.13	17	3.4	0.88	0.04	5	0.18	75	0.02	11	0.02	<0.01	7.6	0.05	17	9	1.4	<1	0.1	0.03	0.04	9.88
UB21-INFRA-GTTP-003	0.08	1.28	45	1.39	49	21.6	2.04	0.12	13	1.01	291	0.04	35	0.04	<0.01	24.2	0.11	42	33	2.5	1	0.2	0.08	0.06	29.56
UB21-INFRA-GTTP-004	0.04	1.71	83	2.27	59	23.8	2.27	0.23	20	1.41	404	0.07	35	0.05	<0.01	40.2	0.15	48	39	15.3	<1	0.4	0.12	0.08	46.66
UB21-INFRA-GTTP-005	0.04	1.78	89	1.6	59	21.8	2.35	0.23	22	1.17	398	0.06	33	0.04	<0.01	31.6	0.15	50	44	8.7	1	0.4	0.13	0.08	50.65
UB21-INFRA-GTTP-006	0.02	1.65	80	0.96	54	21.8	2.16	0.16	17	0.96	417	0.06	32	0.03	<0.01	28.6	0.14	45	34	10.4	<1	0.3	0.11	0.04	48.59
UB21-OBSF-GTTP-001	0.03	0.83	33	0.63	27	8.3	1.26	0.08	7	0.46	179	0.04	17	0.03	<0.01	17.1	0.08	25	15	5.6	<1	0.2	0.04	0.04	22.33
UB21-OBSF-GTTP-002	0.04	0.83	41	2.84	33	13.3	1.34	0.11	10	1.22	257	0.04	19	0.05	<0.01	29.9	0.09	29	22	9.7	<1	0.2	0.06	0.04	34.99
UB21-OP-GTTP-001-OB	0.03	1.28	57	0.33	40	14.3	1.65	0.12	12	0.48	288	0.04	24	0.04	<0.01	19	0.1	34	25	3.2	<1	0.3	0.07	0.05	36.59
UB21-OP-GTTP-001-TP	0.18	1.26	56	0.54	37	130	1.8	0.08	10	0.46	373	0.02	22	0.04	0.04	21.2	0.09	38	40	1	2	0.2	0.18	0.24	23.51
UB21-OP-GTTP-002-OB	0.05	0.86	39	0.82	30	14.6	1.35	0.07	10	0.54	176	0.04	19	0.03	<0.01	18.1	0.09	30	23	3.8	<1	0.2	0.05	0.03	27.58
UB21-OP-GTTP-002-TP	0.07	1.32	65	0.53	45	30.8	1.91	0.13	15	0.59	348	0.03	26	0.04	0.01	22.7	0.11	40	52	3.8	1	0.3	0.12	0.15	41.42
UB21-OP-GTTP-003-OB	0.06	1.1	30	0.77	35	27.9	1.84	0.04	7	0.67	344	0.04	28	0.03	<0.01	17.4	0.12	43	145	3.5	1	0.1	0.04	0.06	21.76
UB21-OP-GTTP-003-TP	1.4	0.98	1383	0.9	82	424	2.76	0.05	8	0.58	419	0.03	31	0.08	0.08	45.7	0.1	47	8864	1.4	9	0.2	0.77	2.69	16.63
UB21-OP-GTTP-006-OB	0.05	1.33	75	0.47	44	12.4	1.91	0.14	16	0.57	356	0.04	26	0.05	<0.01	23.6	0.11	37	36	4.4	1	0.3	0.09	0.06	45.97
UB21-OP-GTTP-006-TP	0.05	1.03	50	0.45	33	57.4	1.61	0.08	9	0.46	304	0.03	22	0.04	0.02	18.5	0.08	32	30	1.4	1	0.2	0.12	0.17	27.88
UB21-OP-GTTP-007-OB	0.03	0.9	54	4.53	37	23.9	1.45	0.1	10	1.8	310	0.05	24	0.05	0.02	42.3	0.12	39	25	11.7	<1	0.2	0.06	0.07	37.93
UB21-OP-GTTP-007-TP	0.21	1.02	134	3.41	30	456	0.96	0.08	11	0.52	305	0.02	22	0.05	0.52	50.1	0.04	27	38	4.1	2	0.3	0.07	0.34	30.23
UB21-OP-GTTP-008-OB	0.07	1.5	95	0.77	50	51.1	1.87	0.13	18	0.63	265	0.03	30	0.05	0.05	27.3	0.11	43	42	3.9	<1	0.4	0.11	0.1	50.5
UB21-OP-GTTP-008-TP	0.06	1.2	96	1.67	38	70.4	1.39	0.1	13	0.54	230	0.03	24	0.05	0.17	40.2	0.06	32	36	4.5	1	0.3	0.11	0.23	28.94
UB21-OP-GTTP-010	0.03	0.9	47	1.85	35	23.6	1.48	0.1	11	1.01	257	0.04	21	0.04	0.01	28.3	0.09	31	28	5.2	<1	0.2	0.07	0.06	34.43
UB21-OP-GTTP-012-OB	0.7	0.98	40	2.48	38	24.2	1.63	0.1	11	1.33	269	0.05	23	0.04	0.01	35.8	0.11	37	22	9.5	1	0.2	0.08	0.04	31.88
UB21-OP-GTTP-012-TP	0.2	2.19	110	2.57	46	30.4	1.69	0.13	15	0.57	452	0.03	29	0.04	0.24	83.9	0.08	30	35	6	<1	0.5	0.1	0.29	44.62
UB21-TSF-GTTP-001	<0.01	0.92	19	0.59	27	17	2.43	0.04	6	0.64	294	0.04	23	0.1	<0.01	20.6	0.2	60	27	5.3	<1	0.2	0.03	0.03	24.45
UB21-TSF-GTTP-002	0.04	2.17	112	1.88	73	27.3	2.82	0.24	25	1.54	559	0.08	42	0.05	<0.01	44.9	0.18	58	48	16.2	1	0.5	0.15	0.07	55.01
UB21-TSF-GTTP-004	0.02	1.41	60	0.53	45	26.4	2.07	0.1	13	0.68	335	0.06	29	0.04	<0.01	25.1	0.14	46	30	8.5	<1	0.3	0.08	0.03	35.62
UB21-TSF-GTTP-005	0.02	1.73	80	0.45	54	19.7	2.16	0.19	17	0.75	391	0.06	33	0.03	<0.01	29	0.14	45	35	12.3	<1	0.4	0.1	0.05	44.52
UB21-TSF-GTTP-006	<0.01	0.42	14	0.23	13	6.3	0.79	0.04	3	0.21	102	0.04	9	0.02	<0.01	13.3	0.06	18	9	3.8	<1	<0.1	0.02	0.02	14.89
UB21-TSF-GTTP-007	0.02	1.53	26	0.58	49	29.8	2.61	0.06	11	1.02	366	0.05	44	0.04	<0.01	18.1	0.16	58	37	7.5	1	0.2	0.04	0.05	19.11
UB21-TSF-GTTP-008	0.02	0.75	25	0.26	21	6.3	1.2	0.07	6	0.34	176	0.04	16	0.02	<0.01	13.9	0.08	24	14	2.7	<1	0.1	0.03	0.04	17.45
DUP																									
*Rep UB21-OP-GTTP-007-OB	0.03	0.86	52	4.34	36	23.3	1.4	0.09	9	1.73	295	0.04	23	0.05	0.02	40.1	0.11	37	23	11.3	<1	0.2	0.06	0.07	33.42
QC																									
OREAS 260	0.15	1.26	143	0.87	48	46.8	3.61	0.26	20	0.59	422	0.08	80	0.04	0.08	13.9	<0.01	21	119	15.3	12	1.1	0.54	0.2	63.36
Expected Values	0.146	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.593	450	0.082	75	0.04	0.077	14.8	BDL	22.0	125	12.6	12.5	1.24	0.54	0.21	55
Tolerance (%)	30.77	12.80	20.12	14.46	16.31	13.55	11.33	23.08	24.25	14.55	11.76	46.15	14.29	66.67	66.67	20.32	BDL	23.9	12.77	#N/A	35.29	35.07	20.41	27.03	#N/A
OREAS 502c	0.77	1.97	390	1.05	60	7850	4.35	1.05	29	1.2	359	0.2	35	0.1	0.8	65.6	0.34	116	94	9.2	59	0.4	0.66	0.3	58.93
Expected Values	0.796	2.07	383	1.09	66	0.779	4.45	1.07	30.9	1.21	380	0.192	36.4	0.096	0.821	66	0.34	110	102	9.53	59	0.53	0.68	BDL	59
Tolerance (%)	20.14	15.6	17.7	18.4	18.7	6.64	11.39	15.2	14.1	10.2	7.18	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	17.7	38.5	16.5		16.3

CLIENT
PROJECT
SGS Project #
Test
Date

Samples screened and -2mm

Sample ID	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20	IMS21B20
LOD	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
UB21-INFRA-GTTP-001-OB	0.5	0.07	0.3	0.2	<0.05	<0.01	<0.02	1.2	<0.01	<0.05	<0.05	0.2	1.1	<0.05	0.2	<1	<0.3	<0.05	<0.02	<0.05	0.3	<0.02	<0.05	<0.1	0.38	<0.1
UB21-INFRA-GTTP-001-TP	8.1	2.51	13.5	0.1	0.06	0.13	0.04	15.3	0.05	0.72	3.24	18.3	44.5	0.13	3.7	<1	1.1	<0.05	0.2	<0.05	1.1	0.2	0.91	0.5	3.9	0.3
UB21-INFRA-GTTP-002-OB	9.2	1.23	5.9	0.1	0.3	0.01	<0.02	19.5	0.09	0.19	0.79	5.5	18.8	<0.05	4.9	<1	0.5	<0.05	0.3	<0.05	5.5	0.13	0.46	0.1	6.66	0.6
UB21-INFRA-GTTP-002-TP	2.7	0.31	2.4	<0.1	<0.05	<0.01	<0.02	4.1	0.02	0.24	0.86	2.3	4.2	<0.05	1.4	<1	<0.3	<0.05	0.07	<0.05	1.1	0.03	0.19	0.1	1.66	0.1
UB21-INFRA-GTTP-003	8.8	0.84	5.3	0.1	0.07	0.02	<0.02	12.3	0.07	0.35	1.55	5.3	14.9	0.07	3.7	<1	0.5	<0.05	0.21	<0.05	2.5	0.08	0.38	0.3	4.99	0.4
UB21-INFRA-GTTP-004	10.6	1.53	6.7	0.1	0.31	0.01	<0.02	22.5	0.12	0.19	0.77	5.9	28	<0.05	5.7	<1	0.6	<0.05	0.35	<0.05	6.2	0.16	0.85	0.1	8.51	0.7
UB21-INFRA-GTTP-005	10.5	1.74	7.5	0.1	0.17	0.01	<0.02	22.3	0.1	0.29	2.01	7.2	29.3	0.06	5.3	<1	0.7	<0.05	0.31	<0.05	6.1	0.17	0.54	0.2	7.51	0.7
UB21-INFRA-GTTP-006	10.7	1.31	6.3	0.1	0.18	0.01	<0.02	21	0.1	0.18	1.01	5.8	18.7	0.05	5.4	<1	0.6	<0.05	0.32	<0.05	5.6	0.14	0.45	0.1	7.44	0.6
UB21-OBSF-GTTP-001	4.6	0.47	3	0.1	0.1	<0.01	<0.02	9.5	0.05	0.22	1.11	2.9	8	<0.05	2.5	<1	<0.3	<0.05	0.16	<0.05	2.6	0.05	0.27	<0.1	3.69	0.3
UB21-OBSF-GTTP-002	5.9	0.71	3.3	0.1	0.22	<0.01	<0.02	14.4	0.08	0.19	1.07	3.9	11.9	0.05	3.1	<1	0.4	<0.05	0.24	<0.05	3.6	0.08	0.55	<0.1	5.79	0.5
UB21-OP-GTTP-001-OB	7.2	0.95	5	0.1	0.06	0.01	<0.02	15.2	0.07	0.27	1.68	4.5	14.9	<0.05	3.6	<1	0.4	<0.05	0.24	<0.05	3.2	0.1	0.38	<0.1	5.5	0.5
UB21-OP-GTTP-001-TP	7.2	0.93	6	0.1	<0.05	0.11	<0.02	9.6	0.04	1.3	1.56	9.1	13.6	0.27	2.3	<1	0.5	<0.05	0.15	<0.05	0.7	0.07	0.36	0.8	3.17	0.3
UB21-OP-GTTP-002-OB	5.6	0.42	3.2	0.1	0.08	0.01	<0.02	13.5	0.07	0.34	0.75	3	8.2	<0.05	2.9	<1	<0.3	<0.05	0.22	<0.05	2.7	0.05	0.28	<0.1	5.53	0.5
UB21-OP-GTTP-002-TP	8.6	1.1	5.5	0.1	0.08	0.06	<0.02	17.4	0.08	1.59	1.98	15.4	20.3	0.13	3.9	<1	0.9	<0.05	0.26	<0.05	3.6	0.11	0.45	0.2	6.21	0.5
UB21-OP-GTTP-003-OB	9	0.19	3.5	0.1	0.08	0.01	<0.02	7.3	0.06	0.9	0.81	40	2.7	0.15	3.3	<1	1.7	<0.05	0.19	<0.05	1.3	0.03	0.32	0.1	4.8	0.4
UB21-OP-GTTP-003-TP	10.5	0.34	4.3	0.2	<0.05	0.42	0.21	6.1	0.05	15.22	1.03	2846	6.1	12.67	2.9	1	181	<0.05	0.14	<0.05	0.7	0.04	0.34	1.2	3.62	0.3
UB21-OP-GTTP-006-OB	8.4	1.03	5	0.1	0.09	0.01	<0.02	18.9	0.09	0.55	1.62	6.2	19.7	<0.05	4.3	<1	0.5	<0.05	0.29	<0.05	4.3	0.11	0.45	<0.1	6.85	0.6
UB21-OP-GTTP-006-TP	7.3	0.64	3.9	0.1	<0.05	0.14	<0.02	11.6	0.06	1.75	1.3	9.1	10.9	0.33	2.8	<1	0.5	<0.05	0.2	<0.05	1.6	0.07	0.31	0.4	4.89	0.4
UB21-OP-GTTP-007-OB	7.7	0.54	3.6	0.1	0.37	0.02	<0.02	15.9	0.1	0.37	1.15	3.6	8.8	0.13	4.1	<1	0.4	<0.05	0.3	<0.05	3.9	0.08	1.33	0.1	7.01	0.6
UB21-OP-GTTP-007-TP	4.6	0.7	3.4	<0.1	0.13	0.12	<0.02	17.9	0.1	9.98	1.41	3.6	12	0.53	2.4	1	0.3	<0.05	0.27	<0.05	1.1	0.11	4.28	0.9	7.42	0.6
UB21-OP-GTTP-008-OB	8.6	1.2	5.7	0.1	0.12	0.06	<0.02	21.2	0.1	1.79	2.33	6.6	19.1	0.23	4.3	<1	0.5	<0.05	0.29	<0.05	3.1	0.12	0.73	0.2	7.39	0.6
UB21-OP-GTTP-008-TP	6	0.91	4.2	<0.1	0.15	0.12	<0.02	14	0.08	2.12	1.72	5.9	15.5	0.42	3.3	<1	0.4	<0.05	0.21	<0.05	1.8	0.12	0.51	0.3	5.42	0.5
UB21-OP-GTTP-010	6.6	0.73	3.5	0.1	0.12	0.06	<0.02	14.3	0.08	0.55	1.59	6.1	11.4	0.09	3.2	<1	2.3	<0.05	0.24	<0.05	6.4	0.08	0.69	0.1	5.61	0.5
UB21-OP-GTTP-012-OB	7.6	0.59	3.8	0.1	0.2	<0.01	<0.02	13.6	0.08	4.11	0.74	3.8	10.4	0.09	3.7	<1	0.4	<0.05	0.25	<0.05	3.3	0.07	0.35	5.8	6.52	0.6
UB21-OP-GTTP-012-TP	6.8	1.27	6.3	0.1	0.16	0.12	<0.02	23.5	0.13	9.59	2.3	5.7	18.3	0.14	4.8	<1	0.5	<0.05	0.37	<0.05	2.4	0.13	5.93	0.8	10.24	0.9
UB21-TSF-GTTP-001	10.5	0.29	3.9	0.1	0.11	<0.01	<0.02	10.1	0.07	0.26	1.22	2.3	3.2	<0.05	2.9	<1	<0.3	<0.05	0.25	<0.05	1.6	0.03	0.23	<0.1	5.93	0.5
UB21-TSF-GTTP-002	12.7	1.94	8.6	0.2	0.34	0.01	0.02	28.4	0.14	0.13	1.13	7.7	28.3	0.06	7	<1	0.7	<0.05	0.42	<0.05	7.5	0.19	0.56	0.1	9.8	0.9
UB21-TSF-GTTP-004	9.1	0.79	5.3	0.1	0.17	<0.01	<0.02	15.5	0.1	0.2	0.89	4.6	9.7	<0.05	4.9	<1	0.4	<0.05	0.28	<0.05	3.8	0.08	0.35	0.1	6.93	0.6
UB21-TSF-GTTP-005	9.9	1.31	6.4	0.1	0.27	<0.01	<0.02	17.4	0.09	0.16	0.83	5.5	24.4	<0.05	5.1	<1	0.5	<0.05	0.27	<0.05	5	0.14	0.41	<0.1	6.52	0.6
UB21-TSF-GTTP-006	2.7	0.1	1.5	0.1	0.13	<0.01	<0.02	6.5	0.04	0.12	0.32	1.2	1.9	<0.05	1.5	<1	<0.3	<0.05	0.12	<0.05	1.4	<0.02	0.17	<0.1	3.09	0.3
UB21-TSF-GTTP-007	13.1	0.27	5.5	0.1	0.18	<0.01	<0.02	6.6	0.07	0.25	0.52	2.2	4.7	<0.05	4.1	<1	<0.3	<0.05	0.19	<0.05	1.8	0.03	0.19	<0.1	5.11	0.5
UB21-TSF-GTTP-008	4.5	0.28	2.5	<0.1	<0.05	<0.01	<0.02	5.7	0.03	0.18	0.72	1.9	5.4	<0.05	1.9	<1	<0.3	<0.05	0.11	<0.05	1.4	0.03	0.18	<0.1	2.63	0.2
DUP																										
*Rep UB21-OP-GTTP-007-OB	7.5	0.52	3.4	0.1	0.33	0.02	<0.02	14	0.09	0.35	1.07	3.3	8.7	0.13	3.8	<1	0.4	<0.05	0.27	<0.05	3.3	0.06	1.18	0.1	6.79	0.6
QC																										
OREAS 260	31.4	2.71	4.7	0.1	0.4	0.05	0.03	31.2	0.15	0.39	<0.05	30.5	22.6	1.27	3.2	<1	0.5	<0.05	0.53	0.06	11.1	0.21	1.31	<0.1	11.85	1
Expected Values	32.10	3.12	5.05	BDL	0.33	0.047	0.027	28.1	0.140	0.43	BDL	30.7	21.2	1.32	3.39	BDL	0.62	BDL	0.52	0.081	11.30	0.22	1.29	BDL	11.7	0.99
Tolerance (%)	11.39	#N/A	16.04	BDL	#N/A	#N/A	90.91	#N/A	33.33	49.28	BDL	12.35	#N/A	21.85	19.06	BDL	#N/A	BDL	21.28	89.66	13.01	37.84	21.46	BDL	11.76	42.94
OREAS 502c	12.7	9.03	9.4	0.3	0.38	0.03	0.06	29.6	0.23	228	1.44	11.3	125	4.67	7.1	4	2.7	<0.05	0.57	0.51	16.8	0.69	4.47	2.7	15.77	1.4
Expected Values	13.5	9.02	8.67	BDL	0.41	BDL	0.061	29.4	0.22	223	BDL	11.1	124	4.78	7.28	BDL	2.71	0.009	0.58	0.47	17.6	0.67	4.53	2.98	16.1	1.51
Tolerance (%)	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6

SGS proposal: 20619-PR1
SGS project #: 2434

Work order date: 30-Aug-24
Report date: 23-Sep-24
Sample receipt date: 13-Aug-24
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Agnico Eagle

Project reference: Upper Beaver Over

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

rburden

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
ENV-TP-102-ORG	0.080	0.03	0.05	NA	1.6
ENV-TP-102-COM	0.008	<0.01	0.008	NA	0.3
ENV-TP-104-ORG	0.044	0.01	0.034	NA	1.1
ENV-TP-104-COM	0.017	<0.01	0.017	NA	0.5
TP-201-ENV-ORG	0.080	0.03	0.05	NA	1.6
TP-201-ENV-COMP	0.017	<0.01	0.017	NA	0.5
TP-205-ENV-ORG	0.051	0.03	0.021	NA	0.7
TP-205-ENV-COMP	0.007	<0.01	0.007	NA	0.2
TP-401-ENV-ORG	0.062	0.03	0.032	NA	1.0
TP-401-ENV-COMP	0.014	<0.01	0.014	NA	0.4
TP-404-ENV-ORG	0.027	0.01	0.017	NA	0.5
TP-404-ENV-COMP	0.009	<0.01	0.009	NA	0.3
BH-503-ENV-ORG	0.058	0.02	0.038	NA	1.2
Duplicates					
*Rep ENV-TP-102-ORG	0.038				
*Rep ENV-TP-104-COM		<0.01			
QA/QC					
Blank	<0.005				
Certified standards					
GS-314	2.649				
RTS-3a		0.94			

SGS proposal: 20619-PR1 Work order date: 30-Aug-24
SGS project #: 2434 Report date: 23-Sep-24

Version: Final

ABA Report

Test	C(T)	TIC	CaCO3 NP	Modified NP	Net Modified NP	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
Method Code	CSA06V	CSB02V	Calc.	Modified	Calc.	Sobek	Sobek
LOD	0.005	0.01		0.5			0.2
Sample ID							
ENV-TP-102-ORG	9.962	<0.01	<0.8	-1.9	-3.5	None	5.48
ENV-TP-102-COM	0.289	0.13	10.8	6.7	6.4	None	7.67
ENV-TP-104-ORG	3.561	0.01	0.8	-3.0	-4.0	None	4.25
ENV-TP-104-COM	0.133	0.02	1.7	15.6	15.1	None	7.44
TP-201-ENV-ORG	8.608	0.03	2.5	2.9	1.4	None	6.53
TP-201-ENV-COMP	0.125	0.02	1.7	6.3	5.7	None	7.87
TP-205-ENV-ORG	8.749	<0.01	<0.8	-9.9	-10.5	None	3.67
TP-205-ENV-COMP	0.716	0.46	38.3	43.2	43.0	Slight	8.06
TP-401-ENV-ORG	14.831	<0.01	<0.8	-0.2	-1.2	None	5.89
TP-401-ENV-COMP	1.27	<0.01	<0.8	2.8	2.4	None	5.99
TP-404-ENV-ORG	3.328	<0.01	<0.8	-9.2	-9.7	None	4.23
TP-404-ENV-COMP	0.098	<0.01	<0.8	-2.1	-2.4	None	5.68
BH-503-ENV-ORG	14.586	0.03	2.5	-5.6	-6.7	None	4.55
Duplicates							
ENV-TP-102-ORG				-2.0		None	5.52
*Rep TP-401-ENV-ORG		<0.014					
*Rep ENV-TP-102-ORG	3.571						

QA/QC							
Blank	<0.005						
Certified standards							
NBM-1				44.2		Slight	
TIC-L1		0.12					
GS-314	4.965						

SGS proposal: 20619-PR1
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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000	1000
Sample ID																									
ENV-TP-104-ORG	0.66	38	0.28	16	14	0.91	0.05	4	0.20	163	0.02	11	0.04	0.06	15.7	0.07	26	37	0.7	0.16	2	0.2	0.3	0.33	13.54
ENV-TP-104-COM	1.98	102	0.91	69	24	2.48	0.21	21	1.00	486	0.07	37	0.04	<0.01	35.8	0.17	52	44	17.8	0.03	2	0.6	0.1	0.06	47.24
ENV-TP-102-ORG	1.74	50	0.56	38	35	2.89	0.06	10	0.88	396	0.03	29	0.04	0.05	18.4	0.16	77	42	1.5	0.07	1	0.4	0.1	0.11	17.14
ENV-TP-102-COM	1.68	75	0.82	45	44	2.92	0.06	9	1.04	491	0.06	33	0.04	0.02	21.3	0.21	79	40	9.9	0.02	1	0.3	0.0	0.06	15.84
TP-201-ENV-ORG	1.97	112	1.06	54	31	2.73	0.09	13	0.80	1699	0.04	32	0.06	0.08	27	0.16	68	54	1.5	0.27	2	0.4	0.1	0.22	27.85
TP-201-ENV-COMP	1.72	63	0.74	61	30	2.52	0.13	14	0.99	476	0.05	38	0.04	<0.01	23.4	0.17	59	38	11.1	0.03	1	0.3	0.1	0.04	25.13
TP-205-ENV-ORG	0.59	25	0.12	16	11	0.74	0.05	2	0.11	90	0.02	7	0.05	0.04	10.5	0.04	18	15	<0.5	0.14	2	0.1	0.2	0.33	12.82
TP-205-ENV-COMP	0.89	41	1.34	32	11	1.28	0.08	8	0.71	267	0.04	18	0.04	<0.01	22.3	0.09	27	19	5.3	0.02	<1	0.2	0.1	0.04	27.9
TP-404-ENV-ORG	0.63	43	0.23	16	13	1.33	0.03	4	0.15	232	0.02	11	0.03	0.06	15.7	0.06	27	27	1.4	0.14	3	0.1	0.4	0.36	9.49
TP-404-ENV-COMP	1.94	43	0.37	47	15	2.16	0.06	13	0.64	270	0.04	29	0.02	0.01	18.6	0.13	42	29	4.1	0.02	2	0.3	0.1	0.05	24.27
TP-401-ENV-ORG	1.75	62	0.48	50	16	2.93	0.06	12	0.84	799	0.03	32	0.06	0.03	21.8	0.17	72	51	2.2	0.10	2	0.3	0.1	0.2	16.84
TP-401-ENV-COMP	1.28	38	0.4	41	22	2.09	0.05	9	0.74	363	0.03	27	0.03	<0.01	16	0.14	51	29	7.0	0.01	1	0.2	0.0	0.03	19.89
BH-503-ENV-ORG	1.11	36	0.29	5	14	2.47	0.07	9	0.30	438	0.03	7	0.08	0.05	9.6	<0.01	20	61	0.8	0.06	2	0.1	0.4	0.47	17.89
Duplicates																									
*Rep TP-205-ENV-COMP	0.90	41	1.35	33	11	1.29	0.08	8	0.72	273	0.04	19	0.04	<0.01	22.7	0.09	28	19	5.8	0.02	<1	0.2	0.1	0.03	28.37
QA/QC																									
*Blk BLANK	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05
Certified standards																									
*Std OREAS 261	1.31	159	1.11	55	61	3.48	0.28	20	0.64	444	0.08	73	0.04	0.11	16.2	<0.01	21	122	16.2	0.20	18	1.3	0.6	0.28	57.2
*Std OREAS 609b	0.64	254	0.71	17	4618	2.19	0.26	7	0.06	195	0.06	7	0.02	1.81	34.6	<0.01	5	1192	36.9	22.06	1475	0.6	109.0	8.18	35.59

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Test	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																										
ENV-TP-104-ORG	3.6	0.60	4.1	<0.1	<0.05	0.2	0.03	7.4	0.02	0.42	1.50	19.1	7.7	0.2	1.5	<1	0.8	<0.05	0.1	<0.05	0.8	0.06	0.33	0.1	2.12	0.2
ENV-TP-104-COM	11.4	1.82	7.4	<0.1	0.42	0.1	0.02	26.5	0.12	0.10	0.98	7.4	22	0.1	7.1	<1	0.7	<0.05	0.4	<0.05	7.2	0.18	0.47	0.2	9.01	0.9
ENV-TP-102-ORG	14.8	0.39	6.1	<0.1	0.07	0.1	0.02	8.8	0.07	0.51	1.23	4.5	4.6	0.1	5.3	<1	0.3	<0.05	0.2	<0.05	0.7	0.03	0.43	<0.1	5.00	0.5
ENV-TP-102-COM	14.2	0.25	5.8	<0.1	0.28	0.0	<0.02	8	0.1	0.44	0.57	3.6	3	0.1	5.7	<1	0.3	<0.05	0.3	<0.05	1.6	0.03	0.21	<0.1	6.75	0.7
TP-201-ENV-ORG	14.7	0.76	5.9	<0.1	0.05	0.1	<0.02	15.4	0.1	1.84	1.70	6.1	9.3	0.1	5	<1	0.5	<0.05	0.3	<0.05	1.1	0.08	0.52	1.6	7.52	0.7
TP-201-ENV-COMP	12.2	0.94	5.9	<0.1	0.33	0.1	<0.02	13	0.09	0.26	0.88	4.2	13.1	0.1	6	<1	0.4	<0.05	0.3	<0.05	3.6	0.08	0.30	0.1	6.72	0.6
TP-205-ENV-ORG	1.7	0.72	4.1	<0.1	<0.05	0.1	<0.02	7.5	0.02	0.50	0.85	14.6	7	0.1	0.4	<1	0.7	<0.05	0.1	<0.05	<0.1	0.04	0.34	0.1	1.66	0.1
TP-205-ENV-COMP	5.6	0.65	3.3	<0.1	0.08	0.0	<0.02	14.3	0.08	0.22	1.27	4	8.2	<0.05	3.2	<1	0.4	<0.05	0.2	<0.05	3.5	0.06	0.35	0.1	5.91	0.5
TP-404-ENV-ORG	3.5	0.48	4.1	<0.1	<0.05	0.1	0.04	4.9	0.02	0.55	1.24	25.8	4.5	0.3	1.4	<1	0.9	<0.05	0.1	0.07	1.1	0.05	0.19	0.1	1.33	0.1
TP-404-ENV-COMP	9.2	0.81	5.8	<0.1	0.10	0.1	<0.02	9.8	0.06	0.31	1.90	5	7	<0.05	4.3	<1	0.5	<0.05	0.2	<0.05	2.7	0.07	0.35	0.1	4.61	0.4
TP-401-ENV-ORG	13.8	0.75	6.9	<0.1	0.06	0.0	<0.02	8.2	0.05	0.45	1.74	9.3	11.1	0.1	4.7	<1	0.6	<0.05	0.2	<0.05	1.4	0.05	0.26	<0.1	4.44	0.4
TP-401-ENV-COMP	10	0.53	4.4	<0.1	0.16	<0.01	<0.02	10.8	0.07	0.23	0.66	3.2	5	<0.05	4.7	<1	<0.3	<0.05	0.2	<0.05	2.4	0.05	0.23	<0.1	5.66	0.5
BH-503-ENV-ORG	5.5	0.40	5.6	<0.1	<0.05	0.1	0.05	9.4	0.01	0.61	0.14	30.8	6.1	0.3	1.7	<1	1	<0.05	0.1	<0.05	0.5	0.03	0.08	<0.1	1.19	<0.1
Duplicates																										
*Rep TP-205-ENV-COMP	5.7	0.63	3.4	<0.1	0.11	0.0	<0.02	14.8	0.08	0.22	1.28	4	8.1	<0.05	3.3	<1	0.4	<0.05	0.3	<0.05	3.6	0.07	0.37	0.1	6.05	0.5
QA/QC																										
*Blk BLANK	<0.1	<0.05	<0.1	<0.1	<0.05	0.0	<0.02	<0.1	<0.01	<0.05	<0.05	0.4	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																										
*Std OREAS 261	31.5	3.20	4.5	<0.1	0.44	0.1	0.03	33.2	0.15	1	0.05	35.2	20	2.5	3.4	<1	0.6	<0.05	0.5	0.11	10.9	0.28	1.29	0.2	11.75	1
*Std OREAS 609b	4.9	1.38	5.1	0.2	1.16	0.5	2.12	19.9	0.03	5.35	0.71	401	14.6	128.0	1.1	14	9.7	<0.05	0.3	22.53	6.5	0.98	2.08	2.1	5.30	0.2

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ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(SO4)	S(S-2)	C(T)	TIC	CO2	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	CSA07D	Calc.	CSA06V	CSB02V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	1.01	0.01	0.005	0.01	0.005	0.5				0.2
GGC-07	Expected value	0.51				0.56							
	Tolerance (+/-)	0.09				0.09							
HCC-1	Expected value	33.92											
	Tolerance (+/-)	5.04											
RTS-3a	Expected value		0.98	1.34									
	Tolerance (+/-)		0.12	0.35									
OREAS 278	Expected value				0.699								
	Tolerance (+/-)				0.06								
NBM-1	Expected value								41.92	53.21	57.6	Slight	
	Tolerance (+/-)								3.04	3.3	1.3		
TIC-L1	Expected value						0.13	0.477					
	Tolerance (+/-)						0.02	0.78					
GS314-2	Expected value	2.56				5.15							
	Tolerance (+/-)	0.14				0.27							
GS915-8	Expected value	0.13				0.07							
	Tolerance (+/-)	0.02				0.02							
OREAS 550	Expected value	0.220				4.110							
	Tolerance (+/-)	0.004				0.22							
SX35-13	Expected value						11.954						
	Tolerance (+/-)												
SY4	Expected value						0.95						
	Tolerance (+/-)						0.06						

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68	BDL
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5	
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4	BDL
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1	
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54	0.21
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7	24.3
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68	0.06
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8	39.3
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3	
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7	0.34
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4	25.59
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59	0.27
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5	19.3
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57	0.27
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8	19.3
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33	0.033
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18	86
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40	0.58
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16	14
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109	7.93
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02	10.32
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4	3.16
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19	10.79
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220	12.3
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01	10.20
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7	
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57	
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3	2.7
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12	10.93
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5	125
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24	10.02
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18	2.04
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28	11.23
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9	52
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30	10.05
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90	30.4
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03	10.08
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5	
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59	

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SGS

Metals - Aqu

CRM	Test	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	1000	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)		12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	14.3	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value		31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)		10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value		31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)		10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3
OREAS 235	Expected value	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6	1.55	0.45	9.47	0.85
	Tolerance (%)	10	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18	18	38	11	39
OREAS 151b	Expected value	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12	0.60		10.40	0.93
	Tolerance (%)	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7	30.8		11.2	36.9
OREAS 609b	Expected value	34	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009	2.04	1.81	5.22	0.21
	Tolerance (%)	10.15	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	41.6	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41	2.23	0.58	5.77	0.21
	Tolerance (%)	10.12	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20	15.61	31.55	12.17	129.05
OREAS 610	Expected value	13.7	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49	1.12	3.58	3.09	
	Tolerance (%)	10.36	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36	21.16	13.49	14.05	
OREAS 501c	Expected value	64	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3		4.87	2.96		
	Tolerance (%)	10.08	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65		12.57	14.22		
OREAS 601c	Expected value	34.7	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20	2.04	1.16	5.1	0.23
	Tolerance (%)	10.14	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17	16.13	20.78	12.45	118.70
OREAS 624	Expected value	24	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9		0.74	2.73	6.59	0.84
	Tolerance (%)	10.52	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62		26.89	19.16	11.90	39.76
OREAS 601b	Expected value	38.5	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08	2.22	1.86	5.34	0.2
	Tolerance (%)	10.32	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63	15.63	23.44	33.41	135.00
OREAS 623	Expected value	36.4	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26	1.43	2.62	7.43	
	Tolerance (%)	10.34	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23	18.74	19.54	11.68	
OREAS 603c	Expected value	30.7	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68	2.19	2.99	5.55	0.22
	Tolerance (%)	10.16	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36	15.71	14.18	12.25	123.64
OREAS 523	Expected value		698.000							233		293		27.4			6.41		9.88							160	14.8	
	Tolerance (%)		10.36							10.54		10.85		28.25			29.50		263.04							25.62	18.45	

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1
SGS project #: 2138

Work order date: 17-May-23
Report date: 19-Jun-23
Sample receipt date: 2022
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax for Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 20

Report Distribution

Name	Email
Timo Kirchner	timo.kirchner@lorax.ca
Sarah Morin	sarah.morin@agnicoeagle.com

Special notes:

Note: one sample had limited mass available and adsorbed water significantly.
The SFE water to solids ratio had to be increased to allow mixing and to
obtain sufficient leachate for analysis.
Details are provided in the SFE results tab.

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

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Shake Flask Extraction Report

Leachate Analysis

Sample ID			UB21-OP-GTTP-001-OB	UB21-OP-GTTP-001-TP	UB21-OP-GTTP-002-OB	UB21-OP-GTTP-002-TP	UB21-OP-GTTP-007-OB	UB21-OP-GTTP-007-TP	UB21-OP-GTTP-012-OB	UB21-OP-GTTP-012-TP	Blank
Parameter	**Method**	**Units**									
Volume Nanopure Water		mL	750	750	750	750	750	585	750	750	750
Sample Weight		g	250	250	250	250	250	117	250	250	-
pH	meter		6.02	6.76	7.99	7.96	8.13	8.19	8.18	7.78	5.63
Redox	meter	mV	411	355	299	298	298	260	278	311	-
Conductivity	meter	uS/cm	46	154	131	128	186	856	161	298	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	5.2	12.5	0.9	1.4	0.9	2.1	0.9	2.8	-
Alkalinity	titration	mg CaCO3/L	3.6	35.2	59.0	43.5	52.8	129.1	65.1	47.4	-
Bromide			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	
Chloride		mg/L	3	11	< 1	9	< 1	3	< 1	9	-
Fluoride		mg/L	< 0.06	< 0.06	0.36	0.2	0.22	0.16	0.25	0.08	-
Nitrite (as N)		as N mg/L	< 0.03	< 0.03	< 0.03	0.04	< 0.03	0.34	< 0.03	< 0.03	
Nitrate (as N)		as N mg/L	0.37	< 0.06	< 0.06	0.16	0.07	3.26	0.08	< 0.06	
Dissolved Organic Carbon		mg/L	23	135	5	28	6	66	6	95	
Ammonia+Ammonium (N)		as N mg/L	< 0.1	3.2	< 0.1	0.4	< 0.1	0.8	< 0.1	0.8	
Sulphate	IC	mg/L	3.1	5.5	2.6	3.5	31.5	287.1	13.3	68.1	-
Ion Balance											
Major Anions	Calc	meq/L	0.25	1.13	1.25	1.22	1.73	8.91	1.60	2.62	
Major Cations	Calc	meq/L	0.55	2.60	1.35	1.42	1.89	9.84	1.71	3.54	
Difference	Calc	meq/L	-0.30	-1.47	-0.10	-0.19	-0.16	-0.92	-0.11	-0.92	
Balance (%)	Calc	%	-37.6%	-39.5%	-3.9%	-7.4%	-4.4%	-4.9%	-3.3%	-14.9%	
Dissolved Metals											
Hardness (dissolved)		mg/L	16.4	86.2	62.1	61.3	86	474	62.1	142.0	-
Aluminum (dissolved)	ICP-MS	mg/L	0.57	2.47	0.033	0.183	0.045	0.068	0.103	0.387	-
Antimony (dissolved)	ICP-MS	mg/L	< 0.0009	0.0011	< 0.0009	< 0.0009	0.0027	0.0022	< 0.0009	< 0.0009	-
Arsenic (dissolved)	ICP-MS	mg/L	0.0014	0.0034	0.0111	0.0019	0.0093	0.006	0.003	0.0012	-
Barium (dissolved)	ICP-MS	mg/L	0.00687	0.041	0.00782	0.00709	0.0498	0.1	0.00899	0.02240	-
Beryllium (dissolved)	ICP-MS	mg/L	0.000052	0.00006	< 0.000007	0.000017	< 0.000007	< 0.000007	< 0.000007	0.000029	-
Bismuth (dissolved)	ICP-MS	mg/L	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron (dissolved)	ICP-MS	mg/L	0.037	0.045	0.010	0.043	0.015	0.063	0.039	0.099	-
Cadmium (dissolved)	ICP-MS	mg/L	0.000047	0.000631	0.000018	0.000236	0.000055	0.000544	0.00025	0.000424	-
Calcium (dissolved)	ICP-MS	mg/L	4.88	28.8	18.6	17.8	25.5	141	18.2	41.1	-
Chromium (dissolved)	ICP-MS	mg/L	0.00322	0.00846	0.00019	0.00168	0.0004	0.00047	0.00043	0.00181	-
Cobalt (dissolved)	ICP-MS	mg/L	0.00031	0.00366	0.000181	0.000434	0.000141	0.00041	0.000267	0.000493	-
Copper (dissolved)	ICP-MS	mg/L	0.0164	0.113	0.0070	0.0202	0.0127	0.0322	0.0058	0.0077	-
Iron (dissolved)	ICP-MS	mg/L	0.29	1.32	0.018	0.154	0.03	0.064	0.058	0.514	-
Lead (dissolved)	ICP-MS	mg/L	0.00057	0.00613	0.00019	0.00044	0.0007	0.0025	0.00016	0.00159	-
Lithium (dissolved)	ICP-MS	mg/L	0.0013	0.0012	0.0011	0.0004	0.0043	0.0029	0.0018	0.0005	-
Magnesium (dissolved)	ICP-MS	mg/L	1.03	3.46	3.82	4.09	5.45	29.6	4.03	9.47	-
Manganese (dissolved)	ICP-MS	mg/L	0.0307	0.676	0.00925	0.051	0.102	0.262	0.041	0.08340	-
Mercury (dissolved)	ICP-MS	mg/L	< 0.00001	0.00006	< 0.00001	0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Molybdenum (dissolved)	ICP-MS	mg/L	0.00076	0.0033	0.00825	0.012	0.0284	0.392	0.806	0.05510	-
Nickel (dissolved)	ICP-MS	mg/L	0.0017	0.0072	0.0005	0.002	0.001	0.0017	0.0005	0.0021	-
Phosphorus (dissolved)	ICP-MS	mg/L	0.019	0.385	0.043	0.052	0.023	0.159	0.037	0.14	-
Potassium (dissolved)	ICP-MS	mg/L	0.504	7.03	0.535	0.92	1.96	1	1.95	4.060	-
Selenium (dissolved)	ICP-MS	mg/L	0.00034	0.0018	0.00033	0.00058	0.0246	0.00503	0.00043	0.00055	-
Silicon (dissolved)	ICP-MS	mg/L	6.07	3.49	4.27	3.77	3.01	1.91	4.47	4.09	-
Silver (dissolved)	ICP-MS	mg/L	< 0.00005	0.00015	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium (dissolved)	ICP-MS	mg/L	2.67	2.43	2.01	2.22	2.2	5.21	8.52	10.40	-
Strontium (dissolved)	ICP-MS	mg/L	0.0238	0.0709	0.0325	0.0402	0.0531	0.248	0.0795	0.1140	-
Sulfur (dissolved)	ICP-MS	mg/L	1	4	< 1	2	11	93	5	26	-
Thallium (dissolved)	ICP-MS	mg/L	0.000022	0.000084	0.000008	0.000016	0.000041	0.000051	< 0.000005	0.000044	-
Tin (dissolved)	ICP-MS	mg/L	0.00025	0.0024	0.00022	0.00017	< 0.00006	0.00051	0.00009	0.00084	-
Titanium (dissolved)	ICP-MS	mg/L	0.0144	0.0506	0.00111	0.00888	0.0022	0.0019	0.00349	0.0171	-
Uranium (dissolved)	ICP-MS	mg/L	0.00015	0.000303	0.000285	0.000107	0.0117	0.0013	0.000465	0.000469	-
Vanadium (dissolved)	ICP-MS	mg/L	0.0138	0.00453	0.00287	0.00156	0.0407	0.00515	0.0155	0.00621	-
Zinc (dissolved)	ICP-MS	mg/L	0.005	0.017	< 0.002	< 0.002	< 0.002	0.005	0.004	0.002	-
Zirconium (dissolved)	ICP-MS	mg/L	0.004	0.004	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

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Appendix E: Humidity Cell Test Data

AGNICO EAGLE

Cell No.	Sample ID	Sample Type	Method Reference	Column Dimensions			Column Packing			Total Volume of Initial Flushings	Flushing Rate/Weekly Input*	Temp	Sampling Frequency	Start-up Date	Sampling Day	Operation Procedure	Sample Prep for Flushings
				Inner Diameter (cm)	Length (cm)	Distance from top to Sample (cm)	Dry Wt. of Sample (kg)	Other Materials Used	Column Material	(mL)	(mL)	(°C)		2018/2019/2022/2023/2025			
Column 1	**Detoxified Tail Slurry**	Tailings	MEND	17.00	30.00	-	4.60	Plexiglas perforated disk & nylon mesh	Plexiglas	-	750	20-22	Weekly	1-Apr-22	Thursday	Trickle leach	
HC 1	**R353465 + 176396**	Waste Rock	MEND	10.20	25.50		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	19-Nov-18	Monday	Flood leach	
HC 1 Duplicate	**HC 1 Duplicate**	Waste Rock	MEND	10.20	25.50		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	19-Nov-18	Monday	Flood leach	
HC 2	**R353389**	Waste Rock	MEND	10.20	25.50		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	11/19/2018 Restarted 15 May-23	Monday	Flood leach	
HC 3	**Q303652 + 271241**	Waste Rock	MEND	10.20	25.50		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	19-Nov-18	Monday	Flood leach	
HC 4	**223687**	Waste Rock	MEND	10.20	25.50		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	19-Nov-18	Monday	Flood leach	
HC 5	**Blank**		MEND	10.20	25.50			Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	19-Nov-18	Monday	Flood leach	
HC 7	**Basalt (Open Pit) Composite**	Waste-rock	MEND	10.00	21.00	9.50	1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	22-Sep-22	Thursday	Flood leach	
HC 8	**Crowded Porphyry (Composite)**	Waste-rock	MEND	10.00	21.00	9.50	1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	22-Sep-22	Thursday	Flood leach	
HC 9	**Mafic intrusive rock (Composite)**	Waste-rock	MEND	10.00	21.00	9.00	1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	22-Sep-22	Thursday	Flood leach	
HC 10	**Mixed PAG (Composite NP removed)**	Waste-rock	MEND	10.00	21.00	9.00	1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-22	Weekly	22-Sep-22	Thursday	Flood leach	
HC 11	**HC 11**	Waste-rock	MEND	10.00	21.00	8.80	1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	500	500	20-23	Weekly	14-Aug-25	Friday	Flood leach	
T1	**Composite Tailing**	Tailing	MEND	20.00	10.00		1.00	Plexiglas perforated disk & nylon mesh	Plexiglas	750	500	20-22	Weekly	2-Sep-19	Monday	Flood leach	

HC 1

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Alkalinity**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**							**CaCO3**															
					umhos/cm	mgCaCO3/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
19-Nov-18	0	500	400	7.66	599	12.6	207	4	0.13	250	0.074	0.0057	0.0044	0.0263	*<0.0000035*	*<0.0000035*	0.053	0.00254	92.0	*<0.000015*	0.000170	0.00201	*<0.0035*	*<0.000005*	0.0020
26-Nov-18	1	500	445	7.32	729	12.2	313	2	0.13	372	0.061	0.0091	0.0070	0.0190	*<0.0000035*	*<0.0000035*	0.052	0.000028	134	*<0.000015*	0.000371	0.00167	*<0.0035*	0.00003	0.0018
03-Dec-18	2	500	420	7.30	593	9.8	261	*<0.5*	0.09	309	0.057	0.0079	0.0059	0.0134	*<0.0000035*	*<0.0000035*	0.028	0.000013	114	*<0.000015*	0.000267	0.00220	0.007	*<0.000005*	0.0010
10-Dec-18	3	500	430	7.24	547	9.8	243	*<0.5*	0.08	274	0.051	0.0071	0.0050	0.0105	*<0.0000035*	*<0.0000035*	0.026	0.000011	102	*<0.000015*	0.000288	0.00148	*<0.0035*	*<0.000005*	0.0012
17-Dec-18	4	500	440	7.61	493		189																		
24-Dec-18	5	500	445	6.94	465	10.4	185	*<0.5*	*<0.03*	225	0.050	0.0061	0.0041	0.00838	*<0.0000035*	*<0.0000035*	0.014	0.000007	84.9	*<0.000015*	0.000180	0.00086	*<0.0035*	*<0.000005*	0.0008
31-Dec-18	6	500	450	7.31	564		244																		
07-Jan-19	7	500	455	7.52	446	10.4	200	*<0.5*	*<0.03*	250	0.056	0.0063	0.0040	0.00894	*<0.0000035*	*<0.0000035*	0.013	*<0.0000015*	94.6	0.00007	0.000289	0.00170	*<0.0035*	0.00001	0.0006
14-Jan-19	8	500	435	7.31	429		191																		
21-Jan-19	9	500	440	7.31	409	9.4	185	*<0.5*	*<0.03*	223	0.066	0.0040	0.0037	0.00738	*<0.0000035*	*<0.0000035*	0.010	0.000012	83.8	*<0.000015*	0.000216	0.00085	*<0.0035*	*<0.000005*	0.0011
28-Jan-19	10	500	435	7.53	375		150																		
04-Feb-19	11	500	440	7.59	402	9.5	165	*<0.5*	*<0.03*	180	0.054	0.0036	0.0030	0.00633	*<0.0000035*	*<0.0000035*	0.007	0.000008	67.2	*<0.000015*	0.000177	0.00173	*<0.0035*	*<0.000005*	0.0029
11-Feb-19	12	500	435	7.31	336		132																		
18-Feb-19	13	500	435	7.16	358	9.2	154	*<0.5*	*<0.03*	185	0.058	0.0033	0.0028	0.00656	*<0.0000035*	*<0.0000035*	0.010	0.000058	69.4	*<0.000015*	0.000146	0.00074	*<0.0035*	*<0.000005*	0.0005
25-Feb-19	14	500	435	7.59	344		148																		
04-Mar-19	15	500	420	7.17	360	12.2	159	*<0.5*	*<0.03*	174	0.076	0.0031	0.0027	0.00911	*<0.0000035*	*<0.0000035*	0.005	0.000006	65.1	*<0.00004*	0.000137	0.0020	*<0.0035*	*<0.000005*	0.0006
11-Mar-19	16	500	445	6.91	313		121																		
18-Mar-19	17	500	430	7.46	285	10.1	108	*<0.5*	*<0.03*	138	0.058	0.0026	0.0023	0.00578	*<0.0000035*	*<0.0000035*	0.005	0.000003	50.7	*<0.00004*	0.000114	0.0008	*<0.0035*	*<0.000005*	0.0003
25-Mar-19	18	500	430	7.14	303		115																		
01-Apr-19	19	500	440	7.45	302	11.1	123	*<0.5*	*<0.03*	144	0.055	0.0027	0.0021	0.00619	*<0.0000035*	*<0.0000035*	0.005	0.000007	52.1	*<0.00004*	0.000144	0.0006	*<0.0035*	*<0.000005*	0.0004
08-Apr-19	20	500	435	7.60	288		120																		
15-Apr-19	21	500	435	7.54	279	11.0	118	*<0.5*	*<0.03*	130	0.056	0.0024	0.0020	0.00649	*<0.0000035*	*<0.0000035*	0.004	0.000007	47.3	*<0.00004*	0.000134	0.0007	*<0.0035*	*<0.000005*	0.0003
22-Apr-19	22	500	515	7.73	236		95																		
29-Apr-19	23	500	445	7.51	275	10.9	114	*<0.5*	*<0.03*	143	0.059	0.0029	0.0020	0.00644	*<0.0000035*	*<0.0000035*	0.004	0.000009	50.9	*<0.00004*	0.000143	0.0008	*<0.0035*	*<0.000005*	0.0003
06-May-19	24	500	440	7.30	287		121																		
13-May-19	25	500	440	7.32	273	10.9	109	*<0.5*	*<0.03*	134	0.050	0.0022	0.0016	0.00605	*<0.0000035*	*<0.0000035*	0.004	0.000004	48.0	*<0.00004*	0.000124	0.0007	*<0.0035*	*<0.000005*	0.0003
20-May-19	26	500	430	7.38	255		108																		
27-May-19	27	500	445	7.48	237	11.5	100	*<0.5*	*<0.03*	114	0.062	0.0019	0.0016	0.00629	*<0.0000035*	*<0.0000035*	0.004	0.000007	40.3	*<0.00004*	0.000145	0.0112	*<0.0035*	*<0.000005*	0.0003
03-Jun-19	28	500	440	7.40	251		106																		
10-Jun-19	29	500	430	7.42	274	10.5	118	*<0.5*	*<0.03*	129	0.049	0.0016	0.0017	0.00768	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	45.4	*<0.00004*	0.000113	0.0005	*<0.0035*	*<0.000005*	0.0002
17-Jun-19	30	500	435	7.35	242		99																		
24-Jun-19	31	500	440	7.47	232	9.8	100	*<0.5*	*<0.03*	125	0.050	0.0016	0.0013	0.00592	*<0.0000035*	*<0.0000035*	0.003	0.000003	44.7	*<0.00004*	0.000112	0.0007	*<0.0035*	*<0.000005*	0.0002
01-Jul-19	32	500	430	7.52	227		103																		
08-Jul-19	33	500	460	7.42	242	13.1	90	*<0.5*	*<0.03*	121	0.042	0.0016	0.0011	0.00587	*<0.0000035*	*<0.0000035*	0.003	0.000004	42.1	*<0.00004*	0.000127	0.0004	*<0.0035*	*<0.000005*	*<0.00005*
15-Jul-19	34	500	445	7.35	205		80																		
22-Jul-19	35	500	440	7.72	201	11.0	78	*<0.5*	*<0.03*	93.0	0.044	0.0015	0.0011	0.00576	*<0.0000035*	*<0.0000035*	0.007	0.000007	31.3	*<0.00004*	0.000085	0.0004	*<0.0035*	0.00002	0.0001
29-Jul-19	36	500	420	7.49	208		73																		
05-Aug-19	37	500	425	7.81	198	11.2	78	*<0.5*	*<0.03*	93.1	0.048	0.0014	0.0012	0.00626	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	31.2	*<0.00004*	0.000074	0.0007	*<0.0035*	0.00001	0.0002
12-Aug-19	38	500	450	7.93	182	11.5	60	*<0.5*	*<0.03*	74.9	0.036	0.0012	0.0011	0.00618	*<0.0000035*	*<0.0000035*	*<0.001*	0.000003	25.6	*<0.00004*	0.000090	0.0005	*<0.0035*	*<0.000005*	0.0002
19-Aug-19	39	500	440	7.51	168	10.9	59	*<0.5*	*<0.03*	78.3	0.040	0.0011	0.0011	0.00571	*<0.0000035*	*<0.0000035*	0.003	0.000005	26.2	0.00037	0.000065	0.0008	0.007	0.00002	0.0001

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 1

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
19-Nov-18	0	500	400	7.66	4.98	0.0171	*<0.005*	0.0392	0.0010	*<0.0015*	11.0	0.00020	1.01	*<0.000025*	6.50	1.56	89.4	0.000014	0.00012	0.00071	0.000327	0.00072	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	445	7.32	9.03	0.0314	*<0.005*	0.0849	0.0014	0.004	8.72	0.00015	0.91	*<0.000025*	5.34	2.64	127	0.000012	0.00005	*<0.000025*	0.000887	0.00082	*<0.001*	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	420	7.30	5.78	0.0230	*<0.005*	0.0407	0.0006	*<0.0015*	4.92	0.00008	0.56	*<0.000025*	2.05	1.93	92.9	*<0.0000025*	0.00010	*<0.000025*	0.000619	0.00068	*<0.001*	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	430	7.24	4.57	0.0248	*<0.005*	0.0269	0.0005	*<0.0015*	3.37	0.00008	0.81	*<0.000025*	0.97	2.21	82.5	*<0.0000025*	0.00006	*<0.000025*	0.000632	0.00055	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	440	7.61																					
24-Dec-18	5	500	445	6.94	3.28	0.0184	*<0.005*	0.0207	*<0.00005*	*<0.0015*	1.97	0.00008	0.58	*<0.000025*	0.38	1.84	70.7	*<0.0000025*	0.00006	*<0.000025*	0.000430	0.00050	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	450	7.31																					
07-Jan-19	7	500	455	7.52	3.27	0.0220	*<0.005*	0.0173	0.0003	*<0.0015*	1.49	0.00012	0.60	*<0.000025*	0.34	2.01	78.2	*<0.0000025*	0.00006	*<0.000025*	0.000357	0.00049	0.004	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	435	7.31																					
21-Jan-19	9	500	440	7.31	3.24	0.0193	*<0.005*	0.0156	0.0001	*<0.0015*	1.14	0.00019	0.58	*<0.000025*	0.28	1.92	63.9	*<0.0000025*	0.00004	*<0.000025*	0.000320	0.00048	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	435	7.53																					
04-Feb-19	11	500	440	7.59	3.00	0.0169	*<0.005*	0.0110	0.0001	*<0.0015*	0.742	0.00011	0.52	*<0.000025*	0.18	1.83	66.7	*<0.0000025*	0.00003	*<0.000025*	0.000244	0.00035	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	435	7.31																					
18-Feb-19	13	500	435	7.16	2.88	0.0147	*<0.005*	0.0121	*<0.00005*	*<0.0015*	0.736	0.00008	0.51	*<0.000025*	0.23	1.43	63.6	*<0.0000025*	0.00003	*<0.000025*	0.000173	0.00036	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	435	7.59																					
04-Mar-19	15	500	420	7.17	2.87	0.0150	0.04	0.0104	0.0002	*<0.0015*	0.686	0.00011	0.55	*<0.000025*	0.31	1.60	55.1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000149	0.00037	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	445	6.91																					
18-Mar-19	17	500	430	7.46	2.68	0.0124	*<0.005*	0.00886	*<0.00005*	*<0.0015*	0.541	0.00009	0.46	*<0.000025*	0.09	1.21	47.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000110	0.00027	*<0.001*	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	430	7.14																					
01-Apr-19	19	500	440	7.45	3.44	0.0143	*<0.005*	0.0109	*<0.00005*	*<0.0015*	0.513	0.00007	0.43	*<0.000025*	0.10	1.32	57.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000124	0.00025	*<0.001*	*<0.001*	CA15038-APR19
08-Apr-19	20	500	435	7.60																					
15-Apr-19	21	500	435	7.54	2.99	0.0122	*<0.005*	0.0110	0.0001	*<0.0015*	0.442	0.00005	0.45	*<0.000025*	0.10	1.26	38.6	*<0.0000025*	0.00007	*<0.000025*	0.000117	0.00026	*<0.001*	*<0.001*	CA15345-APR19
22-Apr-19	22	500	515	7.73																					
29-Apr-19	23	500	445	7.51	3.72	0.0137	*<0.005*	0.0153	*<0.00005*	*<0.0015*	0.483	0.00008	0.43	*<0.000025*	0.12	1.38	46.7	*<0.0000025*	0.00015	*<0.000025*	0.000126	0.00025	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	440	7.30																					
13-May-19	25	500	440	7.32	3.36	0.0124	*<0.005*	0.0134	*<0.00005*	*<0.0015*	0.408	0.00008	0.44	*<0.000025*	0.11	1.06	41.3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000087	0.00019	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	430	7.38																					
27-May-19	27	500	445	7.48	3.29	0.0124	*<0.005*	0.0124	*<0.00005*	*<0.0015*	0.368	0.00006	0.46	*<0.000025*	0.12	1.00	32.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000077	0.00019	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	440	7.40																					
10-Jun-19	29	500	430	7.42	3.78	0.0099	*<0.005*	0.0132	*<0.00005*	*<0.0015*	0.338	0.00006	0.42	*<0.000025*	0.10	1.11	36.1	*<0.0000025*	0.00007	*<0.000025*	0.000067	0.00019	*<0.001*	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	435	7.35																					
24-Jun-19	31	500	440	7.47	3.25	0.0105	*<0.005*	0.0124	*<0.00005*	*<0.0015*	0.322	0.00007	0.38	*<0.000025*	0.11	0.938	32.3	*<0.0000025*	0.00008	*<0.000025*	0.000068	0.00018	*<0.001*	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	430	7.52																					
08-Jul-19	33	500	460	7.42	3.88	0.0111	*<0.005*	0.0110	0.0001	*<0.0015*	0.288	*<0.00002*	0.41	*<0.000025*	0.09	1.03	39.0	*<0.0000025*	*<0.00003*	*<0.000025*	0.000091	0.00016	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	445	7.35																					
22-Jul-19	35	500	440	7.72	3.62	0.00789	0.02	0.00961	*<0.00005*	*<0.0015*	0.264	0.00008	0.30	*<0.000025*	0.06	0.763	28.0	*<0.0000025*	*<0.00003*	*<0.000025*	0.000065	0.00014	*<0.001*	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	420	7.49																					
05-Aug-19	37	500	425	7.81	3.71	0.00804	*<0.005*	0.0135	*<0.00005*	*<0.0015*	0.271	0.00007	0.37	*<0.000025*	0.08	0.807	26.7	*<0.0000025*	*<0.00003*	*<0.000025*	0.000041	0.00020	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	450	7.93	2.69	0.00764	*<0.005*	0.0101	0.0001	*<0.0015*	0.172	0.00005	0.26	*<0.000025*	0.06	0.642	17.7	*<0.0000025*	*<0.00003*	*<0.000025*	0.000063	0.00014	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	440	7.51	3.12	0.00729	*<0.005*	0.00950	*<0.00005*	*<0.0015*	0.224	*<0.00002*	0.28	*<0.000025*	0.05	0.643	19.7	*<0.0000025*	0.00007	*<0.000025*	0.000035	0.00015	*<0.001*	*<0.001*	CA15365-AUG19

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been

HC 1 Dup
Sample = R353465 + 176396 (Dup)

Date	Cycle	Volume mL		pH	Cond.	Alkalinity	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output							CaCO3															
					umhos/cm	mgCaCO3/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
19-Nov-18	0	500	405	7.85	598	13.8	194	5	0.08	254	0.076	0.0070	0.0050	0.0262	*<0.0000035*	*<0.0000035*	0.046	0.000007	92.8	*<0.000015*	0.000211	0.00216	*<0.0035*	*<0.000005*	0.0019
26-Nov-18	1	500	435	7.69	797	13.1	362	2	0.15	412	0.059	0.0095	0.0064	0.0216	*<0.0000035*	*<0.0000035*	0.056	0.000029	148	*<0.000015*	0.000322	0.00201	*<0.0035*	0.00003	0.0021
03-Dec-18	2	500	450	7.69	650	11.0	266	*<0.5*	0.10	330	0.055	0.0090	0.0053	0.0142	*<0.0000035*	*<0.0000035*	0.032	0.000013	122	*<0.000015*	0.000246	0.00255	*<0.0035*	0.00021	0.0012
10-Dec-18	3	500	450	7.71	539	10.6	239	*<0.5*	0.11	267	0.053	0.0061	0.0046	0.0112	*<0.0000035*	*<0.0000035*	0.023	0.000006	100	*<0.000015*	0.000158	0.00155	*<0.0035*	*<0.000005*	0.0011
17-Dec-18	4	500	410	7.73	518		197																		
24-Dec-18	5	500	435	7.78	441	13.0	170	*<0.5*	*<0.03*	209	0.060	0.0062	0.0037	0.0123	*<0.0000035*	*<0.0000035*	0.016	0.000007	77.9	0.00004	0.000096	0.00089	*<0.0035*	*<0.000005*	0.0008
31-Dec-18	6	500	460	7.62	537		220																		
07-Jan-19	7	500	470	7.60	440	11.1	196	*<0.5*	*<0.03*	244	0.061	0.0067	0.0036	0.00921	*<0.0000035*	*<0.0000035*	0.015	*<0.0000015*	91.3	0.00007	0.000274	0.00144	*<0.0035*	*<0.000005*	0.0007
14-Jan-19	8	500	435	7.51	373		165																		
21-Jan-19	9	500	435	7.55	353	10.2	155	*<0.5*	*<0.03*	185	0.076	0.0041	0.0033	0.00923	*<0.0000035*	*<0.0000035*	0.010	0.000014	68.6	0.00005	0.000135	0.00099	*<0.0035*	*<0.000005*	0.0010
28-Jan-19	10	500	445	7.74	319		129																		
04-Feb-19	11	500	430	7.62	332	9.9	132	*<0.5*	*<0.03*	148	0.058	0.0032	0.0025	0.00644	*<0.0000035*	*<0.0000035*	0.007	0.000009	53.8	*<0.000015*	0.000129	0.00155	*<0.0035*	*<0.000005*	0.0020
11-Feb-19	12	500	440	7.42	300		118																		
18-Feb-19	13	500	430	7.46	322	10.3	129	*<0.5*	*<0.03*	162	0.058	0.0032	0.0023	0.00652	*<0.0000035*	*<0.0000035*	0.009	0.000005	59.3	*<0.000015*	0.000119	0.00107	*<0.0035*	*<0.000005*	0.0004
25-Feb-19	14	500	430	7.33	301		134																		
04-Mar-19	15	500	440	7.38	324	13.8	143	*<0.5*	*<0.03*	155	0.065	0.0031	0.0022	0.00732	*<0.0000035*	*<0.0000035*	0.006	0.000004	56.3	*<0.00004*	0.000151	0.0012	*<0.0035*	*<0.000005*	0.0008
11-Mar-19	16	500	445	6.89	295		119																		
18-Mar-19	17	500	440	7.60	279	10.5	110	*<0.5*	*<0.03*	142	0.056	0.0026	0.0018	0.00594	*<0.0000035*	*<0.0000035*	0.007	0.000006	52.0	*<0.00004*	0.000113	0.0015	*<0.0035*	0.00012	0.0004
25-Mar-19	18	500	420	7.34	301		117																		
01-Apr-19	19	500	430	7.49	294	11.4	121	*<0.5*	*<0.03*	136	0.052	0.0025	0.0016	0.00605	*<0.0000035*	*<0.0000035*	0.005	0.000006	48.4	*<0.00004*	0.000146	0.0007	*<0.0035*	*<0.000005*	0.0005
08-Apr-19	20	500	435	7.77	277		118																		
15-Apr-19	21	500	440	7.84	268	11.0	111	*<0.5*	*<0.03*	122	0.050	0.0021	0.0015	0.00586	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	43.5	*<0.00004*	0.000137	0.0007	*<0.0035*	*<0.000005*	0.0003
22-Apr-19	22	500	460	7.82	282		113																		
29-Apr-19	23	500	445	7.77	269	12.0	108	*<0.5*	*<0.03*	138	0.059	0.0029	0.0017	0.00640	*<0.0000035*	*<0.0000035*	0.004	0.000006	48.9	*<0.00004*	0.000153	0.0011	*<0.0035*	*<0.000005*	0.0003
06-May-19	24	500	440	7.44	276		113																		
13-May-19	25	500	440	7.45	256	10.9	100	*<0.5*	*<0.03*	126	0.051	0.0021	0.0014	0.00627	*<0.0000035*	*<0.0000035*	0.004	0.000005	44.4	*<0.00004*	0.000123	0.0007	*<0.0035*	*<0.000005*	0.0003
20-May-19	26	500	445	7.43	260		107																		
27-May-19	27	500	450	7.41	230	12.2	95	*<0.5*	*<0.03*	110	0.057	0.0017	0.0012	0.00562	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	38.5	*<0.00004*	0.000124	0.0033	0.012	*<0.000005*	0.0003
03-Jun-19	28	500	440	7.44	236		95																		
10-Jun-19	29	500	445	7.53	233	11.2	94	*<0.5*	*<0.03*	108	0.052	0.0016	0.0014	0.00717	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	37.4	*<0.00004*	0.000108	0.0006	*<0.0035*	*<0.000005*	0.0002
17-Jun-19	30	500	415	7.41	217		84																		
24-Jun-19	31	500	460	7.65	225	10.5	94	*<0.5*	*<0.03*	122	0.051	0.0016	0.0011	0.00648	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	42.5	*<0.00004*	0.000094	0.0007	*<0.0035*	*<0.000005*	0.0002
01-Jul-19	32	500	440	7.43	251		92																		
08-Jul-19	33	500	450	7.69	201	13.0	75	*<0.5*	0.07	93.3	0.054	0.0017	0.0011	0.00531	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	32.0	*<0.00004*	0.000078	0.0006	*<0.0035*	*<0.000005*	*<0.00005*
15-Jul-19	34	500	445	7.49	187		73																		
22-Jul-19	35	500	415	7.73	193	10.8	71	*<0.5*	*<0.03*	93.7	0.053	0.0015	0.0012	0.00564	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	32.0	*<0.00004*	0.000061	0.0008	*<0.0035*	0.00020	0.0001
29-Jul-19	36	500	460	7.56	216		78																		
05-Aug-19	37	500	425	7.82	198	11.9	77	*<0.5*	*<0.03*	94.1	0.056	0.0014	0.0012	0.00670	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	32.1	*<0.00004*	0.000055	0.0012	*<0.0035*	*<0.000005*	0.0002
12-Aug-19	38	500	450	7.99	181	12.2	59	*<0.5*	*<0.03*	73.7	0.042	0.0014	0.0010	0.00590	*<0.0000035*	*<0.0000035*	0.002	0.000003	25.0	*<0.00004*	0.000077	0.0007	*<0.0035*	*<0.000005*	0.0002
19-Aug-19	39	500	425	7.71	176	11.0	61	*<0.5*	*<0.03*	84.3	0.045	0.0012	0.0010	0.00590	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	29.2	*<0.00004*	0.000052	0.0012	0.013	*<0.000005*	0.0001

Cell Terminated
Note:
For reporting purposes, original laboratory detection limits have been halved

HC 1 Dup
Sample = R353465 + 176396 (Dup)

Date	Cycle	Volume mL		pH	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	
	No.	Input	Output																						SGS File #
					mg/L	mg/L	µg/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	
19-Nov-18	0	500	405	7.85	5.45	0.0198	*<0.005*	0.0469	0.0013	*<0.0015*	11.5	0.00025	0.94	*<0.000025*	6.89	1.59	90.5	0.000015	0.00025	0.00006	0.000400	0.00072	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	435	7.69	10.1	0.0291	*<0.005*	0.0872	0.0012	*<0.0015*	9.44	0.00021	1.23	*<0.000025*	5.68	2.85	138	0.000014	0.00015	*<0.000025*	0.000832	0.00085	*<0.001*	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	450	7.69	6.51	0.0225	*<0.005*	0.0377	0.0006	*<0.0015*	5.38	0.00008	0.76	*<0.000025*	2.04	2.15	104	*<0.0000025*	0.00011	*<0.000025*	0.000579	0.00071	*<0.001*	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	450	7.71	4.04	0.0191	*<0.005*	0.0232	0.0003	*<0.0015*	3.16	0.00008	0.93	*<0.000025*	0.79	2.15	80.5	*<0.0000025*	0.00009	*<0.000025*	0.000371	0.00059	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	410	7.73																					
24-Dec-18	5	500	435	7.78	3.60	0.0205	*<0.005*	0.0188	0.0001	*<0.0015*	2.13	0.00007	0.66	*<0.000025*	0.46	1.67	65.5	*<0.0000025*	0.00004	*<0.000025*	0.000389	0.00055	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	460	7.62																					
07-Jan-19	7	500	470	7.60	3.93	0.0247	*<0.005*	0.0159	0.0003	*<0.0015*	1.71	0.00013	0.70	*<0.000025*	0.41	1.92	77.4	*<0.0000025*	*<0.000005*	*<0.000025*	0.000362	0.00059	*<0.001*	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	435	7.51																					
21-Jan-19	9	500	435	7.55	3.42	0.0173	*<0.005*	0.0172	0.0001	*<0.0015*	1.19	0.00011	0.66	*<0.000025*	0.30	1.60	53.4	*<0.0000025*	0.00007	*<0.000025*	0.000309	0.00051	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	445	7.74																					
04-Feb-19	11	500	430	7.62	3.23	0.0145	*<0.005*	0.0129	0.0001	*<0.0015*	0.773	0.00010	0.56	*<0.000025*	0.20	1.51	54.4	*<0.0000025*	0.00002	*<0.000025*	0.000170	0.00043	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	440	7.42																					
18-Feb-19	13	500	430	7.46	3.28	0.0141	*<0.005*	0.0131	0.0001	*<0.0015*	0.836	0.00008	0.56	*<0.000025*	0.24	1.25	56.5	*<0.0000025*	0.00004	*<0.000025*	0.000128	0.00041	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	430	7.33																					
04-Mar-19	15	500	440	7.38	3.53	0.0162	*<0.005*	0.0122	0.0002	*<0.0015*	0.703	0.00012	0.60	*<0.000025*	0.31	1.42	48.0	*<0.0000025*	*<0.00003*	*<0.000025*	0.000130	0.00038	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	445	6.89																					
18-Mar-19	17	500	440	7.60	3.03	0.0138	*<0.005*	0.00865	*<0.00005*	*<0.0015*	0.581	0.00009	0.50	*<0.000025*	0.12	1.18	47.5	*<0.0000025*	0.00015	*<0.000025*	0.000100	0.00030	*<0.001*	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	420	7.34																					
01-Apr-19	19	500	430	7.49	3.58	0.0151	*<0.005*	0.00958	*<0.00005*	*<0.0015*	0.510	0.00008	0.52	*<0.000025*	0.10	1.25	53.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000099	0.00025	*<0.001*	*<0.001*	CA15038-APR19
08-Apr-19	20	500	435	7.77																					
15-Apr-19	21	500	440	7.84	3.17	0.0131	*<0.005*	0.00804	0.0001	*<0.0015*	0.452	0.00005	0.48	*<0.000025*	0.10	1.16	35.8	*<0.0000025*	*<0.00003*	0.00006	0.000091	0.00027	*<0.001*	*<0.001*	CA15345-APR19
22-Apr-19	22	500	460	7.82																					
29-Apr-19	23	500	445	7.77	3.86	0.0152	*<0.005*	0.00951	0.0001	*<0.0015*	0.502	0.00008	0.50	*<0.000025*	0.13	1.35	44.2	*<0.0000025*	0.00017	*<0.000025*	0.000114	0.00028	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	440	7.44																					
13-May-19	25	500	440	7.45	3.63	0.0133	*<0.005*	0.00709	*<0.00005*	*<0.0015*	0.416	0.00009	0.51	*<0.000025*	0.12	0.988	38.8	*<0.0000025*	0.00006	*<0.000025*	0.000062	0.00023	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	445	7.43																					
27-May-19	27	500	450	7.41	3.29	0.0117	*<0.005*	0.00619	*<0.00005*	*<0.0015*	0.383	0.00013	0.50	*<0.000025*	0.12	0.927	31.6	*<0.0000025*	*<0.00003*	*<0.000025*	0.000061	0.00025	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	440	7.44																					
10-Jun-19	29	500	445	7.53	3.65	0.0097	*<0.005*	0.00673	*<0.00005*	*<0.0015*	0.341	0.00008	0.48	*<0.000025*	0.10	0.94	29.1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000061	0.00022	*<0.001*	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	415	7.41																					
24-Jun-19	31	500	460	7.65	3.77	0.0112	*<0.005*	0.00588	*<0.00005*	*<0.0015*	0.371	0.00006	0.45	*<0.000025*	0.12	0.881	31.3	*<0.0000025*	0.00006	*<0.000025*	0.000057	0.00022	*<0.001*	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	440	7.43																					
08-Jul-19	33	500	450	7.69	3.25	0.00886	*<0.005*	0.00443	0.0001	*<0.0015*	0.339	0.00006	0.46	*<0.000025*	0.08	0.808	31.6	*<0.0000025*	*<0.00003*	*<0.000025*	0.000053	0.00023	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	445	7.49																					
22-Jul-19	35	500	415	7.73	3.39	0.00777	0.01	0.00411	*<0.00005*	*<0.0015*	0.322	0.00009	0.41	*<0.000025*	0.08	0.762	28.1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000047	0.00019	*<0.001*	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	460	7.56																					
05-Aug-19	37	500	425	7.82	3.38	0.00764	*<0.005*	0.00474	*<0.00005*	*<0.0015*	0.333	0.00009	0.51	*<0.000025*	0.10	0.825	27.4	0.000005	*<0.00003*	*<0.000025*	0.000033	0.00023	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	450	7.99	2.73	0.00763	*<0.005*	0.00422	*<0.00005*	*<0.0015*	0.204	0.00005	0.32	*<0.000025*	0.08	0.632	17.3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000054	0.00018	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	425	7.71	2.77	0.00592	*<0.005*	0.00356	*<0.00005*	*<0.0015*	0.265	*<0.00002*	0.35	*<0.000025*	0.05	0.728	21.1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000030	0.00020	*<0.001*	*<0.001*	CA15365-AUG19

Cell Terminated
Note:
For reporting purposes, original laboratory detection limits have been halved

HC 2

Mass	1

Date	Cycle	Volume mL		pH	Cond.	Alkalinity	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output							CaCO3															
					µmhos/cm	mgCaCO3/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
19-Nov-18	0	500	410	8.28	128	15.2	22	5	0.16	30.3	0.141	0.0034	0.0013	0.0044	*<0.0000035*	*<0.0000035*	0.077	*<0.0000015*	9.61	0.00004	0.000058	0.00143	*<0.0035*	*<0.000005*	0.0012
26-Nov-18	1	500	450	8.06	166	14.8	49	3	0.12	44.8	0.133	0.0036	0.0011	0.00436	*<0.0000035*	*<0.0000035*	0.120	0.000006	12.6	*<0.000015*	0.000089	0.00119	*<0.0035*	0.00002	0.0013
03-Dec-18	2	500	435	7.99	105	12.4	25	1	0.06	32.5	0.115	0.0033	0.0009	0.00377	*<0.0000035*	*<0.0000035*	0.062	*<0.0000015*	9.42	*<0.000015*	0.000080	0.00178	*<0.0035*	0.00001	0.0010
10-Dec-18	3	500	440	7.91	70	11.7	17	*<0.5*	*<0.03*	26.6	0.106	0.0025	0.0008	0.00274	*<0.0000035*	*<0.0000035*	0.055	*<0.0000015*	7.74	*<0.000015*	0.000082	0.00094	*<0.0035*	*<0.000005*	0.0012
17-Dec-18	4	500	450	8.06	64		12																		
24-Dec-18	5	500	445	8.15	54	12.1	11	*<0.5*	*<0.03*	19.9	0.104	0.0021	0.0009	0.00243	*<0.0000035*	*<0.0000035*	0.027	0.000003	6.15	0.00005	0.000054	0.00058	*<0.0035*	*<0.000005*	0.0009
31-Dec-18	6	500	455	7.82	59		11																		
07-Jan-19	7	500	460	7.73	54	10.3	14	*<0.5*	*<0.03*	23.2	0.119	0.0023	0.0009	0.00341	*<0.0000035*	*<0.0000035*	0.026	*<0.0000015*	7.44	0.00009	0.000098	0.00102	*<0.0035*	*<0.000005*	0.0008
14-Jan-19	8	500	440	7.68	48		11																		
21-Jan-19	9	500	445	7.60	51	8.2	12	*<0.5*	*<0.03*	21.6	0.118	0.0013	0.0009	0.00211	*<0.0000035*	*<0.0000035*	0.018	0.000005	6.96	*<0.000015*	0.000122	0.00051	*<0.0035*	0.00007	0.0010
28-Jan-19	10	500	435	7.77	51		12																		
04-Feb-19	11	500	430	7.70	44	8.1	12	*<0.5*	*<0.03*	20.2	0.114	0.0011	0.0008	0.00196	*<0.0000035*	*<0.0000035*	0.013	0.000007	6.49	*<0.000015*	0.000154	0.00138	*<0.0035*	*<0.000005*	0.0031
11-Feb-19	12	500	445	7.57	42		8																		
18-Feb-19	13	500	445	7.52	36	8.2	7	*<0.5*	*<0.03*	15.8	0.104	0.0011	0.0006	0.00144	*<0.0000035*	*<0.0000035*	0.013	*<0.0000015*	5.23	*<0.000015*	0.000183	0.00179	*<0.0035*	*<0.000005*	0.0006
25-Feb-19	14	500	430	7.51	32		5																		
04-Mar-19	15	500	435	7.51	34	10.9	7	*<0.5*	*<0.03*	15.7	0.136	*<0.00045*	0.0008	0.00135	*<0.0000035*	*<0.0000035*	0.010	*<0.0000015*	5.30	*<0.00004*	0.000227	0.0025	0.017	*<0.000005*	0.0012
11-Mar-19	16	500	430	7.51	35		7																		
18-Mar-19	17	500	455	7.59	32	7.1	7	*<0.5*	*<0.03*	14.6	0.105	*<0.00045*	0.0006	0.00132	0.000007	*<0.0000035*	0.012	*<0.0000015*	4.91	*<0.00004*	0.000285	0.0013	*<0.0035*	*<0.000005*	0.0005
25-Mar-19	18	500	440	7.60	32		5																		
01-Apr-19	19	500	445	7.50	30	8.3	5	*<0.5*	*<0.03*	13.5	0.102	*<0.00045*	0.0006	0.00241	*<0.0000035*	*<0.0000035*	0.011	*<0.0000015*	4.57	*<0.00004*	0.000331	0.0014	*<0.0035*	*<0.000005*	0.0006
08-Apr-19	20	500	445	7.74	29		5																		
15-Apr-19	21	500	445	7.91	27	12.0	4	*<0.5*	*<0.03*	12.3	0.103	*<0.00045*	0.0006	0.00126	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	4.20	*<0.00004*	0.000299	0.0019	*<0.0035*	*<0.000005*	0.0004
22-Apr-19	22	500	450	7.70	25		5																		
29-Apr-19	23	500	435	7.73	26	7.7	5	*<0.5*	*<0.03*	13.5	0.105	*<0.00045*	0.0006	0.00122	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	4.61	*<0.00004*	0.000348	0.0020	0.008	*<0.000005*	0.0004
06-May-19	24	500	445	7.58	31		5																		
13-May-19	25	500	440	7.32	26	6.5	5	*<0.5*	*<0.03*	12.1	0.093	*<0.00045*	0.0005	0.00093	*<0.0000035*	*<0.0000035*	0.007	0.000003	4.12	*<0.00004*	0.000663	0.0024	*<0.0035*	0.00001	0.0004
20-May-19	26	500	440	7.47	29		5																		
27-May-19	27	500	440	7.83	26	7.8	5	*<0.5*	*<0.03*	11.9	0.098	*<0.00045*	0.0004	0.00102	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	4.05	*<0.00004*	0.000738	0.0047	0.009	*<0.000005*	0.0005
03-Jun-19	28	500	440	7.45	25		5																		
10-Jun-19	29	500	445	7.52	26	7.0	4	*<0.5*	*<0.03*	11.1	0.082	*<0.00045*	0.0005	0.00110	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	3.75	*<0.00004*	0.000880	0.0024	0.009	*<0.000005*	0.0002
17-Jun-19	30	500	425	7.48	20		4																		
24-Jun-19	31	500	455	7.52	27	5.3	6	*<0.5*	*<0.03*	12.2	0.082	*<0.00045*	0.0003	0.00093	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	4.16	*<0.00004*	0.000666	0.0016	0.008	*<0.000005*	0.0003
01-Jul-19	32	500	485	7.35	35		6																		
08-Jul-19	33	500	490	7.59	27	8.0	5	*<0.5*	*<0.03*	13.2	0.069	*<0.00045*	0.0004	0.00095	*<0.0000035*	*<0.0000035*	0.010	*<0.0000015*	4.65	*<0.00004*	0.000240	0.0007	*<0.0035*	*<0.000005*	0.0002
15-Jul-19	34	500	485	7.36	20		4																		
22-Jul-19	35	500	485	7.79	26	6.9	5	*<0.5*	*<0.03*	12.8	0.102	*<0.00045*	0.0004	0.00096	0.000080	*<0.0000035*	0.008	0.000026	4.42	*<0.00004*	0.000514	0.0014	0.008	0.00001	0.0005
29-Jul-19	36	500	465	7.31	22		3																		
05-Aug-19	37	500	460	7.86	23	7.3	5	*<0.5*	*<0.03*	12.7	0.061	*<0.00045*	0.0003	0.00088	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	4.45	*<0.00004*	0.000463	0.0012	*<0.0035*	*<0.000005*	0.0003
12-Aug-19	38	500	465	7.77	19	7.2	5	*<0.5*	*<0.03*	9.8	0.046	*<0.00045*	0.0003	0.00081	*<0.0000035*	*<0.0000035*	0.005	*<0.0000015*	3.48	*<0.00004*	0.000365	0.0011	*<0.0035*	*<0.000005*	0.0002
19-Aug-19	39	500	475	7.72	23	5.8	4	*<0.5*	*<0.03*	11.6	0.050	*<0.00045*	0.0003	0.00085	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	4.09	*<0.00004*	0.000378	0.0012	*<0.0035*	0.00001	0.0002
26-Aug-19	40	500	505	7.41		6.2																			
02-Sep-19	41	500	485	7.72		5.5	4																		
09-Sep-19	42	500	490	7.37		6.2																			
16-Sep-19	43	500	485	7.20		7.2	4			10.7	0.053	*<0.00045*	0.0003	0.00070	*<0.0000035*	*<0.0000035*	0.008	*<0.0000015*	3.78	*<0.00004*	0.000311	0.0016	*<0.0035*	*<0.000005*	0.0003
23-Sep-19	44	500	505	7.22		8.5																			
30-Sep-19	45	500	450	7.54		4.7	3																		
07-Oct-19	46	500	465	7.59		5.9																			
14-Oct-19	47	500	495	7.68		5.8	5			14.0	0.037	*<0.00045*	0.0003	0.00149	*<0.0000035*	*<0.0000035*	0.009	*<0.0000015*	4.94	*<0.00004*	0.000627	0.0018	*<0.0035*	0.00001	0.0004
21-Oct-19	48	500	505	7.72		5.9																			
28-Oct-19	49	500	500	7.30		6.8	4																		
04-Nov-19	50	500	495	7.20		6.3																			
11-Nov-19	51	500	510	7.27		7.2	3			12.2	0.043	*<0.00045*	0.0003	0.00089	*<0.0000035*	*<0.0000035*	0.006	0.000003	4.30	*<0.00004*	0.000633	0.0021	*<0.0035*	0.00001	0.0003
18-Nov-19	52	500	495	7.28		5.1																			
25-Nov-19	53	500	490	7.28		5.8	4																		
02-Dec-19	54	500	475	7.57		5.1																			
09-Dec-19	55	500	475	7.19		5.8	3			9.7	0.039	*<0.00045*	0.0003	0.00094	0.000017	*<0.0000035*	0.005	0.000034	3.34	*<0.00004*	0.00102	0.0040	0.010	0.00006	0.0003
16-Dec-19	56	500	480	7.21		5.6																			
23-Dec-19	57	500	485	7.34		6.2	5																		
30-Dec-19	58	500	450	7.07		5.8																			
06-Jan-20	59	500	460	7.15		5.3	4			9.7	0.039	*<0.00045*	*<0.0001*	0.00064	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	3.37	*<0.00004*	0.001260	0.0037	*<0.0035*	*<0.000005*	0.0003
13-Jan-20	60	500	470	7.02		4.4																			
20-Jan-20	61	500	480	7.52		5.6	4																		
27-Jan-20	62	500	470	7.21		5.1																			
03-Feb-20	63	500	480	7.67		4.2	6			10.0	0.035	*<0.00045*	0.0003	0.00071	*<0.0000035*	*<0.0000035*	0.005	0.000011	3.52	*<0.00004*	0.000617	0.0025	*<0.0035*	0.00017	0.0002
10-Feb-20	64	500	475	7.31		5.1																			

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Mass	1

Date	Cycle	Volume mL		pH	Cond.	Alkalinity	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output							CaCO3															
17-Feb-20	65	500	475	7.59		5.5	6																		
24-Feb-20	66	500	465	6.98		5.8																			
02-Mar-20	67	500	470	7.09		4.8	5			9.4	0.033	*<0.00045*	*<0.0001*	0.00063	*<0.0000035*	*<0.0000035*	0.005	*<0.0000015*	3.25	*<0.00004*	0.000771	0.0035	*<0.0035*	0.00002	0.0002
09-Mar-20	68	500	495	6.70		5.7																			
16-Mar-20	69	500	495	7.25		5.3	4																		
23-Mar-20	70	500	460	7.15		4.3																			
30-Mar-20	71	500	495	7.23		5.3	4			9.6	0.031	*<0.00045*	*<0.0001*	0.00063	*<0.0000035*	*<0.0000035*	0.006	0.000004	3.40	*<0.00004*	0.000654	0.0028	*<0.0035*	*<0.000005*	0.0002
06-Apr-20	72	500	510	6.92		3.0																			
13-Apr-20	73	500	495	7.67		5.4	3																		
20-Apr-20	74	500	485	7.61		4.7																			
27-Apr-20	75	500	475	7.30		4.2	3			8.4	0.037	*<0.00045*	0.0003	0.00083	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	2.90	*<0.00004*	0.000886	0.0043	*<0.0035*	0.00003	0.0002
04-May-20	76	500	440	6.98		3.3																			
11-May-20	77	500	475	7.21		4.4	3																		
18-May-20	78	500	460	7.33		3.5																			
25-May-20	79	500	430	6.91		3.0	3			6.8	0.034	*<0.00045*	*<0.0001*	0.00070	*<0.0000035*	0.000007	0.004	*<0.0000015*	2.36	*<0.00004*	0.00120	0.0057	*<0.0035*	0.00003	0.0002
01-Jun-20	80	500	460	6.85		3.8																			
08-Jun-20	81	500	495	7.12		4.9	3																		
15-Jun-20	82	500	495	7.16		3.8																			
22-Jun-20	83	500	485	7.31		5.5	3			9.8	0.031	*<0.00045*	0.0003	0.00053	*<0.0000035*	*<0.0000035*	0.005	*<0.0000015*	3.46	*<0.00004*	0.00106	0.0051	*<0.0035*	*<0.000005*	0.0002
29-Jun-20	84	500	475	7.81		10.9																			
06-Jul-20	85	500	470	6.81		3.0	4																		
13-Jul-20	86	500	455	6.90		2.5																			
20-Jul-20	87	500	445	6.90		2.5	4			7.7	0.032	*<0.00045*	0.0005	0.00094	*<0.0000035*	*<0.0000035*	0.009	*<0.0000015*	2.71	0.00008	0.001665	0.0068	0.017	0.00007	0.0002
27-Jul-20	88	500	465	7.17		3.3																			
03-Aug-20	89	500	435	6.98		2.5	5																		
10-Aug-20	90	500	490	7.08		4.1																			
17-Aug-20	91	500	450	7.07		3.5	3			7.8	0.029	*<0.00045*	*<0.0001*	0.00058	*<0.0000035*	*<0.0000035*	0.020	0.000004	2.75	*<0.00004*	0.00150	0.0065	*<0.0035*	*<0.000005*	*<0.00005*
24-Aug-20	92	500	430	6.64		3.6																			
31-Aug-20	93	500	460	7.21		4.0	3																		
07-Sep-20	94	500	430	7.11		2.8																			
14-Sep-20	95	500	450	7.22		5.3	4			10.4	0.024	*<0.00045*	*<0.0001*	0.00102	*<0.0000035*	*<0.0000035*	0.006	0.000004	3.76	0.00017	0.00168	0.0030	*<0.0035*	0.00002	0.0002
21-Sep-20	96	500	465	7.07		3.3																			
28-Sep-20	97	500	425	7.14		4.2	3																		
05-Oct-20	98	500	435	7.00		3.2																			
12-Oct-20	99	500	435	7.13		3.3	4			8.1	0.031	*<0.00045*	0.0004	0.00062	0.000010	*<0.0000035*	0.005	*<0.0000015*	2.79	*<0.00004*	0.00247	0.0108	*<0.0035*	0.00001	*<0.00005*
19-Oct-20	100	500	455	7.21		2.9																			
26-Oct-20	101	500	435	7.18		3.9	4																		
02-Nov-20	102	500	485	7.23		4.5																			
09-Nov-20	103	500	435	7.38		2.5	3			6.86	0.027	*<0.00045*	*<0.0001*	0.00057	0.000007	*<0.0000035*	0.004	*<0.0000015*	2.41	0.00008	0.00255	0.0126	*<0.0035*	0.00002	0.0002
16-Nov-20	104	500	445	7.33		3.1																			
23-Nov-20	105	500	490	7.04		4.9	5																		
30-Nov-20	106	500	500	7.33		4.8																			
07-Dec-20	107	500	500	7.13		5.8	4			10.8	0.019	*<0.00045*	0.0002	0.00083	*<0.0000035*	*<0.0000035*	0.008	0.000006	3.89	*<0.00004*	0.00184	0.0066	*<0.0035*	0.00005	0.0001
14-Dec-20	108	500	510	7.12		5.2																			
21-Dec-20	109	500	420	7.01		4.1	3																		
28-Dec-20	110	500	510	7.03		5.0																			
04-Jan-21	111	500	490	6.91		4.2	3			9.9	0.021	*<0.00045*	*<0.0001*	0.00065	*<0.0000035*	*<0.0000035*	0.009	0.000003	3.59	*<0.00004*	0.00174	0.0095	*<0.0035*	0.00002	0.0002
11-Jan-21	112	500	500	7.00		3.4																			
18-Jan-21	113	500	495	7.26		5.3	5																		
25-Jan-21	114	500	435	7.36		4.8																			
01-Feb-21	115	500	510	7.32		4.4	4			10.8	0.027	*<0.00045*	*<0.0001*	0.00076	*<0.0000035*	*<0.000005*	0.007	0.000079	3.92	*<0.00004*	0.00188	0.0067	*<0.0035*	*<0.000045*	0.0002
15-May-23	116	500	435	6.93	45	4.5	9			16.0	0.018	*<0.00045*	0.0006	0.00169	*<0.0000035*	*<0.000005*	0.027	0.000708	5.37	*<0.00004*	0.00604	0.0106	0.234	0.00175	0.0005
22-May-23	117	500	420	7.25	91	5.2	27			34.6	0.042	*<0.00045*	0.0015	0.00162	0.000009	*<0.000005*	0.024	0.00239	11.7	*<0.00004*	0.00141	0.0051	0.603	0.0103	0.0003
29-May-23	118	500	465	7.32	51	6.9	11			21.2	0.038	*<0.00045*	*<0.0001*	0.00177	*<0.0000035*	*<0.000005*	0.020	0.000003	7.36	*<0.00004*	0.000384	0.0013	*<0.0035*	*<0.000045*	0.0003
05-Jun-23	119	500	470	7.44	41	7.3																			
12-Jun-23	120	500	460	7.37	37	5.9																			
19-Jun-23	121	500	485	7.23	46	7.4																			
26-Jun-23	122	500	520	7.22	36	5.4	8			14.3	0.038	*<0.00045*	*<0.0001*	0.00072	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	5.14	*<0.00004*	0.000408	0.0009	*<0.0035*	*<0.000045*	0.0002
03-Jul-23	123	500	490	7.23	59	6.5																			
10-Jul-23	124	500	505	7.27	47	5.5	10																		
17-Jul-23	125	500	465	7.14	42	3.8																			
24-Jul-23	126	500	485	6.88	42	3.8	8			16.2	0.030	*<0.00045*	*<0.0001*	0.00078	*<0.0000035*	*<0.000005*	0.004	0.000036	5.81	*<0.00004*	0.000461	0.0022	*<0.0035*	*<0.000045*	0.0002
31-Jul-23	127	500	500	7.28	39	5.0																			
07-Aug-23	128	500	495	7.16	39	4.7	7																		
14-Aug-23	129	500	450	7.23	31	4.1																			
21-Aug-23	130	500	480	7.20	37	6.4	7			15.1	0.020	*<0.00045*	0.0004	0.00070	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	5.38	*<0.00004*	0.000459	0.0013	*<0.0035*	*<0.000045*	0.0002

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Mass	1

Date	Cycle	Volume mL		pH	Cond.	Alkalinity	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output							CaCO3															
28-Aug-23	131	500	450	7.14	30	4.1																			
04-Sep-23	132	500	460	7.17	30	4.4	6																		
11-Sep-23	133	500	455	6.98	28	6.1																			
18-Sep-23	134	500	460	7.13	27	5.9	5			10.6	0.029	*<0.00045*	*<0.0001*	0.00088	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	3.8	*<0.00004*	0.000368	0.0013	*<0.0035*	*<0.000045*	0.0001
25-Sep-23	135	500	465	7.13	27	5.4																			
02-Oct-23	136	500	445	7.25	29	4.5	4																		
09-Oct-23	137	500	455	6.98	26	4.1																			
16-Oct-23	138	500	460	7.03	23	3.7	4			9.7	0.024	*<0.00045*	*<0.0001*	0.00044	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	3.47	*<0.00004*	0.000474	0.0017	*<0.0035*	*<0.000045*	0.0001
23-Oct-23	139	500	460	7.09	27	4.2																			
30-Oct-23	140	500	435	7.10	26	4.7	5																		
06-Nov-23	141	500	430	7.22	25	4.1																			
13-Nov-23	142	500	480	7.12	28	4.8	4			10.1	0.022	*<0.00045*	0.0004	0.00055	*<0.0000035*	*<0.000005*	0.003	0.000014	3.60	*<0.00004*	0.000585	0.0024	*<0.0035*	*<0.000045*	0.0002
20-Nov-23	143	500	460	7.12	22	4.2																			
12-Feb-24	144	500	420	6.86	50	2.7	14			19.7	0.018	*<0.00045*	0.0004	0.00127	0.000419	*<0.000005*	0.003	0.000004	7	0.00008	0.00216	0.011	*<0.0035*	*<0.000045*	0.0003
19-Feb-24	145	500	440	7.07	42	4.6																			
26-Feb-24	146	500	475	7.24	30	4.8	9			10.3	0.017	*<0.00045*	*<0.0001*	0.00068	*<0.0000035*	*<0.000005*	0.004	0.000005	3.62	*<0.00004*	0.00117	0.005	*<0.0035*	*<0.000045*	0.0002
04-Mar-24	147	500	465	6.65	23	3.8																			
11-Mar-24	148	500	520	7.37	26	5.8	7			9.0	0.016	*<0.00045*	*<0.0001*	0.00067	*<0.0000035*	*<0.000005*	0.003	0.000017	3.16	*<0.00004*	0.000792	0.004	*<0.0035*	0.00046	0.0001
18-Mar-24	149	500	455	6.89	20	3.1																			
25-Mar-24	150	500	465	7.02	23	3.6	7			9.1	0.023	*<0.00045*	*<0.0001*	0.00054	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	3.20	*<0.00004*	0.000849	0.003	*<0.0035*	*<0.000045*	0.0002
01-Apr-24	151	500	490	7.09	24	4.7																			
08-Apr-24	152	500	490	6.98	22	4.0	6			8.9	0.018	*<0.00045*	*<0.0001*	0.00043	*<0.0000035*	*<0.000005*	0.003	0.000010	3.09	*<0.00004*	0.000737	0.003	*<0.0035*	*<0.000045*	0.0001
15-Apr-24	153	500	455	6.90	20	3.0																			
22-Apr-24	154	500	450	6.77	18	2.7	6			7.3	0.018	*<0.00045*	0.0003	0.00041	*<0.0000035*	*<0.000005*	*<0.001*	0.000004	2.55	*<0.00004*	0.000778	0.003	*<0.0035*	*<0.000045*	0.0001
29-Apr-24	155	500	465	6.85	19	2.9																			
06-May-24	156	500	460	7.03	22	3.4	6			8.99	0.017	*<0.00045*	*<0.0001*	0.00041	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	3.13	*<0.00004*	0.000836	0.004	*<0.0035*	*<0.000045*	0.0001
13-May-24	157	500	465	6.92	20	3.3																			
20-May-24	158	500	520	7.03	24	4.4	6			9.3	0.019	*<0.00045*	*<0.0001*	0.00056	*<0.0000035*	*<0.000005*	0.004	0.000011	3.23	*<0.00004*	0.000679	0.004	0.009	0.00016	0.0001
27-May-24	159	500	460	7.00	19	3.8																			
03-Jun-24	160	500	470	7.01	20	3.5	6																		
10-Jun-24	161	500	470	6.89	21	3.3																			
17-Jun-24	162	500	510	6.93	23	3.8	7			9.3	0.023	*<0.00045*	0.0002	0.00140	*<0.0000035*	*<0.000005*	0.004	0.000281	3.21	0.00044	0.000755	0.004	0.113	0.0115	*<0.00005*
24-Jun-24	163	500	510	6.96	22	5.4																			
01-Jul-24	164	500	470	6.86	18	2.6	6																		
08-Jul-24	165	500	460	6.85	18	2.9																			
15-Jul-24	166	500	500	6.97	23	4.4	6			9.2	0.02	*<0.00045*	*<0.0001*	0.00077	0.000007	*<0.000005*	0.003	*<0.0000015*	3.15	*<0.00004*	0.000987	0.004	0.015	*<0.000045*	0.0002
22-Jul-24	167	500	455	6.84	18	2.9																			
29-Jul-24	168	500	470	6.77	18	2.6	6																		
05-Aug-24	169	500	460	6.84	18	2.8																			
12-Aug-24	170	500	460	6.79	16	2.6	5			6.6	0.013	*<0.00045*	*<0.0001*	0.00041	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	2.28	*<0.00004*	0.000978	0.003	*<0.0035*	*<0.000045*	*<0.00005*
19-Aug-24	171	500	460	6.85	20	3.3																			
26-Aug-24	172	500	465	6.79	18	2.8	6																		
02-Sep-24	173	500	470	6.78	17	2.4																			
09-Sep-24	174	500	490	6.86	19	3.7	5			7.4	0.005	*<0.00045*	*<0.0001*	0.00046	*<0.0000035*	*<0.000005*	0.002	0.000041	2.56	*<0.00004*	0.000910	0.005	0.013	0.00038	*<0.00005*
16-Sep-24	175	500	470	6.83	18	2.9																			
23-Sep-24	176	500	475	6.84	17	2.8	5																		
30-Sep-24	177	500	490	6.85	19	3.0																			
07-Oct-24	178	500	490	6.89	17	3.1	5			7.4	0.012	*<0.00045*	*<0.0001*	0.00046	0.000008	*<0.000005*	0.003	0.000003	2.55	*<0.00004*	0.000963	0.005	*<0.0035*	*<0.000045*	0.0002
14-Oct-24	179	500	465	6.80	19	3.4																			
21-Oct-24	180	500	480	6.81	17	2.9	5																		
28-Oct-24	181	500	470	6.74	15	2.5																			
04-Nov-24	182	500	490	6.80	16	2.7	4			6.4	0.010	*<0.00045*	*<0.0001*	0.00048	*<0.0000035*	*<0.000005*	0.003	0.000004	2.22	*<0.00004*	0.00109	0.007	0.007	0.00130	0.0001
11-Nov-24	183	500	510	6.66	18	2.6																			
18-Nov-24	184	500	435	6.70	14	2.5	4																		
25-Nov-24	185	500	495	6.74	16	2.7																			
02-Dec-24	186	500	445	6.55	15	2.8	4			6.0	0.005	*<0.00045*	*<0.0001*	0.00038	*<0.0000035*	*<0.000005*	0.002	0.000055	2.09	*<0.00004*	0.00135	0.009	*<0.0035*	0.00013	0.0001
09-Dec-24	187	500	450	6.70	16	2.4																			
16-Dec-24	188	500	510	6.84	17	3.0	5																		
23-Dec-24	189	500	460	6.73	14	2.5																			
30-Dec-24	190	500	470	6.61	18	2.7	5			7.1	0.008	*<0.00045*	*<0.0001*	0.00041	*<0.0000035*	*<0.000005*	0.003	0.000073	2.44	0.00015	0.00164	0.009	0.013	0.00030	*<0.00005*
06-Jan-25	191	500	450	6.67	16	2.8																			
13-Jan-25	192	500	435	6.70	17	2.7	5																		
20-Jan-25	193	500	465	6.75	17	2.7																			
27-Jan-25	194	500	520	6.79	18	3.3	5			7.6	0.007	*<0.00045*	*<0.0001*	0.00044	0.000007	*<0.000005*	0.003	0.000004	2.59	*<0.00004*	0.00140	0.007	0.015	*<0.000045*	0.0001
03-Feb-25	195	500	460	6.55	14	1.9																			
10-Feb-25	196	500	415	6.69	15	2.6																			

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Mass	1

Date	Cycle	Volume mL		pH	Cond.	Alkalinity	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output							CaCO3															
17-Feb-25	197	500	415																						
24-Feb-25	198	500	470	7.16	17	3.9	5			6.6	0.008	*<0.00045*	*<0.0001*	0.00042	*<0.0000035*	*<0.000005*	0.002	0.000027	2.32	*<0.00004*	0.00136	0.008	*<0.0035*	*<0.000045*	0.0001
03-Mar-25	199	500	475																						
10-Mar-25	200	500	455	6.75	14	2.9																			
17-Mar-25	201	500	455																						
24-Mar-25	202	500	465	6.40	14	1.9	5			5.2	0.006	*<0.00045*	*<0.0001*	0.00064	*<0.0000035*	*<0.000005*	*<0.001*	0.000038	1.79	*<0.00004*	0.00163	0.009	0.046	0.00030	0.0001
31-Mar-25	203	500	490																						
07-Apr-25	204	500	500	6.52	17	3.1																			
14-Apr-25	205	500	500																						
21-Apr-25	206	500	500	6.79	17	2.3	5			7.0	0.008	*<0.00045*	*<0.0001*	0.00044	*<0.0000035*	*<0.000005*	0.002	0.000349	2.41	*<0.00004*	0.00185	0.012	0.026	0.0029	0.0001
28-Apr-25	207	500	470																						
05-May-25	208	500	475	6.59	15	2.2																			
12-May-25	209	500	455																						
19-May-25	210	500	505	6.70	20	2.4	6			7.8	0.007	*<0.00045*	*<0.0001*	0.00058	*<0.0000035*	*<0.000005*	0.003	0.000024	2.70	*<0.00004*	0.00205	0.011	*<0.0035*	0.00018	*<0.00005*
26-May-25	211	500	495																						
02-Jun-25	212	500	465	6.66	16	2.0																			
09-Jun-25	213	500	475																						
16-Jun-25	214	500	455	6.61	15	2.5	4			6.2	0.006	*<0.00045*	*<0.0001*	0.00045	*<0.0000035*	*<0.000005*	0.002	0.000010	2.12	*<0.00004*	0.00212	0.013	*<0.0035*	*<0.000045*	0.0001
23-Jun-25	215	500	495																						
30-Jun-25	216	500	430	6.53	13	1.6																			
07-Jul-25	217	500	440																						
14-Jul-25	218	500	445	6.49	15	1.8	5			5.9	0.005	*<0.00045*	*<0.0001*	0.00064	*<0.0000035*	*<0.000005*	0.002	0.000004	2.01	0.00068	0.00292	0.019	*<0.0035*	*<0.000045*	*<0.00005*
21-Jul-25	219	500	515																						
28-Jul-25	220	500	430	6.44	13	1.7																			
04-Aug-25	221	500	440																						
11-Aug-25	222	500	440	6.46	14	1.5	5			5.3	0.004	*<0.00045*	*<0.0001*	0.00066	*<0.0000035*	*<0.000005*	0.003	0.000004	1.81	*<0.00004*	0.00291	0.019	*<0.0035*	*<0.000045*	0.0001
18-Aug-25	223	500	445																						
25-Aug-25	224	500	430	6.36	15	1.7																			
01-Sep-25	225	500	450																						
08-Sep-25	226	500	430	6.33	13	1.2	4			4.9	0.003	*<0.00045*	*<0.0001*	0.00062	*<0.0000035*	*<0.000005*	0.003	0.000004	1.70	*<0.00004*	0.00323	0.021	*<0.0035*	*<0.000045*	0.0001
15-Sep-25	227	500	455																						
22-Sep-25	228	500	505	6.36	21	1.6																			
29-Sep-25	229	500	455																						
06-Oct-25	230	500	465	6.26	14	1.6	5			5.2	0.004	*<0.00045*	*<0.0001*	0.00073	*<0.0000035*	*<0.000005*	0.007	0.000014	1.82	*<0.00004*	0.00404	0.029	*<0.0035*	0.00057	0.0001
13-Oct-25	231	500	470																						
20-Oct-25	232	500	505	6.39	17	1.8																			
27-Oct-25	233	500	485																						
03-Nov-25	234	500	510	6.45	17	1.6	5			6.6	0.003	*<0.00045*	*<0.0001*	0.00074	*<0.0000035*	*<0.000005*	0.004	0.00001	2.27	*<0.00004*	0.00311	0.016	*<0.0035*	*<0.000045*	0.0001
10-Nov-25	235	500	500																						
17-Nov-25	236	500	475	6.24	14	1.4																			
24-Nov-25	237	500	480																						
01-Dec-25	238	500	470	6.29	13	1.5																			

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 2

Mass	1

Date	Cycle	Volume mL		pH	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	
	No.	Input	Output																						SGS File #
					mg/L	mg/L	µg/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	
19-Nov-18	0	500	410	8.28	1.53	0.00457	*<0.005*	0.0026	0.0002	*<0.0015*	3.04	0.00027	0.85	*<0.000025*	8.98	0.0694	10.3	*<0.0000025*	0.00004	0.00016	0.000040	0.00131	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	450	8.06	3.26	0.00656	*<0.005*	0.00381	*<0.00005*	0.005	2.82	0.00038	0.98	*<0.000025*	11.5	0.106	16.5	0.000005	0.00005	0.00007	0.000053	0.00154	*<0.001*	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	435	7.99	2.18	0.00560	*<0.005*	0.00241	*<0.00005*	*<0.0015*	1.69	0.00018	0.55	*<0.000025*	5.17	0.0590	11.8	*<0.0000025*	0.00010	0.00007	0.000021	0.00119	*<0.001*	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	440	7.91	1.76	0.00582	*<0.005*	0.00317	*<0.00005*	*<0.0015*	1.11	0.00010	0.80	*<0.000025*	2.60	0.0530	6.4	*<0.0000025*	0.00002	0.00007	0.000026	0.00100	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	450	8.06																					
24-Dec-18	5	500	445	8.15	1.10	0.00484	*<0.005*	0.00212	*<0.00005*	*<0.0015*	0.691	0.00008	0.59	*<0.000025*	1.14	0.0361	4.5	*<0.0000025*	0.00013	0.00023	0.000019	0.00099	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	455	7.82																					
07-Jan-19	7	500	460	7.73	1.12	0.00568	*<0.005*	0.00160	*<0.00005*	*<0.0015*	0.673	0.00009	0.69	*<0.000025*	0.92	0.0468	5.7	*<0.0000025*	0.00001	0.00009	0.000028	0.00115	*<0.001*	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	440	7.68																					
21-Jan-19	9	500	445	7.60	1.02	0.00449	*<0.005*	0.00210	*<0.00005*	*<0.0015*	0.499	0.00007	0.64	*<0.000025*	0.69	0.0334	4.5	*<0.0000025*	0.00003	0.00012	0.000045	0.00107	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	435	7.77																					
04-Feb-19	11	500	430	7.70	0.969	0.00386	*<0.005*	0.00221	*<0.00005*	*<0.0015*	0.348	0.00006	0.62	*<0.000025*	0.48	0.0318	5.2	*<0.0000025*	0.00003	0.00026	0.000020	0.00098	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	445	7.57																					
18-Feb-19	13	500	445	7.52	0.659	0.00330	*<0.005*	0.00094	*<0.00005*	*<0.0015*	0.391	0.00020	0.56	*<0.000025*	0.44	0.0194	3.9	*<0.0000025*	0.00002	0.00025	0.000014	0.00084	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	430	7.51																					
04-Mar-19	15	500	435	7.51	0.605	0.00372	*<0.005*	0.00030	*<0.00005*	*<0.0015*	0.282	0.00009	0.64	*<0.000025*	0.49	0.0204	1.8	*<0.0000025*	0.00007	0.00020	0.000014	0.00110	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	430	7.51																					
18-Mar-19	17	500	455	7.59	0.564	0.00345	*<0.005*	0.00058	*<0.00005*	*<0.0015*	0.265	0.00007	0.59	*<0.000025*	0.27	0.0177	3.1	*<0.0000025*	*<0.00003*	0.00022	0.000010	0.00081	*<0.001*	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	440	7.60																					
01-Apr-19	19	500	445	7.50	0.515	0.00426	*<0.005*	0.00232	*<0.00005*	*<0.0015*	0.217	0.00006	0.56	*<0.000025*	0.23	0.0160	2.0	*<0.0000025*	0.00008	0.00007	0.000013	0.00082	*<0.001*	*<0.001*	CA15038-APR19
08-Apr-19	20	500	445	7.74																					
15-Apr-19	21	500	445	7.91	0.429	0.00393	*<0.005*	0.00053	0.0008	*<0.0015*	0.200	0.00005	0.55	*<0.000025*	0.20	0.0148	0.8	*<0.0000025*	0.00009	0.00010	0.000012	0.00078	0.003	*<0.001*	CA15345-APR19
22-Apr-19	22	500	450	7.70																					
29-Apr-19	23	500	435	7.73	0.480	0.00438	*<0.005*	0.00034	*<0.00005*	*<0.0015*	0.217	0.00010	0.72	*<0.000025*	0.23	0.0163	2.6	*<0.0000025*	0.00013	0.00009	0.000013	0.00082	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	445	7.58																					
13-May-19	25	500	440	7.32	0.442	0.00454	*<0.005*	0.00040	*<0.00005*	*<0.0015*	0.193	0.00007	0.56	*<0.000025*	0.21	0.0132	3.2	*<0.0000025*	0.00006	0.00007	0.000008	0.00071	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	440	7.47																					
27-May-19	27	500	440	7.83	0.426	0.00587	*<0.005*	0.00011	*<0.00005*	*<0.0015*	0.174	0.00006	0.58	*<0.000025*	0.19	0.0133	1.9	*<0.0000025*	*<0.00003*	*<0.000025*	0.000009	0.00069	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	440	7.45																					
10-Jun-19	29	500	445	7.52	0.415	0.00458	*<0.005*	0.00033	0.0001	*<0.0015*	0.164	0.00006	0.51	*<0.000025*	0.18	0.0122	1.3	*<0.0000025*	*<0.00003*	0.00005	0.000007	0.00064	*<0.001*	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	425	7.48																					
24-Jun-19	31	500	455	7.52	0.436	0.00495	*<0.005*	0.00014	*<0.00005*	*<0.0015*	0.156	0.00005	0.49	*<0.000025*	0.19	0.0120	1.9	*<0.0000025*	0.00007	0.00015	0.000014	0.00064	*<0.001*	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	485	7.35																					
08-Jul-19	33	500	490	7.59	0.390	0.00362	*<0.005*	0.00026	*<0.00005*	*<0.0015*	0.133	0.00005	0.64	*<0.000025*	0.14	0.0137	5.7	*<0.0000025*	*<0.00003*	*<0.000025*	0.000020	0.00063	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	485	7.36																					
22-Jul-19	35	500	485	7.79	0.442	0.0294	*<0.005*	0.00008	0.0010	0.003	0.136	0.00005	0.49	*<0.000025*	0.13	0.0126	2.4	*<0.0000025*	*<0.00003*	*<0.000025*	0.000019	0.00054	0.006	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	465	7.31																					
05-Aug-19	37	500	460	7.86	0.386	0.00460	*<0.005*	0.00004	*<0.00005*	*<0.0015*	0.120	0.00004	0.58	*<0.000025*	0.15	0.0129	2.5	*<0.0000025*	*<0.00003*	*<0.000025*	0.000008	0.00057	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	465	7.77	0.279	0.00355	*<0.005*	0.00018	*<0.00005*	*<0.0015*	0.075	*<0.00002*	0.43	*<0.000025*	0.11	0.0109	1.3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000012	0.00047	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	475	7.72	0.350	0.00345	*<0.005*	0.00045	0.0002	*<0.0015*	0.105	*<0.00002*	0.48	*<0.000025*	0.12	0.0114	0.9	*<0.0000025*	*<0.00003*	*<0.000025*	0.000008	0.00054	*<0.001*	*<0.001*	CA15365-AUG19
26-Aug-19	40	500	505	7.41																					
02-Sep-19	41	500	485	7.72																					
09-Sep-19	42	500	490	7.37																					
16-Sep-19	43	500	485	7.20	0.307	0.00331	*<0.005*	0.00011	*<0.00005*	*<0.0015*	0.095	*<0.00002*	0.54	*<0.000025*	0.17	0.0103	0.8	*<0.0000025*	0.00045	*<0.000025*	0.000017	0.00051	*<0.001*	*<0.001*	CA15304-SEP19
23-Sep-19	44	500	505	7.22																					
30-Sep-19	45	500	450	7.54																					
07-Oct-19	46	500	465	7.59																					
14-Oct-19	47	500	495	7.68	0.398	0.00458	*<0.005*	0.00012	*<0.00005*	0.003	0.100	0.00005	0.60	*<0.000025*	0.18	0.0141	2.0	*<0.0000025*	*<0.00003*	*<0.000025*	0.000020	0.00041	*<0.001*	*<0.001*	CA15338-OCT19
21-Oct-19	48	500	505	7.72																					
28-Oct-19	49	500	500	7.30																					
04-Nov-19	50	500	495	7.20																					
11-Nov-19	51	500	510	7.27	0.354	0.00564	*<0.005*	0.00006	0.0002	*<0.0015*	0.097	*<0.00002*	0.71	*<0.000025*	0.12	0.01172	2.0	*<0.0000025*	*<0.00003*	*<0.000025*	0.000012	0.00045	0.002	*<0.001*	CA15229-NOV19
18-Nov-19	52	500	495	7.28																					
25-Nov-19	53	500	490	7.28																					
02-Dec-19	54	500	475	7.57																					
09-Dec-19	55	500	475	7.19	0.340	0.00607	*<0.005*	0.00018	0.0006	*<0.0015*	0.088	*<0.00002*	0.56	*<0.000025*	0.11	0.00975	*<0.15*	*<0.0000025*	0.00007	*<0.000025*	0.000161	0.00047	0.002	*<0.001*	CA15172-DEC19
16-Dec-19	56	500	480	7.21																					
23-Dec-19	57	500	485	7.34																					
30-Dec-19	58	500	450	7.07																					
06-Jan-20	59	500	460	7.15	0.306	0.00597	*<0.005*	0.00008	0.0002	*<0.0015*	0.038	0.00007	0.51	*<0.000025*	0.25	0.00913	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	0.000009	0.00038	*<0.001*	*<0.001*	CA15109-JAN20
13-Jan-20	60	500	470	7.02																					
20-Jan-20	61	500	480	7.52																					
27-Jan-20	62	500	470	7.21																					
03-Feb-20	63	500	480	7.67	0.290	0.00427	*<0.005*	0.00005	*<0.00005*	*<0.0015*	0.064	*<0.00002*	0.44	*<0.000025*	0.08	0.00948	0.9	*<0.0000025*	0.00010	*<0.000025*	0.000020	0.00038	*<0.001*	*<0.001*	CA15086-FEB20
10-Feb-20	64	500	475	7.31																					

HC 2

Mass	1

Date	Cycle	Volume mL		pH	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	
	No.	Input	Output																						SGS File #
17-Feb-20	65	500	475	7.59																					
24-Feb-20	66	500	465	6.98																					
02-Mar-20	67	500	470	7.09	0.302	0.00415	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.060	*<0.00002*	0.45	*<0.000025*	0.11	0.00889	1.5	*<0.0000025*	*<0.00003*	*<0.000025*	0.000006	0.00033	*<0.001*	*<0.001*	CA15052-MAR20
09-Mar-20	68	500	495	6.70																					
16-Mar-20	69	500	495	7.25																					
23-Mar-20	70	500	460	7.15																					
30-Mar-20	71	500	495	7.23	0.281	0.00369	0.01	*<0.00002*	*<0.00005*	*<0.0015*	0.065	*<0.00002*	0.50	*<0.000025*	0.10	0.00936	1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000012	0.00033	*<0.001*	*<0.001*	CA15022-APR20
06-Apr-20	72	500	510	6.92																					
13-Apr-20	73	500	495	7.67																					
20-Apr-20	74	500	485	7.61																					
27-Apr-20	75	500	475	7.30	0.281	0.00347	*<0.005*	0.00006	0.0001	*<0.0015*	0.056	*<0.00002*	0.48	*<0.000025*	0.13	0.00728	1	*<0.0000025*	*<0.00003*	*<0.000025*	0.000022	0.00028	*<0.001*	*<0.001*	CA15510-APR20
04-May-20	76	500	440	6.98																					
11-May-20	77	500	475	7.21																					
18-May-20	78	500	460	7.33																					
25-May-20	79	500	430	6.91	0.219	0.00358	*<0.005*	0.00005	*<0.00005*	*<0.0015*	0.055	*<0.00002*	0.38	*<0.000025*	0.08	0.00631	1	*<0.0000025*	0.00013	*<0.000025*	0.000005	0.00028	*<0.001*	*<0.001*	CA15448-MAY20
01-Jun-20	80	500	460	6.85																					
08-Jun-20	81	500	495	7.12																					
15-Jun-20	82	500	495	7.16																					
22-Jun-20	83	500	485	7.31	0.282	0.00390	*<0.005*	0.00007	*<0.00005*	*<0.0015*	0.069	*<0.00002*	0.38	*<0.000025*	0.09	0.00873	2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000004	0.00032	*<0.001*	*<0.001*	CA15625-JUN20
29-Jun-20	84	500	475	7.81																					
06-Jul-20	85	500	470	6.81																					
13-Jul-20	86	500	455	6.90																					
20-Jul-20	87	500	445	6.90	0.238	0.00465	*<0.005*	0.00093	0.0002	*<0.0015*	0.072	0.00005	0.35	*<0.000025*	0.16	0.00702	2	*<0.0000025*	0.00012	0.00008	0.000141	0.00028	0.003	*<0.001*	CA15914-JUL20
27-Jul-20	88	500	465	7.17																					
03-Aug-20	89	500	435	6.98																					
10-Aug-20	90	500	490	7.08																					
17-Aug-20	91	500	450	7.07	0.226	0.00451	*<0.005*	0.00010	*<0.00005*	*<0.0015*	0.059	*<0.00002*	0.41	*<0.000025*	0.16	0.00684	3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000004	0.00026	0.002	*<0.001*	CA15359-AUG20
24-Aug-20	92	500	430	6.64																					
31-Aug-20	93	500	460	7.21																					
07-Sep-20	94	500	430	7.11																					
14-Sep-20	95	500	450	7.22	0.256	0.00624	*<0.005*	0.00006	0.0003	*<0.0015*	0.059	*<0.00002*	0.47	*<0.000025*	0.20	0.00849	2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000007	0.00022	*<0.001*	*<0.001*	CA15270-SEP20
21-Sep-20	96	500	465	7.07																					
28-Sep-20	97	500	425	7.14																					
05-Oct-20	98	500	435	7.00																					
12-Oct-20	99	500	435	7.13	0.264	0.00619	*<0.005*	0.00006	*<0.00005*	*<0.0015*	0.058	*<0.00002*	0.35	*<0.000025*	0.09	0.00672	2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000012	0.00023	*<0.001*	*<0.001*	CA14261-OCT20
19-Oct-20	100	500	455	7.21																					
26-Oct-20	101	500	435	7.18																					
02-Nov-20	102	500	485	7.23																					
09-Nov-20	103	500	435	7.38	0.206	0.00586	*<0.005*	0.00035	0.0002	*<0.0015*	0.054	*<0.00002*	0.26	*<0.000025*	0.09	0.00531	1	*<0.0000025*	0.00011	*<0.000025*	0.000005	0.00019	0.002	*<0.001*	CA15190-NOV20
16-Nov-20	104	500	445	7.33																					
23-Nov-20	105	500	490	7.04																					
30-Nov-20	106	500	500	7.33																					
07-Dec-20	107	500	500	7.13	0.265	0.00667	0.02	0.00006	*<0.00005*	*<0.0015*	0.049	*<0.00002*	0.48	*<0.000025*	0.05	0.00933	2	*<0.0000025*	0.00006	*<0.000025*	0.000007	0.00020	*<0.001*	*<0.001*	CA15120-DEC20
14-Dec-20	108	500	510	7.12																					
21-Dec-20	109	500	420	7.01																					
28-Dec-20	110	500	510	7.03																					
04-Jan-21	111	500	490	6.91	0.221	0.00581	0.02	0.00019	0.0002	*<0.0015*	0.038	0.00005	0.42	*<0.000025*	0.08	0.00720	2	*<0.0000025*	0.00059	*<0.000025*	0.000009	0.00020	0.004	*<0.001*	CA15022-JAN21
11-Jan-21	112	500	500	7.00																					
18-Jan-21	113	500	495	7.26																					
25-Jan-21	114	500	435	7.36																					
01-Feb-21	115	500	510	7.32	0.250	0.00721	*<0.005*	0.00016	0.0003	*<0.0015*	0.059	*<0.00002*	0.51	*<0.000025*	0.09	0.00751	4	*<0.0000025*	0.00011	*<0.000025*	0.000006	0.00023	0.007	*<0.001*	CA15532-APR21
15-May-23	116	500	435	6.93	0.634	0.0343	*<0.005*	0.00048	0.0007	*<0.0015*	0.201	0.00011	0.38	0.00005	0.28	0.0138	3	*<0.0000025*	0.00110	0.00009	0.000012	0.00013	0.004	*<0.001*	CA15185-MAY23
22-May-23	117	500	420	7.25	1.28	0.0234	*<0.005*	0.00022	0.0001	*<0.0015*	0.127	0.00033	0.65	0.00006	0.26	0.0230	10	*<0.0000025*	0.00114	0.00021	0.000005	0.00017	0.016	*<0.001*	CA15933-MAY23
29-May-23	118	500	465	7.32	0.682	0.00706	*<0.005*	0.00026	*<0.00005*	*<0.0015*	0.114	0.00010	0.55	*<0.000025*	0.19	0.0131	5	*<0.0000025*	0.00008	*<0.000025*	0.000085	0.00022	*<0.001*	*<0.001*	CA19819-MAY23
05-Jun-23	119	500	470	7.44																					
12-Jun-23	120	500	460	7.37																					
19-Jun-23	121	500	485	7.23																					
26-Jun-23	122	500	520	7.22	0.360	0.00611	*<0.005*	0.00008	*<0.00005*	*<0.0015*	0.068	*<0.00002*	0.48	*<0.000025*	0.10	0.00886	*<1.5*	*<0.0000025*	0.00007	*<0.000035*	0.000004	0.00019	*<0.001*	*<0.001*	CA15323-JUN23
03-Jul-23	123	500	490	7.23																					
10-Jul-23	124	500	505	7.27																					
17-Jul-23	125	500	465	7.14																					
24-Jul-23	126	500	485	6.88	0.407	0.00728	*<0.005*	0.00014	*<0.00005*	*<0.0015*	0.048	0.00008	0.52	*<0.000025*	0.12	0.00919	4	*<0.0000025*	*<0.00003*	*<0.000035*	0.000003	0.00014	*<0.001*	*<0.001*	CA15144-JUL23 Revised
31-Jul-23	127	500	500	7.28																					
07-Aug-23	128	500	495	7.16																					
14-Aug-23	129	500	450	7.23																					
21-Aug-23	130	500	480	7.20	0.413	0.00598	*<0.005*	0.00020	*<0.00005*	*<0.0015*	0.051	0.00004	0.50	*<0.000025*	0.14	0.00924	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	*<0.000001*	0.00017	*<0.001*	*<0.001*	CA15748-AUG23

HC 2

Mass	1

Date	Cycle	Volume mL		pH	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	
	No.	Input	Output																						SGS File #
28-Aug-23	131	500	450	7.14																					
04-Sep-23	132	500	460	7.17																					
11-Sep-23	133	500	455	6.98																					
18-Sep-23	134	500	460	7.13	0.277	0.00501	*<0.005*	0.00011	0.0001	*<0.0015*	0.032	*<0.00002*	0.41	*<0.000025*	0.11	0.00522	*<1.5*	*<0.0000025*	0.0001	*<0.000035*	0.000005	0.0002	*<0.001*	*<0.001*	CA15126-SEP23
25-Sep-23	135	500	465	7.13																					
02-Oct-23	136	500	445	7.25																					
09-Oct-23	137	500	455	6.98																					
16-Oct-23	138	500	460	7.03	0.252	0.00492	0.01	0.00015	*<0.00005*	*<0.0015*	0.033	*<0.00002*	0.34	*<0.000025*	0.07	0.00503	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000003	0.00016	*<0.001*	*<0.001*	CA15306-OCT23
23-Oct-23	139	500	460	7.09																					
30-Oct-23	140	500	435	7.10																					
06-Nov-23	141	500	430	7.22																					
13-Nov-23	142	500	480	7.12	0.273	0.00629	*<0.005*	0.00009	*<0.00005*	*<0.0015*	0.036	0.00007	0.42	*<0.000025*	0.13	0.00674	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	*<0.000001*	0.00013	0.002	*<0.001*	CA14528-NOV23
20-Nov-23	143	500	460	7.12																					
12-Feb-24	144	500	420	6.86	0.544	0.0147	*<0.005*	*<0.0002*	0.0003	0.003	0.145	0.00018	0.63	*<0.000025*	0.27	0.0109	6	*<0.0000025*	*<0.00003*	*<0.00005*	0.000005	0.00013	*<0.001*	*<0.001*	CA15188-FEB24
19-Feb-24	145	500	440	7.07																					
26-Feb-24	146	500	475	7.24	0.3	0.00908	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.049	*<0.00002*	0.58	*<0.000025*	0.1	0.0069	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00014	0.002	*<0.001*	CA15718-FEB24
04-Mar-24	147	500	465	6.65																					
11-Mar-24	148	500	520	7.37	0.273	0.00669	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.038	*<0.00002*	0.43	*<0.000025*	0.09	0.0058	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000003	0.00012	0.004	*<0.001*	CA15063-MAR24
18-Mar-24	149	500	455	6.89																					
25-Mar-24	150	500	465	7.02	0.268	0.00692	*<0.005*	*<0.0002*	*<0.00005*	*<0.0015*	0.043	*<0.00002*	0.42	*<0.000025*	0.10	0.00544	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00016	*<0.001*	*<0.001*	CA15244-MAR24
01-Apr-24	151	500	490	7.09																					
08-Apr-24	152	500	490	6.98	0.289	0.00645	*<0.005*	*<0.0002*	*<0.00005*	*<0.0015*	0.041	*<0.00002*	0.42	*<0.000025*	0.06	0.00515	*<2.5*	*<0.0000025*	*<0.00003*	0.0001	*<0.000001*	0.00014	*<0.001*	*<0.001*	CA14495-APR24
15-Apr-24	153	500	455	6.90																					
22-Apr-24	154	500	450	6.77	0.225	0.0057	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.027	*<0.00002*	0.32	*<0.000025*	0.1	0.00383	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00011	*<0.001*	*<0.001*	CA15164-APR24
29-Apr-24	155	500	465	6.85																					
06-May-24	156	500	460	7.03	0.287	0.00621	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.027	*<0.00002*	0.38	*<0.000025*	0.05	0.00517	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00018	*<0.001*	*<0.001*	CA15687-MAY24
13-May-24	157	500	465	6.92																					
20-May-24	158	500	520	7.03	0.293	0.00568	*<0.005*	*<0.0002*	*<0.00005*	*<0.0015*	0.038	*<0.00002*	0.42	*<0.000025*	0.05	0.00530	*<2.5*	*<0.0000025*	*<0.00003*	0.0004	0.000003	0.00012	0.005	*<0.001*	CA14653-MAY24
27-May-24	159	500	460	7.00																					
03-Jun-24	160	500	470	7.01																					
10-Jun-24	161	500	470	6.89																					
17-Jun-24	162	500	510	6.93	0.308	0.00571	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.037	*<0.00002*	0.41	0.00012	0.14	0.00533	*<2.5*	*<0.0000025*	*<0.00003*	0.0009	0.000002	0.00010	0.018	*<0.001*	CA15792-JUN24
24-Jun-24	163	500	510	6.96																					
01-Jul-24	164	500	470	6.86																					
08-Jul-24	165	500	460	6.85																					
15-Jul-24	166	500	500	6.97	0.314	0.00739	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.034	*<0.00002*	0.44	*<0.000025*	0.1	0.0055	*<2.5*	*<0.0000025*	0.00012	0.0008	0.000004	0.00011	*<0.001*	*<0.001*	CA15744-JUL24
22-Jul-24	167	500	455	6.84																					
29-Jul-24	168	500	470	6.77																					
05-Aug-24	169	500	460	6.84																					
12-Aug-24	170	500	460	6.79	0.21	0.00611	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.024	*<0.00002*	0.28	*<0.000025*	0.1	0.00411	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000005	0.00013	*<0.001*	*<0.001*	CA15691-AUG24
19-Aug-24	171	500	460	6.85																					
26-Aug-24	172	500	465	6.79																					
02-Sep-24	173	500	470	6.78																					
09-Sep-24	174	500	490	6.86	0.248	0.00672	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.027	*<0.00002*	0.34	*<0.000025*	0.07	0.00435	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000003	0.00009	*<0.001*	*<0.001*	CA15513-SEP24
16-Sep-24	175	500	470	6.83																					
23-Sep-24	176	500	475	6.84																					
30-Sep-24	177	500	490	6.85																					
07-Oct-24	178	500	490	6.89	0.247	0.00628	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.030	*<0.00002*	0.35	*<0.000025*	*<0.005*	0.00391	*<2.5*	*<0.0000025*	0.00011	*<0.00005*	0.000017	0.00009	*<0.001*	*<0.001*	CA15622-OCT24
14-Oct-24	179	500	465	6.80																					
21-Oct-24	180	500	480	6.81																					
28-Oct-24	181	500	470	6.74																					
04-Nov-24	182	500	490	6.80	0.214	0.00676	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.033	*<0.00002*	0.27	*<0.000025*	0.06	0.00382	*<2.5*	*<0.0000025*	*<0.00003*	0.00037	0.000002	0.00008	*<0.001*	*<0.001*	CA14123-NOV24
11-Nov-24	183	500	510	6.66																					
18-Nov-24	184	500	435	6.70																					
25-Nov-24	185	500	495	6.74																					
02-Dec-24	186	500	445	6.55	0.202	0.00783	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.022	*<0.00002*	0.24	*<0.000025*	0.08	0.00384	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00006	*<0.001*	*<0.001*	CA15025-DEC24
09-Dec-24	187	500	450	6.70																					
16-Dec-24	188	500	510	6.84																					
23-Dec-24	189	500	460	6.73																					
30-Dec-24	190	500	470	6.61	0.247	0.00889	*<0.005*	*<0.0002*	0.0003	*<0.0015*	0.024	*<0.00002*	0.31	*<0.000025*	0.11	0.00435	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00006	0.008	*<0.001*	CA15685-DEC24
06-Jan-25	191	500	450	6.67																					
13-Jan-25	192	500	435	6.70																					
20-Jan-25	193	500	465	6.75																					
27-Jan-25	194	500	520	6.79	0.264	0.01011	*<0.005*	*<0.0002*	0.0004	*<0.0015*	0.020	0.00005	0.29	*<0.000025*	0.10	0.00413	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000166	0.00007	*<0.001*	*<0.001*	CA15831-JAN25
03-Feb-25	195	500	460	6.55																					
10-Feb-25	196	500	415	6.69																					

HC 2

Mass	1																						
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
17-Feb-25	197	500	415																						
24-Feb-25	198	500	470	7.16	0.208	0.00887	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.03	*<0.00002*	0.26	*<0.000025*	0.09	0.00389	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00007	0.004	*<0.001*	CA15728-FEB25
03-Mar-25	199	500	475																						
10-Mar-25	200	500	455	6.75																					
17-Mar-25	201	500	455																						
24-Mar-25	202	500	465	6.40	0.171	0.00873	*<0.005*	*<0.0002*	0.0001	*<0.0015*	0.018	*<0.00002*	0.20	*<0.000025*	0.06	0.00303	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00003	0.004	*<0.001*	CA15317-MAR25
31-Mar-25	203	500	490																						
07-Apr-25	204	500	500	6.52																					
14-Apr-25	205	500	500																						
21-Apr-25	206	500	500	6.79	0.243	0.0296	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.025	*<0.00002*	0.24	*<0.000025*	0.07	0.00407	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00005	0.033	*<0.001*	CA15134-APR25
28-Apr-25	207	500	470																						
05-May-25	208	500	475	6.59																					
12-May-25	209	500	455																						
19-May-25	210	500	505	6.70	0.265	0.0124	*<0.005*	*<0.0002*	0.0003	*<0.0015*	0.039	*<0.00002*	0.32	*<0.000025*	0.08	0.00460	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00006	0.003	*<0.001*	CA15039-MAY25
26-May-25	211	500	495																						
02-Jun-25	212	500	465	6.66																					
09-Jun-25	213	500	475																						
16-Jun-25	214	500	455	6.61	0.213	0.0101	*<0.005*	*<0.0002*	0.0002	*<0.0015*	0.041	*<0.00002*	0.25	*<0.000025*	0.07	0.00343	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00005	*<0.001*	*<0.001*	CA15127-JUN25
23-Jun-25	215	500	495																						
30-Jun-25	216	500	430	6.53																					
07-Jul-25	217	500	440																						
14-Jul-25	218	500	445	6.49	0.209	0.0136	*<0.005*	*<0.0002*	0.0003	*<0.0015*	0.030	*<0.00002*	0.24	*<0.000025*	0.13	0.00375	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00004	*<0.001*	*<0.001*	CA15617-JUL25
21-Jul-25	219	500	515																						
28-Jul-25	220	500	430	6.44																					
04-Aug-25	221	500	440																						
11-Aug-25	222	500	440	6.46	0.185	0.0126	*<0.005*	*<0.0002*	0.0003	*<0.0015*	0.024	*<0.00002*	0.22	*<0.000025*	0.13	0.00302	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00005	*<0.001*	*<0.001*	CA14121-AUG25
18-Aug-25	223	500	445																						
25-Aug-25	224	500	430	6.36																					
01-Sep-25	225	500	450																						
08-Sep-25	226	500	430	6.33	0.169	0.0146	*<0.005*	*<0.0002*	0.0003	*<0.0015*	0.022	*<0.00002*	0.21	*<0.000025*	0.09	0.00326	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00003	*<0.001*	*<0.001*	CA15100-SEP25
15-Sep-25	227	500	455																						
22-Sep-25	228	500	505	6.36																					
29-Sep-25	229	500	455																						
06-Oct-25	230	500	465	6.26	0.173	0.0179	*<0.005*	*<0.0002*	0.0010	*<0.0015*	0.033	*<0.00002*	0.30	*<0.000025*	0.07	0.00370	*<2.5*	*<0.0000025*	*<0.00003*	0.00015	0.000002	0.00004	0.007	*<0.001*	CA15520-OCT25
13-Oct-25	231	500	470																						
20-Oct-25	232	500	505	6.39																					
27-Oct-25	233	500	485																						
03-Nov-25	234	500	510	6.45	0.22	0.0164	*<0.005*	*<0.0002*	0.0005	*<0.0015*	0.028	*<0.00002*	0.35	*<0.000025*	0.08	0.00409	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00005	0.005	*<0.001*	CA15020-NOV25
10-Nov-25	235	500	500																						
17-Nov-25	236	500	475	6.24																					
24-Nov-25	237	500	480																						
01-Dec-25	238	500	470	6.29																					

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 3

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Alkalinity**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**							**CaCO3**															
			#N/A		umhos/cm	mgCaCO3/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
19-Nov-18	0	500	400	8.81	80	15.9	5	4	*<0.03*	23.9	0.133	0.0031	0.0020	0.00826	*<0.0000035*	0.000013	0.031	*<0.0000015*	7.84	0.00006	0.000052	0.00256	*<0.0035*	*<0.000005*	0.0007
26-Nov-18	1	500	435	8.36	86	21.4	8	2	0.08	24.9	0.131	0.0049	0.0022	0.00888	*<0.0000035*	*<0.0000035*	0.044	0.000026	7.47	*<0.000015*	0.000089	0.00382	*<0.0035*	0.00037	0.0006
03-Dec-18	2	500	440	8.43	57	16.8	6	*<0.5*	0.06	20.2	0.117	0.0042	0.0023	0.00595	*<0.0000035*	*<0.0000035*	0.019	0.000012	6.14	*<0.000015*	0.000049	0.00237	*<0.0035*	0.00002	0.0004
10-Dec-18	3	500	435	8.52	42	17.1	6	*<0.5*	*<0.03*	18.2	0.116	0.0031	0.0022	0.00613	*<0.0000035*	*<0.0000035*	0.016	0.000012	5.67	0.00017	0.000027	0.00100	*<0.0035*	*<0.000005*	0.0004
17-Dec-18	4	500	440	8.63	44		4																		
24-Dec-18	5	500	450	8.49	42	16.3	4	*<0.5*	*<0.03*	17.7	0.111	0.0024	0.0023	0.00574	*<0.0000035*	*<0.0000035*	0.009	0.000119	5.72	0.00008	*<0.000002*	0.00061	*<0.0035*	*<0.000005*	0.0004
31-Dec-18	6	500	460	8.28	48		4																		
07-Jan-19	7	500	450	8.06	43	15.5	5	*<0.5*	*<0.03*	20.9	0.136	0.0026	0.0026	0.00735	*<0.0000035*	*<0.0000035*	0.009	0.000007	6.84	0.00005	0.000030	0.00151	*<0.0035*	*<0.000005*	0.0004
14-Jan-19	8	500	435	7.97	40		3																		
21-Jan-19	9	500	455	8.03	39	17.0	3	*<0.5*	*<0.03*	19.7	0.150	0.0015	0.0027	0.00561	0.000021	*<0.0000035*	0.006	0.000029	6.50	*<0.000015*	0.000015	0.00099	*<0.0035*	0.00001	0.0006
28-Jan-19	10	500	445	8.35	36		3																		
04-Feb-19	11	500	450	8.43	28	13.1	3	*<0.5*	*<0.03*	14.7	0.137	0.0010	0.0022	0.00410	*<0.0000035*	*<0.0000035*	0.004	0.000013	4.81	*<0.000015*	0.000013	0.00279	*<0.0035*	0.00003	0.0027
11-Feb-19	12	500	445	7.79	33		2																		
18-Feb-19	13	500	425	8.01	34	13.6	3	*<0.5*	*<0.03*	16.3	0.128	0.0012	0.0020	0.00548	*<0.0000035*	*<0.0000035*	0.008	0.000018	5.56	*<0.000015*	0.000009	0.00248	*<0.0035*	*<0.000005*	0.0004
25-Feb-19	14	500	445	8.26	35		3																		
04-Mar-19	15	500	430	8.02	35	21.1	3	*<0.5*	*<0.03*	17.3	0.145	0.0012	0.0023	0.00468	*<0.0000035*	*<0.0000035*	0.004	0.000027	5.96	*<0.00004*	0.000010	0.0014	*<0.0035*	*<0.000005*	0.0004
11-Mar-19	16	500	475	7.81	35		3																		
18-Mar-19	17	500	445	7.94	30	10.1	3	*<0.5*	*<0.03*	16.6	0.142	*<0.00045*	0.0020	0.00384	*<0.0000035*	*<0.0000035*	0.004	0.000020	5.79	*<0.00004*	*<0.000002*	0.0017	*<0.0035*	*<0.000005*	0.0002
25-Mar-19	18	500	435	7.58	32		2																		
01-Apr-19	19	500	450	7.97	31	13.7	2	*<0.5*	*<0.03*	15.5	0.137	*<0.00045*	0.0019	0.00394	*<0.0000035*	*<0.0000035*	0.003	0.000005	5.35	*<0.00004*	0.000013	0.0017	*<0.0035*	*<0.000005*	0.0003
08-Apr-19	20	500	455	8.33	31		3																		
15-Apr-19	21	500	480	8.22	33	13.2	2	*<0.5*	*<0.03*	16.0	0.118	0.0010	0.0018	0.00453	*<0.0000035*	*<0.0000035*	0.004	0.000028	5.63	*<0.00004*	0.000010	0.0012	*<0.0035*	*<0.000005*	0.0002
22-Apr-19	22	500	485	8.29	34		2																		
29-Apr-19	23	500	485	8.04	33	16.8	*<1*	*<0.5*	*<0.03*	18.9	0.123	0.0012	0.0019	0.00464	*<0.0000035*	*<0.0000035*	0.004	0.000022	6.68	*<0.00004*	0.000021	0.0013	*<0.0035*	*<0.000005*	0.0002
06-May-19	24	500	480	7.94	36		2																		
13-May-19	25	500	475	7.83	34	13.9	2	*<0.5*	*<0.03*	17.8	0.118	0.0009	0.0018	0.00411	*<0.0000035*	*<0.0000035*	0.004	0.000022	6.36	*<0.00004*	0.000018	0.0011	*<0.0035*	*<0.000005*	0.0002
20-May-19	26	500	505	7.96	36		2																		
27-May-19	27	500	490	8.03	35	15.3	3	*<0.5*	*<0.03*	17.6	0.129	*<0.00045*	0.0017	0.00426	*<0.0000035*	*<0.0000035*	0.005	0.000021	6.35	*<0.00004*	0.000023	0.0019	*<0.0035*	*<0.000005*	0.0003
03-Jun-19	28	500	455	8.02	29		*<1*																		
10-Jun-19	29	500	475	7.93	34	14.2	2	*<0.5*	*<0.03*	15.6	0.115	*<0.00045*	0.0018	0.00445	*<0.0000035*	*<0.0000035*	0.004	0.000017	5.54	*<0.00004*	0.000018	0.0010	*<0.0035*	*<0.000005*	0.0001
17-Jun-19	30	500	480	7.89	29		2																		
24-Jun-19	31	500	485	7.95	33	13.4	2	*<0.5*	*<0.03*	17.4	0.106	*<0.00045*	0.0015	0.00390	*<0.0000035*	*<0.0000035*	0.004	0.000018	6.27	*<0.00004*	0.000018	0.0015	*<0.0035*	*<0.000005*	0.0002
01-Jul-19	32	500	500	7.75	34		2																		
08-Jul-19	33	500	500	7.95	32	15.4	2	*<0.5*	*<0.03*	17.0	0.102	*<0.00045*	0.0014	0.00350	*<0.0000035*	*<0.0000035*	0.004	0.000032	6.14	*<0.00004*	0.000017	0.0007	*<0.0035*	*<0.000005*	*<0.00005*
15-Jul-19	34	500	490	7.96	25		2																		
22-Jul-19	35	500	480	8.29	31	14.0	*<1*	*<0.5*	*<0.03*	16.5	0.111	*<0.00045*	0.0014	0.00347	*<0.0000035*	*<0.0000035*	0.004	0.000027	5.95	*<0.00004*	0.000015	0.0008	*<0.0035*	0.00002	*<0.00005*
29-Jul-19	36	500	450	7.81	28		2																		
05-Aug-19	37	500	465	8.31	29	13.8	2	*<0.5*	*<0.03*	16.5	0.120	*<0.00045*	0.0015	0.00348	*<0.0000035*	*<0.0000035*	0.003	0.000042	5.99	*<0.00004*	0.000013	0.0008	*<0.0035*	*<0.000005*	0.0001
12-Aug-19	38	500	470	8.29	24	13.3	3	*<0.5*	*<0.03*	12.7	0.095	*<0.00045*	0.0013	0.00294	*<0.0000035*	*<0.0000035*	*<0.001*	0.000023	4.66	*<0.00004*	0.000019	0.0010	*<0.0035*	*<0.000005*	0.0001
19-Aug-19	39	500	475	8.00	28	12.7	*<1*	*<0.5*	*<0.03*	15.7	0.099	*<0.00045*	0.0012	0.00331	*<0.0000035*	*<0.0000035*	0.002	0.000017	5.75	*<0.00004*	0.000016	0.0010	*<0.0035*	*<0.000005*	0.0001

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 3

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
			#N/A		mg/L	mg/L	µg/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	
19-Nov-18	0	500	400	8.81	1.05	0.00298	*<0.005*	0.0300	0.0005	*<0.0015*	2.07	0.00053	0.72	*<0.000025*	4.15	0.111	2.2	*<0.0000025*	0.00086	0.00028	0.000015	0.00318	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	435	8.36	1.51	0.00377	*<0.005*	0.0701	0.0005	*<0.0015*	2.00	0.00076	0.92	*<0.000025*	5.13	0.129	3.5	*<0.0000025*	0.00773	0.00007	0.000047	0.00512	0.008	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	440	8.43	1.17	0.00337	*<0.005*	0.0558	0.0002	*<0.0015*	1.43	0.00053	0.57	*<0.000025*	2.67	0.0819	4.6	*<0.0000025*	0.00014	0.00007	0.000035	0.00448	*<0.001*	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	435	8.52	0.995	0.00400	*<0.005*	0.0473	*<0.00005*	*<0.0015*	0.994	0.00060	0.81	*<0.000025*	1.30	0.0841	1.1	*<0.0000025*	0.00009	0.00022	0.000042	0.00392	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	440	8.63																					
24-Dec-18	5	500	450	8.49	0.828	0.00396	*<0.005*	0.0646	*<0.00005*	*<0.0015*	0.668	0.00052	0.59	*<0.000025*	0.59	0.0702	1.2	*<0.0000025*	0.00010	0.00013	0.000045	0.00337	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	460	8.28																					
07-Jan-19	7	500	450	8.06	0.926	0.00456	*<0.005*	0.0809	0.0001	*<0.0015*	0.645	0.00063	0.69	*<0.000025*	0.51	0.0757	2.0	*<0.0000025*	0.00003	0.00021	0.000055	0.00355	*<0.001*	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	435	7.97																					
21-Jan-19	9	500	455	8.03	0.844	0.00450	*<0.005*	0.0895	*<0.00005*	*<0.0015*	0.481	0.00051	0.65	*<0.000025*	0.38	0.0663	1.1	*<0.0000025*	0.00005	0.00027	0.000051	0.00318	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	445	8.35																					
04-Feb-19	11	500	450	8.43	0.661	0.00334	*<0.005*	0.0612	*<0.00005*	*<0.0015*	0.292	0.00059	0.60	*<0.000025*	0.24	0.0510	0.3	*<0.0000025*	0.00013	0.00021	0.000031	0.00278	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	445	7.79																					
18-Feb-19	13	500	425	8.01	0.595	0.00310	*<0.005*	0.0712	*<0.00005*	*<0.0015*	0.387	0.00058	0.65	*<0.000025*	0.29	0.0450	1.4	*<0.0000025*	0.00004	0.00010	0.000031	0.00232	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	445	8.26																					
04-Mar-19	15	500	430	8.02	0.597	0.00419	*<0.005*	0.0930	*<0.00005*	*<0.0015*	0.274	0.00049	0.66	*<0.000025*	0.28	0.0481	*<0.15*	*<0.0000025*	0.00006	0.00011	0.000038	0.00284	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	475	7.81																					
18-Mar-19	17	500	445	7.94	0.530	0.00447	*<0.005*	0.0607	*<0.00005*	*<0.0015*	0.243	0.00042	0.58	*<0.000025*	0.17	0.0420	0.9	*<0.0000025*	*<0.00003*	0.00014	0.000030	0.00265	*<0.001*	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	435	7.58																					
01-Apr-19	19	500	450	7.97	0.518	0.00356	*<0.005*	0.0645	*<0.00005*	*<0.0015*	0.206	0.00043	0.58	*<0.000025*	0.15	0.0383	*<0.15*	*<0.0000025*	0.00010	0.00012	0.000032	0.00237	*<0.001*	*<0.001*	CA15038-APR19
08-Apr-19	20	500	455	8.33																					
15-Apr-19	21	500	480	8.22	0.465	0.00443	*<0.005*	0.0738	0.0001	*<0.0015*	0.168	0.00037	0.67	*<0.000025*	0.12	0.0398	*<0.15*	*<0.0000025*	0.00008	0.00010	0.000040	0.00215	0.003	*<0.001*	CA15345-APR19
22-Apr-19	22	500	485	8.29																					
29-Apr-19	23	500	485	8.04	0.536	0.00525	*<0.005*	0.0856	*<0.00005*	*<0.0015*	0.196	0.00036	0.61	*<0.000025*	0.15	0.0460	0.8	*<0.0000025*	0.00009	*<0.000025*	0.000049	0.00211	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	480	7.94																					
13-May-19	25	500	475	7.83	0.473	0.00558	*<0.005*	0.0726	*<0.00005*	*<0.0015*	0.168	0.00038	0.65	*<0.000025*	0.13	0.0364	1.6	*<0.0000025*	0.00006	0.00009	0.000026	0.00187	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	505	7.96																					
27-May-19	27	500	490	8.03	0.435	0.00617	*<0.005*	0.0683	*<0.00005*	*<0.0015*	0.162	0.00029	0.68	*<0.000025*	0.12	0.0364	*<0.15*	*<0.0000025*	0.00012	*<0.000025*	0.000031	0.00188	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	455	8.02																					
10-Jun-19	29	500	475	7.93	0.423	0.00512	*<0.005*	0.0889	*<0.00005*	*<0.0015*	0.135	0.00034	0.62	*<0.000025*	0.11	0.0298	*<0.15*	*<0.0000025*	*<0.00003*	0.00006	0.000031	0.00190	*<0.001*	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	480	7.89																					
24-Jun-19	31	500	485	7.95	0.415	0.00575	*<0.005*	0.0924	*<0.00005*	*<0.0015*	0.138	0.00027	0.59	*<0.000025*	0.12	0.0300	3.4	*<0.0000025*	0.00015	*<0.000025*	0.000029	0.00165	*<0.001*	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	500	7.75																					
08-Jul-19	33	500	500	7.95	0.411	0.00509	*<0.005*	0.0780	*<0.00005*	*<0.0015*	0.134	0.00024	0.59	*<0.000025*	0.08	0.0314	3.5	*<0.0000025*	*<0.00003*	0.00006	0.000034	0.00153	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	490	7.96																					
22-Jul-19	35	500	480	8.29	0.393	0.00567	0.01	0.0812	*<0.00005*	*<0.0015*	0.119	0.00024	0.47	*<0.000025*	0.08	0.0261	0.4	*<0.0000025*	*<0.00003*	0.00005	0.000028	0.00145	*<0.001*	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	450	7.81																					
05-Aug-19	37	500	465	8.31	0.368	0.00603	*<0.005*	0.0843	*<0.00005*	*<0.0015*	0.120	0.00033	0.59	*<0.000025*	0.10	0.0263	0.3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000015	0.00169	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	470	8.29	0.262	0.00522	*<0.005*	0.0703	*<0.00005*	*<0.0015*	0.076	0.00028	0.41	*<0.000025*	0.08	0.0224	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	0.000027	0.00149	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	475	8.00	0.334	0.00586	*<0.005*	0.0890	*<0.00005*	*<0.0015*	0.128	0.00024	0.45	*<0.000025*	0.09	0.0245	*<0.15*	*<0.0000025*	*<0.00003*	0.00005	0.000022	0.00157	*<0.001*	*<0.001*	CA15365-AUG19

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have

HC 4

Mass	**1**																						
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Alkalinity**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**							**CaCO3**															
					umhos/cm	mgCaCO3/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
19-Nov-18	0	500	410	8.31	168	15.7	26	8	0.07	53.0	0.079	0.0043	0.0054	0.00781	*<0.0000035*	0.000045	0.041	*<0.0000015*	17.6	0.00007	0.000439	0.00494	*<0.0035*	*<0.000005*	0.0019
26-Nov-18	1	500	460	7.98	198	12.6	55	4	0.06	72.1	0.090	0.0039	0.0099	0.00675	*<0.0000035*	0.000019	0.058	0.000005	22.6	0.00003	0.000807	0.00364	*<0.0035*	*<0.000005*	0.0019
03-Dec-18	2	500	445	8.07	116	13.9	29	*<0.5*	*<0.03*	44.0	0.101	0.0027	0.0131	0.00353	*<0.0000035*	0.000007	0.021	0.000003	14.6	0.00004	0.000561	0.00431	0.007	*<0.000005*	0.0010
10-Dec-18	3	500	445	8.13	82	13.8	21	*<0.5*	*<0.03*	34.6	0.103	0.0019	0.0145	0.00355	*<0.0000035*	*<0.0000035*	0.018	*<0.0000015*	11.6	*<0.000015*	0.000487	0.00346	*<0.0035*	*<0.000005*	0.0009
17-Dec-18	4	500	450	8.38	77		14																		
24-Dec-18	5	500	445	8.28	70	15.2	13	*<0.5*	*<0.03*	29.0	0.090	0.0018	0.0148	0.00272	*<0.0000035*	*<0.0000035*	0.010	0.000007	10.1	0.00004	0.000632	0.00408	*<0.0035*	*<0.000005*	0.0006
31-Dec-18	6	500	455	8.03	95		17																		
07-Jan-19	7	500	455	7.88	84	12.8	22	*<0.5*	*<0.03*	38.1	0.096	0.0018	0.0282	0.00353	*<0.0000035*	*<0.0000035*	0.013	*<0.0000015*	13.5	0.00005	0.00135	0.00265	*<0.0035*	*<0.000005*	0.0005
14-Jan-19	8	500	450	7.98	65		15																		
21-Jan-19	9	500	450	8.04	59	13.2	10	*<0.5*	*<0.03*	26.7	0.104	0.0012	0.0266	0.00212	*<0.0000035*	*<0.0000035*	0.007	*<0.0000015*	9.58	*<0.000015*	0.001048	0.00421	*<0.0035*	0.00008	0.0005
28-Jan-19	10	500	445	8.33	56		9																		
04-Feb-19	11	500	445	8.22	50	14.6	10	*<0.5*	*<0.03*	23.5	0.087	0.0011	0.0258	0.00195	*<0.0000035*	*<0.0000035*	0.007	*<0.0000015*	8.43	*<0.000015*	0.000954	0.00409	*<0.0035*	*<0.000005*	0.0028
11-Feb-19	12	500	445	7.99	53		8																		
18-Feb-19	13	500	450	7.91	51	13.5	8	*<0.5*	*<0.03*	23.8	0.088	0.0009	0.0236	0.00190	*<0.0000035*	*<0.0000035*	0.009	*<0.0000015*	8.75	*<0.000015*	0.000834	0.00390	*<0.0035*	*<0.000005*	0.0003
25-Feb-19	14	500	435	8.26	47		7																		
04-Mar-19	15	500	445	7.90	51	15.1	10	*<0.5*	*<0.03*	23.3	0.103	*<0.00045*	0.0276	0.00180	*<0.0000035*	*<0.0000035*	0.005	0.000004	8.57	*<0.00004*	0.000742	0.0038	0.010	*<0.000005*	0.0005
11-Mar-19	16	500	460	7.89	50		9																		
18-Mar-19	17	500	440	7.89	50	13.9	6	*<0.5*	*<0.03*	21.7	0.091	*<0.00045*	0.0249	0.00157	*<0.0000035*	*<0.0000035*	0.006	0.000003	8.02	*<0.00004*	0.000744	0.0032	*<0.0035*	*<0.000005*	0.0002
25-Mar-19	18	500	435	7.48	49		7																		
01-Apr-19	19	500	460	7.88	50	13.2	9	*<0.5*	*<0.03*	23.8	0.090	*<0.00045*	0.0290	0.00179	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	8.78	*<0.00004*	0.000856	0.0027	*<0.0035*	*<0.000005*	0.0003
08-Apr-19	20	500	455	8.42	49		7																		
15-Apr-19	21	500	455	8.20	44	10.6	7	*<0.5*	*<0.03*	19.8	0.090	*<0.00045*	0.0288	0.00149	*<0.0000035*	0.000007	0.004	0.000003	7.38	*<0.00004*	0.000617	0.0031	*<0.0035*	*<0.000005*	0.0001
22-Apr-19	22	500	465	8.45	48		9																		
29-Apr-19	23	500	450	8.13	44	13.1	7	*<0.5*	*<0.03*	22.6	0.094	*<0.00045*	0.0355	0.00155	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	8.44	*<0.00004*	0.000824	0.0038	*<0.0035*	*<0.000005*	0.0001
06-May-19	24	500	455	8.07	47		8																		
13-May-19	25	500	455	7.97	44	11.7	6	*<0.5*	*<0.03*	20.8	0.086	*<0.00045*	0.0308	0.00151	*<0.0000035*	*<0.0000035*	0.003	0.000003	7.81	*<0.00004*	0.000854	0.0044	*<0.0035*	*<0.000005*	0.0001
20-May-19	26	500	450	8.13	46		6																		
27-May-19	27	500	440	8.36	43	14.0	6	*<0.5*	*<0.03*	19.7	0.099	*<0.00045*	0.0320	0.00129	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	7.42	*<0.00004*	0.000789	0.0042	*<0.0035*	*<0.000005*	0.0002
03-Jun-19	28	500	450	8.11	42		7																		
10-Jun-19	29	500	450	8.06	42	12.0	4	*<0.5*	*<0.03*	18.6	0.080	*<0.00045*	0.0325	0.00146	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	6.99	*<0.00004*	0.000965	0.0055	0.022	*<0.000005*	*<0.00005*
17-Jun-19	30	500	435	7.99	38		5																		
24-Jun-19	31	500	490	8.06	39	11.0	4	*<0.5*	*<0.03*	18.3	0.081	*<0.00045*	0.0257	0.00109	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	6.94	*<0.00004*	0.000709	0.0040	*<0.0035*	*<0.000005*	*<0.00005*
01-Jul-19	32	500	450	7.82	43		6																		
08-Jul-19	33	500	450	7.99	43	12.7	7	*<0.5*	*<0.03*	20.7	0.074	*<0.00045*	0.0352	0.00126	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	7.78	*<0.00004*	0.000823	0.0022	*<0.0035*	*<0.000005*	*<0.00005*
15-Jul-19	34	500	450	8.04	35		6																		
22-Jul-19	35	500	450	8.38	39	11.5	5	*<0.5*	*<0.03*	18.6	0.072	*<0.00045*	0.0291	0.00104	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	7.01	*<0.00004*	0.000901	0.0035	*<0.0035*	0.00001	*<0.00005*
29-Jul-19	36	500	440	7.85	40		5																		
05-Aug-19	37	500	435	8.59	39	11.9	5	*<0.5*	*<0.03*	20.4	0.076	*<0.00045*	0.0315	0.00120	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	7.73	*<0.00004*	0.000970	0.0047	*<0.0035*	0.00003	*<0.00005*
12-Aug-19	38	500	445	8.47	33	11.7	5	*<0.5*	*<0.03*	14.6	0.060	*<0.00045*	0.0253	0.00115	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	5.55	*<0.00004*	0.000844	0.0040	*<0.0035*	*<0.000005*	*<0.00005*
19-Aug-19	39	500	430	8.16	36	10.9	4	*<0.5*	*<0.03*	17.7	0.064	*<0.00045*	0.0253	0.00112	*<0.0000035*	*<0.0000035*	0.002	0.000004	6.75	*<0.00004*	0.000962	0.0072	*<0.0035*	*<0.000005*	*<0.00005*

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 4

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
19-Nov-18	0	500	410	8.31	2.18	0.00543	0.02	0.00384	0.0011	*<0.0015*	7.07	0.00185	1.31	*<0.000025*	4.72	0.157	14.5	0.000006	0.00005	0.00039	0.000043	0.00153	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	460	7.98	3.83	0.00764	*<0.005*	0.00536	0.0008	*<0.0015*	5.53	0.00218	0.84	*<0.000025*	4.37	0.205	18.9	0.000007	0.00009	0.00020	0.000112	0.00159	*<0.001*	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	445	8.07	1.86	0.00483	0.02	0.00170	0.0003	*<0.0015*	2.87	0.00129	0.52	*<0.000025*	1.51	0.0959	12.6	*<0.0000025*	0.00078	0.00029	0.000053	0.00153	*<0.001*	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	445	8.13	1.38	0.00415	*<0.005*	0.00500	0.0003	*<0.0015*	2.03	0.00122	0.74	*<0.000025*	0.74	0.0831	7.1	*<0.0000025*	0.00007	0.00015	0.000041	0.00119	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	450	8.38																					
24-Dec-18	5	500	445	8.28	0.879	0.00435	0.01	0.00470	*<0.00005*	*<0.0015*	1.12	0.00101	0.55	*<0.000025*	0.36	0.0562	5.2	*<0.0000025*	0.00005	0.00013	0.000040	0.00089	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	455	8.03																					
07-Jan-19	7	500	455	7.88	1.09	0.00720	*<0.005*	0.00624	0.0003	*<0.0015*	0.988	0.00070	0.60	*<0.000025*	0.36	0.0640	9.8	*<0.0000025*	*<0.000005*	0.00013	0.000010	0.00088	*<0.001*	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	450	7.98																					
21-Jan-19	9	500	450	8.04	0.670	0.00541	*<0.005*	0.00157	0.0001	*<0.0015*	0.708	0.00076	0.57	*<0.000025*	0.24	0.0409	4.1	*<0.0000025*	0.00003	0.00016	0.000019	0.00083	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	445	8.33																					
04-Feb-19	11	500	445	8.22	0.583	0.00480	*<0.005*	0.00615	0.0001	*<0.0015*	0.502	0.00064	0.50	*<0.000025*	0.18	0.0365	3.9	*<0.0000025*	0.00014	0.00012	0.000015	0.00072	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	445	7.99																					
18-Feb-19	13	500	450	7.91	0.468	0.00487	*<0.005*	0.00211	0.0001	*<0.0015*	0.492	0.00052	0.51	*<0.000025*	0.22	0.0276	4.7	*<0.0000025*	0.00001	0.00009	0.000007	0.00067	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	435	8.26																					
04-Mar-19	15	500	445	7.90	0.455	0.00491	*<0.005*	0.00124	0.0001	*<0.0015*	0.397	0.00058	0.54	*<0.000025*	0.22	0.0282	2.4	*<0.0000025*	*<0.00003*	0.00014	0.000009	0.00073	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	460	7.89																					
18-Mar-19	17	500	440	7.89	0.397	0.00539	0.02	0.00275	*<0.00005*	*<0.0015*	0.338	0.00044	0.51	*<0.000025*	0.10	0.0238	3.5	*<0.0000025*	*<0.00003*	0.00014	0.000003	0.00069	*<0.001*	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	435	7.48																					
01-Apr-19	19	500	460	7.88	0.457	0.00617	*<0.005*	0.00118	0.0001	*<0.0015*	0.333	0.00038	0.51	*<0.000025*	0.10	0.0246	4.1	*<0.0000025*	0.00016	0.00020	0.000015	0.00068	*<0.001*	*<0.001*	CA15038-APR19
08-Apr-19	20	500	455	8.42																					
15-Apr-19	21	500	455	8.20	0.335	0.00482	*<0.005*	0.00360	0.0005	*<0.0015*	0.269	0.00040	0.49	*<0.000025*	0.08	0.0206	1.6	*<0.0000025*	0.00008	0.00018	0.000006	0.00061	0.003	*<0.001*	CA15345-APR19
22-Apr-19	22	500	465	8.45																					
29-Apr-19	23	500	450	8.13	0.372	0.00538	*<0.005*	0.00357	0.0001	*<0.0015*	0.290	0.00044	0.49	*<0.000025*	0.11	0.0226	3.0	*<0.0000025*	0.00007	*<0.000025*	0.000007	0.00066	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	455	8.07																					
13-May-19	25	500	455	7.97	0.312	0.00542	*<0.005*	0.00070	0.0001	*<0.0015*	0.254	0.00047	0.46	*<0.000025*	0.10	0.0176	3.5	*<0.0000025*	*<0.00003*	0.00010	0.000006	0.00054	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	450	8.13																					
27-May-19	27	500	440	8.36	0.283	0.00506	*<0.005*	0.00063	*<0.00005*	*<0.0015*	0.233	0.00036	0.52	*<0.000025*	0.09	0.0174	1.9	*<0.0000025*	*<0.00003*	0.00009	0.000003	0.00065	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	450	8.11																					
10-Jun-19	29	500	450	8.06	0.270	0.00588	0.02	0.00076	*<0.00005*	*<0.0015*	0.201	0.00037	0.42	*<0.000025*	0.08	0.0155	0.3	*<0.0000025*	*<0.00003*	0.00006	0.000019	0.00051	*<0.001*	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	435	7.99																					
24-Jun-19	31	500	490	8.06	0.244	0.00455	*<0.005*	0.00101	*<0.00005*	*<0.0015*	0.182	0.00030	0.37	*<0.000025*	0.08	0.0134	4.7	*<0.0000025*	0.00008	*<0.000025*	0.000003	0.00050	*<0.001*	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	450	7.82																					
08-Jul-19	33	500	450	7.99	0.319	0.00548	*<0.005*	0.00190	0.0001	*<0.0015*	0.187	0.00028	0.90	*<0.000025*	0.10	0.0168	5.8	*<0.0000025*	0.00037	0.00011	0.000042	0.00053	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	450	8.04																					
22-Jul-19	35	500	450	8.38	0.267	0.00478	0.02	0.00258	*<0.00005*	*<0.0015*	0.170	0.00027	0.35	*<0.000025*	0.06	0.0128	2.2	*<0.0000025*	*<0.00003*	0.00006	0.000004	0.00040	*<0.001*	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	440	7.85																					
05-Aug-19	37	500	435	8.59	0.269	0.00527	*<0.005*	0.00090	0.0001	*<0.0015*	0.182	0.00033	0.40	*<0.000025*	0.07	0.0145	2.6	*<0.0000025*	0.00007	*<0.000025*	0.000003	0.00046	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	445	8.47	0.170	0.00436	*<0.005*	0.00075	*<0.00005*	*<0.0015*	0.110	0.00025	0.27	*<0.000025*	0.06	0.0116	1.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000004	0.00038	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	430	8.16	0.205	0.00454	*<0.005*	0.00297	0.0001	*<0.0015*	0.157	0.00022	0.28	*<0.000025*	0.06	0.0126	0.6	*<0.0000025*	*<0.00003*	*<0.000025*	0.000003	0.00042	*<0.001*	*<0.001*	CA15365-AUG19

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been

HC 5

Mass	**0**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Alkalinity**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**							**CaCO3**															
					umhos/cm	mgCaCO3/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
19-Nov-18	0	500	485	6.01	*<0.5*	1.2	2	*<0.5*	*<0.03*	0.18	*<0.0005*	0.0003	*<0.0001*	0.00032	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	0.04	*<0.000015*	*<0.000002*	0.00065	*<0.0035*	0.0295	0.0002
26-Nov-18	1	500	490	7.53	3	1.9	*<1*	*<0.5*	*<0.03*	0.07	*<0.0005*	0.0020	*<0.0001*	0.00071	*<0.0000035*	0.000008	0.003	0.000003	0.03	*<0.000015*	*<0.000002*	0.00121	*<0.0035*	0.760	*<0.00005*
03-Dec-18	2	500	500	5.91	3	1.0	4	*<0.5*	*<0.03*	*<0.025*	0.002	0.0072	*<0.0001*	0.00035	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.000015*	0.000033	0.00624	*<0.0035*	0.455	*<0.00005*
10-Dec-18	3	500	490	5.52	*<0.5*	0.7	5	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0010	*<0.0001*	0.00015	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.000015*	*<0.000002*	0.00055	*<0.0035*	0.123	*<0.00005*
17-Dec-18	4	500	490	5.85	*<0.5*		*<1*																		
24-Dec-18	5	500	475	5.67	*<0.5*	1.2	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0013	*<0.0001*	0.00009	*<0.0000035*	*<0.0000035*	*<0.001*	0.000004	*<0.005*	*<0.000015*	*<0.000002*	0.00063	*<0.0035*	0.0554	*<0.00005*
31-Dec-18	6	500	475	5.80	*<0.5*		*<1*																		
07-Jan-19	7	500	480	5.74	*<0.5*	0.7	*<1*	*<0.5*	*<0.03*	0.05	*<0.0005*	0.0014	*<0.0001*	0.00009	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	0.02	0.00003	0.000013	0.00077	*<0.0035*	0.0609	*<0.00005*
14-Jan-19	8	500	480	5.70	*<0.5*		*<1*																		
21-Jan-19	9	500	485	5.80	1	0.8	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0007	*<0.0001*	0.00007	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.000015*	*<0.000002*	0.00079	*<0.0035*	0.0542	0.0003
28-Jan-19	10	500	485	6.03	*<0.5*		*<1*																		
04-Feb-19	11	500	490	5.80	*<0.5*	0.8	2	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0009	*<0.0001*	0.00006	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.000015*	*<0.000002*	0.00081	*<0.0035*	0.0374	0.0021
11-Feb-19	12	500	490	5.44	*<0.5*		*<1*																		
18-Feb-19	13	500	485	5.70	*<0.5*	0.6	2	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0009	*<0.0001*	0.00005	*<0.0000035*	*<0.0000035*	0.005	*<0.0000015*	*<0.005*	*<0.000015*	*<0.000002*	0.00034	*<0.0035*	0.0272	0.0001
25-Feb-19	14	500	480	5.98	*<0.5*		*<1*																		
04-Mar-19	15	500	480	5.51	*<0.5*	0.8	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0010	*<0.0001*	0.00008	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.0265	*<0.00005*
11-Mar-19	16	500	500	6.01	*<0.5*		*<1*																		
18-Mar-19	17	500	490	5.47	*<0.5*	0.6	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0018	*<0.0001*	0.00014	*<0.0000035*	*<0.0000035*	0.004	0.000004	*<0.005*	*<0.00004*	*<0.000002*	0.0008	*<0.0035*	0.0416	*<0.00005*
25-Mar-19	18	500	475	5.61	*<0.5*		*<1*																		
01-Apr-19	19	500	490	5.53	*<0.5*	0.6	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0024	*<0.0001*	0.00007	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0011	*<0.0035*	0.03793	0.0002
08-Apr-19	20	500	485	5.78	*<0.5*		2																		
15-Apr-19	21	500	495	5.96	*<0.5*	1.4	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	*<0.00001*	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	0.0122	*<0.00005*
22-Apr-19	22	500	490	5.88	*<0.5*		*<1*																		
29-Apr-19	23	500	490	5.74	*<0.5*	0.7	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0016	*<0.0001*	0.00005	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	0.000004	0.0010	*<0.0035*	0.0175	*<0.00005*
06-May-19	24	500	495	6.05	*<0.5*		2																		
13-May-19	25	500	495	5.33	*<0.5*	0.8	2	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	*<0.001*	0.000003	*<0.005*	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	0.00643	*<0.00005*
20-May-19	26	500	500	5.74	*<0.5*		2																		
27-May-19	27	500	495	5.92	*<0.5*	0.9	2	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0010	*<0.0001*	0.00005	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	0.02	*<0.00004*	0.000009	0.0009	0.013	0.00876	*<0.00005*
03-Jun-19	28	500	500	5.73	*<0.5*		*<1*																		
10-Jun-19	29	500	515	5.55	*<0.5*	0.8	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0014	*<0.0001*	0.00019	*<0.0000035*	*<0.0000035*	0.002	0.000004	*<0.005*	*<0.00004*	*<0.000002*	0.0007	*<0.0035*	0.0124	*<0.00005*
17-Jun-19	30	500	520	5.79	*<0.5*		*<1*																		
24-Jun-19	31	500	515	5.82	*<0.5*	0.8	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0010	*<0.0001*	0.00014	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0009	*<0.0035*	0.00724	*<0.00005*
01-Jul-19	32	500	480	5.82	*<0.5*		*<1*																		
08-Jul-19	33	500	465	5.76	*<0.5*	0.9	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00002	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	0.00234	*<0.00005*
15-Jul-19	34	500	470	5.71	*<0.5*		2																		
22-Jul-19	35	500	475	6.02	*<0.5*	0.4	*<1*	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	*<0.0001*	*<0.0035*	0.00108	*<0.00005*
29-Jul-19	36	500	510	5.77	*<0.5*		*<1*																		
05-Aug-19	37	500	520	5.70	*<0.5*	0.8	2	*<0.5*	*<0.03*	0.07	*<0.0005*	0.0013	*<0.0001*	0.00005	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	0.02	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.00617	*<0.00005*
12-Aug-19	38	500	500	6.01	*<0.5*	1.0	2	*<0.5*	*<0.03*	*<0.025*	*<0.0005*	0.0010	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	0.000005	0.0005	*<0.0035*	0.00361	*<0.00005*
19-Aug-19	39	500	510	5.91	*<0.5*	1.4	*<1*		*<0.03*	*<0.025*	*<0.0005*	0.0014	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0007	*<0.0035*	0.00578	*<0.00005*
26-Aug-19	40	500	505	6.01		0.4																			
02-Sep-19	41	500	515	5.98		0.3	*<1*																		
09-Sep-19	42	500	490	5.86		1.0																			
16-Sep-19	43	500	495	5.81		1.5	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0008	0.008	0.00248	*<0.00005*
23-Sep-19	44	500	485	6.01		1.7																			
30-Sep-19	45	500	460	6.01		0.4	*<1*																		
07-Oct-19	46	500	470	6.29		0.5																			
14-Oct-19	47	500	490	6.06		0.8	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.00304	*<0.00005*
21-Oct-19	48	500	465	6.36		0.5																			
28-Oct-19	49	500	465	5.77		0.7	*<1*																		
04-Nov-19	50	500	480	5.64		0.6																			
11-Nov-19	51	500	480	5.70		0.5	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	*<0.001*	0.000003	*<0.005*	*<0.00004*	*<0.000002*	0.0008	*<0.0035*	0.00124	*<0.00005*
18-Nov-19	52	500	485	6.03		0.6																			
25-Nov-19	53	500	485	5.75		0.7	2																		
02-Dec-19	54	500	505	6.01		0.6																			
09-Dec-19	55	500	490	5.80		0.7	*<1*			*<0.025*	0.030	*<0.00045*	*<0.0001*	0.00016	0.000009	*<0.0000035*	*<0.001*	0.000008	*<0.005*	*<0.00004*	0.000216	0.100	0.175	0.00369	*<0.00005*
16-Dec-19	56	500	485	5.96		0.7																			
23-Dec-19	57	500	465	6.07		0.9	2																		
30-Dec-19	58	500	460	5.83		0.9																			
06-Jan-20	59	500	480	6.01		0.6	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00004	*<0.0000035*	*<0.0000035*	*<0.001*	0.000004	*<0.005*	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.00186	*<0.00005*
13-Jan-20	60	500	495	5.43		0.8																			
20-Jan-20	61	500	485	6.05		0.7	*<1*																		
27-Jan-20	62	500	485	5.87		0.7																			
03-Feb-20	63	500	485	6.02		*<0.05*	3			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00004	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0007	*<0.0035*	0.00020	*<0.00005*
10-Feb-20	64	500	490	6.02		0.6																			
17-Feb-20	65	500	515	5.98		0.7	3																		
24-Feb-20	66	500	445	5.83		1.4																			
02-Mar-20	67	500	495	5.77		0.8	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00006	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.00157	*<0.00005*
09-Mar-20	68	500	495	5.29		0.4																			
16-Mar-20	69	500	500	5.92		0.3	2																		
23-Mar-20	70	500	485	6.01		0.7																			

HC 5

Mass	**0**																								
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Alkalinity**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**							**CaCO3**															
30-Mar-20	71	500	480	5.67		0.6	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	*<0.00001*	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	*<0.005*	*<0.00004*	0.000010	0.0008	0.075	0.00061	*<0.00005*
06-Apr-20	72	500	450	5.68		0.5																			
13-Apr-20	73	500	455	6.01		0.6	*<1*																		
20-Apr-20	74	500	495	6.02		0.7																			
27-Apr-20	75	500	490	6.01		0.6	*<1*			0.33	*<0.0005*	*<0.00045*	*<0.0001*	0.00021	*<0.0000035*	*<0.0000035*	0.003	0.000009	0.09	*<0.00004*	*<0.000002*	0.0013	*<0.0035*	0.00092	*<0.00005*
04-May-20	76	500	460	5.96		0.8																			
11-May-20	77	500	470	6.01		0.8	*<1*																		
18-May-20	78	500	495	6.02		0.7																			
25-May-20	79	500	435	5.53		0.9	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00005	*<0.0000035*	0.000007	0.002	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0006	*<0.0035*	0.00013	*<0.00005*
01-Jun-20	80	500	475	5.79		0.8																			
08-Jun-20	81	500	470	5.95		0.8	*<1*																		
15-Jun-20	82	500	430	5.28		*<0.05*																			
22-Jun-20	83	500	475	5.87		0.7	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	*<0.00001*	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0012	*<0.0035*	0.00016	*<0.00005*
29-Jun-20	84	500	470	5.81		*<0.05*																			
06-Jul-20	85	500	465	5.79		*<0.05*	*<1*																		
13-Jul-20	86	500	470	5.91		*<0.05*																			
20-Jul-20	87	500	430	5.24		*<0.05*	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	*<0.00001*	*<0.0000035*	*<0.0000035*	0.006	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0005	*<0.0035*	0.00016	*<0.00005*
27-Jul-20	88	500	470	5.81		*<0.05*																			
03-Aug-20	89	500	410	6.08		*<0.05*	2																		
10-Aug-20	90	500	475	5.94		0.6																			
17-Aug-20	91	500	465	6.00		0.7	*<1*			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.0000035*	0.012	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0007	*<0.0035*	0.00009	*<0.00005*
24-Aug-20	92	500	445	5.62		1.1																			
31-Aug-20	93	500	445	6.07		1.6	2																		
07-Sep-20	94	500	470	5.99		1.1																			
14-Sep-20	95	500	455	6.08		1.0	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00002	*<0.0000035*	*<0.0000035*	0.002	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0008	*<0.0035*	0.00013	*<0.00005*
21-Sep-20	96	500	445	5.96		0.5																			
28-Sep-20	97	500	375	6.01		0.9	2																		
05-Oct-20	98	500	425	5.88		0.6																			
12-Oct-20	99	500	450	6.01		1.1	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	*<0.00001*	*<0.0000035*	*<0.0000035*	*<0.001*	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	0.00005	*<0.00005*
19-Oct-20	100	500	455	6.02		0.7																			
26-Oct-20	101	500	435	6.01		1.0	2																		
02-Nov-20	102	500	500	6.02		0.8																			
09-Nov-20	103	500	490	6.03		0.6	2			0.05	*<0.0005*	*<0.00045*	*<0.0001*	0.00004	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	0.02	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	0.00050	*<0.00005*
16-Nov-20	104	500	505	6.01		0.4																			
23-Nov-20	105	500	495	6.01		1.4	2																		
30-Nov-20	106	500	510	6.02		0.6																			
07-Dec-20	107	500	480	6.05		0.6	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00004	*<0.0000035*	*<0.0000035*	0.004	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	0.00042	*<0.00005*
14-Dec-20	108	500	455	5.88		0.8																			
21-Dec-20	109	500	490	5.86		0.4	2																		
28-Dec-20	110	500	495	5.79		0.7																			
04-Jan-21	111	500	455	5.82		1.0	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00006	*<0.0000035*	*<0.0000035*	0.003	*<0.0000015*	0.01	*<0.00004*	*<0.000002*	0.0007	*<0.0035*	0.00027	*<0.00005*
11-Jan-21	112	500	440	5.91		*<0.05*																			
18-Jan-21	113	500	490	6.01		0.8	2																		
25-Jan-21	114	500	420	6.01		0.4																			
01-Feb-21	115	500	455	6.49		0.7	2			*<0.025*	*<0.0005*	*<0.00045*	*<0.0001*	0.00003	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	*<0.005*	*<0.00004*	*<0.000002*	*<0.0001*	*<0.0035*	0.00024	*<0.00005*

Aug 26/19. Change in analytical schedule.

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 5

Mass	**0**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
19-Nov-18	0	500	485	6.01	0.021	0.00005	*<0.005*	0.00028	*<0.00005*	*<0.0015*	0.038	*<0.00002*	*<0.01*	*<0.000025*	0.07	0.00033	0.2	*<0.0000025*	0.00002	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15462-NOV18
26-Nov-18	1	500	490	7.53	0.001	0.00005	*<0.005*	0.000529	0.0001	0.004	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.03	0.00008	0.5	*<0.0000025*	0.00004	*<0.000025*	0.000002	*<0.000005*	0.002	*<0.001*	CA15623-NOV18
03-Dec-18	2	500	500	5.91	0.003	0.00018	*<0.005*	0.00075	0.0002	*<0.0015*	0.037	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00008	2.9	*<0.0000025*	0.00034	*<0.000025*	*<0.000001*	0.00002	0.005	*<0.001*	CA15057-DEC18
10-Dec-18	3	500	490	5.52	*<0.0005*	0.00011	*<0.005*	0.00088	*<0.00005*	*<0.0015*	0.004	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	*<0.00001*	0.2	*<0.0000025*	0.00003	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15199-DEC18
17-Dec-18	4	500	490	5.85																					
24-Dec-18	5	500	475	5.67	0.001	*<0.000005*	*<0.005*	0.00080	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.01	0.00005	0.2	*<0.0000025*	0.00003	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15422-DEC18
31-Dec-18	6	500	475	5.80																					
07-Jan-19	7	500	480	5.74	0.002	0.00014	*<0.005*	0.00068	*<0.00005*	*<0.0015*	0.034	*<0.00002*	*<0.01*	*<0.000025*	0.05	0.00009	0.5	*<0.0000025*	*<0.000005*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15125-JAN19
14-Jan-19	8	500	480	5.70																					
21-Jan-19	9	500	485	5.80	0.001	*<0.000005*	*<0.005*	0.00047	*<0.00005*	*<0.0015*	0.020	*<0.00002*	*<0.01*	*<0.000025*	0.04	*<0.00001*	*<0.05*	*<0.0000025*	0.00007	*<0.000025*	0.000002	*<0.000005*	*<0.001*	*<0.001*	CA15324-JAN19
28-Jan-19	10	500	485	6.03																					
04-Feb-19	11	500	490	5.80	0.001	*<0.000005*	*<0.005*	0.00134	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.02	0.00005	*<0.05*	*<0.0000025*	0.00001	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15085-FEB19
11-Feb-19	12	500	490	5.44																					
18-Feb-19	13	500	485	5.70	0.002	0.00004	*<0.005*	0.00029	*<0.00005*	*<0.0015*	0.025	*<0.00002*	*<0.01*	*<0.000025*	0.07	0.00004	0.8	*<0.0000025*	*<0.000005*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15269-FEB19
25-Feb-19	14	500	480	5.98																					
04-Mar-19	15	500	480	5.51	0.001	0.00002	*<0.005*	0.00004	*<0.00005*	*<0.0015*	0.008	*<0.00002*	*<0.01*	*<0.000025*	0.03	*<0.00001*	*<0.15*	0.000007	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15100-MAR19
11-Mar-19	16	500	500	6.01																					
18-Mar-19	17	500	490	5.47	*<0.0005*	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00002	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15355-MAR19
25-Mar-19	18	500	475	5.61																					
01-Apr-19	19	500	490	5.53	0.001	0.00004	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00004	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15038-APR19
08-Apr-19	20	500	485	5.78																					
15-Apr-19	21	500	495	5.96	0.001	0.00004	*<0.005*	0.00060	0.0001	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00003	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15345-APR19
22-Apr-19	22	500	490	5.88																					
29-Apr-19	23	500	490	5.74	*<0.0005*	0.00003	*<0.005*	0.00030	*<0.00005*	*<0.0015*	0.007	*<0.00002*	*<0.01*	*<0.000025*	0.02	*<0.00001*	0.3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000004	*<0.000005*	*<0.001*	*<0.001*	CA15030-MAY19
06-May-19	24	500	495	6.05																					
13-May-19	25	500	495	5.33	0.001	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.004	*<0.00002*	*<0.01*	*<0.000025*	0.02	*<0.00001*	1.0	*<0.0000025*	0.00007	*<0.000025*	0.000002	*<0.000005*	*<0.001*	*<0.001*	CA15323-MAY19
20-May-19	26	500	500	5.74																					
27-May-19	27	500	495	5.92	0.002	0.00006	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.03	0.00002	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15603-MAY19
03-Jun-19	28	500	500	5.73																					
10-Jun-19	29	500	515	5.55	*<0.0005*	0.00002	*<0.005*	*<0.00002*	0.0002	*<0.0015*	0.003	*<0.00002*	*<0.01*	*<0.000025*	0.04	*<0.00001*	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.005	*<0.001*	CA15327-JUN19
17-Jun-19	30	500	520	5.79																					
24-Jun-19	31	500	515	5.82	0.001	*<0.000005*	*<0.005*	0.00012	0.0002	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.03	0.00005	2.3	*<0.0000025*	0.00007	*<0.000025*	*<0.000001*	*<0.000005*	0.004	*<0.001*	CA15480-JUN19
01-Jul-19	32	500	480	5.82																					
08-Jul-19	33	500	465	5.76	0.001	*<0.000005*	*<0.005*	0.00025	0.0001	*<0.0015*	0.005	*<0.00002*	0.21	*<0.000025*	*<0.005*	0.00004	3.1	*<0.0000025*	0.00013	*<0.000025*	0.000003	0.00001	*<0.001*	*<0.001*	CA15147-JUL19
15-Jul-19	34	500	470	5.71																					
22-Jul-19	35	500	475	6.02	*<0.0005*	*<0.000005*	0.01	0.00031	*<0.00005*	*<0.0015*	*<0.0045*	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00003	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15378-JUL19
29-Jul-19	36	500	510	5.77																					
05-Aug-19	37	500	520	5.70	0.004	0.00002	*<0.005*	0.00007	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.02	0.00005	*<0.15*	*<0.0000025*	0.00029	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15081-AUG19
12-Aug-19	38	500	500	6.01	0.001	0.00020	*<0.005*	0.00179	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.02	0.00003	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	0.000003	*<0.000005*	*<0.001*	*<0.001*	CA15191-AUG19
19-Aug-19	39	500	510	5.91	*<0.0005*	0.00002	*<0.005*	0.00019	*<0.00005*	*<0.0015*	0.006	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	*<0.00001*	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15365-AUG19
26-Aug-19	40	500	505	6.01																					
02-Sep-19	41	500	515	5.98																					
09-Sep-19	42	500	490	5.86																					
16-Sep-19	43	500	495	5.81	*<0.0005*	0.00004	*<0.005*	*<0.00002*	0.0001	*<0.0015*	0.015	*<0.00002*	*<0.01*	*<0.000025*	0.09	*<0.00001*	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15304-SEP19
23-Sep-19	44	500	485	6.01																					
30-Sep-19	45	500	460	6.01																					
07-Oct-19	46	500	470	6.29																					
14-Oct-19	47	500	490	6.06	*<0.0005*	0.00011	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.02	0.00011	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15338-OCT19
21-Oct-19	48	500	465	6.36																					
28-Oct-19	49	500	465	5.77																					
04-Nov-19	50	500	480	5.64																					
11-Nov-19	51	500	480	5.70	0.001	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	*<0.00001*	0.5	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15229-NOV19
18-Nov-19	52	500	485	6.03																					
25-Nov-19	53	500	485	5.75																					
02-Dec-19	54	500	505	6.01																					
09-Dec-19	55	500	490	5.80	0.013	0.00208	*<0.005*	*<0.00002*	0.0002	*<0.0015*	0.010	*<0.00002*	0.04	*<0.000025*	0.03	0.00578	1.2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000005	*<0.000005*	0.010	*<0.001*	CA15172-DEC19
16-Dec-19	56	500	485	5.96																					
23-Dec-19	57	500	465	6.07																					
30-Dec-19	58	500	460	5.83																					
06-Jan-20	59	500	480	6.01	*<0.0005*	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.01	0.00005	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15109-JAN20
13-Jan-20	60	500	495	5.43																					
20-Jan-20	61	500	485	6.05																					
27-Jan-20	62	500	485	5.87																					
03-Feb-20	63	500	485	6.02	0.001	0.00003	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.004	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	*<0.00001*	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15086-FEB20
10-Feb-20	64	500	490	6.02																					
17-Feb-20	65	500	515	5.98																					
24-Feb-20	66	500	445	5.83																					
02-Mar-20	67	500	495	5.77	0.001	0.00002	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.005	*<0.00002*	*<0.01*	*<0.000025*	0.02	*<0.00001*	*<0.15*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	0.002	*<0.001*	CA15052-MAR20
09-Mar-20	68	500	495	5.29																					
16-Mar-20	69	500	500	5.92																					
23-Mar-20	70	500	485	6.01																					

HC 5

Mass	**0**																						
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
30-Mar-20	71	500	480	5.67	*<0.0005*	0.00002	0.02	0.00019	*<0.00005*	*<0.0015*	*<0.0015*	0.00008	*<0.01*	*<0.000025*	0.02	*<0.00001*	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	0.000019	*<0.000005*	*<0.001*	*<0.001*	CA15022-APR20
06-Apr-20	72	500	450	5.68																					
13-Apr-20	73	500	455	6.01																					
20-Apr-20	74	500	495	6.02																					
27-Apr-20	75	500	490	6.01	0.027	0.00006	*<0.005*	0.00004	0.0002	*<0.0015*	0.008	*<0.00002*	*<0.01*	*<0.000025*	0.06	*<0.00001*	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	0.000002	*<0.000005*	0.007	*<0.001*	CA15510-APR20
04-May-20	76	500	460	5.96																					
11-May-20	77	500	470	6.01																					
18-May-20	78	500	495	6.02																					
25-May-20	79	500	435	5.53	*<0.0005*	0.00008	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.004	*<0.00002*	0.02	*<0.000025*	0.02	0.00003	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15448-MAY20
01-Jun-20	80	500	475	5.79																					
08-Jun-20	81	500	470	5.95																					
15-Jun-20	82	500	430	5.28																					
22-Jun-20	83	500	475	5.87	0.001	0.00007	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.008	*<0.00002*	*<0.01*	*<0.000025*	0.03	0.00002	*<0.5*	*<0.0000025*	0.00049	*<0.000025*	*<0.000001*	*<0.000005*	0.003	*<0.001*	CA15625-JUN20
29-Jun-20	84	500	470	5.81																					
06-Jul-20	85	500	465	5.79																					
13-Jul-20	86	500	470	5.91																					
20-Jul-20	87	500	430	5.24	*<0.0005*	0.00002	*<0.005*	0.00005	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.04	*<0.00001*	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15914-JUL20
27-Jul-20	88	500	470	5.81																					
03-Aug-20	89	500	410	6.08																					
10-Aug-20	90	500	475	5.94																					
17-Aug-20	91	500	465	6.00	*<0.0005*	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.011	*<0.00002*	*<0.01*	*<0.000025*	0.10	*<0.00001*	1	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15359-AUG20
24-Aug-20	92	500	445	5.62																					
31-Aug-20	93	500	445	6.07																					
07-Sep-20	94	500	470	5.99																					
14-Sep-20	95	500	455	6.08	0.001	0.00006	*<0.005*	0.00024	*<0.00005*	*<0.0015*	0.014	*<0.00002*	*<0.01*	*<0.000025*	0.04	0.00002	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15270-SEP20
21-Sep-20	96	500	445	5.96																					
28-Sep-20	97	500	375	6.01																					
05-Oct-20	98	500	425	5.88																					
12-Oct-20	99	500	450	6.01	0.001	*<0.000005*	*<0.005*	*<0.00002*	*<0.00005*	0.006	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.01	*<0.00001*	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA14261-OCT20
19-Oct-20	100	500	455	6.02																					
26-Oct-20	101	500	435	6.01																					
02-Nov-20	102	500	500	6.02																					
09-Nov-20	103	500	490	6.03	0.002	0.00014	*<0.005*	0.00008	*<0.00005*	*<0.0015*	0.009	*<0.00002*	*<0.01*	*<0.000025*	0.04	0.00012	*<0.5*	*<0.0000025*	0.00012	*<0.000025*	0.000007	*<0.000005*	*<0.001*	*<0.001*	CA15190-NOV20
16-Nov-20	104	500	505	6.01																					
23-Nov-20	105	500	495	6.01																					
30-Nov-20	106	500	510	6.02																					
07-Dec-20	107	500	480	6.05	*<0.0005*	0.00005	*<0.005*	*<0.00002*	*<0.00005*	*<0.0015*	0.004	*<0.00002*	*<0.01*	*<0.000025*	*<0.005*	0.00027	*<0.5*	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15120-DEC20
14-Dec-20	108	500	455	5.88																					
21-Dec-20	109	500	490	5.86																					
28-Dec-20	110	500	495	5.79																					
04-Jan-21	111	500	455	5.82	0.002	0.00003	0.02	0.00006	*<0.00005*	*<0.0015*	*<0.0015*	*<0.00002*	*<0.01*	*<0.000025*	0.03	0.00003	*<0.5*	*<0.0000025*	0.00010	*<0.000025*	*<0.000001*	*<0.000005*	*<0.001*	*<0.001*	CA15022-JAN21
11-Jan-21	112	500	440	5.91																					
18-Jan-21	113	500	490	6.01																					
25-Jan-21	114	500	420	6.01																					
01-Feb-21	115	500	455	6.49	*<0.0005*	*<0.000005*	*<0.005*	0.00038	*<0.00005*	*<0.0015*	0.013	*<0.00002*	*<0.01*	*<0.000025*	0.04	*<0.00001*	2	*<0.0000025*	*<0.00003*	*<0.000025*	0.000003	*<0.000005*	*<0.001*	*<0.001*	CA15532-APR21

Aug 26/19. Change in analytical schedule.

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 7

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
					µmhos/cm	mg$CaCO_3$/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
22-Sep-22	0	500	370	9.05	91	23.9	12	*<0.5*	0.06	25.6	0.057	0.0010	0.0008	0.00439	*<0.0000035*	*<0.000005*	0.030	*<0.0000015*	8.47	*<0.00004*	0.000018	0.0010	*<0.0035*	*<0.000045*	*<0.00005*
29-Sep-22	1	500	480	8.32	104	34.3	10	*<0.5*	0.11	33.6	0.128	0.0043	0.0018	0.00803	*<0.0000035*	*<0.000005*	0.057	*<0.0000015*	9.13	*<0.00004*	*<0.000002*	0.0009	*<0.0035*	*<0.000045*	0.0006
06-Oct-22	2	500	465	8.38	66	25.8	4	*<0.5*	*<0.03*	23.1	0.112	0.0033	0.0016	0.00607	*<0.0000035*	*<0.000005*	0.026	*<0.0000015*	6.43	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	*<0.000045*	0.0004
13-Oct-22	3	500	445	8.60	61	24.4	4	*<0.5*	*<0.03*	22.9	0.109	0.0026	0.0013	0.00582	*<0.0000035*	*<0.000005*	0.016	*<0.0000015*	6.28	*<0.00004*	*<0.000002*	0.0003	0.007	*<0.000045*	0.0003
20-Oct-22	4	500	450	8.37	57		3																		
27-Oct-22	5	500	455	8.44	54	22.7	3	*<0.5*	*<0.03*	18.9	0.101	0.0015	0.0012	0.00585	0.000023	*<0.000005*	0.012	0.000039	5.64	*<0.00004*	0.000012	0.0036	0.022	0.00056	0.0003
03-Nov-22	6	500	460	7.99	53		4																		
10-Nov-22	7	500	460	7.98	53	22.7	3	*<0.5*	*<0.03*	20.9	0.115	0.0012	0.0012	0.00537	*<0.0000035*	*<0.000005*	0.010	*<0.0000015*	6.03	*<0.00004*	0.000041	0.0004	*<0.0035*	0.00023	0.0005
17-Nov-22	8	500	440	8.16	50		3																		
24-Nov-22	9	500	470	8.01	51	21.6	4	*<0.5*	*<0.03*	21.2	0.101	0.0011	0.0012	0.00582	*<0.0000035*	*<0.000005*	0.006	*<0.0000015*	6.40	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	*<0.000045*	0.0001
01-Dec-22	10	500	455	7.72	50		3																		
08-Dec-22	11	500	470	8.09	50	20.4	5	*<0.5*	*<0.03*	19.2	0.097	0.0011	0.0012	0.00553	*<0.0000035*	*<0.000005*	0.013	0.000008	5.84	0.00009	0.000013	0.0003	*<0.0035*	*<0.000045*	0.0004
15-Dec-22	12	500	460	7.86	50		5																		
22-Dec-22	13	500	450	7.70	53	20.9	5	*<0.5*	*<0.03*	24.1	0.133	0.0010	0.0012	0.00615	0.000012	*<0.000005*	0.008	*<0.0000015*	7.56	0.00009	0.000008	0.0006	*<0.0035*	*<0.000045*	0.0004
29-Dec-22	14	500	430	7.76	47		4																		
05-Jan-23	15	500	455	7.39	49	20.2	4	*<0.5*	*<0.03*	21.4	0.113	*<0.00045*	0.0016	0.00546	*<0.0000035*	*<0.000005*	0.004	0.000003	6.96	*<0.00004*	0.000015	0.0003	*<0.0035*	*<0.000045*	0.0003
12-Jan-23	16	500	460	7.91	48		3																		
19-Jan-23	17	500	455	6.95	50	24.2	4	*<0.5*	*<0.03*	21.9	0.108	*<0.00045*	0.0009	0.00517	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	7.33	*<0.00004*	0.000016	0.0021	*<0.0035*	*<0.000045*	0.0003
26-Jan-23	18	500	460	7.49	46		3																		
02-Feb-23	19	500	470	7.60	49	17.4	5	*<0.5*	*<0.03*	21.4	0.097	*<0.00045*	0.0016	0.00594	0.000025	*<0.000005*	0.004	0.000071	7.13	0.00023	0.000029	0.0007	*<0.0035*	*<0.000045*	0.0003
09-Feb-23	20	500	455	8.13	46		3																		
16-Feb-23	21	500	460	8.21	46	23.2	4	*<0.5*	*<0.03*	20.6	0.113	*<0.00045*	0.0014	0.00547	0.000008	*<0.000005*	0.006	0.000037	7.02	0.00026	0.000018	0.0004	*<0.0035*	*<0.000045*	0.0004
23-Feb-23	22	500	455	7.40	44		6																		
02-Mar-23	23	500	465	8.14	46	15.9	4	*<0.5*	*<0.03*	20.1	0.111	*<0.00045*	0.0009	0.00478	*<0.0000035*	*<0.000005*	0.004	0.000007	6.87	*<0.00004*	0.000008	0.0004	0.042	*<0.000045*	0.0003
09-Mar-23	24	500	445	7.94	44		4																		
16-Mar-23	25	500	460	8.12	43	15.4	4	*<0.5*	*<0.03*	19.2	0.109	*<0.00045*	0.0008	0.00447	*<0.0000035*	*<0.000005*	0.006	0.000007	6.67	*<0.00004*	0.000005	0.0004	*<0.0035*	*<0.000045*	0.0003
23-Mar-23	26	500	455	8.22	46		4																		
30-Mar-23	27	500	440	8.04	46	16.8	4	*<0.5*	*<0.03*	20.6	0.104	*<0.00045*	0.0008	0.00448	*<0.0000035*	*<0.000005*	0.008	*<0.0000015*	7.27	*<0.00004*	0.000007	0.0003	0.021	*<0.000045*	0.0002
06-Apr-23	28	500	445	7.43	44		3																		
13-Apr-23	29	500	430	7.97	43	15.4	3	*<0.5*	*<0.03*	21	0.152	*<0.00045*	0.0009	0.00488	*<0.0000035*	*<0.000005*	0.013	0.000005	7.34	*<0.00004*	0.000018	0.0004	*<0.0035*	*<0.000045*	0.0003
20-Apr-23	30	500	455	8.23	44		3																		
27-Apr-23	31	500	450	8.47	39	14.8	4	*<0.5*	*<0.03*	17.4	0.119	*<0.00045*	0.0006	0.00417	*<0.0000035*	*<0.000005*	*<0.001*	*<0.0000015*	6.13	*<0.00004*	0.00001	0.0003	*<0.0035*	*<0.000045*	*<0.00005*
04-May-23	32	500	450	8.57	41		4																		
11-May-23	33	500	430	7.95	41	15.4	3	*<0.5*	*<0.03*	18.6	0.110	*<0.00045*	0.0008	0.00423	*<0.0000035*	*<0.000005*	0.008	*<0.0000015*	6.53	*<0.00004*	0.000006	0.0003	*<0.0035*	*<0.000045*	0.0002
18-May-23	34	500	430	7.92	41		4																		
25-May-23	35	500	425	7.66	40	14.8	3	*<0.5*	*<0.03*	20.0	0.131	*<0.00045*	0.0006	0.00378	*<0.0000035*	*<0.000005*	0.005	*<0.0000015*	7.22	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	*<0.000045*	0.0002
01-Jun-23	36	500	450	7.95	39		3																		
08-Jun-23	37	500	440	8.14	44	16.2	4	*<0.5*	*<0.03*	22.5	0.144	*<0.00045*	0.0010	0.00472	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	8.16	*<0.00004*	0.000013	0.0004	*<0.0035*	*<0.000045*	0.0004
15-Jun-23	38	500	445	8.34	41	15.2	3	*<0.5*	*<0.03*	19.2	0.118	*<0.00045*	0.0009	0.00356	*<0.0000035*	*<0.000005*	0.004	0.000020	6.99	*<0.00004*	0.000030	0.0003	*<0.0035*	*<0.000045*	0.0002
22-Jun-23	39	500	475	8.11	41	15.7	3	*<0.5*	*<0.03*	18.9	0.119	*<0.00045*	0.0006	0.00392	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	6.85	*<0.00004*	0.000010	0.0004	*<0.0035*	*<0.000045*	0.0002

Cell Terminated

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 7

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
22-Sep-22	0	500	370	9.05	1.07	0.00064	*<0.005*	0.00113	0.0002	0.036	1.72	0.00078	1.00	*<0.000025*	5.16	0.0573	4	*<0.0000025*	*<0.00003*	0.00081	0.000002	0.00653	*<0.001*	*<0.001*	CA15397-SEP22
29-Sep-22	1	500	480	8.32	2.64	0.00451	*<0.005*	0.00190	0.0002	0.005	1.85	0.00067	1.81	*<0.000025*	7.07	0.0758	4	*<0.0000025*	*<0.00003*	0.00269	0.000015	0.00887	*<0.001*	*<0.001*	CA15024-OCT22
06-Oct-22	2	500	465	8.38	1.71	0.00218	*<0.005*	0.00120	*<0.00005*	*<0.0015*	1.03	0.00038	1.38	*<0.000025*	3.36	0.0529	2	0.000012	*<0.00003*	*<0.000025*	0.000013	0.00741	*<0.001*	*<0.001*	CA15119-OCT22
13-Oct-22	3	500	445	8.60	1.74	0.00234	*<0.005*	0.00043	*<0.00005*	*<0.0015*	0.923	0.00025	1.14	*<0.000025*	2.76	0.0491	1	0.000008	*<0.00003*	0.00014	0.000016	0.00671	*<0.001*	*<0.001*	CA15257-OCT22
20-Oct-22	4	500	450	8.37																					
27-Oct-22	5	500	455	8.44	1.17	0.00510	*<0.005*	0.00087	0.0002	*<0.0015*	0.547	0.00008	1.08	*<0.000025*	0.98	0.0501	*<0.5*	0.000011	0.00147	0.00007	0.000039	0.00534	*<0.001*	*<0.001*	CA15528-OCT22
03-Nov-22	6	500	460	7.99																					
10-Nov-22	7	500	460	7.98	1.41	0.00303	*<0.005*	0.00024	0.0001	0.015	0.471	0.00020	1.20	*<0.000025*	0.96	0.0443	1	*<0.0000025*	*<0.00003*	0.00021	0.000062	0.00519	*<0.001*	*<0.001*	CA15363-NOV22
17-Nov-22	8	500	440	8.16																					
24-Nov-22	9	500	470	8.01	1.28	0.00312	*<0.005*	0.00031	*<0.00005*	*<0.0015*	0.470	0.00018	0.75	*<0.000025*	0.75	0.0446	3	*<0.0000025*	*<0.00003*	0.00011	0.000046	0.00521	*<0.001*	*<0.001*	CA15603-NOV22
01-Dec-22	10	500	455	7.72																					
08-Dec-22	11	500	470	8.09	1.12	0.00308	*<0.005*	0.00034	*<0.00005*	*<0.0015*	0.351	0.00024	0.51	*<0.000025*	0.54	0.0407	2	*<0.0000025*	*<0.00003*	0.00012	0.000060	0.00375	*<0.001*	*<0.001*	CA14343-DEC22
15-Dec-22	12	500	460	7.86																					
22-Dec-22	13	500	450	7.70	1.26	0.00264	*<0.005*	0.0120	0.0011	*<0.0015*	0.403	0.00023	1.42	*<0.000025*	0.75	0.0423	2	*<0.0000025*	*<0.00003*	0.00012	0.000063	0.00500	*<0.001*	*<0.001*	CA15434-DEC22
29-Dec-22	14	500	430	7.76																					
05-Jan-23	15	500	455	7.39	0.976	0.00338	*<0.005*	0.00045	*<0.00005*	*<0.0015*	0.282	0.00014	0.90	*<0.000025*	0.36	0.0378	1	*<0.0000025*	0.00025	0.00006	0.000048	0.00409	*<0.001*	*<0.001*	CA15085-JAN23
12-Jan-23	16	500	460	7.91																					
19-Jan-23	17	500	455	6.95	0.880	0.00366	*<0.005*	0.00059	*<0.00005*	*<0.0015*	0.272	*<0.00002*	0.96	*<0.000025*	0.37	0.0359	2	*<0.0000025*	*<0.00003*	0.00018	0.000052	0.00373	*<0.001*	*<0.001*	CA15299-JAN23
26-Jan-23	18	500	460	7.49																					
02-Feb-23	19	500	470	7.60	0.868	0.00275	*<0.005*	0.00029	*<0.00005*	0.009	0.263	0.00129	0.86	*<0.000025*	0.38	0.0356	1	0.000006	*<0.00003*	0.00098	0.000048	0.00358	*<0.001*	*<0.001*	CA15074-FEB23
09-Feb-23	20	500	455	8.13																					
16-Feb-23	21	500	460	8.21	0.739	0.00299	*<0.005*	0.00027	*<0.00005*	*<0.0015*	0.219	0.00088	1.01	*<0.000025*	0.34	0.0349	1	*<0.0000025*	*<0.00003*	0.00053	0.000044	0.00382	*<0.001*	*<0.001*	CA15362-FEB23
23-Feb-23	22	500	455	7.40																					
02-Mar-23	23	500	465	8.14	0.728	0.00380	*<0.005*	0.00032	*<0.00005*	*<0.0015*	0.219	0.00023	0.86	*<0.000025*	0.28	0.0323	1	*<0.0000025*	0.00010	0.00016	0.000073	0.00322	*<0.001*	*<0.001*	CA15060-MAR23
09-Mar-23	24	500	445	7.94																					
16-Mar-23	25	500	460	8.12	0.621	0.00280	*<0.005*	0.00038	*<0.00005*	*<0.0015*	0.190	0.00015	0.88	*<0.000025*	0.25	0.0288	*<0.5*	*<0.0000025*	*<0.00003*	0.00017	0.000054	0.00312	*<0.001*	*<0.001*	CA15296-MAR23
23-Mar-23	26	500	455	8.22																					
30-Mar-23	27	500	440	8.04	0.590	0.00324	*<0.005*	0.00042	*<0.00005*	0.012	0.163	0.00037	0.83	*<0.000025*	0.27	0.0298	1	*<0.0000025*	0.00074	0.00018	0.000035	0.00331	*<0.001*	*<0.001*	CA15547-MAR23
06-Apr-23	28	500	445	7.43																					
13-Apr-23	29	500	430	7.97	0.635	0.00415	*<0.005*	0.00321	0.0001	*<0.0015*	0.23	0.00011	0.93	*<0.000025*	0.29	0.0275	2	*<0.0000025*	*<0.00003*	0.00024	0.000032	0.00433	*<0.001*	*<0.001*	CA15237-APR23
20-Apr-23	30	500	455	8.23																					
27-Apr-23	31	500	450	8.47	0.501	0.00342	*<0.005*	0.00047	0.001	*<0.0015*	0.136	0.00017	0.72	*<0.000025*	0.19	0.0235	*<0.5*	*<0.0000025*	*<0.00003*	0.00009	0.000029	0.0029	*<0.001*	*<0.001*	CA15464-APR23
04-May-23	32	500	450	8.57																					
11-May-23	33	500	430	7.95	0.542	0.00284	*<0.005*	0.00076	*<0.00005*	*<0.0015*	0.163	0.00005	0.78	*<0.000025*	0.24	0.0240	1	*<0.0000025*	*<0.00003*	0.00011	0.000029	0.00337	*<0.001*	*<0.001*	CA15133-MAY23
18-May-23	34	500	430	7.92																					
25-May-23	35	500	425	7.66	0.487	0.00353	*<0.005*	0.00131	*<0.00005*	*<0.0015*	0.159	0.00010	0.78	*<0.000025*	0.24	0.0238	*<0.5*	*<0.0000025*	*<0.00003*	0.00021	0.000019	0.00341	*<0.001*	*<0.001*	CA15511-MAY23
01-Jun-23	36	500	450	7.95																					
08-Jun-23	37	500	440	8.14	0.509	0.00392	*<0.005*	0.00056	0.0009	*<0.0015*	0.171	0.00011	0.97	*<0.000025*	0.31	0.0249	*<0.5*	*<0.0000025*	*<0.00003*	0.00025	0.000021	0.00349	*<0.001*	*<0.001*	CA15113-JUN23
15-Jun-23	38	500	445	8.34	0.418	0.00340	*<0.005*	0.00049	*<0.00005*	*<0.0015*	0.159	0.00013	0.83	*<0.000025*	0.21	0.0209	*<1.5*	*<0.0000025*	*<0.00003*	0.00019	0.000018	0.00285	0.006	*<0.001*	CA15637-JUN23
22-Jun-23	39	500	475	8.11	0.446	0.00295	*<0.005*	0.00076	*<0.00005*	*<0.0015*	0.157	0.00010	0.84	*<0.000025*	0.21	0.0227	*<1.5*	*<0.0000025*	*<0.00003*	0.00008	0.000049	0.00304	*<0.001*	*<0.001*	CA15752-JUN23

Cell Terminated

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 8

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
					µmhos/cm	$mgCaCO_3/L$	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
22-Sep-22	0	500	365	8.68	184	20.9	32	18	0.15	54.7	0.034	0.0082	0.0066	0.0111	*<0.0000035*	0.00013	0.029	0.000962	17.3	*<0.00004*	0.000185	0.0039	*<0.0035*	*<0.000045*	0.0008
29-Sep-22	1	500	490	8.21	211	26.8	41	18	0.09	78.4	0.101	0.0293	0.0151	0.0163	*<0.0000035*	0.00010	0.054	0.00105	23.2	*<0.00004*	0.000224	0.0045	*<0.0035*	*<0.000045*	0.0019
06-Oct-22	2	500	460	8.14	106	25.1	13	3	0.12	37.9	0.106	0.0269	0.0118	0.0106	0.000008	0.00007	0.023	0.000664	11.7	*<0.00004*	0.000062	0.0016	0.015	*<0.000045*	0.0009
13-Oct-22	3	500	440	8.52	76	23.9	8	*<0.5*	0.12	28.8	0.113	0.0214	0.0113	0.00947	*<0.0000035*	0.00007	0.015	0.000436	8.78	*<0.00004*	0.000013	0.0011	*<0.0035*	*<0.000045*	0.0006
20-Oct-22	4	500	460	8.41	64		5																		
27-Oct-22	5	500	465	8.57	64	24.7	4	*<0.5*	*<0.03*	23.3	0.128	0.0112	0.0121	0.00839	*<0.0000035*	0.00003	0.011	0.000800	7.69	*<0.00004*	0.000044	0.0012	0.014	*<0.000045*	0.0006
03-Nov-22	6	500	455	8.13	58		5																		
10-Nov-22	7	500	460	8.19	57	23.2	4	*<0.5*	*<0.03*	23.5	0.113	0.0090	0.0136	0.00871	*<0.0000035*	0.00003	0.010	0.000288	7.58	*<0.00004*	0.000083	0.0011	*<0.0035*	*<0.000045*	0.0008
17-Nov-22	8	500	445	8.28	55		4																		
24-Nov-22	9	500	455	8.28	53	22.2	4	*<0.5*	*<0.03*	22.4	0.099	0.0082	0.0143	0.00966	*<0.0000035*	0.00003	0.004	0.000197	7.40	*<0.00004*	0.00007	0.0012	*<0.0035*	*<0.000045*	0.0003
01-Dec-22	10	500	470	8.18	54		4																		
08-Dec-22	11	500	465	8.44	55	23.5	5	*<0.5*	*<0.03*	21.2	0.129	0.0071	0.0129	0.00708	*<0.0000035*	0.00002	0.011	0.000166	7.16	*<0.00004*	0.000049	0.0009	*<0.0035*	*<0.000045*	0.0005
15-Dec-22	12	500	460	8.48	55		4																		
22-Dec-22	13	500	460	8.08	60	25.7	5	*<0.5*	*<0.03*	28.0	0.141	0.0071	0.0154	0.00881	0.000016	0.00002	0.007	0.000284	9.62	0.00009	0.000071	0.0012	*<0.0035*	*<0.000045*	0.0006
29-Dec-22	14	500	435	7.90	55		4																		
05-Jan-23	15	500	445	7.98	52	23.5	4	*<0.5*	*<0.03*	23.2	0.134	0.0066	0.0145	0.00730	*<0.0000035*	0.00002	0.003	0.000178	8.14	*<0.00004*	0.000048	0.0010	*<0.0035*	*<0.000045*	0.0004
12-Jan-23	16	500	470	8.01	53		3																		
19-Jan-23	17	500	460	7.90	53	22.5	4	*<0.5*	*<0.03*	23.6	0.114	0.0051	0.0120	0.00800	*<0.0000035*	0.00004	0.003	0.000290	8.34	*<0.00004*	0.000065	0.0049	0.010	0.00009	0.0003
26-Jan-23	18	500	475	8.26	53		3																		
02-Feb-23	19	500	455	8.22	53	21.9	5	*<0.5*	*<0.03*	23.0	0.097	0.0062	0.0122	0.00817	0.000041	0.00002	0.002	0.000292	8.19	0.00032	0.000099	0.0011	*<0.0035*	*<0.000045*	0.0003
09-Feb-23	20	500	455	8.39	55		4																		
16-Feb-23	21	500	450	8.66	52	21.2	4	*<0.5*	*<0.03*	25.4	0.116	0.0058	0.0129	0.00793	*<0.0000035*	0.00003	0.031	0.000200	9.02	0.00030	0.000050	0.0011	0.010	0.00026	0.0008
23-Feb-23	22	500	450	7.83	50		5																		
02-Mar-23	23	500	455	8.52	51	20.8	4	*<0.5*	*<0.03*	22.2	0.111	0.0056	0.0109	0.00824	*<0.0000035*	0.00003	0.003	0.000233	7.93	*<0.00004*	0.000081	0.0011	0.077	*<0.000045*	0.0003
09-Mar-23	24	500	450	8.31	50		4																		
16-Mar-23	25	500	460	8.51	49	17.8	5	*<0.5*	0.10	22.1	0.102	0.0055	0.0109	0.00823	0.000016	0.00002	0.004	0.000312	7.98	0.00016	0.000088	0.0011	*<0.0035*	*<0.000045*	0.0003
23-Mar-23	26	500	445	8.73	51		4																		
30-Mar-23	27	500	455	8.25	52	21.3	4	*<0.5*	*<0.03*	23.6	0.095	0.0046	0.0110	0.00728	*<0.0000035*	0.00003	0.006	0.000699	8.57	*<0.00004*	0.000071	0.0010	*<0.0035*	*<0.000045*	0.0002
06-Apr-23	28	500	470	8.09	51		4																		
13-Apr-23	29	500	425	8.66	50	17.5	4	*<0.5*	*<0.03*	24.9	0.141	0.0056	0.0113	0.00895	*<0.0000035*	0.00004	0.018	0.00108	9.06	*<0.00004*	0.000092	0.0015	0.007	*<0.000045*	0.0004
20-Apr-23	30	500	450	8.49	53		3																		
27-Apr-23	31	500	455	8.74	47	17.3	5	*<0.5*	*<0.03*	20.8	0.11	0.0047	0.009	0.00749	0.000007	0.00003	*<0.001*	0.000415	7.6	*<0.00004*	0.000083	0.001	*<0.0035*	*<0.000045*	*<0.00005*
04-May-23	32	500	455	8.87	50		5																		
11-May-23	33	500	430	8.11	48	17.2	4	*<0.5*	*<0.03*	20.0	0.090	0.0037	0.0098	0.00690	*<0.0000035*	0.00002	0.003	0.000306	7.29	*<0.00004*	0.000080	0.0010	*<0.0035*	*<0.000045*	0.0002
18-May-23	34	500	430	8.07	51		5																		
25-May-23	35	500	430	8.24	49	15.6	4	*<0.5*	*<0.03*	23.7	0.099	0.0067	0.0094	0.00942	*<0.0000035*	0.00004	0.003	0.000543	8.66	*<0.00004*	0.000074	0.0015	*<0.0035*	*<0.000045*	0.0002
01-Jun-23	36	500	460	8.55	46		4																		
08-Jun-23	37	500	440	8.65	51	21.1	4	*<0.5*	*<0.03*	26.7	0.137	0.0046	0.0106	0.00769	*<0.0000035*	0.00003	0.003	0.000216	9.94	*<0.00004*	0.000058	0.0011	*<0.0035*	*<0.000045*	0.0003
15-Jun-23	38	500	445	8.54	47	16.5	4	*<0.5*	*<0.03*	21.3	0.095	0.0036	0.0086	0.00619	*<0.0000035*	0.00002	0.003	0.000280	7.91	*<0.00004*	0.000053	0.0008	*<0.0035*	*<0.000045*	0.0001
22-Jun-23	39	500	450	8.39	45	16.4	3	*<0.5*	*<0.03*	20.4	0.091	0.0037	0.0086	0.00654	*<0.0000035*	0.00003	0.003	0.000266	7.54	*<0.00004*	0.000069	0.0011	*<0.0035*	*<0.000045*	0.0002
02-May-24	40	500	415	8.06	85	22.4	14	*<0.5*	*<0.03*	36.6	0.084	0.0132	0.0150	0.0155	*<0.0000035*	0.00002	0.012	0.000832	13.3	*<0.00004*	0.000139	0.003	*<0.0035*	*<0.000045*	0.0005
09-May-24	41	500	490	8.01	59	20.9	6	*<0.5*	*<0.03*	25.9	0.073	0.0079	0.0080	0.00968	*<0.0000035*	0.00002	0.006	0.000493	9.61	*<0.00004*	0.000081	0.001	*<0.0035*	*<0.000045*	0.0004
16-May-24	42	500	475	8.24	48	17.6	5	*<0.5*	*<0.03*	21.2	0.081	0.0062	0.0083	0.00796	*<0.0000035*	0.00002	0.004	0.000273	7.91	*<0.00004*	0.000071	0.001	0.024	0.00031	0.0003
23-May-24	43	500	455	7.54	48	17.6																			
30-May-24	44	500	475	8.04	48	17.5																			
06-Jun-24	45	500	480	8.25	46	17.0																			
13-Jun-24	46	500	450	8.17	47	17.3	5			20.7	0.031	0.0046	0.0081	0.00525	*<0.0000035*	0.00002	0.003	0.000369	7.69	0.00009	0.000047	*<0.0005*	*<0.0035*	*<0.000045*	0.0002
20-Jun-24	47	500	470	8.59	50	18.0																			
27-Jun-24	48	500	470	8.01	49	17.0																			
04-Jul-24	49	500	450	7.77	49	17.0																			
11-Jul-24	50	500	475	8.33	48	17.1	5			21.1	0.081	0.0046	0.0074	0.00694	*<0.0000035*	0.00002	0.002	0.000234	7.94	*<0.00004*	0.000075	*<0.0005*	0.019	*<0.000045*	0.0002
18-Jul-24	51	500	465	8.31	48	15.6																			
25-Jul-24	52	500	450	7.69	46	15.4																			
01-Aug-24	53	500	475	7.97	46	15.9																			
08-Aug-24	54	500	440	7.89	48	16.6	6			21.6	0.119	0.0035	0.0065	0.00569	*<0.0000035*	0.00003	0.003	0.000425	8	0.00074	0.000107	0.001	0.026	0.00012	0.0002
15-Aug-24	55	500	455	8.18	45	15.3																			
22-Aug-24	56	500	450	8.12	45	15.6																			
29-Aug-24	57	500	470	8.01	47	15.6																			
05-Sep-24	58	500	445	8.04	41	16.9	5			20.3	0.089	0.0039	0.0063	0.00603	*<0.0000035*	0.00003	0.002	0.000262	7.65	*<0.00004*	0.000134	0.001	0.019	*<0.000045*	0.0001
12-Sep-24	59	500	465	7.99	42	15.9																			
19-Sep-24	60	500	460	8.38	43	15.9																			
26-Sep-24	61	500	520	8.41	47	17.2																			
03-Oct-24	62	500	455	8.30	39	15.6	3			17.6	0.086	0.0034	0.0066	0.00554	0.000007	0.00002	*<0.001*	0.000171	6.65	0.00015	0.000224	0.001	0.017	0.00016	0.0001
10-Oct-24	63	500	475	7.96	41	16.1																			
17-Oct-24	64	500	450	7.65	38	14.1																			

HC 8

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
24-Oct-24	65	500	490	8.36	41	16.1																			
31-Oct-24	66	500	490	8.16	41	16.5	3			19.6	0.065	0.0032	0.0056	0.00576	*<0.0000035*	0.00001	*<0.001*	0.000149	7.38	0.00009	0.000072	*<0.0005*	*<0.0035*	*<0.000045*	0.0001
07-Nov-24	67	500	480	7.80	41	15.9																			
14-Nov-24	68	500	480	7.67	41	15.8																			
21-Nov-24	69	500	455	8.32	37	14.7																			
28-Nov-24	70	500	480	8.18	41	16.8	3			19.4	0.045	0.0031	0.0050	0.00548	*<0.0000035*	0.00001	*<0.001*	0.000280	7.34	*<0.00004*	0.000064	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
05-Dec-24	71	500	485	8.09	43	16.7																			
12-Dec-24	72	500	475	8.15	40	15.4																			
19-Dec-24	73	500	500	7.85	39	15.7																			
26-Dec-24	74	500	495	7.63	40	16.2	3			18.6	0.044	0.0032	0.0046	0.00477	0.000008	0.00001	*<0.001*	0.000244	6.98	*<0.00004*	0.000098	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
02-Jan-25	75	500	485	8.35	37	14.8																			
09-Jan-25	76	500	490	7.81		15.7																			
16-Jan-25	77	500	500																						
23-Jan-25	78	500	490	7.80		17.8	3			18.6	0.049	0.0027	0.0043	0.00540	*<0.0000035*	0.00001	*<0.001*	0.000146	7.08	*<0.00004*	0.000102	*<0.0005*	*<0.0035*	*<0.000045*	0.0001
30-Jan-25	79	500	520																						
06-Feb-25	80	500	500																						
13-Feb-25	81	500	500																						
20-Feb-25	82	500	470	7.53		15.0	3			16.7	0.048	0.0021	0.0037	0.00462	*<0.0000035*	0.00001	0.002	0.000236	6.37	*<0.00004*	0.000058	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
27-Feb-25	83	500	490																						
06-Mar-25	84	500	480																						
13-Mar-25	85	500	490																						
20-Mar-25	86	500	505	7.99		16.0	3			16.9	0.051	0.0026	0.0060	0.00442	*<0.0000035*	*<0.000005*	*<0.001*	0.000172	6.44	0.00026	0.000039	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
27-Mar-25	87	500	515																						
03-Apr-25	88	500	490																						
10-Apr-25	89	500	470																						
17-Apr-25	90	500	475	7.64		14.8	3			16.5	0.045	0.0026	0.0040	0.00481	*<0.0000035*	0.00001	0.002	0.000155	6.29	*<0.00004*	0.000059	*<0.0005*	*<0.0035*	0.00018	0.0001
24-Apr-25	91	500	480																						
01-May-25	92	500	485																						
08-May-25	93	500	520																						
15-May-25	94	500	490	7.92		15.3	3			19.1	0.044	0.0025	0.0039	0.00478	*<0.0000035*	*<0.000005*	*<0.001*	0.000223	7.29	*<0.00004*	0.000049	*<0.0005*	*<0.0035*	0.00023	*<0.00005*
22-May-25	95	500	500																						
29-May-25	96	500	460																						
05-Jun-25	97	500	480																						
12-Jun-25	98	500	475	7.89		15.6	3			21.2	0.038	0.0028	0.0037	0.00604	*<0.0000035*	*<0.000005*	*<0.001*	0.000189	8.11	*<0.00004*	0.000086	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
19-Jun-25	99	500	480																						
26-Jun-25	100	500	495																						
03-Jul-25	101	500	495																						
10-Jul-25	102	500	470	8.00		14.3	3			17.8	0.046	0.0023	0.0040	0.00475	*<0.0000035*	0.00001	0.002	0.000182	6.80	*<0.00004*	0.000048	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
17-Jul-25	103	500	435																						
24-Jul-25	104	500	450																						
31-Jul-25	105	500	440																						
07-Aug-25	106	500	450	7.87		13.2	3			17.4	0.048	0.0023	0.0036	0.00488	*<0.0000035*	0.00001	*<0.001*	0.000222	6.62	*<0.00004*	0.000049	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
14-Aug-25	107	500	440																						
21-Aug-25	108	500	445																						
28-Aug-25	109	500	460																						
04-Sep-25	110	500	480	7.90		15.9	3			19.9	0.056	0.0025	0.0038	0.00551	*<0.0000035*	0.00001	*<0.001*	0.000173	7.58	*<0.00004*	0.000047	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
11-Sep-25	111	500	435																						
18-Sep-25	112	500	485																						
25-Sep-25	113	500	480																						
02-Oct-25	114	500	460	7.56		12.7	3	---	---	15.4	0.042	0.0018	0.0033	0.00462	*<0.0000035*	*<0.000005*	0.004	0.000114	5.84	*<0.00004*	0.000054	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
09-Oct-25	115	500	510																						
16-Oct-25	116	500	450																						
23-Oct-25	117	500	435																						
30-Oct-25	118	500	450	7.79		15.5	3			19.4	0.054	0.0021	0.0034	0.00506	*<0.0000035*	*<0.000005*	*<0.001*	0.000190	7.39	*<0.00004*	0.000065	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
06-Nov-25	119	500	420																						
13-Nov-25	120	500	460																						
20-Nov-25	121	500	480																						
27-Nov-25	122	500	460	7.72		15.2	3																		

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 8

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
22-Sep-22	0	500	365	8.68	2.80	0.00324	*<0.005*	1.28	0.0007	0.016	5.62	0.00674	0.61	*<0.000025*	6.03	0.293	11	0.000114	*<0.00003*	0.00028	0.000061	0.00135	*<0.001*	*<0.001*	CA15397-SEP22
29-Sep-22	1	500	490	8.21	5.00	0.00862	*<0.005*	4.38	0.0004	0.005	4.96	0.00919	1.32	*<0.000025*	7.68	0.479	14	0.000058	*<0.00003*	0.00459	0.000329	0.00233	*<0.001*	*<0.001*	CA15024-OCT22
06-Oct-22	2	500	460	8.14	2.13	0.00426	*<0.005*	3.22	0.0001	0.004	2.65	0.00588	1.20	*<0.000025*	3.02	0.244	5	0.000048	0.00010	0.00356	0.000160	0.00248	*<0.001*	*<0.001*	CA15119-OCT22
13-Oct-22	3	500	440	8.52	1.67	0.00418	*<0.005*	2.03	*<0.00005*	*<0.0015*	2.13	0.00448	0.94	*<0.000025*	1.83	0.178	2	0.000012	*<0.00003*	0.00105	0.000108	0.00242	*<0.001*	*<0.001*	CA15257-OCT22
20-Oct-22	4	500	460	8.41																					
27-Oct-22	5	500	465	8.57	0.997	0.00393	*<0.005*	1.13	0.0003	*<0.0015*	1.10	0.00409	0.99	*<0.000025*	0.58	0.160	1	0.000038	0.00038	0.00065	0.000265	0.00187	*<0.001*	*<0.001*	CA15528-OCT22
03-Nov-22	6	500	455	8.13																					
10-Nov-22	7	500	460	8.19	1.12	0.00593	*<0.005*	0.764	0.0001	0.011	0.935	0.00287	1.00	*<0.000025*	0.47	0.145	2	0.000025	*<0.00003*	0.00047	0.000199	0.00186	*<0.001*	*<0.001*	CA15363-NOV22
17-Nov-22	8	500	445	8.28																					
24-Nov-22	9	500	455	8.28	0.94	0.00630	*<0.005*	0.78900	*<0.00005*	*<0.0015*	0.816	0.00256	0.52	*<0.000025*	0.38	0.1260	3	0.000025	*<0.00003*	0.00036	0.000276	0.00178	*<0.001*	*<0.001*	CA15603-NOV22
01-Dec-22	10	500	470	8.18																					
08-Dec-22	11	500	465	8.44	0.811	0.00441	*<0.005*	0.587	0.0001	*<0.0015*	0.636	0.00251	0.48	*<0.000025*	0.27	0.109	2	0.000020	*<0.00003*	0.00014	0.000200	0.00140	*<0.001*	*<0.001*	CA14343-DEC22
15-Dec-22	12	500	460	8.48																					
22-Dec-22	13	500	460	8.08	0.959	0.00824	*<0.005*	0.771	0.0008	*<0.0015*	0.725	0.00263	1.14	*<0.000025*	0.51	0.118	2	0.000021	*<0.00003*	0.00034	0.000236	0.00166	*<0.001*	*<0.001*	CA15434-DEC22
29-Dec-22	14	500	435	7.90																					
05-Jan-23	15	500	445	7.98	0.696	0.00598	*<0.005*	0.789	*<0.00005*	*<0.0015*	0.486	0.00229	0.74	*<0.000025*	0.16	0.0985	1	0.000018	0.00016	0.00021	0.000194	0.00137	*<0.001*	*<0.001*	CA15085-JAN23
12-Jan-23	16	500	470	8.01																					
19-Jan-23	17	500	460	7.90	0.674	0.00718	*<0.005*	0.869	*<0.00005*	*<0.0015*	0.467	0.00213	0.75	*<0.000025*	0.19	0.0931	2	0.000019	0.00012	0.00040	0.000196	0.00111	*<0.001*	*<0.001*	CA15299-JAN23
26-Jan-23	18	500	475	8.26																					
02-Feb-23	19	500	455	8.22	0.627	0.00767	*<0.005*	0.749	0.0001	0.015	0.428	0.00288	0.63	*<0.000025*	0.19	0.0877	1	0.000029	*<0.00003*	0.00167	0.000160	0.00102	*<0.001*	*<0.001*	CA15074-FEB23
09-Feb-23	20	500	455	8.39																					
16-Feb-23	21	500	450	8.66	0.703	0.00799	*<0.005*	0.958	0.0011	*<0.0015*	0.560	0.00143	0.64	0.00007	0.74	0.0891	5	*<0.0000025*	0.00013	*<0.000025*	0.000170	0.00124	0.002	*<0.001*	CA15362-FEB23
23-Feb-23	22	500	450	7.83																					
02-Mar-23	23	500	455	8.52	0.589	0.00829	*<0.005*	0.906	*<0.00005*	*<0.0015*	0.360	0.00191	0.67	*<0.000025*	0.15	0.0827	1	0.000021	0.00014	0.00049	0.000244	0.00097	*<0.001*	*<0.001*	CA15060-MAR23
09-Mar-23	24	500	450	8.31																					
16-Mar-23	25	500	460	8.51	0.523	0.00730	*<0.005*	0.889	*<0.00005*	0.004	0.329	0.00181	0.67	*<0.000025*	0.13	0.0744	*<0.5*	0.000027	*<0.00003*	0.00094	0.000146	0.00096	*<0.001*	*<0.001*	CA15296-MAR23
23-Mar-23	26	500	445	8.73																					
30-Mar-23	27	500	455	8.25	0.525	0.00690	*<0.005*	0.959	*<0.00005*	0.013	0.289	0.00229	0.65	*<0.000025*	0.16	0.0772	1	0.000014	0.00040	0.00027	0.000125	0.00094	*<0.001*	*<0.001*	CA15547-MAR23
06-Apr-23	28	500	470	8.09																					
13-Apr-23	29	500	425	8.66	0.561	0.00865	*<0.005*	1.04	*<0.00005*	*<0.0015*	0.418	0.00197	0.74	*<0.000025*	0.23	0.0727	3	0.00002	*<0.00003*	0.00022	0.0001	0.00135	*<0.001*	*<0.001*	CA15237-APR23
20-Apr-23	30	500	450	8.49																					
27-Apr-23	31	500	455	8.74	0.444	0.00766	*<0.005*	0.982	0.0008	*<0.0015*	0.248	0.00179	0.55	*<0.000025*	0.1	0.0616	*<0.5*	0.000017	*<0.00003*	0.00044	0.000099	0.00089	*<0.001*	*<0.001*	CA15464-APR23
04-May-23	32	500	455	8.87																					
11-May-23	33	500	430	8.11	0.444	0.00741	*<0.005*	1.04	*<0.00005*	*<0.0015*	0.262	0.00163	0.59	*<0.000025*	0.12	0.0577	1	0.000013	*<0.00003*	0.00036	0.000063	0.00090	*<0.001*	*<0.001*	CA15133-MAY23
18-May-23	34	500	430	8.07																					
25-May-23	35	500	430	8.24	0.493	0.00734	0.040	1.74	*<0.00005*	*<0.0015*	0.295	0.00194	0.68	*<0.000025*	0.13	0.0887	1	0.000025	*<0.00003*	0.00055	0.000092	0.00111	*<0.001*	*<0.001*	CA15511-MAY23
01-Jun-23	36	500	460	8.55																					
08-Jun-23	37	500	440	8.65	0.463	0.0101	*<0.005*	0.885	*<0.00005*	*<0.0015*	0.273	0.00194	0.73	*<0.000025*	0.19	0.0597	1	0.000014	*<0.00003*	0.00040	0.000082	0.00094	*<0.001*	*<0.001*	CA15113-JUN23
15-Jun-23	38	500	445	8.54	0.381	0.00853	*<0.005*	0.788	*<0.00005*	*<0.0015*	0.255	0.00172	0.63	*<0.000025*	0.12	0.0502	*<1.5*	0.000016	*<0.00003*	0.00028	0.000061	0.00073	*<0.001*	*<0.001*	CA15637-JUN23
22-Jun-23	39	500	450	8.39	0.389	0.00858	*<0.005*	0.816	*<0.00005*	*<0.0015*	0.237	0.00152	0.58	*<0.000025*	0.11	0.0493	*<1.5*	0.000018	*<0.00003*	0.00024	0.000077	0.00076	*<0.001*	*<0.001*	CA15752-JUN23
02-May-24	40	500	415	8.06	0.817	0.00701	0.0120	2.40	*<0.00005*	*<0.0015*	0.614	0.00321	1.76	*<0.000025*	0.36	0.125	*<2.5*	0.000041	*<0.00003*	0.0008	0.000211	0.00151	*<0.001*	*<0.001*	CA15608-MAY24
09-May-24	41	500	490	8.01	0.458	0.00906	0.02	0.984	*<0.00005*	*<0.0015*	0.352	0.00179	0.94	*<0.000025*	0.24	0.0673	*<2.5*	0.000026	*<0.00003*	0.0004	0.000117	0.00080	*<0.001*	*<0.001*	CA15734-MAY24
16-May-24	42	500	475	8.24	0.363	0.00808	*<0.005*	0.813	0.0004	*<0.0015*	0.339	0.00137	0.78	*<0.000025*	0.21	0.0606	*<2.5*	0.000019	*<0.00003*	0.0012	0.000114	0.00096	*<0.001*	*<0.001*	CA15834-MAY24
23-May-24	43	500	455	7.54																					
30-May-24	44	500	475	8.04																					
06-Jun-24	45	500	480	8.25																					
13-Jun-24	46	500	450	8.17	0.356	0.00540	*<0.005*	0.870	*<0.00005*	*<0.0015*	0.218	0.00128	0.70	*<0.000025*	0.21	0.0440	*<2.5*	0.000008	*<0.00003*	0.0005	0.000039	0.00055	*<0.001*	*<0.001*	CA15699-JUN24
20-Jun-24	47	500	470	8.59																					
27-Jun-24	48	500	470	8.01																					
04-Jul-24	49	500	450	7.77																					
11-Jul-24	50	500	475	8.33	0.306	0.00875	*<0.005*	0.943	*<0.00005*	*<0.0015*	0.213	0.00106	0.61	*<0.000025*	0.11	0.0448	*<2.5*	0.000017	*<0.00003*	0.0013	0.000096	0.00071	*<0.001*	*<0.001*	CA15639-JUL24
18-Jul-24	51	500	465	8.31																					
25-Jul-24	52	500	450	7.69																					
01-Aug-24	53	500	475	7.97																					
08-Aug-24	54	500	440	7.89	0.403	0.00947	*<0.005*	0.812	0.0002	0.003	0.197	0.00105	0.57	*<0.000025*	0.31	0.0366	*<2.5*	0.000013	*<0.00003*	0.0015	0.000062	0.00068	*<0.001*	*<0.001*	CA15126-AUG24
15-Aug-24	55	500	455	8.18																					
22-Aug-24	56	500	450	8.12																					
29-Aug-24	57	500	470	8.01																					
05-Sep-24	58	500	445	8.04	0.299	0.00902	*<0.005*	0.604	0.0001	0.003	0.203	0.00102	0.52	*<0.000025*	0.14	0.0357	*<2.5*	0.000005	0.00024	0.0002	0.000041	0.00061	*<0.001*	*<0.001*	CA15088-SEP24
12-Sep-24	59	500	465	7.99																					
19-Sep-24	60	500	460	8.38																					
26-Sep-24	61	500	520	8.41																					
03-Oct-24	62	500	455	8.30	0.242	0.00784	*<0.005*	0.617	0.0057	*<0.0015*	0.141	0.00097	0.52	*<0.000025*	0.14	0.0376	*<2.5*	0.000016	*<0.00003*	0.0006	0.000052	0.00063	*<0.001*	*<0.001*	CA15571-OCT24
10-Oct-24	63	500	475	7.96																					
17-Oct-24	64	500	450	7.65																					

HC 8

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
24-Oct-24	65	500	490	8.36																					
31-Oct-24	66	500	490	8.16	0.287	0.00833	*<0.005*	0.626	*<0.00005*	*<0.0015*	0.150	0.00073	0.49	*<0.000025*	0.11	0.0354	*<2.5*	0.000015	*<0.00003*	0.0004	0.000043	0.00052	*<0.001*	*<0.001*	CA15017-NOV24
07-Nov-24	67	500	480	7.80																					
14-Nov-24	68	500	480	7.67																					
21-Nov-24	69	500	455	8.32																					
28-Nov-24	70	500	480	8.18	0.263	0.00999	0.01	0.620	*<0.00005*	*<0.0015*	0.130	0.00066	0.45	*<0.000025*	0.20	0.0321	*<2.5*	0.000012	*<0.00003*	0.00018	0.000024	0.00043	*<0.001*	*<0.001*	CA15309-NOV24
05-Dec-24	71	500	485	8.09																					
12-Dec-24	72	500	475	8.15																					
19-Dec-24	73	500	500	7.85																					
26-Dec-24	74	500	495	7.63	0.271	0.0100	0.03	0.639	0.0001	*<0.0015*	0.115	0.00065	0.48	*<0.000025*	0.10	0.0306	*<2.5*	0.000010	*<0.00003*	0.00020	0.000039	0.00038	*<0.001*	*<0.001*	CA15679-DEC24
02-Jan-25	75	500	485	8.35																					
09-Jan-25	76	500	490	7.81																					
16-Jan-25	77	500	500																						
23-Jan-25	78	500	490	7.80	0.232	0.0111	*<0.005*	0.538	*<0.00005*	*<0.0015*	0.102	0.00072	0.40	*<0.000025*	0.07	0.0309	*<2.5*	0.000008	*<0.00003*	0.00013	0.000050	0.00037	*<0.001*	*<0.001*	CA15081-JAN25
30-Jan-25	79	500	520																						
06-Feb-25	80	500	500																						
13-Feb-25	81	500	500																						
20-Feb-25	82	500	470	7.53	0.204	0.00910	*<0.005*	0.499	*<0.00005*	*<0.0015*	0.095	0.00067	0.32	*<0.000025*	0.08	0.0262	*<2.5*	0.000011	*<0.00003*	0.00016	0.000047	0.00034	*<0.001*	*<0.001*	CA15682-FEB25
27-Feb-25	83	500	490																						
06-Mar-25	84	500	480																						
13-Mar-25	85	500	490																						
20-Mar-25	86	500	505	7.99	0.208	0.00890	*<0.005*	0.539	*<0.00005*	*<0.0015*	0.120	0.00068	0.36	*<0.000025*	0.14	0.0277	*<2.5*	0.000009	*<0.00003*	0.00016	0.000040	0.00031	*<0.001*	*<0.001*	CA15261-MAR25
27-Mar-25	87	500	515																						
03-Apr-25	88	500	490																						
10-Apr-25	89	500	470																						
17-Apr-25	90	500	475	7.64	0.194	0.00948	*<0.005*	0.542	0.0002	*<0.0015*	0.103	0.00086	0.36	*<0.000025*	0.10	0.0275	*<2.5*	0.000008	*<0.00003*	0.00017	0.000030	0.00034	0.003	*<0.001*	CA15679-APR25
24-Apr-25	91	500	480																						
01-May-25	92	500	485																						
08-May-25	93	500	520																						
15-May-25	94	500	490	7.92	0.207	0.00908	*<0.005*	0.560	*<0.00005*	*<0.0015*	0.089	0.00072	0.34	*<0.000025*	0.08	0.0266	*<2.5*	0.000014	0.00011	0.00024	0.000043	0.00031	0.002	*<0.001*	CA15997-MAY25
22-May-25	95	500	500																						
29-May-25	96	500	460																						
05-Jun-25	97	500	480																						
12-Jun-25	98	500	475	7.89	0.238	0.00891	*<0.005*	0.503	*<0.00005*	*<0.0015*	0.124	0.00086	0.38	*<0.000025*	0.09	0.0279	*<2.5*	*<0.0000025*	*<0.00003*	0.00020	0.000030	0.00032	*<0.001*	*<0.001*	CA15705-JUN25
19-Jun-25	99	500	480																						
26-Jun-25	100	500	495																						
03-Jul-25	101	500	495																						
10-Jul-25	102	500	470	8.00	0.194	0.00828	*<0.005*	0.538	0.0001	*<0.0015*	0.102	0.00084	0.30	*<0.000025*	0.08	0.0238	*<2.5*	*<0.0000025*	*<0.00003*	0.00030	0.000029	0.00032	*<0.001*	*<0.001*	CA15545-JUL25
17-Jul-25	103	500	435																						
24-Jul-25	104	500	450																						
31-Jul-25	105	500	440																						
07-Aug-25	106	500	450	7.87	0.216	0.00845	*<0.005*	0.532	*<0.00005*	*<0.0015*	0.101	0.00083	0.33	*<0.000025*	0.09	0.0223	*<2.5*	0.000010	*<0.00003*	0.00010	0.000033	0.00035	*<0.001*	*<0.001*	CA15557-AUG25
14-Aug-25	107	500	440																						
21-Aug-25	108	500	445																						
28-Aug-25	109	500	460																						
04-Sep-25	110	500	480	7.90	0.230	0.00819	*<0.005*	0.601	*<0.00005*	*<0.0015*	0.089	0.00090	0.39	*<0.000025*	0.08	0.0255	*<2.5*	0.000008	*<0.00003*	0.0002	0.000046	0.00035	*<0.001*	*<0.001*	CA15406-SEP25
11-Sep-25	111	500	435																						
18-Sep-25	112	500	485																						
25-Sep-25	113	500	480																						
02-Oct-25	114	500	460	7.56	0.191	0.00723	*<0.005*	0.464	*<0.00005*	*<0.0015*	0.092	0.00067	0.26	*<0.000025*	0.09	0.0207	*<2.5*	0.000007	*<0.00003*	0.00020	0.000030	0.00028	*<0.001*	*<0.001*	CA15034-OCT25
09-Oct-25	115	500	510																						
16-Oct-25	116	500	450																						
23-Oct-25	117	500	435																						
30-Oct-25	118	500	450	7.79	0.225	0.00874	*<0.005*	0.514	0.0001	*<0.0015*	0.089	0.00081	0.31	*<0.000025*	0.08	0.0245	*<2.5*	0.000012	*<0.00003*	0.00021	0.000052	0.00032	*<0.001*	*<0.001*	CA85189-OCT25
06-Nov-25	119	500	420																						
13-Nov-25	120	500	460																						
20-Nov-25	121	500	480																						
27-Nov-25	122	500	460	7.72																					

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 9

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
					µmhos/cm	$mgCaCO_3/L$	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
22-Sep-22	0	500	380	8.92	101	25.2	15	*<0.5*	0.06	33.1	0.045	*<0.00045*	0.0005	0.00123	*<0.0000035*	*<0.000005*	0.036	0.000035	11.4	*<0.00004*	0.000008	0.0006	*<0.0035*	*<0.000045*	0.0005
29-Sep-22	1	500	490	8.55	88	32.6	6	1	0.06	26.9	0.165	0.0032	0.0011	0.00101	*<0.0000035*	*<0.000005*	0.078	0.000009	7.60	0.00009	*<0.000002*	0.0006	*<0.0035*	*<0.000045*	0.0009
06-Oct-22	2	500	460	8.34	73	27.7	6	*<0.5*	*<0.03*	25.3	0.130	0.0026	0.0013	0.00113	*<0.0000035*	*<0.000005*	0.042	*<0.0000015*	7.51	0.00012	*<0.000002*	0.0004	*<0.0035*	*<0.000045*	0.0006
13-Oct-22	3	500	440	8.72	59	25.7	4	*<0.5*	*<0.03*	22.7	0.129	0.0020	0.0011	0.00076	*<0.0000035*	*<0.000005*	0.028	*<0.0000015*	6.38	0.00010	*<0.000002*	0.0003	0.007	*<0.000045*	0.0004
20-Oct-22	4	500	455	8.42	55		3																		
27-Oct-22	5	500	465	8.60	51	24.3	3	*<0.5*	*<0.03*	19.9	0.119	0.0012	0.0012	0.00066	0.000016	*<0.000005*	0.025	0.000010	5.97	0.00009	0.000016	0.0007	0.012	*<0.000045*	0.0004
03-Nov-22	6	500	455	8.34	52		3																		
10-Nov-22	7	500	460	8.34	50	24.8	2	*<0.5*	*<0.03*	20.8	0.131	*<0.00045*	0.0013	0.00056	*<0.0000035*	*<0.000005*	0.019	*<0.0000015*	6.10	*<0.00004*	0.000025	0.0003	*<0.0035*	*<0.000045*	0.0007
17-Nov-22	8	500	440	8.31	48		3																		
24-Nov-22	9	500	460	8.38	48	23.8	3	*<0.5*	*<0.03*	20.2	0.114	*<0.00045*	0.0013	0.00085	*<0.0000035*	*<0.000005*	0.009	*<0.0000015*	5.93	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	*<0.000045*	0.0002
01-Dec-22	10	500	465	8.31	48		2																		
08-Dec-22	11	500	465	8.42	47	23.1	3	*<0.5*	*<0.03*	18.6	0.106	*<0.00045*	0.0015	0.00060	*<0.0000035*	*<0.000005*	0.018	*<0.0000015*	5.51	*<0.00004*	0.000020	0.0003	*<0.0035*	*<0.000045*	0.0005
15-Dec-22	12	500	450	8.36	44		3																		
22-Dec-22	13	500	455	8.18	49	24.9	3	*<0.5*	*<0.03*	23.6	0.137	*<0.00045*	0.0015	0.00069	0.000015	*<0.000005*	0.015	*<0.0000015*	7.13	0.00010	0.000022	0.0005	*<0.0035*	*<0.000045*	0.0007
29-Dec-22	14	500	440	8.30	42		3																		
05-Jan-23	15	500	455	7.93	44	23.3	2	*<0.5*	*<0.03*	19.7	0.115	*<0.00045*	0.0013	0.00050	*<0.0000035*	*<0.000005*	0.008	*<0.0000015*	6.16	*<0.00004*	0.000005	0.0003	*<0.0035*	*<0.000045*	0.0005
12-Jan-23	16	500	450	8.19	43		2																		
19-Jan-23	17	500	455	7.87	43	22.3	2	*<0.5*	*<0.03*	19.7	0.102	*<0.00045*	0.0009	0.00047	*<0.0000035*	*<0.000005*	0.008	*<0.0000015*	6.38	*<0.00004*	0.000008	0.0026	*<0.0035*	*<0.000045*	0.0004
26-Jan-23	18	500	455	8.23	43		2																		
02-Feb-23	19	500	460	8.18	45	23.0	4	*<0.5*	*<0.03*	20.6	0.100	*<0.00045*	0.0016	0.00058	0.000027	*<0.000005*	0.012	0.000038	6.73	0.00016	0.000015	0.0004	*<0.0035*	*<0.000045*	0.0007
09-Feb-23	20	500	455	8.33	43		2																		
16-Feb-23	21	500	455	8.49	41	20.9	3	*<0.5*	*<0.03*	19.2	0.120	*<0.00045*	0.0016	0.00045	0.000023	*<0.000005*	0.010	0.000044	6.38	0.00018	0.000022	0.0005	*<0.0035*	*<0.000045*	0.0006
23-Feb-23	22	500	445	8.23	40		4																		
02-Mar-23	23	500	465	8.43	40	20.4	3	*<0.5*	*<0.03*	18.2	0.107	*<0.00045*	0.0009	0.00069	*<0.0000035*	*<0.000005*	0.007	*<0.0000015*	6.01	*<0.00004*	0.000010	0.0004	0.008	*<0.000045*	0.0004
09-Mar-23	24	500	450	8.35	40		3																		
16-Mar-23	25	500	460	8.37	38	17.7	4	*<0.5*	*<0.03*	17.4	0.103	*<0.00045*	0.0011	0.00041	*<0.0000035*	*<0.000005*	0.008	*<0.0000015*	5.86	*<0.00004*	*<0.000002*	0.0003	*<0.0035*	*<0.000045*	0.0004
23-Mar-23	26	500	450	8.60	39		3																		
30-Mar-23	27	500	445	8.14	40	20.6	3	*<0.5*	*<0.03*	18.3	0.090	*<0.00045*	0.0010	0.00047	*<0.0000035*	*<0.000005*	0.009	0.000009	6.24	*<0.00004*	0.000004	0.0002	*<0.0035*	*<0.000045*	0.0003
06-Apr-23	28	500	460	8.29	40		2																		
13-Apr-23	29	500	430	8.89	49	24.7	2	*<0.5*	*<0.03*	25.1	0.183	*<0.00045*	0.0022	0.00198	*<0.0000035*	*<0.000005*	0.017	*<0.0000015*	8.51	*<0.00004*	0.000007	0.0005	*<0.0035*	*<0.000045*	0.0005
20-Apr-23	30	500	455	8.34	39		2																		
27-Apr-23	31	500	450	8.49	36	17.5	3	*<0.5*	*<0.03*	16.4	0.115	*<0.00045*	0.0007	0.00053	*<0.0000035*	*<0.000005*	0.003	0.000007	5.69	*<0.00004*	0.000012	0.0003	*<0.0035*	*<0.000045*	0.0002
04-May-23	32	500	450	8.70	36		3																		
11-May-23	33	500	420	7.94	38	20.1	3	*<0.5*	*<0.03*	16.6	0.105	*<0.00045*	0.0009	0.00035	*<0.0000035*	*<0.000005*	0.007	*<0.0000015*	5.68	*<0.00004*	0.000007	0.0003	*<0.0035*	*<0.000045*	0.0003
18-May-23	34	500	440	8.05	35		3																		
25-May-23	35	500	440	8.27	37	17.1	3	*<0.5*	*<0.03*	18.6	0.121	*<0.00045*	0.0008	0.00043	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	6.50	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	*<0.000045*	0.0003
01-Jun-23	36	500	465	8.38	36		3																		
08-Jun-23	37	500	450	8.56	39	20.3	3	*<0.5*	*<0.03*	20.9	0.384	*<0.00045*	0.0011	0.00045	*<0.0000035*	*<0.000005*	0.005	*<0.0000015*	7.45	*<0.00004*	0.000009	0.0004	*<0.0035*	*<0.000045*	0.0005
15-Jun-23	38	500	445	8.50	36	16.7	3	*<0.5*	*<0.03*	16.9	0.110	*<0.00045*	0.0009	0.00026	*<0.0000035*	*<0.000005*	0.005	*<0.0000015*	5.96	*<0.00004*	0.000007	0.0003	*<0.0035*	*<0.000045*	0.0003
22-Jun-23	39	500	445	8.42	37	17.4	2	*<0.5*	*<0.03*	17.1	0.121	*<0.00045*	0.0008	0.00037	*<0.0000035*	*<0.000005*	0.005	*<0.0000015*	5.99	*<0.00004*	*<0.000002*	0.0004	*<0.0035*	*<0.000045*	0.0003

Cell Terminated

Note:

For reporting purposes, original laboratory detection limits have been halved

HC 9

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
22-Sep-22	0	500	380	8.92	1.12	0.00060	*<0.005*	0.00186	0.0001	0.027	1.31	0.00033	0.66	*<0.000025*	4.64	0.126	5	*<0.0000025*	*<0.00003*	0.00008	0.000003	0.00431	*<0.001*	*<0.001*	CA15397-SEP22
29-Sep-22	1	500	490	8.55	1.92	0.00183	*<0.005*	0.00310	*<0.00005*	0.010	1.12	0.00045	1.42	*<0.000025*	6.11	0.0686	2	*<0.0000025*	*<0.00003*	0.00264	0.000007	0.0106	*<0.001*	*<0.001*	CA15024-OCT22
06-Oct-22	2	500	460	8.34	1.59	0.00156	*<0.005*	0.00142	*<0.00005*	*<0.0015*	0.791	0.00026	1.27	*<0.000025*	3.49	0.0795	3	0.000013	*<0.00003*	*<0.000025*	0.000008	0.0105	*<0.001*	*<0.001*	CA15119-OCT22
13-Oct-22	3	500	440	8.72	1.65	0.00162	*<0.005*	0.00044	*<0.00005*	*<0.0015*	0.708	0.00020	1.08	*<0.000025*	2.78	0.0512	1	*<0.0000025*	*<0.00003*	0.00014	0.000007	0.00985	*<0.001*	*<0.001*	CA15257-OCT22
20-Oct-22	4	500	455	8.42																					
27-Oct-22	5	500	465	8.60	1.21	0.00320	*<0.005*	0.0151	0.0003	*<0.0015*	0.426	0.00006	1.05	*<0.000025*	1.11	0.0496	*<0.5*	*<0.0000025*	0.00034	0.00021	0.000007	0.00857	*<0.001*	*<0.001*	CA15528-OCT22
03-Nov-22	6	500	455	8.34																					
10-Nov-22	7	500	460	8.34	1.34	0.00317	*<0.005*	0.00023	*<0.00005*	0.013	0.371	0.00015	1.15	*<0.000025*	0.90	0.0413	*<0.5*	*<0.0000025*	*<0.00003*	0.00014	0.000009	0.00845	*<0.001*	*<0.001*	CA15363-NOV22
17-Nov-22	8	500	440	8.31																					
24-Nov-22	9	500	460	8.38	1.32	0.00273	*<0.005*	0.00018	*<0.00005*	*<0.0015*	0.379	0.00014	0.75	*<0.000025*	0.74	0.0386	2	*<0.0000025*	*<0.00003*	0.00017	0.000004	0.00833	*<0.001*	*<0.001*	CA15603-NOV22
01-Dec-22	10	500	465	8.31																					
08-Dec-22	11	500	465	8.42	1.19	0.00310	*<0.005*	0.00026	0.0001	*<0.0015*	0.287	0.00026	0.55	*<0.000025*	0.52	0.0367	*<0.5*	*<0.0000025*	*<0.00003*	0.00014	0.000008	0.00655	*<0.001*	*<0.001*	CA14343-DEC22
15-Dec-22	12	500	450	8.36																					
22-Dec-22	13	500	455	8.18	1.40	0.00268	*<0.005*	0.00047	0.0010	*<0.0015*	0.352	0.00015	1.60	*<0.000025*	0.75	0.0393	1	0.000006	0.00014	0.00013	0.000125	0.00807	*<0.001*	*<0.001*	CA15434-DEC22
29-Dec-22	14	500	440	8.30																					
05-Jan-23	15	500	455	7.93	1.04	0.00293	*<0.005*	0.00029	*<0.00005*	*<0.0015*	0.233	0.00008	0.99	*<0.000025*	0.32	0.0326	*<0.5*	*<0.0000025*	*<0.00003*	0.00010	0.000010	0.00655	*<0.001*	*<0.001*	CA15085-JAN23
12-Jan-23	16	500	450	8.19																					
19-Jan-23	17	500	455	7.87	0.915	0.00344	*<0.005*	0.00015	*<0.00005*	*<0.0015*	0.215	0.00007	0.95	*<0.000025*	0.32	0.0314	1	*<0.0000025*	*<0.00003*	0.00011	0.000008	0.00560	*<0.001*	*<0.001*	CA15299-JAN23
26-Jan-23	18	500	455	8.23																					
02-Feb-23	19	500	460	8.18	0.932	0.00271	*<0.005*	0.00024	*<0.00005*	0.004	0.237	0.00057	0.93	*<0.000025*	0.37	0.0315	*<0.5*	*<0.0000025*	*<0.00003*	0.00051	0.000012	0.00529	*<0.001*	*<0.001*	CA15074-FEB23
09-Feb-23	20	500	455	8.33																					
16-Feb-23	21	500	455	8.49	0.801	0.00326	*<0.005*	0.00044	*<0.00005*	*<0.0015*	0.199	0.00083	0.99	*<0.000025*	0.31	0.0307	*<0.5*	*<0.0000025*	*<0.00003*	0.00068	0.000008	0.00606	*<0.001*	*<0.001*	CA15362-FEB23
23-Feb-23	22	500	445	8.23																					
02-Mar-23	23	500	465	8.43	0.774	0.00333	*<0.005*	0.00018	*<0.00005*	*<0.0015*	0.187	0.00010	0.90	*<0.000025*	0.34	0.0284	*<0.5*	0.000006	0.00017	0.00026	0.000896	0.00505	*<0.001*	*<0.001*	CA15060-MAR23
09-Mar-23	24	500	450	8.35																					
16-Mar-23	25	500	460	8.37	0.678	0.00236	*<0.005*	0.00043	*<0.00005*	*<0.0015*	0.153	0.00009	0.95	*<0.000025*	0.21	0.0259	*<0.5*	*<0.0000025*	*<0.00003*	0.00012	0.000014	0.00472	*<0.001*	*<0.001*	CA15296-MAR23
23-Mar-23	26	500	450	8.60																					
30-Mar-23	27	500	445	8.14	0.650	0.00246	*<0.005*	0.0204	*<0.00005*	0.011	0.146	0.00043	0.92	*<0.000025*	0.22	0.0277	*<0.5*	0.000005	0.00026	0.00018	0.000011	0.00465	*<0.001*	*<0.001*	CA15547-MAR23
06-Apr-23	28	500	460	8.29																					
13-Apr-23	29	500	430	8.89	0.939	0.00131	*<0.005*	0.0015	*<0.00005*	*<0.0015*	0.258	0.00011	2.3	*<0.000025*	0.33	0.0375	*<0.5*	*<0.0000025*	*<0.00003*	0.00033	0.000017	0.0104	*<0.001*	*<0.001*	CA15237-APR23
20-Apr-23	30	500	455	8.34																					
27-Apr-23	31	500	450	8.49	0.547	0.00345	*<0.005*	0.00014	0.0008	*<0.0015*	0.114	0.00022	0.74	*<0.000025*	0.16	0.0216	*<0.5*	*<0.0000025*	*<0.00003*	0.00017	0.000007	0.00399	*<0.001*	*<0.001*	CA15464-APR23
04-May-23	32	500	450	8.70																					
11-May-23	33	500	420	7.94	0.582	0.00259	*<0.005*	0.00075	*<0.00005*	*<0.0015*	0.136	0.00016	0.84	*<0.000025*	0.20	0.0212	*<0.5*	*<0.0000025*	*<0.00003*	0.00027	0.000016	0.00457	*<0.001*	*<0.001*	CA15133-MAY23
18-May-23	34	500	440	8.05																					
25-May-23	35	500	440	8.27	0.581	0.00335	*<0.005*	0.00162	*<0.00005*	*<0.0015*	0.134	0.00010	0.94	*<0.000025*	0.20	0.0215	*<0.5*	*<0.0000025*	*<0.00003*	0.00014	0.000007	0.00503	*<0.001*	*<0.001*	CA15511-MAY23
01-Jun-23	36	500	465	8.38																					
08-Jun-23	37	500	450	8.56	0.555	0.00538	*<0.005*	0.00026	*<0.00005*	*<0.0015*	0.118	0.00010	0.97	*<0.000025*	0.24	0.0222	*<0.5*	*<0.0000025*	*<0.00003*	0.00013	0.000009	0.00507	*<0.001*	*<0.001*	CA15113-JUN23
15-Jun-23	38	500	445	8.50	0.490	0.00271	*<0.005*	0.00015	*<0.00005*	*<0.0015*	0.139	0.00011	0.94	*<0.000025*	0.16	0.0188	*<1.5*	*<0.0000025*	*<0.00003*	0.00009	0.000004	0.00432	*<0.001*	*<0.001*	CA15637-JUN23
22-Jun-23	39	500	445	8.42	0.519	0.00259	*<0.005*	0.00059	*<0.00005*	*<0.0015*	0.126	0.00006	0.93	*<0.000025*	0.16	0.0197	*<1.5*	*<0.0000025*	*<0.00003*	0.00013	0.000008	0.00470	*<0.001*	*<0.001*	CA15752-JUN23

Cell Terminated

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 10

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
					µmhos/cm	mg$CaCO_3$/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
22-Sep-22	0	500	415	7.60	35	9.2	8	*<0.5*	*<0.03*	13.6	0.097	*<0.00045*	0.0006	0.00128	*<0.0000035*	*<0.000005*	0.018	0.000070	5.29	*<0.00004*	0.000067	0.0009	*<0.0035*	*<0.000045*	*<0.00005*
29-Sep-22	1	500	485	7.46	88	11.6	24	*<0.5*	*<0.03*	39.0	0.086	0.0010	0.0008	0.00256	*<0.0000035*	*<0.000005*	0.015	0.000020	15.1	*<0.00004*	0.000094	0.0006	*<0.0035*	*<0.000045*	*<0.00005*
06-Oct-22	2	500	460	7.69	71	10.9	17	*<0.5*	*<0.03*	28.2	0.066	0.0011	0.0011	0.00249	*<0.0000035*	*<0.000005*	0.012	0.000008	10.9	*<0.00004*	0.000079	0.0003	*<0.0035*	*<0.000045*	*<0.00005*
13-Oct-22	3	500	455	7.44	55	10.1	13	*<0.5*	*<0.03*	22.1	0.063	0.0009	0.0012	0.00179	*<0.0000035*	*<0.000005*	0.006	*<0.0000015*	8.56	*<0.00004*	0.000049	0.0004	*<0.0035*	*<0.000045*	*<0.00005*
20-Oct-22	4	500	450	7.46	53		13																		
27-Oct-22	5	500	435	7.39	57	9.1	13	*<0.5*	*<0.03*	20.5	0.058	*<0.00045*	0.0017	0.00238	0.000014	*<0.000005*	0.004	0.000019	7.97	*<0.00004*	0.000086	0.0011	0.040	*<0.000045*	*<0.00005*
03-Nov-22	6	500	470	7.45	63		15																		
10-Nov-22	7	500	460	7.44	59	10.1	13	*<0.5*	*<0.03*	22.6	0.056	*<0.00045*	0.0022	0.00223	*<0.0000035*	*<0.000005*	0.006	0.000003	8.79	0.00009	0.000125	0.0005	*<0.0035*	*<0.000045*	*<0.00005*
17-Nov-22	8	500	445	7.37	56		15																		
24-Nov-22	9	500	425	7.49	55	9.8	15	*<0.5*	*<0.03*	21.6	0.042	0.0011	0.0028	0.00281	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	8.40	*<0.00004*	0.000168	0.0017	*<0.0035*	*<0.000045*	*<0.00005*
01-Dec-22	10	500	440	7.49	43		9																		
08-Dec-22	11	500	485	7.45	46	10.4	11	*<0.5*	*<0.03*	16.7	0.044	*<0.00045*	0.0031	0.00226	*<0.0000035*	*<0.000005*	0.012	0.000013	6.46	*<0.00004*	0.000099	0.0005	*<0.0035*	*<0.000045*	*<0.00005*
15-Dec-22	12	500	450	7.19	42		10																		
22-Dec-22	13	500	460	7.54	49	11.9	10	*<0.5*	*<0.03*	21.6	0.063	0.0014	0.0036	0.00256	0.000009	*<0.000005*	0.012	*<0.0000015*	8.40	0.00012	0.000078	0.0006	*<0.0035*	*<0.000045*	0.0003
29-Dec-22	14	500	440	7.28	37		8																		
05-Jan-23	15	500	455	7.70	39	11.3	6	*<0.5*	*<0.03*	15.7	0.052	*<0.00045*	0.0037	0.00207	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	6.12	*<0.00004*	0.000108	0.0013	*<0.0035*	*<0.000045*	*<0.00005*
12-Jan-23	16	500	455	7.51	41		7																		
19-Jan-23	17	500	455	7.74	40	8.6	7	*<0.5*	*<0.03*	16.9	0.045	*<0.00045*	0.0028	0.00219	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	6.56	*<0.00004*	0.000098	0.0020	*<0.0035*	*<0.000045*	*<0.00005*
26-Jan-23	18	500	455	7.75	41		7																		
02-Feb-23	19	500	460	7.80	41	8.7	9	*<0.5*	*<0.03*	17.1	0.039	*<0.00045*	0.0035	0.00246	0.000057	*<0.000005*	0.008	0.000108	6.67	0.00032	0.000124	0.0014	*<0.0035*	*<0.000045*	*<0.00005*
09-Feb-23	20	500	455	7.58	41		8																		
16-Feb-23	21	500	465	7.52	40	8.0	8	*<0.5*	*<0.03*	16.9	0.045	*<0.00045*	0.0037	0.00217	0.000022	*<0.000005*	0.005	0.000053	6.60	0.00013	0.000100	0.0006	*<0.0035*	*<0.000045*	*<0.00005*
23-Feb-23	22	500	460	7.62	35		7																		
02-Mar-23	23	500	455	7.40	34	7.2	7	*<0.5*	*<0.03*	13.7	0.046	*<0.00045*	0.0031	0.00217	*<0.0000035*	*<0.000005*	0.005	*<0.0000015*	5.32	*<0.00004*	0.000118	0.0007	*<0.0035*	*<0.000045*	*<0.00005*
09-Mar-23	24	500	455	7.51	36		7																		
16-Mar-23	25	500	450	7.50	37	7.8	8	*<0.5*	*<0.03*	15.0	0.044	*<0.00045*	0.0029	0.00206	*<0.0000035*	*<0.000005*	0.005	0.000010	5.86	*<0.00004*	0.000085	0.0006	*<0.0035*	*<0.000045*	*<0.00005*
23-Mar-23	26	500	445	7.57	37		7																		
30-Mar-23	27	500	445	7.46	38	8.6	7	*<0.5*	*<0.03*	16.1	0.038	*<0.00045*	0.0031	0.00221	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	6.30	*<0.00004*	0.000096	0.0009	0.014	*<0.000045*	*<0.00005*
06-Apr-23	28	500	460	7.90	38		7																		
13-Apr-23	29	500	450	7.57	32	8.0	6	*<0.5*	*<0.03*	14.2	0.049	*<0.00045*	0.0032	0.00238	*<0.0000035*	*<0.000005*	0.006	0.000003	5.52	*<0.00004*	0.000175	0.0013	*<0.0035*	*<0.000045*	*<0.00005*
20-Apr-23	30	500	455	7.56	38		6																		
27-Apr-23	31	500	455	7.51	31	7.3	7	*<0.5*	*<0.03*	12.9	0.042	*<0.00045*	0.0022	0.0022	0.000018	*<0.000005*	*<0.001*	0.000003	5	*<0.00004*	0.000197	0.0012	*<0.0035*	*<0.000045*	*<0.00005*
04-May-23	32	500	455	7.67	33		6																		
11-May-23	33	500	425	7.49	36	8.8	6	*<0.5*	*<0.03*	15.0	0.045	*<0.00045*	0.0033	0.00209	*<0.0000035*	*<0.000005*	0.007	*<0.0000015*	5.82	*<0.00004*	0.000142	0.0012	*<0.0035*	*<0.000045*	0.0001
18-May-23	34	500	440	7.41	33		6																		
25-May-23	35	500	450	7.27	32	7.0	6	*<0.5*	*<0.03*	14.1	0.044	*<0.00045*	0.0025	0.00213	*<0.0000035*	*<0.000005*	*<0.001*	*<0.0000015*	5.51	*<0.00004*	0.000126	0.0011	*<0.0035*	*<0.000045*	*<0.00005*
01-Jun-23	36	500	445	7.49	31		6																		
08-Jun-23	37	500	455	7.42	31	7.1	6	*<0.5*	*<0.03*	14.3	0.047	*<0.00045*	0.0029	0.00233	*<0.0000035*	*<0.000005*	0.003	*<0.0000015*	5.57	*<0.00004*	0.000138	0.0009	*<0.0035*	*<0.000045*	0.0002
15-Jun-23	38	500	445	7.42	32	6.9	6	*<0.5*	*<0.03*	13.6	0.041	*<0.00045*	0.0026	0.00199	*<0.0000035*	*<0.000005*	0.004	0.000005	5.28	*<0.00004*	0.000117	0.0008	*<0.0035*	*<0.000045*	*<0.00005*
22-Jun-23	39	500	450	7.43	32	7.7	6	*<0.5*	*<0.03*	13.2	0.037	*<0.00045*	0.0028	0.00215	*<0.0000035*	*<0.000005*	0.004	0.000004	5.13	*<0.00004*	0.000170	0.0012	*<0.0035*	*<0.000045*	*<0.00005*
29-Jun-23	40	500	450	7.28	32	6.3	5																		
06-Jul-23	41	500	430	7.28	33	6.3	6																		
13-Jul-23	42	500	440	7.29	37	5.9																			
20-Jul-23	43	500	460	7.25	39	5.9	7	*<0.5*	*<0.03*	16.3	0.041	*<0.00045*	0.0024	0.00258	*<0.0000035*	*<0.000005*	0.004	0.000017	6.34	*<0.00004*	0.000122	0.0016	0.101	*<0.000045*	0.0002
27-Jul-23	44	500	65	7.24	41	7.5																			
03-Aug-23	45	500	445	7.27	38	5.7	6																		
10-Aug-23	46	500	450	7.17	33	5.8																			
17-Aug-23	47	500	450	7.22	34	7.4	5	*<0.5*	*<0.03*	13.9	0.024	*<0.00045*	0.0027	0.00242	*<0.0000035*	*<0.000005*	0.003	0.000013	5.40	0.00035	0.000267	0.0020	0.156	*<0.000045*	0.0001
24-Aug-23	48	500	465	7.30	33	6.2																			
31-Aug-23	49	500	450	7.29	36	6.3	6																		
07-Sep-23	50	500	445	7.26	32	5.6																			
14-Sep-23	51	500	455	7.20	37	5.6	6	*<0.5*	*<0.03*	15.0	0.032	*<0.00045*	0.0020	0.00243	*<0.0000035*	*<0.000005*	0.002	0.000003	5.82	*<0.00004*	0.000098	0.0006	*<0.0035*	*<0.000045*	*<0.00005*
21-Sep-23	52	500	455	7.18	34	5.3																			
28-Sep-23	53	500	460	7.26	36	6.4	6																		
05-Oct-23	54	500	450	7.17	30	5.3																			
12-Oct-23	55	500	435	7.16	30	5.6	4	*<0.5*	*<0.03*	11.5	0.036	*<0.00045*	0.0024	0.00200	*<0.0000035*	*<0.000005*	0.002	0.000004	4.49	*<0.00004*	0.000134	0.0007	*<0.0035*	*<0.000045*	*<0.00005*
19-Oct-23	56	500	470	7.27	32	5.9																			
26-Oct-23	57	500	445	7.43	30	6.6	5																		
02-Nov-23	58	500	470	7.22	34	6.1																			
09-Nov-23	59	500	450	7.19	32	5.9	5	*<0.5*	*<0.03*	12.0	0.027	*<0.00045*	0.0024	0.00311	*<0.0000035*	*<0.000005*	0.002	0.000029	4.66	*<0.00004*	0.000131	0.0007	*<0.0035*	0.00015	*<0.00005*
16-Nov-23	60	500	485	7.17	36	7.0																			
23-Nov-23	61	500	450	7.18	33	5.8	5																		
30-Nov-23	62	500	465	7.33	34	6.4																			
07-Dec-23	63	500	440	7.19	29	5.9	5	*<0.5*	*<0.03*	11.9	0.035	*<0.00045*	0.0023	0.00252	*<0.0000035*	*<0.000005*	0.002	0.000070	4.65	*<0.00004*	0.000150	0.0008	*<0.0035*	*<0.000045*	*<0.00005*
14-Dec-23	64	500	475	7.22	31	5.7																			
21-Dec-23	65	500	465	7.27	32	6.1	6																		
28-Dec-23	66	500	450	7.13	26	5.0																			
04-Jan-24	67	500	440	7.21	27	5.2	4	*<0.5*	*<0.03*	10.9	0.037	*<0.00045*	0.0022	0.00183	*<0.0000035*	*<0.000005*	0.002	0.000020	4.23	*<0.00004*	0.000117	0.0007	*<0.0035*	*<0.000045*	*<0.00005*
11-Jan-24	68	500	475	7.22	33	6.1																			
18-Jan-24	69	500	450	6.85	28	5.2	4																		
25-Jan-24	70	500	460	7.23	28	5.4																			
01-Feb-24	71	500	455	7.23	29	5.6	5	*<0.5*	*<0.03*	13.1	0.033	*<0.00045*	0.0019	0.00218	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	5.11	*<0.00004*	0.000147	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
08-Feb-24	72	500	460	7.08	27	5.1																			
15-Feb-24	73	500	450	7.19	28	5.1	5																		
22-Feb-24	74	500	450	7.06	28	4.8																			
29-Feb-24	75	500	440	7.17	28	5.3	7	*<0.5*	*<0.03*	10.9	0.024	*<0.00045*	0.0021	0.00193	*<0.0000035*	*<0.000005*	0.003	0.000004	4.26	*<0.00004*	0.000143	0.001	*<0.0035*	*<0.000045*	*<0.00005*
07-Mar-24	76	500	470	6.92	34	6.9																			
14-Mar-24	77	500	460	7.15	27	5.1	7																		
21-Mar-24	78	500	440	7.18	28	6.1																			
28-Mar-24	79	500	455	7.30	32	6.1	8	*<0.5*	*<0.03*	13.4	0.034	*<0.00045*	0.002	0.00205	*<0.0000035*	*<0.000005*	*<0.001*	*<0.0000015*	5.22	*<0.00004*	0.000091	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
04-Apr-24	80	500	465	6.89	31	6.2																			
11-Apr-24	81	500	470	7.18	31	5.5	10																		
18-Apr-24	82	500	450	7.19	30	5.4																			
25-Apr-24	83	500	455	7.06	27	5.0	7	*<0.5*	*<0.03*	11.5	0.026	*<0.00045*	0.0015	0.00184	*<0.0000035*	*<0.000005*	*<0.001*	*<0.0000015*	4.5	*<0.00004*	0.000122	*<0.0005*	0.007	*<0.000045*	*<0.00005*

HC 10

Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Cond.**	**Total**	**Sulphate**	**Chloride**	**Fluoride**	**Hardness**	**Al**	**Sb**	**As**	**Ba**	**Be**	**Bi**	**B**	**Cd**	**Ca**	**Cr**	**Co**	**Cu**	**Fe**	**Pb**	**Li**
	No.	**Input**	**Output**			**Alkalinity**				**$CaCO_3$**															
02-May-24	84	500	450	7.28	46	10.7																			
09-May-24	85	500	465	7.45	29	7.9	7																		
16-May-24	86	500	440	7.30	25	6.9																			
23-May-24	87	500	435	7.32	28	5.4	7	*<0.5*	*<0.03*	11.1	0.027	*<0.00045*	0.0017	0.00188	*<0.0000035*	*<0.000005*	*<0.001*	0.000010	4.32	*<0.00004*	0.000137	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
30-May-24	88	500	460	7.13	29	5.3																			
06-Jun-24	89	500	460	7.22	28	6.7	8																		
13-Jun-24	90	500	450	7.14	26	5.2																			
20-Jun-24	91	500	465	7.07	30	5.5	8	*<0.5*	*<0.03*	12.1	0.030	*<0.00045*	0.0016	0.00200	*<0.0000035*	*<0.000005*	0.003	0.000005	4.69	0.00055	0.000149	0.001	0.093	0.00013	*<0.00005*
27-Jun-24	92	500	465	7.25	29	6.7																			
04-Jul-24	93	500	460	7.21	30	7.2	7																		
11-Jul-24	94	500	455	7.38	28	6.6																			
18-Jul-24	95	500	460	7.21	25	6.0	7	*<0.5*	*<0.03*	10.2	0.034	*<0.00045*	0.0012	0.00249	*<0.0000035*	*<0.000005*	0.002	*<0.0000015*	3.93	*<0.00004*	0.000132	*<0.0005*	0.026	0.00011	*<0.00005*
25-Jul-24	96	500	460	7.17	26	6.3																			
01-Aug-24	97	500	450	7.08	27	4.8	7																		
08-Aug-24	98	500	445	7.22	25	6.7																			
15-Aug-24	99	500	460	7.24	29	6.5	7	*<0.5*	*<0.03*	12.0	0.028	*<0.00045*	0.0017	0.00185	0.000012	*<0.000005*	0.004	*<0.0000015*	4.67	*<0.00004*	0.000093	*<0.0005*	*<0.0035*	0.0001	0.0001
22-Aug-24	100	500	450	7.28	28	6.9																			
29-Aug-24	101	500	505	7.30	39	9.3	8																		
05-Sep-24	102	500	455	7.19	23	8.5																			
12-Sep-24	103	500	450	7.27	26	7.2	6	*<0.5*	*<0.03*	11.2	0.035	*<0.00045*	0.0017	0.00214	*<0.0000035*	*<0.000005*	0.003	0.000004	4.34	*<0.00004*	0.000171	0.001	0.022	0.00018	*<0.00005*
19-Sep-24	104	500	475	7.39	30	7.3																			
26-Sep-24	105	500	500	7.38	37	9.6	7																		
03-Oct-24	106	500	460	7.30	25	6.8																			
10-Oct-24	107	500	460	7.22	26	6.6	6	*<0.5*	*<0.03*	10.6	0.020	*<0.00045*	0.0014	0.00180	*<0.0000035*	*<0.000005*	0.002	0.000003	4.12	*<0.00004*	0.000148	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
17-Oct-24	108	500	455	7.15	23	6.7																			
24-Oct-24	109	500	460	7.37	27	6.9	6																		
31-Oct-24	110	500	470	7.09	25	5.4																			
07-Nov-24	111	500	465	6.92	26	5.7	6	*<0.5*	*<0.03*	11.2	0.023	*<0.00045*	0.0014	0.00163	*<0.0000035*	*<0.000005*	0.003	0.000006	4.36	*<0.00004*	0.000127	*<0.0005*	*<0.0035*	*<0.000045*	0.0001
14-Nov-24	112	500	450	7.01	25	5.3																			
21-Nov-24	113	500	445	7.08	22	4.9	5																		
28-Nov-24	114	500	460	7.12	26	5.8																			
05-Dec-24	115	500	455	7.10	24	5.8	6	*<0.5*	*<0.03*	11.2	0.023	*<0.00045*	0.0015	0.00152	*<0.0000035*	*<0.000005*	0.004	0.000040	4.37	*<0.00004*	0.000131	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
12-Dec-24	116	500	465	7.11	24	4.7																			
19-Dec-24	117	500	460	7.11	27	5.5	6																		
26-Dec-24	118	500	455	7.05	28	5.2																			
02-Jan-25	119	500	440	7.05		5.1	7	*<0.5*	*<0.03*	12.4	0.020	*<0.00045*	0.0020	0.00193	*<0.0000035*	*<0.000005*	*<0.001*	0.000003	4.85	*<0.00004*	0.000141	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
09-Jan-25	120	500	470																						
16-Jan-25	121	500	485	7.37		7.1	7																		
23-Jan-25	122	500	470																						
30-Jan-25	123	500	500	7.05		6.4	7			12.3	0.013	*<0.00045*	0.0010	0.00160	*<0.0000035*	*<0.000005*	*<0.001*	0.000005	4.82	*<0.00004*	0.000166	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
06-Feb-25	124	500	490																						
13-Feb-25	125	500	495	7.16		6.5																			
20-Feb-25	126	500	470																						
27-Feb-25	127	500	485	6.96		6.4	5			10.6	0.015	*<0.00045*	0.0012	0.00159	*<0.0000035*	*<0.000005*	*<0.001*	0.000003	4.14	*<0.00004*	0.000163	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
06-Mar-25	128	500	460																						
13-Mar-25	129	500	450	7.05		7.8																			
20-Mar-25	130	500	480																						
27-Mar-25	131	500	485	7.30		6.3	6			11.6	0.016	*<0.00045*	0.0013	0.0017	*<0.0000035*	*<0.000005*	*<0.001*	0.000004	4.57	*<0.00004*	0.000125	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
03-Apr-25	132	500	480																						
10-Apr-25	133	500	980	6.73		5.1																			
17-Apr-25	134	500	475																						
24-Apr-25	135	500	475	7.27		6.3	7			13.2	0.012	*<0.00045*	0.0014	0.00187	*<0.0000035*	*<0.000005*	*<0.001*	0.000003	5.14	*<0.00004*	0.000133	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
01-May-25	136	500	490																						
08-May-25	137	500	495	7.16		6.3																			
15-May-25	138	500	475																						
22-May-25	139	500	505	7.25		6.5	6			12.2	0.020	*<0.00045*	0.0013	0.00183	*<0.0000035*	*<0.000005*	*<0.001*	*<0.0000015*	4.79	*<0.00004*	0.000117	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
29-May-25	140	500	480																						
05-Jun-25	141	500	485	7.35		7.6																			
12-Jun-25	142	500	480																						
19-Jun-25	143	500	485	7.22		6.6	6			13.6	0.018	*<0.00045*	0.0011	0.00190	*<0.0000035*	*<0.000005*	0.002	0.000075	5.32	*<0.00004*	0.000142	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
26-Jun-25	144	500	490																						
03-Jul-25	145	500	485	7.30		6.7																			
10-Jul-25	146	500	460																						
17-Jul-25	147	500	445	7.13		6.1	5			10.4	0.023	*<0.00045*	0.0014	0.00167	*<0.0000035*	*<0.000005*	0.004	0.000006	4.08	0.00009	0.000109	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
24-Jul-25	148	500	445																						
31-Jul-25	149	500	460	7.27		6.0																			
07-Aug-25	150	500	440																						
14-Aug-25	151	500	450	7.12		4.4	6			10.2	0.026	*<0.00045*	0.0017	0.00175	*<0.0000035*	*<0.000005*	0.004	*<0.0000015*	3.98	0.00017	0.000118	*<0.0005*	*<0.0035*	*<0.000045*	*<0.00005*
21-Aug-25	152	500	450																						
28-Aug-25	153	500	460	7.14		4.3																			
04-Sep-25	154	500	480																						
11-Sep-25	155	500	445	7.14		5.2	6			10	0.027	*<0.00045*	0.0014	0.00189	0.000017	*<0.000005*	*<0.001*	0.00001	3.92	*<0.00004*	0.000128	0.001	*<0.0035*	*<0.000045*	0.0001
18-Sep-25	156	500	460																						
25-Sep-25	157	500	450	7.33		6.3																			
02-Oct-25	158	500	450																						
09-Oct-25	159	500	440	7.13		5.0	5			10.2	0.021	*<0.00045*	0.0014	0.00168	*<0.0000035*	*<0.000005*	0.003	0.000053	3.98	*<0.00004*	0.000171	0.001	*<0.0035*	*<0.000045*	*<0.00005*
16-Oct-25	160	500	450																						
23-Oct-25	161	500	445	7.13		4.9																			
30-Oct-25	162	500	460																						
06-Nov-25	163	500	440	7.08		4.4	5			8.4	0.019	*<0.00045*	0.0013	0.00144	*<0.0000035*	*<0.000005*	0.002	0.000007	3.26	*<0.00004*	0.000132	0.001	*<0.0035*	*<0.000045*	*<0.00005*
13-Nov-25	164	500	450																						
20-Nov-25	165	500	470	7.04		5.2																			
27-Nov-25	166	500	470																						

Note:
For reporting purposes, original laboratory detection limits have been halved

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Mass	**1**																							
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
					mg/L	mg/L	µg/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	
22-Sep-22	0	500	415	7.60	0.104	0.00362	*<0.005*	0.00547	0.0002	0.003	0.125	0.00017	0.19	*<0.000025*	0.11	0.0183	3	*<0.0000025*	*<0.00003*	0.00007	0.000003	0.00032	0.003	*<0.001*	CA15397-SEP22
29-Sep-22	1	500	485	7.46	0.299	0.00656	*<0.005*	0.00088	*<0.00005*	*<0.0015*	0.144	0.00044	0.48	*<0.000025*	0.16	0.0672	9	*<0.0000025*	*<0.00003*	0.00253	0.000011	0.00025	*<0.001*	*<0.001*	CA15024-OCT22
06-Oct-22	2	500	460	7.69	0.217	0.00402	*<0.005*	0.00166	*<0.00005*	*<0.0015*	0.111	0.00039	0.42	*<0.000025*	0.15	0.0641	7	0.000007	*<0.00003*	0.00007	0.000010	0.00026	*<0.001*	*<0.001*	CA15119-OCT22
13-Oct-22	3	500	455	7.44	0.167	0.00179	*<0.005*	0.00081	*<0.00005*	*<0.0015*	0.107	0.00035	0.35	*<0.000025*	0.14	0.0568	4	*<0.0000025*	*<0.00003*	0.00009	0.000005	0.00029	*<0.001*	*<0.001*	CA15257-OCT22
20-Oct-22	4	500	450	7.46																					
27-Oct-22	5	500	435	7.39	0.136	0.00236	*<0.005*	0.00233	0.0003	*<0.0015*	0.084	0.00048	0.40	*<0.000025*	0.10	0.0769	4	*<0.0000025*	0.00421	0.00005	0.000004	0.00027	0.002	*<0.001*	CA15528-OCT22
03-Nov-22	6	500	470	7.45																					
10-Nov-22	7	500	460	7.44	0.16	0.00285	*<0.005*	0.00109	*<0.00005*	0.014	0.084	0.00034	0.37	*<0.000025*	0.12	0.0729	6	*<0.0000025*	*<0.00003*	*<0.000025*	0.000009	0.00029	*<0.001*	*<0.001*	CA15363-NOV22
17-Nov-22	8	500	445	7.37																					
24-Nov-22	9	500	425	7.49	0.146	0.00358	*<0.005*	0.00120	0.0001	*<0.0015*	0.139	0.00038	0.07	*<0.000025*	0.13	0.0729	7	0.000008	0.00009	*<0.000025*	0.00146	0.00025	*<0.001*	*<0.001*	CA15603-NOV22
01-Dec-22	10	500	440	7.49																					
08-Dec-22	11	500	485	7.45	0.133	0.00248	0.05	0.00230	*<0.00005*	*<0.0015*	0.085	0.00021	*<0.01*	*<0.000025*	0.12	0.0636	4	*<0.0000025*	*<0.00003*	*<0.000025*	0.000007	0.00027	*<0.001*	*<0.001*	CA14343-DEC22
15-Dec-22	12	500	450	7.19																					
22-Dec-22	13	500	460	7.54	0.162	0.00218	*<0.005*	0.00312	0.0009	*<0.0015*	0.148	0.00051	0.50	*<0.000025*	0.44	0.0697	6	*<0.0000025*	*<0.00003*	*<0.000025*	0.000008	0.00037	*<0.001*	*<0.001*	CA15434-DEC22
29-Dec-22	14	500	440	7.28																					
05-Jan-23	15	500	455	7.70	0.101	0.00199	*<0.005*	0.00101	*<0.00005*	*<0.0015*	0.072	0.00032	0.31	*<0.000025*	0.03	0.0544	3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000013	0.00029	0.003	*<0.001*	CA15085-JAN23
12-Jan-23	16	500	455	7.51																					
19-Jan-23	17	500	455	7.74	0.115	0.00195	*<0.005*	0.00123	*<0.00005*	*<0.0015*	0.075	0.00022	0.31	*<0.000025*	0.08	0.0549	4	*<0.0000025*	*<0.00003*	*<0.000025*	0.000008	0.00027	*<0.001*	*<0.001*	CA15299-JAN23
26-Jan-23	18	500	455	7.75																					
02-Feb-23	19	500	460	7.80	0.110	0.00226	*<0.005*	0.00116	0.0002	0.017	0.084	0.00155	0.29	*<0.000025*	0.15	0.0508	3	0.000006	*<0.00003*	0.00138	0.000013	0.00030	*<0.001*	*<0.001*	CA15074-FEB23
09-Feb-23	20	500	455	7.58																					
16-Feb-23	21	500	465	7.52	0.106	0.00191	*<0.005*	0.00125	*<0.00005*	*<0.0015*	0.059	0.00101	0.33	*<0.000025*	0.12	0.0535	3	*<0.0000025*	*<0.00003*	0.00054	0.000003	0.00036	*<0.001*	*<0.001*	CA15362-FEB23
23-Feb-23	22	500	460	7.62																					
02-Mar-23	23	500	455	7.40	0.094	0.00191	*<0.005*	0.00437	*<0.00005*	*<0.0015*	0.079	0.00034	0.26	*<0.000025*	0.07	0.0428	3	*<0.0000025*	0.00009	0.00007	0.000020	0.00026	*<0.001*	*<0.001*	CA15060-MAR23
09-Mar-23	24	500	455	7.51																					
16-Mar-23	25	500	450	7.50	0.091	0.00162	*<0.005*	0.00163	*<0.00005*	*<0.0015*	0.061	0.00011	0.28	*<0.000025*	0.07	0.0467	2	*<0.0000025*	*<0.00003*	0.00011	0.000004	0.00026	*<0.001*	*<0.001*	CA15296-MAR23
23-Mar-23	26	500	445	7.57																					
30-Mar-23	27	500	445	7.46	0.099	0.00171	*<0.005*	0.00182	*<0.00005*	0.013	0.066	0.00053	0.27	*<0.000025*	0.10	0.0506	3	0.000005	0.00047	0.00007	0.000009	0.00023	*<0.001*	*<0.001*	CA15547-MAR23
06-Apr-23	28	500	460	7.90																					
13-Apr-23	29	500	450	7.57	0.088	0.0037	*<0.005*	0.00114	*<0.00005*	*<0.0015*	0.115	0.00028	0.31	*<0.000025*	0.09	0.0386	3	*<0.0000025*	*<0.00003*	0.00006	0.000003	0.00048	*<0.001*	*<0.001*	CA15237-APR23
20-Apr-23	30	500	455	7.56																					
27-Apr-23	31	500	455	7.51	0.097	0.00248	*<0.005*	0.00113	0.0013	*<0.0015*	0.048	0.00047	0.21	*<0.000025*	0.07	0.038	2	*<0.0000025*	*<0.00003*	0.0001	0.000018	0.00014	*<0.001*	*<0.001*	CA15464-APR23
04-May-23	32	500	455	7.67																					
11-May-23	33	500	425	7.49	0.104	0.00208	*<0.005*	0.00389	*<0.00005*	*<0.0015*	0.082	0.00069	0.26	*<0.000025*	0.13	0.0415	3	*<0.0000025*	*<0.00003*	*<0.000025*	0.000048	0.00029	*<0.001*	*<0.001*	CA15133-MAY23
18-May-23	34	500	440	7.41																					
25-May-23	35	500	450	7.27	0.087	0.00259	*<0.005*	0.00128	*<0.00005*	*<0.0015*	0.065	0.00031	0.28	*<0.000025*	0.08	0.0355	2	*<0.0000025*	*<0.00003*	*<0.000025*	*<0.000001*	0.00022	*<0.001*	*<0.001*	CA15511-MAY23
01-Jun-23	36	500	445	7.49																					
08-Jun-23	37	500	455	7.42	0.097	0.00254	*<0.005*	0.00290	*<0.00005*	*<0.0015*	0.037	0.00029	0.28	*<0.000025*	0.13	0.0328	2	*<0.0000025*	*<0.00003*	0.00005	0.000002	0.00024	*<0.001*	*<0.001*	CA15113-JUN23
15-Jun-23	38	500	445	7.42	0.091	0.00218	*<0.005*	0.00266	*<0.00005*	*<0.0015*	0.079	0.00025	0.28	*<0.000025*	0.09	0.0307	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000002	0.00019	*<0.001*	*<0.001*	CA15637-JUN23
22-Jun-23	39	500	450	7.43	0.095	0.00277	*<0.005*	0.00156	*<0.00005*	*<0.0015*	0.088	0.00027	0.27	*<0.000025*	0.08	0.0330	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000007	0.00022	*<0.001*	*<0.001*	CA15752-JUN23
29-Jun-23	40	500	450	7.28																					
06-Jul-23	41	500	430	7.28																					
13-Jul-23	42	500	440	7.29																					
20-Jul-23	43	500	460	7.25	0.112	0.00328	*<0.005*	0.00180	0.0033	*<0.0015*	0.079	0.00024	0.26	*<0.000025*	0.11	0.0372	*<1.5*	0.000008	*<0.00003*	*<0.000035*	*<0.000001*	0.00023	0.003	*<0.001*	CA15743-JUL23
27-Jul-23	44	500	65	7.24																					
03-Aug-23	45	500	445	7.27																					
10-Aug-23	46	500	450	7.17																					
17-Aug-23	47	500	450	7.22	0.104	0.00527	*<0.005*	0.00130	0.0028	*<0.0015*	0.113	0.00025	0.28	*<0.000025*	0.08	0.0297	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000003	0.00017	*<0.001*	*<0.001*	CA15071-AUG23
24-Aug-23	48	500	465	7.30																					
31-Aug-23	49	500	450	7.29																					
07-Sep-23	50	500	445	7.26																					
14-Sep-23	51	500	455	7.20	0.105	0.00212	*<0.005*	0.00115	*<0.00005*	*<0.0015*	0.078	0.00016	0.26	*<0.000025*	0.18	0.0343	4	*<0.0000025*	*<0.00003*	*<0.000035*	0.000002	0.00021	*<0.001*	*<0.001*	CA15609-SEP23
21-Sep-23	52	500	455	7.18																					
28-Sep-23	53	500	460	7.26																					
05-Oct-23	54	500	450	7.17																					
12-Oct-23	55	500	435	7.16	0.069	0.00240	*<0.005*	0.00102	0.0001	*<0.0015*	0.052	0.00016	0.26	*<0.000025*	0.06	0.0257	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000002	0.00019	*<0.001*	*<0.001*	CA15217-OCT23
19-Oct-23	56	500	470	7.27																					
26-Oct-23	57	500	445	7.43																					
02-Nov-23	58	500	470	7.22																					
09-Nov-23	59	500	450	7.19	0.079	0.00224	*<0.005*	0.00104	*<0.00005*	*<0.0015*	0.044	0.00013	0.17	*<0.000025*	0.07	0.0299	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000006	0.00017	0.009	*<0.001*	CA15161-NOV23
16-Nov-23	60	500	485	7.17																					
23-Nov-23	61	500	450	7.18																					
30-Nov-23	62	500	465	7.33																					
07-Dec-23	63	500	440	7.19	0.077	0.00307	*<0.005*	0.00129	*<0.00005*	*<0.0015*	0.028	0.00015	0.23	*<0.000025*	0.11	0.0280	*<1.5*	0.000005	*<0.00003*	*<0.000035*	0.000003	0.00020	0.006	*<0.001*	CA15071-DEC23
14-Dec-23	64	500	475	7.22																					
21-Dec-23	65	500	465	7.27																					
28-Dec-23	66	500	450	7.13																					
04-Jan-24	67	500	440	7.21	0.075	0.00251	*<0.005*	0.00065	*<0.00005*	*<0.0015*	0.054	0.00012	0.19	*<0.000025*	0.07	0.0232	*<1.5*	*<0.0000025*	*<0.00003*	*<0.000035*	0.000003	0.00016	*<0.001*	*<0.001*	CA15661-JAN24
11-Jan-24	68	500	475	7.22																					
18-Jan-24	69	500	450	6.85																					
25-Jan-24	70	500	460	7.23																					
01-Feb-24	71	500	455	7.23	0.077	0.00270	*<0.005*	0.0014	*<0.00005*	*<0.0015*	0.061	0.00010	0.23	*<0.000025*	0.09	0.0255	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000005	0.00018	*<0.001*	*<0.001*	CA15017-FEB24
08-Feb-24	72	500	460	7.08																					
15-Feb-24	73	500	450	7.19																					
22-Feb-24	74	500	450	7.06																					
29-Feb-24	75	500	440	7.17	0.069	0.00252	*<0.005*	0.0019	*<0.00005*	*<0.0015*	0.061	0.00019	0.17	*<0.000025*	0.06	0.022	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00015	*<0.001*	*<0.001*	CA15643-MAR24
07-Mar-24	76	500	470	6.92																					
14-Mar-24	77	500	460	7.15																					
21-Mar-24	78	500	440	7.18																					
28-Mar-24	79	500	455	7.30	0.077	0.00214	*<0.005*	0.0015	0.0001	*<0.0015*	0.035	0.00012	0.19	*<0.000025*	0.05	0.0252	*<2.5*	*<0.0000025*	*<0.00003*	0.0001	0.000003	0.00017	*<0.001*	*<0.001*	CA14106-APR24
04-Apr-24	80	500	465	6.89																					
11-Apr-24	81	500	470	7.18																					
18-Apr-24	82	500	450	7.19																					
25-Apr-24	83	500	455	7.06	0.072	0.00252	*<0.005*	0.0022	*<0.00005*	*<0.0015*	0.049	0.00011	0.19	*<0.000025*	0.06	0.0189	*<2.5*	*<0.0000025*	0.00008	0.0003	0.000003	0.00014	*<0.001*	*<0.001*	CA14960-APR24

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Mass	**1**																						
Date	**Cycle**	**Volume mL**		**pH**	**Mg**	**Mn**	**Hg**	**Mo**	**Ni**	**P**	**K**	**Se**	**Si**	**Ag**	**Na**	**Sr**	**S**	**Tl**	**Sn**	**Ti**	**U**	**V**	**Zn**	**Zr**	
	No.	**Input**	**Output**																						**SGS File #**
02-May-24	84	500	450	7.28																					
09-May-24	85	500	465	7.45																					
16-May-24	86	500	440	7.30																					
23-May-24	87	500	435	7.32	0.073	0.00304	*<0.005*	0.0017	*<0.00005*	*<0.0015*	0.046	0.00010	0.17	*<0.000025*	0.06	0.0193	*<2.5*	0.000006	*<0.00003*	0.0002	0.000006	0.00012	*<0.001*	*<0.001*	CA15914-MAY24
30-May-24	88	500	460	7.13																					
06-Jun-24	89	500	460	7.22																					
13-Jun-24	90	500	450	7.14																					
20-Jun-24	91	500	465	7.07	0.090	0.00330	*<0.005*	0.0024	0.0001	*<0.0015*	0.054	0.00010	0.18	*<0.000025*	0.13	0.02004	*<2.5*	0.000005	*<0.00003*	0.0008	0.000002	0.00013	*<0.001*	*<0.001*	CA15257-JUN24
27-Jun-24	92	500	465	7.25																					
04-Jul-24	93	500	460	7.21																					
11-Jul-24	94	500	455	7.38																					
18-Jul-24	95	500	460	7.21	0.089	0.00254	*<0.005*	0.0025	0.0002	*<0.0015*	0.03	0.00007	0.14	*<0.000025*	0.08	0.0149	*<2.5*	*<0.0000025*	*<0.00003*	0.0013	0.000002	0.00014	*<0.001*	*<0.001*	CA15762-JUL24
25-Jul-24	96	500	460	7.17																					
01-Aug-24	97	500	450	7.08																					
08-Aug-24	98	500	445	7.22																					
15-Aug-24	99	500	460	7.24	0.076	0.00233	*<0.005*	0.0012	*<0.00005*	*<0.0015*	0.137	0.00013	0.16	*<0.000025*	0.07	0.0199	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00013	*<0.001*	*<0.001*	CA15793-AUG24
22-Aug-24	100	500	450	7.28																					
29-Aug-24	101	500	505	7.30																					
05-Sep-24	102	500	455	7.19																					
12-Sep-24	103	500	450	7.27	0.098	0.00297	*<0.005*	0.0021	*<0.00005*	*<0.0015*	0.050	0.00010	0.19	*<0.000025*	0.05	0.0186	*<2.5*	*<0.0000025*	*<0.00003*	0.0013	0.000004	0.00013	*<0.001*	*<0.001*	CA15146-SEP24
19-Sep-24	104	500	475	7.39																					
26-Sep-24	105	500	500	7.38																					
03-Oct-24	106	500	460	7.30																					
10-Oct-24	107	500	460	7.22	0.069	0.00277	*<0.005*	0.0017	*<0.00005*	0.003	0.048	0.00010	0.16	*<0.000025*	0.08	0.0181	*<2.5*	*<0.0000025*	*<0.00003*	0.00014	*<0.000001*	0.00011	*<0.001*	*<0.001*	CA15639-OCT24
17-Oct-24	108	500	455	7.15																					
24-Oct-24	109	500	460	7.37																					
31-Oct-24	110	500	470	7.09																					
07-Nov-24	111	500	465	6.92	0.068	0.00300	*<0.005*	0.0020	*<0.00005*	*<0.0015*	0.043	0.00007	0.16	*<0.000025*	0.07	0.0183	*<2.5*	0.000009	*<0.00003*	0.00020	0.000002	0.00010	*<0.001*	*<0.001*	CA15077-NOV24
14-Nov-24	112	500	450	7.01																					
21-Nov-24	113	500	445	7.08																					
28-Nov-24	114	500	460	7.12																					
05-Dec-24	115	500	455	7.10	0.063	0.00348	*<0.005*	0.0018	*<0.00005*	*<0.0015*	0.060	0.00009	0.13	*<0.000025*	0.09	0.0175	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00011	0.005	*<0.001*	CA15063-DEC24
12-Dec-24	116	500	465	7.11																					
19-Dec-24	117	500	460	7.11																					
26-Dec-24	118	500	455	7.05																					
02-Jan-25	119	500	440	7.05	0.067	0.00264	*<0.005*	0.0027	0.0002	*<0.0015*	0.039	0.00008	0.13	*<0.000025*	0.08	0.0184	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00014	*<0.001*	*<0.001*	CA15610-JAN25
09-Jan-25	120	500	470																						
16-Jan-25	121	500	485	7.37																					
23-Jan-25	122	500	470																						
30-Jan-25	123	500	500	7.05	0.063	0.00299	*<0.005*	0.0028	0.0001	*<0.0015*	*<0.0045*	0.00009	0.13	*<0.000025*	0.05	0.0187	*<2.5*	*<0.0000025*	0.00059	*<0.00005*	0.000002	0.00008	*<0.001*	*<0.001*	CA15115-JAN25
06-Feb-25	124	500	490																						
13-Feb-25	125	500	495	7.16																					
20-Feb-25	126	500	470																						
27-Feb-25	127	500	485	6.96	0.056	0.00285	*<0.005*	0.0030	0.0002	*<0.0015*	0.036	0.00007	0.11	*<0.000025*	0.08	0.0160	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00009	*<0.001*	*<0.001*	CA15744-FEB25
06-Mar-25	128	500	460																						
13-Mar-25	129	500	450	7.05																					
20-Mar-25	130	500	480																						
27-Mar-25	131	500	485	7.30	0.06	0.00355	*<0.005*	0.0028	*<0.00005*	*<0.0015*	0.029	0.00007	0.12	*<0.000025*	0.08	0.0172	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.0001	*<0.001*	*<0.001*	CA15373-MAR25
03-Apr-25	132	500	480																						
10-Apr-25	133	500	980	6.73																					
17-Apr-25	134	500	475																						
24-Apr-25	135	500	475	7.27	0.082	0.00350	*<0.005*	0.0028	0.0004	*<0.0015*	0.036	0.00010	0.12	*<0.000025*	0.09	0.0186	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00006	*<0.001*	*<0.001*	CA15217-APR25
01-May-25	136	500	490																						
08-May-25	137	500	495	7.16																					
15-May-25	138	500	475																						
22-May-25	139	500	505	7.25	0.063	0.00328	*<0.005*	0.0029	*<0.00005*	*<0.0015*	0.035	0.00006	0.13	*<0.000025*	0.07	0.0181	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00010	*<0.001*	*<0.001*	CA15577-MAY25
29-May-25	140	500	480																						
05-Jun-25	141	500	485	7.35																					
12-Jun-25	142	500	480																						
19-Jun-25	143	500	485	7.22	0.066	0.00400	*<0.005*	0.0036	*<0.00005*	*<0.0015*	0.028	0.00009	0.14	*<0.000025*	0.07	0.0185	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	*<0.000001*	0.00008	0.011	*<0.001*	CA15766-JUN25
26-Jun-25	144	500	490																						
03-Jul-25	145	500	485	7.30																					
10-Jul-25	146	500	460																						
17-Jul-25	147	500	445	7.13	0.061	0.00259	*<0.005*	0.0024	*<0.00005*	*<0.0015*	0.029	0.00009	0.13	*<0.000025*	0.10	0.0145	*<2.5*	0.000015	*<0.00003*	*<0.00005*	0.000003	0.00010	*<0.001*	*<0.001*	CA15605-JUL25
24-Jul-25	148	500	445																						
31-Jul-25	149	500	460	7.27																					
07-Aug-25	150	500	440																						
14-Aug-25	151	500	450	7.12	0.062	0.00339	*<0.005*	0.0019	*<0.00005*	*<0.0015*	0.03	0.0001	0.16	*<0.000025*	0.09	0.0148	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00014	*<0.001*	*<0.001*	CA14145-AUG25
21-Aug-25	152	500	450																						
28-Aug-25	153	500	460	7.14																					
04-Sep-25	154	500	480																						
11-Sep-25	155	500	445	7.14	0.059	0.0023	*<0.005*	0.0019	0.0003	*<0.0015*	0.038	0.00008	0.16	*<0.000025*	0.07	0.0133	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000118	0.00012	*<0.001*	*<0.001*	CA14401-SEP25
18-Sep-25	156	500	460																						
25-Sep-25	157	500	450	7.33																					
02-Oct-25	158	500	450																						
09-Oct-25	159	500	440	7.13	0.063	0.00310	*<0.005*	0.0016	0.0001	*<0.0015*	0.025	0.00008	0.14	*<0.000025*	0.06	0.0142	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000002	0.00009	0.005	*<0.001*	CA15133-OCT25
16-Oct-25	160	500	450																						
23-Oct-25	161	500	445	7.13																					
30-Oct-25	162	500	460																						
06-Nov-25	163	500	440	7.08	0.056	0.00263	*<0.005*	0.0015	0.0002	*<0.0015*	0.026	0.00009	0.10	*<0.000025*	0.08	0.0126	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000071	0.00009	*<0.001*	*<0.001*	CA15088-NOV25
13-Nov-25	164	500	450																						
20-Nov-25	165	500	470	7.04																					
27-Nov-25	166	500	470																						

Note:
For reporting purposes, original laboratory detection limits have been halved

HC 11

Mass	1

Date	Cycle	Volume mL		pH	Cond.	Total	Sulphate	Chloride	Fluoride	Hardness	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li
	No.	Input	Output			Alkalinity				$CaCO_3$															
					µmhos/cm	$mgCaCO_3/L$	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
14-Aug-25	0	500	395	7.83		31.1	18	5	*<0.03*	50.9	0.149	0.0017	0.0024	0.0103	*<0.0000035*	*<0.000005*	0.199	0.000031	16.3	0.00016	0.000199	0.004	0.018	0.00032	0.0006
21-Aug-25	1	500	500	8.09		29.9	13	*<0.5*	*<0.03*	39.6	0.099	0.0017	0.0020	0.00897	*<0.0000035*	*<0.000005*	0.165	0.000010	11.7	0.00022	0.000076	0.002	*<0.0035*	*<0.000045*	0.0005
28-Aug-25	2	500	490	8.28		27.4	11	*<0.5*	*<0.03*	31.8	0.120	0.0015	0.0025	0.00711	*<0.0000035*	*<0.000005*	0.116	0.000014	9.26	0.00017	0.000055	0.001	0.017	*<0.000045*	0.0005
04-Sep-25	3	500	515	8.14		27.4	9	*<0.5*	*<0.03*	29.7	0.107	0.0013	0.0030	0.00594	*<0.0000035*	*<0.000005*	0.076	0.000005	8.68	*<0.00004*	0.000042	*<0.0005*	*<0.0035*	*<0.000045*	0.0005
11-Sep-25	4	500	505	8.30		24.9	9																		
18-Sep-25	5	500	510	8.29		23.5	8	*<0.5*	*<0.03*	29.0	0.093	*<0.00045*	0.0043	0.00466	*<0.0000035*	*<0.000005*	0.049	0.000011	8.54	*<0.00004*	0.000071	*<0.0005*	*<0.0035*	*<0.000045*	0.0004
25-Sep-25	6	500	505	7.90		25.5	7																		
02-Oct-25	7	500	505	7.76		24.4	6	*<0.5*	*<0.03*	26.2	0.099	*<0.00045*	0.0057	0.00456	*<0.0000035*	*<0.000005*	0.035	0.000003	7.89	*<0.00004*	0.000038	*<0.0005*	*<0.0035*	*<0.000045*	0.0004
09-Oct-25	8	500	495	8.12		24.6	6																		
16-Oct-25	9	500	505	7.88		24.2	6	*<0.5*	*<0.03*	27.9	0.097	*<0.00045*	0.0065	0.00378	*<0.0000035*	*<0.000005*	0.029	0.000004	8.45	*<0.00004*	0.000085	*<0.0005*	*<0.0035*	*<0.000045*	0.0004
23-Oct-25	10	500	500	8.10		24.3	6																		
30-Oct-25	11	500	485	7.99		25.8	5	*<0.5*	*<0.03*	27.7	0.117	*<0.00045*	0.0081	0.00366	*<0.0000035*	*<0.000005*	0.025	0.000004	8.47	0.00019	0.000053	*<0.0005*	*<0.0035*	*<0.000045*	0.0004
06-Nov-25	12	500	500	8.04		22.7	5																		
13-Nov-25	13	500	460	7.71		23.8	5	*<0.5*	*<0.03*	26.4	0.092	*<0.00045*	0.0068	0.00327	*<0.0000035*	*<0.000005*	0.024	*<0.0000015*	8.13	*<0.00004*	0.000048	*<0.0005*	*<0.0035*	*<0.000045*	0.0004
20-Nov-25	14	500	500	7.86		23.1	5																		
27-Nov-25	15	500	490	7.92		24.5	5																		

Date	Cycle	Volume mL		pH	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	
	No.	Input	Output																						SGS File #
					mg/L	mg/L	µg/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	
14-Aug-25	0	500	395	7.83	2.45	0.0408	*<0.005*	0.0242	0.0011	*<0.0015*	4.32	0.00079	1.08	*<0.000025*	7.12	0.101	6	*<0.0000025*	*<0.00003*	0.0005	0.000065	0.00543	*<0.001*	*<0.001*	CA14145-AUG25
21-Aug-25	1	500	500	8.09	2.56	0.0149	*<0.005*	0.0257	0.0008	*<0.0015*	3.11	0.00041	0.98	*<0.000025*	4.72	0.0936	*<2.5*	*<0.0000025*	*<0.00003*	0.0002	0.000091	0.00429	*<0.001*	*<0.001*	CA15305-AUG25
28-Aug-25	2	500	490	8.28	2.10	0.0143	*<0.005*	0.0124	0.0006	*<0.0015*	2.17	0.00034	0.96	*<0.000025*	2.57	0.0762	*<2.5*	0.000008	*<0.00003*	0.0001	0.000106	0.00473	*<0.001*	*<0.001*	CA15964-AUG25
04-Sep-25	3	500	515	8.14	1.96	0.00894	0.03	0.0118	0.0001	*<0.0015*	1.57	0.00018	0.83	*<0.000025*	1.56	0.0693	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000100	0.00382	*<0.001*	*<0.001*	CA15406-SEP25
11-Sep-25	4	500	505	8.30																					
18-Sep-25	5	500	510	8.29	1.85	0.0105	*<0.005*	0.0057	0.0002	*<0.0015*	0.998	0.00018	0.75	*<0.000025*	0.94	0.0640	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000118	0.00323	*<0.001*	*<0.001*	CA14333-SEP25
25-Sep-25	6	500	505	7.90																					
02-Oct-25	7	500	505	7.76	1.58	0.00812	*<0.005*	0.0154	*<0.00005*	*<0.0015*	0.760	0.00025	0.69	*<0.000025*	0.54	0.0562	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000061	0.00303	*<0.001*	*<0.001*	CA15034-OCT25
09-Oct-25	8	500	495	8.12																					
16-Oct-25	9	500	505	7.88	1.64	0.00740	*<0.005*	0.0053	0.0002	*<0.0015*	0.638	0.00017	0.72	*<0.000025*	0.49	0.0534	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000057	0.00290	*<0.001*	*<0.001*	CA15597-OCT25
23-Oct-25	10	500	500	8.10																					
30-Oct-25	11	500	485	7.99	1.59	0.00587	*<0.005*	0.0103	*<0.00005*	*<0.0015*	0.547	0.00016	0.69	*<0.000025*	0.37	0.0529	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000059	0.00297	*<0.001*	*<0.001*	CA85189-OCT25
06-Nov-25	12	500	500	8.04																					
13-Nov-25	13	500	460	7.71	1.48	0.00674	*<0.005*	0.0071	*<0.00005*	*<0.0015*	0.464	0.00020	0.63	*<0.000025*	0.30	0.0445	*<2.5*	*<0.0000025*	*<0.00003*	*<0.00005*	0.000052	0.00231	*<0.001*	*<0.001*	CA15450-NOV25
20-Nov-25	14	500	500	7.86																					
27-Nov-25	15	500	490	7.92																					

Note:
For reporting purposes, original laboratory detection limits have been halved

Appendix F: Field Barrel Test Data

AGNICO EAGLE

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 22T958989
PROJECT: Upper Beaver
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra Deforge
DATE RECEIVED: Oct 19, 2022
DATE SAMPLED: Oct 17, 2022
DATE REPORTED: Oct 27, 2022

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry
X02	Water		Anion Scan
X03	Water		Metals - Dissolved Metals in Water (µg/L)

(Water) Inorganic Chemistry

Sample Description				**FB-1**	**FB-2**	**FB-3**	**FB-4**	**FB-5**	**FB-1 DUP**
Date Sampled				**10/17/2022**	**10/17/2022**	**10/17/2022**	**10/17/2022**	**10/17/2022**	**10/17/2022**
Parameter	**Unit**	**G / S**	**RDL**	**4429534**	**4429549**	**4429550**	**4429551**	**4429552**	**4429553**
Dissolved Mercury	µg/L		0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
pH	pH Units		NA	7.14	6.84	6.82	7.23	7.58	7.34
Alkalinity (as CaCO3)	µg/L		5000	48000	13300	12700	46100	106000	50400
Electrical Conductivity	µS/cm		2	1820	287	279	2200	380	1830
Dissolved Organic Carbon	µg/L		500	31500	10300	5980	26200	25600	32700

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Anion Scan

Sample Description				FB-1		FB-2	FB-3		FB-4		FB-5		FB-1 DUP
Date Sampled				10/17/2022		10/17/2022	10/17/2022		10/17/2022		10/17/2022		10/17/2022
Parameter	**Unit**	**G / S**	**RDL**	**4429534**	**RDL**	**4429549**	**4429550**	**RDL**	**4429551**	**RDL**	**4429552**	**RDL**	**4429553**
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.05	4.22	0.05	<0.05
Chloride	mg/L		0.24	38.3	0.10	6.78	6.13	0.24	38.5	0.10	22.0	0.24	40.8
Sulphate	mg/L		0.19	989	0.10	99.9	99.6	0.38	1320	0.10	67.5	0.38	1010

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4429534-4429553 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Metals - Dissolved Metals in Water (µg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-1 DUP
Date Sampled				10/17/2022		10/17/2022		10/17/2022	10/17/2022	10/17/2022	10/17/2022
Parameter	Unit	G / S	RDL	4429534	RDL	4429549	RDL	4429550	4429551	4429552	4429553
Dissolved Aluminum	µg/L		4.0	27.1	4.0	17.3	4.0	13.9	19.3	21.4	19.0
Dissolved Antimony	µg/L		1.0	8.4	1.0	4.0	1.0	3.2	11.0	6.0	8.2
Dissolved Arsenic	µg/L		1.0	3.7	1.0	1.8	1.0	<1.0	4.7	2.2	3.4
Dissolved Barium	µg/L		2.0	25.8	2.0	9.4	2.0	9.6	29.4	22.7	24.8
Dissolved Beryllium	µg/L		0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Bismuth	µg/L		2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Boron	µg/L		10.0	263	10.0	33.9	10.0	55.3	338	135	267
Dissolved Cadmium	µg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10
Dissolved Chromium	µg/L		2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Cobalt	µg/L		0.50	0.78	0.50	0.52	0.50	<0.50	2.10	<0.50	0.84
Dissolved Copper	µg/L		1.0	229	1.0	531	1.0	379	153	423	228
Dissolved Iron	µg/L		10	27	10	<10	10	<10	<10	11	10
Dissolved Lead	µg/L		0.50	<0.50	0.50	<0.50	0.50	<0.50	<0.50	<0.50	<0.50
Dissolved Lithium	µg/L		50	<50	50	<50	50	<50	<50	<50	<50
Dissolved Manganese	µg/L		2.0	93.9	2.0	44.6	2.0	21.5	204	33.0	92.7
Dissolved Molybdenum	µg/L		2.0	156	4.0	1020	2.0	42.9	211	116	153
Dissolved Nickel	µg/L		1.0	10.9	1.0	2.5	1.0	<1.0	9.5	2.9	6.6
Dissolved Phosphorus	µg/L		50	<50	50	<50	50	<50	<50	<50	<50
Dissolved Selenium	µg/L		1.0	3.0	1.0	1.6	1.0	<1.0	4.5	1.3	1.8
Dissolved Silicon	µg/L		50	1640	50	418	50	482	1630	1870	1660
Dissolved Silver	µg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10
Dissolved Strontium	µg/L		5.0	3910	5.0	575	5.0	589	3540	419	3780
Dissolved Thallium	µg/L		0.30	<0.30	0.30	<0.30	0.30	<0.30	<0.30	<0.30	<0.30
Dissolved Tin	µg/L		2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0	<2.0	<2.0
Dissolved Titanium	µg/L		2.0	2.5	2.0	<2.0	2.0	<2.0	<2.0	<2.0	2.4
Dissolved Uranium	µg/L		0.50	3.85	0.50	1.82	0.50	<0.50	3.96	<0.50	3.73
Dissolved Vanadium	µg/L		2.0	<2.0	2.0	<2.0	2.0	<2.0	<2.0	3.8	<2.0
Dissolved Zinc	µg/L		5.0	24.1	5.0	17.6	5.0	14.1	46.3	16.4	17.1
Dissolved Zirconium	µg/L		4.0	<4.0	4.0	<4.0	4.0	<4.0	<4.0	<4.0	<4.0

Comments: ı Limit; G / S - Guideline / Standard

4429534-4429553 ›mpleted on a filtered sample.

Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Metals - Dissolved Metals in Water (µg/L)															
Dissolved Aluminum	4429534	4429534	144	123	15.7%	< 4.0	92%	70%	130%	100%	80%	120%	83%	70%	130%
Dissolved Antimony	4429534	4429534	8.4	8.5	1.2%	< 1.0	102%	70%	130%	103%	80%	120%	110%	70%	130%
Dissolved Arsenic	4429534	4429534	3.7	4.1	NA	< 1.0	97%	70%	130%	93%	80%	120%	100%	70%	130%
Dissolved Barium	4429534	4429534	25.8	25.2	2.4%	< 2.0	95%	70%	130%	98%	80%	120%	95%	70%	130%
Dissolved Beryllium	4429534	4429534	<0.50	<0.50	NA	< 0.50	102%	70%	130%	102%	80%	120%	103%	70%	130%
Dissolved Bismuth	4429534	4429534	<2.0	<2.0	NA	< 2.0	90%	70%	130%	95%	80%	120%	97%	70%	130%
Dissolved Boron	4429534	4429534	263	261	0.8%	< 10.0	104%	70%	130%	106%	80%	120%	103%	70%	130%
Dissolved Cadmium	4429534	4429534	<0.10	0.10	NA	< 0.10	99%	70%	130%	101%	80%	120%	108%	70%	130%
Dissolved Chromium	4429534	4429534	<2.0	<2.0	NA	< 2.0	100%	70%	130%	105%	80%	120%	111%	70%	130%
Dissolved Cobalt	4429534	4429534	0.78	0.68	NA	< 0.50	102%	70%	130%	109%	80%	120%	111%	70%	130%
Dissolved Copper	4429534	4429534	229	236	3.0%	< 1.0	101%	70%	130%	102%	80%	120%	105%	70%	130%
Dissolved Iron	4429534	4429534	27	18	NA	< 10	97%	70%	130%	103%	80%	120%	107%	70%	130%
Dissolved Lead	4429534	4429534	<0.50	<0.50	NA	< 0.50	94%	70%	130%	90%	80%	120%	92%	70%	130%
Dissolved Lithium	4429534	4429534	<50	<50	NA	< 50	99%	70%	130%	106%	80%	120%	103%	70%	130%
Dissolved Manganese	4429534	4429534	93.9	96.7	2.9%	< 2.0	101%	70%	130%	109%	80%	120%	110%	70%	130%
Dissolved Molybdenum	4429534	4429534	156	158	1.3%	< 2.0	103%	70%	130%	108%	80%	120%	119%	70%	130%
Dissolved Nickel	4429534	4429534	10.9	10.0	8.6%	< 1.0	102%	70%	130%	107%	80%	120%	106%	70%	130%
Dissolved Phosphorus	4429534	4429534	<50	<50	NA	< 50	91%	70%	130%	101%	80%	120%	111%	70%	130%
Dissolved Selenium	4429534	4429534	3.0	1.2	NA	< 1.0	109%	70%	130%	93%	80%	120%	103%	70%	130%
Dissolved Silicon	4429534	4429534	1640	1620	1.2%	< 50	96%	70%	130%	113%	80%	120%	114%	70%	130%
Dissolved Silver	4429534	4429534	<0.10	<0.10	NA	< 0.10	98%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Strontium	4429534	4429534	3910	3880	0.8%	< 5.0	101%	70%	130%	111%	80%	120%	106%	70%	130%
Dissolved Thallium	4429534	4429534	<0.30	<0.30	NA	< 0.30	98%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Tin	4429534	4429534	<2.0	<2.0	NA	< 2.0	103%	70%	130%	107%	80%	120%	109%	70%	130%
Dissolved Titanium	4429534	4429534	2.5	2.4	NA	< 2.0	108%	70%	130%	106%	80%	120%	106%	70%	130%
Dissolved Uranium	4429534	4429534	3.85	3.70	4.0%	< 0.50	96%	70%	130%	100%	80%	120%	104%	70%	130%
Dissolved Vanadium	4429534	4429534	<2.0	<2.0	NA	< 2.0	101%	70%	130%	109%	80%	120%	113%	70%	130%
Dissolved Zinc	4429534	4429534	24.1	20.4	NA	< 5.0	104%	70%	130%	97%	80%	120%	106%	70%	130%
Dissolved Zirconium	4429534	4429534	<4.0	<4.0	NA	< 4.0	101%	70%	130%	105%	80%	120%	115%	70%	130%
Anion Scan															
Fluoride	4425570		<0.05	<0.05	NA	< 0.05	108%	70%	130%	109%	80%	120%	109%	70%	130%
Chloride	4425570		13.7	13.7	0.0%	< 0.10	97%	70%	130%	102%	80%	120%	104%	70%	130%
Sulphate	4425570		281	281	0.0%	< 0.10	95%	70%	130%	98%	80%	120%	NA	70%	130%
(Water) Inorganic Chemistry															
Dissolved Mercury	4429534	4429534	<0.1	<0.1	NA	< 0.1	99%	70%	130%	99%	80%	120%	92%	70%	130%
pH	4429065		7.73	7.78	0.6%	NA	101%	90%	110%	NA			NA		
Alkalinity (as CaCO3)	4429065		82600	84700	2.5%	< 5000	90%	80%	120%	NA			NA		
Electrical Conductivity	4429065		83	85	2.4%	< 2	101%	90%	110%						
Dissolved Organic Carbon	4433241		3300	3290	0.3%	< 500	97%	90%	110%	96%	90%	110%	100%	80%	120%

Comments: culated. Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 22T971094
PROJECT: Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra Deforge
DATE RECEIVED: Nov 18, 2022
DATE SAMPLED: Nov 14, 2022
DATE REPORTED: Nov 28, 2022

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry

(Water) Inorganic Chemistry

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5		FB-1 Dup		Field Blank
Date Sampled				11/14/2022		11/14/2022		11/14/2022		11/14/2022		11/14/2022		11/14/2022		11/14/2022
Parameter	**Unit**	**G / S**	**RDL**	**4531204**	**RDL**	**4531207**	**RDL**	**4531243**	**RDL**	**4531244**	**RDL**	**4531245**	**RDL**	**4531246**	**RDL**	**4531248**
pH	pH Units		NA	7.23	NA	7.32	NA	7.43	NA	7.12	NA	7.57	NA	7.32	NA	6.34
Electrical Conductivity	µS/cm		2	1540	2	518	2	412	2	2130	2	296	2	553	2	<2
Alkalinity (as CaCO3)	mg/L		5	65	5	69	5	119	5	54	5	105	5	72	5	<5
Chloride	mg/L		0.12	17.4	0.10	7.82	0.10	3.51	0.24	11.3	0.10	7.42	0.10	8.32	0.10	<0.10
Fluoride	mg/L		0.05	<0.05	0.05	0.19	0.05	0.74	0.05	<0.05	0.05	2.59	0.05	0.23	0.05	<0.05
Sulphate	mg/L		0.19	841	0.10	189	0.10	126	0.38	1390	0.10	32.4	0.10	200	0.10	<0.10
Dissolved Organic Carbon	mg/L		0.5	10.1	0.5	10.3	0.5	4.0	0.5	9.0	0.5	8.2	0.5	10.4	0.5	<0.5
Dissolved Calcium	mg/L		0.05	292	0.05	76.5	0.05	55.1	0.10	496	0.05	20.1	0.05	80.9	0.05	<0.05
Dissolved Magnesium	mg/L		0.05	24.1	0.05	11.5	0.05	11.6	0.05	13.1	0.05	6.89	0.05	11.7	0.05	<0.05
Dissolved Sodium	mg/L		0.05	44.3	0.05	11.9	0.05	10.9	0.05	22.7	0.05	14.0	0.05	12.8	0.05	<0.05
Dissolved Potassium	mg/L		0.50	11.9	0.50	5.86	0.50	2.94	0.50	7.32	0.50	2.98	0.50	5.94	0.50	<0.50
Dissolved Aluminum	mg/L		0.004	0.022	0.004	0.018	0.004	0.023	0.004	0.015	0.004	0.020	0.004	0.017	0.004	<0.004
Dissolved Antimony	mg/L		0.001	0.012	0.001	0.018	0.001	0.011	0.001	0.010	0.001	0.006	0.001	0.019	0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.007	0.001	0.003	0.001	0.003	0.001	0.002	0.001	0.008	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.021	0.002	0.021	0.002	0.017	0.002	0.020	0.002	0.020	0.002	0.021	0.002	<0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.318	0.010	0.106	0.010	0.135	0.010	0.225	0.010	0.105	0.010	0.116	0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001
Dissolved Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	0.0007	0.0005	<0.0005	0.0005	0.0019	0.0005	<0.0005	0.0005	0.0008	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.069	0.001	0.227	0.001	0.121	0.001	0.065	0.001	0.126	0.001	0.235	0.001	<0.001
Dissolved Iron	mg/L		0.010	0.019	0.010	<0.010	0.010	<0.010	0.010	0.012	0.010	<0.010	0.010	0.011	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.040	0.002	0.041	0.002	0.017	0.002	0.107	0.002	0.011	0.002	0.042	0.002	<0.002
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.175	0.010	3.72	0.002	0.106	0.002	0.162	0.002	0.073	0.010	3.81	0.002	<0.002
Dissolved Nickel	mg/L		0.001	0.005	0.001	0.003	0.001	<0.001	0.001	0.005	0.001	0.001	0.001	0.003	0.001	<0.001
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10
Dissolved Selenium	mg/L		0.001	0.001	0.001	0.002	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	3.97	0.005	2.05	0.005	1.42	0.005	3.38	0.005	0.277	0.005	2.06	0.005	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0043	0.0005	0.0064	0.0005	<0.0005	0.0005	0.0031	0.0005	<0.0005	0.0005	0.0066	0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.009	0.005	0.005	0.005	<0.005	0.005	0.030	0.005	0.016	0.005	0.006	0.005	<0.005
Lab Filtration DOC				2022/22/11		2022/22/11		2022/22/11		2022/22/11		2022/22/11		2022/22/11		2022/22/11

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4531204-4531246 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference	Lower	Upper	Method Blank	Lower	Upper	Matrix Spike	Lower	Upper
(Water) Inorganic Chemistry															
pH	4531805		7.38	7.35	0.4%	NA	102%	90%	110%						
Electrical Conductivity	4531805		858	860	0.2%	< 2	97%	90%	110%						
Alkalinity (as CaCO3)	4531805		132	135	2.2%	< 5	95%	80%	120%						
Chloride	4531207	4531207	7.32	7.30	0.3%	< 0.10	91%	70%	130%	97%	80%	120%	97%	70%	130%
Fluoride	4531207	4531207	<0.05	<0.05	NA	< 0.05	104%	70%	130%	99%	80%	120%	103%	70%	130%
Sulphate	4531207	4531207	189	190	0.5%	< 0.10	98%	70%	130%	97%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	4531204	4531204	10.1	9.4	7.2%	< 0.5	106%	90%	110%	96%	90%	110%	109%	80%	120%
Dissolved Calcium	4531204	4531204	292	285	2.4%	< 0.05	100%	70%	130%	96%	80%	120%	92%	70%	130%
Dissolved Magnesium	4531204	4531204	24.2	22.3	8.2%	< 0.05	103%	70%	130%	100%	80%	120%	93%	70%	130%
Dissolved Sodium	4531204	4531204	44.3	43.8	1.1%	< 0.05	102%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Potassium	4531204	4531204	11.9	11.3	5.2%	< 0.50	103%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Aluminum	4531204	4531204	0.022	0.021	4.7%	< 0.004	92%	70%	130%	96%	80%	120%	89%	70%	130%
Dissolved Antimony	4531204	4531204	0.012	0.011	8.7%	< 0.001	102%	70%	130%	98%	80%	120%	109%	70%	130%
Dissolved Arsenic	4531204	4531204	0.003	0.002	NA	< 0.001	100%	70%	130%	96%	80%	120%	105%	70%	130%
Dissolved Barium	4531204	4531204	0.021	0.019	10.0%	< 0.002	101%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Beryllium	4531204	4531204	<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Bismuth	4531204	4531204	<0.002	<0.002	NA	< 0.002	97%	70%	130%	95%	80%	120%	90%	70%	130%
Dissolved Boron	4531204	4531204	0.318	0.309	2.9%	< 0.010	99%	70%	130%	108%	80%	120%	106%	70%	130%
Dissolved Cadmium	4531204	4531204	<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	101%	80%	120%	99%	70%	130%
Dissolved Chromium	4531204	4531204	<0.003	<0.003	NA	< 0.003	98%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Cobalt	4531204	4531204	<0.0005	0.0007	NA	< 0.0005	99%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Copper	4531204	4531204	0.069	0.067	2.9%	< 0.001	99%	70%	130%	98%	80%	120%	94%	70%	130%
Dissolved Iron	4531204	4531204	0.019	0.024	NA	< 0.010	99%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Lead	4531204	4531204	<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	93%	80%	120%	86%	70%	130%
Dissolved Manganese	4531204	4531204	0.040	0.040	0.0%	< 0.002	96%	70%	130%	101%	80%	120%	99%	70%	130%
Dissolved Mercury	4531204	4531204	<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Molybdenum	4531204	4531204	0.175	0.168	4.1%	< 0.002	101%	70%	130%	105%	80%	120%	105%	70%	130%
Dissolved Nickel	4531204	4531204	0.005	0.004	NA	< 0.001	98%	70%	130%	98%	80%	120%	98%	70%	130%
Total Phosphorus	4531204	4531204	<0.10	<0.10	NA	< 0.10	98%	70%	130%	120%	80%	120%	117%	70%	130%
Dissolved Selenium	4531204	4531204	0.001	0.005	NA	< 0.001	103%	70%	130%	96%	80%	120%	100%	70%	130%
Dissolved Silver	4531204	4531204	<0.0001	0.0001	NA	< 0.0001	97%	70%	130%	98%	80%	120%	97%	70%	130%
Dissolved Strontium	4531204	4531204	3.97	3.75	5.7%	< 0.005	99%	70%	130%	101%	80%	120%	97%	70%	130%
Dissolved Thallium	4531204	4531204	<0.0003	<0.0003	NA	< 0.0003	98%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Tin	4531204	4531204	<0.002	<0.002	NA	< 0.002	102%	70%	130%	96%	80%	120%	105%	70%	130%
Dissolved Titanium	4531204	4531204	<0.002	<0.002	NA	< 0.002	92%	70%	130%	98%	80%	120%	108%	70%	130%
Dissolved Uranium	4531204	4531204	0.0043	0.0039	9.8%	< 0.0005	98%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Vanadium	4531204	4531204	<0.002	<0.002	NA	< 0.002	99%	70%	130%	104%	80%	120%	105%	70%	130%
Dissolved Zinc	4531204	4531204	0.009	0.011	NA	< 0.005	100%	70%	130%	99%	80%	120%	97%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T015732
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Apr 19, 2023
DATE SAMPLED: Apr 17, 2023
DATE REPORTED: Apr 27, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Cations in Water - Dissolved (mg/L)
X02	Water		Dissolved Metals in Water (mg/L)
X03	Water		Inorganic Chemistry

Cations in Water - Dissolved (mg/L)

Sample Description				FB-1		FB-2	FB-3		FB-4		FB-5	X1	FIELD BLANK
Date Sampled				04/17/2023		04/17/2023	04/17/2023		04/17/2023		04/17/2023	04/17/2023	04/17/2023
Parameter	Unit	G / S	RDL	4925648	RDL	4925697	4925698	RDL	4925699	RDL	4925700	4925701	4925702
Dissolved Calcium	mg/L		0.05	224	0.05	32.6	52.4	0.05	317	0.05	11.9	30.9	<0.05
Dissolved Magnesium	mg/L		0.05	10.0	0.05	3.27	5.81	0.05	4.05	0.05	4.30	3.49	<0.05
Dissolved Potassium	mg/L		0.50	5.40	0.50	1.45	1.43	0.50	2.89	0.50	1.56	1.60	<0.50
Dissolved Sodium	mg/L		0.25	12.8	0.05	2.86	3.85	0.25	5.35	0.05	4.64	2.86	<0.05

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4925648 Analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

4925697-4925698 Analysis completed on a filtered sample.

4925699 Analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

4925700-4925702 Analysis completed on a filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Dissolved Metals in Water (mg/L)

Sample Description				FB-1	FB-2	FB-3	FB-4	FB-5	X1	FIELD BLANK
Date Sampled				04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023	04/17/2023
Parameter	**Unit**	**G / S**	**RDL**	**4925648**	**4925697**	**4925698**	**4925699**	**4925700**	**4925701**	**4925702**
Dissolved Aluminum	mg/L		0.004	0.011	0.006	<0.004	<0.004	0.018	0.005	<0.004
Dissolved Antimony	mg/L		0.001	0.006	0.004	0.004	0.004	0.003	0.004	<0.001
Dissolved Arsenic	mg/L		0.001	0.002	0.003	0.001	0.002	0.001	0.002	<0.001
Dissolved Barium	mg/L		0.002	0.021	0.017	0.011	0.014	0.016	0.017	<0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.094	0.022	0.032	0.050	0.025	0.020	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	<0.0005	<0.0005	0.0010	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.005	0.208	0.066	0.181	0.076	0.208	<0.001
Dissolved Iron	mg/L		0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.028	0.019	0.014	0.061	0.005	0.017	<0.002
Dissolved Molybdenum	mg/L		0.002	0.053	0.751	0.047	0.048	0.030	0.722	<0.002
Dissolved Nickel	mg/L		0.001	0.001	0.001	<0.001	0.002	<0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Silicon	mg/L		0.05	1.56	0.41	0.88	0.80	1.30	0.36	<0.05
Dissolved Strontium	mg/L		0.005	2.03	0.777	0.746	1.53	0.164	0.758	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0021	0.0029	<0.0005	0.0013	<0.0005	0.0029	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	<0.005	<0.005	0.007	<0.005	<0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4925648-4925702 Metals analysis completed on a filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Inorganic Chemistry

Sample Description				FB-1		FB-2	FB-3		FB-4		FB-5	X1	FIELD BLANK
Date Sampled				04/17/2023		04/17/2023	04/17/2023		04/17/2023		04/17/2023	04/17/2023	04/17/2023
Parameter	**Unit**	**G / S**	**RDL**	**4925648**	**RDL**	**4925697**	**4925698**	**RDL**	**4925699**	**RDL**	**4925700**	**4925701**	**4925702**
pH	pH Units		NA	5.74	NA	7.01	7.36	NA	7.17	NA	7.66	7.20	5.91
Alkalinity (as CaCO3)	mg/L		5	45	5	24	37	5	28	5	46	24	<5
Electrical Conductivity	µS/cm		2	1020	2	221	342	2	1340	2	117	225	<2
Chloride	mg/L		0.12	4.99	0.10	2.09	1.99	0.12	2.73	0.10	1.46	2.08	<0.10
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.10	0.05	<0.05	0.05	0.79	<0.05	<0.05
Sulphate	mg/L		0.10	471	0.10	66.3	110	0.19	700	0.10	5.26	66.3	<0.10
Dissolved Organic Carbon	mg/L		0.5	3.9	0.5	2.9	2.2	0.5	3.3	0.5	3.0	2.9	<0.5
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4925648 Dilution required, RDL has been increased accordingly.

4925699 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Inorganic Chemistry															
pH	4928042		7.31	7.26	0.7%	NA	103%	90%	110%						
Alkalinity (as CaCO3)	4925648	4925648	45	41	9.3%	< 5	100%	80%	120%						
Electrical Conductivity	4925648	4925648	1020	1030	1.0%	< 2	102%	90%	110%						
Chloride	4928101		181	180	0.6%	< 0.10	99%	70%	130%	94%	80%	120%	NA	70%	130%
Fluoride	4928101		<0.05	<0.05	NA	< 0.05	97%	70%	130%	92%	80%	120%	96%	70%	130%
Sulphate	4928101		82.8	82.8	0.0%	< 0.10	100%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Organic Carbon	4925648	4925648	3.9	4.1	5.0%	< 0.5	103%	90%	110%	106%	90%	110%	105%	80%	120%
Dissolved Mercury	4925648	4925648	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	102%	80%	120%	99%	70%	130%
Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	4925648	4925648	0.011	<0.004	NA	< 0.004	90%	70%	130%	89%	80%	120%	87%	70%	130%
Dissolved Antimony	4925648	4925648	0.006	0.006	0.0%	< 0.001	102%	70%	130%	104%	80%	120%	102%	70%	130%
Dissolved Arsenic	4925648	4925648	0.002	0.001	NA	< 0.001	99%	70%	130%	102%	80%	120%	108%	70%	130%
Dissolved Barium	4925648	4925648	0.021	0.022	4.7%	< 0.002	105%	70%	130%	104%	80%	120%	101%	70%	130%
Dissolved Beryllium	4925648	4925648	<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	110%	80%	120%	99%	70%	130%
Dissolved Bismuth	4925648	4925648	<0.002	<0.002	NA	< 0.002	94%	70%	130%	97%	80%	120%	92%	70%	130%
Dissolved Boron	4925648	4925648	0.094	0.097	3.1%	< 0.010	96%	70%	130%	109%	80%	120%	101%	70%	130%
Dissolved Cadmium	4925648	4925648	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	99%	80%	120%	94%	70%	130%
Dissolved Chromium	4925648	4925648	<0.002	<0.002	NA	< 0.002	95%	70%	130%	92%	80%	120%	91%	70%	130%
Dissolved Cobalt	4925648	4925648	<0.0005	<0.0005	NA	< 0.0005	92%	70%	130%	91%	80%	120%	90%	70%	130%
Dissolved Copper	4925648	4925648	0.005	0.004	NA	< 0.001	96%	70%	130%	90%	80%	120%	85%	70%	130%
Dissolved Iron	4925648	4925648	<0.010	<0.010	NA	< 0.010	98%	70%	130%	92%	80%	120%	92%	70%	130%
Dissolved Lead	4925648	4925648	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	92%	80%	120%	89%	70%	130%
Dissolved Manganese	4925648	4925648	0.028	0.027	3.6%	< 0.002	91%	70%	130%	89%	80%	120%	91%	70%	130%
Dissolved Molybdenum	4925648	4925648	0.053	0.054	1.9%	< 0.002	97%	70%	130%	92%	80%	120%	90%	70%	130%
Dissolved Nickel	4925648	4925648	0.001	0.001	NA	< 0.001	91%	70%	130%	89%	80%	120%	88%	70%	130%
Dissolved Phosphorus	4925648	4925648	<0.05	<0.05	NA	< 0.05	82%	70%	130%	89%	80%	120%	94%	70%	130%
Dissolved Selenium	4925648	4925648	<0.001	<0.001	NA	< 0.001	97%	70%	130%	102%	80%	120%	106%	70%	130%
Dissolved Silver	4925648	4925648	<0.0001	<0.0001	NA	< 0.0001	89%	70%	130%	85%	80%	120%	83%	70%	130%
Dissolved Silicon	4925648	4925648	1.56	1.64	5.0%	< 0.05	97%	70%	130%	92%	80%	120%	109%	70%	130%
Dissolved Strontium	4925648	4925648	2.03	2.01	1.0%	< 0.005	88%	70%	130%	88%	80%	120%	NA	70%	130%
Dissolved Thallium	4925648	4925648	<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Tin	4925648	4925648	<0.002	<0.002	NA	< 0.002	106%	70%	130%	103%	80%	120%	101%	70%	130%
Dissolved Titanium	4925648	4925648	<0.002	<0.002	NA	< 0.002	103%	70%	130%	103%	80%	120%	100%	70%	130%
Dissolved Uranium	4925648	4925648	0.0021	0.0022	NA	< 0.0005	93%	70%	130%	99%	80%	120%	102%	70%	130%
Dissolved Vanadium	4925648	4925648	<0.002	<0.002	NA	< 0.002	94%	70%	130%	96%	80%	120%	94%	70%	130%
Dissolved Zinc	4925648	4925648	<0.005	<0.005	NA	< 0.005	95%	70%	130%	91%	80%	120%	92%	70%	130%
Cations in Water - Dissolved (mg/L)															
Dissolved Calcium	4925648	4925648	224	229	2.2%	< 0.05	103%	70%	130%	106%	80%	120%	95%	70%	130%
Dissolved Magnesium	4925648	4925648	10.0	10.2	2.0%	< 0.05	113%	70%	130%	102%	80%	120%	101%	70%	130%
Dissolved Potassium	4925648	4925648	5.40	5.77	6.6%	< 0.50	100%	70%	130%	98%	80%	120%	103%	70%	130%
Dissolved Sodium	4925648	4925648	12.8	13.1	2.3%	< 0.05	100%	70%	130%	101%	80%	120%	101%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T021621
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: May 05, 2023
DATE SAMPLED: May 05, 2023
DATE REPORTED: May 15, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Inorganic Chemistry (Water)

Inorganic Chemistry (Water)

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5		X1		Field Blank
Date Sampled				05/05/2023		05/05/2023		05/05/2023		05/05/2023		05/05/2023		05/05/2023		05/05/2023
Parameter	Unit	G / S	RDL	4965639	RDL	4965702	RDL	4965703	RDL	4965704	RDL	4965705	RDL	4965706	RDL	4965707
pH	pH Units		NA	7.67	NA	7.78	NA	7.78	NA	7.56	NA	7.87	NA	7.58	NA	6.40
Electrical Conductivity	µS/cm		2	930	2	392	2	291	2	1880	2	178	2	1870	2	2
Alkalinity (as CaCO3)	mg/L		5	63	5	73	5	74	5	50	5	83	5	51	5	<5
Chloride	mg/L		0.12	2.72	0.10	2.72	0.10	1.29	0.24	2.16	0.10	0.97	0.24	2.12	0.10	<0.10
Fluoride	mg/L		0.05	<0.05	0.05	0.11	0.05	0.83	0.05	<0.05	0.05	0.62	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	415	0.10	116	0.10	68.3	0.38	1180	0.10	6.74	0.38	1180	0.10	<0.10
Dissolved Organic Carbon	mg/L		0.5	3.5	0.5	4.2	0.5	3.5	0.5	3.8	0.5	6.2	0.5	3.9	0.5	<0.5
Dissolved Calcium	mg/L		0.05	181	0.05	62.0	0.05	41.1	0.10	499	0.05	21.1	0.10	486	0.05	<0.05
Dissolved Magnesium	mg/L		0.05	9.27	0.05	7.94	0.05	7.26	0.05	5.75	0.05	5.93	0.05	5.84	0.05	<0.05
Dissolved Potassium	mg/L		0.50	4.27	0.50	3.41	0.50	1.73	0.50	4.05	0.50	2.20	0.50	4.06	0.50	<0.50
Dissolved Sodium	mg/L		0.05	10.3	0.05	4.98	0.05	4.67	0.05	6.39	0.05	5.88	0.05	6.68	0.05	<0.05
Dissolved Aluminum	mg/L		0.004	0.008	0.004	0.022	0.004	0.016	0.004	0.013	0.004	0.019	0.004	0.014	0.004	<0.004
Dissolved Antimony	mg/L		0.001	0.007	0.001	0.021	0.001	0.010	0.001	0.011	0.001	0.005	0.001	0.011	0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.001	0.001	0.008	0.001	0.003	0.001	0.002	0.001	0.002	0.001	0.002	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.019	0.002	0.033	0.002	0.015	0.002	0.022	0.002	0.026	0.002	0.031	0.002	<0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.122	0.010	0.057	0.010	0.058	0.010	0.114	0.010	0.037	0.010	0.114	0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0009	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	0.0005	0.0005	<0.0005	0.0005	0.0017	0.0005	<0.0005	0.0005	0.0018	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.175	0.001	0.290	0.001	0.342	0.001	0.107	0.001	0.193	0.001	0.111	0.001	<0.001
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.011	0.010	<0.010	0.010	0.013	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.036	0.002	0.039	0.002	0.016	0.002	0.087	0.002	0.012	0.002	0.085	0.002	<0.002
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.099	0.010	3.60	0.002	0.119	0.002	0.176	0.002	0.051	0.002	0.175	0.002	<0.002
Dissolved Nickel	mg/L		0.001	0.002	0.001	<0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.002	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	0.002	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	2.21	0.005	1.82	0.005	0.891	0.005	2.81	0.005	0.219	0.005	2.85	0.005	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0020	0.0005	0.0055	0.0005	<0.0005	0.0005	0.0019	0.0005	<0.0005	0.0005	0.0020	0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.004	0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.005	0.005	<0.005	0.005	<0.005	0.005	0.009	0.005	0.061	0.005	0.009	0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

4965639-4965706 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

4965707 Metals analysis completed on a filtered sample.
Electrical Conductivity was confirmed by re-analysis.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Inorganic Chemistry (Water)															
pH	4968622		6.59	6.58	0.2%	NA	100%	90%	110%						
Electrical Conductivity	4968622		42	41	2.4%	< 2	110%	90%	110%						
Alkalinity (as CaCO3)	4968622		13	13	NA	< 5	101%	80%	120%						
Chloride	4967065		61.5	61.5	0.0%	< 0.10	94%	70%	130%	102%	80%	120%	107%	70%	130%
Fluoride	4967065		<0.05	<0.05	NA	< 0.05	102%	70%	130%	103%	80%	120%	100%	70%	130%
Sulphate	4967065		28.7	28.5	0.7%	< 0.10	97%	70%	130%	99%	80%	120%	101%	70%	130%
Dissolved Organic Carbon	4965463		0.7	0.6	NA	< 0.5	103%	90%	110%	101%	90%	110%	95%	80%	120%
Dissolved Calcium	4965954		12.2	12.4	1.6%	< 0.05	101%	70%	130%	109%	80%	120%	103%	70%	130%
Dissolved Magnesium	4965954		0.87	0.85	2.3%	< 0.05	102%	70%	130%	101%	80%	120%	99%	70%	130%
Dissolved Potassium	4965954		0.69	0.67	NA	< 0.50	101%	70%	130%	108%	80%	120%	98%	70%	130%
Dissolved Sodium	4965954		1.26	1.33	5.4%	< 0.05	98%	70%	130%	109%	80%	120%	100%	70%	130%
Dissolved Aluminum	4965954		0.018	0.016	NA	< 0.004	94%	70%	130%	103%	80%	120%	96%	70%	130%
Dissolved Antimony	4965954		<0.001	<0.001	NA	< 0.001	101%	70%	130%	95%	80%	120%	101%	70%	130%
Dissolved Arsenic	4965954		<0.001	<0.001	NA	< 0.001	98%	70%	130%	92%	80%	120%	99%	70%	130%
Dissolved Barium	4965954		0.017	0.017	0.0%	< 0.002	100%	70%	130%	99%	80%	120%	95%	70%	130%
Dissolved Beryllium	4965954		<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	109%	80%	120%	106%	70%	130%
Dissolved Bismuth	4965954		<0.002	<0.002	NA	< 0.002	89%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Boron	4965954		<0.010	<0.010	NA	< 0.010	98%	70%	130%	111%	80%	120%	107%	70%	130%
Dissolved Cadmium	4965954		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	97%	80%	120%	100%	70%	130%
Dissolved Chromium	4965954		<0.002	<0.002	NA	< 0.002	95%	70%	130%	96%	80%	120%	94%	70%	130%
Dissolved Cobalt	4965954		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Copper	4965954		<0.001	<0.001	NA	< 0.001	97%	70%	130%	95%	80%	120%	93%	70%	130%
Dissolved Iron	4965954		0.034	0.015	NA	< 0.010	94%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Lead	4965954		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	93%	80%	120%	87%	70%	130%
Dissolved Manganese	4965954		<0.002	<0.002	NA	< 0.002	99%	70%	130%	96%	80%	120%	97%	70%	130%
Dissolved Mercury	4965639	4965639	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Molybdenum	4965954		<0.002	<0.002	NA	< 0.002	101%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Nickel	4965954		<0.001	<0.001	NA	< 0.001	96%	70%	130%	95%	80%	120%	93%	70%	130%
Dissolved Phosphorus	4965954		<0.05	<0.05	NA	< 0.05	89%	70%	130%	109%	80%	120%	96%	70%	130%
Dissolved Selenium	4965954		<0.001	<0.001	NA	< 0.001	99%	70%	130%	101%	80%	120%	109%	70%	130%
Dissolved Silver	4965954		<0.0001	<0.0001	NA	< 0.0001	97%	70%	130%	95%	80%	120%	95%	70%	130%
Dissolved Strontium	4965954		0.050	0.055	9.5%	< 0.005	96%	70%	130%	91%	80%	120%	92%	70%	130%
Dissolved Thallium	4965954		<0.0003	<0.0003	NA	< 0.0003	99%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Tin	4965954		<0.002	<0.002	NA	< 0.002	92%	70%	130%	96%	80%	120%	100%	70%	130%
Dissolved Titanium	4965954		<0.002	<0.002	NA	< 0.002	102%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Uranium	4965954		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Vanadium	4965954		<0.002	<0.002	NA	< 0.002	95%	70%	130%	97%	80%	120%	96%	70%	130%
Dissolved Zinc	4965954		0.005	<0.005	NA	< 0.005	98%	70%	130%	95%	80%	120%	93%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T039489
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Jun 23, 2023
DATE SAMPLED: Jun 21, 2023
DATE REPORTED: Jul 04, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry

(Water) Inorganic Chemistry

Sample Description			FB-1	FB-2	FB-3	FB-4	FB-5		X1	Field Blank
Date Sampled			06/21/2023	06/21/2023	06/21/2023	06/21/2023	06/21/2023		06/21/2023	06/21/2023
Parameter	**Unit**	**G / S**	**5092429**	**5092431**	**5092432**	**5092433**	**5092434**	**RDL**	**5092435**	**5092436**
pH	pH Units		7.51	6.84	7.02	7.38	7.94	NA	6.83	5.79
Electrical Conductivity	µS/cm		1450	218	407	2710	331	2	211	3
Alkalinity (as CaCO3)	mg/L		39	17	24	35	82	5	17	<5
Chloride	mg/L		2.36	0.60	1.24	3.41	1.70	0.10	0.60	<0.10
Fluoride	mg/L		<0.05	<0.05	<0.05	<0.05	0.50	0.05	<0.05	<0.05
Sulphate	mg/L		500	43.0	102	978	24.7	0.10	43.1	<0.10
Dissolved Organic Carbon	mg/L		6.3	9.0	5.5	8.6	9.8	0.5	9.3	<0.5
Dissolved Calcium	mg/L		181	19.5	40.0	360	28.1	0.05	19.0	<0.05
Dissolved Magnesium	mg/L		10.7	2.27	4.43	8.88	6.26	0.05	2.31	<0.05
Dissolved Sodium	mg/L		11.2	1.50	2.93	9.97	6.85	0.05	1.50	<0.05
Dissolved Potassium	mg/L		4.38	1.33	1.23	5.18	2.93	0.50	1.46	<0.50
Dissolved Aluminum	mg/L		0.022	0.019	0.010	0.019	0.024	0.004	0.017	<0.004
Dissolved Antimony	mg/L		0.013	0.020	0.010	0.016	0.013	0.001	0.020	<0.001
Dissolved Arsenic	mg/L		0.002	0.003	0.002	0.005	0.004	0.001	0.003	<0.001
Dissolved Barium	mg/L		0.032	0.018	0.016	0.030	0.048	0.002	0.018	<0.002
Dissolved Beryllium	mg/L		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.183	0.026	0.052	0.225	0.067	0.010	0.026	<0.010
Dissolved Cadmium	mg/L		<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		<0.003	<0.003	<0.003	<0.003	0.003	0.003	<0.003	<0.003
Dissolved Cobalt	mg/L		<0.0005	<0.0005	<0.0005	0.0018	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.347	1.91	0.668	0.096	0.230	0.001	1.93	<0.001
Dissolved Iron	mg/L		0.022	0.017	<0.010	0.010	<0.010	0.010	0.016	<0.010
Dissolved Lead	mg/L		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0006	<0.0005
Dissolved Manganese	mg/L		0.031	0.028	0.026	0.070	0.017	0.002	0.027	<0.002
Dissolved Mercury	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.129	1.73	0.136	0.390	0.146	0.004	1.70	<0.002
Dissolved Nickel	mg/L		0.002	0.001	<0.001	0.004	<0.001	0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.06	<0.05	<0.05	<0.05	<0.05	0.05	<0.05	<0.05
Dissolved Selenium	mg/L		<0.001	0.001	<0.001	0.002	<0.001	0.001	<0.001	<0.001
Dissolved Silver	mg/L		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		2.48	0.696	0.692	3.19	0.342	0.005	0.654	<0.005
Dissolved Thallium	mg/L		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002
Dissolved Titanium	mg/L		<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002	<0.002
Dissolved Uranium	mg/L		0.0024	0.0014	<0.0005	0.0023	0.0013	0.0005	0.0015	<0.0005
Dissolved Vanadium	mg/L		<0.002	<0.002	<0.002	<0.002	0.007	0.002	<0.002	<0.002
Dissolved Zinc	mg/L		0.012	0.015	0.010	0.014	0.021	0.005	0.021	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5092429-5092435 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
(Water) Inorganic Chemistry															
pH	5089684		7.91	7.95	0.5%	NA	101%	90%	110%						
Electrical Conductivity	5089684		1150	1150	0.0%	< 2	103%	90%	110%						
Alkalinity (as CaCO3)	5089684		288	291	1.0%	< 5	99%	80%	120%						
Chloride	5092986		69.0	68.7	0.4%	< 0.10	98%	70%	130%	102%	80%	120%	107%	70%	130%
Fluoride	5092986		<0.05	<0.05	NA	< 0.05	97%	70%	130%	100%	80%	120%	96%	70%	130%
Sulphate	5092986		12.4	12.4	0.0%	< 0.10	95%	70%	130%	99%	80%	120%	100%	70%	130%
Dissolved Organic Carbon	5092429	5092429	6.3	6.3	0.0%	< 0.5	109%	90%	110%	95%	90%	110%	104%	80%	120%
Dissolved Calcium	5089674		259	270	4.2%	< 0.05	98%	70%	130%	102%	80%	120%	NA	70%	130%
Dissolved Magnesium	5089674		112	108	3.6%	< 0.05	99%	70%	130%	101%	80%	120%	94%	70%	130%
Dissolved Sodium	5089674		535	553	3.3%	< 0.05	96%	70%	130%	104%	80%	120%	NA	70%	130%
Dissolved Potassium	5089674		2.41	2.36	NA	< 0.50	97%	70%	130%	98%	80%	120%	86%	70%	130%
Dissolved Aluminum	5089674		0.007	0.009	NA	< 0.004	92%	70%	130%	95%	80%	120%	84%	70%	130%
Dissolved Antimony	5089674		<0.001	<0.001	NA	< 0.001	104%	70%	130%	108%	80%	120%	107%	70%	130%
Dissolved Arsenic	5089674		0.011	0.012	8.7%	< 0.001	90%	70%	130%	90%	80%	120%	106%	70%	130%
Dissolved Barium	5089674		0.604	0.587	2.9%	< 0.002	102%	70%	130%	103%	80%	120%	107%	70%	130%
Dissolved Beryllium	5089674		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	104%	80%	120%	97%	70%	130%
Dissolved Bismuth	5089674		<0.002	<0.002	NA	< 0.002	92%	70%	130%	98%	80%	120%	86%	70%	130%
Dissolved Boron	5089674		0.041	0.042	NA	< 0.010	99%	70%	130%	102%	80%	120%	96%	70%	130%
Dissolved Cadmium	5089674		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Chromium	5089674		<0.003	<0.003	NA	< 0.003	97%	70%	130%	98%	80%	120%	106%	70%	130%
Dissolved Cobalt	5089674		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	97%	80%	120%	103%	70%	130%
Dissolved Copper	5089674		<0.001	<0.001	NA	< 0.001	98%	70%	130%	96%	80%	120%	96%	70%	130%
Dissolved Iron	5089674		8.52	7.90	7.6%	< 0.010	104%	70%	130%	102%	80%	120%	120%	70%	130%
Dissolved Lead	5089674		<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	92%	80%	120%	87%	70%	130%
Dissolved Manganese	5089674		0.719	0.674	6.5%	< 0.002	98%	70%	130%	97%	80%	120%	108%	70%	130%
Dissolved Mercury	5092688		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	98%	80%	120%	99%	70%	130%
Dissolved Molybdenum	5089674		<0.002	<0.002	NA	< 0.002	101%	70%	130%	102%	80%	120%	115%	70%	130%
Dissolved Nickel	5089674		<0.001	0.001	NA	< 0.001	98%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved Phosphorus	5089674		0.09	0.06	NA	< 0.05	91%	70%	130%	102%	80%	120%	92%	70%	130%
Dissolved Selenium	5089674		0.027	0.031	13.8%	< 0.001	100%	70%	130%	99%	80%	120%	107%	70%	130%
Dissolved Silver	5089674		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	106%	80%	120%	80%	70%	130%
Dissolved Strontium	5089674		2.13	1.97	7.8%	< 0.005	97%	70%	130%	99%	80%	120%	NA	70%	130%
Dissolved Thallium	5089674		<0.0003	<0.0003	NA	< 0.0003	96%	70%	130%	96%	80%	120%	94%	70%	130%
Dissolved Tin	5089674		<0.002	<0.002	NA	< 0.002	106%	70%	130%	110%	80%	120%	104%	70%	130%
Dissolved Titanium	5089674		0.003	0.003	NA	< 0.002	99%	70%	130%	102%	80%	120%	110%	70%	130%
Dissolved Uranium	5089674		<0.0005	<0.0005	NA	< 0.0005	93%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Vanadium	5089674		<0.002	<0.002	NA	< 0.002	97%	70%	130%	100%	80%	120%	115%	70%	130%
Dissolved Zinc	5089674		<0.005	<0.005	NA	< 0.005	98%	70%	130%	99%	80%	120%	105%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T051500
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Jul 27, 2023
DATE SAMPLED: Jul 24, 2023
DATE REPORTED: Aug 03, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Inorganic Chemistry (Water)

Inorganic Chemistry (Water)

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5	FB-5 DUP	Field Blank
Date Sampled				07/24/2023		07/24/2023		07/24/2023		07/24/2023		07/24/2023	07/24/2023	07/24/2023
Parameter	Unit	G / S	RDL	5169742	RDL	5169896	RDL	5169897	RDL	5169898	RDL	5169899	5169900	5169901
pH	pH Units		NA	7.03	NA	6.93	NA	7.06	NA	7.15	NA	6.72	6.64	5.88
Electrical Conductivity	µS/cm		2	1040	2	458	2	323	2	2370	2	142	141	2
Alkalinity (as CaCO3)	mg/L		5	37	5	41	5	47	5	39	5	42	40	<5
Chloride	mg/L		0.12	1.96	0.10	2.02	0.10	1.02	0.49	2.42	0.10	0.80	0.82	<0.10
Fluoride	mg/L		0.05	<0.05	0.05	0.10	0.05	<0.05	0.05	<0.05	0.05	0.24	0.22	<0.05
Sulphate	mg/L		0.10	471	0.10	146	0.10	96.3	0.38	1330	0.10	18.2	18.2	<0.10
Dissolved Organic Carbon	mg/L		0.5	5.8	0.5	7.7	0.5	6.8	0.5	7.7	0.5	25.7	20.0	<0.5
Dissolved Calcium	mg/L		0.05	169	0.05	55.6	0.05	40.0	0.10	532	0.05	12.6	13.6	<0.05
Dissolved Magnesium	mg/L		0.05	10.2	0.05	7.53	0.05	7.67	0.05	9.06	0.05	2.31	2.52	<0.05
Dissolved Potassium	mg/L		0.50	5.27	0.50	3.74	0.50	2.53	0.50	6.85	0.50	1.52	1.62	<0.50
Dissolved Sodium	mg/L		0.05	12.1	0.05	5.76	0.05	6.33	0.05	10.2	0.05	3.63	3.81	<0.05
Dissolved Aluminum	mg/L		0.004	0.032	0.004	0.025	0.004	0.026	0.004	0.020	0.004	0.012	0.013	<0.004
Dissolved Antimony	mg/L		0.001	0.013	0.001	0.058	0.001	0.022	0.001	0.020	0.001	0.006	0.006	<0.001
Dissolved Arsenic	mg/L		0.001	0.004	0.001	0.020	0.001	0.023	0.001	0.010	0.001	0.003	0.003	<0.001
Dissolved Barium	mg/L		0.002	0.039	0.002	0.039	0.002	0.026	0.002	0.043	0.002	0.027	0.027	<0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.233	0.010	0.093	0.010	0.138	0.010	0.288	0.010	0.039	0.041	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	0.0006	0.0005	0.0005	0.0005	0.0021	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.244	0.001	0.835	0.001	0.446	0.001	0.030	0.001	1.30	1.29	<0.001
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.015	0.002	0.034	0.002	0.019	0.002	0.060	0.002	0.025	0.027	<0.002
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.172	0.02	6.19	0.002	0.235	0.002	0.426	0.002	0.088	0.085	<0.002
Dissolved Nickel	mg/L		0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.003	0.001	<0.001	<0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.003	0.001	0.001	0.001	0.003	0.001	<0.001	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	2.41	0.005	2.02	0.005	1.01	0.005	4.23	0.005	0.144	0.141	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0019	0.0005	0.0040	0.0005	<0.0005	0.0005	0.0023	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	0.002	0.006	0.005	<0.002
Dissolved Zinc	mg/L		0.005	0.007	0.005	0.009	0.005	0.009	0.005	0.007	0.005	0.447	0.446	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5169742-5169898 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Inorganic Chemistry (Water)															
pH	5168486		7.94	7.99	0.6%	NA	101%	90%	110%						
Electrical Conductivity	5168486		415	415	0.0%	< 2	107%	90%	110%						
Alkalinity (as CaCO3)	5168486		155	154	0.6%	< 5	103%	80%	120%						
Chloride	5170297		84.8	85.3	0.6%	< 0.10	93%	70%	130%	105%	80%	120%	102%	70%	130%
Fluoride	5170297		<0.05	<0.05	NA	< 0.05	99%	70%	130%	102%	80%	120%	101%	70%	130%
Sulphate	5170297		8.98	8.87	1.2%	< 0.10	104%	70%	130%	106%	80%	120%	102%	70%	130%
Dissolved Organic Carbon	5169742	5169742	5.8	6.1	5.0%	< 0.5	103%	90%	110%	103%	90%	110%	93%	80%	120%
Dissolved Calcium	5169742	5169742	169	172	1.8%	< 0.05	104%	70%	130%	99%	80%	120%	114%	70%	130%
Dissolved Magnesium	5169742	5169742	10.8	10.3	4.7%	< 0.05	104%	70%	130%	100%	80%	120%	95%	70%	130%
Dissolved Potassium	5169742	5169742	5.27	5.23	0.8%	< 0.50	99%	70%	130%	101%	80%	120%	108%	70%	130%
Dissolved Sodium	5169742	5169742	12.1	12.2	0.8%	< 0.05	102%	70%	130%	102%	80%	120%	99%	70%	130%
Dissolved Aluminum	5169742	5169742	0.032	0.015	NA	< 0.004	89%	70%	130%	103%	80%	120%	104%	70%	130%
Dissolved Antimony	5169742	5169742	0.013	0.013	0.0%	< 0.001	108%	70%	130%	109%	80%	120%	109%	70%	130%
Dissolved Arsenic	5169742	5169742	0.004	0.004	NA	< 0.001	98%	70%	130%	104%	80%	120%	110%	70%	130%
Dissolved Barium	5169742	5169742	0.039	0.041	5.0%	< 0.002	100%	70%	130%	101%	80%	120%	101%	70%	130%
Dissolved Beryllium	5169742	5169742	<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	109%	80%	120%	109%	70%	130%
Dissolved Bismuth	5169742	5169742	<0.002	<0.002	NA	< 0.002	99%	70%	130%	99%	80%	120%	100%	70%	130%
Dissolved Boron	5169742	5169742	0.233	0.230	1.3%	< 0.010	96%	70%	130%	106%	80%	120%	95%	70%	130%
Dissolved Cadmium	5169742	5169742	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	103%	80%	120%	107%	70%	130%
Dissolved Chromium	5169742	5169742	<0.002	0.005	NA	< 0.002	96%	70%	130%	99%	80%	120%	100%	70%	130%
Dissolved Cobalt	5169742	5169742	<0.0005	<0.0005	NA	< 0.0005	100%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Copper	5169742	5169742	0.244	0.239	2.1%	< 0.001	98%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Iron	5169742	5169742	<0.010	<0.010	NA	< 0.010	103%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Lead	5169742	5169742	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Manganese	5169742	5169742	0.015	0.014	6.9%	< 0.002	98%	70%	130%	101%	80%	120%	95%	70%	130%
Dissolved Mercury	5168815		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Molybdenum	5169742	5169742	0.172	0.167	2.9%	< 0.002	103%	70%	130%	104%	80%	120%	100%	70%	130%
Dissolved Nickel	5169742	5169742	0.001	<0.001	NA	< 0.001	99%	70%	130%	100%	80%	120%	96%	70%	130%
Dissolved Phosphorus	5169742	5169742	<0.05	<0.05	NA	< 0.05	109%	70%	130%	115%	80%	120%	95%	70%	130%
Dissolved Selenium	5169742	5169742	<0.001	<0.001	NA	< 0.001	99%	70%	130%	96%	80%	120%	108%	70%	130%
Dissolved Silver	5169742	5169742	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Strontium	5169742	5169742	2.41	2.32	3.8%	< 0.005	103%	70%	130%	102%	80%	120%	NA	70%	130%
Dissolved Thallium	5169742	5169742	<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	98%	80%	120%	101%	70%	130%
Dissolved Tin	5169742	5169742	<0.002	<0.002	NA	< 0.002	101%	70%	130%	105%	80%	120%	105%	70%	130%
Dissolved Titanium	5169742	5169742	<0.002	<0.002	NA	< 0.002	94%	70%	130%	96%	80%	120%	118%	70%	130%
Dissolved Uranium	5169742	5169742	0.0019	0.0019	NA	< 0.0005	98%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved Vanadium	5169742	5169742	0.002	0.003	NA	< 0.002	99%	70%	130%	103%	80%	120%	102%	70%	130%
Dissolved Zinc	5169742	5169742	0.007	0.007	NA	< 0.005	100%	70%	130%	100%	80%	120%	100%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T061669
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: SARAH MORIN
DATE RECEIVED: Aug 25, 2023
DATE SAMPLED: Aug 24, 2023
DATE REPORTED: Sep 08, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water	PWQO * Variable - refer	Leachate Water Chemistry

Leachate Water Chemistry

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5		X1		Field Blank		FB-6
Date Sampled				08/24/2023		08/24/2023		08/24/2023		08/24/2023		08/24/2023		08/24/2023		08/24/2023		08/24/2023
Parameter	**Unit**	**G / S**	**RDL**	**5238693**	**RDL**	**5238722**	**RDL**	**5238723**	**RDL**	**5238724**	**RDL**	**5238725**	**RDL**	**5238726**	**RDL**	**5238727**	**RDL**	**5238728**
pH	pH Units	6.5-8.5	NA	6.95	NA	6.66	NA	6.76	NA	6.88	NA	6.74	NA	6.85	NA	6.32	NA	6.20
Electrical Conductivity	µS/cm		2	748	2	328	2	247	2	1700	2	133	2	1690	2	<2	2	34
Alkalinity (as CaCO3)	mg/L		5	41	5	40	5	48	5	33	5	44	5	33	5	<5	5	12
Chloride	mg/L		0.12	0.74	0.10	0.68	0.10	0.45	0.24	1.08	0.10	0.55	0.24	1.26	0.10	<0.10	0.10	0.35
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.17	0.05	<0.05	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	339	0.10	110	0.10	67.5	0.19	996	0.10	17.8	0.19	996	0.10	<0.10	0.10	0.66
Dissolved Organic Carbon	mg/L		0.5	2.9	0.5	6.0	0.5	4.4	0.5	4.2	0.5	5.3	0.5	4.3	0.5	<0.5	0.5	16.6
Dissolved Calcium	mg/L		0.05	137	0.05	49.6	0.05	30.6	0.5	348	0.05	13.4	0.5	452	0.05	<0.05	0.05	3.84
Dissolved Magnesium	mg/L		0.05	7.71	0.05	6.28	0.05	5.00	0.05	5.26	0.05	3.10	0.05	5.85	0.05	<0.05	0.05	0.27
Dissolved Sodium	mg/L		0.05	5.98	0.05	3.74	0.05	3.43	0.05	5.51	0.05	2.90	0.05	6.39	0.05	<0.05	0.05	0.37
Dissolved Potassium	mg/L		0.50	4.16	0.50	3.37	0.50	1.79	0.50	3.18	0.50	1.96	0.50	3.54	0.50	<0.50	0.50	0.85
Dissolved Aluminum	mg/L	*	0.004	0.009	0.004	0.010	0.004	<0.004	0.004	0.039	0.004	0.004	0.004	0.032	0.004	<0.004	0.004	<0.004
Dissolved Antimony	mg/L	0.020	0.001	0.008	0.001	**0.048**	0.001	0.014	0.001	0.011	0.001	0.006	0.001	0.012	0.001	<0.001	0.001	<0.001
Dissolved Arsenic	mg/L	0.1	0.001	<0.001	0.001	0.018	0.001	0.015	0.001	0.005	0.001	0.003	0.001	0.007	0.001	<0.001	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.029	0.002	0.031	0.002	0.013	0.002	0.030	0.002	0.015	0.002	0.032	0.002	<0.002	0.002	0.025
Dissolved Beryllium	mg/L	*	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L	0.2	0.010	0.133	0.010	0.049	0.010	0.058	0.010	0.151	0.010	0.030	0.010	0.148	0.010	<0.010	0.010	<0.010
Dissolved Cadmium	mg/L	0.0002	0.0001	<0.0001	0.0001	**0.0005**	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	0.015	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003
Dissolved Cobalt	mg/L	0.0009	0.0005	0.0006	0.0005	**0.0011**	0.0005	0.0005	0.0005	**0.0020**	0.0005	<0.0005	0.0005	**0.0021**	0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L	0.005	0.001	**0.129**	0.001	**0.804**	0.001	**0.370**	0.001	**0.034**	0.001	**0.549**	0.001	**0.036**	0.001	<0.001	0.01	**1.91**
Dissolved Iron	mg/L	0.3	0.010	<0.010	0.010	<0.010	0.010	0.079	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.017
Dissolved Lead	mg/L	*	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.018	0.002	0.032	0.002	0.027	0.002	0.040	0.002	0.033	0.002	0.039	0.002	<0.002	0.002	0.078
Dissolved Mercury	mg/L	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L	0.040	0.002	**0.159**	0.02	**4.30**	0.002	**0.175**	0.002	**0.240**	0.002	**0.152**	0.002	**0.243**	0.002	<0.002	0.002	<0.002
Dissolved Nickel	mg/L	0.025	0.001	<0.001	0.001	<0.001	0.001	0.005	0.001	0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05
Dissolved Selenium	mg/L	0.1	0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	0.001	<0.001
Dissolved Silver	mg/L	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.85	0.005	1.71	0.005	0.725	0.005	3.05	0.005	0.157	0.005	3.06	0.005	<0.005	0.005	0.017
Dissolved Thallium	mg/L	0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Uranium	mg/L	0.005	0.0005	0.0013	0.0005	0.0037	0.0005	<0.0005	0.0005	0.0013	0.0005	<0.0005	0.0005	0.0013	0.0005	<0.0005	0.0005	<0.0005
Dissolved Vanadium	mg/L	0.006	0.002	0.003	0.002	<0.002	0.002	0.004	0.002	<0.002	0.002	**0.008**	0.002	<0.002	0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L	0.030	0.005	<0.005	0.005	0.009	0.005	<0.005	0.005	0.005	0.005	0.015	0.005	0.006	0.005	<0.005	0.005	**0.051**

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5238693-5238728 For Acidity determination samples were titrated to a pH ~8.3.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Leachate Water Chemistry															
pH	5236139		7.59	7.66	0.9%	NA	99%	90%	110%						
Electrical (	5236139		1690	1680	0.2%	< 2	104%	90%	110%						
Alkalinity (	5236139		753	741	1.7%	< 5	102%	80%	120%						
Chloride	5238724	5238724	1.08	1.09	NA	< 0.10	100%	70%	130%	107%	80%	120%	106%	70%	130%
Fluoride	5238724	5238724	<0.05	<0.05	NA	< 0.05	101%	70%	130%	106%	80%	120%	104%	70%	130%
Sulphate	5238724	5238724	996	998	0.2%	< 0.10	102%	70%	130%	105%	80%	120%	NA	70%	130%
Dissolved	5238667		9.1	8.8	3.4%	< 0.5	102%	90%	110%	105%	90%	110%	NA	80%	120%
Dissolved	5238920		48.0	53.8	11.3%	< 0.05	93%	70%	130%	104%	80%	120%	99%	70%	130%
Dissolved	5238920		14.3	13.2	8.1%	< 0.05	98%	70%	130%	111%	80%	120%	95%	70%	130%
Dissolved	5238920		8.42	8.02	4.8%	< 0.05	108%	70%	130%	98%	80%	120%	101%	70%	130%
Dissolved	5238920		0.71	1.30	NA	< 0.50	114%	70%	130%	113%	80%	120%	112%	70%	130%
Dissolved	5238920		0.005	<0.004	NA	< 0.004	109%	70%	130%	94%	80%	120%	101%	70%	130%
Dissolved	5238920		<0.001	<0.001	NA	< 0.001	101%	70%	130%	105%	80%	120%	102%	70%	130%
Dissolved	5238920		0.002	0.001	NA	< 0.001	105%	70%	130%	99%	80%	120%	102%	70%	130%
Dissolved	5238920		0.024	0.025	6.5%	< 0.002	107%	70%	130%	109%	80%	120%	113%	70%	130%
Dissolved	5238920		<0.0005	<0.0005	NA	< 0.0005	105%	70%	130%	106%	80%	120%	101%	70%	130%
Dissolved	5238920		<0.002	<0.002	NA	< 0.002	104%	70%	130%	101%	80%	120%	97%	70%	130%
Dissolved	5238920		0.019	0.011	NA	< 0.010	104%	70%	130%	114%	80%	120%	105%	70%	130%
Dissolved	5238920		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved	5238920		<0.003	<0.003	NA	< 0.003	101%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved	5238920		<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	104%	80%	120%	99%	70%	130%
Dissolved	5238920		<0.001	<0.001	NA	< 0.001	100%	70%	130%	100%	80%	120%	93%	70%	130%
Dissolved	5238920		0.339	0.344	1.3%	< 0.010	108%	70%	130%	108%	80%	120%	93%	70%	130%
Dissolved	5238920		<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	103%	80%	120%	96%	70%	130%
Dissolved	5238920		0.145	0.147	1.6%	< 0.002	98%	70%	130%	101%	80%	120%	82%	70%	130%
Dissolved	5236015		<0.0001	<0.0001	NA	< 0.0001	104%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved	5238920		<0.002	0.003	NA	< 0.002	99%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved	5238920		<0.001	<0.001	NA	< 0.001	96%	70%	130%	102%	80%	120%	95%	70%	130%
Dissolved	5238920		0.08	0.07	NA	< 0.05	92%	70%	130%	105%	80%	120%	91%	70%	130%
Dissolved	5238920		<0.001	<0.001	NA	< 0.001	100%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved	5238920		<0.0001	<0.0001	NA	< 0.0001	96%	70%	130%	98%	80%	120%	81%	70%	130%
Dissolved	5238920		0.153	0.184	18.3%	< 0.005	94%	70%	130%	104%	80%	120%	97%	70%	130%
Dissolved	5238920		<0.0003	<0.0003	NA	< 0.0003	102%	70%	130%	104%	80%	120%	96%	70%	130%
Dissolved	5238920		<0.002	<0.002	NA	< 0.002	109%	70%	130%	102%	80%	120%	98%	70%	130%
Dissolved	5238920		<0.002	<0.002	NA	< 0.002	126%	70%	130%	113%	80%	120%	76%	70%	130%
Dissolved	5238920		<0.0005	<0.0005	NA	< 0.0005	100%	70%	130%	102%	80%	120%	98%	70%	130%
Dissolved	5238920		<0.002	<0.002	NA	< 0.002	98%	70%	130%	107%	80%	120%	103%	70%	130%
Dissolved	5238920		<0.005	<0.005	NA	< 0.005	100%	70%	130%	99%	80%	120%	110%	70%	130%

Comment NA Signifies Not ApplicableDuplicate NA: results are under 5X the RDL and will not be calculated.Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.

Leachate Water Chemistry															
Dissolved	5238728	5238728	16.6	16.6	0.4%	< 0.5	105%	90%	110%	93%	90%	110%	NA	80%	120%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T071064
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Sep 20, 2023
DATE SAMPLED: Sep 18, 2023
DATE REPORTED: Sep 27, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry
X02	Water		Metals - Lab Filtered Dissolved Metals in Water (mg/L)
X03	Water		Metals - Total Metals in Water (mg/L)

(Water) Inorganic Chemistry

Sample Description				McBean US	MBS1	McBean DS	MBS2	FB-6 A	FB-6 B	MB4
Date Sampled				09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023
Parameter	**Unit**	**G / S**	**RDL**	**5299965**	**5300000**	**5300001**	**5300002**	**5300003**	**5300004**	**5300005**
Electrical Conductivity	µS/cm		2	232	113	157	110	460	264	166
pH	pH Units		NA	6.85	6.82	6.81	6.90	6.87	6.92	6.88
Alkalinity (as CaCO3)	mg/L		5	87	59	60	62	72	72	60
Fluoride	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chloride	mg/L		0.10	1.72	0.19	0.76	0.13	1.11	0.28	0.70
Sulphate	mg/L		0.10	51.7	11.5	31.7	11.5	142	68.9	32.0
Dissolved Mercury	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Organic Carbon	mg/L		0.5	17.8	3.7	25.2	4.2	4.5	1.2	26.0

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard
Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Metals - Lab Filtered Dissolved Metals in Water (mg/L)

Sample Description				McBean US	MBS1	McBean DS	MBS2	FB-6 A	FB-6 B	MB4
Date Sampled				09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023
Parameter	**Unit**	**G / S**	**RDL**	**5299965**	**5300000**	**5300001**	**5300002**	**5300003**	**5300004**	**5300005**
Dissolved Aluminum	mg/L		0.004	0.051	0.035	0.127	0.029	0.032	0.015	0.033
Dissolved Antimony	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.003	0.002	<0.001	<0.001	0.002	<0.001	0.001
Dissolved Barium	mg/L		0.002	0.075	0.064	0.033	0.048	0.063	0.061	0.034
Dissolved Beryllium	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.015	<0.010	0.022	<0.010	<0.010	<0.010	<0.010
Dissolved Calcium	mg/L		0.05	44.4	10.1	19.2	21.0	38.3	22.7	18.5
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0009	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	0.003	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.008	0.003	0.009	0.002	0.333	0.001	0.008
Dissolved Iron	mg/L		0.010	0.183	<0.010	0.288	<0.010	<0.010	<0.010	0.245
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.005	<0.002	0.004	0.002	0.007	0.004	<0.002
Dissolved Magnesium	mg/L		0.05	9.85	4.96	6.85	4.85	11.6	8.34	7.42
Dissolved Molybdenum	mg/L		0.002	0.003	0.036	0.004	0.039	0.010	0.013	0.004
Dissolved Nickel	mg/L		0.001	0.002	<0.001	<0.001	<0.001	0.003	0.002	0.002
Dissolved Phosphorus	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Potassium	mg/L		5.0	8.0	6.29	0.80	3.21	5.70	8.88	2.43
Dissolved Selenium	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	0.0002	0.0002	<0.0001	<0.0001	0.0002	0.0002	<0.0001
Dissolved Sodium	mg/L		0.05	3.16	1.77	0.78	0.19	1.40	0.59	6.71
Dissolved Strontium	mg/L		0.005	0.873	0.507	0.503	0.360	0.482	0.334	0.416
Dissolved Thallium	mg/L		0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Uranium	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	<0.005	0.009	<0.005	0.011	<0.005	0.018
Lab Filtration Performed				9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/25/2023	9/25/2023

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5299965 Metals analysis completed on a lab filtered sample.
Dilution required, RDL has been increased accordingly.

5300000-5300005 Metals analysis completed on a lab filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Metals - Total Metals in Water (mg/L)

Sample Description				McBean US	MBS1	McBean DS	MBS2	FB-6 A		FB-6 B		MB4
Date Sampled				09/18/2023	09/18/2023	09/18/2023	09/18/2023	09/18/2023		09/18/2023		09/18/2023
Parameter	Unit	G / S	RDL	5299965	5300000	5300001	5300002	5300003	RDL	5300004	RDL	5300005
Total Aluminum	mg/L		0.010	0.102	0.043	0.172	0.027	0.115	0.10	54.9	0.010	0.178
Total Antimony	mg/L		0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006	<0.006	0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006	0.032	0.003	<0.003
Total Barium	mg/L		0.002	0.068	0.069	0.033	0.046	0.079	0.004	0.190	0.002	0.034
Total Beryllium	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	<0.002	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.004	0.002	<0.002
Total Boron	mg/L		0.010	0.017	<0.010	<0.010	<0.010	<0.010	0.020	<0.020	0.010	0.010
Total Calcium	mg/L		0.20	37.4	14.3	24.5	15.8	66.8	0.40	52.7	0.20	26.9
Total Cadmium	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	<0.003	<0.003	<0.003	0.005	0.03	2.20	0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0010	0.0876	0.0005	<0.0005
Total Copper	mg/L		0.002	0.010	0.004	0.009	0.003	0.723	0.004	0.214	0.002	0.009
Total Iron	mg/L		0.010	0.361	0.045	0.392	0.023	0.243	0.020	84.3	0.010	0.436
Total Lead	mg/L		0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.002	0.032	0.001	<0.001
Total Magnesium	mg/L		0.10	10.2	6.02	8.33	5.59	17.2	0.20	98.4	0.10	8.61
Total Manganese	mg/L		0.002	0.037	0.002	0.019	0.004	0.010	0.004	1.10	0.002	0.023
Total Molybdenum	mg/L		0.002	<0.002	0.031	0.003	0.039	0.016	0.004	0.014	0.002	0.004
Total Nickel	mg/L		0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006	0.736	0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.20	0.31	0.10	<0.10
Total Potassium	mg/L		0.50	1.65	5.56	1.33	3.05	15.4	1.00	13.1	0.50	1.40
Total Selenium	mg/L		0.002	<0.002	<0.002	<0.002	0.006	<0.002	0.004	0.005	0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001
Total Sodium	mg/L		0.10	2.76	0.22	1.72	0.23	1.20	0.20	1.40	0.10	1.80
Total Strontium	mg/L		0.005	0.830	0.479	0.456	0.355	0.643	0.010	0.409	0.005	0.476
Total Thallium	mg/L		0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0006	<0.0006	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	<0.004	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.020	1.22	0.010	<0.010
Total Uranium	mg/L		0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	0.0010	<0.0010	0.0005	<0.0005
Total Vanadium	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.004	0.216	0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.040	0.152	0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5300004 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Metals - Lab Filtered Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	5299965	5299965	0.051	0.047	8.2%	< 0.004	93%	70%	130%	97%	80%	120%	103%	70%	130%
Dissolved Antimony	5299965	5299965	<0.001	<0.001	NA	< 0.001	102%	70%	130%	104%	80%	120%	107%	70%	130%
Dissolved Arsenic	5299965	5299965	0.003	<0.001	NA	< 0.001	103%	70%	130%	101%	80%	120%	110%	70%	130%
Dissolved Barium	5299965	5299965	0.075	0.067	11.3%	< 0.002	104%	70%	130%	111%	80%	120%	110%	70%	130%
Dissolved Beryllium	5299965	5299965	<0.0005	<0.0005	NA	< 0.0005	113%	70%	130%	113%	80%	120%	119%	70%	130%
Dissolved Bismuth	5299965	5299965	<0.002	<0.002	NA	< 0.002	101%	70%	130%	92%	80%	120%	95%	70%	130%
Dissolved Boron	5299965	5299965	0.015	0.015	NA	< 0.010	102%	70%	130%	102%	80%	120%	104%	70%	130%
Dissolved Calcium	5299965	5299965	44.4	38.6	14.0%	< 0.05	104%	70%	130%	106%	80%	120%	130%	70%	130%
Dissolved Cadmium	5299965	5299965	<0.0001	<0.0001	NA	< 0.0001	106%	70%	130%	101%	80%	120%	110%	70%	130%
Dissolved Chromium	5299965	5299965	<0.002	<0.002	NA	< 0.002	100%	70%	130%	103%	80%	120%	108%	70%	130%
Dissolved Cobalt	5299965	5299965	<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	106%	80%	120%	102%	70%	130%
Dissolved Copper	5299965	5299965	0.008	0.008	0.0%	< 0.001	100%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Iron	5299965	5299965	0.183	0.283	42.9%	< 0.010	103%	70%	130%	112%	80%	120%	100%	70%	130%
Dissolved Lead	5299965	5299965	<0.0005	<0.0005	NA	< 0.0005	103%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Manganese	5299965	5299965	0.005	0.005	NA	< 0.002	103%	70%	130%	111%	80%	120%	102%	70%	130%
Dissolved Magnesium	5299965	5299965	9.85	9.37	5.0%	< 0.05	100%	70%	130%	101%	80%	120%	123%	70%	130%
Dissolved Molybdenum	5299965	5299965	0.003	0.003	NA	< 0.002	100%	70%	130%	103%	80%	120%	108%	70%	130%
Dissolved Nickel	5299965	5299965	0.002	0.003	NA	< 0.001	104%	70%	130%	111%	80%	120%	104%	70%	130%
Dissolved Phosphorus	5299965	5299965	<0.05	<0.05	NA	< 0.05	110%	70%	130%	102%	80%	120%	86%	70%	130%
Dissolved Potassium	5299965	5299965	8.0	7.8	2.5%	< 0.50	120%	70%	130%	82%	80%	120%	84%	70%	130%
Dissolved Selenium	5299965	5299965	<0.001	<0.001	NA	< 0.001	102%	70%	130%	104%	80%	120%	113%	70%	130%
Dissolved Silver	5299965	5299965	0.0002	<0.0001	NA	< 0.0001	106%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Sodium	5299965	5299965	3.16	2.64	17.9%	< 0.05	93%	70%	130%	104%	80%	120%	107%	70%	130%
Dissolved Strontium	5299965	5299965	0.873	0.798	9.0%	< 0.005	111%	70%	130%	100%	80%	120%	107%	70%	130%
Dissolved Thallium	5299965	5299965	<0.0003	<0.0003	NA	< 0.0003	103%	70%	130%	97%	80%	120%	100%	70%	130%
Dissolved Tin	5299965	5299965	<0.002	<0.002	NA	< 0.002	108%	70%	130%	105%	80%	120%	108%	70%	130%
Dissolved Titanium	5299965	5299965	<0.002	<0.002	NA	< 0.002	111%	70%	130%	87%	80%	120%	87%	70%	130%
Dissolved Uranium	5299965	5299965	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	100%	80%	120%	105%	70%	130%
Dissolved Vanadium	5299965	5299965	<0.002	<0.002	NA	< 0.002	109%	70%	130%	104%	80%	120%	109%	70%	130%
Dissolved Zinc	5299965	5299965	<0.005	0.007	NA	< 0.005	100%	70%	130%	116%	80%	120%	111%	70%	130%
Comments:	NA signifies Not Applicable.		Duplicate NA: results are under 5X the RDL and will not be calculated.												
Metals - Total Metals in Water (mg/L)															
Total Aluminum	5300000	5300000	0.043	0.043	NA	< 0.010	91%	70%	130%	95%	80%	120%	97%	70%	130%
Total Antimony	5300000	5300000	<0.003	<0.003	NA	< 0.003	102%	70%	130%	103%	80%	120%	107%	70%	130%
Total Arsenic	5300000	5300000	<0.003	<0.003	NA	< 0.003	103%	70%	130%	103%	80%	120%	104%	70%	130%
Total Barium	5300000	5300000	0.069	0.068	1.5%	< 0.002	100%	70%	130%	98%	80%	120%	101%	70%	130%
Total Beryllium	5300000	5300000	<0.001	<0.001	NA	< 0.001	99%	70%	130%	102%	80%	120%	107%	70%	130%
Total Bismuth	5300000	5300000	<0.002	<0.002	NA	< 0.002	91%	70%	130%	97%	80%	120%	101%	70%	130%
Total Boron	5300000	5300000	<0.010	<0.010	NA	< 0.010	100%	70%	130%	103%	80%	120%	106%	70%	130%
Total Calcium	5300000	5300000	14.3	13.5	5.8%	< 0.20	104%	70%	130%	104%	80%	120%	107%	70%	130%
Total Cadmium	5300000	5300000	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	99%	80%	120%	104%	70%	130%
Total Chromium	5300000	5300000	<0.003	<0.003	NA	< 0.003	100%	70%	130%	101%	80%	120%	104%	70%	130%
Total Cobalt	5300000	5300000	<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	98%	80%	120%	104%	70%	130%
Total Copper	5300000	5300000	0.004	0.005	NA	< 0.002	100%	70%	130%	98%	80%	120%	102%	70%	130%
Total Iron	5300000	5300000	0.045	0.047	NA	< 0.010	104%	70%	130%	102%	80%	120%	110%	70%	130%
Total Lead	5300000	5300000	<0.001	<0.001	NA	< 0.001	94%	70%	130%	93%	80%	120%	94%	70%	130%
Total Magnesium	5300000	5300000	6.02	5.92	1.7%	< 0.10	105%	70%	130%	108%	80%	120%	111%	70%	130%
Total Manganese	5300000	5300000	0.002	0.002	NA	< 0.002	98%	70%	130%	100%	80%	120%	105%	70%	130%
Total Molybdenum	5300000	5300000	0.031	0.032	3.2%	< 0.002	100%	70%	130%	100%	80%	120%	105%	70%	130%
Total Nickel	5300000	5300000	<0.003	<0.003	NA	< 0.003	97%	70%	130%	99%	80%	120%	100%	70%	130%
Total Phosphorus	5300000	5300000	<0.10	<0.10	NA	< 0.10	98%	70%	130%	102%	80%	120%	111%	70%	130%
Total Potassium	5300000	5300000	5.56	5.09	8.8%	< 0.50	103%	70%	130%	102%	80%	120%	109%	70%	130%
Total Selenium	5300000	5300000	<0.002	0.006	NA	< 0.002	97%	70%	130%	99%	80%	120%	97%	70%	130%
Total Silver	5300000	5300000	<0.0001	<0.0001	NA	< 0.0001	96%	70%	130%	96%	80%	120%	99%	70%	130%
Total Sodium	5300000	5300000	0.22	0.23	NA	< 0.10	105%	70%	130%	101%	80%	120%	111%	70%	130%
Total Strontium	5300000	5300000	0.479	0.492	2.7%	< 0.005	95%	70%	130%	94%	80%	120%	NA	70%	130%
Total Thallium	5300000	5300000	<0.0003	<0.0003	NA	< 0.0003	93%	70%	130%	98%	80%	120%	102%	70%	130%
Total Tin	5300000	5300000	<0.002	<0.002	NA	< 0.002	101%	70%	130%	101%	80%	120%	100%	70%	130%
Total Titanium	5300000	5300000	<0.010	<0.010	NA	< 0.010	98%	70%	130%	105%	80%	120%	103%	70%	130%
Total Uranium	5300000	5300000	<0.0005	<0.0005	NA	< 0.0005	92%	70%	130%	100%	80%	120%	104%	70%	130%
Total Vanadium	5300000	5300000	<0.002	<0.002	NA	< 0.002	99%	70%	130%	101%	80%	120%	107%	70%	130%
Total Zinc	5300000	5300000	<0.020	<0.020	NA	< 0.020	100%	70%	130%	97%	80%	120%	99%	70%	130%
Comments:	NA signifies Not Applicable.		Duplicate NA: results are under 5X the RDL and will not be calculated.												
(Water) Inorganic Chemistry															
Electrical Conductivity	5300594		305	290	5.0%	< 2	99%	90%	110%						
pH	5300594		7.06	7.16	1.4%	NA	97%	90%	110%						
Alkalinity (as CaCO3)	5300594		105	103	1.9%	< 5	106%	80%	120%						
Fluoride	5300000	5300000	<0.05	<0.05	NA	< 0.05	98%	70%	130%	99%	80%	120%	100%	70%	130%
Chloride	5300000	5300000	0.19	0.19	NA	< 0.10	96%	70%	130%	105%	80%	120%	106%	70%	130%
Sulphate	5300000	5300000	11.5	11.6	0.9%	< 0.10	98%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Mercury	5299965	5299965	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	102%	80%	120%	99%	70%	130%
Dissolved Organic Carbon	5301533		9.6	9.7	1.0%	< 0.5	103%	90%	110%	105%	90%	110%	NA	80%	120%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T074370
PROJECT: Upper Beaver - Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra Deforge
DATE RECEIVED: Sep 28, 2023
DATE SAMPLED: Sep 26, 2023
DATE REPORTED: Oct 10, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water	PWQO * Variable - refer	Dissolved Metals in Water (mg/L) - 0.22 um filtered
X02	Water	PWQO * Variable - refer	Leachate Parameters
X03	Water	PWQO * Variable - refer	Leachate Parameters (Excl. DOC)

Dissolved Metals in Water (mg/L) - 0.22 um filtered

Sample Description				**FB-1**	**FB-2**	**FB-3**	**FB-4**	**FB-5**	**FB-6**	**FB-1B**	**FB-2B**	**FB-3B**	**FB-4B**	**FB-5B**
Date Sampled				**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**
Parameter	**Unit**	**G / S**	**RDL**	**5323839**	**5323961**	**5323962**	**5323963**	**5323964**	**5323965**	**5323966**	**5323967**	**5323975**	**5323976**	**5323977**
Dissolved Calcium	mg/L		0.05	76.7	22.1	23.3	251	11.4	27.6	46.6	17.9	12.0	142	8.36
Dissolved Magnesium	mg/L		0.05	2.79	2.33	1.89	1.82	1.12	6.15	1.17	2.34	1.41	1.13	1.65
Dissolved Potassium	mg/L		0.50	2.39	0.85	1.69	4.30	2.44	9.72	0.82	5.89	1.67	0.85	1.48
Dissolved Sodium	mg/L		0.05	3.44	0.56	2.02	0.60	0.53	0.27	0.84	1.40	0.56	0.31	1.26
Dissolved Aluminum	mg/L	*	0.004	0.115	0.041	0.035	0.026	0.026	0.021	0.060	0.104	0.019	0.120	0.051
Dissolved Antimony	mg/L	0.020	0.001	0.004	**0.025**	0.007	0.006	0.003	0.001	0.003	**0.023**	0.004	0.003	0.003
Dissolved Arsenic	mg/L	0.1	0.001	0.002	0.020	0.016	0.006	0.008	0.002	0.001	0.017	0.007	0.002	0.004
Dissolved Barium	mg/L		0.002	0.024	0.028	0.014	0.036	0.012	0.045	0.024	0.036	0.011	0.029	0.008
Dissolved Beryllium	mg/L	*	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L	0.2	0.010	0.034	<0.010	<0.010	0.062	<0.010	<0.010	0.015	<0.010	<0.010	0.011	<0.010
Dissolved Cadmium	mg/L	0.0002	0.0001	<0.0001	**0.0005**	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L	0.0009	0.0005	0.0005	<0.0005	<0.0005	**0.0020**	<0.0005	<0.0005	0.0006	0.0008	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L	0.005	0.001	**0.021**	**0.089**	**0.062**	**0.031**	**0.112**	**0.222**	0.004	0.005	0.001	**0.006**	0.002
Dissolved Iron	mg/L	0.3	0.010	0.018	<0.010	0.019	<0.010	0.019	<0.010	<0.010	<0.010	0.020	0.020	0.016
Dissolved Lead	mg/L	*	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.005	0.009	0.009	0.023	0.009	0.010	0.009	0.011	0.007	0.019	<0.002
Dissolved Molybdenum	mg/L	0.040	0.002	**0.073**	**1.993**	**0.053**	**0.101**	**0.063**	0.009	**0.046**	**1.94**	0.037	**0.060**	**0.052**
Dissolved Nickel	mg/L	0.025	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	0.08	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved Selenium	mg/L	0.1	0.001	0.002	0.004	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001
Dissolved Silver	mg/L	0.0001	0.0001	**0.0002**	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.02	0.983	0.473	1.89	0.142	0.288	0.720	0.904	0.270	0.978	0.104
Dissolved Thallium	mg/L	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.012	0.012	0.012	<0.002	<0.002	0.012	0.012	<0.002	<0.002	0.011
Dissolved Uranium	mg/L	0.005	0.0005	0.0008	0.0019	<0.0005	0.0007	<0.0005	<0.0005	<0.0005	0.0020	<0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L	0.006	0.002	0.003	<0.002	0.002	<0.002	**0.008**	<0.002	<0.002	<0.002	<0.002	<0.002	0.004
Dissolved Zinc	mg/L	0.030	0.005	0.011	<0.005	<0.005	0.009	0.018	0.007	<0.005	<0.005	<0.005	0.023	<0.005
Lab Filtration Aluminum Dissolved				9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023	9/29/2023

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5323839 Metals analysis completed on a filtered sample.

5323961 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

5323962-5323966 Metals analysis completed on a filtered sample.

5323967 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

5323975-5323977 Metals analysis completed on a filtered sample.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Leachate Parameters				5	6	7	8	9	10	11	12	13	14	15
Sample Description				**FB-1**	**FB-2**	**FB-3**	**FB-4**	**FB-5**	**FB-6**	**FB-1B**	**FB-2B**	**FB-3B**	**FB-4B**	**FB-5B**
Date Sampled				**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**	**09/26/2023**
Parameter	**Unit**	**G / S**	**RDL**	**5323839**	**5323961**	**5323962**	**5323963**	**5323964**	**5323965**	**5323966**	**5323967**	**5323975**	**5323976**	**5323977**
pH	pH Units	6.5-8.5	NA	6.94	6.71	6.76	6.63	6.78	6.91	6.65	6.78	6.82	6.46	6.85
Electrical Conductivity	µS/cm		2	575	190	160	1230	111	264	347	184	122	743	95
Alkalinity (as CaCO3)	mg/L		5	55	49	52	34	48	67	32	44	48	24	42
Chloride	mg/L		0.10	0.47	0.31	0.70	<0.12	0.27	0.32	0.20	0.23	0.18	0.21	0.19
Fluoride	mg/L		0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Sulphate	mg/L		0.10	249	44.4	26.9	742	8.15	59.6	142	45.0	15.6	392	7.06
Dissolved Organic Carbon	mg/L		0.5	1.1	1.9	1.2	1.5	2.5	3.7	1.0		0.6	0.7	
Total Calcium	mg/L		0.20	95.1	13.1	26.9	244	13.5	14.1	81.1	60.2	135	268	13.5
Total Magnesium	mg/L		0.10	4.55	3.36	3.47	2.97	1.88	8.89	17.0	9.14	27.2	11.0	9.57
Total Potassium	mg/L		0.50	3.91	<0.50	<0.50	1.01	<0.50	9.75	5.91	2.90	2.94	<0.50	2.80
Total Sodium	mg/L		0.10	4.80	1.71	3.16	1.42	1.93	1.08	3.61	3.83	2.50	1.89	1.74
Total Aluminum	mg/L		0.010	0.060	0.121	0.103	0.021	0.230	0.188	20.8	17.8	28.0	14.3	7.72
Total Antimony	mg/L	0.020	0.003	<0.003	**0.029**	0.009	0.007	0.004	<0.003	0.004	**0.027**	0.008	0.005	0.004
Total Arsenic	mg/L	0.1	0.003	<0.003	0.021	0.030	0.008	0.008	<0.003	0.008	0.046	0.062	0.038	0.008
Total Barium	mg/L		0.002	0.004	0.037	0.019	0.036	0.018	0.065	0.223	0.488	0.207	0.238	0.030
Total Beryllium	mg/L	*	0.001	<0.001	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.008	<0.002	<0.002	<0.002
Total Boron	mg/L	0.2	0.010	<0.010	0.024	0.027	0.057	0.027	0.010	0.041	0.028	0.029	0.031	0.016
Total Cadmium	mg/L	0.0002	0.0001	<0.0001	**0.0008**	<0.0001	<0.0001	<0.0001	**0.0006**	<0.0001	**0.0006**	<0.0001	<0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.006	0.036	0.019	0.091	0.028	0.045
Total Cobalt	mg/L	0.0009	0.0005	<0.0005	<0.0005	0.0007	**0.0017**	<0.0005	<0.0005	**0.0165**	**0.0230**	**0.0618**	**0.0371**	**0.0088**
Total Copper	mg/L	0.005	0.001	**0.048**	**0.243**	**0.139**	**0.055**	**0.274**	**0.464**	**0.237**	**0.310**	**1.16**	**0.718**	**0.120**
Total Iron	mg/L	0.3	0.010	0.023	0.079	0.083	0.048	0.134	0.291	**25.5**	**19.5**	**43.3**	**24.5**	**12.2**
Total Lead	mg/L	*	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.007	0.013	0.023	0.011	0.001
Total Manganese	mg/L		0.002	0.005	0.012	0.010	0.020	0.019	0.016	0.629	0.680	1.60	1.33	0.163
Dissolved Mercury	mg/L	0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L	0.040	0.002	**0.117**	**2.02**	**0.075**	**0.122**	**0.087**	0.015	**0.053**	**2.26**	0.039	**0.052**	**0.073**
Total Nickel	mg/L	0.025	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	**0.050**	**0.029**	**0.074**	**0.058**	0.023
Total Phosphorus	mg/L		0.10	<0.10	<0.10	<0.10	0.10	0.10	0.10	1.87	1.09	1.08	3.38	0.19
Total Selenium	mg/L	0.1	0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.003
Total Silver	mg/L	0.0001	0.0001	<0.0001	<0.0001	**0.0002**	0.0001	<0.0001	<0.0001	**0.0002**	**0.0002**	**0.0003**	<0.0001	<0.0001
Total Strontium	mg/L		0.005	1.46	1.02	0.552	2.16	0.110	0.358	0.974	1.19	0.595	1.43	0.134
Total Thallium	mg/L	0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	0.013	0.013	0.013	0.026	0.013	0.013	0.756	0.211	1.29	0.415	0.544
Total Uranium	mg/L	0.005	0.0005	0.0012	0.0024	<0.0005	0.0009	0.0006	<0.0005	0.0009	0.0033	<0.0005	0.0009	0.0008
Total Vanadium	mg/L	0.006	0.002	<0.002	<0.002	0.003	<0.002	**0.009**	<0.002	**0.063**	**0.033**	**0.158**	**0.052**	**0.053**
Total Zinc	mg/L	0.030	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	**0.121**	**0.043**	**0.094**	**0.160**	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5323961 Dilution required, RDL has been increased accordingly.

5323963 Dilution required, RDL has been increased accordingly.

5323966-5323976 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Leachate Parameters															
pH	5324257		7.37	7.38	0.1%		100%	90%	110%						
Electrical Conductivity	5324257		241	241	0.0%	< 2	106%	90%	110%						
Alkalinity (as CaCO3)	5324257		93	100	7.8%	< 5	92%	80%	120%						
Chloride	5324698		3.12	3.14	0.8%	< 0.10	97%	70%	130%	100%	80%	120%	100%	70%	130%
Fluoride	5324698		<0.05	<0.05	NA	< 0.05	102%	70%	130%	104%	80%	120%	98%	70%	130%
Sulphate	5324698		7.40	7.49	1.3%	< 0.10	102%	70%	130%	96%	80%	120%	100%	70%	130%
Dissolved Organic Carbon	5324233		2.3	2.4	NA	< 0.5	96%	90%	110%	93%	90%	110%	101%	80%	120%
Total Calcium	5323839	5323839	95.1	90.1	5.4%	< 0.20	74%	70%	130%	86%	80%	120%	103%	70%	130%
Total Magnesium	5323839	5323839	4.55	4.79	5.3%	< 0.10	105%	70%	130%	96%	80%	120%	97%	70%	130%
Total Potassium	5323839	5323839	3.91	1.04	NA	< 0.50	119%	70%	130%	92%	80%	120%	112%	70%	130%
Total Sodium	5323839	5323839	4.80	4.00	18.1%	< 0.10	105%	70%	130%	107%	80%	120%	98%	70%	130%
Total Aluminum	5323839	5323839	0.060	<0.010	NA	< 0.010	113%	70%	130%	95%	80%	120%	117%	70%	130%
Total Antimony	5323839	5323839	<0.003	0.006	NA	< 0.003	103%	70%	130%	99%	80%	120%	107%	70%	130%
Total Arsenic	5323839	5323839	<0.003	<0.003	NA	< 0.003	91%	70%	130%	86%	80%	120%	95%	70%	130%
Total Barium	5323839	5323839	0.004	0.003	NA	< 0.002	98%	70%	130%	99%	80%	120%	108%	70%	130%
Total Beryllium	5323839	5323839	<0.001	<0.001	NA	< 0.001	97%	70%	130%	95%	80%	120%	92%	70%	130%
Total Bismuth	5323839	5323839	<0.002	<0.002	NA	< 0.002	98%	70%	130%	90%	80%	120%	97%	70%	130%
Total Boron	5323839	5323839	<0.010	0.070	NA	< 0.010	98%	70%	130%	96%	80%	120%	102%	70%	130%
Total Cadmium	5323839	5323839	<0.0001	0.0006	NA	< 0.0001	98%	70%	130%	90%	80%	120%	102%	70%	130%
Total Chromium	5323839	5323839	<0.003	<0.003	NA	< 0.003	99%	70%	130%	93%	80%	120%	98%	70%	130%
Total Cobalt	5323839	5323839	<0.0005	<0.0005	NA	< 0.0005	88%	70%	130%	93%	80%	120%	88%	70%	130%
Total Copper	5323839	5323839	0.048	0.047	2.4%	< 0.001	99%	70%	130%	91%	80%	120%	102%	70%	130%
Total Iron	5323839	5323839	0.023	0.022	NA	< 0.010	96%	70%	130%	91%	80%	120%	96%	70%	130%
Total Manganese	5323839	5323839	0.005	0.003	NA	< 0.002	90%	70%	130%	98%	80%	120%	88%	70%	130%
Dissolved Mercury	5323839	5323839	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	98%	80%	120%	98%	70%	130%
Total Molybdenum	5323839	5323839	0.117	0.108	8.0%	< 0.002	96%	70%	130%	96%	80%	120%	124%	70%	130%
Total Nickel	5323839	5323839	<0.003	<0.003	NA	< 0.003	93%	70%	130%	94%	80%	120%	89%	70%	130%
Total Phosphorus	5323839	5323839	<0.10	0.31	NA	< 0.10	111%	70%	130%	81%	80%	120%	105%	70%	130%
Total Selenium	5323839	5323839	<0.002	<0.002	NA	< 0.002	95%	70%	130%	95%	80%	120%	95%	70%	130%
Total Silver	5323839	5323839	<0.0001	<0.0001	NA	< 0.0001	90%	70%	130%	94%	80%	120%	95%	70%	130%
Total Strontium	5323839	5323839	1.46	1.48	0.9%	< 0.005	108%	70%	130%	100%	80%	120%	NA	70%	130%
Total Thallium	5323839	5323839	<0.0003	<0.0003	NA	< 0.0003	97%	70%	130%	98%	80%	120%	97%	70%	130%
Total Tin	5323839	5323839	<0.002	<0.002	NA	< 0.002	101%	70%	130%	98%	80%	120%	103%	70%	130%
Total Titanium	5323839	5323839	0.013	<0.010	NA	< 0.010	89%	70%	130%	85%	80%	120%	82%	70%	130%
Total Uranium	5323839	5323839	0.0012	0.0010	NA	< 0.0005	97%	70%	130%	112%	80%	120%	109%	70%	130%
Total Vanadium	5323839	5323839	<0.002	0.003	NA	< 0.002	98%	70%	130%	100%	80%	120%	105%	70%	130%
Total Zinc	5323839	5323839	<0.020	<0.020	NA	< 0.020	97%	70%	130%	91%	80%	120%	95%	70%	130%
Comments:	NA signifies Not Applicable. Duplicate NA: results are under 5X the RDL and will not be calculated. Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.														
Leachate Parameters															
Dissolved Organic Carbon	5323975	5323975	0.6	0.6	NA	< 0.5	99%	90%	110%	108%	90%	110%	92%	80%	120%
Comments:	NA signifies Not Applicable. Duplicate NA: results are under 5X the RDL and will not be calculated.														
Leachate Parameters (Excl. DOC)															
pH	5324257		7.37	7.38	0.1%		100%	90%	110%	NA			NA		
Electrical Conductivity	5324257		241	241	0%	< 2	106%	90%	110%	NA			NA		
Alkalinity (as CaCO3)	5324257		93	100	7.8%	< 5	92%	80%	120%	NA			NA		
Chloride	5324698		3.12	3.14	0.8%	< 0.10	97%	70%	130%	100%	80%	120%	100%	70%	130%
Fluoride	5324698		<0.05	<0.05	NA	< 0.05	102%	70%	130%	104%	80%	120%	98%	70%	130%
Sulphate	5324698		7.40	7.49	1.3%	< 0.10	102%	70%	130%	96%	80%	120%	100%	70%	130%
Total Calcium	5323839	5323839	95.1	90.1	5.4%	< 0.20	74%	70%	130%	86%	80%	120%	NA	70%	130%
Total Magnesium	5323839	5323839	4.55	4.79	5.3%	< 0.10	105%	70%	130%	96%	80%	120%	97%	70%	130%
Total Potassium	5323839	5323839	3.91	1.04	NA	< 0.50	119%	70%	130%	92%	80%	120%	112%	70%	130%
Total Sodium	5323839	5323839	4.80	4.00	18.1%	< 0.10	105%	70%	130%	107%	80%	120%	98%	70%	130%
Total Aluminum	5323839	5323839	0.060	<0.010	NA	< 0.010	113%	70%	130%	95%	80%	120%	117%	70%	130%
Total Antimony	5323839	5323839	<0.003	0.006	NA	< 0.003	103%	70%	130%	99%	80%	120%	107%	70%	130%
Total Arsenic	5323839	5323839	<0.003	<0.003	NA	< 0.003	91%	70%	130%	86%	80%	120%	95%	70%	130%
Total Barium	5323839	5323839	0.004	0.003	NA	< 0.002	98%	70%	130%	99%	80%	120%	108%	70%	130%
Total Beryllium	5323839	5323839	<0.001	<0.001	NA	< 0.001	97%	70%	130%	95%	80%	120%	92%	70%	130%
Total Bismuth	5323839	5323839	<0.002	<0.002	NA	< 0.002	98%	70%	130%	90%	80%	120%	97%	70%	130%
Total Boron	5323839	5323839	<0.010	0.070	NA	< 0.010	98%	70%	130%	96%	80%	120%	102%	70%	130%
Total Cadmium	5323839	5323839	<0.0001	0.0006	NA	< 0.0001	98%	70%	130%	90%	80%	120%	102%	70%	130%
Total Chromium	5323839	5323839	<0.003	<0.003	NA	< 0.003	99%	70%	130%	93%	80%	120%	98%	70%	130%
Total Cobalt	5323839	5323839	<0.0005	<0.0005	NA	< 0.0005	88%	70%	130%	93%	80%	120%	88%	70%	130%
Total Copper	5323839	5323839	0.048	0.047	2.4%	< 0.001	99%	70%	130%	91%	80%	120%	102%	70%	130%
Total Iron	5323839	5323839	0.023	0.022	NA	< 0.010	96%	70%	130%	97%	80%	120%	100%	70%	130%

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Total Lead	5323839	5323839	<0.001	<0.001	NA	< 0.001	100%	70%	130%	91%	80%	120%	96%	70%	130%
Total Manganese	5323839	5323839	0.005	0.003	NA	< 0.002	90%	70%	130%	98%	80%	120%	88%	70%	130%
Dissolved Mercury	5323839	5323839	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	98%	80%	120%	98%	70%	130%
Total Molybdenum	5323839	5323839	0.009	0.008	NA	< 0.002	96%	70%	130%	96%	80%	120%	124%	70%	130%
Total Nickel	5323839	5323839	<0.003	<0.003	NA	< 0.003	93%	70%	130%	94%	80%	120%	89%	70%	130%
Total Phosphorus	5323839	5323839	<0.10	0.31	NA	< 0.10	111%	70%	130%	81%	80%	120%	105%	70%	130%
Total Selenium	5323839	5323839	<0.002	<0.002	NA	< 0.002	95%	70%	130%	95%	80%	120%	95%	70%	130%
Total Silver	5323839	5323839	<0.0001	<0.0001	NA	< 0.0001	90%	70%	130%	94%	80%	120%	95%	70%	130%
Total Strontium	5323839	5323839	1.46	1.48	0.9%	< 0.005	108%	70%	130%	100%	80%	120%	NA	70%	130%
Total Thallium	5323839	5323839	<0.0003	<0.0003	NA	< 0.0003	97%	70%	130%	98%	80%	120%	97%	70%	130%
Total Tin	5323839	5323839	<0.002	<0.002	NA	< 0.002	101%	70%	130%	98%	80%	120%	103%	70%	130%
Total Titanium	5323839	5323839	0.013	<0.010	NA	< 0.010	89%	70%	130%	85%	80%	120%	82%	70%	130%
Total Uranium	5323839	5323839	0.0012	0.0010	NA	< 0.0005	97%	70%	130%	112%	80%	120%	109%	70%	130%
Total Vanadium	5323839	5323839	<0.002	0.003	NA	< 0.002	98%	70%	130%	100%	80%	120%	105%	70%	130%
Total Zinc	5323839	5323839	<0.020	<0.020	NA	< 0.020	97%	70%	130%	91%	80%	120%	95%	70%	130%
Comments:	NA signifies Not Applicable. Duplicate NA: results are under 5X the RDL and will not be calculated. Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.														
Dissolved Metals in Water (mg/L) - 0.22 um filtered															
Dissolved Calcium	5330257		433	358	18.9%	< 0.05	86%	70%	130%	104%	80%	120%	80%	70%	130%
Dissolved Magnesium	5330257		46.4	51.1	9.6%	< 0.05	97%	70%	130%	87%	80%	120%	84%	70%	130%
Dissolved Potassium	5330257		6.18	6.49	4.9%	< 0.50	101%	70%	130%	107%	80%	120%	101%	70%	130%
Dissolved Sodium	5330257		474	446	6.1%	< 0.05	94%	70%	130%	91%	80%	120%	NA	70%	130%
Dissolved Aluminum	5330257		0.014	0.012	NA	< 0.004	94%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved Antimony	5330257		<0.001	<0.001	NA	< 0.001	101%	70%	130%	105%	80%	120%	99%	70%	130%
Dissolved Arsenic	5330257		<0.001	<0.001	NA	< 0.001	107%	70%	130%	104%	80%	120%	117%	70%	130%
Dissolved Barium	5330257		0.207	0.217	4.4%	< 0.002	98%	70%	130%	102%	80%	120%	108%	70%	130%
Dissolved Beryllium	5330257		<0.0005	<0.0005	NA	< 0.0005	108%	70%	130%	116%	80%	120%	121%	70%	130%
Dissolved Bismuth	5330257		<0.002	<0.002	NA	< 0.002	100%	70%	130%	96%	80%	120%	93%	70%	130%
Dissolved Boron	5330257		0.012	0.011	NA	< 0.010	101%	70%	130%	102%	80%	120%	118%	70%	130%
Dissolved Cadmium	5330257		<0.0001	<0.0001	NA	< 0.0001	NA	70%	130%	NA	80%	120%	97%	70%	130%
Dissolved Chromium	5330257		<0.002	<0.002	NA	< 0.002	96%	70%	130%	97%	80%	120%	104%	70%	130%
Dissolved Cobalt	5330257		<0.0005	0.0006	NA	< 0.0005	101%	70%	130%	107%	80%	120%	111%	70%	130%
Dissolved Copper	5330257		0.014	0.016	12.5%	< 0.001	97%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Iron	5330257		0.022	0.020	NA	< 0.010	100%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Lead	5330257		<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Manganese	5330257		0.041	0.047	13.6%	< 0.002	99%	70%	130%	97%	80%	120%	107%	70%	130%
Dissolved Molybdenum	5330257		<0.002	<0.002	NA	< 0.002	99%	70%	130%	101%	80%	120%	107%	70%	130%
Dissolved Nickel	5330257		0.003	0.002	NA	< 0.001	99%	70%	130%	96%	80%	120%	95%	70%	130%
Dissolved Phosphorus	5330257		<0.05	<0.05	NA	< 0.05	82%	70%	130%	92%	80%	120%	94%	70%	130%
Dissolved Selenium	5330257		0.001	<0.001	NA	< 0.001	100%	70%	130%	100%	80%	120%	105%	70%	130%
Dissolved Silver	5330257		<0.0001	<0.0001	NA	< 0.0001	91%	70%	130%	89%	80%	120%	86%	70%	130%
Dissolved Strontium	5330257		0.943	1.05	10.6%	< 0.005	100%	70%	130%	111%	80%	120%	97%	70%	130%
Dissolved Thallium	5330257		<0.0003	<0.0003	NA	< 0.0003	99%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Tin	5330257		<0.002	<0.002	NA	< 0.002	101%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Titanium	5330257		<0.002	<0.002	NA	< 0.002	104%	70%	130%	100%	80%	120%	116%	70%	130%
Dissolved Uranium	5330257		0.0011	0.0011	NA	< 0.0005	98%	70%	130%	101%	80%	120%	106%	70%	130%
Dissolved Vanadium	5330257		<0.002	<0.002	NA	< 0.002	98%	70%	130%	98%	80%	120%	105%	70%	130%
Dissolved Zinc	5330257		0.014	0.027	NA	< 0.005	101%	70%	130%	99%	80%	120%	115%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T082392
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Oct 19, 2023
DATE SAMPLED: Oct 17, 2023
DATE REPORTED: Oct 30, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Metals - Dissolved Metals in Water (mg/L)
X02	Water	PWQO * Variable - refer	Upper Beaver - Surface Water

Metals - Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5	FB-6	Field Blank		X1
Date Sampled				10/17/2023		10/17/2023		10/17/2023		10/17/2023		10/17/2023	10/17/2023	10/17/2023		10/17/2023
Parameter	Unit	G / S	RDL	5377960	RDL	5377965	RDL	5377966	RDL	5377967	RDL	5377969	5377970	5377971	RDL	5377972
Dissolved Aluminum	mg/L		0.004	0.031	0.004	0.022	0.004	0.022	0.004	0.016	0.004	0.020	<0.004	<0.004	0.004	0.021
Dissolved Antimony	mg/L		0.001	0.005	0.001	0.029	0.001	0.007	0.001	0.007	0.001	0.004	0.001	<0.001	0.001	0.030
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.021	0.001	0.022	0.001	0.007	0.001	0.007	0.003	<0.001	0.001	0.019
Dissolved Barium	mg/L		0.002	0.026	0.002	0.043	0.002	0.017	0.002	0.023	0.002	0.016	0.058	<0.002	0.002	0.043
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.053	0.010	0.022	0.010	0.019	0.010	0.052	0.010	0.015	<0.010	<0.010	0.010	0.020
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	0.0003
Dissolved Calcium	mg/L		0.05	119	0.05	38.5	0.05	28.1	0.10	411	0.05	20.0	38.6	<0.05	0.05	39.0
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	0.0005	0.0005	0.0006	0.0005	0.0027	0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.053	0.001	0.165	0.001	0.073	0.001	0.012	0.001	0.117	0.388	<0.001	0.001	0.171
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	4.52	0.05	4.37	0.05	3.50	0.05	2.56	0.05	3.43	9.76	<0.05	0.05	4.26
Dissolved Manganese	mg/L		0.002	0.004	0.002	0.009	0.002	0.010	0.002	0.010	0.002	0.003	0.007	<0.002	0.002	0.008
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.103	0.010	2.72	0.002	0.072	0.002	0.171	0.002	0.075	0.014	<0.002	0.010	2.65
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05	0.05	<0.05
Dissolved Potassium	mg/L		0.50	1.87	0.50	1.36	0.50	0.70	0.50	1.64	0.50	1.05	8.17	<0.50	0.50	1.34
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	2.69	0.05	1.48	0.05	1.13	0.05	1.78	0.05	1.72	0.88	<0.05	0.05	1.42
Dissolved Strontium	mg/L		0.005	1.40	0.005	1.41	0.005	0.560	0.005	2.59	0.005	0.197	0.329	<0.005	0.005	1.47
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0009	0.0005	0.0023	0.0005	<0.0005	0.0005	0.0008	0.0005	0.0006	<0.0005	<0.0005	0.0005	0.0024
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	0.007	<0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.006	<0.005	0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5377960-5377967 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

5377969-5377971 Metals analysis completed on a filtered sample.

5377972 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Upper Beaver - Surface Water

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5	FB-6		Field Blank		X1
Date Sampled				10/17/2023		10/17/2023		10/17/2023		10/17/2023		10/17/2023	10/17/2023		10/17/2023		10/17/2023
Parameter	**Unit**	**G / S**	**RDL**	**5377960**	**RDL**	**5377965**	**RDL**	**5377966**	**RDL**	**5377967**	**RDL**	**5377969**	**5377970**	**RDL**	**5377971**	**RDL**	**5377972**
pH	pH Units	6.5-8.5	NA	6.84	NA	6.87	NA	6.87	NA	6.72	NA	6.96	6.86	NA	5.92	NA	6.74
Alkalinity (as CaCO3)	mg/L		5	66	5	72	5	70	5	44	5	70	65	5	<5	5	65
Electrical Conductivity	µS/cm		2	562	2	225	2	164	2	1450	2	131	292	2	<2	2	228
Chloride	mg/L		0.12	<0.12	0.10	0.27	0.10	<0.10	0.12	<0.12	0.10	0.25	0.21	0.10	<0.10	0.10	0.27
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	0.32	0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	251	0.10	53.8	0.10	24.3	0.38	932	0.10	6.96	82.1	0.10	<0.10	0.10	53.9
Dissolved Organic Carbon	mg/L		0.5	1.2	0.5	1.5	0.5	0.9	0.5	1.4	0.5	1.3	2.7	0.5	<0.5	0.5	1.7
Total Calcium	mg/L		0.40	119	0.40	40.3	0.40	29.8	0.40	439	0.40	21.1	42.6	0.20	<0.20	0.40	41.5
Total Magnesium	mg/L		0.20	4.64	0.20	4.77	0.20	3.97	0.20	3.57	0.20	4.02	10.8	0.10	<0.10	0.20	4.83
Total Potassium	mg/L		1.15	2.29	1.15	1.47	1.15	<1.15	1.15	1.95	1.15	1.34	9.53	0.50	<0.50	1.15	1.70
Total Sodium	mg/L		0.20	2.74	0.20	1.48	0.20	1.12	0.20	1.99	0.20	1.66	0.91	0.10	<0.10	0.20	1.54
Total Aluminum	mg/L		0.010	0.135	0.010	0.129	0.010	0.359	0.010	0.334	0.010	0.254	0.035	0.010	0.014	0.010	0.091
Total Antimony	mg/L	0.020	0.001	0.005	0.001	**0.027**	0.001	0.007	0.001	0.007	0.001	0.003	0.001	0.001	<0.001	0.001	**0.029**
Total Arsenic	mg/L	0.1	0.003	<0.003	0.003	0.018	0.003	0.022	0.003	0.008	0.003	0.007	<0.003	0.003	<0.003	0.003	0.020
Total Barium	mg/L		0.002	0.029	0.002	0.047	0.002	0.019	0.002	0.033	0.002	0.017	0.061	0.002	<0.002	0.002	0.048
Total Beryllium	mg/L	*	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002
Total Boron	mg/L	0.2	0.010	0.059	0.010	0.025	0.010	0.020	0.010	0.054	0.010	0.017	<0.010	0.010	<0.010	0.010	0.022
Total Cadmium	mg/L	0.0002	0.0001	<0.0001	0.0001	**0.0017**	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	**0.0017**
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	0.003	<0.003
Total Cobalt	mg/L	0.0009	0.0005	<0.0005	0.0005	0.0006	0.0005	**0.0013**	0.0005	**0.0036**	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0005
Total Copper	mg/L	0.005	0.001	**0.073**	0.001	**0.227**	0.001	**0.136**	0.001	**0.027**	0.001	**0.223**	**0.494**	0.001	<0.001	0.001	**0.226**
Total Iron	mg/L	0.3	0.010	0.169	0.010	0.134	0.010	**0.619**	0.010	**0.681**	0.010	**0.393**	0.038	0.010	0.052	0.010	0.096
Total Lead	mg/L	*	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001
Total Manganese	mg/L		0.002	0.009	0.002	0.012	0.002	0.026	0.002	0.028	0.002	0.008	0.011	0.002	<0.002	0.002	0.013
Total Molybdenum	mg/L	0.040	0.002	**0.121**	0.010	**2.82**	0.002	**0.085**	0.002	**0.189**	0.002	**0.087**	0.016	0.002	<0.002	0.010	**2.91**
Total Nickel	mg/L	0.025	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	0.10	<0.10	0.10	<0.10
Total Selenium	mg/L	0.1	0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	0.001	0.001
Total Silver	mg/L	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001
Total Strontium	mg/L		0.005	1.59	0.005	1.53	0.005	0.649	0.005	2.78	0.005	0.210	0.392	0.005	<0.005	0.005	1.53
Total Thallium	mg/L	0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	0.021	0.010	0.029	0.010	0.018	<0.010	0.010	<0.010	0.010	<0.010
Total Uranium	mg/L	0.005	0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	0.003
Total Vanadium	mg/L	0.006	0.002	0.002	0.002	<0.002	0.002	0.005	0.002	0.003	0.002	**0.008**	<0.002	0.002	<0.002	0.002	<0.002
Total Zinc	mg/L	0.030	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	0.020	<0.020	0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5377960-5377970: For Acidity determination samples were titrated to a pH ~8.3.
Un-ionized Ammonia RDL is a calculated detection limit. The calculation of Un-ionized Ammonia was based on lab measured parameters (pH and temperature) rather than the field parameters, these were not provided to the lab. The temperature is recorded at the time of pH measurement. Values are reported as calculated.
Dilution required, RDL has been increased accordingly.

5377971: For Acidity determination samples were titrated to a pH ~8.3.
Un-ionized Ammonia RDL is a calculated detection limit. The calculation of Un-ionized Ammonia was based on lab measured parameters (pH and temperature) rather than the field parameters, these were not provided to the lab. The temperature is recorded at the time of pH measurement. Values are reported as calculated.

5377972: For Acidity determination samples were titrated to a pH ~8.3.
Un-ionized Ammonia RDL is a calculated detection limit. The calculation of Un-ionized Ammonia was based on lab measured parameters (pH and temperature) rather than the field parameters, these were not provided to the lab. The temperature is recorded at the time of pH measurement. Values are reported as calculated.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Upper Beaver - Surface Water															
pH	5379732		6.99	7.11	1.7%	NA	100%	90%	110%						
Alkalinity (as CaCO3)	5379732		91	92	1.1%	< 5	92%	80%	120%						
Electrical Conductivity	5379732		292	303	3.7%	< 2	100%	90%	110%						
Chloride	5377960	5377960	<0.12	<0.12	NA	< 0.10	95%	70%	130%	99%	80%	120%	97%	70%	130%
Fluoride	5377960	5377960	<0.05	<0.05	NA	< 0.05	108%	70%	130%	101%	80%	120%	95%	70%	130%
Sulphate	5377960	5377960	251	248	1.2%	< 0.10	96%	70%	130%	99%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	5377960	5377960	1.2	1.1	NA	< 0.5	96%	90%	110%	97%	90%	110%	86%	80%	120%
Total Calcium	5375984		35.3	33.7	4.6%	< 0.20	102%	70%	130%	100%	80%	120%	107%	70%	130%
Total Magnesium	5375984		8.85	8.44	4.7%	< 0.10	101%	70%	130%	100%	80%	120%	104%	70%	130%
Total Potassium	5375984		1.70	1.63	NA	< 0.50	104%	70%	130%	103%	80%	120%	105%	70%	130%
Total Sodium	5375984		14.3	13.6	5.0%	< 0.10	102%	70%	130%	101%	80%	120%	103%	70%	130%
Total Aluminum	5375984		0.018	0.017	NA	< 0.010	92%	70%	130%	91%	80%	120%	94%	70%	130%
Total Antimony	5375984		<0.001	<0.001	NA	< 0.001	100%	70%	130%	96%	80%	120%	97%	70%	130%
Total Arsenic	5375984		<0.003	<0.003	NA	< 0.003	95%	70%	130%	98%	80%	120%	102%	70%	130%
Total Barium	5375984		0.017	0.016	6.1%	< 0.002	97%	70%	130%	96%	80%	120%	97%	70%	130%
Total Beryllium	5375984		<0.001	<0.001	NA	< 0.001	97%	70%	130%	102%	80%	120%	103%	70%	130%
Total Bismuth	5375984		<0.002	<0.002	NA	< 0.002	95%	70%	130%	101%	80%	120%	101%	70%	130%
Total Boron	5375984		0.028	0.027	NA	< 0.010	99%	70%	130%	104%	80%	120%	105%	70%	130%
Total Cadmium	5375984		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	98%	80%	120%	97%	70%	130%
Total Chromium	5375984		<0.003	<0.003	NA	< 0.003	96%	70%	130%	105%	80%	120%	109%	70%	130%
Total Cobalt	5375984		<0.0005	<0.0005	NA	< 0.0005	96%	70%	130%	108%	80%	120%	112%	70%	130%
Total Copper	5375984		0.008	0.008	0.0%	< 0.001	93%	70%	130%	104%	80%	120%	109%	70%	130%
Total Iron	5375984		<0.010	<0.010	NA	< 0.010	94%	70%	130%	105%	80%	120%	105%	70%	130%
Total Lead	5375984		0.003	0.003	NA	< 0.001	104%	70%	130%	95%	80%	120%	95%	70%	130%
Total Manganese	5375984		<0.002	<0.002	NA	< 0.002	100%	70%	130%	105%	80%	120%	108%	70%	130%
Total Molybdenum	5375984		<0.002	<0.002	NA	< 0.002	103%	70%	130%	110%	80%	120%	116%	70%	130%
Total Nickel	5375984		<0.003	<0.003	NA	< 0.003	93%	70%	130%	105%	80%	120%	109%	70%	130%
Total Phosphorus	5375984		0.70	0.68	2.9%	< 0.10	92%	70%	130%	104%	80%	120%	90%	70%	130%
Total Selenium	5375984		<0.001	<0.001	NA	< 0.001	96%	70%	130%	95%	80%	120%	93%	70%	130%
Total Silver	5375984		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	108%	80%	120%	110%	70%	130%
Total Strontium	5375984		0.187	0.179	4.4%	< 0.005	103%	70%	130%	99%	80%	120%	105%	70%	130%
Total Thallium	5375984		<0.0003	<0.0003	NA	< 0.0003	92%	70%	130%	102%	80%	120%	102%	70%	130%
Total Tin	5375984		<0.002	<0.002	NA	< 0.002	106%	70%	130%	100%	80%	120%	103%	70%	130%
Total Titanium	5375984		<0.010	<0.010	NA	< 0.010	94%	70%	130%	100%	80%	120%	111%	70%	130%
Total Uranium	5375984		<0.002	<0.002	NA	< 0.002	93%	70%	130%	104%	80%	120%	105%	70%	130%
Total Vanadium	5375984		<0.002	<0.002	NA	< 0.002	92%	70%	130%	108%	80%	120%	110%	70%	130%
Total Zinc	5375984		<0.020	<0.020	NA	< 0.020	102%	70%	130%	111%	80%	120%	122%	70%	130%
Metals - Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	5375718		0.010	0.010	NA	< 0.004	89%	70%	130%	95%	80%	120%	120%	70%	130%
Dissolved Antimony	5375718		<0.001	<0.001	NA	< 0.001	109%	70%	130%	109%	80%	120%	110%	70%	130%
Dissolved Arsenic	5375718		<0.001	<0.001	NA	< 0.001	97%	70%	130%	99%	80%	120%	109%	70%	130%
Dissolved Barium	5375718		0.061	0.060	1.1%	< 0.002	98%	70%	130%	97%	80%	120%	110%	70%	130%
Dissolved Beryllium	5375718		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	107%	80%	120%	118%	70%	130%
Dissolved Bismuth	5375718		<0.002	<0.002	NA	< 0.002	94%	70%	130%	101%	80%	120%	120%	70%	130%
Dissolved Boron	5375718		0.133	0.131	1.3%	< 0.010	97%	70%	130%	107%	80%	120%	110%	70%	130%
Dissolved Cadmium	5375718		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	102%	80%	120%	127%	70%	130%
Dissolved Calcium	5375718		45.3	43.6	4%	< 0.05	107%	70%	130%	109%	80%	120%	108%	70%	130%
Dissolved Chromium	5375718		<0.002	<0.002	NA	< 0.002	104%	70%	130%	101%	80%	120%	128%	70%	130%
Dissolved Cobalt	5375718		<0.0005	<0.0005	NA	< 0.0005	104%	70%	130%	102%	80%	120%	125%	70%	130%
Dissolved Copper	5375718		<0.001	<0.001	NA	< 0.001	104%	70%	130%	100%	80%	120%	123%	70%	130%
Dissolved Iron	5375718		<0.010	<0.010	NA	< 0.010	102%	70%	130%	102%	80%	120%	124%	70%	130%
Dissolved Lead	5375718		<0.0005	<0.0005	NA	< 0.0005	101%	70%	130%	94%	80%	120%	117%	70%	130%
Dissolved Magnesium	5375718		15.6	14.8	5.1%	< 0.05	99%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Manganese	5375718		0.034	0.033	2.5%	< 0.002	102%	70%	130%	100%	80%	120%	110%	70%	130%
Dissolved Mercury	5377960	5377960	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Molybdenum	5375718		0.029	0.029	2.4%	< 0.002	112%	70%	130%	108%	80%	120%	116%	70%	130%
Dissolved Nickel	5375718		<0.001	<0.001	NA	< 0.001	106%	70%	130%	102%	80%	120%	123%	70%	130%
Dissolved Phosphorus	5375718		<0.05	<0.05	NA	< 0.05	100%	70%	130%	92%	80%	120%	109%	70%	130%
Dissolved Potassium	5375718		8.68	8.24	5.2%	< 0.50	98%	70%	130%	105%	80%	120%	87%	70%	130%
Dissolved Selenium	5375718		<0.001	<0.001	NA	< 0.001	101%	70%	130%	106%	80%	120%	104%	70%	130%
Dissolved Silver	5375718		<0.0001	<0.0001	NA	< 0.0001	109%	70%	130%	103%	80%	120%	120%	70%	130%
Dissolved Sodium	5375718		405	414	2.3%	< 0.05	103%	70%	130%	105%	80%	120%	NA	70%	130%
Dissolved Strontium	5375718		0.186	0.170	8.8%	< 0.005	107%	70%	130%	100%	80%	120%	100%	70%	130%
Dissolved Thallium	5375718		<0.0003	<0.0003	NA	< 0.0003	102%	70%	130%	101%	80%	120%	119%	70%	130%
Dissolved Tin	5375718		<0.002	<0.002	NA	< 0.002	112%	70%	130%	107%	80%	120%	130%	70%	130%
Dissolved Titanium	5375718		<0.002	<0.002	NA	< 0.002	102%	70%	130%	104%	80%	120%	106%	70%	130%
Dissolved Uranium	5375718		0.0013	0.0012	NA	< 0.0005	104%	70%	130%	105%	80%	120%	121%	70%	130%
Dissolved Vanadium	5375718		<0.002	<0.002	NA	< 0.002	105%	70%	130%	104%	80%	120%	129%	70%	130%
Dissolved Zinc	5375718		<0.005	<0.005	NA	< 0.005	107%	70%	130%	108%	80%	120%	113%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 23T087587
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Nov 01, 2023
DATE SAMPLED: Oct 30, 2023
DATE REPORTED: Nov 10, 2023

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Leachate Water Monitoring
X02	Water		Total Metals in Water (mg/L)

Leachate Water Monitoring

Sample Description				**FB-1**		**FB-2**		**FB-3**		**FB-4**		**FB-5**	**FB-6**	**X1**
Date Sampled				**10/30/2023**		**10/30/2023**		**10/30/2023**		**10/30/2023**		**10/30/2023**	**10/30/2023**	**10/30/2023**
Parameter	**Unit**	**G / S**	**RDL**	**5415329**	**RDL**	**5415381**	**RDL**	**5415382**	**RDL**	**5415383**	**RDL**	**5415384**	**5415385**	**5415386**
pH	pH Units		NA	6.84	NA	6.82	NA	6.79	NA	6.56	NA	7.72	6.92	6.76
Electrical Conductivity	µS/cm		2	509	2	238	2	186	2	1400	2	129	301	188
Alkalinity (as CaCO3)	mg/L		5	60	5	66	5	66	5	42	5	66	97	67
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05
Chloride	mg/L		0.12	<0.12	0.10	0.24	0.10	0.16	0.12	<0.12	0.10	0.28	0.21	0.24
Sulphate	mg/L		0.10	205	0.10	55.1	0.10	32.5	0.19	838	0.10	5.76	68.8	32.2
Dissolved Organic Carbon	mg/L		0.5	0.8	0.5	1.4	0.5	0.7	0.5	0.9	0.5	1.5	1.4	0.9
Dissolved Calcium	mg/L		0.05	99.3	0.05	38.2	0.05	30.3	0.05	327	0.05	18.9	39.7	30.8
Dissolved Magnesium	mg/L		0.05	3.39	0.05	3.85	0.05	3.50	0.05	1.95	0.05	3.37	11.1	3.50
Dissolved Potassium	mg/L		0.50	1.56	0.50	1.37	0.50	0.75	0.50	1.23	0.50	1.08	8.55	0.84
Dissolved Sodium	mg/L		0.05	1.71	0.05	1.09	0.05	0.98	0.05	1.29	0.05	1.39	0.88	1.05
Dissolved Aluminum	mg/L		0.004	0.014	0.004	0.012	0.004	0.010	0.004	0.008	0.004	0.009	<0.004	0.010
Dissolved Antimony	mg/L		0.001	0.004	0.001	0.036	0.001	0.008	0.001	0.006	0.001	0.003	<0.001	0.008
Dissolved Arsenic	mg/L		0.001	<0.001	0.001	0.010	0.001	0.012	0.001	0.009	0.001	0.009	0.003	0.009
Dissolved Barium	mg/L		0.002	0.022	0.002	0.049	0.002	0.016	0.002	0.018	0.002	0.018	0.059	0.016
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.037	0.010	0.019	0.010	0.017	0.010	0.037	0.010	0.014	<0.010	0.017
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	0.0006	0.0005	0.0007	0.0005	0.0029	0.0005	<0.0005	<0.0005	0.0008
Dissolved Copper	mg/L		0.001	0.035	0.001	0.153	0.001	0.053	0.001	0.008	0.001	0.192	0.168	0.052
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.005	0.002	0.009	0.002	0.006	0.002	0.007	0.002	0.003	0.004	0.008
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.060	0.010	2.85	0.002	0.062	0.002	0.107	0.002	0.052	0.015	0.055
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	0.07
Dissolved Selenium	mg/L		0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	<0.001	0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.12	0.005	1.44	0.005	0.653	0.005	2.12	0.005	0.189	0.364	0.638
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.002	<0.002	0.002	0.005	0.002	0.002	0.002	0.004	0.002	<0.002	0.002	0.004
Dissolved Uranium	mg/L		0.0005	0.0008	0.0005	0.0026	0.0005	<0.0005	0.0005	0.0008	0.0005	0.0006	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.002	0.002	<0.002	0.002	0.006	<0.002	0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	0.006	0.005	<0.005	<0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5415329-5415386 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6	X1
Date Sampled				10/30/2023		10/30/2023		10/30/2023	10/30/2023	10/30/2023	10/30/2023	10/30/2023
Parameter	Unit	G / S	RDL	5415329	RDL	5415381	RDL	5415382	5415383	5415384	5415385	5415386
Total Aluminum	mg/L		0.010	0.041	0.010	0.055	0.010	0.062	0.035	0.085	0.047	0.064
Total Antimony	mg/L		0.003	0.004	0.003	0.037	0.003	0.008	0.006	0.004	<0.003	0.009
Total Arsenic	mg/L		0.003	<0.003	0.003	0.016	0.003	0.020	0.007	0.007	0.003	0.021
Total Barium	mg/L		0.002	0.021	0.002	0.051	0.002	0.016	0.019	0.019	0.062	0.022
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.035	0.010	0.020	0.010	0.018	0.040	0.017	<0.010	0.018
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0016	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L		0.10	98.5	0.10	40.8	0.10	30.8	351	20.5	40.4	31.2
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0008	0.0036	<0.0005	<0.0005	0.0008
Total Copper	mg/L		0.002	0.040	0.002	0.184	0.002	0.071	0.010	0.276	0.183	0.068
Total Iron	mg/L		0.010	0.032	0.010	0.030	0.010	0.057	0.041	0.086	0.050	0.063
Total Lead	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Magnesium	mg/L		0.10	3.54	0.10	3.51	0.10	3.73	2.26	3.64	11.7	3.91
Total Manganese	mg/L		0.002	0.005	0.002	0.011	0.002	0.009	0.009	0.004	0.005	0.010
Total Molybdenum	mg/L		0.002	0.065	0.010	2.75	0.002	0.066	0.127	0.059	0.014	0.065
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Phosphorus	mg/L		0.10	0.11	0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Potassium	mg/L		0.50	1.42	0.50	1.47	0.50	0.78	1.35	1.21	8.94	0.86
Total Selenium	mg/L		0.002	<0.002	0.002	0.003	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Sodium	mg/L		0.10	1.91	0.10	1.22	0.10	1.16	1.49	1.70	1.06	1.17
Total Strontium	mg/L		0.005	1.24	0.005	1.53	0.005	0.709	2.47	0.217	0.359	0.704
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	0.0008	0.0005	0.0028	0.0005	<0.0005	0.0009	0.0007	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.002	<0.002	0.009	<0.002	0.003
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5415329-5415386 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Leachate Water Monitoring															
pH	5416745		7.28	7.42	1.9%	NA	100%	90%	110%						
Electrical Conductivity	5416745		1280	1270	0.8%	< 2	91%	90%	110%						
Alkalinity (as CaCO3)	5416745		171	179	4.6%	< 5	92%	80%	120%						
Fluoride	5415329	5415329	<0.05	<0.05	NA	< 0.05	99%	70%	130%	106%	80%	120%	103%	70%	130%
Chloride	5415329	5415329	<0.12	<0.12	NA	< 0.10	96%	70%	130%	100%	80%	120%	100%	70%	130%
Sulphate	5415329	5415329	205	203	1.0%	< 0.10	100%	70%	130%	99%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	5420214		1.4	1.3	NA	< 0.5	91%	90%	110%	98%	90%	110%	81%	80%	120%
Dissolved Calcium	5413038		137	134	2.2%	< 0.05	114%	70%	130%	110%	80%	120%	96%	70%	130%
Dissolved Magnesium	5413038		32.4	31.9	1.6%	< 0.05	105%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Potassium	5413038		2.18	2.06	NA	< 0.50	106%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Sodium	5413038		128	131	2.3%	< 0.05	95%	70%	130%	94%	80%	120%	90%	70%	130%
Dissolved Aluminum	5413038		<0.004	<0.004	NA	< 0.004	98%	70%	130%	101%	80%	120%	89%	70%	130%
Dissolved Antimony	5413038		<0.001	<0.001	NA	< 0.001	104%	70%	130%	104%	80%	120%	103%	70%	130%
Dissolved Arsenic	5413038		<0.001	<0.001	NA	< 0.001	100%	70%	130%	103%	80%	120%	108%	70%	130%
Dissolved Barium	5413038		0.092	0.093	1.1%	< 0.002	99%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Beryllium	5413038		<0.0005	<0.0005	NA	< 0.0005	111%	70%	130%	113%	80%	120%	111%	70%	130%
Dissolved Bismuth	5413038		<0.002	<0.002	NA	< 0.002	95%	70%	130%	99%	80%	120%	92%	70%	130%
Dissolved Boron	5413038		0.037	0.039	NA	< 0.010	110%	70%	130%	114%	80%	120%	104%	70%	130%
Dissolved Cadmium	5413038		0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Chromium	5413038		<0.002	<0.002	NA	< 0.002	97%	70%	130%	99%	80%	120%	95%	70%	130%
Dissolved Cobalt	5413038		<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	99%	80%	120%	97%	70%	130%
Dissolved Copper	5413038		0.001	0.001	NA	< 0.001	99%	70%	130%	99%	80%	120%	94%	70%	130%
Dissolved Iron	5413038		<0.010	<0.010	NA	< 0.010	101%	70%	130%	102%	80%	120%	98%	70%	130%
Dissolved Lead	5413038		<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	97%	80%	120%	90%	70%	130%
Dissolved Manganese	5413038		<0.002	<0.002	NA	< 0.002	101%	70%	130%	102%	80%	120%	96%	70%	130%
Dissolved Mercury	5415281		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	99%	80%	120%	94%	70%	130%
Dissolved Molybdenum	5413038		<0.002	<0.002	NA	< 0.002	101%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Nickel	5413038		<0.001	<0.001	NA	< 0.001	100%	70%	130%	98%	80%	120%	95%	70%	130%
Dissolved Phosphorus	5413038		<0.05	<0.05	NA	< 0.05	87%	70%	130%	108%	80%	120%	102%	70%	130%
Dissolved Selenium	5413038		<0.001	0.003	NA	< 0.001	108%	70%	130%	101%	80%	120%	112%	70%	130%
Dissolved Silver	5413038		<0.0001	<0.0001	NA	< 0.0001	95%	70%	130%	96%	80%	120%	93%	70%	130%
Dissolved Strontium	5413038		0.668	0.681	1.9%	< 0.005	98%	70%	130%	99%	80%	120%	NA	70%	130%
Dissolved Thallium	5413038		<0.0003	<0.0003	NA	< 0.0003	101%	70%	130%	97%	80%	120%	91%	70%	130%
Dissolved Tin	5413038		<0.002	<0.002	NA	< 0.002	106%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Titanium	5413038		<0.002	<0.002	NA	< 0.002	96%	70%	130%	101%	80%	120%	102%	70%	130%
Dissolved Uranium	5413038		<0.0005	<0.0005	NA	< 0.0005	93%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Vanadium	5413038		<0.002	<0.002	NA	< 0.002	99%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Zinc	5413038		0.026	0.021	NA	< 0.005	100%	70%	130%	99%	80%	120%	97%	70%	130%
Total Metals in Water (mg/L)															
Total Aluminum	5415902		0.121	0.128	5.6%	< 0.010	95%	70%	130%	100%	80%	120%	97%	70%	130%
Total Antimony	5415902		<0.003	<0.003	NA	< 0.003	110%	70%	130%	98%	80%	120%	107%	70%	130%
Total Arsenic	5415902		<0.003	<0.003	NA	< 0.003	96%	70%	130%	96%	80%	120%	109%	70%	130%
Total Barium	5415902		0.111	0.115	3.5%	< 0.002	109%	70%	130%	95%	80%	120%	104%	70%	130%
Total Beryllium	5415902		<0.001	<0.001	NA	< 0.001	100%	70%	130%	104%	80%	120%	103%	70%	130%
Total Bismuth	5415902		<0.002	<0.002	NA	< 0.002	98%	70%	130%	98%	80%	120%	98%	70%	130%
Total Boron	5415902		0.214	0.226	5.5%	< 0.010	99%	70%	130%	107%	80%	120%	101%	70%	130%
Total Cadmium	5415902		<0.0001	<0.0001	NA	< 0.0001	106%	70%	130%	95%	80%	120%	101%	70%	130%
Total Calcium	5415902		113	118	4.3%	< 0.10	104%	70%	130%	97%	80%	120%	92%	70%	130%
Total Chromium	5415902		<0.003	<0.003	NA	< 0.003	101%	70%	130%	100%	80%	120%	101%	70%	130%
Total Cobalt	5415902		<0.0005	<0.0005	NA	< 0.0005	101%	70%	130%	108%	80%	120%	103%	70%	130%
Total Copper	5415902		<0.002	<0.002	NA	< 0.002	100%	70%	130%	100%	80%	120%	101%	70%	130%
Total Iron	5415902		0.149	0.161	7.7%	< 0.010	100%	70%	130%	108%	80%	120%	104%	70%	130%
Total Lead	5415902		0.002	0.002	NA	< 0.001	102%	70%	130%	92%	80%	120%	93%	70%	130%
Total Magnesium	5415902		31.0	32.5	4.7%	< 0.10	111%	70%	130%	101%	80%	120%	98%	70%	130%
Total Manganese	5415902		0.114	0.118	3.4%	< 0.002	102%	70%	130%	112%	80%	120%	105%	70%	130%
Total Molybdenum	5415902		0.006	0.006	NA	< 0.002	104%	70%	130%	91%	80%	120%	111%	70%	130%
Total Nickel	5415902		<0.003	<0.003	NA	< 0.003	103%	70%	130%	112%	80%	120%	98%	70%	130%
Total Phosphorus	5415902		<0.10	<0.10	NA	< 0.10	90%	70%	130%	103%	80%	120%	108%	70%	130%
Total Potassium	5415902		4.71	5.17	9.3%	< 0.50	107%	70%	130%	106%	80%	120%	100%	70%	130%
Total Selenium	5415902		0.003	<0.002	NA	< 0.002	105%	70%	130%	95%	80%	120%	97%	70%	130%
Total Silver	5415902		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	109%	80%	120%	102%	70%	130%
Total Sodium	5415902		38.9	40.7	4.5%	< 0.10	104%	70%	130%	98%	80%	120%	100%	70%	130%
Total Strontium	5415902		3.09	3.30	6.6%	< 0.005	101%	70%	130%	111%	80%	120%	103%	70%	130%
Total Thallium	5415902		<0.0003	<0.0003	NA	< 0.0003	96%	70%	130%	97%	80%	120%	98%	70%	130%
Total Tin	5415902		<0.002	<0.002	NA	< 0.002	106%	70%	130%	94%	80%	120%	104%	70%	130%
Total Titanium	5415902		<0.010	<0.010	NA	< 0.010	101%	70%	130%	100%	80%	120%	106%	70%	130%
Total Uranium	5415902		0.0038	0.0039	2.6%	< 0.0005	96%	70%	130%	100%	80%	120%	106%	70%	130%
Total Vanadium	5415902		<0.002	<0.002	NA	< 0.002	101%	70%	130%	113%	80%	120%	107%	70%	130%
Total Zinc	5415902		<0.020	<0.020	NA	< 0.020	101%	70%	130%	101%	80%	120%	103%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 24T165213
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Jun 21, 2024
DATE SAMPLED: Jun 20, 2024
DATE REPORTED: Jun 28, 2024

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry
X02	Water		Metals - Dissolved Metals in Water (mg/L)

(Water) Inorganic Chemistry

Sample Description				**FB-1**		**FB-2**		**FB-3**		**FB-4**		**FB-5**	**FB-6**	**X1**
Date Sampled				**06/20/2024**		**06/20/2024**		**06/20/2024**		**06/20/2024**		**06/20/2024**	**06/20/2024**	**06/20/2024**
Parameter	**Unit**	**G / S**	**RDL**	**5953241**	**RDL**	**5953266**	**RDL**	**5953267**	**RDL**	**5953268**	**RDL**	**5953269**	**5953270**	**5953271**
Electrical Conductivity	µS/cm		2	430	2	156	2	130	2	831	2	64	150	781
pH	pH Units		NA	7.50	NA	7.03	NA	7.24	NA	7.10	NA	7.14	7.26	7.12
Alkalinity (as CaCO3)	mg/L		5	34	5	27	5	29	5	21	5	25	30	22
Chloride	mg/L		0.10	0.41	0.10	0.30	0.10	1.11	0.12	0.73	0.10	0.23	0.15	0.47
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05
Sulphate	mg/L		0.10	210	0.10	41.4	0.10	30.4	0.10	430	0.10	7.14	41.8	435
Dissolved Organic Carbon	mg/L		0.5	2.5	0.5	4.3	0.5	3.4	0.5	3.7	0.5	5.0	6.0	3.7
Total Aluminum	mg/L		0.010	0.144	0.010	0.190	0.010	0.224	0.010	0.218	0.010	0.384	0.212	0.307
Total Antimony	mg/L		0.003	0.007	0.003	0.030	0.003	0.010	0.003	0.005	0.003	0.003	<0.003	0.007
Total Arsenic	mg/L		0.003	<0.003	0.003	0.014	0.003	0.016	0.003	0.004	0.003	0.004	<0.003	0.005
Total Barium	mg/L		0.002	0.032	0.002	0.033	0.002	0.018	0.002	0.029	0.002	0.013	0.056	0.037
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.067	0.010	0.023	0.010	0.026	0.010	0.049	0.010	0.012	<0.010	0.060
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L		0.20	95.4	0.20	23.9	0.20	19.5	0.20	183	0.20	9.18	22.4	236
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.007	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	0.0005	0.0010	0.0005	<0.0005	0.0006	0.0013
Total Copper	mg/L		0.002	0.037	0.002	0.563	0.002	0.258	0.002	0.096	0.002	0.569	1.10	0.116
Total Iron	mg/L		0.050	0.111	0.050	0.166	0.050	0.259	0.050	0.302	0.050	0.514	0.336	0.364
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Total Magnesium	mg/L		0.10	3.23	0.10	2.27	0.10	2.37	0.10	1.97	0.10	1.62	6.36	2.49
Total Manganese	mg/L		0.002	0.010	0.002	0.019	0.002	0.023	0.002	0.022	0.002	0.035	0.026	0.028
Total Molybdenum	mg/L		0.002	0.152	0.010	2.67	0.002	0.142	0.002	0.176	0.002	0.075	0.013	0.226
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	0.004	0.003	<0.003	0.003	0.004	0.005	<0.003
Total Potassium	mg/L		0.50	1.93	0.50	1.40	0.50	0.95	0.50	1.25	0.50	1.17	7.84	1.58
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Total Sodium	mg/L		0.10	2.09	0.10	0.91	0.10	1.01	0.10	1.25	0.10	0.80	0.70	1.53
Total Strontium	mg/L		0.005	1.25	0.005	0.946	0.005	0.424	0.005	1.63	0.005	0.085	0.279	2.03
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.014	<0.010	0.015
Total Uranium	mg/L		0.0005	0.0008	0.0005	0.0014	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005
Total Vanadium	mg/L		0.002	0.003	0.002	<0.002	0.002	0.004	0.002	<0.002	0.002	0.008	<0.002	0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	<0.10

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5953241-5953271 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Metals - Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4		FB-5		FB-6	X1
Date Sampled				06/20/2024		06/20/2024		06/20/2024	06/20/2024		06/20/2024		06/20/2024	06/20/2024
Parameter	Unit	G / S	RDL	5953241	RDL	5953266	RDL	5953267	5953268	RDL	5953269	RDL	5953270	5953271
Dissolved Aluminum	mg/L		0.004	0.054	0.004	0.021	0.004	0.038	0.035	0.004	0.023	0.004	0.013	0.033
Dissolved Antimony	mg/L		0.001	0.007	0.001	0.027	0.001	0.009	0.005	0.001	0.003	0.001	0.002	0.005
Dissolved Arsenic	mg/L		0.001	0.002	0.001	0.012	0.001	0.015	0.004	0.001	0.003	0.001	0.002	0.004
Dissolved Barium	mg/L		0.002	0.030	0.002	0.028	0.002	0.016	0.026	0.002	0.011	0.002	0.043	0.026
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.02	<0.02	0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.055	0.010	0.020	0.010	0.023	0.046	0.010	0.010	0.010	<0.010	0.043
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	0.0009	0.0005	<0.0005	0.0005	<0.0005	0.0008
Dissolved Copper	mg/L		0.001	0.027	0.001	0.363	0.001	0.151	0.061	0.001	0.353	0.001	0.567	0.058
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	0.152	0.033	0.020	<0.020	0.020	<0.020	<0.020
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	0.007	0.002	0.014	0.002	0.021	0.017	0.002	0.024	0.002	0.013	0.016
Dissolved Molybdenum	mg/L		0.002	0.149	0.02	2.55	0.002	0.127	0.175	0.002	0.072	0.002	0.008	0.170
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.001	0.001	0.003	<0.001	0.001	0.004	0.001	0.001	0.004
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.18	0.005	0.856	0.005	0.377	1.54	0.005	0.080	0.005	0.197	1.53
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0007	0.0005	0.0011	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.004	<0.002	0.002	0.006	0.002	<0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	0.005	0.007	0.005	0.010	0.005	0.011	0.011
Dissolved Calcium	mg/L		0.05	90.7	0.05	22.1	0.05	18.2	176	0.05	8.81	0.05	17.8	179
Dissolved Potassium	mg/L		0.50	1.58	0.50	1.09	0.50	0.75	1.02	0.50	0.91	0.50	5.37	0.99
Dissolved Magnesium	mg/L		0.05	3.07	0.05	2.20	0.05	2.04	1.82	0.05	1.16	0.05	4.42	1.82
Dissolved Sodium	mg/L		0.05	1.85	0.05	0.79	0.05	0.86	1.14	0.05	0.67	0.05	0.62	1.09
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

5953241-5953271 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.
Please note that some dissolved metals parameters are slightly higher that for the corresponding metals (unfiltered) parameters, however, the values are statistically equivalent.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
(Water) Inorganic Chemistry															
Electrical Conductivity	5953112		7200	7320	1.7%	< 2	98%	90%	110%						
pH	5953112		6.98	7.02	0.6%	NA	100%	90%	110%						
Alkalinity (as CaCO3)	5953112		390	394	1.0%	< 5	105%	80%	120%						
Chloride	5953241	5953241	0.41	0.42	NA	< 0.10	94%	70%	130%	97%	80%	120%	97%	70%	130%
Fluoride	5953241	5953241	<0.05	<0.05	NA	< 0.05	97%	70%	130%	94%	80%	120%	96%	70%	130%
Sulphate	5953241	5953241	210	210	0.0%	< 0.10	98%	70%	130%	96%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	5953241	5953241	2.5	2.4	NA	< 0.5	99%	90%	110%	101%	90%	110%	97%	80%	120%
Total Aluminum	5954346		0.011	0.012	NA	< 0.010	105%	70%	130%	106%	80%	120%	118%	70%	130%
Total Antimony	5954346		<0.003	<0.003	NA	< 0.003	103%	70%	130%	102%	80%	120%	109%	70%	130%
Total Arsenic	5954346		<0.003	<0.003	NA	< 0.003	102%	70%	130%	99%	80%	120%	106%	70%	130%
Total Barium	5954346		0.153	0.155	1.3%	< 0.002	96%	70%	130%	93%	80%	120%	112%	70%	130%
Total Beryllium	5954346		<0.001	<0.001	NA	< 0.001	107%	70%	130%	105%	80%	120%	113%	70%	130%
Total Bismuth	5954346		<0.002	<0.002	NA	< 0.002	95%	70%	130%	98%	80%	120%	105%	70%	130%
Total Boron	5954346		0.067	0.070	4.4%	< 0.010	102%	70%	130%	104%	80%	120%	110%	70%	130%
Total Cadmium	5954346		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	101%	80%	120%	107%	70%	130%
Total Calcium	5954346		63.9	65.6	2.6%	< 0.20	95%	70%	130%	99%	80%	120%	99%	70%	130%
Total Chromium	5954346		<0.003	<0.003	NA	< 0.003	100%	70%	130%	106%	80%	120%	105%	70%	130%
Total Cobalt	5954346		<0.0005	<0.0005	NA	< 0.0005	100%	70%	130%	106%	80%	120%	103%	70%	130%
Total Copper	5954346		<0.002	<0.002	NA	< 0.002	100%	70%	130%	103%	80%	120%	100%	70%	130%
Total Iron	5954346		2.92	2.93	0.3%	< 0.050	102%	70%	130%	104%	80%	120%	104%	70%	130%
Total Lead	5954346		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	94%	80%	120%	103%	70%	130%
Total Magnesium	5954346		3.47	3.41	1.7%	< 0.10	102%	70%	130%	106%	80%	120%	109%	70%	130%
Total Manganese	5954346		0.070	0.070	0.0%	< 0.002	102%	70%	130%	108%	80%	120%	108%	70%	130%
Total Molybdenum	5954346		<0.002	<0.002	NA	< 0.002	101%	70%	130%	107%	80%	120%	110%	70%	130%
Total Nickel	5954346		<0.003	<0.003	NA	< 0.003	101%	70%	130%	101%	80%	120%	99%	70%	130%
Total Potassium	5954346		2.02	1.95	NA	< 0.50	98%	70%	130%	100%	80%	120%	102%	70%	130%
Total Selenium	5954346		<0.002	<0.002	NA	< 0.002	104%	70%	130%	98%	80%	120%	108%	70%	130%
Total Silver	5954346		<0.0001	<0.0001	NA	< 0.0001	97%	70%	130%	102%	80%	120%	99%	70%	130%
Total Sodium	5954346		77.3	77.9	0.8%	< 0.10	105%	70%	130%	107%	80%	120%	105%	70%	130%
Total Strontium	5954346		0.331	0.319	3.7%	< 0.005	103%	70%	130%	109%	80%	120%	111%	70%	130%
Total Thallium	5954346		<0.0003	<0.0003	NA	< 0.0003	96%	70%	130%	97%	80%	120%	104%	70%	130%
Total Tin	5954346		<0.002	<0.002	NA	< 0.002	104%	70%	130%	99%	80%	120%	110%	70%	130%
Total Titanium	5954346		<0.010	<0.010	NA	< 0.010	107%	70%	130%	105%	80%	120%	115%	70%	130%
Total Uranium	5954346		<0.0005	<0.0005	NA	< 0.0005	91%	70%	130%	98%	80%	120%	108%	70%	130%
Total Vanadium	5954346		<0.002	<0.002	NA	< 0.002	101%	70%	130%	109%	80%	120%	108%	70%	130%
Total Zinc	5954346		0.029	0.031	NA	< 0.020	101%	70%	130%	99%	80%	120%	100%	70%	130%
Total Phosphorus	5954346		<0.10	<0.10	NA	< 0.10	100%	70%	130%	105%	80%	120%	116%	70%	130%
Metals - Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	5953241	5953241	0.054	0.053	1.9%	< 0.004	91%	70%	130%	92%	80%	120%	98%	70%	130%
Dissolved Antimony	5953241	5953241	0.007	0.007	0.0%	< 0.001	105%	70%	130%	106%	80%	120%	109%	70%	130%
Dissolved Arsenic	5953241	5953241	0.003	0.002	NA	< 0.001	102%	70%	130%	104%	80%	120%	110%	70%	130%
Dissolved Barium	5953241	5953241	0.030	0.030	0.0%	< 0.002	101%	70%	130%	102%	80%	120%	105%	70%	130%
Dissolved Beryllium	5953241	5953241	<0.0005	<0.0005	NA	< 0.0005	105%	70%	130%	105%	80%	120%	106%	70%	130%
Dissolved Bismuth	5953241	5953241	<0.002	<0.002	NA	< 0.002	98%	70%	130%	99%	80%	120%	102%	70%	130%
Dissolved Boron	5953241	5953241	0.055	0.056	1.8%	< 0.010	102%	70%	130%	99%	80%	120%	101%	70%	130%
Dissolved Cadmium	5953241	5953241	<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	102%	80%	120%	105%	70%	130%
Dissolved Chromium	5953241	5953241	<0.002	<0.002	NA	< 0.002	102%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Cobalt	5953241	5953241	<0.0005	<0.0005	NA	< 0.0005	103%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Copper	5953241	5953241	0.027	0.028	3.6%	< 0.001	99%	70%	130%	104%	80%	120%	103%	70%	130%
Dissolved Iron	5953241	5953241	<0.020	<0.020	NA	< 0.010	110%	70%	130%	114%	80%	120%	111%	70%	130%
Dissolved Lead	5953241	5953241	<0.0005	<0.0005	NA	< 0.0005	105%	70%	130%	95%	80%	120%	97%	70%	130%
Dissolved Manganese	5953241	5953241	0.007	0.007	NA	< 0.002	107%	70%	130%	111%	80%	120%	107%	70%	130%
Dissolved Molybdenum	5953241	5953241	0.149	0.150	0.7%	< 0.002	100%	70%	130%	107%	80%	120%	109%	70%	130%
Dissolved Nickel	5953241	5953241	<0.001	<0.001	NA	< 0.001	104%	70%	130%	105%	80%	120%	105%	70%	130%
Dissolved Phosphorus	5953241	5953241	<0.05	<0.05	NA	< 0.05	97%	70%	130%	116%	80%	120%	112%	70%	130%
Dissolved Selenium	5953241	5953241	<0.001	0.001	NA	< 0.001	105%	70%	130%	112%	80%	120%	112%	70%	130%
Dissolved Silver	5953241	5953241	<0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Strontium	5953241	5953241	1.18	1.21	2.5%	< 0.005	106%	70%	130%	108%	80%	120%	109%	70%	130%
Dissolved Thallium	5953241	5953241	<0.0003	<0.0003	NA	< 0.0003	103%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved Tin	5953241	5953241	<0.002	<0.002	NA	< 0.002	99%	70%	130%	103%	80%	120%	102%	70%	130%
Dissolved Titanium	5953241	5953241	<0.003	<0.003	NA	< 0.002	109%	70%	130%	112%	80%	120%	113%	70%	130%
Dissolved Uranium	5953241	5953241	0.0007	0.0007	NA	< 0.0005	97%	70%	130%	104%	80%	120%	106%	70%	130%
Dissolved Vanadium	5953241	5953241	0.002	0.002	NA	< 0.002	107%	70%	130%	114%	80%	120%	110%	70%	130%
Dissolved Zinc	5953241	5953241	<0.005	<0.005	NA	< 0.005	101%	70%	130%	107%	80%	120%	108%	70%	130%
Dissolved Calcium	5953241	5953241	90.7	90.3	0.4%	< 0.05	93%	70%	130%	94%	80%	120%	99%	70%	130%
Dissolved Potassium	5953241	5953241	1.58	1.59	NA	< 0.50	92%	70%	130%	87%	80%	120%	94%	70%	130%
Dissolved Magnesium	5953241	5953241	3.07	3.24	5.4%	< 0.05	96%	70%	130%	95%	80%	120%	101%	70%	130%
Dissolved Sodium	5953241	5953241	1.85	1.84	0.5%	< 0.05	95%	70%	130%	90%	80%	120%	97%	70%	130%
Dissolved Mercury	5954937		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	100%	80%	120%	103%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 24T177791
PROJECT: 2024 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Jul 25, 2024
DATE SAMPLED: Jul 23, 2024
DATE REPORTED: Aug 02, 2024

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Dissolved Metals in Water (mg/L)
X02	Water		Total Metals in Water (mg/L)
X03	Water		Waste Rock Chemistry

Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6		FB-DUP
Date Sampled				07/23/2024		07/23/2024		07/23/2024	07/23/2024	07/23/2024	07/23/2024		07/23/2024
Parameter	Unit	G / S	RDL	6027395	RDL	6027404	RDL	6027405	6027406	6027407	6027408	RDL	6027409
Dissolved Aluminum	mg/L		0.004	0.060	0.004	0.062	0.004	0.068	0.061	0.046	0.005	0.004	0.054
Dissolved Antimony	mg/L		0.001	0.006	0.001	0.032	0.001	0.009	0.008	0.005	0.002	0.001	0.030
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.022	0.001	0.024	0.002	0.006	0.002	0.001	0.021
Dissolved Barium	mg/L		0.002	0.032	0.002	0.042	0.002	0.017	0.034	0.012	0.056	0.002	0.042
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.054	0.010	0.019	0.010	0.018	0.059	0.010	<0.010	0.010	0.019
Dissolved Calcium	mg/L		0.05	90.7	0.05	31.3	0.05	23.0	356	13.1	28.0	0.05	31.1
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.015	0.001	0.143	0.001	0.109	0.013	0.195	0.589	0.001	0.143
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.020	<0.020
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	3.08	0.05	3.16	0.05	2.06	2.58	1.67	8.27	0.05	3.05
Dissolved Manganese	mg/L		0.002	0.003	0.002	0.005	0.002	0.007	<0.002	0.009	0.009	0.002	0.005
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.131	0.02	3.27	0.002	0.108	0.205	0.089	0.010	0.02	3.26
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Dissolved Potassium	mg/L		0.10	1.98	0.10	1.60	0.10	0.88	1.81	1.00	7.90	0.10	1.58
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.002	0.001	0.001	<0.001	0.001	<0.001	0.001	0.002
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	1.91	0.05	1.00	0.05	0.96	1.61	1.00	0.67	0.05	1.02
Dissolved Strontium	mg/L		0.005	1.15	0.005	1.20	0.005	0.423	2.55	0.121	0.312	0.005	1.18
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0007	0.0005	0.0019	0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0005	0.0020
Dissolved Vanadium	mg/L		0.002	0.003	0.002	<0.002	0.002	0.004	<0.002	0.009	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.006	0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6027395-6027409 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6		FB-DUP
Date Sampled				07/23/2024		07/23/2024		07/23/2024	07/23/2024	07/23/2024	07/23/2024		07/23/2024
Parameter	Unit	G / S	RDL	6027395	RDL	6027404	RDL	6027405	6027406	6027407	6027408	RDL	6027409
Total Aluminum	mg/L		0.010	0.075	0.010	0.084	0.010	0.310	0.059	0.112	0.075	0.010	0.085
Total Antimony	mg/L		0.003	0.007	0.003	0.032	0.003	0.010	0.008	0.005	<0.003	0.003	0.031
Total Arsenic	mg/L		0.003	0.003	0.003	0.021	0.003	0.025	<0.003	0.007	<0.003	0.003	0.018
Total Barium	mg/L		0.002	0.033	0.002	0.044	0.002	0.019	0.034	0.012	0.057	0.002	0.043
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Boron	mg/L		0.010	0.050	0.010	0.018	0.010	0.017	0.052	<0.010	<0.010	0.010	0.016
Total Calcium	mg/L		0.10	103	0.10	36.1	0.10	27.3	386	14.5	31.4	0.10	34.3
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0004
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	0.0007	<0.0005	<0.0005	0.0005	<0.0005
Total Copper	mg/L		0.002	0.018	0.002	0.170	0.002	0.240	0.018	0.264	0.729	0.002	0.170
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	0.330	<0.050	0.082	0.087	0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Total Magnesium	mg/L		0.10	4.05	0.10	3.93	0.10	3.16	2.80	2.03	9.14	0.10	3.44
Total Manganese	mg/L		0.002	0.003	0.002	0.005	0.002	0.014	0.003	0.010	0.013	0.002	0.007
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.127	0.02	3.39	0.002	0.123	0.217	0.090	0.010	0.02	3.27
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	0.003	0.003	0.004
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10
Total Potassium	mg/L		0.50	2.17	0.50	1.89	0.50	1.21	1.94	1.13	9.11	0.50	1.75
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Sodium	mg/L		0.10	2.23	0.10	1.21	0.10	1.09	1.77	1.13	0.72	0.10	1.13
Total Strontium	mg/L		0.005	1.17	0.005	1.23	0.005	0.470	2.72	0.122	0.353	0.005	1.25
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010
Total Uranium	mg/L		0.0005	0.0007	0.0005	0.0020	0.0005	<0.0005	0.0006	<0.0005	<0.0005	0.0005	0.0021
Total Vanadium	mg/L		0.002	0.003	0.002	<0.002	0.002	0.006	<0.002	0.009	<0.002	0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6027395-6027409 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Waste Rock Chemistry

Sample Description				**FB-1**	**FB-2**	**FB-3**		**FB-4**		**FB-5**	**FB-6**	**FB-DUP**
Date Sampled				**07/23/2024**	**07/23/2024**	**07/23/2024**		**07/23/2024**		**07/23/2024**	**07/23/2024**	**07/23/2024**
Parameter	**Unit**	**G / S**	**RDL**	**6027395**	**6027404**	**6027405**	**RDL**	**6027406**	**RDL**	**6027407**	**6027408**	**6027409**
pH	pH Units		NA	7.91	7.68	7.57	NA	7.32	NA	7.56	7.23	7.54
Electrical Conductivity	µS/cm		2	486	184	135	2	1270	2	85	222	175
Alkalinity (as CaCO3)	mg/L		5	47	45	45	5	30	5	38	37	45
Fluoride	mg/L		0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	0.10	<0.05	<0.05
Chloride	mg/L		0.10	0.17	0.17	0.12	0.12	<0.12	0.10	0.14	0.12	0.17
Sulphate	mg/L		0.10	184	45.3	26.8	0.19	712	0.10	8.36	69.1	45.2
Dissolved Organic Carbon	mg/L		0.5	1.0	1.9	1.4	0.5	1.6	0.5	2.5	2.4	1.8

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6027395-6027409 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Waste Rock Chemistry															
pH	6027159		7.90	8.09	2.4%	NA	100%	90%	110%						
Electrical Conductivity	6027159		760	760	0.0%	< 2	94%	90%	110%						
Alkalinity (as CaCO3)	6027159		226	230	1.8%	< 5	106%	80%	120%						
Fluoride	6025140		<0.05	<0.05	NA	< 0.05	99%	70%	130%	99%	80%	120%	94%	70%	130%
Chloride	6025140		75.7	75.3	0.5%	< 0.10	96%	70%	130%	101%	80%	120%	100%	70%	130%
Sulphate	6025140		<0.10	<0.10	NA	< 0.10	97%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Organic Carbon	6018878		12.6	12.6	0.0%	< 0.5	92%	90%	110%	106%	90%	110%	NA	80%	120%
Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	6027395	6027395	0.060	0.069	14.0%	< 0.004	105%	70%	130%	108%	80%	120%	106%	70%	130%
Dissolved Antimony	6027395	6027395	0.006	0.007	15.4%	< 0.001	104%	70%	130%	106%	80%	120%	104%	70%	130%
Dissolved Arsenic	6027395	6027395	0.003	0.002	NA	< 0.001	99%	70%	130%	103%	80%	120%	103%	70%	130%
Dissolved Barium	6027395	6027395	0.032	0.032	0.0%	< 0.002	100%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Beryllium	6027395	6027395	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	109%	80%	120%	105%	70%	130%
Dissolved Bismuth	6027395	6027395	<0.002	<0.002	NA	< 0.002	95%	70%	130%	97%	80%	120%	99%	70%	130%
Dissolved Boron	6027395	6027395	0.054	0.058	7.1%	< 0.010	95%	70%	130%	106%	80%	120%	103%	70%	130%
Dissolved Calcium	6027395	6027395	90.7	90.9	0.2%	< 0.05	112%	70%	130%	106%	80%	120%	NA	70%	130%
Dissolved Cadmium	6027395	6027395	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	98%	80%	120%	97%	70%	130%
Dissolved Chromium	6027395	6027395	<0.002	<0.002	NA	< 0.002	100%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Cobalt	6027395	6027395	<0.0005	<0.0005	NA	< 0.0005	101%	70%	130%	94%	80%	120%	97%	70%	130%
Dissolved Copper	6027395	6027395	0.015	0.015	0.0%	< 0.001	100%	70%	130%	95%	80%	120%	95%	70%	130%
Dissolved Iron	6027395	6027395	<0.020	<0.020	NA	< 0.010	107%	70%	130%	96%	80%	120%	100%	70%	130%
Dissolved Lead	6027395	6027395	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Magnesium	6027395	6027395	3.54	3.38	4.6%	< 0.05	117%	70%	130%	112%	80%	120%	105%	70%	130%
Dissolved Manganese	6027395	6027395	0.003	0.002	NA	< 0.002	106%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Mercury	6027395	6027395	<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Molybdenum	6027395	6027395	0.131	0.128	2.3%	< 0.002	106%	70%	130%	99%	80%	120%	101%	70%	130%
Dissolved Nickel	6027395	6027395	<0.001	<0.001	NA	< 0.001	100%	70%	130%	94%	80%	120%	96%	70%	130%
Dissolved Phosphorus	6027395	6027395	<0.05	<0.05	NA	< 0.05	101%	70%	130%	111%	80%	120%	112%	70%	130%
Dissolved Potassium	6027395	6027395	1.98	1.89	4.7%	< 0.10	112%	70%	130%	106%	80%	120%	101%	70%	130%
Dissolved Selenium	6027395	6027395	<0.001	0.002	NA	< 0.001	99%	70%	130%	103%	80%	120%	107%	70%	130%
Dissolved Silver	6027395	6027395	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	94%	80%	120%	96%	70%	130%
Dissolved Sodium	6027395	6027395	1.91	1.96	2.6%	< 0.05	106%	70%	130%	104%	80%	120%	96%	70%	130%
Dissolved Strontium	6027395	6027395	1.15	1.12	2.6%	< 0.005	108%	70%	130%	102%	80%	120%	NA	70%	130%
Dissolved Thallium	6027395	6027395	<0.0003	<0.0003	NA	< 0.0003	98%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Tin	6027395	6027395	<0.002	<0.002	NA	< 0.002	103%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Titanium	6027395	6027395	<0.003	<0.003	NA	< 0.002	108%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Uranium	6027395	6027395	0.0007	0.0007	NA	< 0.0005	95%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Vanadium	6027395	6027395	0.003	0.003	NA	< 0.002	103%	70%	130%	97%	80%	120%	101%	70%	130%
Dissolved Zinc	6027395	6027395	<0.005	<0.005	NA	< 0.005	101%	70%	130%	100%	80%	120%	103%	70%	130%
Total Metals in Water (mg/L)															
Total Aluminum	6024631		0.080	0.086	7.2%	< 0.010	98%	70%	130%	100%	80%	120%	97%	70%	130%
Total Antimony	6024631		<0.003	<0.003	NA	< 0.003	101%	70%	130%	101%	80%	120%	106%	70%	130%
Total Arsenic	6024631		<0.003	<0.003	NA	< 0.003	98%	70%	130%	100%	80%	120%	103%	70%	130%
Total Barium	6024631		0.089	0.096	7.6%	< 0.002	98%	70%	130%	95%	80%	120%	95%	70%	130%
Total Beryllium	6024631		<0.001	<0.001	NA	< 0.001	105%	70%	130%	106%	80%	120%	107%	70%	130%
Total Bismuth	6024631		<0.002	<0.002	NA	< 0.002	94%	70%	130%	92%	80%	120%	92%	70%	130%
Total Boron	6024631		0.024	0.028	NA	< 0.010	105%	70%	130%	110%	80%	120%	107%	70%	130%
Total Calcium	6024631		144	149	3.4%	< 0.10	105%	70%	130%	100%	80%	120%	102%	70%	130%
Total Cadmium	6024631		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	100%	80%	120%	100%	70%	130%
Total Chromium	6024631		<0.003	<0.003	NA	< 0.003	99%	70%	130%	95%	80%	120%	98%	70%	130%
Total Cobalt	6024631		0.0009	0.0008	NA	< 0.0005	95%	70%	130%	97%	80%	120%	98%	70%	130%
Total Copper	6024631		<0.002	<0.002	NA	< 0.002	98%	70%	130%	96%	80%	120%	94%	70%	130%
Total Iron	6024631		<0.050	<0.050	NA	< 0.050	97%	70%	130%	100%	80%	120%	100%	70%	130%
Total Lead	6024631		0.0006	0.0006	NA	< 0.0005	96%	70%	130%	95%	80%	120%	95%	70%	130%
Total Magnesium	6024631		21.8	23.1	5.8%	< 0.10	108%	70%	130%	100%	80%	120%	101%	70%	130%
Total Manganese	6024631		0.005	0.007	NA	< 0.002	99%	70%	130%	101%	80%	120%	103%	70%	130%
Total Mercury	6027395	6027395	<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	97%	80%	120%	95%	70%	130%
Total Molybdenum	6024631		0.019	0.022	14.6%	< 0.002	99%	70%	130%	99%	80%	120%	108%	70%	130%
Total Nickel	6024631		<0.003	<0.003	NA	< 0.003	95%	70%	130%	98%	80%	120%	94%	70%	130%
Total Phosphorus	6024631		<0.10	<0.10	NA	< 0.10	96%	70%	130%	103%	80%	120%	108%	70%	130%
Total Potassium	6024631		12.9	13.9	7.5%	< 0.50	106%	70%	130%	98%	80%	120%	102%	70%	130%
Total Selenium	6024631		0.002	<0.002	NA	< 0.002	99%	70%	130%	93%	80%	120%	104%	70%	130%
Total Silver	6024631		<0.0001	<0.0001	NA	< 0.0001	96%	70%	130%	95%	80%	120%	92%	70%	130%
Total Sodium	6024631		266	286	7.2%	< 0.10	100%	70%	130%	97%	80%	120%	98%	70%	130%
Total Strontium	6024631		1.50	1.50	0.0%	< 0.005	102%	70%	130%	102%	80%	120%	104%	70%	130%
Total Thallium	6024631		<0.0003	<0.0003	NA	< 0.0003	94%	70%	130%	92%	80%	120%	93%	70%	130%
Total Tin	6024631		<0.002	<0.002	NA	< 0.002	103%	70%	130%	101%	80%	120%	104%	70%	130%
Total Titanium	6024631		<0.010	<0.010	NA	< 0.010	100%	70%	130%	100%	80%	120%	102%	70%	130%
Total Uranium	6024631		<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	97%	80%	120%	101%	70%	130%
Total Vanadium	6024631		0.008	0.007	NA	< 0.002	98%	70%	130%	100%	80%	120%	105%	70%	130%
Total Zinc	6024631		0.743	0.760	2.3%	< 0.020	100%	70%	130%	99%	80%	120%	110%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 24T199280
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Sep 20, 2024
DATE SAMPLED: Sep 19, 2024
DATE REPORTED: Oct 01, 2024

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Dissolved Metals in Water (mg/L)
X02	Water		Total Metals in Water (mg/L)
X03	Water		Waste Rock Chemistry

Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6		X1
Date Sampled				09/19/2024		09/19/2024		09/19/2024	09/19/2024	09/19/2024	09/19/2024		09/19/2024
Parameter	Unit	G / S	RDL	6159746	RDL	6159755	RDL	6159756	6159757	6159758	6159759	RDL	6159760
Dissolved Aluminum	mg/L		0.004	0.023	0.004	0.023	0.004	0.035	0.023	0.024	0.007	0.004	0.034
Dissolved Antimony	mg/L		0.001	0.004	0.001	0.019	0.001	0.005	0.006	0.002	0.001	0.001	0.019
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.014	0.001	0.014	0.003	0.004	<0.001	0.001	0.010
Dissolved Barium	mg/L		0.002	0.024	0.002	0.035	0.002	0.013	0.026	0.005	0.063	0.002	0.035
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.054	0.010	0.023	0.010	0.023	0.066	0.012	<0.010	0.010	0.023
Dissolved Cadmium	mg/L		0.0001	0.0001	0.0001	0.0010	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0012
Dissolved Calcium	mg/L		0.05	97.5	0.05	33.9	0.05	25.2	296	12.8	47.9	0.05	37.6
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0008	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.082	0.001	0.424	0.001	0.122	0.012	0.399	0.751	0.001	0.435
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.020	0.024
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	3.26	0.05	3.88	0.05	2.46	3.08	1.69	14.4	0.05	3.97
Dissolved Manganese	mg/L		0.002	0.004	0.002	0.011	0.002	0.005	0.007	0.010	0.006	0.002	0.006
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.187	0.04	3.59	0.002	0.153	0.290	0.096	0.019	0.04	3.29
Dissolved Nickel	mg/L		0.001	0.001	0.001	0.002	0.001	0.001	0.002	<0.001	0.002	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	0.08	0.05	<0.05	0.05	0.09	0.09	<0.05	0.25	0.05	0.16
Dissolved Potassium	mg/L		0.50	<0.50	0.50	0.98	0.50	0.72	0.80	<0.50	8.21	0.50	1.33
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.002	0.001	<0.001	<0.001	<0.001	<0.001	0.001	0.003
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	1.79	0.05	0.79	0.05	1.05	2.44	0.89	1.44	0.05	0.92
Dissolved Strontium	mg/L		0.005	1.22	0.005	1.32	0.005	0.428	2.49	0.098	0.730	0.005	1.35
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	0.018	<0.003	0.009	<0.003	0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0007	0.0005	0.0021	0.0005	<0.0005	0.0007	<0.0005	<0.0005	0.0005	0.0022
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.006	0.005	0.011	0.005	<0.005	0.007	0.007	0.009	0.005	0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6159746-6159760 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6		X1
Date Sampled				09/19/2024		09/19/2024		09/19/2024	09/19/2024	09/19/2024	09/19/2024		09/19/2024
Parameter	Unit	G / S	RDL	6159746	RDL	6159755	RDL	6159756	6159757	6159758	6159759	RDL	6159760
Total Aluminum	mg/L		0.010	0.074	0.010	0.032	0.010	0.118	<0.010	0.027	0.113	0.010	0.023
Total Antimony	mg/L		0.003	0.004	0.003	0.020	0.003	0.006	0.006	<0.003	<0.003	0.003	0.020
Total Arsenic	mg/L		0.003	<0.003	0.003	0.012	0.003	0.016	<0.003	<0.003	<0.003	0.003	0.013
Total Barium	mg/L		0.002	0.027	0.002	0.040	0.002	0.017	0.028	0.007	0.074	0.002	0.040
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Boron	mg/L		0.010	0.054	0.010	0.023	0.010	0.020	0.064	0.012	<0.010	0.010	0.019
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0002	<0.0001	<0.0001	0.0001	0.0006
Total Calcium	mg/L		0.20	92.7	0.20	36.0	0.20	22.4	309	16.1	51.2	0.20	33.4
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	0.010	0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0007	0.0017	<0.0005	0.0006	0.0005	0.0007
Total Copper	mg/L		0.002	0.087	0.002	0.502	0.002	0.225	0.012	0.527	1.03	0.002	0.529
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	0.189	<0.050	<0.050	0.311	0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Total Magnesium	mg/L		0.10	2.33	0.10	3.61	0.10	3.16	4.18	2.31	19.7	0.10	3.58
Total Manganese	mg/L		0.002	0.002	0.002	0.005	0.002	0.011	0.005	0.015	0.009	0.002	0.011
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.164	0.02	3.71	0.002	0.132	0.294	0.098	0.011	0.02	4.08
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	0.005	0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	0.12	0.12	0.13	0.19	0.10	<0.10
Total Potassium	mg/L		0.50	1.11	0.50	1.63	0.50	0.59	1.69	0.86	9.36	0.50	<0.50
Total Selenium	mg/L		0.002	<0.002	0.002	0.004	0.002	<0.002	<0.002	<0.002	<0.002	0.002	0.003
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Sodium	mg/L		0.10	1.81	0.10	0.93	0.10	1.47	3.16	0.97	0.76	0.10	1.48
Total Strontium	mg/L		0.005	1.05	0.005	1.41	0.005	0.408	2.56	0.129	0.774	0.005	1.52
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	0.010	<0.010
Total Uranium	mg/L		0.0005	0.0008	0.0005	0.0024	0.0005	<0.0005	0.0009	<0.0005	<0.0005	0.0005	0.0024
Total Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.003	<0.002	<0.002	<0.002	0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6159746-6159760 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Waste Rock Chemistry

Sample Description				**FB-1**	**FB-2**	**FB-3**		**FB-4**		**FB-5**	**FB-6**	**X1**
Date Sampled				**09/19/2024**	**09/19/2024**	**09/19/2024**		**09/19/2024**		**09/19/2024**	**09/19/2024**	**09/19/2024**
Parameter	**Unit**	**G / S**	**RDL**	**6159746**	**6159755**	**6159756**	**RDL**	**6159757**	**RDL**	**6159758**	**6159759**	**6159760**
pH	pH Units		NA	7.47	7.36	7.50	NA	7.42	NA	7.39	7.37	7.39
Electrical Conductivity	µS/cm		2	391	196	125	2	1150	2	91	342	192
Alkalinity (as CaCO3)	mg/L		5	44	50	44	5	36	5	40	42	48
Fluoride	mg/L		0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05
Chloride	mg/L		0.10	0.33	0.40	0.34	0.12	0.76	0.10	0.30	0.20	0.39
Sulphate	mg/L		0.10	186	55.3	24.2	0.19	708	0.10	10.4	156	55.4
Dissolved Organic Carbon	mg/L		0.5	1.2	2.9	1.3	0.5	2.0	0.5	2.6	3.5	2.9

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6159746-6159760 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	6159746	6159746	0.023	<0.004	NA	< 0.004	97%	70%	130%	109%	80%	120%	113%	70%	130%
Dissolved Antimony	6159746	6159746	0.004	0.004	NA	< 0.001	102%	70%	130%	108%	80%	120%	111%	70%	130%
Dissolved Arsenic	6159746	6159746	0.003	0.003	NA	< 0.001	95%	70%	130%	97%	80%	120%	101%	70%	130%
Dissolved Barium	6159746	6159746	0.024	0.025	4.1%	< 0.002	99%	70%	130%	102%	80%	120%	107%	70%	130%
Dissolved Beryllium	6159746	6159746	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	115%	80%	120%	113%	70%	130%
Dissolved Bismuth	6159746	6159746	<0.002	<0.002	NA	< 0.002	96%	70%	130%	94%	80%	120%	97%	70%	130%
Dissolved Boron	6159746	6159746	0.054	0.057	5.4%	< 0.010	97%	70%	130%	113%	80%	120%	115%	70%	130%
Dissolved Cadmium	6159746	6159746	0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	105%	80%	120%	107%	70%	130%
Dissolved Calcium	6159746	6159746	97.5	90.5	7.4%	< 0.05	88%	70%	130%	114%	80%	120%	106%	70%	130%
Dissolved Chromium	6159746	6159746	<0.002	<0.002	NA	< 0.002	100%	70%	130%	112%	80%	120%	121%	70%	130%
Dissolved Cobalt	6159746	6159746	<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	115%	80%	120%	117%	70%	130%
Dissolved Copper	6159746	6159746	0.082	0.072	13.0%	< 0.001	101%	70%	130%	106%	80%	120%	115%	70%	130%
Dissolved Iron	6159746	6159746	<0.020	<0.020	NA	< 0.010	100%	70%	130%	117%	80%	120%	115%	70%	130%
Dissolved Lead	6159746	6159746	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	97%	80%	120%	100%	70%	130%
Dissolved Magnesium	6159746	6159746	3.26	3.03	7.3%	< 0.05	100%	70%	130%	84%	80%	120%	87%	70%	130%
Dissolved Manganese	6159746	6159746	0.004	0.002	NA	< 0.002	97%	70%	130%	110%	80%	120%	121%	70%	130%
Dissolved Mercury	6159746	6159746	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	99%	80%	120%	100%	70%	130%
Dissolved Molybdenum	6159746	6159746	0.187	0.191	2.1%	< 0.002	108%	70%	130%	117%	80%	120%	108%	70%	130%
Dissolved Nickel	6159746	6159746	0.001	0.002	NA	< 0.001	100%	70%	130%	112%	80%	120%	117%	70%	130%
Dissolved Phosphorus	6159746	6159746	0.08	0.15	NA	< 0.05	89%	70%	130%	94%	80%	120%	127%	70%	130%
Dissolved Potassium	6159746	6159746	<0.50	<0.50	NA	< 0.50	92%	70%	130%	100%	80%	120%	106%	70%	130%
Dissolved Selenium	6159746	6159746	<0.001	<0.001	NA	< 0.001	100%	70%	130%	114%	80%	120%	104%	70%	130%
Dissolved Silver	6159746	6159746	<0.0001	0.0001	NA	< 0.0001	108%	70%	130%	115%	80%	120%	119%	70%	130%
Dissolved Sodium	6159746	6159746	1.79	1.66	7.5%	< 0.05	113%	70%	130%	92%	80%	120%	112%	70%	130%
Dissolved Strontium	6159746	6159746	1.22	1.39	13.0%	< 0.005	106%	70%	130%	119%	80%	120%	100%	70%	130%
Dissolved Thallium	6159746	6159746	<0.0003	<0.0003	NA	< 0.0003	99%	70%	130%	98%	80%	120%	101%	70%	130%
Dissolved Tin	6159746	6159746	<0.002	<0.002	NA	< 0.002	105%	70%	130%	106%	80%	120%	112%	70%	130%
Dissolved Titanium	6159746	6159746	<0.003	<0.003	NA	< 0.002	87%	70%	130%	113%	80%	120%	127%	70%	130%
Dissolved Uranium	6159746	6159746	0.0007	0.0007	NA	< 0.0005	105%	70%	130%	106%	80%	120%	108%	70%	130%
Dissolved Vanadium	6159746	6159746	0.002	<0.002	NA	< 0.002	97%	70%	130%	117%	80%	120%	114%	70%	130%
Dissolved Zinc	6159746	6159746	0.006	<0.005	NA	< 0.005	105%	70%	130%	119%	80%	120%	118%	70%	130%
Total Metals in Water (mg/L)															
Total Aluminum	6154165		0.389	0.344	12.3%	< 0.010	105%	70%	130%	107%	80%	120%	104%	70%	130%
Total Antimony	6154165		<0.003	<0.003	NA	< 0.003	103%	70%	130%	102%	80%	120%	102%	70%	130%
Total Arsenic	6154165		0.005	<0.003	NA	< 0.003	101%	70%	130%	101%	80%	120%	97%	70%	130%
Total Barium	6154165		0.085	0.087	2.3%	< 0.002	99%	70%	130%	102%	80%	120%	102%	70%	130%
Total Beryllium	6154165		<0.001	<0.001	NA	< 0.001	105%	70%	130%	105%	80%	120%	108%	70%	130%
Total Bismuth	6154165		<0.002	<0.002	NA	< 0.002	98%	70%	130%	100%	80%	120%	98%	70%	130%
Total Boron	6154165		0.121	0.118	2.5%	< 0.010	100%	70%	130%	102%	80%	120%	103%	70%	130%
Total Cadmium	6154165		0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	100%	80%	120%	100%	70%	130%
Total Calcium	6154165		61.6	68.3	10.3%	< 0.20	109%	70%	130%	100%	80%	120%	105%	70%	130%
Total Chromium	6154165		<0.003	<0.003	NA	< 0.003	100%	70%	130%	98%	80%	120%	98%	70%	130%
Total Cobalt	6154165		0.0019	0.0021	NA	< 0.0005	96%	70%	130%	97%	80%	120%	102%	70%	130%
Total Copper	6154165		<0.002	<0.002	NA	< 0.002	103%	70%	130%	103%	80%	120%	102%	70%	130%
Total Iron	6154165		0.863	0.909	5.2%	< 0.050	93%	70%	130%	98%	80%	120%	99%	70%	130%
Total Lead	6154165		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	99%	80%	120%	95%	70%	130%
Total Magnesium	6154165		87.6	94.4	7.5%	< 0.10	91%	70%	130%	92%	80%	120%	97%	70%	130%
Total Manganese	6154165		0.037	0.038	2.7%	< 0.002	92%	70%	130%	96%	80%	120%	98%	70%	130%
Total Mercury	6159746	6159746	<0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	96%	80%	120%	105%	70%	130%
Total Molybdenum	6154165		0.002	0.002	NA	< 0.002	100%	70%	130%	110%	80%	120%	108%	70%	130%
Total Nickel	6154165		<0.003	0.005	NA	< 0.003	96%	70%	130%	98%	80%	120%	100%	70%	130%
Total Phosphorus	6154165		<0.10	<0.10	NA	< 0.10	79%	70%	130%	85%	80%	120%	111%	70%	130%
Total Potassium	6154165		4.75	4.39	7.9%	< 0.50	98%	70%	130%	99%	80%	120%	109%	70%	130%
Total Selenium	6154165		<0.002	<0.002	NA	< 0.002	99%	70%	130%	100%	80%	120%	101%	70%	130%
Total Silver	6154165		<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	111%	80%	120%	106%	70%	130%
Total Sodium	6154165		38.6	35.8	7.5%	< 0.10	107%	70%	130%	101%	80%	120%	110%	70%	130%
Total Strontium	6154165		0.956	0.976	2.1%	< 0.005	100%	70%	130%	102%	80%	120%	89%	70%	130%
Total Thallium	6154165		<0.0003	<0.0003	NA	< 0.0003	98%	70%	130%	98%	80%	120%	96%	70%	130%
Total Tin	6154165		<0.002	<0.002	NA	< 0.002	103%	70%	130%	99%	80%	120%	98%	70%	130%
Total Titanium	6154165		<0.010	0.017	NA	< 0.010	91%	70%	130%	112%	80%	120%	107%	70%	130%
Total Uranium	6154165		0.0028	0.0028	0.0%	< 0.0005	103%	70%	130%	106%	80%	120%	100%	70%	130%
Total Vanadium	6154165		<0.002	<0.002	NA	< 0.002	94%	70%	130%	103%	80%	120%	107%	70%	130%
Total Zinc	6154165		<0.020	<0.020	NA	< 0.020	96%	70%	130%	103%	80%	120%	107%	70%	130%
Waste Rock Chemistry															
pH	6159759	6159759	7.37	7.38	0.1%	NA	102%	90%	110%						
Electrical Conductivity	6159759	6159759	342	340	0.6%	< 2	97%	90%	110%						
Alkalinity (as CaCO3)	6159759	6159759	42	42	0.0%	< 5	105%	80%	120%						
Fluoride	6156194		<0.05	<0.05	NA	< 0.05	100%	70%	130%	99%	80%	120%	96%	70%	130%
Chloride	6156194		66.0	64.4	2.5%	< 0.10	94%	70%	130%	100%	80%	120%	99%	70%	130%
Sulphate	6156194		26.0	25.2	3.1%	< 0.10	92%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Organic Carbon	6142149		1.5	1.5	NA	< 0.5	98%	90%	110%	93%	90%	110%	102%	80%	120%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 24T204498
PROJECT: Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Casandra DeForge
DATE RECEIVED: Oct 03, 2024
DATE SAMPLED: Oct 02, 2024
DATE REPORTED: Oct 15, 2024

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Dissolved Metals in Water (mg/L)
X02	Water		Total Metals in Water (mg/L)
X03	Water		Waste Rock Chemistry

Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6	X1
Date Sampled				10/02/2024		10/02/2024		10/02/2024	10/02/2024	10/02/2024	10/02/2024	10/02/2024
Parameter	Unit	G / S	RDL	6192579	RDL	6192600	RDL	6192601	6192602	6192603	6192604	6192605
Dissolved Aluminum	mg/L		0.004	0.031	0.004	0.039	0.004	0.042	0.067	0.085	0.016	0.034
Dissolved Antimony	mg/L		0.001	0.004	0.001	0.017	0.001	0.006	0.005	0.003	0.001	0.003
Dissolved Arsenic	mg/L		0.001	0.004	0.001	0.016	0.001	0.012	0.008	0.003	0.002	0.006
Dissolved Barium	mg/L		0.002	0.024	0.002	0.044	0.002	0.015	0.033	0.014	0.054	0.015
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.048	0.010	0.025	0.010	0.022	0.051	0.017	<0.010	0.017
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0005	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Calcium	mg/L		0.05	86.5	0.05	27.6	0.05	26.4	289	16.9	45.2	14.3
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	0.0014	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.060	0.001	0.290	0.001	0.108	0.009	0.513	0.537	0.506
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	0.027
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	3.56	0.05	2.50	0.05	2.30	2.14	2.50	10.8	2.43
Dissolved Manganese	mg/L		0.002	0.003	0.002	0.012	0.002	0.007	0.003	0.017	0.010	0.012
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.139	0.02	2.91	0.002	0.113	0.171	0.129	0.013	0.139
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.003	0.001	0.003	0.005	0.002	<0.001	0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	0.15	0.05	0.07	0.16	0.09	0.09	<0.05
Dissolved Potassium	mg/L		0.50	1.12	0.50	1.09	0.50	1.01	1.07	0.80	8.71	1.06
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.002	0.001	<0.001	0.003	0.002	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	2.12	0.05	0.84	0.05	1.24	1.63	1.30	0.63	1.09
Dissolved Strontium	mg/L		0.005	1.07	0.005	1.31	0.005	0.450	2.22	0.212	0.668	0.209
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0006	0.0005	0.0018	0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.003	<0.002	0.008	<0.002	0.009
Dissolved Zinc	mg/L		0.005	<0.005	0.005	0.012	0.005	<0.005	<0.005	<0.005	<0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6192579-6192605 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6	X1
Date Sampled				10/02/2024		10/02/2024		10/02/2024	10/02/2024	10/02/2024	10/02/2024	10/02/2024
Parameter	Unit	G / S	RDL	6192579	RDL	6192600	RDL	6192601	6192602	6192603	6192604	6192605
Total Aluminum	mg/L		0.010	0.026	0.010	0.035	0.010	0.157	0.032	0.045	0.115	0.059
Total Antimony	mg/L		0.003	0.004	0.003	0.018	0.003	0.006	0.005	0.003	<0.003	0.004
Total Arsenic	mg/L		0.003	0.003	0.003	0.017	0.003	0.021	0.006	0.005	0.003	0.008
Total Barium	mg/L		0.002	0.026	0.002	0.047	0.002	0.018	0.034	0.017	0.059	0.017
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.043	0.010	0.021	0.010	0.020	0.045	0.015	<0.010	0.016
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0006	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Calcium	mg/L		0.20	59.7	0.20	26.3	0.20	20.1	226	13.4	33.6	13.2
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	0.004	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0007	<0.0005	<0.0005	<0.0005
Total Copper	mg/L		0.002	0.074	0.002	0.301	0.002	0.155	0.014	0.540	0.679	0.562
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	0.128	<0.050	<0.050	0.099	0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Magnesium	mg/L		0.10	2.69	0.10	2.88	0.10	1.90	1.65	1.42	10.5	2.27
Total Manganese	mg/L		0.002	0.003	0.002	0.004	0.002	0.009	0.011	0.013	0.012	0.012
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.119	0.04	3.60	0.002	0.112	0.214	0.144	0.018	0.136
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	0.10	0.23	0.10	0.26	<0.10	<0.10	<0.10	<0.10
Total Potassium	mg/L		0.50	0.93	0.50	0.58	0.50	<0.50	0.91	0.62	6.24	0.85
Total Selenium	mg/L		0.002	<0.002	0.002	0.003	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Sodium	mg/L		0.10	1.29	0.10	0.85	0.10	1.07	1.10	0.92	1.04	1.15
Total Strontium	mg/L		0.005	1.06	0.005	1.38	0.005	0.422	2.62	0.224	0.750	0.196
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	0.0006	0.0005	0.0019	0.0005	<0.0005	0.0006	0.0006	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	0.003	0.002	<0.002	0.002	0.004	<0.002	0.009	<0.002	0.010
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6192579-6192605 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Waste Rock Chemistry

Sample Description				**FB-1**	**FB-2**	**FB-3**		**FB-4**		**FB-5**	**FB-6**	**X1**
Date Sampled				**10/02/2024**	**10/02/2024**	**10/02/2024**		**10/02/2024**		**10/02/2024**	**10/02/2024**	**10/02/2024**
Parameter	**Unit**	**G / S**	**RDL**	**6192579**	**6192600**	**6192601**	**RDL**	**6192602**	**RDL**	**6192603**	**6192604**	**6192605**
pH	pH Units		NA	7.40	7.21	7.32	NA	7.24	NA	7.23	7.05	7.19
Electrical Conductivity	µS/cm		2	369	183	131	2	1140	2	105	304	105
Alkalinity (as CaCO3)	mg/L		5	48	44	43	5	36	5	42	38	42
Fluoride	mg/L		0.05	<0.05	<0.05	<0.05	0.05	<0.05	0.05	0.11	<0.05	0.11
Chloride	mg/L		0.10	0.11	0.12	0.12	0.12	0.44	0.10	0.13	0.12	0.13
Sulphate	mg/L		0.10	144	44.4	21.9	0.19	616	0.10	11.5	110	11.6
Dissolved Organic Carbon	mg/L		0.5	1.0	2.3	1.1	0.5	1.1	0.5	2.6	2.5	2.5

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6192579-6192605 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)
Insufficient Sample : IS
Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Dissolved Metals in Water (mg/L)															
Dissolved Aluminum	6192600	6192600	0.039	0.037	5.3%	< 0.004	98%	70%	130%	118%	80%	120%	104%	70%	130%
Dissolved Antimony	6192600	6192600	0.017	0.018	5.7%	< 0.001	106%	70%	130%	108%	80%	120%	111%	70%	130%
Dissolved Arsenic	6192600	6192600	0.016	0.018	11.8%	< 0.001	93%	70%	130%	103%	80%	120%	108%	70%	130%
Dissolved Barium	6192600	6192600	0.044	0.043	2.3%	< 0.002	102%	70%	130%	100%	80%	120%	105%	70%	130%
Dissolved Beryllium	6192600	6192600	<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	119%	80%	120%	112%	70%	130%
Dissolved Bismuth	6192600	6192600	<0.002	<0.002	NA	< 0.002	99%	70%	130%	97%	80%	120%	92%	70%	130%
Dissolved Boron	6192600	6192600	0.025	0.022	NA	< 0.010	100%	70%	130%	117%	80%	120%	104%	70%	130%
Dissolved Cadmium	6192600	6192600	0.0005	<0.0001	NA	< 0.0001	100%	70%	130%	105%	80%	120%	115%	70%	130%
Dissolved Calcium	6192600	6192600	27.6	28.4	2.9%	< 0.05	102%	70%	130%	111%	80%	120%	84%	70%	130%
Dissolved Chromium	6192600	6192600	<0.002	<0.002	NA	< 0.002	97%	70%	130%	109%	80%	120%	108%	70%	130%
Dissolved Cobalt	6192600	6192600	<0.0005	<0.0005	NA	< 0.0005	104%	70%	130%	103%	80%	120%	106%	70%	130%
Dissolved Copper	6192600	6192600	0.290	0.265	9.0%	< 0.001	101%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Iron	6192600	6192600	<0.020	<0.020	NA	< 0.010	118%	70%	130%	96%	80%	120%	111%	70%	130%
Dissolved Lead	6192600	6192600	<0.0005	<0.0005	NA	< 0.0005	100%	70%	130%	99%	80%	120%	93%	70%	130%
Dissolved Magnesium	6192600	6192600	2.50	2.82	12.0%	< 0.05	96%	70%	130%	105%	80%	120%	93%	70%	130%
Dissolved Manganese	6192600	6192600	0.012	0.005	NA	< 0.002	106%	70%	130%	103%	80%	120%	109%	70%	130%
Dissolved Mercury	6194080		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	96%	80%	120%	93%	70%	130%
Dissolved Molybdenum	6192600	6192600	2.91	2.87	1.4%	< 0.002	108%	70%	130%	124%	80%	120%	112%	70%	130%
Dissolved Nickel	6192600	6192600	0.003	<0.001	NA	< 0.001	106%	70%	130%	100%	80%	120%	110%	70%	130%
Dissolved Phosphorus	6192600	6192600	0.15	0.14	NA	< 0.05	92%	70%	130%	113%	80%	120%	88%	70%	130%
Dissolved Potassium	6192600	6192600	1.09	0.99	NA	< 0.50	94%	70%	130%	111%	80%	120%	76%	70%	130%
Dissolved Selenium	6192600	6192600	0.002	0.002	NA	< 0.001	100%	70%	130%	103%	80%	120%	109%	70%	130%
Dissolved Silver	6192600	6192600	<0.0001	<0.0001	NA	< 0.0001	107%	70%	130%	118%	80%	120%	113%	70%	130%
Dissolved Sodium	6192600	6192600	0.84	0.82	2.4%	< 0.05	103%	70%	130%	117%	80%	120%	101%	70%	130%
Dissolved Strontium	6192600	6192600	1.31	1.45	10.1%	< 0.005	115%	70%	130%	113%	80%	120%	116%	70%	130%
Dissolved Thallium	6192600	6192600	<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	102%	80%	120%	92%	70%	130%
Dissolved Tin	6192600	6192600	<0.002	<0.002	NA	< 0.002	109%	70%	130%	103%	80%	120%	105%	70%	130%
Dissolved Titanium	6192600	6192600	<0.003	<0.003	NA	< 0.002	85%	70%	130%	86%	80%	120%	92%	70%	130%
Dissolved Uranium	6192600	6192600	0.0018	0.0019	NA	< 0.0005	102%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Vanadium	6192600	6192600	<0.002	<0.002	NA	< 0.002	107%	70%	130%	111%	80%	120%	112%	70%	130%
Dissolved Zinc	6192600	6192600	0.012	0.033	NA	< 0.005	101%	70%	130%	98%	80%	120%	107%	70%	130%
Comments:	NA signifies Not Applicable. Duplicate NA: results are under 5X the RDL and will not be calculated.QA Qualifier for metals – Dissolved Molybdenum: For a multi-element scan for lab control standards and matrix spikes, up to 10% of analytes may exceed the quoted limits by up to 10% absolute and it is considered acceptable.														
Total Metals in Water (mg/L)															
Total Aluminum	6193182		0.060	0.056	6.9%	< 0.010	100%	70%	130%	107%	80%	120%	103%	70%	130%
Total Antimony	6193182		<0.003	<0.003	NA	< 0.003	108%	70%	130%	105%	80%	120%	110%	70%	130%
Total Arsenic	6193182		<0.003	<0.003	NA	< 0.003	103%	70%	130%	98%	80%	120%	100%	70%	130%
Total Barium	6193182		0.059	0.054	8.8%	< 0.002	102%	70%	130%	97%	80%	120%	102%	70%	130%
Total Beryllium	6193182		<0.001	<0.001	NA	< 0.001	101%	70%	130%	100%	80%	120%	100%	70%	130%
Total Bismuth	6193182		<0.002	<0.002	NA	< 0.002	99%	70%	130%	100%	80%	120%	92%	70%	130%
Total Boron	6193182		0.076	0.075	1.3%	< 0.010	100%	70%	130%	102%	80%	120%	97%	70%	130%
Total Cadmium	6193182		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	98%	80%	120%	99%	70%	130%
Total Calcium	6193182		100.0	95.5	4.6%	< 0.20	109%	70%	130%	112%	80%	120%	74%	70%	130%
Total Chromium	6193182		0.042	0.051	19.4%	< 0.003	100%	70%	130%	102%	80%	120%	107%	70%	130%
Total Cobalt	6193182		<0.0005	<0.0005	NA	< 0.0005	104%	70%	130%	98%	80%	120%	104%	70%	130%
Total Copper	6193182		<0.002	<0.002	NA	< 0.002	99%	70%	130%	96%	80%	120%	103%	70%	130%
Total Iron	6193182		<0.050	<0.050	NA	< 0.050	105%	70%	130%	102%	80%	120%	108%	70%	130%
Total Lead	6193182		<0.0005	<0.0005	NA	< 0.0005	100%	70%	130%	102%	80%	120%	98%	70%	130%
Total Magnesium	6193182		18.9	16.5	13.6%	< 0.10	90%	70%	130%	107%	80%	120%	89%	70%	130%
Total Manganese	6193182		<0.002	<0.002	NA	< 0.002	106%	70%	130%	103%	80%	120%	107%	70%	130%
Total Mercury	6192579	6192579	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	96%	80%	120%	100%	70%	130%
Total Molybdenum	6193182		0.025	0.021	17.4%	< 0.002	108%	70%	130%	109%	80%	120%	116%	70%	130%
Total Nickel	6193182		0.004	<0.003	NA	< 0.003	106%	70%	130%	98%	80%	120%	102%	70%	130%
Total Phosphorus	6193182		<0.10	<0.10	NA	< 0.10	92%	70%	130%	116%	80%	120%	106%	70%	130%
Total Potassium	6193182		41.1	37.0	10.5%	< 0.50	99%	70%	130%	114%	80%	120%	74%	70%	130%
Total Selenium	6193182		<0.002	<0.002	NA	< 0.002	100%	70%	130%	92%	80%	120%	94%	70%	130%
Total Silver	6193182		0.0001	<0.0001	NA	< 0.0001	107%	70%	130%	113%	80%	120%	108%	70%	130%
Total Sodium	6193182		140	131	6.6%	< 0.10	105%	70%	130%	117%	80%	120%	NA	70%	130%
Total Strontium	6193182		1.45	1.26	14.0%	< 0.005	115%	70%	130%	113%	80%	120%	118%	70%	130%
Total Thallium	6193182		<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	103%	80%	120%	95%	70%	130%
Total Tin	6193182		0.007	0.007	NA	< 0.002	109%	70%	130%	108%	80%	120%	108%	70%	130%
Total Titanium	6193182		<0.010	<0.010	NA	< 0.010	92%	70%	130%	101%	80%	120%	121%	70%	130%
Total Uranium	6193182		<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	100%	80%	120%	103%	70%	130%
Total Vanadium	6193182		0.006	0.006	NA	< 0.002	107%	70%	130%	104%	80%	120%	117%	70%	130%
Total Zinc	6193182		<0.020	<0.020	NA	< 0.020	100%	70%	130%	101%	80%	120%	99%	70%	130%
Waste Rock Chemistry															
pH	6194080		7.43	7.55	1.6%	NA	99%	90%	110%						
Electrical Conductivity	6194080		851	854	0.4%	< 2	105%	90%	110%						
Alkalinity (as CaCO3)	6194080		228	235	3.0%	< 5	96%	80%	120%						
Fluoride	6194109		<0.13	<0.13	NA	< 0.05	98%	70%	130%	98%	80%	120%	97%	70%	130%
Chloride	6194109		169	171	1.2%	< 0.10	96%	70%	130%	102%	80%	120%	101%	70%	130%
Sulphate	6194109		1490	1510	1.3%	< 0.10	97%	70%	130%	100%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	6193530		2.3	2.4	NA	< 0.5	96%	90%	110%	92%	90%	110%	94%	80%	120%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 24T218726
PROJECT: 2024 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - DIVISION RÉGIONALE
ATTENTION TO: Rebecca Henderson
DATE RECEIVED: Nov 08, 2024
DATE SAMPLED: Nov 07, 2024
DATE REPORTED: Nov 19, 2024

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Waste Rock Leachate Testing

Waste Rock Leachate Testing

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5	FB-6		FB-DUP
Date Sampled				11/07/2024		11/07/2024		11/07/2024		11/07/2024		11/07/2024	11/07/2024		11/07/2024
Parameter	Unit	G / S	RDL	6303510	RDL	6303512	RDL	6303513	RDL	6303514	RDL	6303515	6303516	RDL	6303517
pH	pH Units		NA	7.64	NA	7.67	NA	7.62	NA	7.43	NA	7.39	7.57	NA	7.66
Alkalinity (as CaCO3)	mg/L		5	92	5	104	5	96	5	69	5	87	96	5	106
Electrical Conductivity	µS/cm		2	466	2	207	2	142	2	1370	2	108	416	2	214
Chloride	mg/L		0.10	0.13	0.10	0.12	0.10	0.46	0.12	<0.12	0.10	0.13	0.18	0.10	0.13
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	199	0.10	48.8	0.10	18.1	0.38	894	0.10	7.85	157	0.10	51.9
Dissolved Organic Carbon	mg/L		0.5	1.8	0.5	1.4	0.5	1.0	0.5	1.2	0.5	6.5	2.0	0.5	1.4
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Aluminum	mg/L		0.010	0.027	0.010	0.059	0.010	0.030	0.010	<0.010	0.010	0.022	0.071	0.010	0.077
Total Antimony	mg/L		0.003	0.003	0.003	0.024	0.003	0.006	0.003	0.006	0.003	<0.003	<0.003	0.003	0.026
Total Arsenic	mg/L		0.003	<0.003	0.003	0.011	0.003	0.015	0.003	0.004	0.003	0.005	<0.003	0.003	0.016
Total Barium	mg/L		0.002	0.023	0.002	0.047	0.002	0.016	0.002	0.022	0.002	0.021	0.051	0.002	0.051
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Boron	mg/L		0.010	0.040	0.010	0.032	0.010	0.031	0.010	0.057	0.010	0.025	0.016	0.010	0.029
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0005	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0009
Total Calcium	mg/L		0.20	123	0.20	51.8	0.20	35.1	4.0	388	0.20	23.1	65.7	0.20	50.4
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0007	0.0005	0.0030	0.0005	<0.0005	<0.0005	0.0005	0.0005
Total Copper	mg/L		0.002	0.033	0.002	0.100	0.002	0.060	0.002	0.010	0.002	0.513	0.259	0.002	0.106
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Total Magnesium	mg/L		0.10	3.73	0.10	4.35	0.10	2.67	0.10	2.81	0.10	2.62	15.7	0.10	4.61
Total Molybdenum	mg/L		0.002	0.115	0.04	3.17	0.002	0.080	0.002	0.250	0.002	0.077	0.016	0.04	3.13
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	0.10	<0.10	<0.10	0.10	<0.10
Total Potassium	mg/L		0.50	2.09	0.50	2.26	0.50	1.03	0.50	2.44	0.50	1.82	16.5	0.50	2.76
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	0.004
Total Silver	mg/L		0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0001
Total Sodium	mg/L		0.10	2.68	0.10	1.46	0.10	1.50	0.10	1.46	0.10	1.40	1.80	0.10	1.12
Total Strontium	mg/L		0.005	1.27	0.005	1.66	0.005	0.431	0.005	3.59	0.005	0.195	0.852	0.005	1.69
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.019	0.010	<0.010	<0.010	0.010	<0.010
Total Uranium	mg/L		0.0005	0.0009	0.0005	0.0023	0.0005	<0.0005	0.0005	0.0010	0.0005	<0.0005	<0.0005	0.0005	0.0026
Total Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	0.006	<0.002	0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	0.102	<0.020	0.020	<0.020
Dissolved Aluminum	mg/L		0.004	0.017	0.004	0.029	0.004	0.021	0.004	0.018	0.004	0.028	0.007	0.004	0.031
Dissolved Antimony	mg/L		0.001	0.003	0.001	0.023	0.001	0.006	0.001	0.005	0.001	0.003	<0.001	0.001	0.023
Dissolved Arsenic	mg/L		0.001	0.002	0.001	0.014	0.001	0.014	0.001	0.006	0.001	0.004	0.002	0.001	0.014
Dissolved Barium	mg/L		0.002	0.020	0.002	0.038	0.002	0.013	0.002	0.017	0.002	0.016	0.039	0.002	0.038
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.040	0.010	0.018	0.010	0.018	0.010	0.049	0.010	0.011	<0.010	0.010	0.017
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	0.0001
Dissolved Calcium	mg/L		0.05	93.2	0.05	36.0	0.05	23.9	0.05	353	0.05	17.0	51.6	0.05	35.6
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0005	0.0005	0.0039	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.036	0.001	0.097	0.001	0.047	0.001	0.010	0.001	0.498	0.213	0.001	0.102
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	4.52	0.05	4.86	0.05	2.97	0.05	3.11	0.05	2.85	20.5	0.05	4.86
Dissolved Manganese	mg/L		0.002	0.002	0.002	0.005	0.002	0.004	0.002	0.013	0.002	0.004	0.006	0.002	0.004
Dissolved Molybdenum	mg/L		0.002	0.131	0.010	3.34	0.002	0.085	0.002	0.228	0.002	0.073	0.014	0.010	3.27
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.002	0.001	<0.001	0.005	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	0.05	0.05	0.06	0.05	<0.05	0.06	0.05	0.07
Dissolved Potassium	mg/L		0.50	1.09	0.50	0.99	0.50	0.52	0.50	1.06	0.50	0.71	9.59	0.50	0.89
Dissolved Selenium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	1.62	0.05	0.93	0.05	0.78	0.05	1.42	0.05	1.17	0.90	0.05	0.94
Dissolved Strontium	mg/L		0.005	1.31	0.005	1.54	0.005	0.436	0.005	3.06	0.005	0.171	0.822	0.005	1.58
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0008	0.0005	0.0022	0.0005	<0.0005	0.0005	0.0009	0.0005	<0.0005	<0.0005	0.0005	0.0022
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.002	0.002	<0.002	0.002	0.007	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.007	0.005	<0.005	0.005	<0.005	0.005	0.005	0.005	0.127	0.009	0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6303510-6303517 Dilution required, RDL has been increased accordingly.

Analysis performed at AGAT Toronto (unless marked by *)

Insufficient Sample : IS

Sample Not Received : SNR

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Waste Rock Leachate Testing															
pH	6303569		7.72	7.82	1.3%	NA	99%	90%	110%						
Alkalinity (as CaCO3)	6303569		312	315	1.0%	< 5	99%	80%	120%						
Electrical Conductivity	6303569		1740	1740	0.0%	< 2	92%	90%	110%						
Chloride	6300302		25.1	25.0	0.4%	< 0.10	95%	70%	130%	99%	80%	120%	99%	70%	130%
Fluoride	6300302		1.06	1.08	1.9%	< 0.05	98%	70%	130%	96%	80%	120%	94%	70%	130%
Sulphate	6300302		251	250	0.4%	< 0.10	93%	70%	130%	98%	80%	120%	NA	70%	130%
Dissolved Organic Carbon	6306159		1.8	1.8	NA	< 0.5	90%	90%	110%	96%	90%	110%	88%	80%	120%
Total Mercury	6303510	6303510	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	104%	80%	120%	93%	70%	130%
Dissolved Mercury	6301538		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	104%	80%	120%	99%	70%	130%
Total Aluminum	6303510	6303510	0.027	0.050	NA	< 0.010	82%	70%	130%	88%	80%	120%	96%	70%	130%
Total Antimony	6303510	6303510	0.003	0.004	NA	< 0.003	100%	70%	130%	101%	80%	120%	104%	70%	130%
Total Arsenic	6303510	6303510	<0.003	<0.003	NA	< 0.003	93%	70%	130%	99%	80%	120%	100%	70%	130%
Total Barium	6303510	6303510	0.023	0.026	12.2%	< 0.002	100%	70%	130%	97%	80%	120%	100%	70%	130%
Total Beryllium	6303510	6303510	<0.001	<0.001	NA	< 0.001	104%	70%	130%	104%	80%	120%	97%	70%	130%
Total Bismuth	6303510	6303510	<0.002	<0.002	NA	< 0.002	99%	70%	130%	98%	80%	120%	95%	70%	130%
Total Boron	6303510	6303510	0.040	0.045	NA	0.011	105%	70%	130%	119%	80%	120%	105%	70%	130%
Total Cadmium	6303510	6303510	<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	99%	80%	120%	96%	70%	130%
Total Calcium	6303510	6303510	123	143	15.0%	< 0.20	87%	70%	130%	104%	80%	120%	NA	70%	130%
Total Chromium	6303510	6303510	<0.003	<0.003	NA	< 0.003	98%	70%	130%	100%	80%	120%	97%	70%	130%
Total Cobalt	6303510	6303510	<0.0005	<0.0005	NA	< 0.0005	87%	70%	130%	111%	80%	120%	97%	70%	130%
Total Copper	6303510	6303510	0.033	0.036	8.7%	< 0.002	96%	70%	130%	96%	80%	120%	95%	70%	130%
Total Iron	6303510	6303510	<0.050	<0.050	NA	< 0.050	81%	70%	130%	101%	80%	120%	88%	70%	130%
Total Lead	6303510	6303510	<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	95%	80%	120%	91%	70%	130%
Total Magnesium	6303510	6303510	3.73	4.33	14.9%	< 0.10	89%	70%	130%	85%	80%	120%	84%	70%	130%
Total Molybdenum	6303510	6303510	0.115	0.119	3.4%	< 0.002	106%	70%	130%	103%	80%	120%	100%	70%	130%
Total Nickel	6303510	6303510	<0.003	<0.003	NA	< 0.003	82%	70%	130%	107%	80%	120%	92%	70%	130%
Total Phosphorus	6303510	6303510	<0.10	<0.10	NA	< 0.10	90%	70%	130%	102%	80%	120%	103%	70%	130%
Total Potassium	6303510	6303510	2.09	2.50	NA	< 0.50	121%	70%	130%	119%	80%	120%	NA	70%	130%
Total Selenium	6303510	6303510	<0.002	<0.002	NA	< 0.002	93%	70%	130%	91%	80%	120%	93%	70%	130%
Total Silver	6303510	6303510	<0.0001	<0.0001	NA	< 0.0001	78%	70%	130%	88%	80%	120%	94%	70%	130%
Total Sodium	6303510	6303510	2.68	2.67	0.4%	< 0.10	113%	70%	130%	118%	80%	120%	121%	70%	130%
Total Strontium	6303510	6303510	1.27	1.46	13.9%	< 0.005	109%	70%	130%	113%	80%	120%	NA	70%	130%
Total Thallium	6303510	6303510	<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	100%	80%	120%	98%	70%	130%
Total Tin	6303510	6303510	<0.002	<0.002	NA	< 0.002	105%	70%	130%	102%	80%	120%	104%	70%	130%
Total Titanium	6303510	6303510	<0.010	<0.010	NA	< 0.010	81%	70%	130%	115%	80%	120%	114%	70%	130%
Total Uranium	6303510	6303510	0.0009	0.0008	NA	< 0.0005	82%	70%	130%	94%	80%	120%	97%	70%	130%
Total Vanadium	6303510	6303510	0.002	<0.002	NA	< 0.002	93%	70%	130%	112%	80%	120%	98%	70%	130%
Total Zinc	6303510	6303510	<0.020	<0.020	NA	< 0.020	100%	70%	130%	111%	80%	120%	104%	70%	130%
Dissolved Aluminum	6303510	6303510	0.017	0.020	NA	< 0.004	106%	70%	130%	112%	80%	120%	109%	70%	130%
Dissolved Antimony	6303510	6303510	0.003	0.004	NA	< 0.001	102%	70%	130%	105%	80%	120%	106%	70%	130%
Dissolved Arsenic	6303510	6303510	0.002	0.002	NA	< 0.001	96%	70%	130%	105%	80%	120%	109%	70%	130%
Dissolved Barium	6303510	6303510	0.020	0.020	0.0%	< 0.002	100%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Beryllium	6303510	6303510	<0.0005	<0.0005	NA	< 0.0005	106%	70%	130%	113%	80%	120%	110%	70%	130%
Dissolved Bismuth	6303510	6303510	<0.002	<0.002	NA	< 0.002	101%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Boron	6303510	6303510	0.040	0.045	NA	< 0.010	110%	70%	130%	117%	80%	120%	120%	70%	130%
Dissolved Cadmium	6303510	6303510	<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	103%	80%	120%	105%	70%	130%
Dissolved Calcium	6303510	6303510	93.2	96.0	3.0%	< 0.05	94%	70%	130%	98%	80%	120%	96%	70%	130%
Dissolved Chromium	6303510	6303510	<0.002	<0.002	NA	< 0.002	94%	70%	130%	101%	80%	120%	100%	70%	130%
Dissolved Cobalt	6303510	6303510	<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	101%	80%	120%	101%	70%	130%
Dissolved Copper	6303510	6303510	0.036	0.039	8.0%	< 0.001	98%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Iron	6303510	6303510	<0.010	<0.010	NA	< 0.010	98%	70%	130%	104%	80%	120%	104%	70%	130%
Dissolved Lead	6303510	6303510	<0.0005	<0.0005	NA	< 0.0005	94%	70%	130%	96%	80%	120%	95%	70%	130%
Dissolved Magnesium	6303510	6303510	4.52	4.58	1.3%	< 0.05	102%	70%	130%	101%	80%	120%	102%	70%	130%
Dissolved Manganese	6303510	6303510	0.002	0.003	NA	< 0.002	97%	70%	130%	104%	80%	120%	98%	70%	130%
Dissolved Molybdenum	6303510	6303510	0.131	0.136	3.7%	< 0.002	98%	70%	130%	106%	80%	120%	106%	70%	130%
Dissolved Nickel	6303510	6303510	<0.001	0.003	NA	< 0.001	93%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Phosphorus	6303510	6303510	<0.05	<0.05	NA	< 0.05	86%	70%	130%	110%	80%	120%	104%	70%	130%
Dissolved Potassium	6303510	6303510	1.09	1.12	NA	< 0.50	97%	70%	130%	105%	80%	120%	102%	70%	130%
Dissolved Selenium	6303510	6303510	<0.001	<0.001	NA	< 0.001	98%	70%	130%	107%	80%	120%	106%	70%	130%
Dissolved Silver	6303510	6303510	<0.0001	<0.0001	NA	< 0.0001	97%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Sodium	6303510	6303510	1.62	1.69	4.2%	< 0.05	105%	70%	130%	109%	80%	120%	106%	70%	130%
Dissolved Strontium	6303510	6303510	1.31	1.40	6.6%	< 0.005	104%	70%	130%	110%	80%	120%	112%	70%	130%
Dissolved Thallium	6303510	6303510	<0.0003	<0.0003	NA	< 0.0003	104%	70%	130%	105%	80%	120%	104%	70%	130%
Dissolved Tin	6303510	6303510	<0.002	<0.002	NA	< 0.002	105%	70%	130%	109%	80%	120%	108%	70%	130%
Dissolved Titanium	6303510	6303510	<0.003	<0.003	NA	< 0.002	87%	70%	130%	99%	80%	120%	90%	70%	130%
Dissolved Uranium	6303510	6303510	0.0008	0.0008	NA	< 0.0005	101%	70%	130%	105%	80%	120%	105%	70%	130%
Dissolved Vanadium	6303510	6303510	<0.002	<0.002	NA	< 0.002	94%	70%	130%	101%	80%	120%	101%	70%	130%
Dissolved Zinc	6303510	6303510	0.007	0.006	NA	< 0.005	99%	70%	130%	112%	80%	120%	112%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 25T316735
PROJECT: 2025 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - Division Regionale
ATTENTION TO: Brianna Cibirka
DATE RECEIVED: Jul 03, 2025
DATE SAMPLED: 2025-07-02 12:50
DATE REPORTED: Jul 15, 2025

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		(Water) Inorganic Chemistry
X02	Water		Dissolved Metals in Water (mg/L)
X03	Water		Total Metals in Water (mg/L)

(Water) Inorganic Chemistry

Sample Description				FB-1	FB-2	FB-3		FB-4		FB-5	FB-6	FB-6 DUP	FB-Blank
Date Sampled				2025-07-02	2025-07-02	2025-07-02 13:10		2025-07-02 13:20		2025-07-02	2025-07-02	2025-07-02	2025-07-02 14:00
Parameter	**Unit**	**G / S**	**RDL**	**6860314**	**6860323**	**6860324**	**RDL**	**6860325**	**RDL**	**6860326**	**6860327**	**6860328**	**6860329**
pH	pH Units		NA	6.73	6.67	6.68	NA	6.45	NA	6.72	6.74	6.86	6.27
Alkalinity (as CaCO3)	mg/L		5	68	64	73	5	35	5	64	76	75	<5
Electrical Conductivity	µS/cm		2	332	185	137	2	1060	2	109	329	322	8
Dissolved Organic Carbon	mg/L		0.5	1.5	1.2	1.1	0.5	1.8	0.5	2.1	2.1	2.2	1.5
Total Phosphorus	mg/L		0.02	<0.02	<0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02	<0.02	<0.02
Chloride	mg/L		0.10	1.66	0.74	0.34	0.24	<0.24	0.10	0.32	0.37	0.37	<0.10
Fluoride	mg/L		0.05	<0.05	0.15	<0.05	0.05	<0.05	0.05	0.11	<0.05	<0.05	<0.05
Sulphate	mg/L		0.10	167	60.7	28.7	0.19	761	0.10	10.7	146	149	<0.10

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6860314-6860327 Dilution required, RDL has been increased accordingly.

Dissolved Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6	FB-6 DUP		FB-Blank
Date Sampled				2025-07-02 12:50		2025-07-02 13:00		2025-07-02	2025-07-02	2025-07-02	2025-07-02	2025-07-02 13:40		2025-07-02 14:00
Parameter	Unit	G / S	RDL	6860314	RDL	6860323	RDL	6860324	6860325	6860326	6860327	6860328	RDL	6860329
Dissolved Calcium	mg/L		0.05	74.9	0.05	34.1	0.05	26.3	285	19.6	44.6	48.3	0.05	0.68
Dissolved Magnesium	mg/L		0.05	2.77	0.05	3.97	0.05	2.73	2.13	2.49	14.7	15.6	0.05	<0.05
Dissolved Potassium	mg/L		0.50	1.39	0.50	1.44	0.50	0.77	1.25	1.11	12.9	13.5	0.50	<0.50
Dissolved Sodium	mg/L		0.05	1.33	0.05	1.06	0.05	0.92	1.16	1.19	0.96	1.06	0.05	0.06
Dissolved Aluminum	mg/L		0.004	0.070	0.004	0.071	0.004	0.098	0.049	0.066	0.010	0.031	0.004	<0.004
Dissolved Antimony	mg/L		0.001	0.004	0.001	0.034	0.001	0.010	0.006	0.005	0.002	0.002	0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.003	0.001	0.024	0.001	0.029	0.007	0.012	0.003	0.004	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.030	0.002	0.055	0.002	0.021	0.029	0.019	0.057	0.058	0.002	<0.002
Dissolved Beryllium	mg/L		0.0040	<0.0040	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.036	0.010	0.022	0.010	0.023	0.042	0.019	<0.010	<0.010	0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	0.006	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0010	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.011	0.001	0.017	0.001	0.008	0.011	0.075	0.284	0.282	0.001	0.131
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	<0.020	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	<0.002	0.002	0.004	0.002	<0.002	0.008	0.002	0.002	0.002	0.002	0.003
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.099	0.010	3.46	0.002	0.152	0.193	0.107	0.023	0.025	0.002	<0.002
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	0.004	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.003	0.001	0.001	<0.001	0.002	0.002	0.002	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	0.919	0.005	1.43	0.005	0.460	2.19	0.193	0.730	0.702	0.005	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0005	0.0005	0.0022	0.0005	<0.0005	0.0006	0.0006	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.005	<0.002	0.015	<0.002	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.009	0.005	0.010	0.005	<0.005	0.012	0.008	0.025	0.024	0.005	0.019

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6860314-6860328 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

6860329 Metals analysis completed on a filtered sample.

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2		FB-3	FB-4	FB-5	FB-6	FB-6 DUP	FB-Blank
Date Sampled				2025-07-02 12:50		2025-07-02 13:00		2025-07-02	2025-07-02	2025-07-02	2025-07-02	2025-07-02	2025-07-02 14:00
Parameter	Unit	G / S	RDL	6860314	RDL	6860323	RDL	6860324	6860325	6860326	6860327	6860328	6860329
Total Calcium	mg/L		0.20	67.7	0.20	31.8	0.20	26.5	258	18.8	43.7	45.2	0.70
Total Magnesium	mg/L		0.10	3.21	0.10	3.96	0.10	2.89	2.39	2.94	16.2	16.1	<0.10
Total Potassium	mg/L		0.50	1.44	0.50	1.57	0.50	0.81	1.26	1.17	15.2	15.8	<0.50
Total Sodium	mg/L		0.10	1.43	0.10	1.05	0.10	1.01	1.19	1.23	1.01	1.07	<0.10
Total Aluminum	mg/L		0.010	0.135	0.010	0.086	0.010	0.089	0.058	0.063	0.057	0.038	<0.010
Total Antimony	mg/L		0.003	0.004	0.003	0.032	0.003	0.009	0.005	0.005	<0.003	<0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	0.003	0.022	0.003	0.029	0.008	0.012	0.003	<0.003	<0.003
Total Barium	mg/L		0.002	0.032	0.002	0.061	0.002	0.023	0.032	0.022	0.063	0.062	0.002
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.034	0.010	0.020	0.010	0.024	0.037	0.017	<0.010	<0.010	<0.010
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Chromium	mg/L		0.003	0.004	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0013	<0.0005	<0.0005	<0.0005	<0.0005
Total Copper	mg/L		0.002	0.014	0.002	0.023	0.002	0.010	0.014	0.092	0.328	0.323	0.188
Total Iron	mg/L		0.050	0.081	0.050	<0.050	0.050	<0.050	0.070	<0.050	0.051	<0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Manganese	mg/L		0.002	0.003	0.002	0.003	0.002	<0.002	0.014	0.003	0.003	0.003	0.003
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.094	0.010	3.67	0.002	0.138	0.179	0.103	0.022	0.023	<0.002
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	0.004	<0.003
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.005	<0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Strontium	mg/L		0.005	0.932	0.005	1.43	0.005	0.489	2.33	0.190	0.711	0.717	<0.005
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	0.0006	0.0005	0.0023	0.0005	<0.0005	0.0006	0.0007	<0.0005	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	0.003	0.002	<0.002	0.002	0.006	<0.002	0.016	<0.002	<0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	<0.020	0.024	0.027	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6860314-6860327 Dilution required, RDL has been increased accordingly.

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Dissolved Metals in Water (mg/L)															
Dissolved Calcium	6860314	6860314	74.9	72.6	3.1%	< 0.05	96%	70%	130%	96%	80%	120%	88%	70%	130%
Dissolved Magnesium	6860314	6860314	2.77	2.96	6.5%	< 0.05	107%	70%	130%	95%	80%	120%	95%	70%	130%
Dissolved Potassium	6860314	6860314	1.39	1.44	NA	< 0.50	103%	70%	130%	92%	80%	120%	98%	70%	130%
Dissolved Sodium	6860314	6860314	1.33	1.33	0.4%	< 0.05	96%	70%	130%	95%	80%	120%	91%	70%	130%
Dissolved Aluminum	6860314	6860314	0.070	0.084	18.5%	< 0.004	101%	70%	130%	106%	80%	120%	102%	70%	130%
Dissolved Antimony	6860314	6860314	0.004	0.004	NA	< 0.001	100%	70%	130%	98%	80%	120%	102%	70%	130%
Dissolved Arsenic	6860314	6860314	0.003	0.002	NA	< 0.001	101%	70%	130%	98%	80%	120%	107%	70%	130%
Dissolved Barium	6860314	6860314	0.030	0.036	18.8%	< 0.002	99%	70%	130%	93%	80%	120%	94%	70%	130%
Dissolved Beryllium	6860314	6860314	<0.0040	<0.0040	NA	< 0.0005	98%	70%	130%	98%	80%	120%	102%	70%	130%
Dissolved Bismuth	6860314	6860314	<0.002	<0.002	NA	< 0.002	92%	70%	130%	89%	80%	120%	95%	70%	130%
Dissolved Boron	6860314	6860314	0.036	0.037	NA	< 0.010	98%	70%	130%	95%	80%	120%	94%	70%	130%
Dissolved Cadmium	6860314	6860314	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	98%	80%	120%	100%	70%	130%
Dissolved Chromium	6860314	6860314	<0.002	<0.002	NA	< 0.002	95%	70%	130%	93%	80%	120%	92%	70%	130%
Dissolved Cobalt	6860314	6860314	<0.0005	<0.0005	NA	< 0.0005	92%	70%	130%	91%	80%	120%	91%	70%	130%
Dissolved Copper	6860314	6860314	0.011	0.011	5.1%	< 0.001	96%	70%	130%	91%	80%	120%	92%	70%	130%
Dissolved Iron	6860314	6860314	<0.020	0.037	NA	< 0.010	93%	70%	130%	94%	80%	120%	91%	70%	130%
Dissolved Lead	6860314	6860314	<0.0005	<0.0005	NA	< 0.0005	97%	70%	130%	93%	80%	120%	94%	70%	130%
Dissolved Manganese	6860314	6860314	<0.002	0.003	NA	< 0.002	93%	70%	130%	91%	80%	120%	91%	70%	130%
Dissolved Mercury	6860314	6860314	<0.0001	<0.0001	NA	< 0.0001	105%	70%	130%	96%	80%	120%	104%	70%	130%
Dissolved Molybdenum	6860314	6860314	0.099	0.101	2.1%	< 0.002	98%	70%	130%	102%	80%	120%	107%	70%	130%
Dissolved Nickel	6860314	6860314	<0.001	0.008	NA	< 0.001	93%	70%	130%	91%	80%	120%	92%	70%	130%
Dissolved Phosphorus	6860314	6860314	<0.05	<0.05	NA	< 0.05	109%	70%	130%	112%	80%	120%	84%	70%	130%
Dissolved Selenium	6860314	6860314	<0.001	<0.001	NA	< 0.001	99%	70%	130%	101%	80%	120%	107%	70%	130%
Dissolved Silver	6860314	6860314	<0.0001	<0.0001	NA	< 0.0001	104%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Strontium	6860314	6860314	0.919	0.964	4.7%	< 0.005	98%	70%	130%	95%	80%	120%	NA	70%	130%
Dissolved Thallium	6860314	6860314	<0.0003	<0.0003	NA	< 0.0003	98%	70%	130%	93%	80%	120%	95%	70%	130%
Dissolved Tin	6860314	6860314	<0.002	<0.002	NA	< 0.002	95%	70%	130%	90%	80%	120%	93%	70%	130%
Dissolved Titanium	6860314	6860314	<0.003	<0.003	NA	< 0.002	96%	70%	130%	100%	80%	120%	101%	70%	130%
Dissolved Uranium	6860314	6860314	0.0005	0.0006	NA	< 0.0005	90%	70%	130%	88%	80%	120%	93%	70%	130%
Dissolved Vanadium	6860314	6860314	0.002	0.002	NA	< 0.002	94%	70%	130%	95%	80%	120%	96%	70%	130%
Dissolved Zinc	6860314	6860314	0.009	0.020	NA	< 0.005	98%	70%	130%	96%	80%	120%	94%	70%	130%
Total Metals in Water (mg/L)															
Total Calcium	6859031		93.0	90.2	3%	< 0.20	88%	70%	130%	87%	80%	120%	86%	70%	130%
Total Magnesium	6859031		23.8	24.6	3.1%	< 0.10	99%	70%	130%	97%	80%	120%	97%	70%	130%
Total Potassium	6859031		5.22	5.59	6.9%	< 0.50	102%	70%	130%	103%	80%	120%	106%	70%	130%
Total Sodium	6859031		55.7	55.7	0%	< 0.10	101%	70%	130%	99%	80%	120%	98%	70%	130%
Total Aluminum	6859031		0.029	0.031	NA	< 0.010	96%	70%	130%	89%	80%	120%	109%	70%	130%
Total Antimony	6859031		<0.003	<0.003	NA	< 0.003	94%	70%	130%	92%	80%	120%	94%	70%	130%
Total Arsenic	6859031		0.003	<0.003	NA	< 0.003	103%	70%	130%	98%	80%	120%	105%	70%	130%
Total Barium	6859031		0.076	0.076	1%	< 0.002	109%	70%	130%	106%	80%	120%	107%	70%	130%
Total Beryllium	6859031		<0.001	<0.001	NA	< 0.001	90%	70%	130%	86%	80%	120%	89%	70%	130%
Total Bismuth	6859031		<0.002	<0.002	NA	< 0.002	107%	70%	130%	98%	80%	120%	101%	70%	130%
Total Boron	6859031		0.057	0.056	1.4%	< 0.010	92%	70%	130%	88%	80%	120%	88%	70%	130%
Total Cadmium	6859031		<0.0001	<0.0001	NA	< 0.0001	104%	70%	130%	101%	80%	120%	102%	70%	130%
Total Chromium	6859031		<0.003	<0.003	NA	< 0.003	99%	70%	130%	100%	80%	120%	107%	70%	130%
Total Cobalt	6859031		<0.0005	<0.0005	NA	< 0.0005	96%	70%	130%	94%	80%	120%	103%	70%	130%
Total Copper	6859031		0.005	0.004	NA	< 0.002	100%	70%	130%	97%	80%	120%	101%	70%	130%
Total Iron	6859031		0.066	0.061	NA	< 0.050	98%	70%	130%	97%	80%	120%	103%	70%	130%
Total Lead	6859031		<0.0005	<0.0005	NA	< 0.0005	103%	70%	130%	96%	80%	120%	99%	70%	130%
Total Manganese	6859031		0.009	0.008	NA	< 0.002	93%	70%	130%	93%	80%	120%	99%	70%	130%
Total Mercury	6860314	6860314	<0.0001	<0.0001	NA	< 0.0001	105%	70%	130%	96%	80%	120%	102%	70%	130%
Total Molybdenum	6859031		0.003	0.003	NA	< 0.002	92%	70%	130%	95%	80%	120%	94%	70%	130%
Total Nickel	6859031		<0.003	<0.003	NA	< 0.003	98%	70%	130%	95%	80%	120%	106%	70%	130%
Total Selenium	6859031		<0.002	<0.002	NA	< 0.002	111%	70%	130%	103%	80%	120%	107%	70%	130%
Total Silver	6859031		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	95%	80%	120%	101%	70%	130%
Total Strontium	6859031		0.531	0.524	1.4%	< 0.005	96%	70%	130%	95%	80%	120%	95%	70%	130%
Total Thallium	6859031		<0.0003	<0.0003	NA	< 0.0003	106%	70%	130%	100%	80%	120%	102%	70%	130%
Total Tin	6859031		<0.002	<0.002	NA	< 0.002	103%	70%	130%	103%	80%	120%	104%	70%	130%
Total Titanium	6859031		<0.010	<0.010	NA	< 0.010	97%	70%	130%	95%	80%	120%	98%	70%	130%
Total Uranium	6859031		0.0010	0.0010	NA	< 0.0005	103%	70%	130%	98%	80%	120%	103%	70%	130%
Total Vanadium	6859031		<0.002	<0.002	NA	< 0.002	101%	70%	130%	102%	80%	120%	113%	70%	130%
Total Zinc	6859031		<0.020	<0.020	NA	< 0.020	99%	70%	130%	93%	80%	120%	106%	70%	130%
(Water) Inorganic Chemistry															
pH	6862210		7.56	7.52	0.5%	NA	99%	90%	110%						
Alkalinity (as CaCO3)	6862210		486	492	1.2%	< 5	101%	80%	120%						
Electrical Conductivity	6862210		1280	1290	0.8%	< 2	96%	90%	110%						
Dissolved Organic Carbon	6860314	6860314	1.5	1.5	NA	< 0.5	96%	90%	110%	100%	90%	110%	91%	80%	120%
Total Phosphorus	6842603		0.14	0.14	0.0%	< 0.02	96%	70%	130%	99%	80%	120%	NA	70%	130%
Chloride	6858750		201	198	1.5%	< 0.10	93%	70%	130%	102%	80%	120%	NA	70%	130%
Fluoride	6858750		<0.05	<0.05	NA	< 0.05	102%	70%	130%	102%	80%	120%	99%	70%	130%
Sulphate	6858750		177	175	1.1%	< 0.10	100%	70%	130%	100%	80%	120%	NA	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 25T332989
PROJECT: 2025 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - Division Regionale
ATTENTION TO: Brianna Cibirka
DATE RECEIVED: Aug 14, 2025
DATE SAMPLED: 2025-08-12 09:05
DATE REPORTED: Aug 28, 2025

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Upper Beaver - Leachate

Upper Beaver - Leachate																
Sample Description				**FB-1**	**FB-1 DUP**		**FB-2**		**FB-3**		**FB-4**		**FB-5**	**FB-6**		**FB-BLANK**
Date Sampled				**2025-08-12 09:05**	**2025-08-12 09:05**		**2025-08-12 09:20**		**2025-08-12 09:30**		**2025-08-12 09:40**		**2025-08-12 09:50**	**2025-08-12 10:00**		**2025-08-12 10:10**
Parameter	**Unit**	**G / S**	**RDL**	**6967189**	**6967190**	**RDL**	**6967191**	**RDL**	**6967192**	**RDL**	**6967193**	**RDL**	**6967194**	**6967195**	**RDL**	**6967196**
pH	pH Units		NA	6.59	6.54	NA	6.56	NA	6.56	NA	6.36	NA	6.67	6.63	NA	5.81
Alkalinity (as CaCO3)	mg/L		5	71	65	5	74	5	67	5	37	5	67	72	5	<5
Electrical Conductivity	µS/cm		2	371	371	2	183	2	155	2	1000	2	118	268	2	6
Chloride	mg/L		0.10	0.58	0.33	0.10	1.00	0.10	0.30	0.12	<0.12	0.10	0.28	0.38	0.10	<0.10
Fluoride	mg/L		0.05	<0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.11	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	184	182	0.10	59.2	0.10	40.5	0.19	744	0.10	13.2	109	0.10	<0.10
Dissolved Organic Carbon	mg/L		0.5	1.2	2.0	0.5	1.2	0.5	0.9	0.5	1.4	0.5	1.5	2.1	0.5	2.2
Total Phosphorus	mg/L		0.02	<0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02	0.02	<0.02
Total Calcium	mg/L		0.20	82.1	82.0	0.20	25.6	0.20	25.5	0.20	248	0.20	15.4	37.0	0.20	0.56
Total Magnesium	mg/L		0.10	3.51	3.34	0.10	3.21	0.10	2.27	0.10	2.00	0.10	2.37	11.3	0.10	<0.10
Total Potassium	mg/L		0.50	1.49	2.38	0.50	1.36	0.50	0.64	0.50	0.89	0.50	1.21	13.0	0.50	<0.50
Total Sodium	mg/L		0.10	1.50	1.54	0.10	0.73	0.10	1.06	0.10	1.28	0.10	1.46	1.04	0.10	<0.10
Total Aluminum	mg/L		0.010	<0.010	0.028	0.010	0.046	0.010	0.047	0.010	0.055	0.010	0.079	0.018	0.010	<0.010
Total Antimony	mg/L		0.003	0.006	0.006	0.003	0.038	0.003	0.012	0.003	0.007	0.003	0.007	<0.003	0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	<0.003	0.003	0.020	0.003	0.031	0.003	0.009	0.003	0.012	<0.003	0.003	<0.003
Total Barium	mg/L		0.002	0.036	0.038	0.002	0.064	0.002	0.027	0.002	0.032	0.002	0.023	0.070	0.002	0.002
Total Beryllium	mg/L		0.001	<0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Boron	mg/L		0.010	0.044	0.040	0.010	0.019	0.010	0.022	0.010	0.049	0.010	0.021	<0.010	0.010	<0.010
Total Cadmium	mg/L		0.0001	<0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	0.004	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Total Copper	mg/L		0.002	0.005	0.007	0.002	0.014	0.002	0.007	0.002	0.011	0.002	0.030	0.462	0.002	0.144
Total Iron	mg/L		0.050	<0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Total Manganese	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Mercury	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.158	0.158	0.02	3.91	0.002	0.248	0.002	0.257	0.002	0.175	0.032	0.002	<0.002
Total Nickel	mg/L		0.003	0.015	<0.003	0.003	<0.003	0.003	<0.003	0.003	0.004	0.003	<0.003	<0.003	0.003	<0.003
Total Selenium	mg/L		0.002	<0.002	<0.002	0.002	0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Total Strontium	mg/L		0.005	1.26	1.25	0.005	1.77	0.005	0.549	0.005	2.84	0.005	0.254	0.720	0.005	<0.005
Total Thallium	mg/L		0.0003	<0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	<0.010
Total Uranium	mg/L		0.0005	0.0006	0.0006	0.0005	0.0020	0.0005	<0.0005	0.0005	0.0006	0.0005	0.0007	<0.0005	0.0005	<0.0005
Total Vanadium	mg/L		0.002	0.004	<0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	0.002	0.018	<0.002	0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	<0.020	0.020	0.023	0.020	<0.020	0.020	0.025	0.020	<0.020	<0.020	0.020	0.075
Dissolved Calcium	mg/L		0.05	78.5	78.6	0.05	29.3	0.05	24.6	0.05	261	0.05	16.1	31.6	0.05	0.50
Dissolved Magnesium	mg/L		0.05	3.19	3.20	0.05	4.47	0.05	2.83	0.05	2.04	0.05	3.07	13.7	0.05	<0.05
Dissolved Potassium	mg/L		0.50	1.29	2.20	0.50	1.28	0.50	2.21	0.50	1.73	0.50	0.71	13.0	0.50	<0.50
Dissolved Sodium	mg/L		0.05	1.37	1.44	0.05	1.09	0.05	1.40	0.05	1.87	0.05	1.33	1.16	0.05	0.07
Dissolved Aluminum	mg/L		0.004	0.096	0.103	0.004	0.053	0.004	0.115	0.004	0.035	0.004	0.018	0.052	0.004	<0.004
Dissolved Antimony	mg/L		0.001	0.005	0.006	0.001	0.036	0.001	0.011	0.001	0.007	0.001	0.006	0.003	0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.002	0.002	0.001	0.018	0.001	0.031	0.001	0.008	0.001	0.013	0.003	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.034	0.036	0.002	0.065	0.002	0.029	0.002	0.034	0.002	0.022	0.067	0.002	0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.035	0.042	0.010	0.023	0.010	0.022	0.010	0.047	0.010	0.018	0.010	0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.006	0.006	0.001	0.010	0.001	0.007	0.001	0.006	0.001	0.027	0.387	0.001	0.115
Dissolved Iron	mg/L		0.010	<0.010	<0.010	0.010	<0.010	0.010	0.013	0.010	0.038	0.010	<0.010	<0.010	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.004	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Mercury	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.138	0.139	0.04	3.91	0.002	0.238	0.002	0.237	0.002	0.150	0.031	0.002	<0.002
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.12	0.05	0.12	0.05	<0.05	0.05	0.13	0.05	0.13	<0.05	0.05	<0.05
Dissolved Selenium	mg/L		0.001	0.001	<0.001	0.001	0.004	0.001	0.003	0.001	<0.001	0.001	0.002	<0.001	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.03	0.968	0.005	1.38	0.005	0.450	0.005	2.14	0.005	0.170	0.548	0.005	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	0.0006	0.0006	0.0005	0.0023	0.0005	<0.0005	0.0005	0.0006	0.0005	0.0006	<0.0005	0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.005	0.002	<0.002	0.002	0.005	0.002	<0.002	0.002	0.013	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.006	<0.005	0.005	0.013	0.005	<0.005	0.005	0.021	0.005	0.007	0.015	0.005	0.088

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

6967191 Dilution required, RDL has been increased accordingly.

6967193 Dilution required, RDL has been increased accordingly.

6967196 Results for FB-Blank sample had been confirmed by re-analysis.

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Upper Beaver - Leachate															
pH	6967863		6.96	7.15	2.7%		100%	90%	110%						
Alkalinity (as CaCO3)	6967863		171	157	8.5%	< 5	101%	80%	120%						
Electrical Conductivity	6967863		233	231	0.9%	< 2	104%	90%	110%						
Chloride	6973394		1890	1890	0.0%	< 0.10	90%	70%	130%	98%	80%	120%	NA	70%	130%
Fluoride	6973394		<0.13	<0.13	NA	< 0.05	100%	70%	130%	99%	80%	120%	97%	70%	130%
Sulphate	6973394		80.3	79.5	1.0%	< 0.10	97%	70%	130%	100%	80%	120%	98%	70%	130%
Dissolved Organic Carbon	6967080		15.6	16.2	3.8%	< 0.5	104%	90%	110%	101%	90%	110%	NA	80%	120%
Total Phosphorus	6968270		0.22	0.22	0.0%	< 0.02	94%	70%	130%	98%	80%	120%	NA	70%	130%
Total Calcium	6966609		71.1	67.5	5.2%	< 0.20	98%	70%	130%	98%	80%	120%	76%	70%	130%
Total Magnesium	6966609		11.8	12.0	1.7%	< 0.10	109%	70%	130%	96%	80%	120%	78%	70%	130%
Total Potassium	6966609		1.92	1.73	NA	< 0.50	94%	70%	130%	87%	80%	120%	88%	70%	130%
Total Sodium	6966609		114	102	11.1%	< 0.10	99%	70%	130%	98%	80%	120%	92%	70%	130%
Total Aluminum	6966609		0.028	0.026	NA	< 0.010	101%	70%	130%	105%	80%	120%	100%	70%	130%
Total Antimony	6966609		<0.003	<0.003	NA	< 0.003	101%	70%	130%	101%	80%	120%	103%	70%	130%
Total Arsenic	6966609		<0.003	<0.003	NA	< 0.003	99%	70%	130%	99%	80%	120%	102%	70%	130%
Total Barium	6966609		0.192	0.195	1.6%	< 0.002	102%	70%	130%	101%	80%	120%	101%	70%	130%
Total Beryllium	6966609		<0.001	<0.001	NA	< 0.001	100%	70%	130%	103%	80%	120%	103%	70%	130%
Total Bismuth	6966609		<0.002	<0.002	NA	< 0.002	94%	70%	130%	103%	80%	120%	96%	70%	130%
Total Boron	6966609		0.082	0.081	1.2%	< 0.010	99%	70%	130%	103%	80%	120%	99%	70%	130%
Total Cadmium	6966609		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	101%	80%	120%	100%	70%	130%
Total Chromium	6966609		<0.003	<0.003	NA	< 0.003	94%	70%	130%	104%	80%	120%	100%	70%	130%
Total Cobalt	6966609		<0.0005	<0.0005	NA	< 0.0005	87%	70%	130%	92%	80%	120%	100%	70%	130%
Total Copper	6966609		0.004	0.004	NA	< 0.002	97%	70%	130%	103%	80%	120%	97%	70%	130%
Total Iron	6966609		0.056	0.057	NA	< 0.050	94%	70%	130%	98%	80%	120%	108%	70%	130%
Total Lead	6966609		0.0029	0.0029	0.0%	< 0.0005	91%	70%	130%	102%	80%	120%	96%	70%	130%
Total Manganese	6966609		<0.002	<0.002	NA	< 0.002	92%	70%	130%	88%	80%	120%	103%	70%	130%
Total Mercury	6967189	6967189	<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	99%	80%	120%	104%	70%	130%
Total Molybdenum	6966609		<0.002	<0.002	NA	< 0.002	105%	70%	130%	104%	80%	120%	102%	70%	130%
Total Nickel	6966609		<0.003	<0.003	NA	< 0.003	90%	70%	130%	95%	80%	120%	98%	70%	130%
Total Selenium	6966609		<0.002	<0.002	NA	< 0.002	98%	70%	130%	97%	80%	120%	97%	70%	130%
Total Silver	6966609		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	106%	80%	120%	95%	70%	130%
Total Strontium	6966609		0.610	0.555	9.4%	< 0.005	100%	70%	130%	111%	80%	120%	112%	70%	130%
Total Thallium	6966609		<0.0003	<0.0003	NA	< 0.0003	95%	70%	130%	104%	80%	120%	93%	70%	130%
Total Tin	6966609		<0.002	<0.002	NA	< 0.002	100%	70%	130%	101%	80%	120%	99%	70%	130%
Total Titanium	6966609		<0.010	<0.010	NA	< 0.010	85%	70%	130%	103%	80%	120%	114%	70%	130%
Total Uranium	6966609		<0.0005	<0.0005	NA	< 0.0005	94%	70%	130%	119%	80%	120%	NA	70%	130%
Total Vanadium	6966609		<0.002	<0.002	NA	< 0.002	89%	70%	130%	93%	80%	120%	99%	70%	130%
Total Zinc	6966609		<0.020	0.024	NA	< 0.020	102%	70%	130%	97%	80%	120%	95%	70%	130%
Dissolved Calcium	6967189	6967189	74.6	73.8	1.1%	< 0.05	100%	70%	130%	80%	80%	120%	NA	70%	130%
Dissolved Magnesium	6967189	6967189	3.01	3.32	9.8%	< 0.05	108%	70%	130%	100%	80%	120%	112%	70%	130%
Dissolved Potassium	6967189	6967189	<0.50	0.96	NA	< 0.50	115%	70%	130%	108%	80%	120%	108%	70%	130%
Dissolved Sodium	6967189	6967189	1.67	1.88	11.8%	< 0.05	114%	70%	130%	104%	80%	120%	113%	70%	130%
Dissolved Aluminum	6967189	6967189	0.096	0.086	11.0%	< 0.004	77%	70%	130%	89%	80%	120%	93%	70%	130%
Dissolved Antimony	6967189	6967189	0.005	0.005	0.0%	< 0.001	99%	70%	130%	100%	80%	120%	106%	70%	130%
Dissolved Arsenic	6967189	6967189	0.002	0.002	NA	< 0.001	96%	70%	130%	95%	80%	120%	101%	70%	130%
Dissolved Barium	6967189	6967189	0.034	0.034	1.0%	< 0.002	103%	70%	130%	103%	80%	120%	116%	70%	130%
Dissolved Beryllium	6967189	6967189	<0.0005	<0.0005	NA	< 0.0005	101%	70%	130%	95%	80%	120%	103%	70%	130%
Dissolved Bismuth	6967189	6967189	<0.002	<0.002	NA	< 0.002	98%	70%	130%	93%	80%	120%	102%	70%	130%
Dissolved Boron	6967189	6967189	0.035	0.044	NA	< 0.010	99%	70%	130%	99%	80%	120%	108%	70%	130%
Dissolved Cadmium	6967189	6967189	<0.0001	0.0002	NA	< 0.0001	100%	70%	130%	99%	80%	120%	105%	70%	130%
Dissolved Chromium	6967189	6967189	<0.002	<0.002	NA	< 0.002	91%	70%	130%	90%	80%	120%	89%	70%	130%
Dissolved Cobalt	6967189	6967189	<0.0005	<0.0005	NA	< 0.0005	90%	70%	130%	92%	80%	120%	88%	70%	130%
Dissolved Copper	6967189	6967189	0.006	0.005	9.6%	< 0.001	94%	70%	130%	99%	80%	120%	92%	70%	130%
Dissolved Iron	6967189	6967189	<0.010	<0.010	NA	< 0.010	98%	70%	130%	101%	80%	120%	89%	70%	130%
Dissolved Lead	6967189	6967189	<0.0005	<0.0005	NA	< 0.0005	95%	70%	130%	98%	80%	120%	99%	70%	130%
Dissolved Manganese	6967189	6967189	<0.002	<0.002	NA	< 0.002	88%	70%	130%	90%	80%	120%	85%	70%	130%
Dissolved Mercury	6967499		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	99%	80%	120%	103%	70%	130%
Dissolved Molybdenum	6967189	6967189	0.138	0.138	0.7%	< 0.002	100%	70%	130%	102%	80%	120%	109%	70%	130%
Dissolved Nickel	6967189	6967189	<0.001	0.008	NA	< 0.001	90%	70%	130%	86%	80%	120%	86%	70%	130%
Dissolved Phosphorus	6967189	6967189	<0.05	<0.05	NA	< 0.05	104%	70%	130%	93%	80%	120%	121%	70%	130%
Dissolved Selenium	6967189	6967189	0.001	<0.001	NA	< 0.001	100%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved Silver	6967189	6967189	<0.0001	<0.0001	NA	< 0.0001	105%	70%	130%	108%	80%	120%	105%	70%	130%
Dissolved Strontium	6967189	6967189	1.03	1.01	1.5%	< 0.005	96%	70%	130%	87%	80%	120%	NA	70%	130%
Dissolved Thallium	6967189	6967189	<0.0003	<0.0003	NA	< 0.0003	95%	70%	130%	96%	80%	120%	95%	70%	130%
Dissolved Tin	6967189	6967189	<0.002	<0.002	NA	< 0.002	103%	70%	130%	99%	80%	120%	108%	70%	130%
Dissolved Titanium	6967189	6967189	<0.003	<0.003	NA	< 0.002	116%	70%	130%	105%	80%	120%	92%	70%	130%
Dissolved Uranium	6967189	6967189	0.0006	0.0006	NA	< 0.0005	102%	70%	130%	99%	80%	120%	98%	70%	130%
Dissolved Vanadium	6967189	6967189	<0.002	0.003	NA	< 0.002	93%	70%	130%	90%	80%	120%	91%	70%	130%
Dissolved Zinc	6967189	6967189	0.006	0.007	NA	< 0.005	101%	70%	130%	89%	80%	120%	102%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 25T344242
PROJECT: 2025 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - Division Regionale
ATTENTION TO: Brianna Cibirka
DATE RECEIVED: Sep 12, 2025
DATE SAMPLED: 2025-09-11 09:30
DATE REPORTED: Sep 23, 2025

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Upper Beaver -Leachate

Upper Beaver -Leachate

Sample Description				FB-1		FB-2		FB-3		FB-4		FB-5		FB-6	FB-Blank
Date Sampled				2025-09-11 09:30		2025-09-11 09:40		2025-09-11 09:50		2025-09-11 10:00		2025-09-11 10:10		2025-09-11 10:20	2025-09-11 10:30
Parameter	**Unit**	**G / S**	**RDL**	**7052966**	**RDL**	**7052968**	**RDL**	**7052969**	**RDL**	**7052970**	**RDL**	**7052971**	**RDL**	**7052972**	**7052973**
pH	pH Units		NA	6.68	NA	6.64	NA	6.67	NA	6.45	NA	7.66	NA	6.63	6.03
Alkalinity (as CaCO3)	mg/L		5	82	5	85	5	84	5	43	5	96	5	83	<5
Electrical Conductivity	µS/cm		2	573	2	256	2	236	2	1340	2	160	2	379	7
Chloride	mg/L		0.10	1.09	0.10	0.46	0.10	0.32	0.12	0.72	0.10	0.41	0.10	0.31	0.12
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.12	0.05	<0.05	<0.05
Sulphate	mg/L		0.10	303	0.10	96.4	0.10	85.5	0.19	947	0.10	32.5	0.10	172	0.62
Dissolved Organic Carbon	mg/L		0.5	1.9	0.5	2.4	0.5	1.5	0.5	2.3	0.5	1.8	0.5	5.7	4.4
Total Phosphorus	mg/L		0.006	0.022	0.006	<0.006	0.006	0.006	0.016	0.135	0.008	<0.008	0.006	<0.006	<0.006
Total Calcium	mg/L		2.0	80.3	2.0	50.9	2.0	48.8	2.0	430	2.0	31.8	2.0	53.6	<2.0
Total Magnesium	mg/L		1.0	3.7	1.0	7.0	1.0	5.7	1.0	5.4	1.0	4.4	1.0	17.5	<1.0
Total Potassium	mg/L		5.0	<5	5.0	<5	5.0	<5	5.0	<5	5.0	<5	5.0	13.1	<5
Total Sodium	mg/L		1.0	1.1	1.0	1.1	1.0	1.3	1.0	2.0	1.0	1.4	1.0	<1.0	<1.0
Total Aluminum	mg/L		0.010	0.050	0.010	0.044	0.010	0.227	0.010	0.038	0.010	0.064	0.010	0.024	0.019
Total Antimony	mg/L		0.003	0.008	0.003	0.048	0.003	0.016	0.003	0.010	0.003	0.009	0.003	0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	0.003	0.017	0.003	0.032	0.003	0.008	0.003	0.012	0.003	<0.003	<0.003
Total Barium	mg/L		0.002	0.042	0.002	0.075	0.002	0.036	0.002	0.036	0.002	0.030	0.002	0.084	0.003
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.049	0.010	0.014	0.010	0.031	0.010	0.060	0.010	0.018	0.010	<0.010	<0.010
Total Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0002	0.0001	<0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0012	0.0005	0.0011	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Total Copper	mg/L		0.002	0.020	0.002	0.088	0.002	0.015	0.002	0.013	0.002	0.019	0.002	1.22	0.542
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	0.320	0.050	<0.050	0.050	<0.050	0.050	<0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Total Manganese	mg/L		0.002	<0.002	0.002	0.002	0.002	0.008	0.002	<0.002	0.002	<0.002	0.002	0.003	0.007
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.310	0.04	5.96	0.002	0.622	0.002	0.480	0.002	0.305	0.002	0.029	<0.002
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	0.003	<0.003
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Total Strontium	mg/L		0.005	1.67	0.005	1.96	0.005	0.759	0.005	3.35	0.005	0.285	0.005	0.775	<0.005
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	0.0010	0.0005	0.0027	0.0005	<0.0005	0.0005	0.0010	0.0005	0.0010	0.0005	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	0.002	0.016	0.002	<0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020
Dissolved Aluminum	mg/L		0.004	0.064	0.004	0.040	0.004	0.037	0.004	0.037	0.004	0.060	0.004	0.019	<0.004
Dissolved Antimony	mg/L		0.001	0.007	0.001	0.051	0.001	0.017	0.001	0.010	0.001	0.010	0.001	0.003	<0.001
Dissolved Arsenic	mg/L		0.001	0.002	0.001	0.014	0.001	0.030	0.001	0.008	0.001	0.010	0.001	0.002	<0.001
Dissolved Barium	mg/L		0.002	0.028	0.002	0.057	0.002	0.032	0.002	0.027	0.002	0.023	0.002	0.065	0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.042	0.010	0.011	0.010	0.026	0.010	0.057	0.010	0.012	0.010	<0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	0.0003	0.0001	0.0002	0.0001	0.0002	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Calcium	mg/L		0.05	149	0.05	54.5	0.05	57.4	0.5	454	0.05	35.1	0.05	65.1	0.683
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.003	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0011	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.017	0.001	0.081	0.001	0.010	0.001	0.012	0.001	0.017	0.001	1.12	<0.001
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	0.034	0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005
Dissolved Magnesium	mg/L		0.05	5.87	0.05	6.20	0.05	4.70	0.05	4.57	0.05	3.59	0.05	17.5	<0.05
Dissolved Manganese	mg/L		0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.003	<0.002
Dissolved Molybdenum	mg/L		0.002	0.270	0.04	6.00	0.002	0.668	0.002	0.428	0.002	0.262	0.002	0.027	<0.002
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	0.005	0.001	0.055	0.001	0.009	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.10	0.05	<0.05	0.05	<0.05	<0.05
Dissolved Potassium	mg/L		0.10	1.77	0.10	1.41	0.10	0.93	0.10	1.66	0.10	1.28	0.10	15.7	<0.10
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.001	0.001	0.001	0.001	<0.001	0.001	0.001	0.001	<0.001	<0.001
Dissolved Silver	mg/L		0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001
Dissolved Sodium	mg/L		0.05	1.78	0.05	0.96	0.05	1.24	0.05	1.71	0.05	1.23	0.05	0.93	<0.05
Dissolved Strontium	mg/L		0.005	1.54	0.005	1.91	0.005	0.779	0.005	3.13	0.005	0.258	0.005	0.772	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0009	0.0005	0.0026	0.0005	<0.0005	0.0005	0.0009	0.0005	0.0010	0.0005	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.004	0.002	<0.002	0.002	0.015	0.002	<0.002	<0.002
Dissolved Zinc	mg/L		0.005	0.007	0.005	0.007	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	0.005	<0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

7052966-7052973 Dilution required, RDL has been increased accordingly.

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Upper Beaver -Leachate															
pH	7054350		7.49	7.56	0.9%	NA	101%	90%	110%						
Alkalinity (as CaCO3)	7054350		324	320	1.2%	< 5	120%	80%	120%						
Electrical Conductivity	7054350		1350	1360	0.7%	< 2	104%	90%	110%						
Chloride	7052063		98.0	94.9	3.2%	< 0.10	99%	70%	130%	102%	80%	120%	99%	70%	130%
Fluoride	7052063		<0.05	<0.05	NA	< 0.05	108%	70%	130%	99%	80%	120%	93%	70%	130%
Sulphate	7052063		6.60	6.57	0.5%	< 0.10	100%	70%	130%	97%	80%	120%	94%	70%	130%
Dissolved Organic Carbon	7052966	7052966	1.9	2.1	NA	< 0.5	105%	90%	110%	102%	90%	110%	94%	80%	120%
Total Phosphorus	7048017		0.041	0.042	2.4%	< 0.006	96%	70%	130%	91%	80%	120%	100%	70%	130%
Total Calcium	7054753		61.9	61.6	0.5%	< 0.20	105%	70%	130%	101%	80%	120%	105%	70%	130%
Total Magnesium	7054753		22.7	22.7	0.0%	< 0.10	102%	70%	130%	99%	80%	120%	87%	70%	130%
Total Potassium	7054753		4.21	4.60	8.9%	< 0.50	101%	70%	130%	100%	80%	120%	102%	70%	130%
Total Sodium	7054753		45.7	45.6	0.2%	< 0.10	99%	70%	130%	99%	80%	120%	98%	70%	130%
Total Aluminum	7054753		0.107	0.101	5.8%	< 0.010	100%	70%	130%	102%	80%	120%	106%	70%	130%
Total Antimony	7054753		<0.003	<0.003	NA	< 0.003	101%	70%	130%	99%	80%	120%	103%	70%	130%
Total Arsenic	7054753		<0.003	<0.003	NA	< 0.003	103%	70%	130%	99%	80%	120%	103%	70%	130%
Total Barium	7054753		0.083	0.085	2.4%	< 0.002	103%	70%	130%	105%	80%	120%	111%	70%	130%
Total Beryllium	7054753		<0.001	<0.001	NA	< 0.001	99%	70%	130%	98%	80%	120%	99%	70%	130%
Total Bismuth	7054753		<0.002	<0.002	NA	< 0.002	99%	70%	130%	96%	80%	120%	97%	70%	130%
Total Boron	7054753		0.035	0.039	NA	< 0.010	98%	70%	130%	98%	80%	120%	100%	70%	130%
Total Cadmium	7054753		<0.0001	<0.0001	NA	< 0.0001	103%	70%	130%	101%	80%	120%	105%	70%	130%
Total Chromium	7054753		<0.003	<0.003	NA	< 0.003	100%	70%	130%	103%	80%	120%	107%	70%	130%
Total Cobalt	7054753		<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	103%	80%	120%	108%	70%	130%
Total Copper	7054753		0.004	0.004	NA	< 0.002	99%	70%	130%	100%	80%	120%	102%	70%	130%
Total Iron	7054753		0.237	0.238	NA	< 0.050	99%	70%	130%	104%	80%	120%	104%	70%	130%
Total Lead	7054753		<0.0005	<0.0005	NA	< 0.0005	96%	70%	130%	97%	80%	120%	100%	70%	130%
Total Manganese	7054753		0.008	0.008	NA	< 0.002	97%	70%	130%	102%	80%	120%	104%	70%	130%
Total Mercury	7052966	7052966	<0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Mercury	7031879		<0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	101%	80%	120%	97%	70%	130%
Total Molybdenum	7054753		0.002	<0.002	NA	< 0.002	102%	70%	130%	104%	80%	120%	108%	70%	130%
Total Nickel	7054753		<0.003	<0.003	NA	< 0.003	98%	70%	130%	101%	80%	120%	101%	70%	130%
Total Selenium	7054753		<0.002	<0.002	NA	< 0.002	117%	70%	130%	115%	80%	120%	118%	70%	130%
Total Silver	7054753		<0.0001	<0.0001	NA	< 0.0001	99%	70%	130%	97%	80%	120%	98%	70%	130%
Total Strontium	7054753		0.066	0.077	15.4%	< 0.005	98%	70%	130%	98%	80%	120%	112%	70%	130%
Total Thallium	7054753		<0.0003	<0.0003	NA	< 0.0003	97%	70%	130%	100%	80%	120%	102%	70%	130%
Total Tin	7054753		<0.002	<0.002	NA	< 0.002	102%	70%	130%	97%	80%	120%	100%	70%	130%
Total Titanium	7054753		<0.010	<0.010	NA	< 0.010	100%	70%	130%	96%	80%	120%	100%	70%	130%
Total Uranium	7054753		0.0011	0.0011	NA	< 0.0005	98%	70%	130%	100%	80%	120%	106%	70%	130%
Total Vanadium	7054753		<0.002	<0.002	NA	< 0.002	105%	70%	130%	106%	80%	120%	111%	70%	130%
Total Zinc	7054753		<0.020	<0.020	NA	< 0.020	101%	70%	130%	100%	80%	120%	102%	70%	130%
Dissolved Aluminum	7052966	7052966	0.064	0.035	58.6%	< 0.004	97%	70%	130%	99%	80%	120%	95%	70%	130%
Dissolved Antimony	7052966	7052966	0.007	0.007	0.0%	< 0.001	111%	70%	130%	100%	80%	120%	113%	70%	130%
Dissolved Arsenic	7052966	7052966	0.002	0.002	NA	< 0.001	102%	70%	130%	101%	80%	120%	104%	70%	130%
Dissolved Barium	7052966	7052966	0.028	0.027	3.6%	< 0.002	98%	70%	130%	81%	80%	120%	87%	70%	130%
Dissolved Beryllium	7052966	7052966	<0.0005	<0.0005	NA	< 0.0005	105%	70%	130%	96%	80%	120%	95%	70%	130%
Dissolved Bismuth	7052966	7052966	<0.002	<0.002	NA	< 0.002	109%	70%	130%	93%	80%	120%	103%	70%	130%
Dissolved Boron	7052966	7052966	0.042	0.040	NA	< 0.010	101%	70%	130%	98%	80%	120%	93%	70%	130%
Dissolved Cadmium	7052966	7052966	<0.0001	0.0001	NA	< 0.0001	100%	70%	130%	99%	80%	120%	103%	70%	130%
Dissolved Calcium	7052966	7052966	149	142	4.8%	< 0.05	117%	70%	130%	105%	80%	120%	NA	70%	130%
Dissolved Chromium	7052966	7052966	<0.002	<0.002	NA	< 0.002	101%	70%	130%	101%	80%	120%	99%	70%	130%
Dissolved Cobalt	7052966	7052966	<0.0005	<0.0005	NA	< 0.0005	103%	70%	130%	101%	80%	120%	99%	70%	130%
Dissolved Copper	7052966	7052966	0.017	0.018	5.7%	< 0.001	101%	70%	130%	99%	80%	120%	95%	70%	130%
Dissolved Iron	7052966	7052966	<0.010	<0.010	NA	< 0.010	99%	70%	130%	98%	80%	120%	95%	70%	130%
Dissolved Lead	7052966	7052966	<0.0005	<0.0005	NA	< 0.0005	103%	70%	130%	92%	80%	120%	103%	70%	130%
Dissolved Magnesium	7052966	7052966	5.87	5.55	5.6%	< 0.05	110%	70%	130%	104%	80%	120%	98%	70%	130%
Dissolved Manganese	7052966	7052966	<0.002	<0.002	NA	< 0.002	100%	70%	130%	101%	80%	120%	96%	70%	130%
Dissolved Molybdenum	7052966	7052966	0.270	0.273	1.1%	< 0.002	100%	70%	130%	100%	80%	120%	107%	70%	130%
Dissolved Nickel	7052966	7052966	<0.001	<0.001	NA	< 0.001	101%	70%	130%	102%	80%	120%	100%	70%	130%
Dissolved Phosphorus	7052966	7052966	<0.05	<0.05	NA	< 0.05	94%	70%	130%	97%	80%	120%	86%	70%	130%
Dissolved Potassium	7052966	7052966	1.77	1.62	8.8%	< 0.10	114%	70%	130%	109%	80%	120%	113%	70%	130%
Dissolved Selenium	7052966	7052966	<0.001	<0.001	NA	< 0.001	99%	70%	130%	100%	80%	120%	99%	70%	130%
Dissolved Silver	7052966	7052966	0.0001	<0.0001	NA	< 0.0001	98%	70%	130%	96%	80%	120%	98%	70%	130%
Dissolved Sodium	7052966	7052966	1.78	1.66	7.0%	< 0.05	106%	70%	130%	95%	80%	120%	93%	70%	130%
Dissolved Strontium	7052966	7052966	1.54	1.57	1.9%	< 0.005	101%	70%	130%	99%	80%	120%	NA	70%	130%
Dissolved Thallium	7052966	7052966	<0.0003	<0.0003	NA	< 0.0003	101%	70%	130%	91%	80%	120%	104%	70%	130%
Dissolved Tin	7052966	7052966	<0.002	<0.002	NA	< 0.002	98%	70%	130%	90%	80%	120%	101%	70%	130%
Dissolved Titanium	7052966	7052966	<0.003	<0.003	NA	< 0.002	102%	70%	130%	115%	80%	120%	109%	70%	130%
Dissolved Uranium	7052966	7052966	0.0009	0.0009	NA	< 0.0005	106%	70%	130%	93%	80%	120%	111%	70%	130%
Dissolved Vanadium	7052966	7052966	0.002	0.003	NA	< 0.002	101%	70%	130%	99%	80%	120%	99%	70%	130%
Dissolved Zinc	7052966	7052966	0.007	<0.005	NA	< 0.005	100%	70%	130%	99%	80%	120%	97%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 25T355594
PROJECT: 2025 Waste Rock Leachate
CLIENT NAME: AGNICO EAGLE MINES LIMITED - Division Regionale
ATTENTION TO: SARAH MORIN
DATE RECEIVED: Oct 10, 2025
DATE SAMPLED: 2025-10-09 09:30
DATE REPORTED: Oct 23, 2025

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Upper Beaver - Leachate

Upper Beaver - Leachate

Sample Description				**FB-1**		**FB-2**		**FB-3**		**FB-4**	**FB-4 DUP**		**FB-5**	**FB-6**	**FB-Blank**
Date Sampled				**2025-10-09 09:30**		**2025-10-09 09:40**		**2025-10-09 09:50**		**2025-10-09 10:00**	**2025-10-09 10:10**		**2025-10-09 10:20**	**2025-10-09 10:30**	**2025-10-09 10:40**
Parameter	**Unit**	**G / S**	**RDL**	**7136299**	**RDL**	**7136343**	**RDL**	**7136344**	**RDL**	**7136345**	**7136346**	**RDL**	**7136347**	**7136348**	**7136349**
Electrical Conductivity	µS/cm		2	550	2	243	2	213	2	1250	1250	2	145	536	6
pH	pH Units		NA	6.45	NA	6.44	NA	6.55	NA	6.25	6.36	NA	6.59	6.59	5.76
Alkalinity (as CaCO3)	mg/L		5	54	5	48	5	61	5	32	37	5	63	70	<5
Fluoride	mg/L		0.05	0.15	0.05	0.06	0.05	<0.05	0.05	<0.05	<0.05	0.05	0.20	<0.05	<0.05
Chloride	mg/L		0.10	2.68	0.10	0.66	0.10	0.57	0.12	0.73	1.47	0.10	0.29	0.22	<0.10
Sulphate	mg/L		0.10	237	0.10	74.4	0.10	52.0	0.19	740	744	0.10	19.1	206	<0.10
Total Phosphorus	mg/L		0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02
Dissolved Organic Carbon	mg/L		0.5	1.2	0.5	1.7	0.5	0.8	0.5	1.5	1.4	0.5	1.3	2.2	1.9
Total Calcium	mg/L		0.20	119	0.20	41.6	0.20	37.7	0.20	385	346	0.20	25.9	67.8	0.68
Total Magnesium	mg/L		0.10	4.80	0.10	5.59	0.10	4.19	0.10	3.58	3.13	0.10	3.45	21.4	<0.10
Total Potassium	mg/L		0.50	1.33	0.50	1.20	0.50	0.80	0.50	1.36	1.28	0.50	1.20	13.7	<0.50
Total Sodium	mg/L		0.10	1.50	0.10	0.91	0.10	1.13	0.10	1.45	1.27	0.10	1.24	1.01	<0.10
Total Aluminum	mg/L		0.010	0.053	0.010	0.058	0.010	0.105	0.010	0.053	0.039	0.010	0.096	0.024	<0.010
Total Antimony	mg/L		0.003	0.005	0.003	0.041	0.003	0.013	0.003	0.007	0.007	0.003	0.007	<0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	0.003	0.013	0.003	0.034	0.003	0.008	0.008	0.003	0.011	<0.003	<0.003
Total Barium	mg/L		0.002	0.025	0.002	0.045	0.002	0.027	0.002	0.026	0.023	0.002	0.021	0.065	<0.002
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.045	0.010	0.020	0.010	0.032	0.010	0.056	0.051	0.010	0.021	<0.010	<0.010
Total Cadmium	mg/L		0.0001	0.0001	0.0001	0.0028	0.0001	0.0003	0.0001	0.0002	0.0002	0.0001	0.0001	<0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Total Copper	mg/L		0.002	0.016	0.002	0.076	0.002	0.014	0.002	0.012	0.013	0.002	0.059	0.414	0.235
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	0.075	<0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Total Manganese	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	0.003	<0.002	0.008
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.195	0.010	4.45	0.002	0.434	0.002	0.310	0.302	0.002	0.193	0.028	<0.002
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003
Total Selenium	mg/L		0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Total Strontium	mg/L		0.005	1.38	0.005	1.64	0.005	0.597	0.005	2.97	2.81	0.005	0.204	1.024	<0.005
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	0.0007	0.0005	0.0018	0.0005	<0.0005	0.0005	0.0006	0.0006	0.0005	0.0008	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.005	0.002	<0.002	<0.002	0.002	0.017	<0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	0.020	<0.020	<0.020	<0.020
Dissolved Calcium	mg/L		0.05	92.1	0.05	37.6	0.05	38.1	0.05	338	323	0.05	23.6	68.7	0.70
Dissolved Magnesium	mg/L		0.05	4.05	0.05	5.11	0.05	3.65	0.05	2.81	3.13	0.05	3.20	21.6	0.08
Dissolved Potassium	mg/L		0.50	1.38	0.50	1.29	0.50	1.02	0.50	1.33	1.42	0.50	1.24	16.8	<0.50
Dissolved Sodium	mg/L		0.05	1.52	0.05	1.00	0.05	1.16	0.05	1.39	1.45	0.05	1.35	1.23	0.08
Dissolved Aluminum	mg/L		0.004	0.011	0.004	0.069	0.004	0.084	0.004	0.054	0.036	0.004	0.057	<0.004	0.007
Dissolved Antimony	mg/L		0.001	0.004	0.001	0.039	0.001	0.013	0.001	0.007	0.007	0.001	0.007	0.003	<0.001
Dissolved Arsenic	mg/L		0.001	0.001	0.001	0.014	0.001	0.030	0.001	0.008	0.007	0.001	0.013	0.003	<0.001
Dissolved Barium	mg/L		0.002	0.023	0.002	0.046	0.002	0.029	0.002	0.025	0.025	0.002	0.022	0.072	0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Boron	mg/L		0.010	0.030	0.010	0.011	0.010	0.023	0.010	0.039	0.044	0.010	0.012	<0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	0.0002	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Chromium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	0.0005	<0.0005	0.0006	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.012	0.001	0.074	0.001	0.009	0.001	0.011	0.011	0.001	0.037	0.353	0.182
Dissolved Iron	mg/L		0.010	<0.010	0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	0.005
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.171	0.010	4.44	0.002	0.422	0.002	0.299	0.293	0.002	0.185	0.030	<0.002
Dissolved Nickel	mg/L		0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001	0.001	<0.001	0.002	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	<0.05	0.05	<0.05	<0.05	<0.05
Dissolved Selenium	mg/L		0.001	0.001	0.001	0.003	0.001	<0.001	0.001	0.002	0.002	0.001	0.002	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	1.31	0.005	1.61	0.005	0.588	0.005	2.77	2.70	0.005	0.212	0.948	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	0.005	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003
Dissolved Uranium	mg/L		0.0005	0.0006	0.0005	0.0017	0.0005	<0.0005	0.0005	0.0006	0.0006	0.0005	0.0006	<0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	0.002	0.002	<0.002	0.002	0.004	0.002	<0.002	<0.002	0.002	0.015	<0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	<0.005	0.005	<0.005	<0.005	0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

7136299-7136348 Total Metals and Dissolved Metals values are statistically equivalent.
Dilution required, RDL has been increased accordingly.

7136349 Dissolved Organic Carbon and Metals results were confirmed by re-analysis.
Total Metals and Dissolved Metals values are statistically equivalent.

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Upper Beaver - Leachate															
Electrical Conductivity	7135510		105	101	3.9%	< 2	104%	90%	110%	NA			NA		
pH	7135510		6.44	6.30	2.2%	NA	99%	90%	110%	NA			NA		
Alkalinity (as CaCO3)	7135510		40	38	5.1%	< 5	96%	80%	120%	NA			NA		
Fluoride	7134307		0.08	0.09	NA	< 0.05	106%	70%	130%	101%	80%	120%	101%	70%	130%
Chloride	7134307		38.4	38.4	0.0%	< 0.10	96%	70%	130%	102%	80%	120%	NA	70%	130%
Sulphate	7134307		7.76	7.73	0.4%	< 0.10	99%	70%	130%	100%	80%	120%	98%	70%	130%
Total Phosphorus	7137648		0.04	0.04	NA	< 0.02	98%	70%	130%	96%	80%	120%	98%	70%	130%
Dissolved Organic Carbon	7136299	7136299	1.2	1.1	NA	< 0.5	96%	90%	110%	100%	90%	110%	89%	80%	120%
Total Calcium	7136299	7136299	119	108	9.7%	< 0.20	96%	70%	130%	92%	80%	120%	103%	70%	130%
Total Magnesium	7136299	7136299	4.80	5.04	4.9%	< 0.10	109%	70%	130%	100%	80%	120%	95%	70%	130%
Total Potassium	7136299	7136299	1.33	1.31	NA	< 0.50	101%	70%	130%	92%	80%	120%	91%	70%	130%
Total Sodium	7136299	7136299	1.50	1.51	0.7%	< 0.10	98%	70%	130%	89%	80%	120%	87%	70%	130%
Total Aluminum	7136299	7136299	0.053	0.054	1.9%	< 0.010	97%	70%	130%	96%	80%	120%	98%	70%	130%
Total Antimony	7136299	7136299	0.005	0.005	NA	< 0.003	99%	70%	130%	93%	80%	120%	93%	70%	130%
Total Arsenic	7136299	7136299	<0.003	<0.003	NA	< 0.003	98%	70%	130%	91%	80%	120%	92%	70%	130%
Total Barium	7136299	7136299	0.025	0.025	0.0%	< 0.002	98%	70%	130%	99%	80%	120%	91%	70%	130%
Total Beryllium	7136299	7136299	<0.001	<0.001	NA	< 0.001	95%	70%	130%	95%	80%	120%	90%	70%	130%
Total Bismuth	7136299	7136299	<0.002	<0.002	NA	< 0.002	98%	70%	130%	90%	80%	120%	87%	70%	130%
Total Boron	7136299	7136299	0.045	0.045	NA	< 0.010	94%	70%	130%	94%	80%	120%	87%	70%	130%
Total Cadmium	7136299	7136299	0.0001	0.0001	NA	< 0.0001	95%	70%	130%	88%	80%	120%	88%	70%	130%
Total Chromium	7136299	7136299	<0.003	<0.003	NA	< 0.003	101%	70%	130%	112%	80%	120%	104%	70%	130%
Total Cobalt	7136299	7136299	<0.0005	<0.0005	NA	< 0.0005	102%	70%	130%	105%	80%	120%	106%	70%	130%
Total Copper	7136299	7136299	0.016	0.018	11.8%	< 0.002	101%	70%	130%	100%	80%	120%	100%	70%	130%
Total Iron	7136299	7136299	<0.050	<0.050	NA	< 0.050	98%	70%	130%	115%	80%	120%	99%	70%	130%
Total Lead	7136299	7136299	<0.0005	<0.0005	NA	< 0.0005	93%	70%	130%	88%	80%	120%	86%	70%	130%
Total Manganese	7136299	7136299	<0.002	<0.002	NA	< 0.002	99%	70%	130%	101%	80%	120%	100%	70%	130%
Total Mercury	7136299	7136299	<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	100%	80%	120%	101%	70%	130%
Total Molybdenum	7136299	7136299	0.195	0.206	5.5%	< 0.002	99%	70%	130%	100%	80%	120%	105%	70%	130%
Total Nickel	7136299	7136299	<0.003	<0.003	NA	< 0.003	103%	70%	130%	106%	80%	120%	97%	70%	130%
Total Selenium	7136299	7136299	<0.002	<0.002	NA	< 0.002	93%	70%	130%	83%	80%	120%	96%	70%	130%
Total Silver	7136299	7136299	<0.0001	<0.0001	NA	< 0.0001	95%	70%	130%	97%	80%	120%	90%	70%	130%
Total Strontium	7136299	7136299	1.38	1.31	5.2%	< 0.005	96%	70%	130%	104%	80%	120%	92%	70%	130%
Total Thallium	7136299	7136299	<0.0003	<0.0003	NA	< 0.0003	97%	70%	130%	91%	80%	120%	89%	70%	130%
Total Tin	7136299	7136299	<0.002	<0.002	NA	< 0.002	90%	70%	130%	86%	80%	120%	85%	70%	130%
Total Titanium	7136299	7136299	<0.010	<0.010	NA	< 0.010	105%	70%	130%	108%	80%	120%	107%	70%	130%
Total Uranium	7136299	7136299	0.0007	0.0007	NA	< 0.0005	96%	70%	130%	91%	80%	120%	90%	70%	130%
Total Vanadium	7136299	7136299	0.002	<0.002	NA	< 0.002	102%	70%	130%	106%	80%	120%	105%	70%	130%
Total Zinc	7136299	7136299	<0.020	<0.020	NA	< 0.020	100%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Calcium	7135501		170	161	5.4%	< 0.05	111%	70%	130%	105%	80%	120%	100%	70%	130%
Dissolved Magnesium	7135501		21.2	19.7	7.3%	< 0.05	105%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Potassium	7135501		12.0	11.6	3.4%	< 0.50	116%	70%	130%	113%	80%	120%	107%	70%	130%
Dissolved Sodium	7135501		33.7	31.9	5.5%	< 0.05	111%	70%	130%	105%	80%	120%	97%	70%	130%
Dissolved Aluminum	7135501		0.007	0.004	NA	< 0.004	96%	70%	130%	105%	80%	120%	114%	70%	130%
Dissolved Antimony	7135501		<0.001	<0.001	NA	< 0.001	100%	70%	130%	103%	80%	120%	101%	70%	130%
Dissolved Arsenic	7135501		<0.001	<0.001	NA	< 0.001	99%	70%	130%	102%	80%	120%	98%	70%	130%
Dissolved Barium	7135501		0.202	0.192	5.1%	< 0.002	104%	70%	130%	107%	80%	120%	99%	70%	130%
Dissolved Beryllium	7135501		<0.0005	<0.0005	NA	< 0.0005	96%	70%	130%	103%	80%	120%	100%	70%	130%
Dissolved Bismuth	7135501		<0.002	<0.002	NA	< 0.002	104%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Boron	7135501		0.047	0.052	NA	< 0.010	95%	70%	130%	99%	80%	120%	95%	70%	130%
Dissolved Cadmium	7135501		<0.0001	<0.0001	NA	< 0.0001	100%	70%	130%	102%	80%	120%	99%	70%	130%
Dissolved Chromium	7135501		<0.002	<0.002	NA	< 0.002	100%	70%	130%	102%	80%	120%	101%	70%	130%
Dissolved Cobalt	7135501		0.0009	0.0007	NA	< 0.0005	99%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Copper	7135501		0.003	0.003	NA	< 0.001	99%	70%	130%	101%	80%	120%	97%	70%	130%
Dissolved Iron	7135501		<0.020	<0.020	NA	< 0.010	90%	70%	130%	95%	80%	120%	96%	70%	130%
Dissolved Lead	7135501		<0.0005	<0.0005	NA	< 0.0005	99%	70%	130%	98%	80%	120%	93%	70%	130%
Dissolved Manganese	7135501		0.027	0.033	20.0%	< 0.002	98%	70%	130%	102%	80%	120%	102%	70%	130%
Dissolved Mercury	7135498		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	100%	80%	120%	105%	70%	130%
Dissolved Molybdenum	7135501		<0.002	<0.002	NA	< 0.002	103%	70%	130%	102%	80%	120%	103%	70%	130%
Dissolved Nickel	7135501		0.007	0.007	0.0%	< 0.001	98%	70%	130%	100%	80%	120%	100%	70%	130%
Dissolved Phosphorus	7135501		<0.05	<0.05	NA	< 0.05	95%	70%	130%	106%	80%	120%	121%	70%	130%
Dissolved Selenium	7135501		<0.001	<0.001	NA	< 0.001	99%	70%	130%	102%	80%	120%	99%	70%	130%
Dissolved Silver	7135501		<0.0001	<0.0001	NA	< 0.0001	97%	70%	130%	99%	80%	120%	96%	70%	130%
Dissolved Strontium	7135501		0.483	0.483	0.0%	< 0.005	106%	70%	130%	109%	80%	120%	105%	70%	130%
Dissolved Thallium	7135501		<0.0003	<0.0003	NA	< 0.0003	100%	70%	130%	100%	80%	120%	97%	70%	130%
Dissolved Tin	7135501		<0.002	<0.002	NA	< 0.002	110%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Titanium	7135501		<0.003	<0.003	NA	< 0.002	98%	70%	130%	99%	80%	120%	94%	70%	130%
Dissolved Uranium	7135501		0.0007	0.0007	NA	< 0.0005	100%	70%	130%	100%	80%	120%	95%	70%	130%
Dissolved Vanadium	7135501		<0.002	<0.002	NA	< 0.002	96%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Zinc	7135501		0.006	<0.005	NA	< 0.005	101%	70%	130%	100%	80%	120%	101%	70%	130%

CERTIFICATE OF ANALYSIS

AGAT WORK ORDER: 25T373763
PROJECT: 2025 Waste Rock Leachate Testing
CLIENT NAME: AGNICO EAGLE MINES LIMITED - Division Regionale
ATTENTION TO: Brianna Cibirka
DATE RECEIVED: Nov 20, 2025
DATE SAMPLED: 2025-11-19 08:00
DATE REPORTED: Nov 28, 2025

PACKAGE INFORMATION:

Work Sheet Name	Sample Ty	Guideline / Standard	Package Name
X01	Water		Total Metals in Water (mg/L)
X02	Water		Upper Beaver - Waste Rock Leachate

Total Metals in Water (mg/L)

Sample Description				FB-1		FB-2	FB-2 DUP		FB-3	FB-4	FB-5	FB-6	FB-Blank
Date Sampled				2025-11-19 08:00		2025-11-19	2025-11-19 08:20		2025-11-19	2025-11-19	2025-11-19	2025-11-19	2025-11-19 09:10
Parameter	Unit	G / S	RDL	7268096	RDL	7268116	7268117	RDL	7268118	7268119	7268120	7268121	7268122
Total Calcium	mg/L		0.20	57.6	0.20	27.0	33.0	0.20	27.9	178	26.1	40.8	0.27
Total Magnesium	mg/L		0.10	3.34	0.10	4.28	5.01	0.10	3.45	1.77	2.30	18.4	<0.10
Total Potassium	mg/L		0.50	1.21	0.50	1.31	0.92	0.50	0.91	1.22	0.99	8.13	<0.50
Total Sodium	mg/L		0.10	0.67	0.10	0.55	0.74	0.10	0.60	0.44	0.85	0.76	<0.10
Total Aluminum	mg/L		0.010	<0.010	0.010	0.026	0.026	0.010	0.061	0.037	0.110	<0.010	0.023
Total Antimony	mg/L		0.003	<0.003	0.003	0.022	0.028	0.003	0.008	<0.003	0.004	<0.003	<0.003
Total Arsenic	mg/L		0.003	<0.003	0.003	0.009	0.012	0.003	0.019	0.004	0.008	<0.003	<0.003
Total Barium	mg/L		0.002	0.016	0.002	0.032	0.043	0.002	0.021	0.013	0.022	0.056	<0.002
Total Beryllium	mg/L		0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Total Bismuth	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Boron	mg/L		0.010	0.024	0.010	0.011	0.013	0.010	0.017	0.023	0.015	<0.010	<0.010
Total Cadmium	mg/L		0.0001	<0.0001	0.0002	<0.0002	<0.0002	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Chromium	mg/L		0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	0.0015	<0.0005	<0.0005	<0.0005
Total Copper	mg/L		0.002	0.004	0.002	0.011	0.014	0.002	0.006	0.006	0.024	0.358	0.073
Total Iron	mg/L		0.050	<0.050	0.050	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Total Manganese	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	0.004	<0.002	<0.002	0.003
Total Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Molybdenum	mg/L		0.002	0.108	0.04	2.74	3.76	0.002	0.258	0.153	0.158	0.025	<0.002
Total Nickel	mg/L		0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total Phosphorus	mg/L		0.10	<0.10	0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Selenium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Total Strontium	mg/L		0.005	0.792	0.005	1.24	1.50	0.005	0.471	1.49	0.234	0.909	<0.005
Total Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Total Tin	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Total Titanium	mg/L		0.010	<0.010	0.010	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Total Uranium	mg/L		0.0005	<0.0005	0.0005	0.0014	0.0018	0.0005	<0.0005	<0.0005	0.0006	<0.0005	<0.0005
Total Vanadium	mg/L		0.002	<0.002	0.002	<0.002	<0.002	0.002	0.003	<0.002	0.010	<0.002	<0.002
Total Zinc	mg/L		0.020	<0.020	0.020	<0.020	<0.020	0.020	<0.020	<0.020	<0.020	<0.020	<0.020

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

Upper Beaver - Waste Rock Leachate

Sample Description				FB-1		FB-2		FB-2 DUP		FB-3		FB-4		FB-5	FB-6		FB-Blank
Date Sampled				2025-11-19 08:00		2025-11-19 08:10		2025-11-19 08:20		2025-11-19 08:30		2025-11-19 08:40		2025-11-19	2025-11-19 09:00		2025-11-19 09:10
Parameter	**Unit**	**G / S**	**RDL**	**7268096**	**RDL**	**7268116**	**RDL**	**7268117**	**RDL**	**7268118**	**RDL**	**7268119**	**RDL**	**7268120**	**7268121**	**RDL**	**7268122**
pH	pH Units		NA	7.77	NA	7.83	NA	7.85	NA	7.85	NA	7.51	NA	7.93	7.86	NA	5.91
Electrical Conductivity	µS/cm		2	305	2	179	2	201	2	166	2	736	2	139	324	2	3
Alkalinity (as CaCO3)	mg/L		5	45	5	49	5	57	5	60	5	25	5	63	57	5	<5
Chloride	mg/L		0.10	0.61	0.10	0.26	0.10	0.22	0.10	0.32	0.12	0.31	0.10	0.36	0.17	0.10	<0.10
Fluoride	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.12	<0.05	0.05	<0.05
Sulphate	mg/L		0.10	142	0.10	50.5	0.10	58.7	0.10	34.3	0.10	450	0.10	16.3	142	0.10	<0.10
Dissolved Organic Carbon	mg/L		0.5	1.8	0.5	1.3	0.5	1.5	0.5	1.7	0.5	1.1	0.5	2.0	2.5	0.5	1.2
Total Phosphorus	mg/L		0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	0.02	<0.02	<0.02	0.02	<0.02
Dissolved Calcium	mg/L		0.05	60.8	0.05	26.3	0.05	28.9	0.05	29.7	0.05	162	0.05	22.0	40.2	0.05	0.33
Dissolved Magnesium	mg/L		0.05	2.70	0.05	2.77	0.05	3.78	0.05	2.15	0.05	0.91	0.05	1.98	14.2	0.05	<0.05
Dissolved Potassium	mg/L		0.50	0.55	0.50	1.10	0.50	0.64	0.50	0.58	0.50	0.50	0.50	0.99	8.27	0.50	<0.50
Dissolved Sodium	mg/L		0.05	0.90	0.05	0.82	0.05	0.38	0.05	0.58	0.05	0.83	0.05	0.44	1.14	0.05	<0.05
Dissolved Aluminum	mg/L		0.004	0.037	0.004	0.018	0.004	0.028	0.004	0.036	0.004	0.020	0.004	0.026	0.009	0.004	<0.004
Dissolved Antimony	mg/L		0.001	0.002	0.001	0.023	0.001	0.026	0.001	0.009	0.001	0.003	0.001	0.004	<0.001	0.001	<0.001
Dissolved Arsenic	mg/L		0.001	0.001	0.001	0.009	0.001	0.011	0.001	0.022	0.001	0.004	0.001	0.009	0.002	0.001	<0.001
Dissolved Barium	mg/L		0.002	0.014	0.002	0.031	0.002	0.035	0.002	0.022	0.002	0.012	0.002	0.020	0.054	0.002	<0.002
Dissolved Beryllium	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Bismuth	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Boron	mg/L		0.010	0.021	0.010	0.011	0.010	0.011	0.010	0.019	0.010	0.019	0.010	0.010	<0.010	0.010	<0.010
Dissolved Cadmium	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.001	0.001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Chromium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.003	<0.003
Dissolved Cobalt	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0012	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Copper	mg/L		0.001	0.003	0.001	0.011	0.001	0.012	0.001	0.007	0.001	0.006	0.001	0.022	0.374	0.001	0.068
Dissolved Iron	mg/L		0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	0.020	<0.020	<0.020	0.010	<0.010
Dissolved Lead	mg/L		0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	0.0005	<0.0005	<0.0005	0.0005	<0.0005
Dissolved Manganese	mg/L		0.002	<0.002	0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	0.002
Dissolved Mercury	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Molybdenum	mg/L		0.002	0.108	0.02	2.95	0.02	3.61	0.002	0.290	0.002	0.165	0.002	0.158	0.029	0.002	<0.002
Dissolved Nickel	mg/L		0.001	<0.001	0.001	0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	<0.001	0.001	0.001	<0.001
Dissolved Phosphorus	mg/L		0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	<0.05	0.05	0.08	0.05	<0.05	<0.05	0.05	<0.05
Dissolved Selenium	mg/L		0.001	<0.001	0.001	0.002	0.001	0.002	0.001	<0.001	0.001	<0.001	0.001	<0.001	<0.001	0.001	<0.001
Dissolved Silver	mg/L		0.0001	<0.0001	0.0001	<0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0001	<0.0001
Dissolved Strontium	mg/L		0.005	0.839	0.005	1.20	0.005	1.43	0.005	0.565	0.005	1.45	0.005	0.221	0.932	0.005	<0.005
Dissolved Thallium	mg/L		0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	0.0003	<0.0003	<0.0003	0.0003	<0.0003
Dissolved Tin	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	<0.002	<0.002	0.002	<0.002
Dissolved Titanium	mg/L		0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	0.003	<0.003	<0.003	0.002	<0.002
Dissolved Uranium	mg/L		0.0005	<0.0005	0.0005	0.0013	0.0005	0.0015	0.0005	<0.0005	0.0005	<0.0005	0.0005	0.0006	<0.0005	0.0005	<0.0005
Dissolved Vanadium	mg/L		0.002	<0.002	0.002	<0.002	0.002	<0.002	0.002	0.003	0.002	<0.002	0.002	0.009	<0.002	0.002	<0.002
Dissolved Zinc	mg/L		0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	0.005	<0.005	<0.005	0.005	0.005

Comments: RDL - Reported Detection Limit; G / S - Guideline / Standard

7268096-7268121 Metals analysis completed on a filtered sample.
Dilution required, RDL has been increased accordingly.

7268122 Metals analysis completed on a filtered sample.

Parameter	Batch	Sample Id	Dup #1	Dup #2	RPD	Method Blank	Reference Material	Lower	Upper	Method Blank Spike	Lower	Upper	Matrix Spike	Lower	Upper
Upper Beaver - Waste Rock Leachate															
pH	7266990		8.10	8.16	0.7%	NA	97%	90%	110%	NA			NA		
Electrical Conductivity	7266990		1480	1470	0.7%	< 2	91%	90%	110%	NA			NA		
Alkalinity (as CaCO3)	7266990		231	239	3.4%	< 5	98%	80%	120%	NA			NA		
Chloride	7259983		167	165	1.2%	< 0.10	94%	70%	130%	101%	80%	120%	NA	70%	130%
Fluoride	7259983		<0.05	<0.05	NA	< 0.05	103%	70%	130%	98%	80%	120%	97%	70%	130%
Sulphate	7259983		37.8	37.3	1.3%	< 0.10	99%	70%	130%	98%	80%	120%	98%	70%	130%
Dissolved Organic Carbon	7268096	7268096	1.8	1.7	NA	< 0.5	106%	90%	110%	97%	90%	110%	105%	80%	120%
Total Phosphorus	7257434		<0.02	<0.02	NA	< 0.02	99%	70%	130%	101%	80%	120%	98%	70%	130%
Dissolved Calcium	7269252		157	151	3.9%	< 0.05	95%	70%	130%	101%	80%	120%	92%	70%	130%
Dissolved Magnesium	7269252		18.8	16.2	14.9%	< 0.05	90%	70%	130%	99%	80%	120%	82%	70%	130%
Dissolved Potassium	7269252		71.2	60.1	16.9%	< 0.50	90%	70%	130%	96%	80%	120%	87%	70%	130%
Dissolved Sodium	7269252		759	729	4.0%	< 0.05	110%	70%	130%	109%	80%	120%	NA	70%	130%
Dissolved Aluminum	7269252		0.621	0.597	3.9%	< 0.004	96%	70%	130%	114%	80%	120%	81%	70%	130%
Dissolved Antimony	7269252		0.053	0.049	7.8%	< 0.001	99%	70%	130%	109%	80%	120%	103%	70%	130%
Dissolved Arsenic	7269252		<0.001	<0.001	NA	< 0.001	98%	70%	130%	107%	80%	120%	105%	70%	130%
Dissolved Barium	7269252		0.008	0.008	NA	< 0.002	104%	70%	130%	110%	80%	120%	106%	70%	130%
Dissolved Beryllium	7269252		<0.0005	<0.0005	NA	< 0.0005	98%	70%	130%	119%	80%	120%	81%	70%	130%
Dissolved Bismuth	7269252		<0.002	<0.002	NA	< 0.002	101%	70%	130%	102%	80%	120%	92%	70%	130%
Dissolved Boron	7269252		0.249	0.225	10.1%	< 0.010	98%	70%	130%	119%	80%	120%	77%	70%	130%
Dissolved Cadmium	7269252		0.0036	0.0034	5.7%	< 0.0001	102%	70%	130%	103%	80%	120%	96%	70%	130%
Dissolved Chromium	7269252		<0.003	<0.003	NA	< 0.003	101%	70%	130%	109%	80%	120%	105%	70%	130%
Dissolved Cobalt	7269252		0.0078	0.0082	5.0%	< 0.0005	103%	70%	130%	111%	80%	120%	104%	70%	130%
Dissolved Copper	7269252		0.003	0.003	NA	< 0.001	103%	70%	130%	106%	80%	120%	99%	70%	130%
Dissolved Iron	7269252		0.396	0.439	10.3%	< 0.010	106%	70%	130%	107%	80%	120%	101%	70%	130%
Dissolved Lead	7269252		0.0026	0.0028	7.4%	< 0.0005	95%	70%	130%	98%	80%	120%	90%	70%	130%
Dissolved Manganese	7269252		0.266	0.274	3.0%	< 0.002	102%	70%	130%	109%	80%	120%	102%	70%	130%
Dissolved Mercury	7268096	7268096	<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	101%	80%	120%	103%	70%	130%
Dissolved Molybdenum	7269252		34600	32700	5.6%	< 0.002	104%	70%	130%	110%	80%	120%	NA	70%	130%
Dissolved Nickel	7269252		0.018	0.021	15.4%	< 0.001	103%	70%	130%	107%	80%	120%	100%	70%	130%
Dissolved Phosphorus	7269252		0.26	0.25	3.9%	< 0.05	91%	70%	130%	106%	80%	120%	119%	70%	130%
Dissolved Selenium	7269252		<0.001	<0.001	NA	< 0.001	97%	70%	130%	100%	80%	120%	108%	70%	130%
Dissolved Silver	7269252		<0.0001	<0.0001	NA	< 0.0001	101%	70%	130%	108%	80%	120%	83%	70%	130%
Dissolved Strontium	7269252		0.526	0.541	2.8%	< 0.005	105%	70%	130%	106%	80%	120%	NA	70%	130%
Dissolved Thallium	7269252		<0.0003	<0.0003	NA	< 0.0003	102%	70%	130%	103%	80%	120%	95%	70%	130%
Dissolved Tin	7269252		<0.002	<0.002	NA	< 0.002	85%	70%	130%	90%	80%	120%	87%	70%	130%
Dissolved Titanium	7269252		0.006	0.013	NA	< 0.002	116%	70%	130%	111%	80%	120%	106%	70%	130%
Dissolved Uranium	7269252		0.0009	0.0009	NA	< 0.0005	99%	70%	130%	103%	80%	120%	100%	70%	130%
Dissolved Vanadium	7269252		0.002	0.003	NA	< 0.002	102%	70%	130%	112%	80%	120%	111%	70%	130%
Dissolved Zinc	7269252		0.072	0.076	5.4%	< 0.005	106%	70%	130%	114%	80%	120%	107%	70%	130%
Comments:	NA Signifies Not ApplicableDuplicate NA: results are under 5X the RDL and will not be calculated. Matrix spike NA: Spike level < native concentration. Matrix spike acceptance limits do not apply and are not calculated.														
Upper Beaver - Waste Rock Leachate															
pH	7268118	7268118	7.85	7.89	0.4%		97%	90%	110%	NA			NA		
Electrical Conductivity	7268118	7268118	166	164	1.3%	< 2	95%	90%	110%	NA			NA		
Alkalinity (as CaCO3)	7268118	7268118	60	57	5.5%	< 5	100%	80%	120%	NA			NA		
Comments:	NA Signifies Not ApplicableDuplicate NA: results are under 5X the RDL and will not be calculated.														
Total Metals in Water (mg/L)															
Total Calcium	7269735		120	127	5.7%	< 0.20	92%	70%	130%	97%	80%	120%	NA	70%	130%
Total Magnesium	7269735		14.2	14.5	2.1%	< 0.10	105%	70%	130%	99%	80%	120%	99%	70%	130%
Total Potassium	7269735		4.23	3.61	15.8%	< 0.50	96%	70%	130%	99%	80%	120%	92%	70%	130%
Total Sodium	7269735		203	199	2.0%	< 0.10	94%	70%	130%	103%	80%	120%	NA	70%	130%
Total Aluminum	7269735		0.020	0.019	NA	< 0.010	89%	70%	130%	109%	80%	120%	116%	70%	130%
Total Antimony	7269735		<0.003	<0.003	NA	< 0.003	98%	70%	130%	106%	80%	120%	113%	70%	130%
Total Arsenic	7269735		<0.003	<0.003	NA	< 0.003	101%	70%	130%	107%	80%	120%	110%	70%	130%
Total Barium	7269735		0.067	0.068	1.5%	< 0.002	99%	70%	130%	107%	80%	120%	121%	70%	130%
Total Beryllium	7269735		<0.001	<0.001	NA	< 0.001	100%	70%	130%	112%	80%	120%	112%	70%	130%
Total Bismuth	7269735		<0.002	<0.002	NA	< 0.002	103%	70%	130%	100%	80%	120%	103%	70%	130%
Total Boron	7269735		0.040	0.040	NA	< 0.010	103%	70%	130%	115%	80%	120%	111%	70%	130%
Total Cadmium	7269735		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	103%	80%	120%	114%	70%	130%
Total Chromium	7269735		<0.003	<0.003	NA	< 0.003	102%	70%	130%	100%	80%	120%	105%	70%	130%
Total Cobalt	7269735		<0.0005	<0.0005	NA	< 0.0005	105%	70%	130%	102%	80%	120%	106%	70%	130%
Total Copper	7269735		<0.002	<0.002	NA	< 0.002	99%	70%	130%	101%	80%	120%	104%	70%	130%
Total Iron	7269735		<0.050	<0.050	NA	< 0.050	105%	70%	130%	102%	80%	120%	105%	70%	130%
Total Lead	7269735		0.0013	0.0018	NA	< 0.0005	97%	70%	130%	96%	80%	120%	98%	70%	130%
Total Manganese	7269735		0.004	0.004	NA	< 0.002	105%	70%	130%	100%	80%	120%	103%	70%	130%
Total Mercury	7267141		<0.0001	<0.0001	NA	< 0.0001	102%	70%	130%	101%	80%	120%	102%	70%	130%
Total Molybdenum	7269735		0.004	<0.002	NA	< 0.002	99%	70%	130%	104%	80%	120%	107%	70%	130%
Total Nickel	7269735		<0.003	<0.003	NA	< 0.003	104%	70%	130%	104%	80%	120%	108%	70%	130%
Total Phosphorus	7269735		<0.10	<0.10	NA	< 0.10	102%	70%	130%	106%	80%	120%	105%	70%	130%
Total Selenium	7269735		0.002	<0.002	NA	< 0.002	99%	70%	130%	97%	80%	120%	107%	70%	130%
Total Silver	7269735		<0.0001	<0.0001	NA	< 0.0001	97%	70%	130%	115%	80%	120%	100%	70%	130%
Total Strontium	7269735		0.441	0.450	2.0%	< 0.005	100%	70%	130%	97%	80%	120%	NA	70%	130%
Total Thallium	7269735		<0.0003	<0.0003	NA	< 0.0003	103%	70%	130%	100%	80%	120%	102%	70%	130%
Total Tin	7269735		<0.002	<0.002	NA	< 0.002	87%	70%	130%	90%	80%	120%	97%	70%	130%
Total Titanium	7269735		<0.010	<0.010	NA	< 0.010	116%	70%	130%	112%	80%	120%	110%	70%	130%
Total Uranium	7269735		0.0007	0.0007	NA	< 0.0005	100%	70%	130%	101%	80%	120%	107%	70%	130%
Total Vanadium	7269735		<0.002	<0.002	NA	< 0.002	110%	70%	130%	101%	80%	120%	111%	70%	130%
Total Zinc	7269735		<0.020	<0.020	NA	< 0.020	99%	70%	130%	103%	80%	120%	100%	70%	130%

Appendix G: Tailings Kinetic Test Data

AGNICO EAGLE

Upper Beaver Unsaturated Column Results

Stn.Code	Sample No.	Collect Date/Time	Vol-Leachate-LE	Vol-Eff-LE	pH-LE	pH-Lab	Cond-LE	T-Alk-LE	DOC	NH3	NO2-N	NO3-N	TD-P	CN-Free	CN-WAD	T-CN	Cyanate	SCN	SO4	D-Br	D-Cl	D-F	D-Ag	D-Al
UB1_Influent	VA25C9820-003	2025-11-06 11:38	200		8.26		5386.0	108	45.5	83.3	0.0304	<0.100	0.459		0.0075	0.0487	71.6	90.8	2680	<1.00	10.3	<0.400	<0.000100	0.0242
UB2_Influent	VA25C9820-004	2025-11-06 11:38	200		8.26		6450.0	125	40.5	110	0.0439	0.211	0.346		<0.0050	0.147	53.4	23.7	3330	<1.00	<10.0	<0.400	<0.000100	0.0305
UB1	VA25B0665-001	2025-05-08 15:05	359		7.89		6218.0	75	28.4	77.1	<0.0500	<0.250	0.787						4700	<2.50	<25.0	<1.00	<0.000100	0.0252
UB1	VA25B1991-001	2025-05-22 12:20	343	11	7.98		6095.0	73	28.7	75.1	<0.0500	<0.250	0.750		<0.0050	0.0676	27.0	12.4	3620	<2.50	<25.0	<1.00	<0.000100	0.0217
UB1	VA25B3338-001	2025-06-05 11:48	220		7.92	8.05	6032.0	82	27.2	79.8	<0.0500	<0.250	0.706		0.0065	0.0567	28.5	15.5	3360	<2.50	<25.0	<1.00	<0.000100	0.0246
UB1	VA25B4853-001	2025-06-19 12:20	212		7.94	7.94	5985.0	93	30.2	88.6	<0.0500	<0.250	0.656		0.0050	0.0548	25.5	21.4	3210	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA25B6273-001	2025-07-04 11:25	225		8.05		5957.0	105	26.0	83.4	<0.0500	<0.250	0.648		<0.0050	0.0636	34.5	15.2	3260	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA25B7605-001	2025-07-17 11:48	217	19	8.08		5932.0	93	27.9	83.9	<0.0500	<0.250	0.626		<0.0100	0.0665	49.5	14.4	3110	<2.50	<25.0	<1.00	<0.000100	0.0278
UB1	VA25B8957-001	2025-07-31 11:00	218		8.16		5999.0	96	25.9	87.9	<0.0500	<0.250	0.628		<0.0050	0.0505	3.13	22.1	3010	<2.50	<25.0	<1.00	<0.000100	0.0229
UB1	VA25C0431-001	2025-08-14 14:50	238		8.16		5928.0	99	29.9		<0.0500	<0.250	0.578		<0.0100	0.0540	3.06	26.2	3060	<2.50	<25.0	<1.00	<0.000100	0.0242
UB1	VA25C2080-001	2025-08-28 9:30	196	14	8.05		6012.0	96	25.6	85.1	<0.0500	<0.250	0.598		<0.0100	0.0528	3.72	17.7	3300	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA25C3689-001	2025-09-11 13:00	218	8	8.16		5947.0	103	27.2	92.1	<0.0500	<0.250	0.598		<0.0050	0.0512	2.25	16.0	3190	<2.50	<25.0	<1.00	<0.000100	0.0205
UB1	VA25C5552-001	2025-09-25 15:00	119		8.05		6013.0	95	25.2	94.3			0.578		0.0056	0.0398	1.94	14.9					<0.000100	0.0208
UB1	VA25C6841-001	2025-10-09 10:00	189	10	8.03		5974.0		25.8	93.0	<0.0220	<0.250	0.595		0.0090	0.0430	2.11	13.2	2940	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA25C8422-001	2025-10-24 11:00	200	5	8.12		5861.0	105	24.7	51.4	<0.0500	<0.250	0.576		<0.0200	0.0492	6.42	19.6	3090	<2.50	<25.0	<1.00	<0.000100	0.0219
UB1	VA25C9820-001	2025-11-06 11:38	224	14	8.13		5922.0	112	25.5	101	<0.0200	<0.100	0.589		0.0059	0.0377	3.38	25.0	3070	<1.00	10.5	<0.400	<0.000100	<0.0200
UB1	VA25D1094-001	2025-11-20 12:30	221	10	7.83		5771.0	101	24.5	90.8	<0.0500	<0.250	0.567		0.0054	0.0304	2.37	22.7	3130	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA25D3668-001	2025-12-17 11:15	220		8.11		6041.0	104	27.7	92.6	<0.0500	<0.250	0.636		<0.0050	0.0494	2.22	25.0	3310	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB1	VA26A0968-001	2026-01-15 11:55	222	16	8.17		4286.0	94	12.4	71.0	0.0288	0.103	0.456		<0.0050	0.0385	0.91	0.72	2100	<1.00	<10.0	<0.400	<0.0000500	0.0197
UB1	VA26A3417-001	2026-02-12 12:05	225		8.11		3199.0	85	7.97	52.0	<0.0200	<0.100	0.371		<0.0050	0.0332	0.62	<0.50	1520	<1.00	<10.0	<0.400	<0.0000500	0.0261
UB2	VA25B0665-002	2025-05-08 15:05	269		7.84		7531.0	71	17.7	105	<0.0500	<0.250	0.501						3600	<2.50	<25.0	<1.00	<0.000100	0.0279
UB2	VA25B1991-002	2025-05-22 12:20	257	7	7.92		7308.0	82	18.0	93.0	<0.0200	<0.100	0.504		<0.0050	0.0259	<10.0	0.75	4280	<1.00	11.6	<0.400	<0.000100	0.0246
UB2	VA25B3338-002	2025-06-05 11:48	221		7.95	7.98	7301.0	79	16.9	96.9	<0.0500	<0.250	0.514		<0.0050	0.0431	36.0	0.77	4490	<2.50	<25.0	<1.00	<0.000100	0.0305
UB2	VA25B4853-002	2025-06-19 12:20	231		7.86	7.89	7252.0	81	17.8	87.9	<0.0500	<0.250	0.488		<0.0050	0.0750	22.5	1.74	4430	<2.50	28.6	<1.00	<0.000100	0.0216
UB2	VA25B6273-002	2025-07-04 11:25	212		7.94		7217.0	79	18.6	96.3	<0.0500	<0.250	0.450		<0.0050	0.108	21.0	1.34	4300	<2.50	<25.0	<1.00	<0.000100	0.0240
UB2	VA25B7605-002	2025-07-17 11:48	209	13	7.96		7132.0	81	19.8	102	<0.0500	<0.250	0.407		<0.0100	0.102	85.5	1.58	4300	<2.50	<25.0	<1.00	<0.000100	0.0220
UB2	VA25B8957-002	2025-07-31 11:00	233		8.04		7245.0	84	18.8	117	<0.0500	<0.250	0.393		<0.0050	0.123	3.76	3.52	4050	<2.50	<25.0	<1.00	<0.000100	0.0235
UB2	VA25C0431-002	2025-08-14 14:50	246		7.99		7186.0	85	20.0		<0.0500	<0.250	0.360		<0.0050	0.119	3.91	3.49	4080	<2.50	<25.0	<1.00	<0.000100	0.0228
UB2	VA25C2080-002	2025-08-28 9:30	199	1	7.91		7213.0	79	18.4	121	<0.0500	<0.250	0.349		<0.0100	0.127	2.70	3.28	4270	<2.50	<25.0	<1.00	<0.000100	0.0205
UB2	VA25C3689-002	2025-09-11 13:00	230	0	7.95		7154.0	87	18.2	122	<0.0500	<0.250	0.356		<0.0050	0.105	3.11	2.09	4220	<2.50	<25.0	<1.00	<0.000100	0.0237
UB2	VA25C5552-002	2025-09-25 15:00	233		7.93		7230.0	86	16.7	128	<0.0500	<0.250	0.340		<0.0050	0.108	3.34	3.98	4340	<2.50	<25.0	<1.00	<0.000100	0.0243
UB2	VA25C6841-002	2025-10-09 10:00	204	1	7.89		7145.0		17.0	129	<0.0500	<0.250	0.346		<0.0050	0.0958	3.32	1.82	4050	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB2	VA25C8422-002	2025-10-24 11:00	217	0	7.19		7167.0	83	17.6	46.0	<0.0500	<0.250	0.341		<0.0200	0.0990	3.25	3.01	4100	<2.50	<25.0	<1.00	<0.000100	0.0203
UB2	VA25C9820-002	2025-11-06 11:38	246	7	7.95		7274.0	84	17.9	138	<0.0500	<0.250	0.361		<0.0050	0.104	3.22	1.80	4280	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB2	VA25D1094-002	2025-11-20 12:30	245	0	8.25		5914.0	77	16.9	128	<0.0500	<0.250	0.345		<0.0050	0.0812	3.52	3.44	4330	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB2	VA25D3668-002	2025-12-17 11:15	236		7.98		7515.0	82	16.5	127	<0.0500	<0.250	0.402		<0.0050	0.0257	3.58	0.54	4480	<2.50	<25.0	<1.00	<0.000100	0.0208
UB2	VA26A0968-002	2026-01-15 11:55	233	2	7.96		7615.0	93	16.4	137	<0.0500	0.283	0.415		<0.0050	0.0196	2.94	<0.50	4480	<2.50	<25.0	<1.00	<0.000100	0.0200
UB2	VA26A3417-002	2026-02-12 12:05	229		7.91		7492.0	83	14.6	131	<0.0500	<0.250	0.426		<0.0050	0.0127	2.77	<1.00	4380	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB_18806-3_Influent	VA25C9362-001	2025-11-03 11:05	200		8.09		5416.0	92	17.3	59.4	<0.0500	1.16	0.131		<0.0100	0.0278	180	19.5	3010	<2.50	<25.0	<1.00	<0.000100	0.0249
UB_18806-3	VA25C9084-001	2025-10-30 13:00	615	28	7.86		5515.0	120	23.3	54.2	<0.0200	0.226	0.164		<0.0100	0.0267	162	18.1	3020	<1.00	<10.0	<0.400	<0.0000500	0.0228
UB_18806-3	VA25D0555-001	2025-11-14 12:00	233	23	7.83		5771.0	101	28.6	52.2	<0.0500	0.303	0.196		<0.0050	0.0116	123	35.2	3210	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB_18806-3	VA25D1814-001	2025-11-27 13:00	233	13	7.88		5743.0	90	26.0	49.4	<0.0500	<0.250	0.193		<0.0100	0.0218	105	20.9	3320	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB_18806-3	VA25D3176-001	2025-12-11 11:45	235	19	7.91		5761.0	82	28.4	46.7	<0.0500	<0.250	0.204		<0.0400	0.0926	85.6	35.6	3320	<2.50	<25.0	<1.00	<0.000100	<0.0200
UB_18806-3	VA25D3898-001	2025-12-19 10:00	232	9	8.02		5695.0	88	28.9	0.809	<0.0500	<0.250	0.212		<0.0100	0.0461	1.37	22.0	3500	<2.50	<25.0	<1.00	<0.000100	<0.0200

Notes:
Factor applied to less-than results when calculating statistics: 1.0
Factor applied to greater-than results when calculating statistics: 1.0

Upper Beaver Unsaturated Column Results

Stn.Code	Sample No.	Collect Date/Time	D-As	As-III	As-V	AsB-As	DMA-As	MMA-As	D-B	D-Ba	D-Be	D-Bi	D-Ca	D-Cd	D-Co	D-Cr	D-Cs	D-Cu	D-Fe	D-Fe(II)	D-Hg	D-K	D-Li	D-Mg
UB1_Influent	VA25C9820-003	2025-11-06 11:38	0.000965						<0.100	0.00585	<0.000100	<0.000100	248	<0.000100	0.0630	<0.00200	0.000157	0.00474	<0.0200		0.000166	37.1	<0.0100	28.8
UB2_Influent	VA25C9820-004	2025-11-06 11:38	0.000453						<0.100	0.00263	<0.000100	<0.000100	283	<0.000100	0.0243	<0.00200	<0.000100	0.00272	0.0679		<0.0000500	52.3	<0.0100	34.7
UB1	VA25B0665-001	2025-05-08 15:05	0.00160						0.110	0.0104	<0.000100	<0.000100	285	<0.000100	0.0384	<0.00200	0.00144	0.0204	0.0206		0.0000265	51.7	<0.0100	85.6
UB1	VA25B1991-001	2025-05-22 12:20	0.00176						<0.100	0.00962	<0.000100	<0.000100	260	<0.000100	0.0410	<0.00200	0.00109	0.0192	0.0229		0.0000548	49.2	<0.0100	72.2
UB1	VA25B3338-001	2025-06-05 11:48	0.00156						<0.100	0.0117	<0.000100	<0.000100	266	<0.000100	0.0428	<0.00200	0.00147	0.0186	0.0249		0.0000546	48.3	<0.0100	72.2
UB1	VA25B4853-001	2025-06-19 12:20	0.00129						<0.100	0.00984	<0.000100	<0.000100	242	<0.000100	0.0430	<0.00200	0.00141	0.0155	<0.0200		0.0000294	45.0	<0.0100	62.0
UB1	VA25B6273-001	2025-07-04 11:25	0.00144						<0.100	0.0105	<0.000100	<0.000100	227	<0.000100	0.0435	<0.00200	0.00134	0.0154	<0.0200		0.0000387	44.5	<0.0100	61.5
UB1	VA25B7605-001	2025-07-17 11:48	0.00147						<0.100	0.0106	<0.000100	<0.000100	216	<0.000100	0.0435	<0.00200	0.00117	0.0167	0.0237		0.0000344	45.8	<0.0100	55.0
UB1	VA25B8957-001	2025-07-31 11:00	0.00147						<0.100	0.0117	<0.000100	<0.000100	232	<0.000100	0.0442	<0.00200	0.00121	0.0164	<0.0200		<0.0000500	45.5	<0.0100	57.0
UB1	VA25C0431-001	2025-08-14 14:50	0.00129						<0.100	0.0112	<0.000100	<0.000100	206	<0.000100	0.0437	<0.00200	0.000989	0.0156	<0.0200		0.0000250	42.8	<0.0100	55.8
UB1	VA25C2080-001	2025-08-28 9:30	0.00151						<0.100	0.00999	<0.000100	<0.000100	203	<0.000100	0.0405	<0.00200	0.00112	0.0171	<0.0200		0.0000276	45.6	<0.0100	63.0
UB1	VA25C3689-001	2025-09-11 13:00	0.00137						<0.100	0.0108	<0.000100	<0.000100	205	<0.000100	0.0411	<0.00200	0.00103	0.0164	<0.0200		0.0000090	44.3	<0.0100	56.4
UB1	VA25C5552-001	2025-09-25 15:00	0.00152						0.122	0.0135	<0.000100	<0.000100	193	<0.000100	0.0380	<0.00200	0.00102	0.0166	<0.0200			45.4	<0.0100	56.8
UB1	VA25C6841-001	2025-10-09 10:00	0.00148						<0.100	0.0101	<0.000100	<0.000100	194	<0.000100	0.0345	<0.00200	0.000997	0.0186	<0.0200		0.0000236	43.0	<0.0100	55.1
UB1	VA25C8422-001	2025-10-24 11:00	0.00156						<0.100	0.0110	<0.000100	<0.000100	189	<0.000100	0.0352	<0.00200	0.00115	0.0202	<0.0200		0.0000336	43.8	<0.0100	56.8
UB1	VA25C9820-001	2025-11-06 11:38	0.00152						<0.100	0.00917	<0.000100	<0.000100	199	<0.000100	0.0381	<0.00200	0.00117	0.0237	<0.0200		<0.0000500	45.1	<0.0100	57.1
UB1	VA25D1094-001	2025-11-20 12:30	0.00176						0.107	0.0134	<0.000100	<0.000100	192	<0.000100	0.0376	<0.00200	0.00123	0.0242	<0.0200		0.0000313	46.3	<0.0100	56.7
UB1	VA25D3668-001	2025-12-17 11:15	0.00193						0.125	0.0101	<0.000100	<0.000100	170	<0.000100	0.0448	<0.00200	0.000571	0.0238	<0.0200		0.0000190	43.6	<0.0100	58.0
UB1	VA26A0968-001	2026-01-15 11:55	0.00176						0.0675	0.00976	<0.0000500	<0.0000500	113	<0.0000500	0.0283	<0.00100	0.000223	0.0177	0.0105		0.0000130	30.0	0.00567	42.2
UB1	VA26A3417-001	2026-02-12 12:05	0.00180						0.0765	0.0123	<0.0000500	<0.0000500	84.4	<0.0000500	0.0216	<0.00100	0.000200	0.0135	0.0120		0.0000125	23.3	<0.00500	35.1
UB2	VA25B0665-002	2025-05-08 15:05	0.00124						0.126	0.00934	<0.000100	<0.000100	460	<0.000100	0.00325	<0.00200	0.000580	0.0256	<0.0200		<0.0000050	78.9	<0.0100	116
UB2	VA25B1991-002	2025-05-22 12:20	0.00102						0.105	0.00896	<0.000100	<0.000100	426	<0.000100	0.00382	<0.00200	0.000520	0.0176	<0.0200		<0.0000050	74.3	<0.0100	107
UB2	VA25B3338-002	2025-06-05 11:48	0.00100						0.118	0.00938	<0.000100	<0.000100	451	<0.000100	0.00467	<0.00200	0.000530	0.0164	0.0206		<0.0000050	73.6	<0.0100	108
UB2	VA25B4853-002	2025-06-19 12:20	0.000770						0.102	0.00867	<0.000100	<0.000100	444	<0.000100	0.00475	<0.00200	0.000485	0.0139	0.0283		<0.0000050	71.6	<0.0100	96.7
UB2	VA25B6273-002	2025-07-04 11:25	0.000723						0.112	0.00905	<0.000100	<0.000100	430	<0.000100	0.00503	<0.00200	0.000451	0.0131	0.0362		<0.0000050	72.2	<0.0100	98.6
UB2	VA25B7605-002	2025-07-17 11:48	0.000647						0.109	0.00886	<0.000100	<0.000100	418	<0.000100	0.00488	<0.00200	0.000348	0.0132	0.0380		<0.0000050	74.3	<0.0100	86.7
UB2	VA25B8957-002	2025-07-31 11:00	0.000602						0.106	0.00907	<0.000100	<0.000100	457	<0.000100	0.00538	<0.00200	0.000374	0.0137	0.0495		<0.0000050	76.2	<0.0100	89.8
UB2	VA25C0431-002	2025-08-14 14:50	0.000661						0.109	0.00910	<0.000100	<0.000100	414	<0.000100	0.00482	<0.00200	0.000315	0.0136	0.0456		<0.0000050	68.0	<0.0100	81.3
UB2	VA25C2080-002	2025-08-28 9:30	0.000642						0.106	0.00878	<0.000100	<0.000100	430	<0.000100	0.00510	<0.00200	0.000314	0.0136	0.0519		<0.0000050	72.2	<0.0100	81.6
UB2	VA25C3689-002	2025-09-11 13:00	0.000599						0.111	0.00820	<0.000100	<0.000100	428	<0.000100	0.00470	<0.00200	0.000262	0.0142	0.0473		<0.0000050	67.6	<0.0100	72.4
UB2	VA25C5552-002	2025-09-25 15:00	0.000567						0.117	0.00983	<0.000100	<0.000100	434	<0.000100	0.00503	<0.00200	0.000336	0.0145	0.0456		<0.0000050	74.0	<0.0100	79.2
UB2	VA25C6841-002	2025-10-09 10:00	0.000527						<0.100	0.00848	<0.000100	<0.000100	432	<0.000100	0.00465	<0.00200	0.000313	0.0132	0.0356		<0.0000050	64.1	<0.0100	65.7
UB2	VA25C8422-002	2025-10-24 11:00	0.000557						0.120	0.00959	<0.000100	<0.000100	426	<0.000100	0.00457	<0.00200	0.000323	0.0142	0.0388		<0.0000050	64.5	<0.0100	67.8
UB2	VA25C9820-002	2025-11-06 11:38	0.000557						0.105	0.00854	<0.000100	<0.000100	470	<0.000100	0.00466	<0.00200	0.000292	0.0162	0.0407		<0.0000050	67.8	<0.0100	69.8
UB2	VA25D1094-002	2025-11-20 12:30	0.000619						0.123	0.00963	<0.000100	<0.000100	465	<0.000100	0.00456	<0.00200	0.000278	0.0147	0.0383		<0.0000050	66.0	<0.0100	66.6
UB2	VA25D3668-002	2025-12-17 11:15	0.000650						0.124	0.00917	<0.000100	<0.000100	402	<0.000100	0.00407	<0.00200	0.000212	0.0192	0.0209		<0.0000050	61.9	<0.0100	70.8
UB2	VA26A0968-002	2026-01-15 11:55	0.000474						0.102	0.00851	<0.000100	<0.000100	423	<0.000100	0.00379	<0.00200	0.000224	0.0164	<0.0200		<0.0000050	61.9	<0.0100	80.9
UB2	VA26A3417-002	2026-02-12 12:05	0.000563						0.107	0.00881	<0.000100	<0.000100	425	<0.000100	0.00342	<0.00200	0.000275	0.0159	<0.0200		<0.0000050	57.4	<0.0100	83.7
UB_18806-3_Influent	VA25C9362-001	2025-11-03 11:05	0.00204						<0.100	0.0200	<0.000100	<0.000100	495	<0.000100	0.0137	<0.00200	0.000809	0.0803	<0.0200		0.000123	43.5	<0.0100	33.8
UB_18806-3	VA25C9084-001	2025-10-30 13:00	0.00233						0.0981	0.0171	<0.0000500	<0.0000500	490	<0.0000500	0.0110	<0.00100	0.000957	0.146	<0.0100		0.000867	45.2	0.00749	36.9
UB_18806-3	VA25D0555-001	2025-11-14 12:00	0.00225						0.120	0.0143	<0.000100	<0.000100	496	<0.000100	0.0105	<0.00200	0.00114	0.193	<0.0200		0.00316	49.2	<0.0100	40.0
UB_18806-3	VA25D1814-001	2025-11-27 13:00	0.00204						0.116	0.0130	<0.000100	<0.000100	524	<0.000100	0.0101	<0.00200	0.00112	0.182	<0.0200		0.00239	51.7	<0.0100	42.2
UB_18806-3	VA25D3176-001	2025-12-11 11:45	0.00245						0.129	0.0128	<0.000100	<0.000100	487	<0.000100	0.00927	<0.00200	0.00129	0.166	<0.0200		0.00165	49.5	<0.0100	39.7
UB_18806-3	VA25D3898-001	2025-12-19 10:00	0.00211						0.143	0.0129	<0.000100	<0.000100	478	<0.000100	0.00928	<0.00200	0.00144	0.203	<0.0200		0.00142	51.0	<0.0100	43.9

Notes:
Factor applied to less-than results when calculating statistics: 1.0
Factor applied to greater-than results when calculating statistics: 1.0

Upper Beaver Unsaturated Column Results

Stn.Code	Sample No.	Collect Date/Time	D-Mn	D-Mo	D-Na	D-Ni	D-P	D-Pb	D-Rb	D-S	D-Sb	D-Se	D-Si	D-Sn	D-Sr	D-Te	D-Th	D-Ti	D-Tl	D-U	D-V	D-W	D-Zn	D-Zr
UB1_Influent	VA25C9820-003	2025-11-06 11:38	<0.00100	0.932	973	<0.00100	<1.00	<0.000200	0.0494	928	0.0470	0.00344	2.56	<0.000400	2.75	<0.000400	<0.000100	<0.00100	0.000106	0.000555	<0.00100	0.0952	<0.0100	<0.000200
UB2_Influent	VA25C9820-004	2025-11-06 11:38	<0.00100	0.275	1110	<0.00100	<1.00	<0.000200	0.0584	1160	0.00420	0.00170	2.56	<0.000400	6.97	0.000476	<0.000100	<0.00100	<0.000100	0.000648	<0.00100	0.0174	<0.0100	<0.000200
UB1	VA25B0665-001	2025-05-08 15:05	0.0617	1.88	1050	<0.00100	<1.00	<0.000200	0.122	1140	0.0412	0.00270	3.38	<0.000400	3.74	<0.000400	<0.000100	<0.00100	0.000202	0.00132	<0.00100	0.0162	0.0138	<0.000200
UB1	VA25B1991-001	2025-05-22 12:20	0.0630	1.76	991	<0.00100	<1.00	<0.000200	0.115	1140	0.0385	0.00285	3.34	<0.000400	3.50	<0.000400	<0.000100	<0.00100	0.000189	0.00134	<0.00100	0.0209	<0.0100	<0.000200
UB1	VA25B3338-001	2025-06-05 11:48	0.0616	1.72	977	<0.00100	<1.00	<0.000200	0.118	1130	0.0382	0.00298	3.37	<0.000400	3.60	<0.000400	<0.000100	<0.00100	0.000203	0.00150	<0.00100	0.0210	<0.0100	<0.000200
UB1	VA25B4853-001	2025-06-19 12:20	0.0564	1.55	921	<0.00100	<1.00	<0.000200	0.108	1100	0.0366	0.00254	3.37	<0.000400	3.17	<0.000400	<0.000100	<0.00100	0.000206	0.00152	<0.00100	0.0212	<0.0100	<0.000200
UB1	VA25B6273-001	2025-07-04 11:25	0.0518	1.51	906	<0.00100	<1.00	<0.000200	0.0992	1130	0.0366	0.00288	3.54	<0.000400	3.01	<0.000400	<0.000100	<0.00100	0.000200	0.00136	<0.00100	0.0233	<0.0100	<0.000200
UB1	VA25B7605-001	2025-07-17 11:48	0.0575	1.73	898	<0.00100	<1.00	<0.000200	0.100	1050	0.0360	0.00211	3.28	<0.000400	3.33	<0.000400	<0.000100	<0.00100	0.000208	0.00158	0.00100	0.0234	<0.0100	<0.000200
UB1	VA25B8957-001	2025-07-31 11:00	0.0495	1.70	984	<0.00100	<1.00	<0.000200	0.103	1100	0.0352	0.00248	3.63	<0.000400	3.19	<0.000400	<0.000100	<0.00100	0.000219	0.00144	0.00100	0.0244	<0.0100	<0.000200
UB1	VA25C0431-001	2025-08-14 14:50	0.0473	1.74	914	<0.00100	<1.00	<0.000200	0.0956	1030	0.0354	0.00206	3.31	<0.000400	3.00	<0.000400	<0.000100	<0.00100	0.000223	0.00128	<0.00100	0.0286	<0.0100	<0.000200
UB1	VA25C2080-001	2025-08-28 9:30	0.0521	2.03	994	<0.00100	<1.00	<0.000200	0.101	1120	0.0342	0.00198	3.35	<0.000400	3.00	<0.000400	<0.000100	<0.00100	0.000206	0.00139	<0.00100	0.0213	<0.0100	<0.000200
UB1	VA25C3689-001	2025-09-11 13:00	0.0498	2.01	997	<0.00100	<1.00	<0.000200	0.0971	1060	0.0325	0.00224	3.05	<0.000400	3.09	<0.000400	<0.000100	<0.00100	0.000193	0.00133	<0.00100	0.0235	<0.0100	<0.000200
UB1	VA25C5552-001	2025-09-25 15:00	0.0517	2.05	963	<0.00100	<1.00	<0.000200	0.0926	1160	0.0317	0.00250	3.52	<0.000400	2.80	<0.000400	<0.000100	<0.00100	0.000197	0.00140	<0.00100	0.0232	<0.0100	<0.000200
UB1	VA25C6841-001	2025-10-09 10:00	0.0506	2.10	926	<0.00100	<1.00	<0.000200	0.0952	1090	0.0330	0.00183	3.13	<0.000400	2.93	<0.000400	<0.000100	<0.00100	0.000192	0.00132	<0.00100	0.0241	<0.0100	<0.000200
UB1	VA25C8422-001	2025-10-24 11:00	0.0489	2.29	990	<0.00100	<1.00	<0.000200	0.0974	1050	0.0345	0.00279	3.94	<0.000400	2.82	<0.000400	<0.000100	<0.00100	0.000219	0.00142	<0.00100	0.0261	<0.0100	<0.000200
UB1	VA25C9820-001	2025-11-06 11:38	0.0525	2.37	966	<0.00100	<1.00	<0.000200	0.0988	1020	0.0330	0.00211	3.11	<0.000400	2.95	<0.000400	<0.000100	<0.00100	0.000179	0.00126	<0.00100	0.0239	<0.0100	<0.000200
UB1	VA25D1094-001	2025-11-20 12:30	0.0589	2.42	962	<0.00100	<1.00	<0.000200	0.0980	1090	0.0340	0.00301	3.99	<0.000400	2.92	<0.000400	<0.000100	<0.00100	0.000227	0.00132	<0.00100	0.0245	<0.0100	<0.000200
UB1	VA25D3668-001	2025-12-17 11:15	0.0582	2.88	959	<0.00100	<1.00	<0.000200	0.0937	1140	0.0352	0.00336	3.59	<0.000400	2.95	<0.000400	<0.000100	<0.00100	0.000214	0.00138	<0.00100	0.0244	<0.0100	<0.000200
UB1	VA26A0968-001	2026-01-15 11:55	0.0380	2.76	632	<0.000500	<0.500	<0.000100	0.0597	723	0.0262	0.00230	2.94	<0.000200	1.86	<0.000200	<0.0000500	<0.000500	0.000146	0.000772	0.000857	0.0197	<0.00500	<0.000100
UB1	VA26A3417-001	2026-02-12 12:05	0.0304	2.53	469	<0.000500	<0.500	<0.000100	0.0481	519	0.0228	0.00190	2.55	<0.000200	1.40	<0.000200	<0.0000500	<0.000500	0.000113	0.000551	0.000886	0.0139	<0.00500	<0.000100
UB2	VA25B0665-002	2025-05-08 15:05	0.105	0.770	1250	0.00145	<1.00	<0.000200	0.105	1480	0.00396	0.00186	3.30	<0.000400	10.6	0.000477	<0.000100	<0.00100	<0.000100	0.000924	<0.00100	0.00386	0.0169	<0.000200
UB2	VA25B1991-002	2025-05-22 12:20	0.118	0.692	1170	<0.00100	<1.00	<0.000200	0.103	1460	0.00344	0.00178	3.09	<0.000400	10.2	<0.000400	<0.000100	<0.00100	<0.000100	0.000489	<0.00100	0.00297	<0.0100	<0.000200
UB2	VA25B3338-002	2025-06-05 11:48	0.120	0.664	1130	0.00212	<1.00	<0.000200	0.107	1440	0.00327	0.00188	3.23	<0.000400	10.6	<0.000400	<0.000100	<0.00100	0.000112	0.000331	<0.00100	0.00281	0.0183	<0.000200
UB2	VA25B4853-002	2025-06-19 12:20	0.114	0.620	1040	<0.00100	<1.00	<0.000200	0.103	1460	0.00312	0.00177	3.20	<0.000400	9.90	<0.000400	<0.000100	<0.00100	<0.000100	0.000272	<0.00100	0.00269	<0.0100	<0.000200
UB2	VA25B6273-002	2025-07-04 11:25	0.104	0.529	1020	<0.00100	<1.00	<0.000200	0.0980	1490	0.00303	0.00202	3.36	<0.000400	9.31	<0.000400	<0.000100	<0.00100	<0.000100	0.000222	<0.00100	0.00297	<0.0100	<0.000200
UB2	VA25B7605-002	2025-07-17 11:48	0.110	0.524	983	<0.00100	<1.00	<0.000200	0.102	1320	0.00279	0.00142	2.93	<0.000400	10.6	<0.000400	<0.000100	<0.00100	<0.000100	0.000263	<0.00100	0.00274	<0.0100	<0.000200
UB2	VA25B8957-002	2025-07-31 11:00	0.103	0.483	1110	<0.00100	<1.00	<0.000200	0.107	1440	0.00247	0.00175	3.59	<0.000400	10.5	0.000407	<0.000100	<0.00100	<0.000100	0.000204	<0.00100	0.00291	<0.0100	<0.000200
UB2	VA25C0431-002	2025-08-14 14:50	0.0923	0.453	984	<0.00100	<1.00	<0.000200	0.0984	1290	0.00215	0.00134	3.25	<0.000400	9.69	0.000683	<0.000100	<0.00100	<0.000100	0.000247	<0.00100	0.00290	<0.0100	<0.000200
UB2	VA25C2080-002	2025-08-28 9:30	0.0950	0.459	1040	<0.00100	<1.00	<0.000200	0.100	1510	0.00183	0.00162	3.38	<0.000400	9.63	<0.000480	<0.000100	<0.00100	<0.000100	0.000254	<0.00100	0.00270	<0.0100	<0.000200
UB2	VA25C3689-002	2025-09-11 13:00	0.0908	0.467	1020	<0.00100	<1.00	<0.000200	0.0980	1380	0.00148	0.00116	2.94	<0.000400	10.0	0.000517	<0.000100	<0.00100	<0.000100	0.000248	<0.00100	0.00254	<0.0100	<0.000200
UB2	VA25C5552-002	2025-09-25 15:00	0.0994	0.510	1120	<0.00100	<1.00	<0.000200	0.0998	1560	0.00140	0.00125	3.52	<0.000400	9.93	<0.000400	<0.000100	<0.00100	<0.000100	0.000246	<0.00100	0.00268	<0.0100	<0.000200
UB2	VA25C6841-002	2025-10-09 10:00	0.0931	0.494	987	<0.00100	<1.00	<0.000200	0.0943	1390	0.00116	0.000924	3.08	<0.000400	9.76	0.000492	<0.000100	<0.00100	<0.000100	0.000175	<0.00100	0.00260	<0.0100	<0.000200
UB2	VA25C8422-002	2025-10-24 11:00	0.0910	0.542	1050	<0.00100	<1.00	<0.000200	0.0931	1370	0.00108	0.00145	3.73	<0.000400	9.31	0.000423	<0.000100	<0.00100	<0.000100	0.000171	<0.00100	0.00269	<0.0100	<0.000200
UB2	VA25C9820-002	2025-11-06 11:38	0.101	0.591	1080	<0.00100	<1.00	<0.000200	0.0964	1370	0.000822	0.00114	3.18	<0.000400	9.94	0.000715	<0.000100	<0.00100	<0.000100	0.000163	<0.00100	0.00254	<0.0100	<0.000200
UB2	VA25D1094-002	2025-11-20 12:30	0.109	0.596	1050	<0.00100	<1.00	<0.000200	0.0923	1480	0.000792	0.00157	3.86	<0.000400	9.85	<0.000400	<0.000100	<0.00100	<0.000100	0.000229	<0.00100	0.00262	<0.0100	<0.000200
UB2	VA25D3668-002	2025-12-17 11:15	0.136	0.718	1070	<0.00100	<1.00	<0.000200	0.0901	1490	0.00148	0.00190	3.36	<0.000400	9.87	<0.000400	<0.000100	<0.00100	<0.000100	0.00108	<0.00100	0.00255	<0.0100	<0.000200
UB2	VA26A0968-002	2026-01-15 11:55	0.146	0.735	1120	<0.00100	<1.00	<0.000200	0.0814	1540	0.00149	0.00196	3.19	<0.000400	9.62	<0.000400	<0.000100	<0.00100	<0.000100	0.00115	<0.00100	0.00207	<0.0100	<0.000200
UB2	VA26A3417-002	2026-02-12 12:05	0.156	0.762	1110	<0.00100	<1.00	<0.000200	0.0844	1480	0.00158	0.00184	3.06	<0.000400	9.34	<0.000400	<0.000100	<0.00100	0.000106	0.00127	<0.00100	0.00177	<0.0100	<0.000200
UB_18806-3_Influent	VA25C9362-001	2025-11-03 11:05	0.0437	0.546	815	<0.00100	<1.00	<0.000200	0.0654	983	0.0109	0.00325	4.76	<0.000400	5.42	0.000425	<0.000100	<0.00100	0.000106	0.00221	0.00373	0.0182	<0.0100	<0.000200
UB_18806-3	VA25C9084-001	2025-10-30 13:00	0.0509	0.536	816	<0.000500	<0.500	<0.000100	0.0664	1080	0.0115	0.00305	5.33	<0.000200	5.62	0.000287	<0.0000500	<0.000500	0.000114	0.00255	0.00397	0.0164	0.0106	<0.000100
UB_18806-3	VA25D0555-001	2025-11-14 12:00	0.0768	0.578	827	<0.00100	<1.00	<0.000200	0.0796	1090	0.0119	0.00289	5.52	<0.000400	6.09	<0.000400	<0.000100	<0.00100	0.000137	0.00366	0.00346	0.0144	<0.0100	<0.000200
UB_18806-3	VA25D1814-001	2025-11-27 13:00	0.0725	0.596	853	<0.00100	<1.00	<0.000200	0.0783	1200	0.0106	0.00340	5.37	<0.000400	6.01	<0.000400	<0.000100	<0.00100	0.000130	0.00396	0.00339	0.0150	<0.0100	<0.000200
UB_18806-3	VA25D3176-001	2025-12-11 11:45	0.0760	0.566	793	<0.00100	<1.00	<0.000200	0.0804	1090	0.0106	0.00260	5.44	<0.000400	5.81	<0.000400	<0.000100	<0.00100	0.000132	0.00437	0.00352	0.0129	<0.0100	<0.000200
UB_18806-3	VA25D3898-001	2025-12-19 10:00	0.0735	0.591	850	<0.00100	<1.00	<0.000200	0.0817	1130	0.0109	0.00238	5.77	<0.000400	6.02	<0.000400	<0.000100	<0.00100	0.000159	0.00420	0.00342	0.0123	<0.0100	<0.000200

Notes:
Factor applied to less-than results when calculating statistics: 1.0
Factor applied to greater-than results when calculating statistics: 1.0

Appendix H: Mercury Study Test Data

AGNICO EAGLE

SGS proposal: 19195-PR2
SGS project #: 2321

Work order date: 14-Jun-23
Report date: 28-Jul-23
Sample receipt date: 14-Jun-23
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax for Upper Beaver (Agnico Eagle)

Project reference: Hg leachability

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Timo Kirchner Sarah Morin	

Special notes:

Initial results on SFE were for wet grinding.
Additional SFE data for smaples that underwent dry grinding shown on ab SFE "G" added on 15 Oct 23.

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR2
SGS project #: 2321

Work order date: 14-Jun-23
Report date: 28-Jul-23

Version: Final

ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

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SGS proposal: 19195-PR2
SGS project #: 2321

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Version: Final

Particle Size Analysis by Dry Screening Report

Sample: 99743

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.8	5.8%	5.8%
+35 mesh	0.415	70.5	71.0%	76.8%
+100 mesh	0.150	11.1	11.2%	88.0%
+270 mesh	0.053	5.7	5.7%	93.8%
-270 mesh	-0.053	6.2	6.2%	100.0%
TOTAL		99.3	100.0%	

Sample: 99775

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	0.2	0.2%	0.2%
+35 mesh	0.415	55.1	55.2%	55.4%
+100 mesh	0.150	19.6	19.6%	75.1%
+270 mesh	0.053	11.2	11.2%	86.3%
-270 mesh	-0.053	13.7	13.7%	100.0%
TOTAL		99.8	100.0%	

Sample: 98124

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	2.4	2.4%	2.4%
+35 mesh	0.415	54.7	55.0%	57.4%
+100 mesh	0.150	22.3	22.4%	79.9%
+270 mesh	0.053	9.3	9.4%	89.2%
-270 mesh	-0.053	10.7	10.8%	100.0%
TOTAL		99.4	100.0%	

Sample: 98116

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	4.4	4.4%	4.4%
+35 mesh	0.415	59.3	59.6%	64.0%
+100 mesh	0.150	15.4	15.5%	79.5%
+270 mesh	0.053	8.4	8.4%	87.9%
-270 mesh	-0.053	12.0	12.1%	100.0%
TOTAL		99.5	100.0%	

Sample: 98070

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	4.0	4.0%	4.0%
+35 mesh	0.415	49.0	49.4%	53.4%
+100 mesh	0.150	18.5	18.6%	72.1%
+270 mesh	0.053	13.1	13.2%	85.3%
-270 mesh	-0.053	14.6	14.7%	100.0%
TOTAL		99.2	100.0%	

Sample: 98074

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	3.7	3.7%	3.7%
+35 mesh	0.415	63.4	63.5%	67.2%
+100 mesh	0.150	14.6	14.6%	81.9%
+270 mesh	0.053	8.4	8.4%	90.3%
-270 mesh	-0.053	9.7	9.7%	100.0%
TOTAL		99.8	100.0%	

Sample: 98086

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.3	5.3%	5.3%
+35 mesh	0.415	68.6	68.7%	74.0%
+100 mesh	0.150	12.4	12.4%	86.5%
+270 mesh	0.053	6.4	6.4%	92.9%
-270 mesh	-0.053	7.1	7.1%	100.0%
TOTAL		99.8	100.0%	

Sample: 98104

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	4.3	4.3%	4.3%
+35 mesh	0.415	60.7	61.1%	65.4%
+100 mesh	0.150	15.7	15.8%	81.2%
+270 mesh	0.053	8.6	8.7%	89.8%
-270 mesh	-0.053	10.1	10.2%	100.0%
TOTAL		99.4	100.0%	

Sample: 206761

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	8.4	8.4%	8.4%
+35 mesh	0.415	39.7	39.8%	48.2%
+100 mesh	0.150	39.7	39.8%	88.1%
+270 mesh	0.053	5.5	5.5%	93.6%
-270 mesh	-0.053	6.4	6.4%	100.0%
TOTAL		99.7	100.0%	

Sample: 206785

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	7.0	7.0%	7.0%
+35 mesh	0.415	40.1	40.3%	47.3%
+100 mesh	0.150	31.4	31.6%	78.9%
+270 mesh	0.053	11.8	11.9%	90.8%
-270 mesh	-0.053	9.2	9.2%	100.0%
TOTAL		99.5	100.0%	

Sample: 206796

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	7.8	7.8%	7.8%
+35 mesh	0.415	42.2	42.3%	50.1%
+100 mesh	0.150	39.1	39.2%	89.3%
+270 mesh	0.053	4.6	4.6%	93.9%
-270 mesh	-0.053	6.1	6.1%	100.0%
TOTAL		99.8	100.0%	

Sample: 206803

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	9.4	9.4%	9.4%
+35 mesh	0.415	43.8	44.0%	53.4%
+100 mesh	0.150	27.4	27.5%	80.9%
+270 mesh	0.053	9.8	9.8%	90.8%
-270 mesh	-0.053	9.2	9.2%	100.0%
TOTAL		99.6	100.0%	

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Particle Size Analysis by Dry Screening Report

Sample: 206806

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	4.7	4.7%	4.7%
+35 mesh	0.415	39.1	39.2%	43.9%
+100 mesh	0.150	42.3	42.4%	86.3%
+270 mesh	0.053	5.8	5.8%	92.1%
-270 mesh	-0.053	7.9	7.9%	100.0%
TOTAL		99.8	100.0%	

Sample: 206820

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	6.4	6.4%	6.4%
+35 mesh	0.415	39.1	39.4%	45.8%
+100 mesh	0.150	34.9	35.1%	81.0%
+270 mesh	0.053	9.3	9.4%	90.3%
-270 mesh	-0.053	9.6	9.7%	100.0%
TOTAL		99.3	100.0%	

Sample: 206825

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	7.7	7.7%	7.7%
+35 mesh	0.415	41.3	41.4%	49.1%
+100 mesh	0.150	38.6	38.7%	87.9%
+270 mesh	0.053	5.2	5.2%	93.1%
-270 mesh	-0.053	6.9	6.9%	100.0%
TOTAL		99.7	100.0%	

Sample: 206831

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	10.0	10.0%	10.0%
+35 mesh	0.415	45.5	45.6%	55.6%
+100 mesh	0.150	33.7	33.8%	89.4%
+270 mesh	0.053	4.6	4.6%	94.0%
-270 mesh	-0.053	6.0	6.0%	100.0%
TOTAL		99.8	100.0%	

Sample: 206839

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	9.5	9.5%	9.5%
+35 mesh	0.415	42.0	42.1%	51.6%
+100 mesh	0.150	23.9	23.9%	75.6%
+270 mesh	0.053	13.1	13.1%	88.7%
-270 mesh	-0.053	11.3	11.3%	100.0%
TOTAL		99.8	100.0%	

Sample: 151633

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	11.8	11.8%	11.8%
+35 mesh	0.415	39.7	39.9%	51.7%
+100 mesh	0.150	31.3	31.4%	83.1%
+270 mesh	0.053	7.6	7.6%	90.8%
-270 mesh	-0.053	9.2	9.2%	100.0%
TOTAL		99.6	100.0%	

Sample: 206753

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.7	5.7%	5.7%
+35 mesh	0.415	41.4	41.5%	47.2%
+100 mesh	0.150	31.2	31.3%	78.5%
+270 mesh	0.053	12.0	12.0%	90.5%
-270 mesh	-0.053	9.5	9.5%	100.0%
TOTAL		99.8	100.0%	

Sample: 207061

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.3	5.3%	5.3%
+35 mesh	0.415	40.2	40.3%	45.6%
+100 mesh	0.150	24.8	24.9%	70.5%
+270 mesh	0.053	15.2	15.2%	85.8%
-270 mesh	-0.053	14.2	14.2%	100.0%
TOTAL		99.7	100.0%	

Sample: 207070

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.9	5.9%	5.9%
+35 mesh	0.415	37.5	37.6%	43.5%
+100 mesh	0.150	26.3	26.4%	69.9%
+270 mesh	0.053	17.3	17.4%	87.3%
-270 mesh	-0.053	12.7	12.7%	100.0%
TOTAL		99.7	100.0%	

Sample: 207079

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	13.2	13.2%	13.2%
+35 mesh	0.415	42.2	42.2%	55.5%
+100 mesh	0.150	18.2	18.2%	73.7%
+270 mesh	0.053	11.7	11.7%	85.4%
-270 mesh	-0.053	14.6	14.6%	100.0%
TOTAL		99.9	100.0%	

Sample: 207091

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	17.6	17.6%	17.6%
+35 mesh	0.415	42.0	42.1%	59.7%
+100 mesh	0.150	22.1	22.1%	81.9%
+270 mesh	0.053	9.6	9.6%	91.5%
-270 mesh	-0.053	8.5	8.5%	100.0%
TOTAL		99.8	100.0%	

Sample: 207103

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	5.2	5.2%	5.2%
+35 mesh	0.415	40.6	40.7%	45.9%
+100 mesh	0.150	25.1	25.2%	71.0%
+270 mesh	0.053	16.0	16.0%	87.1%
-270 mesh	-0.053	12.9	12.9%	100.0%
TOTAL		99.8	100.0%	

Sample: 207106

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	12.7	12.8%	12.8%
+35 mesh	0.415	40.7	40.9%	53.7%
+100 mesh	0.150	19.1	19.2%	72.9%
+270 mesh	0.053	12.3	12.4%	85.2%
-270 mesh	-0.053	14.7	14.8%	100.0%
TOTAL		99.5	100.0%	

Sample: 207111

Sieve Designation (Tyler)	Aperture (mm)	Weight Retained (g)	(%)	Cumulative (%)
+1"	25.0		0.0%	0.0%
0.75"	19.0		0.0%	0.0%
+0.5"	12.5		0.0%	0.0%
+3/8"	9.5		0.0%	0.0%
+1/4"	6.3		0.0%	0.0%
+5 mesh	4.0		0.0%	0.0%
+9 mesh	2.0	6.9	6.9%	6.9%
+35 mesh	0.415	36.9	37.0%	43.9%
+100 mesh	0.150	23.6	23.6%	67.5%
+270 mesh	0.053	16.3	16.3%	83.9%
-270 mesh	-0.053	16.1	16.1%	100.0%
TOTAL		99.8	100.0%	

3260 Production Way
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SGS proposal: 19195-PR2
SGS project #: 2321

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Report date: 28-Jul-23

Version: Final

ABA Report

Test	S(T)	S(SO4)	S(S-2)	Insoluble S	AP
Units	%	%	%	%	kg CaCO3/t
Method Code	CSA06V	CSA07V	Calc.	Calc.	Calc.
LOD	0.005	0.01	0.01	#N/A	#N/A
Sample ID					
99743	0.266	0.01	0.256	NA	8.0
99775	0.505	0.04	0.465	NA	14.5
98124	2.985	0.03	2.955	NA	92.3
98116	2.837	0.01	2.827	NA	88.3
98070	4.992	0.09	4.902	NA	153.2
98074	4.985	0.08	4.905	NA	153.3
98086	2.322	0.07	2.252	NA	70.4
98104	2.363	0.06	2.303	NA	72.0
206761	0.046	<0.01	0.046	NA	1.4
206785	0.166	<0.01	0.166	NA	5.2
206796	0.080	<0.01	0.08	NA	2.5
206803	0.453	0.02	0.433	NA	13.5
206806	0.763	0.03	0.733	NA	22.9
206820	0.832	0.03	0.802	NA	25.1
206825	0.463	0.03	0.433	NA	13.5
206831	0.584	0.01	0.574	NA	17.9
206839	0.29	0.03	0.26	NA	8.1
151633	0.576	0.02	0.556	NA	17.4
206753	0.364	0.01	0.354	NA	11.1
207061	0.205	<0.01	0.205	NA	6.4
207070	0.125	<0.01	0.125	NA	3.9
207079	0.484	0.02	0.464	NA	14.5
207091	0.465	0.01	0.455	NA	14.2
207103	0.434	0.01	0.424	NA	13.3
207106	0.128	<0.01	0.128	NA	4.0
207111	0.188	<0.01	0.188	NA	5.9
Duplicates					
207106	0.120				
206785		<0.01			
207111		<0.01			

QA/QC					
Blank	0.007	<0.01			
Certified standards					
GS-314-2	2.599				
RTS-3a		0.96			
RTS-3a		0.94			

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ABA Report

Test	C(T)	TIC	CaCO3 NP	CO3 NPR	Modified NP	Net Modified NP	Bulk NPR	Fizz Test	Paste pH
Units	%	%	kg CaCO3/t		kg CaCO3/t	kg CaCO3/t			
Method Code	CSA06V	CSB02V	Calc.	Calc.	Modified	Calc.	Calc.	Sobek	Sobek
LOD	0.005	0.01			0.5				0.2
Sample ID									
99743	1.240	1.25	104.2	13.02	107.3	99.3	13.41	Moderate	8.90
99775	1.445	1.41	117.5	8.09	119.0	104.5	8.19	Moderate	8.49
98124	1.503	1.47	122.5	1.33	110.4	18.0	1.20	Slight	8.95
98116	1.508	1.48	123.3	1.40	108.8	20.4	1.23	Slight	9.35
98070	2.610	2.55	212.5	1.39	188.9	35.7	1.23	Slight	8.88
98074	2.679	2.55	212.5	1.39	188.8	35.5	1.23	Slight	9.16
98086	2.915	2.98	248.3	3.53	207.0	136.6	2.94	Slight	9.19
98104	2.944	2.98	248.3	3.45	207.0	135.0	2.88	Slight	9.28
206761	2.272	2.26	188.3	131.01	175.8	174.3	122.26	Moderate	9.01
206785	0.743	0.76	63.3	12.21	71.0	65.8	13.69	Slight	8.92
206796	0.993	1.00	83.3	33.33	91.9	89.4	36.75	Moderate	9.23
206803	1.961	1.89	157.5	11.64	160.4	146.8	11.85	Moderate	8.59
206806	1.114	1.13	94.2	4.11	98.4	75.5	4.29	Moderate	8.48
206820	2.144	2.20	183.3	7.32	171.3	146.2	6.83	Moderate	8.66
206825	0.288	0.31	25.8	1.91	30.3	16.7	2.24	Slight	8.61
206831	0.967	0.98	81.7	4.55	87.6	69.7	4.89	Moderate	8.63
206839	1.413	1.38	115.0	14.15	121.3	113.1	14.92	Moderate	8.54
151633	1.400	1.35	112.5	6.47	123.3	105.9	7.09	Slight	8.50
206753	1.550	1.51	125.8	11.37	148.6	137.6	13.44	Moderate	8.63
207061	0.673	0.69	57.5	8.98	66.4	60.0	10.36	Slight	8.77
207070	0.967	1.00	83.3	21.33	88.7	84.8	22.71	Slight	9.20
207079	0.970	1.01	84.2	5.80	87.2	72.7	6.02	Slight	8.67
207091	1.089	1.09	90.8	6.39	96.1	81.9	6.76	Slight	8.88
207103	1.030	1.02	85.0	6.42	89.6	76.3	6.76	Moderate	8.80
207106	0.777	0.80	66.7	16.67	71.8	67.8	17.95	Slight	9.29
207111	1.140	1.15	95.8	16.31	100.9	95.0	17.17	Slight	9.08
Duplicates									
99743					107.3			Moderate	8.91
207061					65.8			Slight	8.83
207070		0.98			88.9			Slight	9.22
207106	0.775								
QA/QC									
Blank	<0.005	<0.01							
Certified standards									
NBM-1					43.4			Slight	
NBM-1					43.8			Slight	
GS-314-2	4.927								
TIC-L1		0.12							
SY-4		0.92							

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Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
Sample ID																	
99743	2.17	49	4.03	127	1975	6.82	0.11	19	2.38	570	0.03	66	0.05	0.28	78.6	0.16	173
99775	1.97	119	4.11	109	1975	6.49	0.12	19	2.44	566	0.03	61	0.08	0.53	117	0.12	149
98124	0.33	123	2.66	6	45	3.37	0.25	2	1.11	1122	0.02	14	0.11	2.90	676	<0.01	9
98116	0.35	100	2.65	7	39	3.34	0.27	2	1.10	1129	0.02	14	0.11	2.86	666	<0.01	9
98070	0.31	68	4.92	9	146	6.56	0.27	15	2.01	2637	0.02	9	0.41	4.73	1929	<0.01	74
98074	0.28	69	4.9	8	143	6.44	0.25	14	2.01	2633	0.02	8	0.39	4.65	1911	<0.01	71
98086	0.30	149	5.4	8	163	5	0.23	7	2.07	1616	0.02	9	0.31	2.30	1770	<0.01	53
98104	0.31	146	5.36	8	166	5.02	0.24	7	2.06	1617	0.02	9	0.31	2.30	1750	<0.01	53
206761	1.98	27	5.46	98	134	5.54	0.2	17	2.68	703	0.02	59	0.04	0.04	71.4	0.08	146
206785	2.10	11	2.82	160	979	6.75	0.07	18	2.54	538	0.04	52	0.04	0.18	51.4	0.25	169
206796	2.71	14	3.46	277	396	6.37	0.11	23	3.39	516	0.03	85	0.03	0.09	73.3	0.18	163
206803	2.77	53	5.83	131	3792	7.06	0.21	20	2.44	704	0.03	83	0.05	0.50	115	0.03	152
206806	2.06	21	4.12	171	6604	9.41	0.09	16	1.86	724	0.04	82	0.04	0.77	57.9	0.34	216
206820	2.20	349	5.11	84	2926	6.15	0.14	18	2.95	838	0.03	42	0.10	0.83	349	0.07	133
206825	1.38	139	1.74	142	4054	12.58	0.11	10	1.28	390	0.04	66	0.03	0.45	49.7	0.30	170
206831	2.53	39	3.54	121	3241	5.83	0.06	26	2.71	600	0.04	69	0.05	0.57	63.5	0.19	164
206839	2.67	272	4.47	179	2301	7.91	0.1	25	3.18	729	0.04	103	0.07	0.29	116	0.20	209
151633	3.09	25	4.73	147	4285	7.1	0.06	30	3.40	806	0.03	76	0.10	0.58	71.2	0.22	192
206753	2.90	127	5.23	198	2525	7.17	0.07	25	3.29	905	0.03	83	0.03	0.37	87.2	0.32	241
207061	2.82	13	2.67	233	1635	6.39	0.07	23	3.29	498	0.04	82	0.03	0.22	57.3	0.28	179
207070	1.93	8	3.9	62	773	6.82	0.05	17	1.93	612	0.05	57	0.06	0.13	60.8	0.35	264
207079	2.49	24	3.51	111	1838	9.41	0.07	25	2.34	645	0.03	72	0.04	0.51	65.1	0.18	211
207091	1.61	13	4	68	2333	7.77	0.07	13	1.35	479	0.04	71	0.07	0.46	61.1	0.29	234
207103	1.57	18	4.07	38	2642	6.34	0.12	11	1.20	522	0.03	79	0.05	0.47	64.4	0.36	215
207106	2.32	7	3.04	146	668	4.87	0.05	18	2.34	772	0.04	86	0.04	0.13	67.4	0.22	157
207111	2.16	12	4.51	117	550	4.25	0.07	22	1.73	828	0.05	70	0.06	0.22	119	0.20	126
Duplicates																	
98074	0.28	68	4.9	9	145	6.45	0.25	14	2.01	2640	0.02	9	0.39	4.71	1914	<0.01	70
QA/QC																	
Blank	<0.01	<5	<0.01	<1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01	<1
Certified standards																	
OREAS 920	2.35	80	0.34	41	104	3.41	0.45	20	1.06	499	0.03	36	0.07	0.03	17.2	0.13	25
OREAS 151b	2.39	64	1.29	26	1717	3.11	0.39	6	1.38	265	0.15	14	0.05	0.72	37.7	0.06	137

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
Sample ID																	
99743	34	10.5	0.40	17	0.4	2.1	0.03	17.04	37.6	0.69	11.0	0.4	0.51	0.7	0.05	8.6	0.16
99775	34	14.7	0.54	13	0.5	4.0	0.04	28.17	41.3	0.65	9.9	0.4	0.58	0.8	0.05	14.6	0.14
98124	26	30.6	1.33	64	0.3	0.6	0.07	44.11	17.1	0.48	1.2	0.2	1.16	0.4	<0.02	22.8	0.12
98116	26	29.7	1.46	65	0.3	0.6	0.07	43.37	17.4	0.51	1.2	0.2	1.11	0.4	<0.02	22.5	0.12
98070	260	16.5	4.87	122	1.8	0.2	0.24	227	25.6	1.44	2.3	0.3	0.48	0.8	0.04	108	0.41
98074	247	16.9	4.55	121	1.7	0.2	0.23	222	24.6	1.29	2.0	0.3	0.46	0.7	0.03	104	0.39
98086	68	27.9	2.78	52	1.2	0.3	0.09	195	23.9	0.64	1.7	0.2	0.61	0.6	0.04	90.6	0.18
98104	64	22.2	3.41	47	1.2	0.2	0.08	181	21.9	0.65	1.8	0.2	0.42	0.5	0.04	86	0.18
206761	29	8.0	0.23	2	0.4	0.9	0.03	19.32	24.3	0.60	8.1	0.3	0.32	0.1	0.04	9.8	0.17
206785	34	13.1	0.20	5	0.4	2.8	0.02	28.33	38.4	0.32	10.4	0.4	0.61	0.2	0.04	14.9	0.19
206796	34	9.5	0.32	2	0.3	3.5	<0.01	10.04	42.3	1.50	14.8	0.5	0.41	0.3	0.03	4.6	0.17
206803	44	7.2	2.55	51	0.4	1.8	0.18	12.11	35.2	0.69	10.5	0.3	0.29	7.5	0.13	6.3	0.14
206806	50	9.1	4.68	19	0.3	0.4	0.04	8.77	48	0.36	10.6	0.4	0.52	1.4	0.07	4.3	0.18
206820	52	19.8	1.09	19	0.5	0.9	0.06	36.18	78.2	0.56	10.1	0.3	0.64	0.8	0.10	19	0.13
206825	23	11.8	1.83	19	0.4	0.2	0.02	9.43	46.9	0.49	9.5	0.4	0.62	0.5	0.04	4.9	0.22
206831	44	10.5	0.50	7	0.3	0.5	0.03	11.63	30.8	0.35	11.3	0.4	0.47	0.6	0.07	5.7	0.15
206839	39	16.9	0.59	19	0.5	1.7	0.03	23.68	38.3	1.13	14.0	0.5	0.65	10.2	0.08	12	0.19
151633	53	19.1	0.42	9	0.4	0.9	0.01	25.82	44.8	0.41	13.5	0.3	0.69	1.0	0.09	13.8	0.18
206753	42	8.0	0.89	12	0.3	0.2	0.04	9.68	38.1	0.48	13.4	0.4	0.42	1.4	0.07	4.8	0.22
207061	36	7.8	1.55	2	0.3	1.4	<0.01	7.24	51.4	0.75	13.6	0.3	0.42	0.5	0.04	3	0.19
207070	29	8.6	0.12	3	0.4	1.3	<0.01	17.92	36.7	0.28	12.2	0.7	0.41	0.1	0.06	7.9	0.17
207079	44	6.8	0.44	12	0.5	2.2	0.01	15.68	53.2	0.33	12.8	0.4	0.32	0.2	0.07	7.9	0.14
207091	25	8.3	0.43	5	0.3	15.1	<0.01	13.73	31	0.34	11.2	0.6	0.38	0.1	0.09	6	0.14
207103	28	6.7	0.71	15	0.4	5.1	<0.01	8.35	53.9	0.64	10.0	0.6	0.35	0.1	0.09	3.4	0.14
207106	39	3.4	0.31	9	0.2	5.9	<0.01	4.9	38.6	0.35	10.4	0.5	0.19	0.1	0.03	2	0.08
207111	39	8.0	1.17	12	0.2	5.5	0.02	12.67	28.5	0.30	9.1	0.4	0.38	0.9	0.04	5.4	0.08
Duplicates																	
98074	248	16.6	5.02	122	1.8	0.3	0.22	220	25.6	1.32	2.0	0.3	0.41	0.7	0.04	104	0.38
QA/QC																	
Blank	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1	<0.05	<0.1	0.2	<0.05	<0.01	<0.02	<0.1	<0.01
Certified standards																	
OREAS 920	102	23.3	0.12	5	0.8	2.4	0.06	73.96	14.7	2.64	7.1	0.2	0.80	<0.01	0.03	36.8	0.26
OREAS 151b	231	2.2	0.52	29	0.2	0.4	0.6	17.24	11.3	1.33	7.9	0.2	0.10	0.0	0.07	7.5	0.13

SGS proposal: 19195-PR2
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Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb	Hg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	CVA37A25
Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1	0.005
Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100	100
Sample ID																		
99743	89.55	0.22	1.4	8.7	3.5	13.1	2	0.4	<0.05	0.4	0.14	0.8	0.06	0.36	68	11.34	1.10	0.584
99775	107.00	0.20	2	8	3.6	12.1	2	0.4	<0.05	0.4	0.23	1.4	0.05	0.46	35	9.89	1.00	1.228
98124	6.18	0.09	25.4	11.2	2.7	2.9	2	<0.3	<0.05	0.4	1.53	6.0	0.22	1.88	22.3	7.13	0.80	0.426
98116	5.03	0.08	24.1	11.9	2.9	2.8	2	<0.3	<0.05	0.4	1.52	5.9	0.23	2.00	29.7	7.19	0.70	0.364
98070	7.39	0.32	86.5	27.9	8.8	4	3	<0.3	<0.05	2.5	8.03	46.9	0.33	17.16	1.9	45.02	3.00	0.819
98074	7.05	0.39	87.9	25.5	8.4	3.9	3	<0.3	<0.05	2.5	7.19	45.4	0.29	16.48	1.5	44.18	2.90	0.652
98086	10.68	0.13	27.1	21.3	2.5	6.8	2	<0.3	<0.05	1.5	3.81	18.3	0.17	4.53	0.9	22.13	1.20	0.68
98104	9.81	0.10	21.9	21.7	2.5	6.8	2	<0.3	<0.05	1.5	3.90	18.1	0.18	4.66	0.7	22.12	1.20	0.489
206761	58.02	0.08	0.9	9.3	1.3	14.7	1	<0.3	<0.05	0.4	0.08	0.7	0.05	0.20	3.4	10.80	1.10	0.103
206785	19.26	0.26	0.8	7.9	1.2	12	1	0.6	<0.05	0.5	0.32	0.9	0.03	0.42	6.3	14.85	1.40	0.146
206796	8.73	0.15	0.6	13.3	1.1	12.9	1	0.3	<0.05	0.4	0.20	0.4	0.08	0.30	10	11.40	1.10	0.262
206803	54.02	0.06	1	13.2	99.0	13.7	2	<0.3	<0.05	0.3	0.19	0.4	0.07	0.22	7.1	7.44	0.90	8.199
206806	70.89	0.31	0.8	7.3	2.6	14.2	2	0.5	<0.05	0.4	0.13	0.2	0.04	0.34	5.1	13.11	1.40	1.009
206820	65.62	0.13	3.3	9.4	2.4	13.9	2	<0.3	<0.05	0.4	0.15	1.7	0.06	1.05	1.1	9.66	0.90	0.814
206825	74.87	0.49	0.8	10.4	4.9	9.4	2	0.7	<0.05	0.4	0.12	0.2	0.05	0.54	8.2	13.91	1.50	0.472
206831	97.70	0.16	0.8	4.9	3.5	12.6	2	0.3	<0.05	0.4	0.13	0.5	0.03	0.34	2.5	10.28	1.00	0.606
206839	55.34	0.19	0.8	11.1	27.7	17.8	1	0.5	<0.05	0.5	0.15	1.0	0.07	0.43	7.3	13.05	1.40	12.62
151633	14.17	0.21	0.6	4.5	2.0	15.7	3	0.5	<0.05	0.5	0.28	1.7	0.02	0.49	2	13.43	1.20	1.218
206753	42.37	0.20	0.7	4.9	7.6	21.7	2	0.4	<0.05	0.5	0.08	0.2	0.05	0.18	2.4	15.68	1.50	1.288
207061	2.36	0.24	0.5	8.8	0.7	10.9	2	0.5	<0.05	0.5	0.38	0.2	0.05	0.17	55.7	14.51	1.40	0.136
207070	5.53	0.30	0.4	4.3	1.1	16.8	1	0.5	<0.05	0.4	0.12	0.5	0.02	0.14	3.3	12.80	1.20	0.072
207079	16.63	0.13	0.8	6.7	1.0	18.1	2	0.5	<0.05	0.4	0.24	0.8	0.03	0.23	4.3	10.23	1.00	0.182
207091	9.23	0.26	1.9	6.7	0.7	16.4	2	0.5	<0.05	0.4	0.85	0.6	0.04	0.18	9.8	10.83	1.00	0.086
207103	8.02	0.39	0.6	12.6	1.0	14.2	2	0.4	<0.05	0.3	0.22	0.2	0.06	0.07	13.8	9.83	1.00	0.139
207106	5.08	0.19	1.9	4.3	1.9	10.4	<1	<0.3	<0.05	0.2	0.14	0.3	0.02	0.05	1.5	5.66	0.50	0.107
207111	1.14	0.28	1.1	6.1	1.1	10.1	<1	<0.3	<0.05	0.2	1.64	0.9	0.04	0.20	4.8	6.49	0.60	1.169
Duplicates																		
98074	7.51	0.39	85.9	25.6	8.8	4	3	<0.3	<0.05	2.4	7.91	44.8	0.29	16.75	1.4	44.57	2.90	
QA/QC																		
Blank	<0.05	<0.05	0.3	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1	
Certified standards																		
OREAS 920	0	1.07	20.2	26.8	0.6	3	<1	1.3	<0.05	0.8	<0.05	17.0	0.19	2.30	0.8	19.09	1.80	
OREAS 151b	58.08	0.26	40.7	18.6	0.5	8.8	4	1	<0.05	0.4	0.11	2.6	0.14	0.65	0.6	10.23	0.90	

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SGS proposal: 19195-PR2 Work order date: 14-Jun-23
SGS project #: 2321 Report date: 21-Jul-23

Version: Final

Shake Flask Extraction Report

Leachate Analysis

Sample ID			99743	99775	98124	98116	98070	98074	98086	98104	206761	206785	206796	206803	206806	206820	206825	206831	206839	151633	206753	207061	207070	207079	207091	207103	207106	207111	Blank
Parameter	**Method**	**Units**																											
Volume Nanopure Water		mL	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	-
pH	meter		8.06	7.93	7.97	8.37	8.02	8.40	8.41	8.50	8.66	8.38	8.68	8.19	8.10	8.24	8.00	8.09	8.13	8.14	8.27	8.39	8.57	8.16	8.29	8.27	8.60	8.52	5.99
Redox	meter	mV	356	326	309	246	320	229	244	242	319	280	282	276	282	286	304	298	334	308	300	294	290	304	286	285	287	278	-
Conductivity	meter	uS/cm	216	694	528	230	628	295	236	226	163	227	120	399	509	355	460	324	445	392	308	275	180	285	221	257	142	173	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.0	1.6	1.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.0	0.8	1.0	0.8	0.8	0.8	0.7	0.0	0.0	0.9	0.6	0.7	0.0	0.0	-
Alkalinity	titration	mg CaCO3/L	35.8	32.3	32.2	50.3	35.5	50.4	53.2	54.6	53.3	40.9	44.4	41.8	36.7	44.0	28.0	31.2	32.6	34.7	38.5	40.6	41.6	37.4	37.1	38.2	38.7	39.2	-
Chloride		mg/L	2	5	3	5	5	5	3	4	8	11	3	6	6	9	4	6	5	6	2	6	6	4	4	4	2	5	-
Sulphate		mg/L	54.3	310	221.9	43.1	274.3	72.6	46.9	37.6	9.1	48.2	7.6	150.7	228.7	123.1	223.7	109.0	137.6	160.8	105.5	78.0	33	105.1	59.3	75.5	25.6	36.8	-
Ion Balance																													
Major Anions	Calc	meq/L	1.90	7.25	5.35	2.04	6.57	2.66	2.13	1.99	1.48	2.13	1.13	4.14	5.67	3.70	5.33	3.06	3.66	4.21	3.02	2.61	1.69	3.05	2.09	2.45	1.36	1.69	
Major Cations	Calc	meq/L	1.97	7.05	5.46	2.09	6.96	3.19	2.39	2.36	1.48	2.09	1.13	3.63	4.99	3.28	4.32	2.88	4.14	3.64	2.80	2.66	1.65	2.61	1.96	2.23	1.32	1.58	
Difference	Calc	meq/L	-0.07	0.20	-0.11	-0.05	-0.40	-0.53	-0.26	-0.38	0.00	0.04	0.00	0.52	0.68	0.41	1.01	0.18	-0.49	0.57	0.22	-0.06	0.04	0.44	0.13	0.22	0.04	0.11	
Balance (%)	Calc	%	-1.8%	1.4%	-1.0%	-1.2%	-2.9%	-9.0%	-5.8%	-8.7%	-0.1%	1.0%	-0.1%	6.6%	6.4%	5.9%	10.4%	3.1%	-6.2%	7.2%	3.9%	-1.1%	1.3%	7.9%	3.1%	4.6%	1.5%	3.3%	
Dissolved Metals																													
Hardness (dissolved)		mg/L	77	322	236.0	70.1	306.0	129.0	95.6	89.0	40.3	68.7	30	136.0	207	128.0	187	116.0	176	156.0	106	93.6	43.9	106	71.6	77.7	37.5	47.8	-
Aluminum (dissolved)	ICP-MS	mg/L	0.062	0.029	0.030	0.089	0.040	0.108	0.106	0.163	0.085	0.032	0.093	0.050	0.058	0.064	0.042	0.045	0.053	0.051	0.067	0.052	0.082	0.073	0.1	0.103	0.116	0.083	-
Antimony (dissolved)	ICP-MS	mg/L	0.0044	0.0049	0.006	0.0149	0.0221	0.0452	0.0074	0.0095	0.0025	0.0015	0.0017	0.181	0.002	0.005	0.0068	0.0073	0.0435	0.0021	0.0137	0.0011	0.0011	0.0011	0.0009	0.0012	0.0029	0.0013	-
Arsenic (dissolved)	ICP-MS	mg/L	0.0063	0.0021	0.0100	0.0567	0.0170	0.0341	0.0067	0.0089	0.0034	0.0016	0.0006	0.0185	0.0011	0.0025	0.0029	0.0014	0.008	0.0006	0.0022	0.0005	0.0009	0.0007	0.0012	0.0021	0.0063	0.0332	-
Barium (dissolved)	ICP-MS	mg/L	0.0341	0.0316	0.04100	0.0401	0.04490	0.15900	0.137	0.17500	0.0108	0.00846	0.00963	0.03520	0.0151	0.05400	0.032	0.03460	0.03	0.02460	0.0374	0.01660	0.00176	0.0231	0.00376	0.00519	0.0017	0.00213	-
Beryllium (dissolved)	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	0.000012	0.000014	0.000012	0.000009	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-
Bismuth (dissolved)	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-
Boron (dissolved)	ICP-MS	mg/L	0.017	0.029	0.062	0.032	0.024	0.017	0.005	0.007	0.028	0.046	0.032	0.045	0.07	0.018	0.036	0.033	0.029	0.025	0.034	0.040	0.04	0.035	0.027	0.054	0.092	0.082	-
Cadmium (dissolved)	ICP-MS	mg/L	0.000124	0.000187	0.000028	0.000028	0.000056	0.000013	0.000024	0.000021	0.000052	0.000008	0.000009	0.000064	0.000028	0.000253	0.00004	0.000185	0.000097	0.000029	0.000018	< 0.000003	< 0.000003	0.000021	0.000003	0.000005	0.000005	< 0.000003	-
Calcium (dissolved)	ICP-MS	mg/L	24.3	111	70.0	18.1	88.1	34.6	24.7	22.2	8.38	19.9	8.27	41.5	69.4	31.8	61.7	36.4	51.4	49.8	32.2	27.3	12.9	34.6	24	26.3	11.1	14.6	-
Chromium (dissolved)	ICP-MS	mg/L	< 0.00008	0.00011	0.00011	0.00012	< 0.00008	0.00016	< 0.00008	0.0001	0.00008	0.00017	0.00099	0.00008	0.00019	0.0001	0.0001	0.00009	< 0.00008	0.00008	0.00067	0.00217	0.00013	< 0.00008	0.00008	< 0.00008	0.00016	0.00031	-
Cobalt (dissolved)	ICP-MS	mg/L	0.000049	0.000227	0.000169	0.000215	0.000189	0.000144	0.000163	0.000133	0.000016	0.000011	< 0.000004	0.000201	0.00007	0.000070	0.000142	0.000022	0.000154	0.000012	0.000015	0.000005	0.000005	0.00002	0.000017	0.000027	0.000015	0.000059	-
Copper (dissolved)	ICP-MS	mg/L	0.0018	0.0086	0.0010	0.0019	0.0008	0.0015	0.0003	0.0007	0.0005	0.0006	< 0.0002	0.0021	0.0026	0.0008	0.0037	0.0010	0.0027	0.0012	0.0008	0.0005	0.0003	0.0009	0.0018	0.001	0.0004	0.001	-
Iron (dissolved)	ICP-MS	mg/L	< 0.007	< 0.007	0.007	0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	0.008	< 0.007	0.009	< 0.007	< 0.007	0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	-
Lead (dissolved)	ICP-MS	mg/L	< 0.00009	< 0.00009	< 0.00009	< 0.00009	0.00015	0.00010	0.00014	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	< 0.00009	-
Lithium (dissolved)	ICP-MS	mg/L	0.0016	0.0034	0.0078	0.0028	0.0102	0.0082	0.006	0.0087	0.001	0.0016	0.0004	0.0017	0.0039	0.0029	0.0037	0.0032	0.0037	0.0022	0.0013	0.0009	0.0009	0.0022	0.0022	0.0027	0.0008	0.0016	-
Magnesium (dissolved)	ICP-MS	mg/L	3.95	10.9	14.90	6.04	20.80	10.40	8.21	8.19	4.7	4.60	2.27	7.74	8.16	11.90	7.92	6.10	11.4	7.67	6.31	6.15	2.84	4.8	2.83	2.92	2.4	2.73	-
Manganese (dissolved)	ICP-MS	mg/L	0.00584	0.0225	0.10400	0.0242	0.09000	0.03560	0.0188	0.01300	0.00313	0.00277	0.00126	0.01370	0.016	0.01260	0.0142	0.00726	0.013	0.00846	0.00675	0.00206	0.00186	0.00671	0.00479	0.00587	0.00181	0.00268	-
Mercury (dissolved)	ICP-MS	mg/L	0.00001	0.00004	0.00002	< 0.00001	0.00002	< 0.00001	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	0.00201	0.00026	0.00003	0.00012	0.00002	0.0013	0.00007	0.00011	0.00003	0.00003	0.00003	0.00004	0.00002	< 0.00001	0.00002	-
Molybdenum (dissolved)	ICP-MS	mg/L	0.489	0.481	0.03470	0.0254	0.07540	0.02610	0.0659	0.05650	0.142	0.01660	0.0137	0.10900	0.0659	0.86100	0.126	0.58100	0.351	0.02340	0.0519	0.00420	0.00517	0.016	0.0103	0.00763	0.00963	0.00239	-
Nickel (dissolved)	ICP-MS	mg/L	< 0.0001	0.0002	0.0002	0.0009	0.0001	0.0003	0.0001	0.0002	0.0002	< 0.0001	< 0.0001	0.0006	0.0002	0.0002	0.0002	0.0002	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0005	-
Phosphorus (dissolved)	ICP-MS	mg/L	< 0.003	< 0.003	0.01	0.004	< 0.003	0.008	0.008	0.006	< 0.003	< 0.003	0.006	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	< 0.003	< 0.003	0.006	< 0.003	-
Potassium (dissolved)	ICP-MS	mg/L	5.42	7.83	16.200	18.5	18.200	14.100	13.6	17.300	14.4	5.810	6.14	20.300	7.38	11.000	9.79	4.240	6.31	3.960	6.93	5.360	2.76	4.47	3.65	10.5	2.3	5.04	-
Selenium (dissolved)	ICP-MS	mg/L	0.00157	0.00453	0.00568	0.00302	0.00653	0.00268	0.00113	0.00108	0.00127	0.00123	0.00045	0.00353	0.00252	0.00216	0.00179	0.00115	0.00182	0.00300	0.0013	0.00236	0.001	0.00245	0.00192	0.00218	0.00097	0.00102	-
Silicon (dissolved)	ICP-MS	mg/L	1.26	1.69	1.63	2.28	1.47	1.42	1.25	1.45	2.06	3.13	2.15	1.79	1.92	1.37	2.6	2.36	1.76	1.46	1.53	2.34	2.7	1.62	1.66	2.06	2.08	2.43	-
Silver (dissolved)	ICP-MS	mg/L	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-
Sodium (dissolved)	ICP-MS	mg/L	6.08	8.26	4.51	3.77	4.95	2.85	1.41	1.57	6.6	12.30	8.11	8.41	14.4	8.96	7.22	9.67	10.2	9.28	10.7	13.60	15.5	7.92	9.52	8.73	10.8	10.6	-
Strontium (dissolved)	ICP-MS	mg/L	0.36	1.29	4.6300	1.07	6.7600	4.1800	2.28	1.9700	0.0631	0.6880	0.115	0.3880	0.251	0.6540	0.417	0.2500	0.559	0.3790	0.438	2.0200	0.108	0.291	0.217	0.135	0.0884	0.0963	-
Sulfur (dissolved)	ICP-MS	mg/L	18	99	67.0	13	83.0	26.0	17	14.0	< 3	15.0	< 3	42.0	66	34.0	58	33.0	54	44.0	31	25.0	10	28	18	23	7	10	-
Thallium (dissolved)	ICP-MS	mg/L	0.000015	0.000021	0.000064	0.000041	0.000042	0.000019	0.000047	0.000029	0.000011	0.000005	0.000006	0.000022	0.000007	0.000031	0.000014	0.000013	0.000016	0.000005	0.000007	0.00001	< 0.000005	0.000005	< 0.000005	0.000009	< 0.000005	0.000005	-
Tin (dissolved)	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	0.00007	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-
Titanium (dissolved)	ICP-MS	mg/L	0.00017	0.0001	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	0.00008	< 0.00007	< 0.00007	0.00026	< 0.00007	0.00015	0.00012	0.00008	< 0.00007	0.00012	0.00023	< 0.00007	0.00008	0.00012	0.00019	0.00008	-
Uranium (dissolved)	ICP-MS	mg/L	0.000022	0.000184	0.002800	0.00249	0.002360	0.002110	0.000751	0.000957	0.000011	0.000016	0.000004	0.000024	0.00002	0.000181	0.000025	0.000021	0.000021	0.000026	0.000014	0.000009	0.000004	0.000012	0.000011	0.000006	0.000009	0.000006	-
Vanadium (dissolved)	ICP-MS	mg/L	0.00204	0.00086	0.00029	0.00198	0.00079	0.00227	0.00161	0.00308	0.00447	0.00764	0.00588	0.00101	0.00088	0.00060	0.00241	0.00216	0.00165	0.00106	0.00199	0.00436	0.00991	0.00141	0.00341	0.00324	0.00746	0.0072	-
Zinc (dissolved)	ICP-MS	mg/L	< 0.002	0.002	< 0.002	0.005	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-
Zirconium (dissolved)	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-

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SGS proposal: 19195-PR2 Work order date: 14-Jun-23
SGS project #: 2321 Report date: 15-Oct-23

Version: Final

Shake Flask Extraction Report

Leachate Analysis Leaching done on ground samples- after wet grinding (G) and dry grinding (DG)

Sample ID			99743G	99775G	98124G	98116G	98070G	Copied - no grind 98074	98074G	98074DG	98086G	98104G	206761G	206785G	Copied - no grind 206796	206796G	206796DG	Copied - no grind 206803	206803G	206803DG	206806G	206820G
Parameter	**Method**	**Units**																				
Volume Nanopure Water		mL	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
pH	meter		8.18	8.23	8.27	8.32	8.33	8.40	8.32	8.57	8.53	8.59	8.50	8.38	8.68	8.42	8.61	8.19	8.30	8.23	8.26	8.45
Redox	meter	mV	301	256	233	204	246	229	237	255	226	219	262	277	282	285	277	276	273	294	301	257
Conductivity	meter	uS/cm	142	173	202	239	311	295	329	529	187	207	158	145	120	131	188	399	200	439	192	208
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	1.0	1.0	1.0	0.8	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	0.8	0.8	0.0
Alkalinity	titration	mg CaCO3/L	48.4	51.7	59.5	68.1	63.7	50.4	71.2	107.4	66.6	69.4	61.1	50.3	44.4	46.7	64.6	41.8	53.4	51.5	43.6	60.3
Chloride		mg/L	1	2	13	11	18	5	23	34	2	3	< 1	1	3	< 1	5	6	3	8	4	4
Sulphate		mg/L	11.6	21.6	18.4	34.4	58.5	72.6	62.7	95.6	20.4	24.6	10.6	13.8	7.6	11.1	10.3	150.7	25.6	118.1	36.6	31.7
Ion Balance																						
Major Anions	Calc	meq/L	1.24	1.54	1.94	2.39	3.00	2.66	3.38	5.10	1.81	1.99	1.44	1.32	1.13	1.17	1.65	4.14	1.68	3.72	1.75	1.98
Major Cations	Calc	meq/L	1.45	1.81	2.24	2.49	3.87	3.19	4.01	5.31	2.02	2.24	1.50	1.44	1.13	1.30	1.75	3.63	1.93	3.89	1.75	2.03
Difference	Calc	meq/L	-0.22	-0.27	-0.30	-0.10	-0.87	-0.53	-0.63	-0.21	-0.21	-0.26	-0.06	-0.12	0.00	-0.13	-0.10	0.52	-0.24	-0.17	0.00	-0.05
Balance (%)	Calc	%	-8.0%	-8.1%	-7.1%	-2.1%	-12.6%	-9.0%	-8.5%	-2.0%	-5.4%	-6.0%	-2.0%	-4.5%	-0.1%	-5.3%	-3.1%	6.6%	-6.7%	-2.2%	-0.1%	-1.3%
Dissolved Metals																						
Hardness (dissolved)		mg/L	58.2	75.6	96.5	105	174.0	129.0	181.0	190	89.6	99.0	54.8	52.9	30	45	33.8	136.0	71.3	117	68.2	82.4
Aluminum (dissolved)	ICP-MS	mg/L	0.101	0.084	0.063	0.091	0.058	0.108	0.077	0.202	0.111	0.108	0.083	0.056	0.093	0.09	0.211	0.050	0.103	0.183	0.105	0.097
Antimony (dissolved)	ICP-MS	mg/L	0.0121	0.0141	0.0427	0.0315	0.034	0.0452	0.0524	0.134	0.0109	0.0153	0.0041	0.0032	0.0017	0.0038	0.0072	0.181	0.247	0.261	0.0062	0.0077
Arsenic (dissolved)	ICP-MS	mg/L	0.003	0.0015	0.0027	0.0061	0.0055	0.0341	0.0065	0.0279	0.005	0.0032	0.0019	0.0009	0.0006	0.0005	0.0008	0.0185	0.0128	0.0136	0.0009	0.0032
Barium (dissolved)	ICP-MS	mg/L	0.136	0.144	0.11100	0.109	0.13900	0.15900	0.15400	0.184	0.312	0.27000	0.0166	0.01130	0.00963	0.0103	0.01400	0.03520	0.05100	0.0369	0.00703	0.17000
Beryllium (dissolved)	ICP-MS	mg/L	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	0.000014	0.000008	0.000017	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007
Bismuth (dissolved)	ICP-MS	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Boron (dissolved)	ICP-MS	mg/L	0.043	0.037	0.042	0.029	0.027	0.017	0.023	0.055	0.017	0.022	0.039	0.065	0.032	0.048	0.088	0.045	0.051	0.094	0.06	0.023
Cadmium (dissolved)	ICP-MS	mg/L	0.000084	0.000078	0.000182	0.000077	0.000032	0.000013	0.000054	0.000029	0.00001	0.000007	0.000029	0.000004	0.000009	0.000003	0.000014	0.000064	0.000012	0.000066	0.000005	0.000083
Calcium (dissolved)	ICP-MS	mg/L	16.1	20.7	26.7	27	47.9	34.6	48.2	42	22.9	24.6	11.5	14.6	8.27	12.4	7.4	41.5	20.2	30.5	21.3	17.4
Chromium (dissolved)	ICP-MS	mg/L	0.00014	0.00011	0.00013	0.0002	0.00011	0.00016	0.00008	0.00022	0.00015	0.00011	0.00008	0.00011	0.00099	0.00023	0.00151	0.00008	0.00018	0.00011	0.00009	0.00011
Cobalt (dissolved)	ICP-MS	mg/L	0.00005	0.000044	0.000161	0.000194	0.000181	0.000144	0.000270	0.000206	0.000109	0.000103	0.000069	0.000012	< 0.000004	0.000007	< 0.000004	0.000201	0.000081	0.000076	0.000028	0.000078
Copper (dissolved)	ICP-MS	mg/L	0.0027	0.0033	0.0034	0.0051	0.0022	0.0015	0.0036	0.0028	0.0037	0.0031	0.0034	0.0008	< 0.0002	0.0006	< 0.0002	0.0021	0.0025	0.0015	0.0019	0.0022
Iron (dissolved)	ICP-MS	mg/L	0.01	0.013	0.015	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	0.008	< 0.007	< 0.007	< 0.007	0.056	< 0.007	0.009	0.022
Lead (dissolved)	ICP-MS	mg/L	0.00019	0.0002	0.00328	0.00021	0.00018	0.00010	0.00034	0.00047	< 0.00009	< 0.00009	0.00013	< 0.00009	< 0.00009	< 0.00009	0.00023	< 0.00009	< 0.00009	0.00027	< 0.00009	< 0.00009
Lithium (dissolved)	ICP-MS	mg/L	0.0019	0.0028	0.0036	0.0027	0.0059	0.0082	0.0063	0.0238	0.0037	0.0053	0.0017	0.0017	0.0004	0.001	0.0007	0.0017	0.0017	0.002	0.0024	0.0025
Magnesium (dissolved)	ICP-MS	mg/L	4.35	5.83	7.23	9.23	13.20	10.40	14.80	20.7	7.88	9.12	6.37	3.97	2.27	3.44	3.71	7.74	5.04	9.92	3.66	9.44
Manganese (dissolved)	ICP-MS	mg/L	0.0046	0.00596	0.03170	0.0216	0.02900	0.03560	0.03670	0.0272	0.00734	0.00713	0.00421	0.00213	0.00126	0.0017	0.00125	0.01370	0.00629	0.00768	0.00465	0.00627
Mercury (dissolved)	ICP-MS	mg/L	< 0.00001	0.00001	0.00015	0.0003	0.00026	< 0.00001	0.00026	0.00004	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00201	0.00042	0.00046	0.00007	0.00003
Molybdenum (dissolved)	ICP-MS	mg/L	0.0917	0.151	0.01950	0.0083	0.01730	0.02610	0.00902	0.0534	0.0129	0.00953	0.0378	0.00473	0.0137	0.00342	0.01990	0.10900	0.02660	0.142	0.0156	0.31800
Nickel (dissolved)	ICP-MS	mg/L	0.0002	0.0002	0.0004	0.0005	0.0005	0.0003	0.0006	0.0004	0.0003	0.0003	0.0005	< 0.0001	< 0.0001	0.0001	< 0.0001	0.0006	0.0003	0.0003	0.0002	0.0002
Phosphorus (dissolved)	ICP-MS	mg/L	< 0.003	< 0.003	0.004	0.003	0.003	0.008	0.003	0.019	0.003	0.003	0.003	0.005	0.006	0.004	0.015	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Potassium (dissolved)	ICP-MS	mg/L	3.32	3.37	5.430	7.76	5.390	14.100	5.880	38.9	3.44	4.550	9.01	3.850	6.14	4.97	12.60	20.300	9.69	33.2	3.21	5.220
Selenium (dissolved)	ICP-MS	mg/L	0.00042	0.00091	0.00216	0.00332	0.00306	0.00268	0.00387	0.00472	0.00101	0.00093	0.00056	0.00044	0.00045	0.00027	0.00048	0.00353	0.00122	0.00321	0.00074	0.00080
Silicon (dissolved)	ICP-MS	mg/L	2.5	2.34	2.45	2.59	1.93	1.42	1.89	1.7	2.25	2.45	2.46	3.52	2.15	2.74	2.27	1.79	2.03	1.8	1.87	1.67
Silver (dissolved)	ICP-MS	mg/L	< 0.00005	< 0.00005	0.00012	0.00049	0.00042	< 0.00005	0.00078	0.00163	< 0.00005	0.00008	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Sodium (dissolved)	ICP-MS	mg/L	3.92	3.99	2.67	3.18	2.38	2.85	2.38	8.22	1.94	2.07	3.44	5.89	8.11	5.51	16.10	8.41	4.97	14.6	6.25	4.85
Strontium (dissolved)	ICP-MS	mg/L	0.325	0.589	1.4200	1.09	5.71	4.18	4.90	4.61	1.41	1.4200	0.113	0.3860	0.115	0.133	0.1080	0.3880	0.2710	0.338	0.0857	0.6030
Sulfur (dissolved)	ICP-MS	mg/L	7	16	23.0	26	44.0	26.0	48.0	58	14	17.0	6	7.0	< 3	6	5.0	42.0	19.0	48	14	13.0
Thallium (dissolved)	ICP-MS	mg/L	0.000043	0.00001	0.00001	0.00003	< 0.000005	0.000019	< 0.000005	0.000089	< 0.000005	< 0.000005	< 0.000005	< 0.000005	0.000006	< 0.000005	0.000025	0.000022	< 0.000005	0.000035	0.000005	0.000019
Tin (dissolved)	ICP-MS	mg/L	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	0.00011	< 0.00006
Titanium (dissolved)	ICP-MS	mg/L	0.00044	0.00016	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	0.00011	0.00008	< 0.00007	< 0.00007	< 0.00007	< 0.00007	< 0.00007	0.00008	0.00017
Uranium (dissolved)	ICP-MS	mg/L	0.000002	0.000003	0.000311	0.000808	0.000927	0.002110	0.002000	0.00355	0.000786	0.000625	0.000006	0.000005	0.000004	< 0.000002	0.000005	0.000024	0.000005	0.000032	0.000003	0.000039
Vanadium (dissolved)	ICP-MS	mg/L	0.00071	0.00037	0.00007	0.00016	0.00022	0.00227	0.00023	0.00229	0.00051	0.00056	0.0015	0.00268	0.00588	0.00169	0.00628	0.00101	0.00062	0.00184	0.00054	0.00044
Zinc (dissolved)	ICP-MS	mg/L	< 0.002	0.003	0.01	0.005	0.003	< 0.002	0.005	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002
Zirconium (dissolved)	ICP-MS	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002

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Version: Final

Shake Flask Extraction Report

Leachate Analysis Leaching done on ground samples- after wet grinding (G) and dry grinding (DG)

Sample ID	206825G	206831G	Copied - no grind 206839	206839G	206839DG	151633G	Copied - no grind 206753	206753G	206753DG	207061G	Copied - no grind 207070	207070G	207070DG	207079G	207091G	207103G	207106G	207111G	Blank G	Blank
Parameter																				
Volume Nanopure Water	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	-	-
pH	8.30	8.37	8.13	8.37	8.11	8.35	8.27	8.36	8.28	8.46	8.57	8.20	8.39	8.16	8.16	8.18	8.21	8.22	5.68	5.69
Redox	271	265	334	278	300	280	300	272	272	271	290	358	282	294	272	272	274	279	-	-
Conductivity	141	150	445	139	498	129	308	164	328	132	180	121	222	124	128	128	108	129	1.0	1.0
Acidity (to pH 4.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Total Acidity (to pH 8.3)	0.8	0.0	0.8	0.0	0.9	0.5	0.7	0.4	0.7	0.0	0.0	0.9	0.0	1.0	0.9	1.0	0.9	0.9	-	-
Alkalinity	47.3	47.7	32.6	52.1	38.6	46.9	38.5	49.8	46.8	47.5	41.6	48.7	48.1	45.6	45.5	49.3	46.6	49.3	-	-
Chloride	2	2	5	< 1	6	< 1	2	< 1	4	< 1	6	< 1	8	< 1	< 1	< 1	< 1	< 1	-	-
Sulphate	20.1	17.6	137.6	13.2	160.1	13.5	105.5	23.2	91.5	10.3	33	5.2	35.7	11.8	13	9.1	4.6	9	-	-
Ion Balance																				
Major Anions	1.42	1.38	3.66	1.32	4.28	1.22	3.02	1.48	2.96	1.16	1.69	1.08	1.93	1.16	1.18	1.17	1.03	1.17		
Major Cations	1.32	1.42	4.14	1.37	4.56	1.25	2.80	1.56	2.94	1.33	1.65	1.19	1.99	1.20	1.21	1.21	1.07	1.24		
Difference	0.10	-0.05	-0.49	-0.05	-0.28	-0.03	0.22	-0.08	0.01	-0.17	0.04	-0.11	-0.06	-0.04	-0.03	-0.03	-0.05	-0.07		
Balance (%)	3.7%	-1.6%	-6.2%	-2.0%	-3.2%	-1.3%	3.9%	-2.6%	0.2%	-6.7%	1.3%	-4.7%	-1.4%	-1.8%	-1.4%	-1.4%	-2.1%	-2.7%		
Dissolved Metals																				
Hardness (dissolved)	53.8	57.6	176	57.2	159.0	53.4	106	60.3	90.8	50.6	43.9	45.4	40.8	48.8	50.1	49	40.5	45.4	-	-
Aluminum (dissolved)	0.064	0.084	0.053	0.09	0.138	0.096	0.067	0.099	0.183	0.089	0.082	0.087	0.174	0.118	0.111	0.115	0.11	0.101	-	-
Antimony (dissolved)	0.0101	0.0072	0.0435	0.0222	0.0371	0.0047	0.0137	0.0104	0.0218	0.0018	0.0011	0.0027	0.0043	0.0024	0.0035	0.0081	0.0043	0.0022	-	-
Arsenic (dissolved)	0.0108	0.0028	0.008	0.003	0.0043	0.0005	0.0022	0.001	0.0013	0.0003	0.0009	0.0013	0.0011	0.0007	0.0008	0.0016	0.0032	0.0094	-	-
Barium (dissolved)	0.115	0.05520	0.03	0.259	0.03580	0.03020	0.0374	0.116	0.0416	0.01250	0.00176	0.00309	0.00644	0.0181	0.0062	0.00795	0.00269	0.00165	-	-
Beryllium (dissolved)	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	< 0.000007	-	-
Bismuth (dissolved)	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-	-
Boron (dissolved)	0.032	0.029	0.029	0.024	0.071	0.027	0.034	0.038	0.065	0.040	0.04	0.036	0.074	0.028	0.026	0.034	0.077	0.08	-	-
Cadmium (dissolved)	0.000008	0.000013	0.000097	0.000024	0.000261	0.000004	0.000018	0.000007	0.000036	0.000004	< 0.000003	0.000003	0.000006	< 0.000003	0.000004	0.000003	0.000003	0.000003	-	-
Calcium (dissolved)	16.8	17.0	51.4	15.8	38.8	16.7	32.2	17.7	23.7	14.5	12.9	13.7	10.7	15.5	17.1	16.9	12.4	14	-	-
Chromium (dissolved)	< 0.00008	0.00008	< 0.00008	0.00019	0.0002	0.00013	0.00067	0.00031	0.00073	0.00024	0.00013	0.00009	0.00148	0.00024	0.0002	0.00061	0.00012	0.00016	-	-
Cobalt (dissolved)	0.000078	0.000024	0.000154	0.000033	0.000144	0.000012	0.000015	0.000024	0.000011	0.000008	0.000005	0.00002	0.000008	0.00002	0.00002	0.000048	0.000011	0.000024	-	-
Copper (dissolved)	0.0035	0.0021	0.0027	0.0025	0.0011	0.0019	0.0008	0.002	0.0004	0.0008	0.0003	0.0034	0.0008	0.0033	0.0034	0.0041	0.0011	0.0013	-	-
Iron (dissolved)	< 0.007	< 0.007	< 0.007	0.037	< 0.007	< 0.007	< 0.007	0.076	< 0.007	0.027	< 0.007	0.046	< 0.007	0.056	0.012	0.239	< 0.007	< 0.007	-	-
Lead (dissolved)	< 0.00009	< 0.00009	< 0.00009	0.00012	0.00020	< 0.00009	< 0.00009	< 0.00009	0.0005	< 0.00009	< 0.00009	< 0.00009	0.00037	< 0.00009	< 0.00009	0.00018	< 0.00009	< 0.00009	-	-
Lithium (dissolved)	0.0019	0.0018	0.0037	0.002	0.0030	0.0017	0.0013	0.0014	0.0015	0.0009	0.0009	0.0019	0.0013	0.0018	0.0018	0.002	0.0014	0.0018	-	-
Magnesium (dissolved)	2.88	3.72	11.4	4.28	15.20	2.86	6.31	3.92	7.66	3.47	2.84	2.73	3.39	2.48	1.82	1.64	2.32	2.56	-	-
Manganese (dissolved)	0.00521	0.00454	0.013	0.00434	0.00743	0.00282	0.00675	0.00419	0.00469	0.00140	0.00186	0.00244	0.00201	0.00268	0.0032	0.00513	0.002	0.00265	-	-
Mercury (dissolved)	< 0.00001	< 0.00001	0.0013	0.00004	0.00008	< 0.00001	0.00011	< 0.00001	< 0.00001	< 0.00001	0.00003	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	-	-
Molybdenum (dissolved)	0.015	0.06910	0.351	0.0647	0.48500	0.00449	0.0519	0.0104	0.0633	0.00199	0.00517	0.0019	0.01580	0.00364	0.00366	0.00213	0.00226	0.00109	-	-
Nickel (dissolved)	0.0004	0.0003	< 0.0001	0.001	0.0002	< 0.0001	< 0.0001	0.0009	< 0.0001	0.0018	< 0.0001	0.0022	< 0.0001	0.0029	0.0031	0.0165	< 0.0001	0.0012	-	-
Phosphorus (dissolved)	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.003	< 0.003	0.003	< 0.003	0.013	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	-	-
Potassium (dissolved)	2.36	2.290	6.31	2.12	16.000	1.040	6.93	4.08	11.3	2.870	2.76	1.2	4.600	1.6	1.1	2.35	1.14	2.99	-	-
Selenium (dissolved)	0.00098	0.00033	0.00182	0.00023	0.00176	0.00047	0.0013	0.00037	0.00116	0.00041	0.001	0.00026	0.00122	0.00054	0.00056	0.0006	0.00029	0.00039	-	-
Silicon (dissolved)	2.56	2.09	1.76	1.96	2.11	1.83	1.53	1.81	1.86	2.23	2.7	2.44	2.62	1.69	1.95	2.01	2.28	2.21	-	-
Silver (dissolved)	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	< 0.00005	-	-
Sodium (dissolved)	3.67	4.25	10.2	3.28	20.80	3.06	10.7	4.91	18.2	4.78	15.5	5.18	23.30	3.54	3.66	3.11	4.55	4.95	-	-
Strontium (dissolved)	0.17	0.1540	0.559	0.29	0.4770	0.1080	0.438	0.249	0.304	0.7780	0.108	0.0766	0.0877	0.116	0.0807	0.0741	0.0628	0.0729	-	-
Sulfur (dissolved)	6	7.0	54	4	62.0	5.0	31	8	35	5.0	10	< 3	15.0	4	5	4	< 3	3	-	-
Thallium (dissolved)	0.000007	0.000009	0.000016	0.000008	0.000036	< 0.000005	0.000007	0.000008	0.000018	0.000009	< 0.000005	< 0.000005	0.000009	< 0.000005	< 0.000005	0.000005	< 0.000005	0.000005	-	-
Tin (dissolved)	< 0.00006	0.00014	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	0.00007	< 0.00006	0.00007	< 0.00006	< 0.00006	< 0.00006	< 0.00006	< 0.00006	-	-
Titanium (dissolved)	0.00007	0.00014	0.00012	0.00011	0.00019	< 0.00007	< 0.00007	< 0.00007	< 0.00007	0.00011	0.00023	< 0.00007	< 0.00007	< 0.00007	< 0.00007	0.00017	0.00008	< 0.00007	-	-
Uranium (dissolved)	0.000014	0.000004	0.000021	0.000002	0.000020	0.000003	0.000014	0.000003	0.000036	0.000003	0.000004	< 0.000002	0.000008	0.000003	0.000012	0.000005	0.000002	< 0.000002	-	-
Vanadium (dissolved)	0.00054	0.00065	0.00165	0.00051	0.00205	0.00050	0.00199	0.00089	0.00272	0.00142	0.00991	0.00159	0.00766	0.00056	0.00059	0.00069	0.0011	0.00156	-	-
Zinc (dissolved)	< 0.002	0.002	< 0.002	< 0.002	0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-
Zirconium (dissolved)	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	-	-

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SGS

ANALYSIS REPORT
ABA Report - CRM Expected Values and Tolerances

CRM	Test	S(T)	S(SO4)	S(S-2)	C(T)	TIC	Modified NP	Modified with Siderite Correction NP	Sobek With Siderite NP	Fizz Test	Paste pH
	Units	%	%	%	%	%	kg CaCO3/t	kg CaCO3/t	kg CaCO3/t		
	Method Code	CSA06V	CSA07V	Calc.	CSA06V	CSB02V	Modified			Sobek	Sobek
	LOD	0.005	0.01	0.01	0.005	0.01	0.5				0.2
GGC-07	Expected value	0.51			0.56						
	Tolerance (+/-)	0.09			0.09						
HCC-1	Expected value	33.92									
	Tolerance (+/-)	5.04									
RTS-3a	Expected value		0.98								
	Tolerance (+/-)		0.12								
OREAS 278	Expected value			0.699							
	Tolerance (+/-)			0.06							
NBM-1	Expected value						42.09	51.85	57.6	Slight	
	Tolerance (+/-)						2.85	2.62	1.3		
TIC-L1	Expected value					0.13					
	Tolerance (+/-)					0.02					
GS314-2	Expected value	2.56			5.15						
	Tolerance (+/-)	0.14			0.27						
SY4	Expected value					0.95					
	Tolerance (+/-)					0.06					

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Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	10000	500	100	500	10000	1000
OREAS 502C	Expected value	102	9.53	0.80	59	0.53	0.68	BDL	59	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22
	Tolerance (%)	15.0	15.7	20.1	17.7	38.5	16.5		16.3	10.6	14.5	19.6		16.2		26.2	24.3	15.4
OREAS 503D	Expected value	67	12.2	1.32	87	0.6	1.4	BDL	62	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21
	Tolerance (%)	21.4	22.0	25.1	15.8	38.6	11.1		21.0	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6
OREAS 260	Expected value	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14
	Tolerance (%)	14.4		26.7	36.0	24.0	16.7	24.3		12.9		42.2				55.6		12.9
OREAS 920	Expected value	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2	
	Tolerance (%)	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3	13.8	56.9	28.7		41.8		17.2	27.3	
OREAS 209	Expected value	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13
	Tolerance (%)	15.5	13.5	41.4	13.5		20.3		18.2	11.6	21.5	21.6		17.9		53.7	49.3	27.7
OREAS 905	Expected value	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03
	Tolerance (%)	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88	23.72	36.36	30.79		54.10		21.72	18.54	44.12
OREAS 261	Expected value	128		0.20	17.8	1.23	0.59	0.27		31.5		5.0			0.1	0.03		0.14
	Tolerance (%)	12.0		22.3	24.0	30.3	18.5	19.3		10.8		15.0			45.2	188.6		27.9
OREAS 263	Expected value	127		0.29	30.8	1.22	0.57	0.27		31		4.9			0.2	0.03		
	Tolerance (%)	12.0		18.8	18.1	30.5	18.8	19.3		10.8		15.1			24.7	182.4		
OREAS 235	Expected value	75.0	27.3	0.135	331	1.22	0.33	0.033	57	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12
	Tolerance (%)	13	15	29	11	20	18	86	10	12	12	13	270	26		64	11	31
OREAS 151b	Expected value	238	3.170	0.52	30.8	0.22	0.40	0.58	16.2	10.9	1.22	8.1		0.1		0.07	7.34	0.12
	Tolerance (%)	11.1	49.4	14.8	18.1	66.8	16	14	10.3	12.3	20.3	13.1		135.0		27.9	13.4	30.8

CRM	Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3
OREAS 235	Expected value	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6	1.55	0.45	9.47	0.85
	Tolerance (%)	32	52	16	10	10	14		48		21		11	18	18	38	11	39
OREAS 151b	Expected value	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12	0.60		10.40	0.93
	Tolerance (%)	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7	30.8		11.2	36.9

CRM	Test	Ca*
	Units	%
Method Code		ICP95A50
	Lower detection	0.007
	Upper detection	43
OREAS 70B	Expected value	3.08
	Tolerance (%)	3.5
MRG_1	Expected value	10.55
	Tolerance (%)	5.1

*Borate fusion ICP

CRM	Test	Hg
	Units	ppm
Method Code		CVA37A25
OREAS 621	Expected value	3.93
	Tolerance (%)	10.3
CZN-4	Expected value	4.54
	Tolerance (%)	10.3

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SGS proposal: 19195-PR2-COS#1-R1
SGS project #: 2321

Work order date: 11-Dec-23
Report date: 20-Dec-23
Sample receipt date: 14-Jan-23
Version: Final

Customer details

Name:	Timo kirchner
Address:	Agnico

Project reference: Upper Beaver Hg Leachability

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 4

Report Distribution

Name	Email
Rtimo Kirchner	

Special notes:

Hg analysis on samples after wet grinding (G) and dry grinding (DG)

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

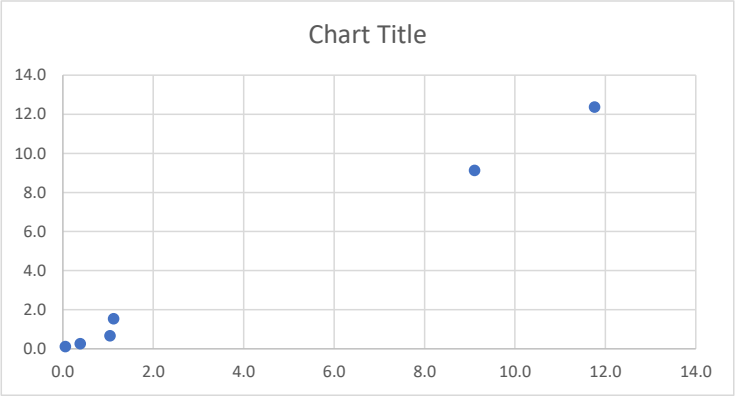
Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR2-COS#1-R1 Work order date: 11-Dec-23
SGS project #: 2321 Report date: 20-Dec-23

Version: Final

Hg By Cold Vapour

Test	Hg
Units	ppm
Method Code	CVA37A25
Lower detection	0.005
Upper detection	100
Sample ID	
98074 G	1.0
206796 G	0.4
206803 G	9.1
206839 G	11.8
206753 G	1.1
207070 G	0.1
98074 DG	0.7
206796 DG	0.3
206803 DG	9.1
206839 DG	12.4
206753 DG	1.5
207070 DG	0.1
Duplicates	
98074 DG	0.7
QA/QC	
Blank	<.005
Certified standards	
OREAS 609b	0.542
CZN-4	4.5



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SGS proposal: 19195-PR1- COS#8
SGS project #: 2321

Work order date: 14-May-24
Report date: 16-Jul-24
Sample receipt date: Old Tailing
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Agnico

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 6

Report Distribution

Name	Email

Special notes:

For MTCP-005 in SFE :insufficent volume for In-house Analysis

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

SGS proposal: 19195-PR1- COS#8
SGS project #: 2321

Work order date: 14-May-24
Report date: 16-Jul-24

Version: Final

Metals - Aqua Regia Digestion with ICP-OES/MS Finish

Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co
Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1
Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000	1000	10000
Sample ID																										
Detox Tailings-Col#1 Residue	1.68	197	4.1	192	556	5.46	0.1	16	1.95	537	0.02	101	0.08	0.19	132	0.15	118	30	15.9	0.19	7	0.3	1.0	0.05	19.81	23.9
Duplicates																										
Detox Tailings-Col#1 Residue	1.68	202	4.11	186	571	5.44	0.11	17	1.93	536	0.03	99	0.08	0.19	136	0.15	115	31	16.0	0.19	6	0.3	1.1	0.05	20.46	23
QA/QC																										
Blank	<0.01	<5	<0.01	<1	1	<0.01	<0.01	<1	<0.01	<2	0.01	<1	<0.01	<0.01	<0.5	<0.01	<1	<1	<0.5	<0.01	<1	<0.1	<0.02	<0.01	<0.05	<0.1
Certified standards																										
OREAS 920	2.45	91	0.35	45	110	3.52	0.49	21	1.10	531	0.03	38	0.08	0.03	16.7	0.20	28	99	32.1	0.10	5	0.9	0.7	0.08	77.8	15.1
OREAS 501c	2.16	422	1	70	2751	3.99	1.14	32	1.26	403	0.21	57	0.10	0.37	64.3	0.39	113	69	10.7	0.45	27	0.5	0.7	0.17	64.04	14.2

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Test	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
Lower detection	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Upper detection	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
Sample ID																									
Detox Tailings-Col#1 Residue	0.38	7.0	0.1	0.41	0.4	0.03	10.9	0.11	98.74	0.14	2.9	5.3	1.8	8.8	<1	0.4	<0.05	0.3	0.13	0.8	<0.02	0.31	13.9	8.39	0.8
Duplicates																									
Detox Tailings-Col#1 Residue	0.37	6.8	0.1	0.47	0.5	0.03	11	0.11	91.97	0.15	3	5.2	1.7	8.6	<1	0.3	<0.05	0.3	0.14	0.8	<0.02	0.31	12.6	8.21	0.8
QA/QC																									
Blank	<0.05	<0.1	<0.1	<0.05	<0.01	<0.02	<0.1	<0.01	0.06	<0.05	<0.2	<0.2	<0.05	<0.1	<1	<0.3	<0.05	<0.02	<0.05	<0.1	<0.02	<0.05	<0.1	<0.05	<0.1
Certified standards																									
OREAS 920	2.54	7.3	<0.1	0.88	<0.01	0.04	38.6	0.32	0	0.97	22	32.2	0.6	3.2	<1	1.5	<0.05	0.9	<0.05	16.4	0.19	2.48	0.6	19.37	2.2
OREAS 501c	10.00	8.8	0.2	0.44	0.0	0.05	32.7	0.26	100.00	2.60	8.7	134	1.5	7.8	2	2.9	<0.05	0.6	0.28	19.6	0.78	5.25	3.1	20.24	1.7

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SGS proposal: 19195-PR1- COS#ample receipt date: 14-May-24
SGS project #: 2321 Report date: 16-Jul-24

Version: Final

Hg/MeHg Speciation on Solids/Solution

Sample ID	Units	Detox Tailings Residue	30107-MTCP-005(Pulverized)	Detox Tailings Residue-SFE Leachate	30107-MTCP-005(150 Mesh)-SFE Leachate
LOD		0.0050	0.050	0.0000050	0.000020
Mercury	mg/kg	0.418	1.10	-	-
Methylmercury (as MeHg)	µg/kg	<0.050	0.460	-	-
Mercury, total	mg/L	-	-	0.000179	0.0000269
Methylmercury (as MeHg), total	µg/L	-	-	0.00306	0.00135
		0.012%	0.042%	2%	5%

SGS proposal: 19195-PR1- COS#8
SGS project #: 2321

Work order date: 14-May-24
Report date: 17-Jun-24

Version: Final

Shake Flask Extraction Report

Leachate Analysis

ISS = insufficient sample

Sample ID			Detox Tailings-Col#1 Residue	30107-MTCP-005 (150 Mesh)	Blank
Parameter	**Method**	**Units**			
Volume Nanopure Water		mL	960	150	750
Sample Weight		g	320	50	-
pH	meter		7.62	ISS	5.66
Redox	meter	mV	241	ISS	-
Conductivity	meter	uS/cm	2524	ISS	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	ISS	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	3.2	ISS	-
Alkalinity	titration	mg CaCO3/L	28.8	ISS	-
Sulphate	IC	mg/L	1181.7	ISS	-
Ion Balance					
Major Anions	Calc	meq/L	25.19		
Major Cations	Calc	meq/L	31.60		
Difference	Calc	meq/L	-6.41		
Balance (%)	Calc	%	-11.3%		
Dissolved Metals					
Hardness CaCO3		mg/L	1280	701	-
Aluminum Al	ICP-MS	mg/L	0.02	0.032	-
Antimony Sb	ICP-MS	mg/L	0.0239	0.0126	-
Arsenic As	ICP-MS	mg/L	0.0016	0.0026	-
Barium Ba	ICP-MS	mg/L	0.0271	0.0648	-
Beryllium Be	ICP-MS	mg/L	< 0.000007	< 0.000007	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.043	0.949	-
Cadmium Cd	ICP-MS	mg/L	0.000096	0.000239	-
Calcium Ca	ICP-MS	mg/L	502	249	-
Chromium Cr	ICP-MS	mg/L	0.00889	0.00011	-
Cobalt Co	ICP-MS	mg/L	0.00325	0.000626	-
Copper Cu	ICP-MS	mg/L	0.003	0.005	-
Iron Fe	ICP-MS	mg/L	0.04	0.029	-
Lead Pb	ICP-MS	mg/L	0.00015	0.00037	-
Lithium Li	ICP-MS	mg/L	0.002	0.0139	-
Magnesium Mg	ICP-MS	mg/L	6.55	19.3	-
Manganese Mn	ICP-MS	mg/L	0.0186	0.0566	-
Mercury Hg	CVAAS	ug/L	0.11	0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.248	0.363	-
Nickel Ni	ICP-MS	mg/L	0.0004	0.0015	-
Phosphorus P	ICP-MS	mg/L	0.012	0.005	-
Potassium K	ICP-MS	mg/L	12	17.7	-
Selenium Se	ICP-MS	mg/L	0.00897	0.00172	-
Silicon Si	ICP-MS	mg/L	2.82	3.04	-
Silver Ag	ICP-MS	mg/L	< 0.00005	< 0.00005	-
Sodium Na	ICP-MS	mg/L	129	17.8	-
Strontium Sr	ICP-MS	mg/L	3.3	3.79	-
Sulphur (S)	ICP-MS	mg/L	542	246	-
Thallium Tl	ICP-MS	mg/L	0.000031	0.000095	-
Tin Sn	ICP-MS	mg/L	< 0.00006	< 0.00006	-
Titanium Ti	ICP-MS	mg/L	0.0003	0.0015	-
Uranium U	ICP-MS	mg/L	0.00103	0.000898	-
Vanadium V	ICP-MS	mg/L	0.00114	0.00551	-
Zinc Zn	ICP-MS	mg/L	0.002	0.011	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	< 0.002	-

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000	10000	10000	100	10000	100	10000	10000	1000
OREAS 502C	Expected value	2.07	383	1.09	66	7990	4.45	1.07	30.9	1.21	380	0.19	36.4	0.10	0.82	66	0.34	110	102	9.53	0.80	59	0.53	0.68	BDL	59
	Tolerance (%)	15.6	18	18.4	18.7	6.6	11.4	15.2	14.1	10.2	7.2	32.2	18.8	12.5	14.5	25.5	10.8	11.3	15.0	15.7	20.1	17.7	38.5	16.5		16.3
OREAS 503D	Expected value	2.08	361	1.19	66	5220	4.58	1.06	27.9	1.21	410	0.21	31.2	0.11	0.80	88	0.32	104	67	12.2	1.32	87	0.6	1.4	BDL	62
	Tolerance (%)	16.8	20	20.0	17.1	6.6	11.5	10.8	33.0	12.7	106.3	38.3	13.0	14.9	13.9	36.5	18.1	14.7	21.4	22.0	25.1	15.8	38.6	11.1		21.0
OREAS 260	Expected value	1.33	151	0.885	49.2	46.5	3.73	0.285	21.5	0.59	450	0.08	75.0	0.04	0.08	14.8	BDL	22	125	BDL	0.15	12.5	1.24	0.54	0.21	BDL
	Tolerance (%)	31.2	24	15.9	29.9	14.8	12.9	57.9	18.0	12.1	20	22.0	10.8	15.0	15.6	24.7		32.7	14.4		26.7	36.0	24.0	16.7	24.3	
OREAS 920	Expected value	2.43	80	0.32	42.5	110	3.63	0.45	21.2	1.10	526	< 0.04	38.4	0.07	0.03	16.9	0.12	26.3	106.4	21.3	0.10	4.4	0.73	0.68	0.06	71.5
	Tolerance (%)	18.6	13	19.8	12.7	12.8	12.7	44.5	21.7	18.9	10.3		14.8	20.4	40.5	14.1	60.5	25.8	14.5	23.5	59.2	29.8	41.5	41.8	39.3	14.3
OREAS 209	Expected value	1.23	73	1.49	39.1	75.6	6.04	0.06	5.38	2.35	1360	0.19	112.8	0.16	0.89	63.5	0.12	39.7	74.3	27.4	0.26	1047	< 0.5	0.06	< 0.2	27.7
	Tolerance (%)	13.3	26	13.9	19.9	14.6	18.0	35.1	22.3	16.9	15.3	34.3	16.6	19.2	22.0	31.4	47.5	28.1	15.5	13.5	41.4	13.5		20.3		18.2
OREAS 905	Expected value	0.82	249	0.34	17.6	1562	3.50	0.32	4.87	0.16	350	0.09	8.9	0.023	0.07	12.3	0.02	6.1	67.0	47.5	0.52	32	0.93	5.7	0.34	80.0
	Tolerance (%)	18.0	18	16.0	30.7	9.0	12.8	21.4	41.3	22.8	8.6	29.3	21.5	26.1	32.3	28.5	47.4	42.1	22.4	31.6	28.5	17.2	25.5	18.4	25.59	19.88
OREAS 261	Expected value	1.33	171	1.15	48.5	64.0	3.74	0.281	21.1	0.66	460	0.08	74.0	0.04	0.11	17.5		22.6	128		0.20	17.8	1.23	0.59	0.27	
	Tolerance (%)	11.9	17	12.2	15.2	12.0	10.7	18.9	21.9	13.8	11	40.5	13.4	40.5	32.7	17.1		21.1	12.0		22.3	24.0	30.3	18.5	19.3	
OREAS 263	Expected value	1.29	175	1.03	48	87.0	3.68	0.288	20.1	0.59	490	0.08	72.0	0.04	0.13	16.9		22.8	127		0.29	30.8	1.22	0.57	0.27	
	Tolerance (%)	11.9	17	12.4	15.2	11.4	10.7	18.7	22.4	14.2	11	41.7	13.5	40.5	29.8	17.4		21.0	12.0		18.8	18.1	30.5	18.8	19.3	
OREAS 235	Expected value	2.5	104	0.2	100.0	24.0	3.4	1.0	33.4	1.3	210	0.1	57.0	0.1	0.1	16.7	0.1	67.0	75.0	27.3	0.135	331	1.22	0.33	0.033	57
	Tolerance (%)	10.5%	14.8%	12.5%	12.5%	15.2%	10.7%	11.3%	17.5%	10.2%	12.4%	26.9%	14.4%	25.0%	42.1%	17.5%	11.8%	13.7%	13	15	29	11	20	18	86	10
OREAS 151b	Expected value	2.43	71	1.37	26.3	1800.0	3.28	0.404	6.07	1.42	280	0.18	14.2	0.05	0.72	38.5		140	238	3.170	0.52	30.8	0.22	0.40	0.58	16.2
	Tolerance (%)	11.0	28	11.8	19.5	10.1	10.8	16.2	51.2	11.8	12	24.2	27.6	34.0	13.5	13.3		11.8	11.1	49.4	14.8	18.1	66.8	16	14	10.3
OREAS 609b	Expected value	0.684		0.764	17.4	4970	2.32	0.279	7.32	0.067	210	0.06	7.05	0.021	1.76	36.2	0.009	5.69	1259	34.6	24.4	1460	0.59	109	7.93	34
	Tolerance (%)	11.83		10.65	24.37	10.03	11.08	14.48	44.15	13.73	12.38	30.83	45.56	45.71	11.42	13.45	37.78	53.94	10.20	13.61	10.10	10.17	31.19	10.02	10.32	10.15
OREAS 607b	Expected value	0.627	412	0.87	14.8	554	1.59	0.261	8.34	0.084	240	0.06	4.98	0.026	0.491	34.6	0.011	3.49	641	35.3	6.1	170	0.66	13.4	3.16	41.6
	Tolerance (%)	11.99	11.21	10.57	26.89	10.23	11.57	14.79	39.98	12.98	12.08	30.83	60.20	38.85	15.09	13.61	32.73	81.63	10.39	13.54	10.41	11.47	28.94	10.19	10.79	10.12
OREAS 610	Expected value	0.85		0.12	33.1	9720.0	2.27	0.213	8.46	0.11	66	0.05	24.3	0.02	2.65	38.6		11.6	1764.00	11	48.4	2807	0.3	220	12.3	13.7
	Tolerance (%)	11.48		14.17	17.55	10.01	11.10	15.87	39.55	12.36	17.58	35.51	20.29	40.12	10.94	13.24		31.55	10.14	21.26	10.05	10.09	53.10	10.01	10.20	10.36
OREAS 501c	Expected value	2.17	428	1.02	68	2750	4.1	1.17	33	1.22	390	0.202	58	0.096	0.343	65	0.363	110	74	9.34	0.444	24.3	0.59	0.7		64
	Tolerance (%)	11.15	12.92	12.45	13.68	10.05	10.61	12.10	17.58	12.05	11.28	22.38	14.31	23.02	17.29	11.92	16.89	12.27	13.38	23.38	15.63	20.29	31.19	13.57		10.08
OREAS 601c	Expected value	0.663		0.779	14.7	1160	1.84	0.254	7.56	0.084	210	0.053	6	0.024	0.909	36.3	0.01	4.75	381	33.5	50.4		0.59	21.3	2.7	34.7
	Tolerance (%)	11.89		10.64	27.01	10.11	11.36	14.92	43.07	12.98	12.38	33.58	51.67	41.25	12.75	13.44	35.00	62.63	10.66	13.73	10.05		31.19	10.12	10.93	10.14
OREAS 624	Expected value	2.06		1.31	19.8				7.65	1.19	620	0.076	17.5	0.052	10.8	11.2		17.8	24,000	45.1	45	108		20.5	125	24
	Tolerance (%)	11.21		11.91	22.63				42.68	12.10	10.81	42.89	24.29	34.04	10.23	21.16		24.04	10.10	12.77	10.06	12.31		10.24	10.02	10.52
OREAS 601b	Expected value	0.63		0.578	24.6	1010	1.94	0.246	7.78	0.0411	192	0.067	6.39	0.0178	0.807	33.2	0.022	3.83	267	38.3	50	276	0.47	18	2.04	38.5
	Tolerance (%)	13.97		14.33	20.16	10.12	11.29	20.16	42.13	70.83	12.60	47.31	49.12	80.22	13.10	13.77	123.64	75.27	10.94	13.26	12.50	12.72	63.19	10.28	11.23	10.32
OREAS 623	Expected value	1.80		1.09	19.4	17200.0	13.01	0.175	10	1.11	570	0.07	15.6	0.04	8.75	14.2		15.8	10100.00	50	20.4	76		16.9	52	36.4
	Tolerance (%)	11.39		12.29	22.89	10.01	10.19	24.29	35.00	12.25	10.88	46.76	26.03	41.25	10.29	18.80		25.82	10.02	12.50	16.13	26.84		10.30	10.05	10.34
OREAS 603c	Expected value	0.72		0.795	16.6	12000.0	3.64	0.254	8.17	0.08	600	0.05	25.8	0.024	3.38	37.3	0.01	6.27	7860.00	43	296	1530	0.6	90	30.4	30.7
	Tolerance (%)	11.73		10.63	25.06	10.01	10.69	14.92	40.60	12.98	10.83	33.58	19.69	41.25	10.74	13.35	32.73	14.65	10.03	12.93	10.42	10.16	30.49	10.03	10.08	10.16
OREAS 523	Expected value	1.15		3.2	24.9	16800.0	28.05	0.615	16.2	0.992	4370		62.0	0.090	3.84	62	0.158	110	38.10	49	2.36	665	0.34	13.5		
	Tolerance (%)	12.17		10.78	20.04	10.01	10.09	14.07	25.43	12.52	10.11		14.03	23.89	10.65	12.02	25.82	12.27	16.56	12.55	62.97	11.13	377.65	102.59		

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SGS

Metals - Aqua Regia Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20	ICM21B20
	Lower detection	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	1000	10000	10000	500	100	500	10000	1000	10000	1000	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 502C	Expected value	13.5	9.02	8.7	BDL	0.4	BDL	0.06	29.4	0.22	223	BDL	11.1	124	4.8	7.28	BDL	2.71	0.01	0.6	0.47	17.6	0.67	4.53	2.98	16.1	1.51
	Tolerance (%)	10.6	14.5	19.6		16.2		26.2	24.3	15.4	15.8		24.4	11.8	56.9	21.9		24.4	56.5	15.4	30.7	15.6	24.0	21.7	49.2	17.5	10.6
OREAS 503D	Expected value	15.9	9.28	8.7	0.15	0.5	BDL	0.07	30.5	0.21	342	1.21	8.39	120	2.4	7.18	3.04	2.51	BDL	0.6	0.30	17.4	0.66	4.35	1.91	16.9	1.47
	Tolerance (%)	11.1	16.7	18.7	56.7	18.3		21.9	16.0	10.6	12.9	59.2	21.5	12.1	36.1	21.9	45.5	16.2		18.7	32.1	9.6	30.1	21.7	49.2	17.7	13.4
OREAS 260	Expected value	32.1	BDL	5.1	BDL	BDL	BDL	0.03	BDL	0.14	0.43	BDL	30.7	BDL	1.3	3.39	BDL	BDL	BDL	0.52	0.08	11.3	0.2	1.29	0.063	11.70	0.99
	Tolerance (%)	12.9		42.2				55.6		12.9	20.2		19.2		38.6	46.9				40.4	59.3	31.9	54.5	39.5	33.3	30.8	29.4
OREAS 920	Expected value	15.0	2.10	6.9	< 0.1	0.6	< 0.01	0.03	37.2		0.41		21.5	24.8	0.6	2.91	0.87	1.21	< 0.05	0.73	< 0.05	15.3	0.15	2.15	< 0.6	18.80	< 1.5
	Tolerance (%)	13.8	56.9	28.7		41.8		17.2	27.3		50.7		20.0	34.1	45.1	47.1	59.5	55.1		59.7		24.0	43.7	38.5		46.9	
OREAS 209	Expected value	29.0	0.92	4.0		0.7	< 1	0.02	12.8	0.13	2.0		3.3	4.0	< 2	3.33	0.99	0.94	< 0.05	0.49		1.8	0.04	0.43	0.36	12.98	0.93
	Tolerance (%)	11.6	21.5	21.6		17.9		53.7	49.3	27.7	15.7		42.4	25.1		41.1	36.6	35.5		26.8		17.7	59.4	29.9	51.4	15.2	17.3
OREAS 905	Expected value	13.9	1.32	6.4		1.2	<0.05	0.58	39.8	0.03	3.0		17.1	19.3	1.1	1.89	2.32	1.27		0.44	0.07	8.9	0.11	2.37	<1	7.08	0.27
	Tolerance (%)	23.72	36.36	30.79		54.10		21.72	18.54	44.12	17.2		29.3	21.9	42.9	30.2	56.9	33.1		34.1	50.8	23.8	27.3	24.6		20.8	44.4
OREAS 261	Expected value	31.5		5.0			0.1	0.03		0.14	0.5		34.2		2.4	3.42				0.51	0.11	10.9	0.28	1.29	0.09	11.70	0.98
	Tolerance (%)	10.8		15.0			45.2	188.6		27.9	36.0		11.5		15.1	17.3				19.8	123.6	12.3	27.9	19.7	281.7	11.1	35.5
OREAS 263	Expected value	31		4.9			0.2	0.03			0.6		34.0		7.4	3.52				0.50	0.21	10.6	0.53	1.28		12.00	0.99
	Tolerance (%)	10.8		15.1			24.7	182.4			31.9		11.5		11.7	17.1				20.0	69.5	12.4	19.4	19.8		11.0	35.3
OREAS 235	Expected value	12.3	7.47	7.84	0.096	0.76		0.023	29.1	0.12	0.57	0.3	8.57	95	235	5.79		1.32		0.44		13	0.6	1.55	0.45	9.47	0.85
	Tolerance (%)	12	12	13	270	26		64	11	31	32	52	16	10	10	14		48		21		11	18	18	38	11	39
OREAS 151b	Expected value	10.9	1.22	8.1		0.1		0.07	7.34	0.12	54.0		41.4	20.4	0.7	8.84	3.06	1.25		0.36	0.09	2.4	0.12	0.60		10.40	0.93
	Tolerance (%)	12.3	20.3	13.1		135.0		27.9	13.4	30.8	10.2		11.2	10.6	23.4	12.8	91.7	50.0		23.9	157	15.1	51.7	30.8		11.2	36.9
OREAS 609b	Expected value	4.75	1.4	4.89	0.13	1.03	0.52	1.98	16.8	0.03	5.1	0.42	384	13.9	134	1.02	15	9.13		0.29	21.8	6.17	0.009	2.04	1.81	5.22	0.21
	Tolerance (%)	15.26	18.93	15.11	202.31	22.14	14.81	10.60	11.49	93.30	12.45	39.76	10.13	10.90	10.09	34.51	26.67	15.48		27.24	10.57	12.03	287.78	16.13	16.91	12.39	129.05
OREAS 607b	Expected value	2.17	1.52	3.46	0.076	1.01	0.098	0.36	20.6	0.029	3.06		1681	13.9	9.79	1.09	3.03	1.19		0.34	2.35	6.94	0.41	2.23	0.58	5.77	0.21
	Tolerance (%)	21.52	18.22	17.23	338.95	22.38	35.51	13.47	11.21	96.21	14.08		10.03	10.90	11.28	32.94	92.51	52.02		24.71	15.32	11.80	22.20	15.61	31.55	12.17	129.05
OREAS 610	Expected value	7.73	0.74	6.36		0.38	0.80	3.76	6.68		4.47	0	512	7.63	265.0	0.84	27.7	24.8	38.60		41.70	3.08	1.49	1.12	3.58	3.09	
	Tolerance (%)	13.23	26.89	13.93		42.89	13.12	10.33	13.74		12.80	88.12	10.10	11.64	10.05	39.76	19.03	12.02	13.24		10.30	14.06	13.36	21.16	13.49	14.05	
OREAS 501c	Expected value	14.2	9.88	8.56	0.4		0.047	31.9			95		8.43	134	1.59	7.36		2.7				19.3		4.87	2.96		
	Tolerance (%)	11.76	11.27	12.92	41.25		36.60	10.78			10.13		15.93	10.09	17.86	13.40		28.52				10.65		12.57	14.22		
OREAS 601c	Expected value	4.27	1.32	3.86	0.084	0.97	0.22	0.5	17.3	0.028	3.35		248	12.4	29.7	1.03	8.02	1.59		0.3	7.22	6.13	1.20	2.04	1.16	5.1	0.23
	Tolerance (%)	15.85	19.47	16.48	307.62	22.89	21.36	12.50	11.45	99.29	13.75		10.20	11.01	10.42	34.27	41.17	41.45		26.67	11.73	12.04	14.17	16.13	20.78	12.45	118.70
OREAS 624	Expected value	265	0.43	14		1.14	1.89	3.62	11.2	0.13	14.2	0.43	6,290	5.4		4.83	29.7	6.04		0.29	0.76	2.9		0.74	2.73	6.59	0.84
	Tolerance (%)	10.09	39.07	11.79		20.96	11.32	11.38	12.23	29.23	10.88	39.07	10.01	19.26		15.18	18.42	22.42		27.24	26.45	18.62		26.89	19.16	11.90	39.76
OREAS 601b	Expected value	2.55	1	3.77	0.1	1.11	0.2		19.9		4.83		234	11.9	18	1	10	1.19		0.28	13.00	6.96	1.08	2.22	1.86	5.34	0.2
	Tolerance (%)	19.80	20.87	16.63	307.62	21.26	1260.00		16.28		61.76		12.14	14.20	10.69	35.00	35.00	73.03		27.86	10.96	13.59	14.63	15.63	23.44	33.41	135.00
OREAS 623	Expected value	216.00		11.90					17.90		8.38		2520		20.2	4.63	18.6	4.07		0.34	0.57	4.7	0.26	1.43	2.62	7.43	
	Tolerance (%)	14.86		12.10					11.40		11.49		10.02		10.62	15.40	23.44	28.43		24.71	31.93	15.30	29.23	18.74	19.54	11.68	
OREAS 603c	Expected value	14.10	1	5.40	0.2	1.16	1.35	3.72	14.60	0.03	56.00	0.51	10228	13.8	339.0	1.18	28.8	9.3		0.3	23.20	5.44	3.68	2.19	2.99	5.55	0.22
	Tolerance (%)	11.77	19.69	14.63	135.00	20.78	11.85	10.34	11.71	93.33	10.22	34.51	10.05	10.91	10.04	31.19	18.68	15.38		26.67	10.54	12.30	11.36	15.71	14.18	12.25	123.64
OREAS 523	Expected value	698.000							233		293		27.4			6.41		9.88							160	14.8	
	Tolerance (%)	10.36							10.54		10.85		28.25			29.50		263.04							25.62	18.45	

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SGS proposal: 19195-PR1-COS8
SGS project #: 2138

Work order date: 15-Mar-24
Report date: 22-Apr-24
Sample receipt date: Old cells
Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax

Project reference: Upper Beaver

P.O. number:

COC:

SGS WO:

ANALYSIS REPORT

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

Terminated tailings column sample

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4) or by nitric acid digestion with ICP finish (Method CSA08C1)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP

Metals by aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12

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Preliminary Data

Anahita Etemadifar - Laboratory Supervisor

Final Data Approval

Noelene Ahern - Manager: ARD

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Shake Flask Extraction Report

Leachate Analysis

Sample ID			Terminated tailings column	Blank
Parameter	**Method**	**Units**		
Volume Nanopure Water		mL	750	750
Sample Weight		g	250	-
pH	meter		7.67	5.68
Redox	meter	mV	253	-
Conductivity	meter	uS/cm	1148	1.0
Acidity (to pH 4.5)	titration	mg CaCO3/L	0.0	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	3.1	-
Alkalinity	titration	mg CaCO3/L	31.0	-
Chloride		mg/L	< 2	-
Nitrite (as N)		as N mg/L	< 0.3	
Nitrate (as N)		as N mg/L	< 0.6	
Fluoride		mg/L	0.14	-
Dissolved Organic Carbon		mg/L	2	
Phosphorus (dissolved reactive)		mg/L	< 0.03	
Ammonia+Ammonium (N)		as N mg/L	0.6	
Cyanide (total)		mg/L	0.1	
Cyanide (WAD)		mg/L	0.03	
Cyanate		mg/L	< 1	
Sulphate	IC	mg/L	576.3	-
Ion Balance				
Major Anions	Calc	meq/L	12.63	
Major Cations	Calc	meq/L	11.39	
Difference	Calc	meq/L	1.24	
Balance (%)	Calc	%	5.2%	
Dissolved Metals				
Hardness CaCO3		mg/L	558	-
Aluminum Al	ICP-MS	mg/L	0.033	-
Antimony Sb	ICP-MS	mg/L	0.01	-
Arsenic As	ICP-MS	mg/L	0.0009	-
Barium Ba	ICP-MS	mg/L	0.0454	-
Beryllium Be	ICP-MS	mg/L	0.00236	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	-
Boron B	ICP-MS	mg/L	0.02	-
Cadmium Cd	ICP-MS	mg/L	0.000051	-
Calcium Ca	ICP-MS	mg/L	195	-
Chromium Cr	ICP-MS	mg/L	0.00041	-
Cobalt Co	ICP-MS	mg/L	0.00215	-
Copper Cu	ICP-MS	mg/L	0.004	-
Iron Fe	ICP-MS	mg/L	0.046	-
Lead Pb	ICP-MS	mg/L	< 0.00009	-
Lithium Li	ICP-MS	mg/L	0.0037	-
Magnesium Mg	ICP-MS	mg/L	17.1	-
Manganese Mn	ICP-MS	mg/L	0.0349	-
Mercury Hg	CVAAS	mg/L	0.00002	-
Molybdenum Mo	ICP-MS	mg/L	0.0922	-
Nickel Ni	ICP-MS	mg/L	0.0003	-
Phosphorus P	ICP-MS	mg/L	0.008	-
Potassium K	ICP-MS	mg/L	2.36	-
Selenium Se	ICP-MS	mg/L	0.00048	-
Silicon Si	ICP-MS	mg/L	2.36	-
Silver Ag	ICP-MS	mg/L	< 0.00005	-
Sodium Na	ICP-MS	mg/L	2.08	-
Strontium Sr	ICP-MS	mg/L	2.1	-
Sulphur (S)	ICP-MS	mg/L	203	-
Thallium Tl	ICP-MS	mg/L	0.000011	-
Tin Sn	ICP-MS	mg/L	0.0002	-
Titanium Ti	ICP-MS	mg/L	0.0001	-
Uranium U	ICP-MS	mg/L	0.000801	-
Vanadium V	ICP-MS	mg/L	0.00056	-
Zinc Zn	ICP-MS	mg/L	0.002	-
Zirconium Zr	ICP-MS	mg/L	< 0.002	-

3260 Production Way
Burnaby - British Columbia - V5A 4W4
Phone: 604-638-2349 FAX: 604-444-5486

SGS proposal: 19195-PR1 COS8
SGS project #: 2321

Work order date: 14-May-24
Report date: 15-Jul-24

Version: Final

Customer details

Name:	Timo Kirchner
Address:	Lorax

Project reference: Upper Beaver

P.O. number:

COC:

ANALYSIS REPORT

SGS WO: 1

Report Distribution

Name	Email
Timo Kirchner	

Special notes:

CIEMAT Sequential Extraction

Hg in final residue added 8 Aug 24.

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ANALYSIS REPORT

Method Summaries *Test method information available upon request.*

S(T) and C(T): Total sulfur and total carbon by LECO, Method CSA06V
S(SO4): Sulfate by HCl digestion with ICP finish, Method CSA07V
S(S2-): Sulfide by calculation of S(T) - S(SO4)

TIC: Total inorganic carbon by coulometry, Method CSB02V
AP: Acid generating potential based on sulfide sulfur
NP: Modified neutralisation potential by excess acid addition and back titration to pH 8.3
Net NP: Net neutralisation potential = NP - AP
NPR: Neutralisation potential ratio = NP/AP

Metals by Aqua regia digest with ICP-OES/MS finish, Method ICP21B20/ICM21B20
Metals by multi-acid digest with ICP-OES/MS finish, Method ICP40Q12/IMS40Q12
Tessier Sequential Extraction - method available on request

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Preliminary Data

Noelene Ahern - Manager: ARD

Final Data Approval

Noelene Ahern - Manager: ARD

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SGS proposal: 19195-PR1 COS8 Work order date: 14-May-24
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Version: Final

CIEMAT EXTRACTION

Readily Soluble Metals
Reagent: 30 mL of Nanopure Distilled Water

Sample			30107-MTCP-005(Pulverized)	Detox Tailings Residue	Detox Tailings Residue-Washed	Blank
Sample weight (g)			0.5079	0.5057	0.5124	0
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	51.8	57.4	25.1	< 0.5
Aluminum Al	mg/L	0.001	0.22	0.19	0.226	< 0.01
Antimony Sb	mg/L	0.0009	< 0.009	< 0.009	0.0022	< 0.009
Arsenic As	mg/L	0.0002	< 0.002	< 0.002	0.001	< 0.002
Barium Ba	mg/L	0.00008	0.0388	0.0288	0.0529	< 0.0008
Beryllium Be	mg/L	0.000007	< 0.00007	< 0.00007	< 0.000007	< 0.00007
Bismuth Bi	mg/L	0.00001	< 0.0001	< 0.0001	< 0.00001	< 0.0001
Boron B	mg/L	0.002	< 0.02	< 0.02	< 0.002	< 0.02
Cadmium Cd	mg/L	0.000003	< 0.00003	0.00004	< 0.000003	< 0.00003
Calcium Ca	mg/L	0.01	18.9	22.2	9.56	< 0.1
Chromium Cr	mg/L	0.00008	< 0.0008	< 0.0008	0.00033	< 0.0008
Cobalt Co	mg/L	0.000004	< 0.00004	0.00035	0.000129	< 0.00004
Copper Cu	mg/L	0.001	< 0.01	< 0.01	0.001	< 0.01
Iron Fe	mg/L	0.007	< 0.07	< 0.07	0.03	< 0.07
Lead Pb	mg/L	0.00009	< 0.0009	< 0.0009	0.00016	< 0.0009
Lithium Li	mg/L	0.0001	< 0.001	< 0.001	0.0001	< 0.001
Magnesium Mg	mg/L	0.001	1.11	0.45	0.298	< 0.01
Manganese Mn	mg/L	0.00001	0.0018	0.0005	0.00084	< 0.0001
Mercury Hg	ug/L	0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum Mo	mg/L	0.0004	0.018	0.009	0.003	< 0.004
Nickel Ni	mg/L	0.0001	< 0.001	< 0.001	0.0001	< 0.001
Phosphorus P	mg/L	0.003	< 0.03	< 0.03	0.005	0.03
Potassium K	mg/L	0.009	1.4	0.49	0.222	< 0.09
Selenium Se	mg/L	0.00004	< 0.0004	< 0.0004	0.00009	< 0.0004
Silicon Si	mg/L	0.02	0.5	0.6	0.72	< 0.2
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	< 0.00005	< 0.0005
Sodium Na	mg/L	0.01	0.7	4.3	0.62	0.1
Strontium Sr	mg/L	0.00008	0.369	0.227	0.211	< 0.0008
Sulphur (S)	mg/L	5	< 50	< 50	5	< 50
Thallium Tl	mg/L	0.000005	< 0.00005	< 0.00005	< 0.000005	< 0.00005
Tin Sn	mg/L	0.00006	< 0.0006	< 0.0006	< 0.00006	< 0.0006
Titanium Ti	mg/L	0.0001	< 0.001	< 0.001	0.0004	< 0.001
Uranium U	mg/L	0.000002	0.00002	0.00004	0.000006	0.00002
Vanadium V	mg/L	0.00001	0.0005	0.0007	0.00089	< 0.0001
Zinc Zn	mg/L	0.002	< 0.02	< 0.02	< 0.002	< 0.02
Zirconium Zr	mg/L	0.002	< 0.02	< 0.02	< 0.002	< 0.02

Concentration leached relative to initial sample mass

Parameter	**Units**	**RDL**				
Aluminum Al	mg/kg		21.7	18.8	22.1	
Antimony Sb	mg/kg		<DL	<DL	0.2	
Arsenic As	mg/kg		<DL	<DL	0.1	
Barium Ba	mg/kg		3.8	2.8	5.2	
Beryllium Be	mg/kg		<DL	<DL	<DL	
Bismuth Bi	mg/kg		<DL	<DL	<DL	
Boron B	mg/kg		<DL	<DL	<DL	
Cadmium Cd	mg/kg		<DL	0.004	<DL	
Calcium Ca	mg/kg		1860.6	2195.0	932.9	
Chromium Cr	mg/kg		<DL	<DL	0.0	
Cobalt Co	mg/kg		<DL	0.0	0.0	
Copper Cu	mg/kg		<DL	<DL	0.1	
Iron Fe	mg/kg		<DL	<DL	2.9	
Lead Pb	mg/kg		<DL	<DL	0.0	
Lithium Li	mg/kg		<DL	<DL	0.0	
Magnesium Mg	mg/kg		109.3	44.5	29.1	
Manganese Mn	mg/kg		0.2	0.0	0.1	
Mercury Hg	ug/kg		<DL	<DL	<DL	
Molybdenum Mo	mg/kg		1.8	0.9	0.3	
Nickel Ni	mg/kg		<DL	<DL	0.0	
Phosphorus P	mg/kg		<DL	<DL	0.5	
Potassium K	mg/kg		137.8	48.4	21.7	
Selenium Se	mg/kg		<DL	<DL	0.0	
Silicon Si	mg/kg		49.2	59.3	70.3	
Silver Ag	mg/kg		<DL	<DL	<DL	
Sodium Na	mg/kg		68.9	425.2	60.5	
Strontium Sr	mg/kg		36.3	22.4	20.6	
Sulphur (S)	mg/kg		<DL	<DL	487.9	
Thallium Tl	mg/kg		<DL	<DL	<DL	
Tin Sn	mg/kg		<DL	<DL	<DL	
Titanium Ti	mg/kg		<DL	<DL	0.0	
Uranium U	mg/kg		0.002	0.004	0.001	
Vanadium V	mg/kg		0.0	0.1	0.1	
Zinc Zn	mg/kg		<DL	<DL	<DL	
Zirconium Zr	mg/kg		<DL	<DL	<DL	

CIEMAT EXTRACTION

Highly Adsorbed on Mineral Surfaces
Reagent: 40 mL of 0.5 M Na2HPO4 (pH 8.0)

Sample			30107-MTCP-005(Pulverized)	Detox Tailings Residue	Detox Tailings Residue-Washed	Blank
Sample weight (g)			0.5079	0.5057	0.5124	0.0000
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	46.2	39	36.6	< 0.5
Aluminum Al	mg/L	0.001	1.08	0.77	0.894	0.01
Antimony Sb	mg/L	0.0009	0.011	0.01	0.0082	< 0.009
Arsenic As	mg/L	0.0002	0.008	0.008	0.0088	0.002
Barium Ba	mg/L	0.00008	0.043	0.0951	0.0569	0.0014
Beryllium Be	mg/L	0.000007	0.00017	0.00026	0.000099	0.00017
Bismuth Bi	mg/L	0.00001	< 0.0001	< 0.0001	0.00003	< 0.0001
Boron B	mg/L	0.002	0.32	0.3	0.187	0.31
Cadmium Cd	mg/L	0.000003	0.00009	0.00011	0.00008	0.0001
Calcium Ca	mg/L	0.01	16.3	14.2	13.1	0.1
Chromium Cr	mg/L	0.00008	0.0123	0.0136	0.0126	0.0192
Cobalt Co	mg/L	0.000004	0.00045	0.00069	0.000725	0.00009
Copper Cu	mg/L	0.001	0.08	0.47	0.419	0.01
Iron Fe	mg/L	0.007	0.5	0.72	0.626	0.17
Lead Pb	mg/L	0.00009	0.003	0.0028	0.00187	0.0085
Lithium Li	mg/L	0.0001	0.003	0.003	0.0011	0.001
Magnesium Mg	mg/L	0.001	1.35	0.85	0.942	0.02
Manganese Mn	mg/L	0.00001	0.115	0.0824	0.0799	0.0018
Mercury Hg	ug/L	0.01	< 0.01	< 0.01	<0.01	< 0.01
Molybdenum Mo	mg/L	0.0004	0.014	0.014	0.0138	0.012
Nickel Ni	mg/L	0.0001	0.008	0.008	0.0075	0.006
Phosphorus P	mg/L	0.003	11000	11200	12200	11100
Potassium K	mg/L	0.009	2.15	1.59	1.44	0.63
Selenium Se	mg/L	0.00004	0.0004	0.0012	0.00181	< 0.0004
Silicon Si	mg/L	0.02	2.6	2.1	3.42	< 0.2
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	< 0.00005	< 0.0005
Sodium Na	mg/L	0.01	15500	15200	17300	15200
Strontium Sr	mg/L	0.00008	0.104	0.0896	0.0885	0.0013
Sulphur (S)	mg/L	5	< 50	< 50	< 5	< 50
Thallium Tl	mg/L	0.000005	0.00005	< 0.00005	0.000024	< 0.00005
Tin Sn	mg/L	0.00006	0.0007	0.0008	0.00066	0.002
Titanium Ti	mg/L	0.0001	0.807	0.883	1.17	1.02
Uranium U	mg/L	0.000002	0.0191	0.0179	0.0128	0.019
Vanadium V	mg/L	0.00001	0.0108	0.0071	0.00685	0.001
Zinc Zn	mg/L	0.002	0.06	0.04	0.012	0.04
Zirconium Zr	mg/L	0.002	< 0.02	0.02	0.047	0.04

Concentration leached relative to initial sample mass

Parameter	**Units**	**RDL**				
Aluminum Al	mg/kg		106.3	76.1	87.2	
Antimony Sb	mg/kg		1.1	1.0	0.8	
Arsenic As	mg/kg		0.8	0.8	0.9	
Barium Ba	mg/kg		4.2	9.4	5.6	
Beryllium Be	mg/kg		0.0	0.0	0.0	
Bismuth Bi	mg/kg		<DL	<DL	0.0	
Boron B	mg/kg		31.5	29.7	18.2	
Cadmium Cd	mg/kg		0.009	0.011	0.008	
Calcium Ca	mg/kg		1604.6	1404.0	1278.3	
Chromium Cr	mg/kg		1.2	1.3	1.2	
Cobalt Co	mg/kg		0.0	0.1	0.1	
Copper Cu	mg/kg		7.9	46.5	40.9	
Iron Fe	mg/kg		49.2	71.2	61.1	
Lead Pb	mg/kg		0.3	0.3	0.2	
Lithium Li	mg/kg		0.3	0.3	0.1	
Magnesium Mg	mg/kg		132.9	84.0	91.9	
Manganese Mn	mg/kg		11.3	8.1	7.8	
Mercury Hg	ug/kg		<DL	<DL	<DL	
Molybdenum Mo	mg/kg		1.4	1.4	1.3	
Nickel Ni	mg/kg		0.8	0.8	0.7	
Phosphorus P	mg/kg		1082890.3	1107375.9	1190476.2	
Potassium K	mg/kg		211.7	157.2	140.5	
Selenium Se	mg/kg		0.04	0.1	0.2	
Silicon Si	mg/kg		256.0	207.6	333.7	
Silver Ag	mg/kg		<DL	<DL	<DL	
Sodium Na	mg/kg		1525890.9	1502867.3	1688134.3	
Strontium Sr	mg/kg		10.2	8.9	8.6	
Sulphur (S)	mg/kg		<DL	<DL	<DL	
Thallium Tl	mg/kg		0.005	<DL	0.002	
Tin Sn	mg/kg		0.1	0.1	0.1	
Titanium Ti	mg/kg		79.4	87.3	114.2	
Uranium U	mg/kg		1.880	1.770	1.249	
Vanadium V	mg/kg		1.1	0.7	0.7	
Zinc Zn	mg/kg		5.9	4.0	1.2	
Zirconium Zr	mg/kg		<DL	2.0	4.6	

CIEMAT EXTRACTION

Associated with Al Oxyhydroxides

Reagent: 30 mL of 0.5 M NH4F (pH 8.2)

Sample			30107-MTCP-	Detox Tailings	Detox Tailings	Blank
Initial sample weight (g)			0.5079	0.5057	0.5124	0.0000
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	1.7	1.6	1.4	0.7
Aluminum Al	mg/L	0.001	0.14	0.14	0.227	0.16
Antimony Sb	mg/L	0.0009	< 0.009	< 0.009	0.0055	< 0.009
Arsenic As	mg/L	0.0002	0.004	0.005	0.0046	< 0.002
Barium Ba	mg/L	0.00008	0.0023	0.0034	0.00249	0.0106
Beryllium Be	mg/L	0.000007	0.00023	0.00021	0.000125	< 0.00007
Bismuth Bi	mg/L	0.00001	< 0.0001	< 0.0001	0.00002	< 0.0001
Boron B	mg/L	0.002	0.39	0.4	0.384	0.44
Cadmium Cd	mg/L	0.000003	0.00007	0.00003	0.000046	0.00003
Calcium Ca	mg/L	0.01	0.3	0.3	0.18	0.2
Chromium Cr	mg/L	0.00008	0.003	0.0029	0.00254	0.005
Cobalt Co	mg/L	0.000004	0.00313	0.00204	0.00198	0.00039
Copper Cu	mg/L	0.001	1.52	1.14	1.09	0.01
Iron Fe	mg/L	0.007	0.2	0.18	0.201	0.12
Lead Pb	mg/L	0.00009	< 0.0009	0.001	0.00099	0.0019
Lithium Li	mg/L	0.0001	0.028	0.028	0.0276	0.037
Magnesium Mg	mg/L	0.001	0.23	0.23	0.239	0.04
Manganese Mn	mg/L	0.00001	0.0901	0.0747	0.0718	0.0017
Mercury Hg	ug/L	0.01	< 0.01	< 0.01	<0.01	< 0.01
Molybdenum Mo	mg/L	0.0004	0.004	< 0.004	0.0038	< 0.004
Nickel Ni	mg/L	0.0001	0.018	0.015	0.012	0.012
Phosphorus P	mg/L	0.003	4.68	3.15	4.69	4.83
Potassium K	mg/L	0.009	0.76	0.5	0.415	0.37
Selenium Se	mg/L	0.00004	0.0011	< 0.0004	0.00028	0.0004
Silicon Si	mg/L	0.02	85.7	76.8	22.6	119
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	0.00015	< 0.0005
Sodium Na	mg/L	0.01	1930	1920	1980	1930
Strontium Sr	mg/L	0.00008	0.0009	0.0012	0.00112	< 0.0008
Sulphur (S)	mg/L	5	< 50	< 50	< 5	< 50
Thallium Tl	mg/L	0.000005	0.00006	< 0.00005	0.000051	< 0.00005
Tin Sn	mg/L	0.00006	< 0.0006	< 0.0006	0.00098	0.0016
Titanium Ti	mg/L	0.0001	0.0186	0.0133	0.0146	0.0114
Uranium U	mg/L	0.000002	0.00068	0.00047	0.000807	0.00006
Vanadium V	mg/L	0.00001	0.0095	0.0055	0.00541	0.0005
Zinc Zn	mg/L	0.002	< 0.02	< 0.02	0.004	< 0.02
Zirconium Zr	mg/L	0.002	< 0.02	< 0.02	0.008	0.05

Concentration leached relative to initial sample mass

Parameter	**Units**	**RDL**				
Aluminum Al	mg/kg		13.8	13.8	22.2	
Antimony Sb	mg/kg		<DL	<DL	0.5	
Arsenic As	mg/kg		0.4	0.5	0.4	
Barium Ba	mg/kg		0.2	0.3	0.2	
Beryllium Be	mg/kg		0.0	0.0	0.0	
Bismuth Bi	mg/kg		<DL	<DL	0.0	
Boron B	mg/kg		38.4	39.5	37.5	
Cadmium Cd	mg/kg		0.0	0.0	0.0	
Calcium Ca	mg/kg		29.5	29.7	17.6	
Chromium Cr	mg/kg		0.3	0.3	0.2	
Cobalt Co	mg/kg		0.3	0.2	0.2	
Copper Cu	mg/kg		149.6	112.7	106.4	
Iron Fe	mg/kg		19.7	17.8	19.6	
Lead Pb	mg/kg		<DL	0.1	0.1	
Lithium Li	mg/kg		2.8	2.8	2.7	
Magnesium Mg	mg/kg		22.6	22.7	23.3	
Manganese Mn	mg/kg		8.9	7.4	7.0	
Mercury Hg	ug/kg		<DL	<DL	<DL	
Molybdenum Mo	mg/kg		0.4	<DL	0.4	
Nickel Ni	mg/kg		1.8	1.5	1.2	
Phosphorus P	mg/kg		460.7	311.4	457.7	
Potassium K	mg/kg		74.8	49.4	40.5	
Selenium Se	mg/kg		0.1	<DL	0.0	
Silicon Si	mg/kg		8436.7	7593.4	2205.3	
Silver Ag	mg/kg		<DL	<DL	0.0	
Sodium Na	mg/kg		189998.0	189835.9	193208.4	
Strontium Sr	mg/kg		0.1	0.1	0.1	
Sulphur (S)	mg/kg		<DL	<DL	<DL	
Thallium Tl	mg/kg		0.0	<DL	0.0	
Tin Sn	mg/kg		<DL	<DL	0.1	
Titanium Ti	mg/kg		1.8	1.3	1.4	
Uranium U	mg/kg		0.07	0.0	0.1	
Vanadium V	mg/kg		0.94	0.54	0.5	
Zinc Zn	mg/kg		<DL	<DL	0.4	
Zirconium Zr	mg/kg		<DL	<DL	0.8	

CIEMAT EXTRACTION

Bound to Organic Matter
Reagent: 10 mL of 0.1 M Na4P2O7

Sample			30107-MTCP-005(Pulverized)	Detox Tailings Residue	Detox Tailings Residue-Washed	Blank
Initial sample weight (g)			0.5079	0.5057	0.5124	0.0000
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	124	105	113	< 0.5
Aluminum Al	mg/L	0.001	1.8	1.34	1.88	0.1
Antimony Sb	mg/L	0.0009	< 0.009	< 0.009	< 0.009	< 0.009
Arsenic As	mg/L	0.0002	0.004	0.002	0.003	< 0.002
Barium Ba	mg/L	0.00008	0.305	0.309	0.244	0.0016
Beryllium Be	mg/L	0.000007	< 0.00007	< 0.00007	0.0001	< 0.00007
Bismuth Bi	mg/L	0.00001	0.0006	0.0004	0.0007	< 0.0001
Boron B	mg/L	0.002	< 0.02	< 0.02	< 0.02	< 0.02
Cadmium Cd	mg/L	0.000003	0.0001	0.0001	0.00022	< 0.00003
Calcium Ca	mg/L	0.01	39.5	33.7	38.7	0.2
Chromium Cr	mg/L	0.00008	0.012	0.0119	0.0203	0.002
Cobalt Co	mg/L	0.000004	0.00207	0.00142	0.00172	0.00006
Copper Cu	mg/L	0.001	1.42	0.38	0.29	< 0.01
Iron Fe	mg/L	0.007	7.38	5.21	7.38	0.07
Lead Pb	mg/L	0.00009	0.0065	0.005	0.0067	0.0078
Lithium Li	mg/L	0.0001	< 0.001	< 0.001	0.002	< 0.001
Magnesium Mg	mg/L	0.001	6.29	5.02	4.09	< 0.01
Manganese Mn	mg/L	0.00001	0.448	0.385	0.54	< 0.0001
Mercury Hg	ug/L	0.01	0.02	0.03	0.01	< 0.01
Molybdenum Mo	mg/L	0.0004	< 0.004	< 0.004	< 0.004	< 0.004
Nickel Ni	mg/L	0.0001	0.019	0.022	0.029	0.009
Phosphorus P	mg/L	0.003	1220	1190	1200	1190
Potassium K	mg/L	0.009	0.49	0.36	0.46	0.14
Selenium Se	mg/L	0.00004	0.0005	0.0005	< 0.0004	< 0.0004
Silicon Si	mg/L	0.02	2.9	2.4	3.8	< 0.2
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Sodium Na	mg/L	0.01	1860	1810	1790	1820
Strontium Sr	mg/L	0.00008	0.126	0.132	0.0901	< 0.0008
Sulphur (S)	mg/L	5	< 50	< 50	< 50	< 50
Thallium Tl	mg/L	0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Tin Sn	mg/L	0.00006	0.0016	0.0017	0.0018	0.0007
Titanium Ti	mg/L	0.0001	0.157	0.15	0.176	0.118
Uranium U	mg/L	0.000002	0.00024	0.00023	0.0002	< 0.00002
Vanadium V	mg/L	0.00001	0.0081	0.0064	0.0082	0.0001
Zinc Zn	mg/L	0.002	< 0.02	< 0.02	< 0.02	< 0.02
Zirconium Zr	mg/L	0.002	0.02	< 0.02	0.04	< 0.02

Concentration leached relative to initial sample mass

Parameter	**Units**	**RDL**				
Aluminum Al	mg/kg		177.2	132.5	183.5	
Antimony Sb	mg/kg		<DL	<DL	<DL	
Arsenic As	mg/kg		0.4	0.2	0.3	
Barium Ba	mg/kg		30.0	30.6	23.8	
Beryllium Be	mg/kg		<DL	<DL	0.0	
Bismuth Bi	mg/kg		0.1	0.0	0.1	
Boron B	mg/kg		<DL	<DL	<DL	
Cadmium Cd	mg/kg		0.010	0.010	0.021	
Calcium Ca	mg/kg		3888.6	3332.0	3776.3	
Chromium Cr	mg/kg		1.2	1.2	1.98	
Cobalt Co	mg/kg		0.2	0.1	0.2	
Copper Cu	mg/kg		139.8	37.6	28.3	
Iron Fe	mg/kg		726.5	515.1	720.1	
Lead Pb	mg/kg		0.6	0.5	0.7	
Lithium Li	mg/kg		<DL	<DL	0.2	
Magnesium Mg	mg/kg		619.2	496.3	399.1	
Manganese Mn	mg/kg		44.1	38.1	52.7	
Mercury Hg	ug/kg		2.0	3.0	1.0	
Molybdenum Mo	mg/kg		<DL	<DL	<DL	
Nickel Ni	mg/kg		1.9	2.2	2.8	
Phosphorus P	mg/kg		120102.4	117658.7	117096.0	
Potassium K	mg/kg		48.2	35.6	44.9	
Selenium Se	mg/kg		0.0	0.0	<DL	
Silicon Si	mg/kg		285.5	237.3	370.8	
Silver Ag	mg/kg		<DL	<DL	<DL	
Sodium Na	mg/kg		183106.9	178959.9	174668.2	
Strontium Sr	mg/kg		12.4	13.1	8.8	
Sulphur (S)	mg/kg		<DL	<DL	<DL	
Thallium Tl	mg/kg		<DL	<DL	<DL	
Tin Sn	mg/kg		0.158	0.168	0.176	
Titanium Ti	mg/kg		15.5	14.8	17.2	
Uranium U	mg/kg		0.02	0.02	0.0	
Vanadium V	mg/kg		0.80	0.63	0.8	
Zinc Zn	mg/kg		<DL	<DL	<DL	
Zirconium Zr	mg/kg		2.0	<DL	3.9	

CIEMAT EXTRACTION

Incorporated into Amorphous Fe oxyhydroxides
Reagent: 20 mL of 0.2 M Ammonium Oxalate - Oxalic

Sample			30107-MTCP-	Detox Tailings Residue	Detox Tailings Residue	Blank
Initial sample weight (g)			0.5079	0.5057	0.5124	0.0000
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	154	122	122	2.2
Aluminum Al	mg/L	0.001	24.1	15.1	14	0.04
Antimony Sb	mg/L	0.0009	0.014	0.009	< 0.009	< 0.009
Arsenic As	mg/L	0.0002	0.011	0.01	0.01	< 0.002
Barium Ba	mg/L	0.00008	0.336	0.29	0.325	0.0092
Beryllium Be	mg/L	0.000007	0.00111	0.00094	0.00076	< 0.00007
Bismuth Bi	mg/L	0.00001	0.0005	0.0004	0.0003	0.0003
Boron B	mg/L	0.002	0.02	< 0.02	< 0.02	< 0.02
Cadmium Cd	mg/L	0.000003	0.00004	< 0.00003	< 0.00003	< 0.00003
Calcium Ca	mg/L	0.01	0.6	0.5	0.5	0.4
Chromium Cr	mg/L	0.00008	0.255	0.178	0.172	0.0033
Cobalt Co	mg/L	0.000004	0.0311	0.0241	0.0234	0.00022
Copper Cu	mg/L	0.001	0.56	0.4	0.32	< 0.01
Iron Fe	mg/L	0.007	181	152	152	0.12
Lead Pb	mg/L	0.00009	0.0055	0.0047	0.0025	0.0063
Lithium Li	mg/L	0.0001	0.02	0.014	0.012	< 0.001
Magnesium Mg	mg/L	0.001	37	29.3	29.2	0.31
Manganese Mn	mg/L	0.00001	1.18	0.986	0.882	0.0029
Mercury Hg	ug/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Molybdenum Mo	mg/L	0.0004	0.004	< 0.004	< 0.004	< 0.004
Nickel Ni	mg/L	0.0001	0.104	0.086	0.083	0.006
Phosphorus P	mg/L	0.003	20.1	15.2	12.9	1.03
Potassium K	mg/L	0.009	0.64	0.44	0.4	0.16
Selenium Se	mg/L	0.00004	< 0.0004	< 0.0004	< 0.0004	< 0.0004
Silicon Si	mg/L	0.02	29.4	20.9	19.1	< 0.2
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Sodium Na	mg/L	0.01	29.4	22	18.4	2.6
Strontium Sr	mg/L	0.00008	0.0125	0.0142	0.0145	0.0035
Sulphur (S)	mg/L	5	< 50	< 50	< 50	< 50
Thallium Tl	mg/L	0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Tin Sn	mg/L	0.00006	0.0109	0.0103	0.0098	0.0094
Titanium Ti	mg/L	0.0001	0.347	0.277	0.255	0.0012
Uranium U	mg/L	0.000002	0.00103	0.00083	0.00073	< 0.00002
Vanadium V	mg/L	0.00001	0.234	0.193	0.192	0.0002
Zinc Zn	mg/L	0.002	0.07	0.06	0.06	< 0.02
Zirconium Zr	mg/L	0.002	0.08	0.06	0.05	< 0.02

Concentration leached relative to initial sample mass

Parameter	Units	RDL				
Aluminum Al	mg/kg		2372.5	1493.0	1366.1	
Antimony Sb	mg/kg		1.4	0.9	<DL	
Arsenic As	mg/kg		1.1	1.0	1.0	
Barium Ba	mg/kg		33.1	28.7	31.7	
Beryllium Be	mg/kg		0.1	0.1	0.1	
Bismuth Bi	mg/kg		0.0	0.0	0.0	
Boron B	mg/kg		2.0	<DL	<DL	
Cadmium Cd	mg/kg		0.004	<DL	<DL	
Calcium Ca	mg/kg		59.1	49.4	48.8	
Chromium Cr	mg/kg		25.1	17.6	16.78	
Cobalt Co	mg/kg		3.1	2.4	2.3	
Copper Cu	mg/kg		55.1	39.5	31.2	
Iron Fe	mg/kg		17818.5	15028.7	14832.2	
Lead Pb	mg/kg		0.5	0.5	0.2	
Lithium Li	mg/kg		2.0	1.4	1.2	
Magnesium Mg	mg/kg		3642.4	2897.0	2849.3	
Manganese Mn	mg/kg		116.2	97.5	86.1	
Mercury Hg	ug/kg		<DL	<DL	<DL	
Molybdenum Mo	mg/kg		0.4	<DL	<DL	
Nickel Ni	mg/kg		10.2	8.5	8.1	
Phosphorus P	mg/kg		1978.7	1502.9	1258.8	
Potassium K	mg/kg		63.0	43.5	39.0	
Selenium Se	mg/kg		<DL	<DL	<DL	
Silicon Si	mg/kg		2894.3	2066.4	1863.8	
Silver Ag	mg/kg		<DL	<DL	<DL	
Sodium Na	mg/kg		2894.3	2175.2	1795.5	
Strontium Sr	mg/kg		1.2	1.4	1.4	
Sulphur (S)	mg/kg		<DL	<DL	<DL	
Thallium Tl	mg/kg		<DL	<DL	<DL	
Tin Sn	mg/kg		1.073	1.018	0.956	
Titanium Ti	mg/kg		34.2	27.4	24.9	
Uranium U	mg/kg		0.10	0.08	0.1	
Vanadium V	mg/kg		23.04	19.08	18.7	
Zinc Zn	mg/kg		6.9	5.9	5.9	
Zirconium Zr	mg/kg		7.9	5.9	4.9	

CIEMAT EXTRACTION

Associated with Poorly Crystalline Fe Hydroxides
Reagent: 40 mL CBA solution (0.2 M Na citrate + 0.6

Sample			30107-MTCP-	Detox Tailings Residue	Detox Tailings Residue	Blank
Initial sample weight (g)			0.5079	0.5057	0.5124	0.0000
Final diluted solution volume after wash and			50	50	50	50
Parameter	**Units**	**RDL**				
Hardness CaCO3	mg/L	0.05	327	356	12.5	35.3
Aluminum Al	mg/L	0.001	0.95	0.83	0.28	0.1
Antimony Sb	mg/L	0.0009	< 0.009	< 0.009	< 0.009	< 0.009
Arsenic As	mg/L	0.0002	< 0.002	< 0.002	< 0.002	< 0.002
Barium Ba	mg/L	0.00008	0.739	0.701	0.0553	0.059
Beryllium Be	mg/L	0.000007	< 0.00007	< 0.00007	< 0.00007	< 0.00007
Bismuth Bi	mg/L	0.00001	0.0001	0.0001	< 0.0001	< 0.0001
Boron B	mg/L	0.002	0.03	0.03	0.03	< 0.02
Cadmium Cd	mg/L	0.000003	0.00003	< 0.00003	0.00008	< 0.00003
Calcium Ca	mg/L	0.01	127	139	3.8	14
Chromium Cr	mg/L	0.00008	0.0416	0.0339	0.0216	0.0036
Cobalt Co	mg/L	0.000004	0.00236	0.00135	0.0002	0.00017
Copper Cu	mg/L	0.001	< 0.01	< 0.01	< 0.01	< 0.01
Iron Fe	mg/L	0.007	7.9	4.5	0.22	0.64
Lead Pb	mg/L	0.00009	0.0035	0.0079	0.0029	< 0.0009
Lithium Li	mg/L	0.0001	0.012	0.019	0.018	< 0.001
Magnesium Mg	mg/L	0.001	2.41	2.21	0.73	0.22
Manganese Mn	mg/L	0.00001	0.581	0.574	0.0123	0.0541
Mercury Hg	ug/L	0.01	< 0.01	< 0.01	< 0.01	< 0.01
Molybdenum Mo	mg/L	0.0004	0.005	0.005	0.004	< 0.004
Nickel Ni	mg/L	0.0001	0.012	0.011	0.006	0.001
Phosphorus P	mg/L	0.003	1.5	1.51	0.45	0.18
Potassium K	mg/L	0.009	2.76	2.91	3.11	0.26
Selenium Se	mg/L	0.00004	0.0015	0.0015	0.0023	< 0.0004
Silicon Si	mg/L	0.02	2.7	2.3	0.6	0.3
Silver Ag	mg/L	0.00005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Sodium Na	mg/L	0.01	21300	20300	20800	2250
Strontium Sr	mg/L	0.00008	0.407	0.425	0.0133	0.0386
Sulphur (S)	mg/L	5	< 50	< 50	< 50	< 50
Thallium Tl	mg/L	0.000005	< 0.00005	< 0.00005	< 0.00005	< 0.00005
Tin Sn	mg/L	0.00006	0.004	0.004	0.0023	< 0.0006
Titanium Ti	mg/L	0.0001	0.0228	0.0235	0.0072	0.003
Uranium U	mg/L	0.000002	0.00029	0.00027	0.00011	0.00003
Vanadium V	mg/L	0.00001	0.0059	0.0051	0.0006	0.0006
Zinc Zn	mg/L	0.002	< 0.02	< 0.02	< 0.02	< 0.02
Zirconium Zr	mg/L	0.002	0.02	< 0.02	< 0.02	< 0.02

Concentration leached relative to initial sample mass

Parameter	Units	RDL				
Aluminum Al	mg/kg		93.5	82.1	27.3	
Antimony Sb	mg/kg		<DL	<DL	<DL	
Arsenic As	mg/kg		<DL	<DL	<DL	
Barium Ba	mg/kg		72.8	69.3	5.4	
Beryllium Be	mg/kg		<DL	<DL	<DL	
Bismuth Bi	mg/kg		0.0	0.0	<DL	
Boron B	mg/kg		3.0	3.0	2.9	
Cadmium Cd	mg/kg		0.0	<DL	0.01	
Calcium Ca	mg/kg		12502.5	13743.3	370.8	
Chromium Cr	mg/kg		4.1	3.4	2.1	
Cobalt Co	mg/kg		0.2	0.1	0.0	
Copper Cu	mg/kg		<DL	<DL	<DL	
Iron Fe	mg/kg		777.7	444.9	21.5	
Lead Pb	mg/kg		0.3	0.8	0.3	
Lithium Li	mg/kg		1.2	1.9	1.8	
Magnesium Mg	mg/kg		237.3	218.5	71.2	
Manganese Mn	mg/kg		57.2	56.8	1.2	
Mercury Hg	ug/kg		<DL	<DL	<DL	
Molybdenum Mo	mg/kg		0.5	0.5	0.4	
Nickel Ni	mg/kg		1.2	1.1	0.6	
Phosphorus P	mg/kg		147.7	149.3	43.9	
Potassium K	mg/kg		271.7	287.7	303.5	
Selenium Se	mg/kg		0.1	0.1	0.2	
Silicon Si	mg/kg		265.8	227.4	58.5	
Silver Ag	mg/kg		<DL	<DL	<DL	
Sodium Na	mg/kg		2096869.5	2007118.8	2029664.3	
Strontium Sr	mg/kg		40.1	42.0	1.3	
Sulphur (S)	mg/kg		<DL	<DL	<DL	
Thallium Tl	mg/kg		<DL	<DL	<DL	
Tin Sn	mg/kg		0.4	0.4	0.2	
Titanium Ti	mg/kg		2.2	2.3	0.7	
Uranium U	mg/kg		0.0	0.0	0.0	
Vanadium V	mg/kg		0.6	0.5	0.1	
Zinc Zn	mg/kg		<DL	<DL	<DL	
Zirconium Zr	mg/kg		2.0	<DL	<DL	

SGS proposal: 19195-PR1 COS8
SGS project #: 2321

Work order date: 14-May-24
Report date: 15-Jul-24

Version: Final

CIEMAT EXTRACTION **Metals - Multi-Acid Digestion with ICP-OES/MS Finish**

Test	Residual wt	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti
Units	g	%	mg/kg	%	mg/kg	mg/kg	%	%	mg/kg	%	mg/kg	%	mg/kg	%	%	mg/kg	%
Method Code		ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
Lower detection		0.01	1	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01
Upper detection		15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15
Sample ID																	
30107-MTCP-005(Pulverized)	0.451	7.450	424.00	3.07	85	2308.0	5.72	2.06	21	1.99	351.0	2.80	64.0	0.1	0.42	141	0.39
Detox Tailings Residue	0.4511	7.550	436.00	3.22	167	326.0	5.54	2.09	22	2.12	407.0	2.92	103.0	0.1	0.10	150	0.39
Detox Tailings Residue-Washed	0.4602	7.430	435.00	3.21	150	310.0	5.41	2.06	22	2.15	406.0	2.95	102.0	0.1	0.09	147	0.38
*Rep Detox Tailings Residue		7.49	434.00	3.18	148	309.0	5.5	2.08	22	2.12	399.0	2.88	102.0	0.1	0.10	147	0.37
*Erep 30107-MTCP-005(Pulverized)																	
QA/QC																	
Blank		<0.01	<1	<0.01	1	<0.5	<0.01	<0.01	<1	<0.01	<2	<0.01	<1	<0.01	<0.01	<0.5	<0.01
Certified standards																	
*Std OREAS 609b		6.460	574.00	0.95	14	4694.0	2.9	2.55	32	0.14	220.0	1.80	7.0	0.0	2.20	209	0.12
*Std OREAS 681		7.850	397.00	5.9	1685	261.0	7.37	1.37	14	5.24	1243.0	1.55	456.0	0.1	0.11	452	0.58

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SGS

CIEMAT EXTRACTION

Test	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
Lower detection	2	1	0.5	0.02	1	0.1	0.04	0.02	0.05	0.1	1	0.1	0.02	0.01	0.05	0.1
Upper detection	10000	10000	10000	100	10000	2500	10000	10000	1000	10000	1000	1000	500	1000	10000	1000
Sample ID																
30107-MTCP-005(Pulverized)	197	36	83.2	1.01	9	0.8	1.46	0.03	39.07	29.7	3.00	18.7	2.25	0.1	21.3	0.26
Detox Tailings Residue	203	35	84.2	0.22	6	0.9	2.4	0.02	41.41	24.8	3.00	19.4	2.27	0.1	22.4	0.28
Detox Tailings Residue-Washed	197	35	82.8	0.29	5	0.8	0.69	0.03	39.16	23.8	3.00	18.8	2.15	0.1	21.2	0.27
*Rep Detox Tailings Residue	197	35	81.5	0.32	6	0.9	0.99	<0.02	42.19	25.5	3.00	19.2	2.19	0.1	23.2	0.27
*Erep 30107-MTCP-005(Pulverized)																
QA/QC																
Blank	<2	<1	<0.5	<0.02	<1	<0.1	<0.04	<0.02	<0.05	<0.1	<1	<0.1	<0.02	<0.02	<0.1	<0.01
Certified standards																
*Std OREAS 609b	13	1335	168	24.48	1442	2.5	111	8.2	75.73	5.2	6.00	23.4	4.71	2.2	37.6	0.07
*Std OREAS 681	245	86	56.3	0.1	<1	1.4	0.09	0.08	40.77	49.6	4.00	16.9	1.68	0.0	19.1	0.27

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CIEMAT EXTRACTION

Test	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb	Hg
Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	ppm	ppm	ppm
Method Code	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	CVA37A25
Lower detection	0.5	0.2	0.05	0.5	2	0.3	0.05	0.05	0.05	0.2	0.02	0.05	0.1	0.1	0.1	0.05	0.1	0.005
Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	1000	10000	100	100
Sample ID																		
30107-MTCP-005(Pulverized)	113	2.8	4.900	92.80	10.82	25.5	<2	1	0.17	0.47	0.09	1.5	0.38	0.8	16.6	14.90	1.6	0.654
Detox Tailings Residue	86.86	3	3.400	92.50	5.76	24.9	<2	1.1	0.16	0.47	0.86	1.5	0.38	0.8	13.4	14.90	1.7	0.247
Detox Tailings Residue-Washed	88.43	3	3.400	94.50	5.51	25	<2	1	0.17	0.47	<0.05	1.4	0.35	0.8	20.5	14.70	1.7	0.24
*Rep Detox Tailings Residue	87.03	3.1	3.3	95.10	5.8	25.9	<2	1.1	0.17	0.48	0.12	1.5	0.39	0.8	10.9	14.60	1.7	
*Erep 30107-MTCP-005(Pulverized)																		0.685
QA/QC																		
Blank	<0.05	<0.1	<0.5	<0.2	<0.05	<0.5	<2	<0.3	<0.05	<0.05	<0.05	<0.2	<0.02	<0.05	<0.1	<0.1	<0.1	<0.005
Certified standards																		
*Std OREAS 609b	5.25	14.5	435.000	116.00	167	3.9	15.0	11.6	1.03	0.6	19.50	13.5	1.46	4.4	4.1	12.20	0.5	
*Std OREAS 681	1.25	6.4	9.600	79.90	0.22	27.9	<2	1.7	0.41	0.59	0.12	6.2	0.17	1.4	1.0	17.70	1.8	

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SGS proposal: 19020-PR1-R1
SGS project #: 2224

Metals - Multi Acid Digestion with ICP-OES/MS Finish - CRM Expected Values and Tolerance

CRM	Test	Al	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V
	Units	%	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	%	%	ppm	%	ppm
Method Code	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12	ICP40Q12
	Lower detection	0.01	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	1	0.01	0.01	0.5	0.01	1
	Upper detection	15	10000	15	10000	10000	15	15	10000	15	10000	15	10000	15	5	10000	15	10000
OREAS 905	Expected value	7.42	2699.0	0.59	19.2	1533	4.08	2.88	20	0.28	380	2.40	9.5	0.028	0.07	157	0.12	10.1
	Tolerance (%)	10.7	14.0	14.2	49.1	11.9	11.5	12.1	23.9	17.2	13.0	14.1	26.5	24.6	29.4	12.5	15.4	28.6
OREAS 601B	Expected value	6.63	BDL	0.887	23.7	1010	2.29	2.41	22.6	0.10	222	1.90	6.5	0.029	1.50	241	0.14	12.1
	Tolerance (%)	10.1		14.9	37.6	6.8	10.7	9.4	26.3	20.0	11.1	14.3	30.9	15.1	7.2	14.7	11.8	21.7

CRM	Test	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Hf	In	La	Lu	Mo	Nb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12
	Lower detection	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.05	0.02	0.1	0.01	0.05	0.05
	Upper detection	10000	10000	100	10000	100	10000	10000	1000	10000	1000	10000	500	500	10000	1000	10000	1000
OREAS 905	Expected value	138	252.000	0.52	34.7	3.04	5.7	0.36	92	14.8	6.78	25.1	6.8	0.64	46	0.1	3.27	18.1
	Tolerance (%)	14.5	13.7	55.1	15.0	31.2	17.7	37.7	14.0	16.3	18.0	12.2	16.5	22.3	19.4	43.4	24.0	18.1
OREAS 601B	Expected value	318	186.000	50.10	284	2.24	18.0	2.05	70	2.97	4.88	23.4	5.1	0.47	33.5	0.0731	5.22	14.4
	Tolerance (%)	5.6	17.0	10.4	19.2	44.2	19.0	16.3	35.5	18.6	11.4	22.9	17.4	17.0	22.6	54.6	27.1	21.7

CRM	Test	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICP40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	ICM40Q12	
	Lower detection	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
	Upper detection	10000	10000	10000	10000	1000	1000	10000	10000	1000	10000	10000	10000	10000	10000	100
OREAS 905	Expected value	30.40	138	1.95	4.9	2.84	3.96	1.34	0.77	0.1	14.60	0.7	5.0	2.78	15.7	0.68
	Tolerance (%)	20.7	13.8	19.7	28.2	34.0	20.5	18.5	27.1	58.3	15.6	22.9	18.4	18.8	15.4	21.2
OREAS 601B	Expected value	318.0	98	22.9	3.8	10.6	3.36	1.11	0.52	12.6	11.90	1.4	4.6	6.13	11.1	0.54
	Tolerance (%)	14.7	10.9	27.4	19.0	31.2	15.8	20.6	40.4	22.8	20.7	19.2	14.0	16.6	13.7	30.4

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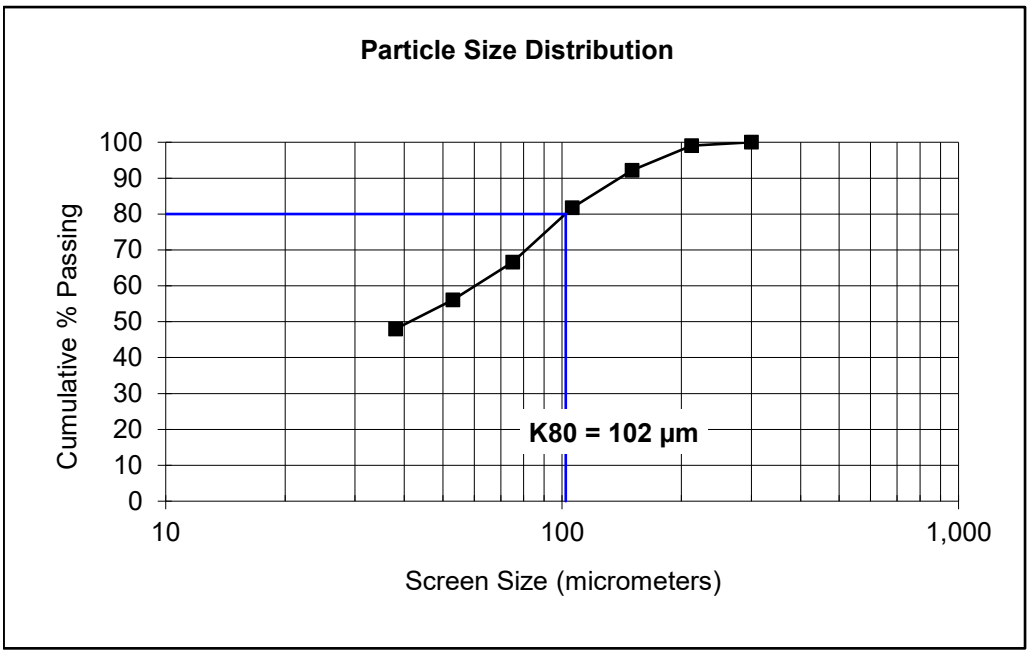
Sample Name		PSA, P80, μm
30103-MTCP-002	99743	107
30103-MTCP-004	99775	100
30103-VRSP-001	98124	101
30103-VRSP-002	98116	103
30103-VRSP-003	98070	102
30103-VRSP-004	98074	99
30103-VRSP-005	98086	104
30103-VRSP-006	98104	98
30103-VRSP-007	206761	102
30103-VRSP-010	206785	105
30103-VRSP-011	206796	100
30103-VRSP-012	206803	93
30103-VRSP-015	206806	94
30103-VRSP-016	206820	93
30103-VRSP-017	206825	106
30103-VRSP-018	206831	109
30103-VRSP-019	206839	103
30103-VRSP-020	151633	97
30103-VRSP-021	206753	104
30103-VRSP-022	207061	104
30103-VRSP-024	207070	112
30103-VRSP-025	207079	102
30103-VRSP-026	207091	101
30103-VRSP-027	207103	109
30103-VRSP-028	207106	97
30103-VRSP-029	207111	103

SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206761G** Test No.: **5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.0	0.9	0.9	99.1
100	150	7.4	6.9	7.8	92.2
150	106	11.1	10.4	18.2	81.8
200	75	16.3	15.2	33.4	66.6
270	53	11.2	10.5	43.9	56.1
400	38	8.7	8.1	52.0	48.0
Pan	-38	51.4	48.0	100.0	0.0
Total	**-**	**107.1**	100.0	**-**	**-**
K80	**102**				

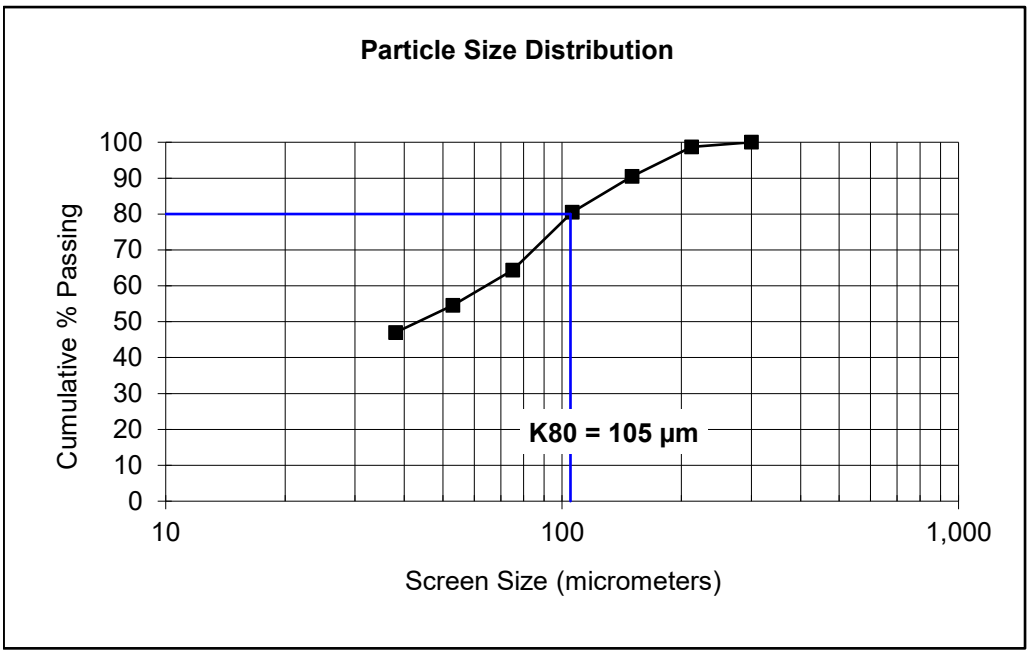


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206785G** Test No.: **5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.4	1.3	1.3	98.7
100	150	9.0	8.2	9.5	90.5
150	106	11.0	10.0	19.5	80.5
200	75	17.7	16.1	35.6	64.4
270	53	10.8	9.8	45.4	54.6
400	38	8.3	7.6	53.0	47.0
Pan	-38	51.6	47.0	100.0	0.0
Total	**-**	**109.8**	100.0	**-**	**-**
K80	**105**				

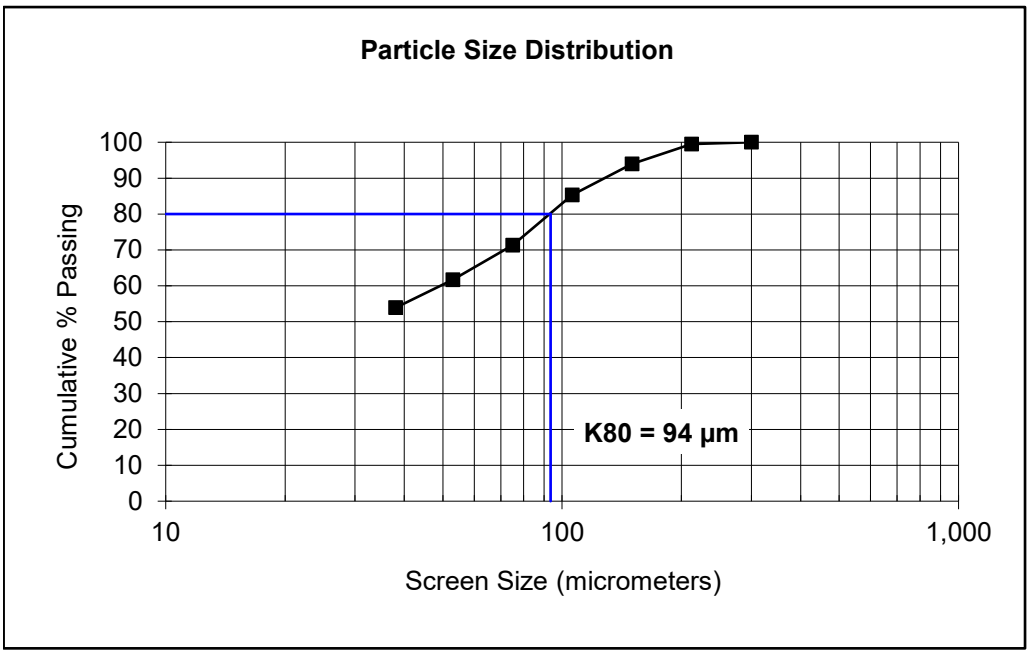


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206806G** Test No.: **5.5 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.6	0.5	0.5	99.5
100	150	6.9	5.6	6.0	94.0
150	106	10.7	8.6	14.6	85.4
200	75	17.4	14.0	28.6	71.4
270	53	12.0	9.7	38.3	61.7
400	38	9.7	7.8	46.1	53.9
Pan	-38	67.0	53.9	100.0	0.0
Total	**-**	**124.3**	100.0	**-**	**-**
K80	**94**				

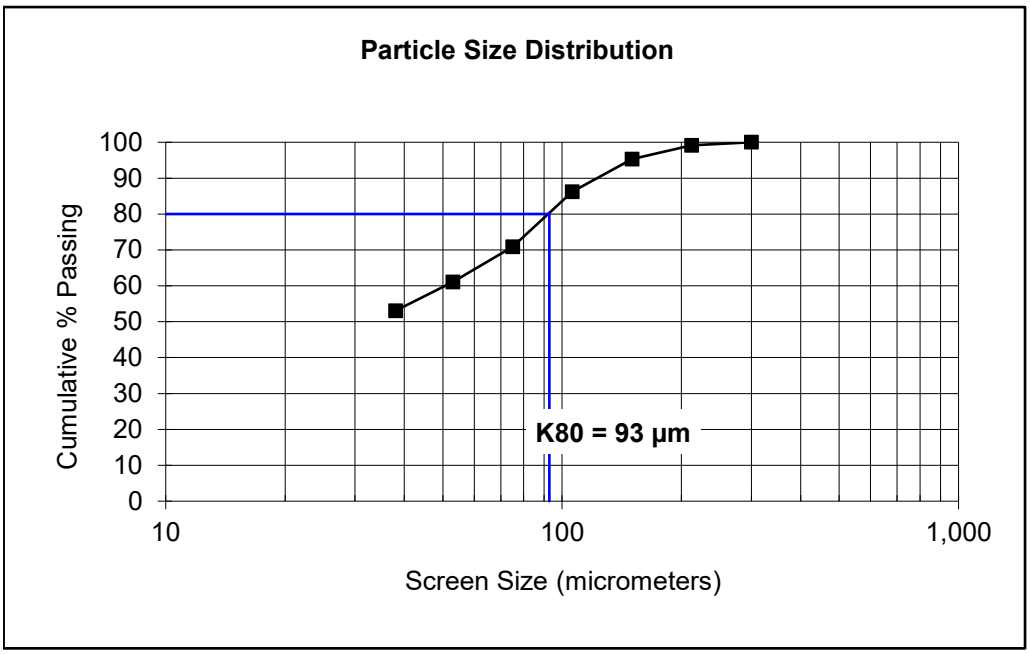


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206820G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.0	0.8	0.8	99.2
100	150	4.7	3.9	4.7	95.3
150	106	10.9	9.0	13.8	86.2
200	75	18.5	15.3	29.1	70.9
270	53	11.8	9.8	38.9	61.1
400	38	9.7	8.0	46.9	53.1
Pan	-38	64.0	53.1	100.0	0.0
Total	**-**	**120.6**	100.0	**-**	**-**
K80	**93**				

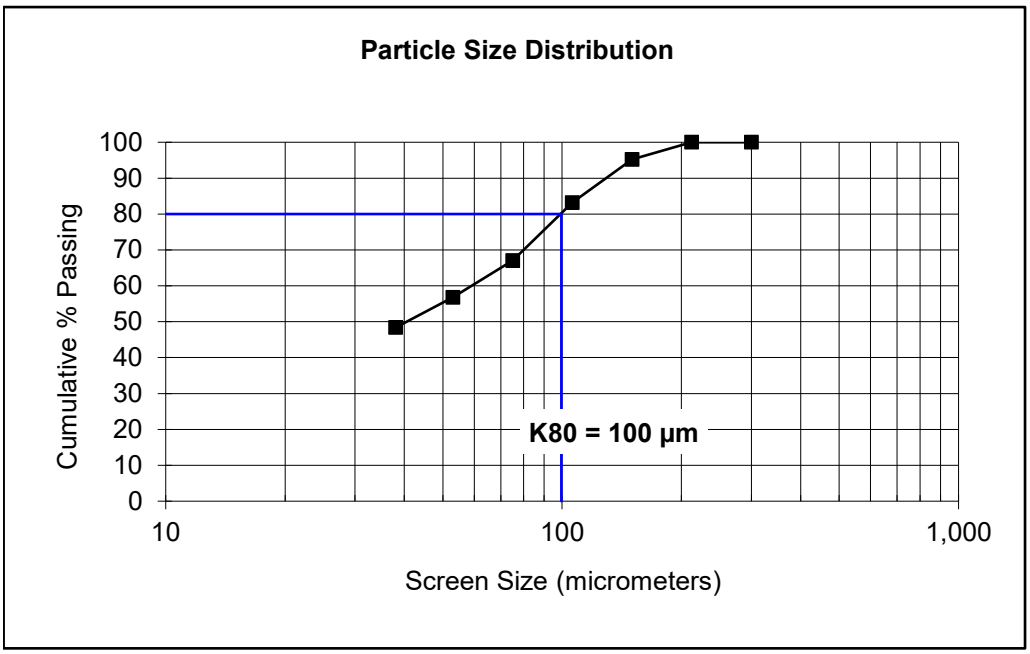


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206796G** Test No.: **7min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.0	0.0	0.0	100.0
100	150	5.4	4.7	4.7	95.3
150	106	13.7	12.0	16.8	83.2
200	75	18.4	16.2	33.0	67.0
270	53	11.6	10.2	43.2	56.8
400	38	9.6	8.4	51.6	48.4
Pan	-38	55.0	48.4	100.0	0.0
Total	**-**	**113.7**	100.0	**-**	**-**
K80	**100**				

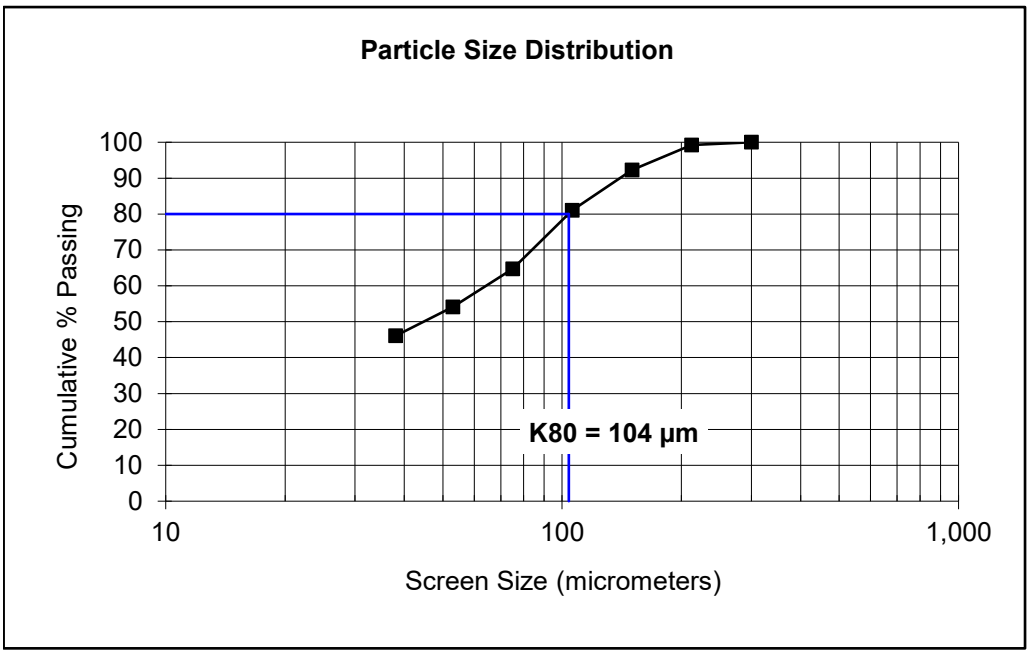


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207061G** Test No.: **5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.1	0.8	0.8	99.2
100	150	10.2	7.0	7.7	92.3
150	106	16.4	11.2	19.0	81.0
200	75	23.7	16.2	35.2	64.8
270	53	15.5	10.6	45.9	54.1
400	38	11.8	8.1	53.9	46.1
Pan	-38	67.2	46.1	100.0	0.0
Total	**-**	**145.9**	100.0	**-**	**-**
K80	**104**				

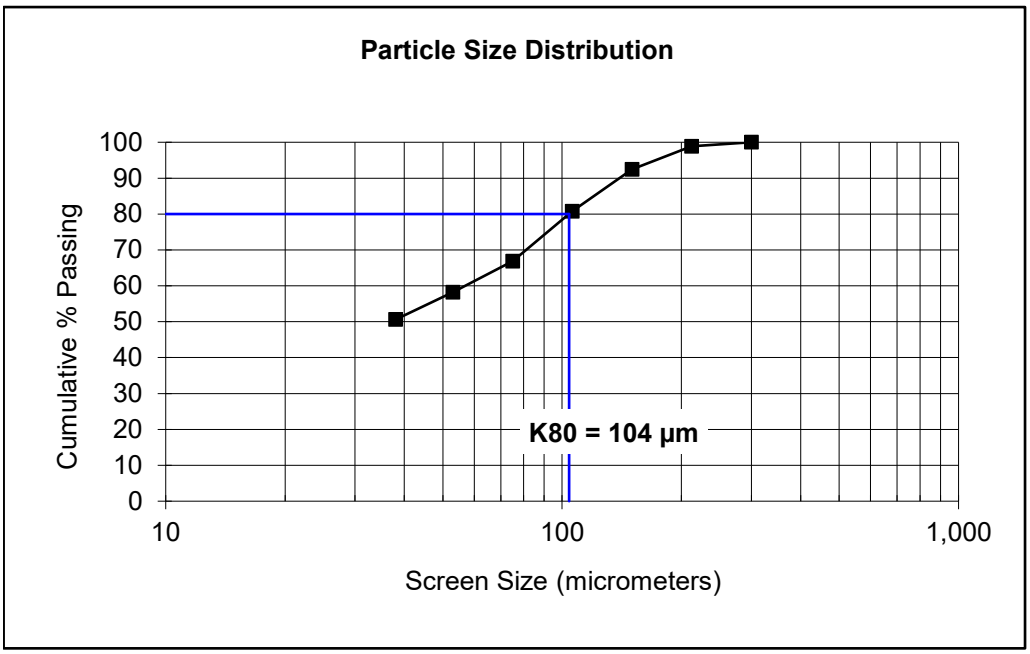


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206753G** Test No.: **5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.6	1.1	1.1	98.9
100	150	9.0	6.4	7.5	92.5
150	106	16.4	11.7	19.2	80.8
200	75	19.6	14.0	33.2	66.8
270	53	12.1	8.6	41.8	58.2
400	38	10.7	7.6	49.4	50.6
Pan	-38	71.1	50.6	100.0	0.0
Total	**-**	**140.5**	100.0	**-**	**-**
K80	**104**				

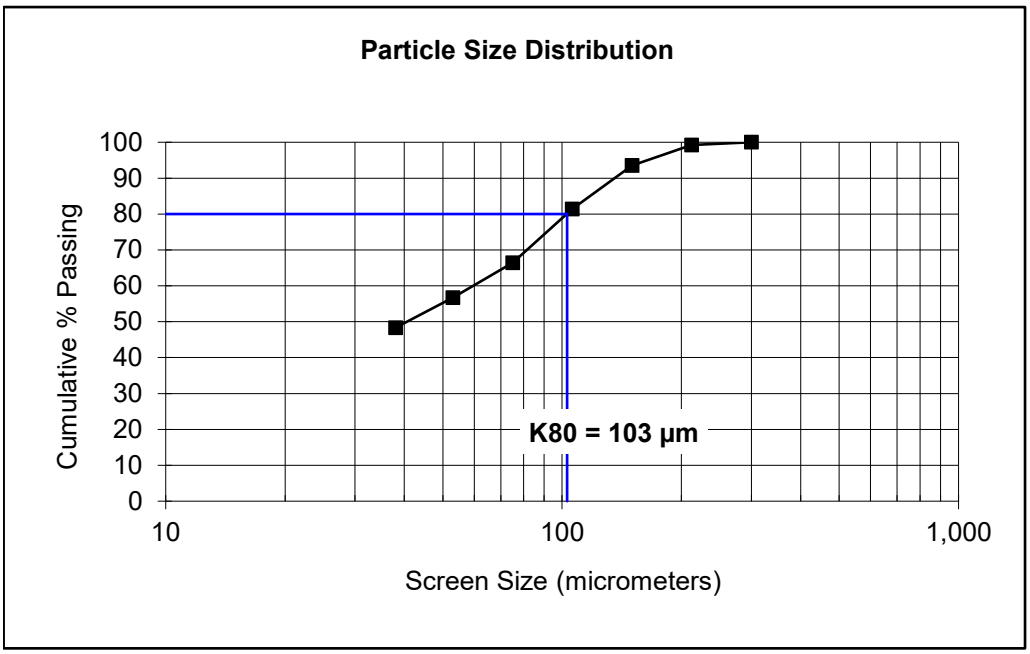


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207111G** Test No.: **5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.1	0.8	0.8	99.2
100	150	8.2	5.7	6.5	93.5
150	106	17.5	12.2	18.6	81.4
200	75	21.5	14.9	33.5	66.5
270	53	14.1	9.8	43.3	56.7
400	38	12.0	8.3	51.7	48.3
Pan	-38	69.6	48.3	100.0	0.0
Total	**-**	**144.0**	100.0	**-**	**-**
K80	**103**				

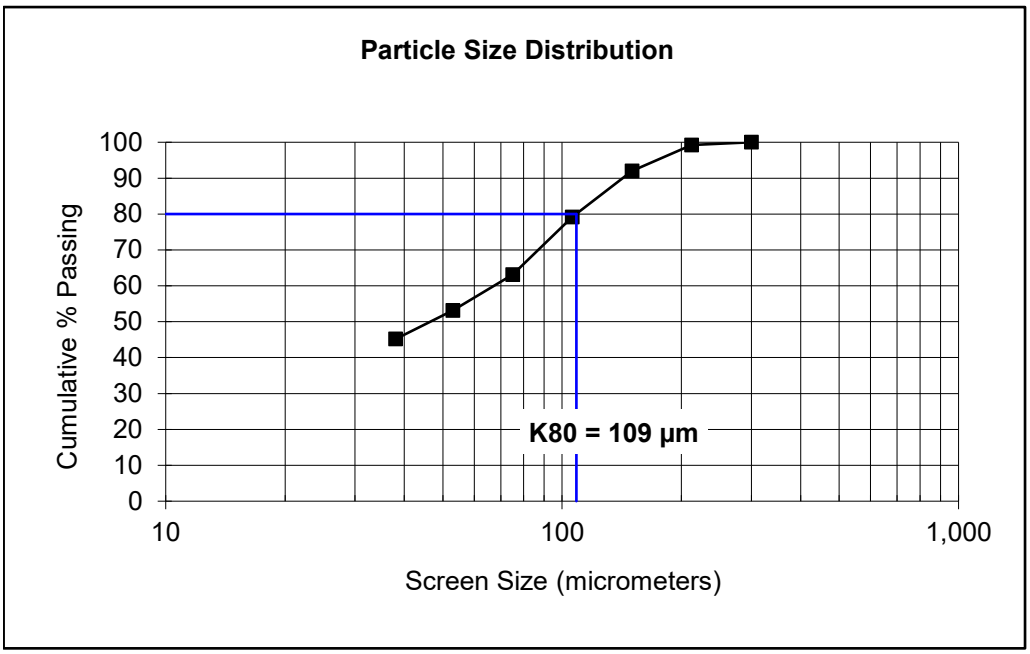


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206831G** Test No.: **8min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.0	0.8	0.8	99.2
100	150	9.6	7.3	8.0	92.0
150	106	17.0	12.8	20.8	79.2
200	75	21.2	16.0	36.9	63.1
270	53	13.3	10.0	46.9	53.1
400	38	10.5	7.9	54.8	45.2
Pan	-38	59.8	45.2	100.0	0.0
Total	**-**	**132.4**	100.0	**-**	**-**
K80	**109**				

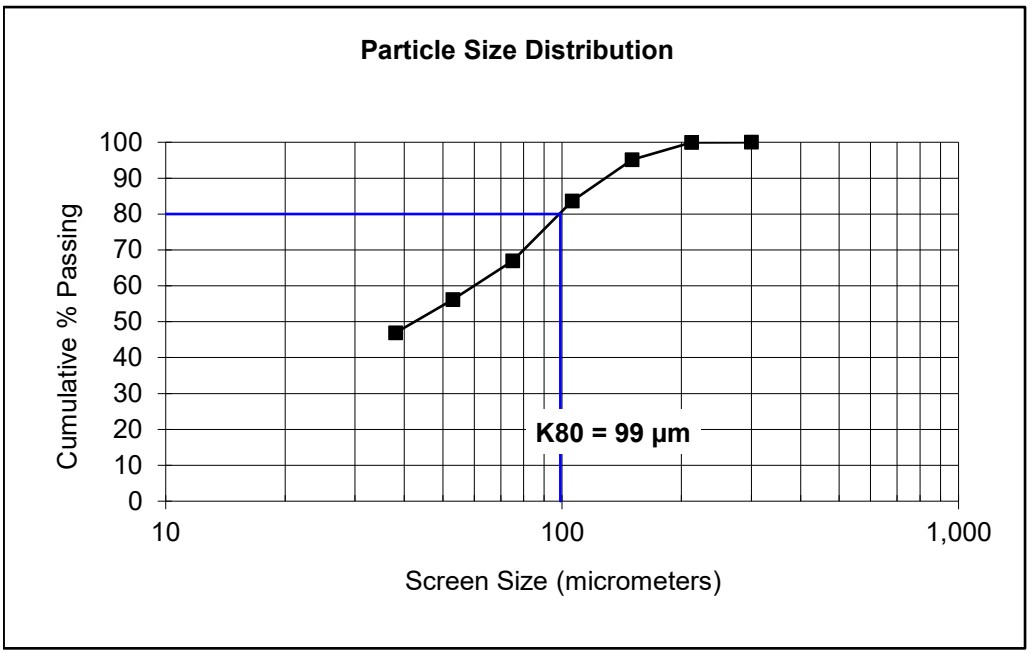


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98074G** Test No.: **7min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.1	0.1	0.1	99.9
100	150	6.1	4.8	4.9	95.1
150	106	14.5	11.5	16.4	83.6
200	75	21.0	16.6	33.0	67.0
270	53	13.6	10.8	43.8	56.2
400	38	11.7	9.3	53.1	46.9
Pan	-38	59.2	46.9	100.0	0.0
Total	**-**	**126.2**	100.0	**-**	**-**
K80	**99**				

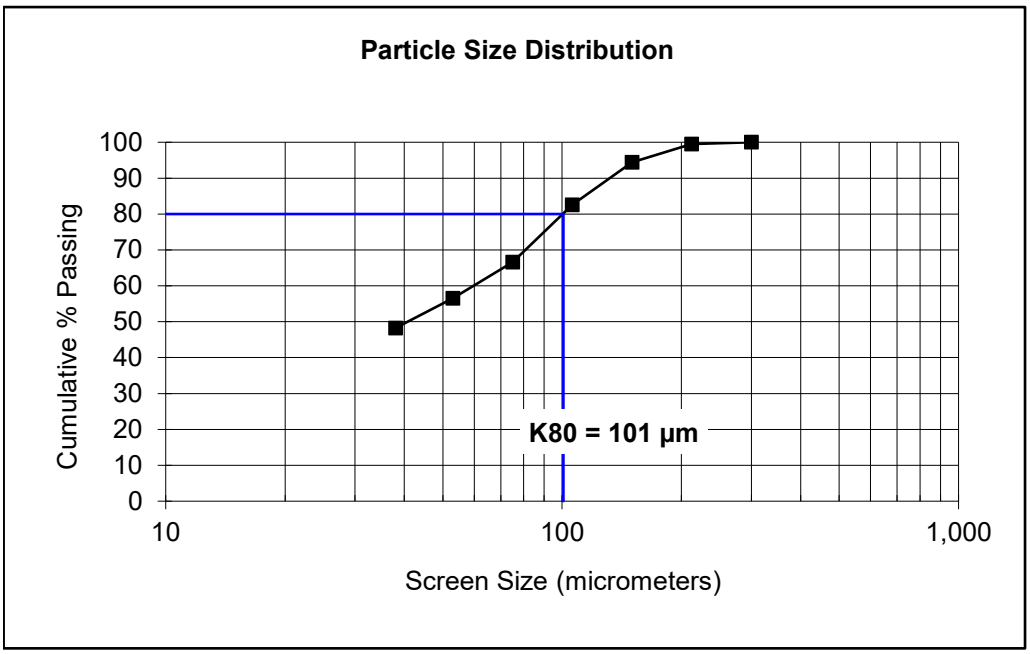


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98124G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.7	0.5	0.5	99.5
100	150	7.8	5.1	5.6	94.4
150	106	18.0	11.8	17.4	82.6
200	75	24.3	16.0	33.4	66.6
270	53	15.3	10.1	43.5	56.5
400	38	12.6	8.3	51.7	48.3
Pan	-38	73.4	48.3	100.0	0.0
Total	**-**	**152.1**	100.0	**-**	**-**
K80	**101**				

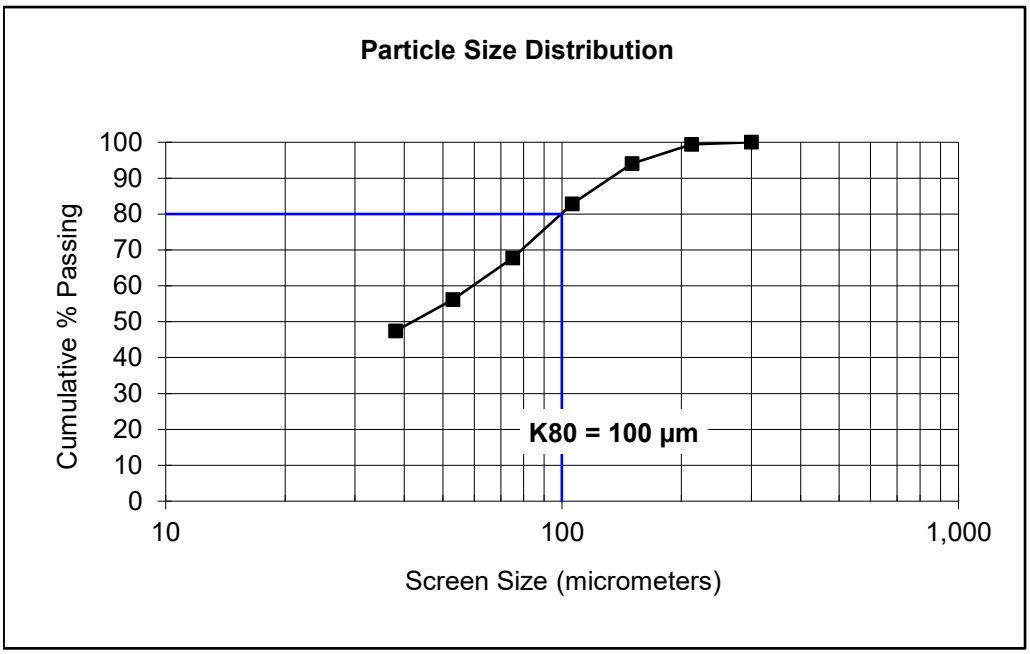


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **99775G** Test No.: **7min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.8	0.6	0.6	99.4
100	150	7.4	5.4	5.9	94.1
150	106	15.5	11.2	17.1	82.9
200	75	20.9	15.1	32.3	67.7
270	53	16.0	11.6	43.8	56.2
400	38	12.1	8.8	52.6	47.4
Pan	-38	65.5	47.4	100.0	0.0
Total	**-**	**138.2**	100.0	**-**	**-**
K80	**100**				

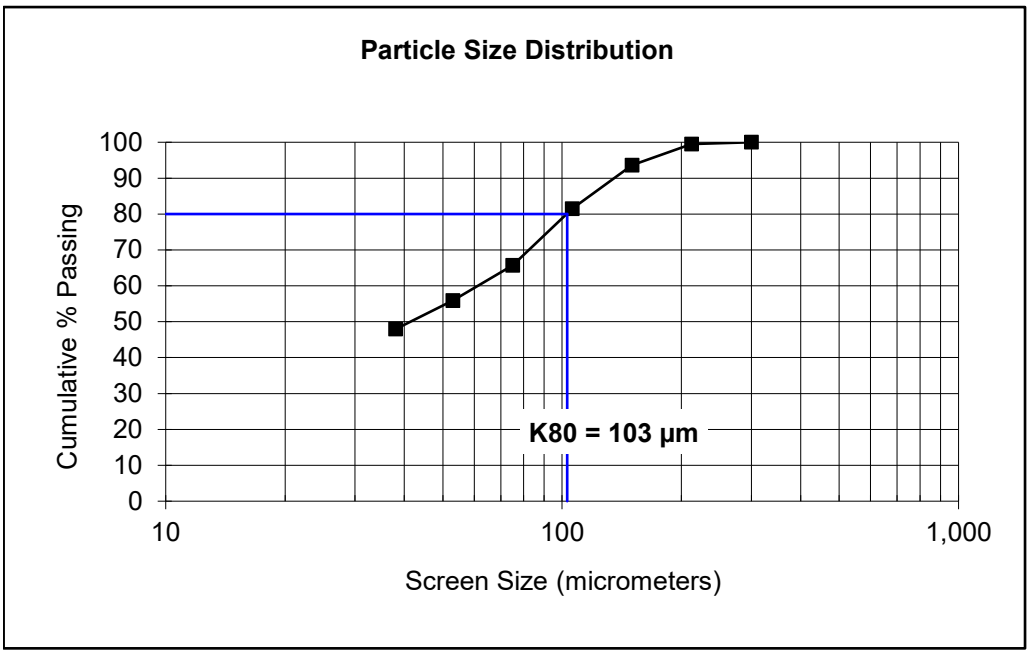


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98116G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.8	0.5	0.5	99.5
100	150	8.6	5.8	6.4	93.6
150	106	18.0	12.2	18.6	81.4
200	75	23.2	15.7	34.3	65.7
270	53	14.5	9.8	44.1	55.9
400	38	11.8	8.0	52.1	47.9
Pan	-38	70.8	47.9	100.0	0.0
Total	**-**	**147.7**	100.0	**-**	**-**
K80	**103**				

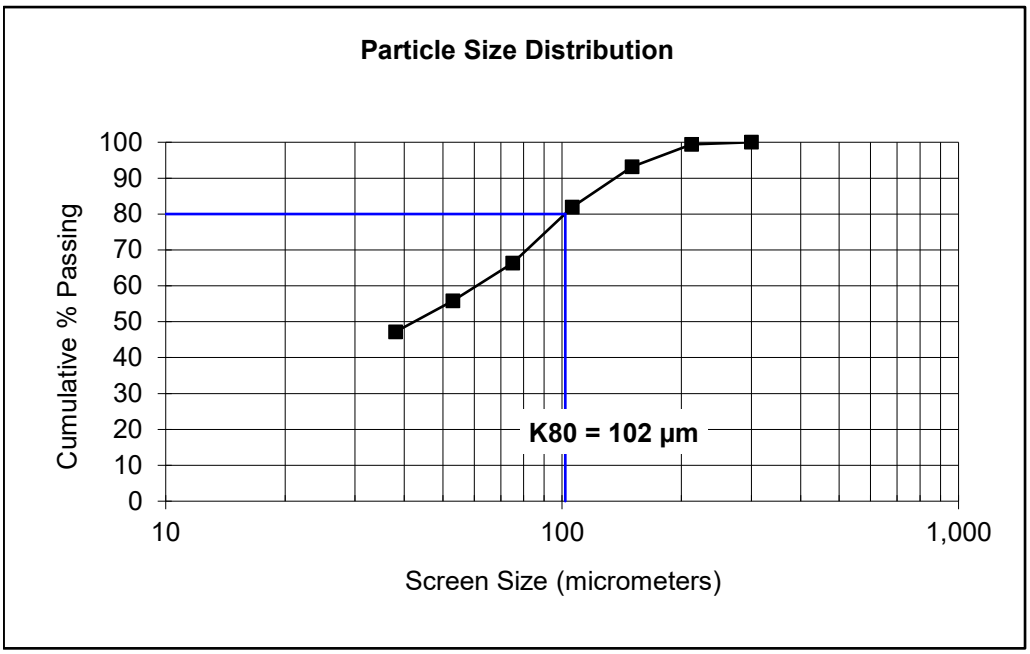


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98070G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.8	0.6	0.6	99.4
100	150	7.9	6.2	6.8	93.2
150	106	14.4	11.2	18.0	82.0
200	75	20.1	15.7	33.7	66.3
270	53	13.5	10.5	44.2	55.8
400	38	11.0	8.6	52.8	47.2
Pan	-38	60.5	47.2	100.0	0.0
Total	**-**	**128.2**	100.0	**-**	**-**
K80	**102**				

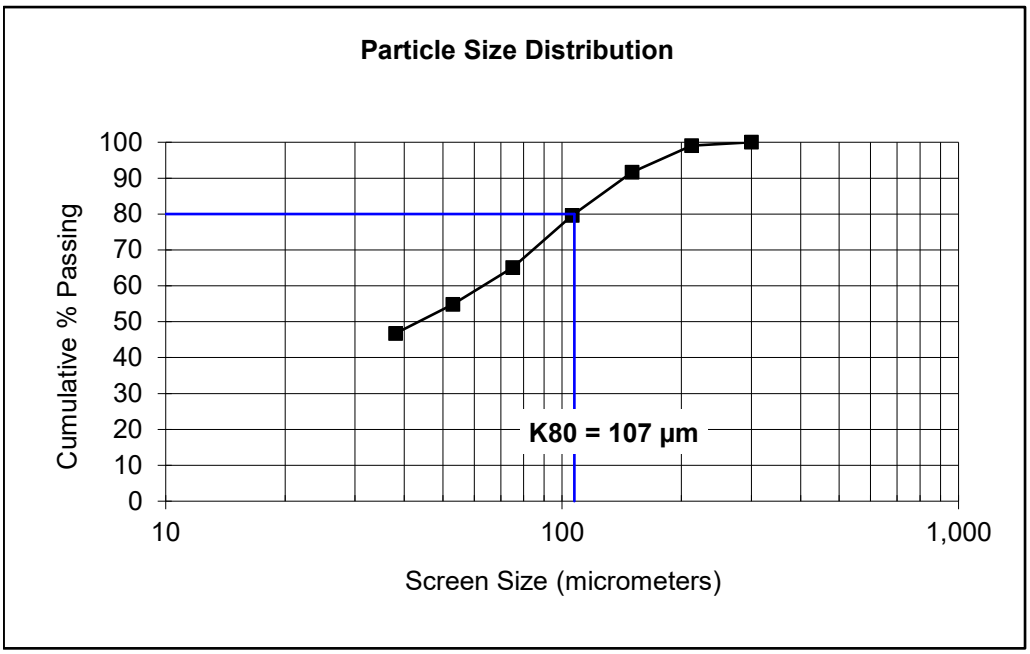


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **99743G** Test No.: **8min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.2	0.9	0.9	99.1
100	150	9.7	7.4	8.4	91.6
150	106	15.7	12.0	20.4	79.6
200	75	18.9	14.5	34.9	65.1
270	53	13.3	10.2	45.1	54.9
400	38	10.6	8.1	53.3	46.7
Pan	-38	60.9	46.7	100.0	0.0
Total	**-**	**130.3**	100.0	**-**	**-**
K80	**107**				

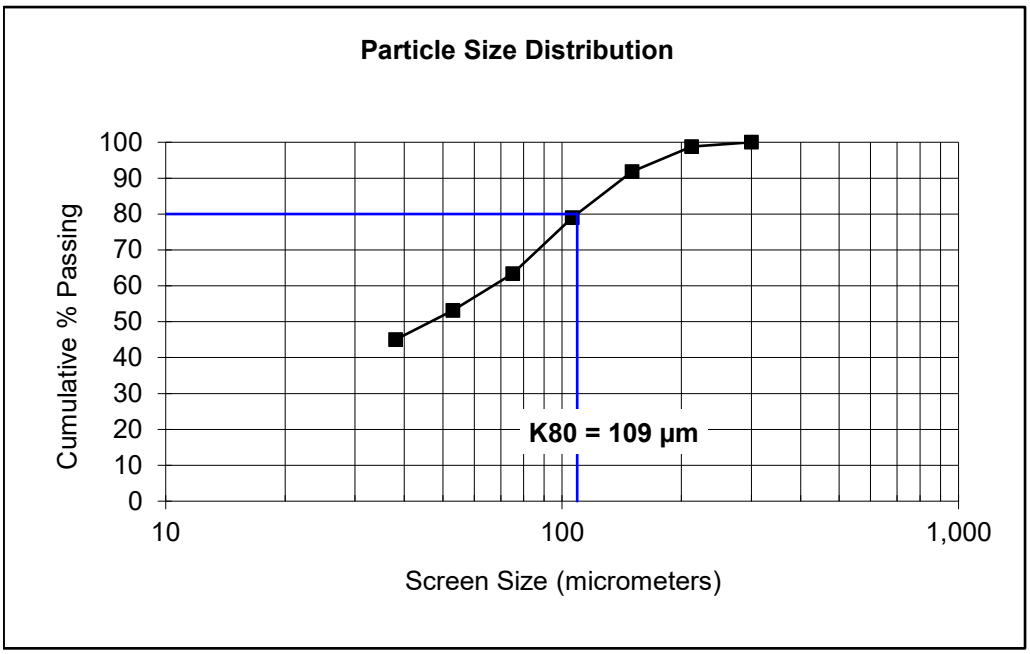


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207103G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.7	1.2	1.2	98.8
100	150	10.0	7.0	8.2	91.8
150	106	18.4	12.8	21.0	79.0
200	75	22.3	15.6	36.6	63.4
270	53	14.7	10.3	46.8	53.2
400	38	11.7	8.2	55.0	45.0
Pan	-38	64.5	45.0	100.0	0.0
Total	**-**	**143.3**	100.0	**-**	**-**
K80	**109**				

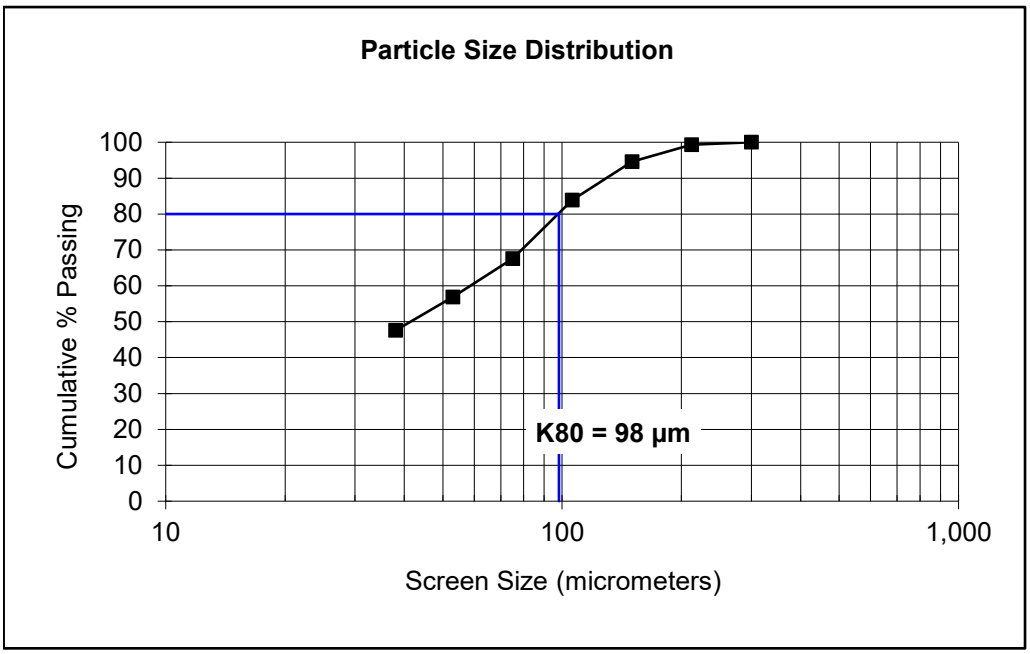


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98104G** Test No.: **7.5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.9	0.7	0.7	99.3
100	150	5.9	4.7	5.4	94.6
150	106	13.4	10.7	16.1	83.9
200	75	20.5	16.3	32.4	67.6
270	53	13.5	10.7	43.1	56.9
400	38	11.7	9.3	52.4	47.6
Pan	-38	59.8	47.6	100.0	0.0
Total	**-**	**125.7**	100.0	**-**	**-**
K80	**98**				

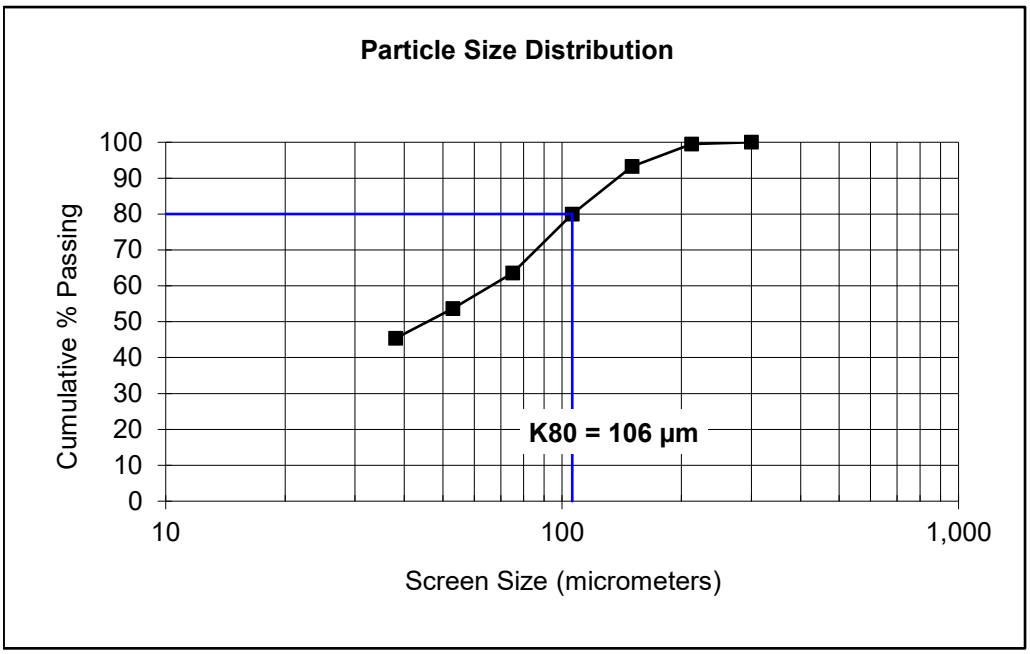


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206825G** Test No.: **7.5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.7	0.5	0.5	99.5
100	150	8.1	6.2	6.7	93.3
150	106	17.4	13.3	20.0	80.0
200	75	21.5	16.4	36.4	63.6
270	53	12.9	9.9	46.3	53.7
400	38	10.9	8.3	54.6	45.4
Pan	-38	59.4	45.4	100.0	0.0
Total	**-**	**130.9**	100.0	**-**	**-**
K80	**106**				

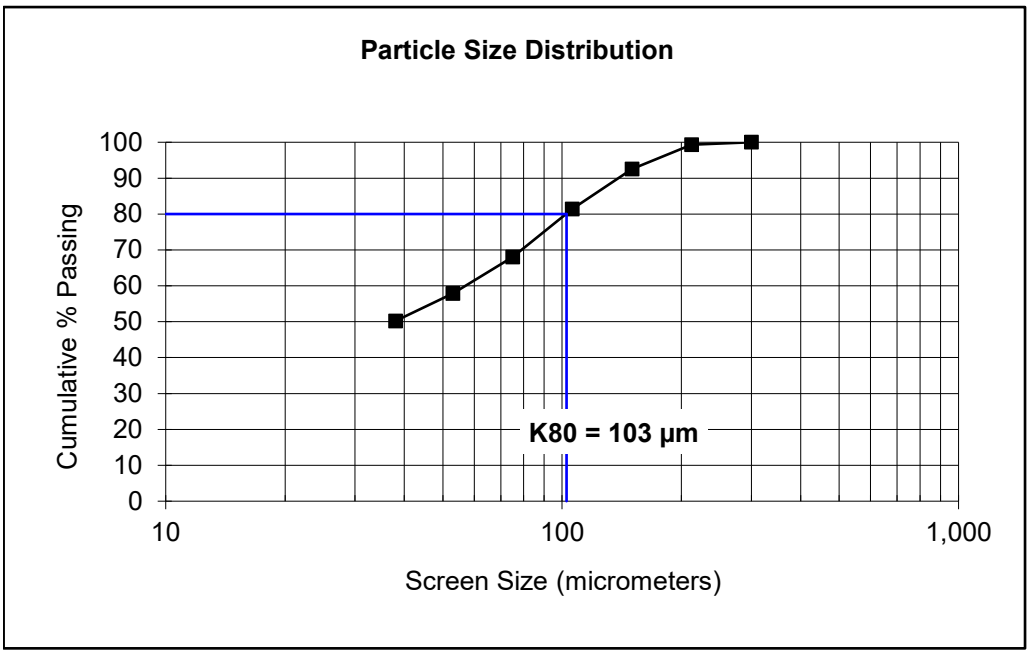


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206839G** Test No.: **6.5min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.9	0.7	0.7	99.3
100	150	9.2	6.8	7.5	92.5
150	106	15.1	11.2	18.6	81.4
200	75	18.0	13.3	32.0	68.0
270	53	13.8	10.2	42.2	57.8
400	38	10.3	7.6	49.8	50.2
Pan	-38	67.9	50.2	100.0	0.0
Total	**-**	**135.2**	100.0	**-**	**-**
K80	**103**				

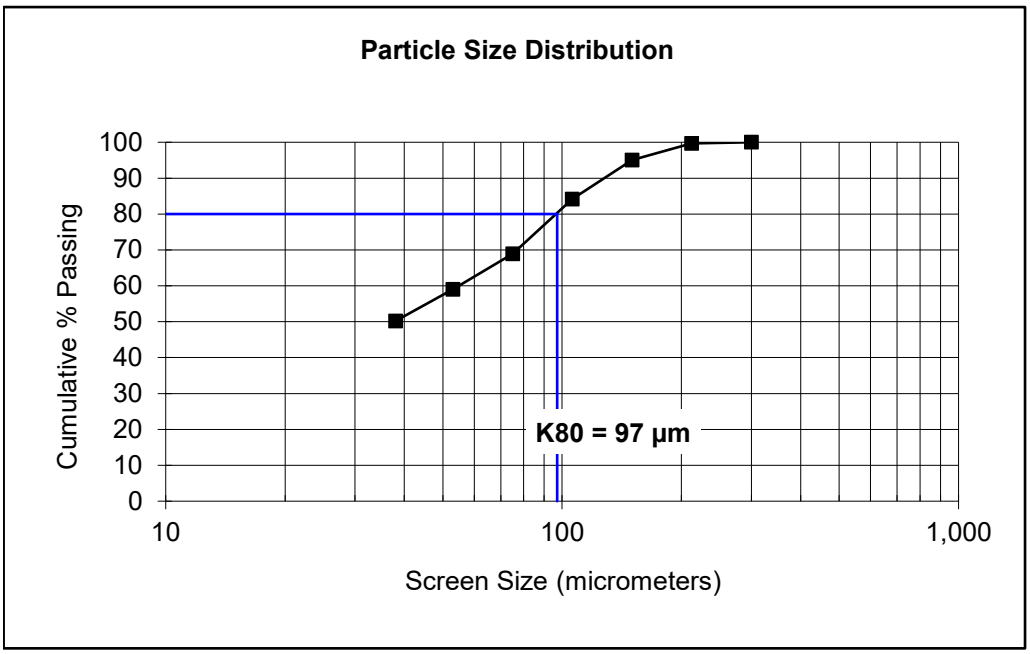


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **151633G** Test No.: **6min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.5	0.3	0.3	99.7
100	150	6.9	4.7	5.0	95.0
150	106	16.1	10.9	15.9	84.1
200	75	22.5	15.2	31.1	68.9
270	53	14.6	9.9	40.9	59.1
400	38	13.1	8.9	49.8	50.2
Pan	-38	74.3	50.2	100.0	0.0
Total	**-**	**148.0**	100.0	**-**	**-**
K80	**97**				

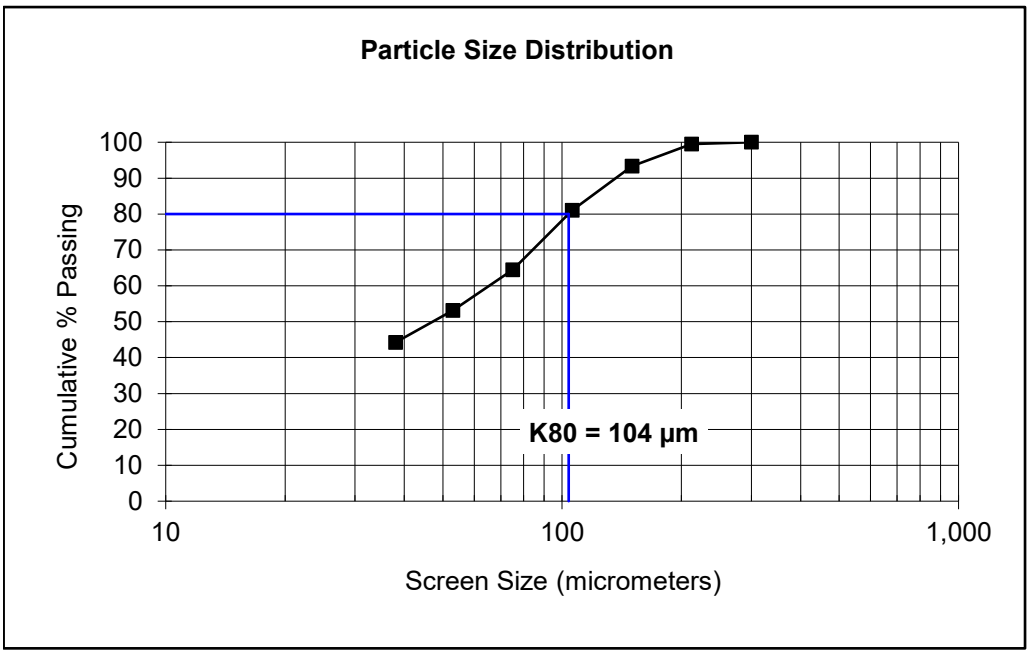


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **98086G** Test No.: **8.25min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.7	0.5	0.5	99.5
100	150	8.4	6.1	6.6	93.4
150	106	16.9	12.3	18.9	81.1
200	75	22.8	16.6	35.5	64.5
270	53	15.6	11.4	46.9	53.1
400	38	12.2	8.9	55.7	44.3
Pan	-38	60.8	44.3	100.0	0.0
Total	**-**	**137.4**	100.0	**-**	**-**
K80	**104**				

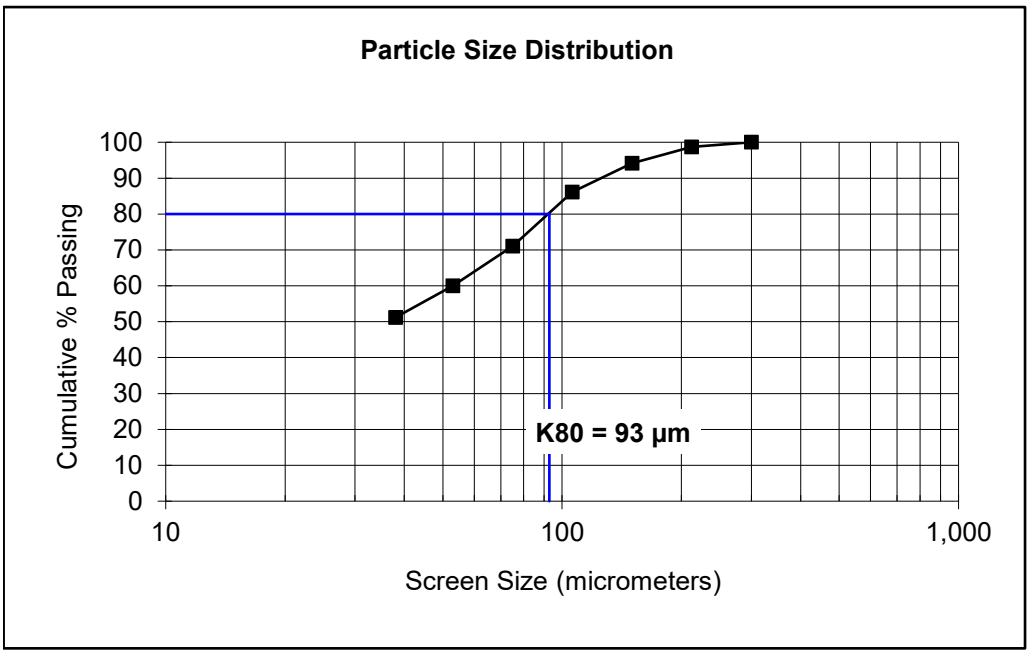


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **206803G** Test No.: **5.5 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	2.0	1.3	1.3	98.7
100	150	7.0	4.5	5.8	94.2
150	106	12.4	8.1	13.9	86.1
200	75	23.1	15.0	28.9	71.1
270	53	17.0	11.0	40.0	60.0
400	38	13.6	8.8	48.8	51.2
Pan	-38	78.8	51.2	100.0	0.0
Total	**-**	**153.9**	100.0	**-**	**-**
K80	**93**				

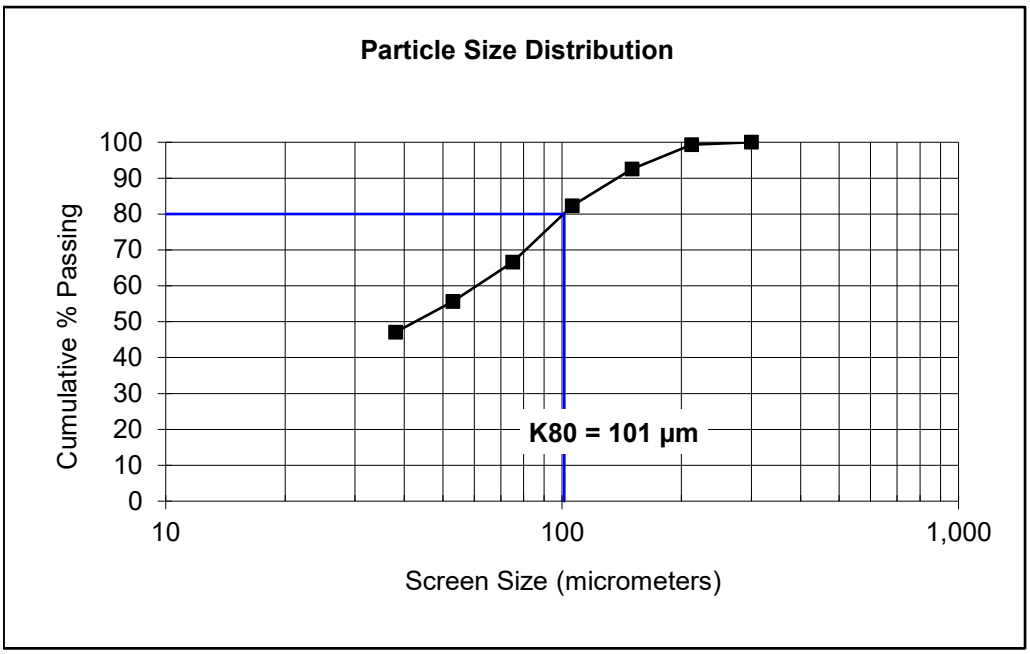


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207091G** Test No.: **6.5 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.8	0.7	0.7	99.3
100	150	8.1	6.8	7.4	92.6
150	106	12.3	10.3	17.7	82.3
200	75	18.7	15.6	33.4	66.6
270	53	13.2	11.0	44.4	55.6
400	38	10.2	8.5	52.9	47.1
Pan	-38	56.3	47.1	100.0	0.0
Total	**-**	**119.6**	100.0	**-**	**-**
K80	**101**				

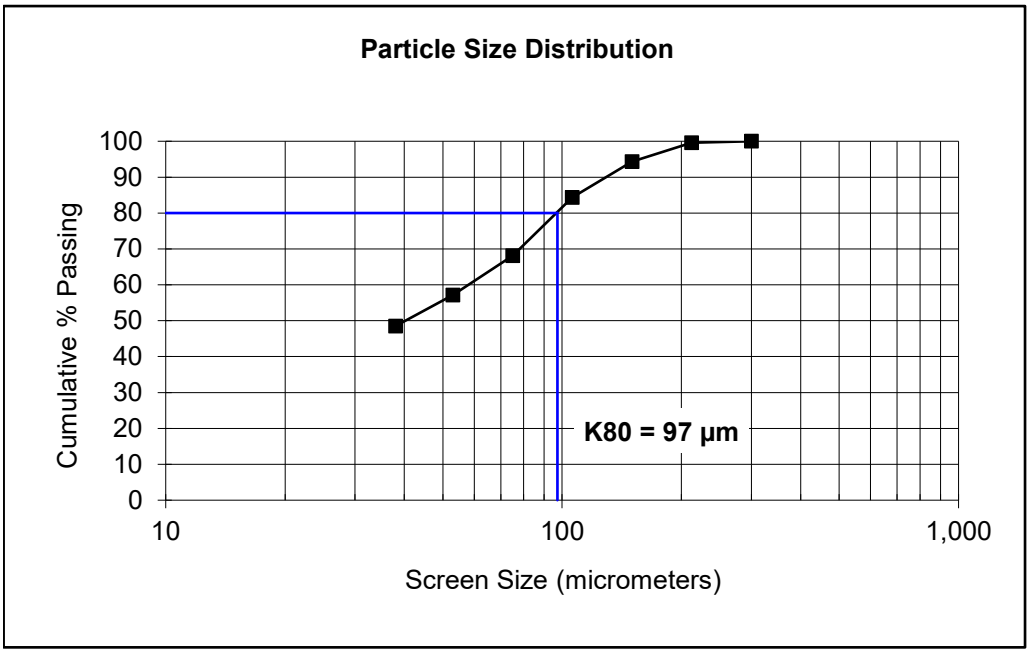


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207106G** Test No.: **7 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	0.5	0.4	0.4	99.6
100	150	6.9	5.2	5.6	94.4
150	106	13.2	10.0	15.7	84.3
200	75	21.3	16.2	31.9	68.1
270	53	14.4	11.0	42.8	57.2
400	38	11.4	8.7	51.5	48.5
Pan	-38	63.8	48.5	100.0	0.0
Total	**-**	**131.5**	100.0	**-**	**-**
K80	**97**				

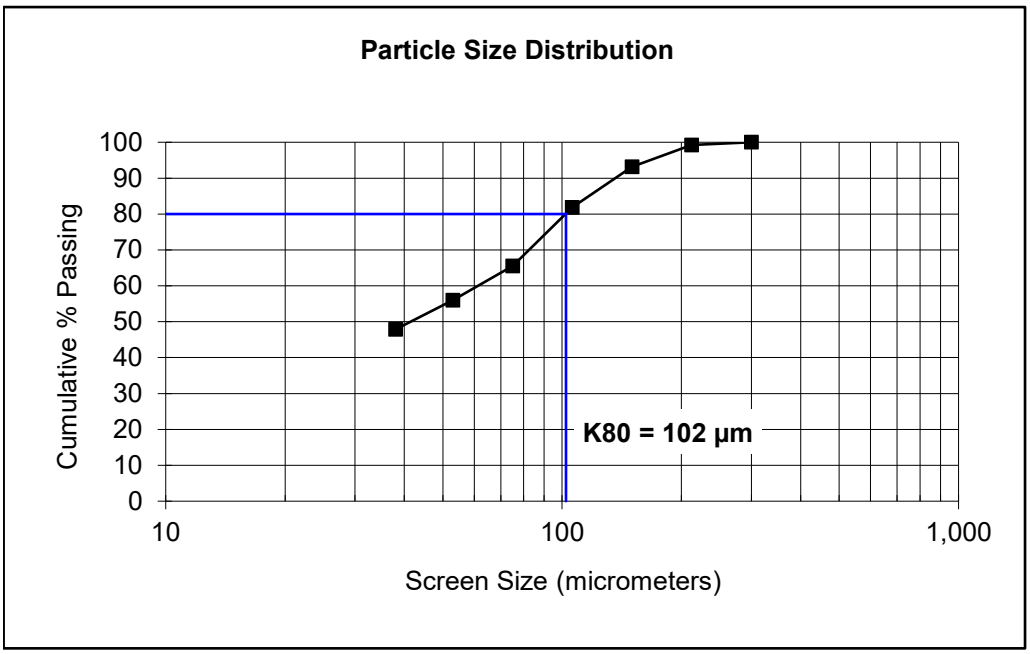


SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207079G** Test No.: **6.25 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.1	0.8	0.8	99.2
100	150	8.6	6.1	6.9	93.1
150	106	15.9	11.3	18.1	81.9
200	75	23.1	16.4	34.5	65.5
270	53	13.4	9.5	44.0	56.0
400	38	11.5	8.1	52.1	47.9
Pan	-38	67.6	47.9	100.0	0.0
Total	**-**	**141.2**	100.0	**-**	**-**
K80	**102**				



SGS Minerals Services
Size Distribution Analysis

Project No.

Sample: **207070G** Test No.: **5 min**

Size		Weight	% Retained		% Passing
Mesh	µm	grams	Individual	Cumulative	Cumulative
48	300	0.0	0.0	0.0	100.0
65	212	1.0	0.7	0.7	99.3
100	150	10.0	6.5	7.2	92.8
150	106	22.8	14.9	22.0	78.0
200	75	29.5	19.2	41.3	58.7
270	53	16.1	10.5	51.8	48.2
400	38	16.5	10.8	62.6	37.4
Pan	-38	57.4	37.4	100.0	0.0
Total	**-**	**153.3**	100.0	**-**	**-**
K80	**112**