

**NEW GOLD RAINY RIVER MINE
APPENDIX A
GEOCHEMICAL MONITORING PLAN
AND RESULTS**

**NEW GOLD RAINY RIVER MINE
APPENDIX A.1
GEOCHEMICAL MONITORING PLAN**



RAINY RIVER PROJECT

**CONSTRUCTION AND OPERATION PHASES
GEOCHEMICAL MONITORING PLAN**

PER ENVIRONMENTAL COMPLIANCE APPROVAL

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VERSION 3

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1.0 PROJECT BACKGROUND

New Gold Inc. (New Gold) is planning to construct, operate and eventually reclaim a new open pit and underground gold mine, the Rainy River Project (RRP) to produce doré bars (gold with silver) for sale. Physical works related to the RRP will consist primarily of:

- Open pit;
- Underground mine;
- Overburden, mine rock and low grade ore stockpiles;
- Primary crusher and process plant;
- Tailings management area;
- 230 kilovolt transmission line;
- Relocation of a portion of gravel-surfaced Highway 600; and
- Associated buildings, facilities and infrastructure.

During the construction phase of the project in broad terms the following activities will involve disturbance of overburden or rock:

- Pre-stripping of the open pit in preparation for production mining;
- Extraction of sand and gravel from the Roen Road Pit and production of crushed rock from the Tait Quarry and Outcrop 3 Quarry;
- Road construction including the East Access Road and realignment of Highway 600;
- Preparation and construction of water management structures / dams;
- Levelling and grade preparation for the plant site and foundation preparation for site buildings; and
- Excavation and establishment of diversion channels.

The operation phase of the project will include the following activities involving the disturbance of overburden or rock:

- Continued stripping of the open pit in support of production mining;
- Placement of overburden and rock in the mine stockpiles;
- Production mining from the open pit and eventually, underground mine

- Potential for ongoing extraction of sand and gravel from the Roen Road Pit and production of crushed rock from the Tait Quarry and Outcrop 3 Quarry; and
- Raising of existing water management structures / dams.

An extensive mine rock characterization study related to the future open pit has been conducted along with additional targeted investigations of the quarry sites (including Tait Quarry and Outcrop 3 Quarry), the plant site, and the Stockpile Pond Diversion Channel. In addition, a mine rock and overburden management plan was developed for the RRP Environmental Assessment (EA 05-09-02) and Closure Plan (EAIMS 13102):

- Final Environmental Assessment Report (Environmental Impact Statement), Version 2, Rainy River Project, Township of Chapple, Ontario (AMEC 2014a).
- Closure Plan, Rainy River Project, Version 1 (Amec Foster Wheeler 2015).

With respect to overburden materials, only the generally coarse grained Labradorean age Whiteshell till has been identified with a possibility of containing potentially acid generating (PAG) material, and then only when in the proximity of mineralized bedrock. Based on investigations to date, the till is expected to be encountered at depth (>5 m) which will generally limit the locations where this material will be encountered; although where shallow bedrock is present, limited near surface exposures could be present. In short, coarse till materials within approximately 3 m of bedrock surface represent some risk of acidic drainage and require consideration in terms of geochemical monitoring.

2.0 PURPOSE AND SCOPE OF MONITORING PLAN

Through the environmental approvals process for construction and operation of the RRP, New Gold is required to prepare a number of plans for submission to the Ministry of the Environment and Climate Change (MOECC). Version 1 of this document was prepared to satisfy the requirement per Environmental Compliance Approval (ECA) 5781-9VJQ2J Condition 10 (10), for a geochemical monitoring plan to be followed to characterize non-ore mine rock (hereafter mine rock) and overburden resulting from the construction phase of the RRP. The ECA condition states the following:

The Owner shall submit a Geochemical Monitoring Plan to the District Manager for approval within thirty (30) days of issuance of this Approval. This plan shall assess the potential acid generating conditions of all materials extracted during the construction phase, either as mine waste rock or to be used for construction purposes, such that these materials can be handled appropriately.

This approval was issued on May 8, 2015 and the plan was provided to the MOECC prior to June 7, 2015.

The plan was subsequently revised and re-issued as Version 2, to address the requirements of ECA 5178-9TUPD9 issued on September 1, 2015 as follows:

The Owner shall submit a Geochemical Monitoring Plan to the District Manager for approval within thirty (30) days of issuance of this Approval. This plan shall assess the potential acid generating conditions of all materials extracted during the construction and operations phases, either as mine waste rock or to be used for construction purposes, such that these materials can be handled appropriately.

The document has subsequently been revised and re-issued as Version 3, to address several comments provided by MOECC dated December 11, 2015.

This plan is intended to fulfill New Gold's obligation to appropriately identify and manage PAG mine rock and overburden for the RRP during construction and preproduction phases of the project. Construction of the RRP will occur over a period of approximately 30 months (second quarter 2015 through 2017).

Accordingly, this plan has been developed to monitor all overburden and rock materials extracted by the project where PAG material has been identified or could be present and incorporates existing investigation findings where available. The plan also includes guidance on minimum monitoring requirements for any excavation of rock or overburden to be conducted at the site during construction.

It is envisioned that the geochemical monitoring plan will evolve over the life of the RRP and be revised, as additional site specific data is collected and interpreted. Additional monitoring requirements related to underground mining will be developed at a later date and prior to initiation of underground mine development.

For the purposes of this Geochemistry Monitoring Plan, suitably trained and supervised personnel are defined as appropriately trained New Gold geologists or engineers, or another person suitably trained and supervised in the action or procedure by such New Gold geologist or engineer.

3.0 ACID ROCK DRAINAGE STANDARDS AND CRITERIA

3.1 Applicable Standards in Ontario

The approach and methodology for the collection and characterization of overburden and Mine rock materials is based upon the requirements described under the Ontario *Mining Act*, namely guidance found within the document:

- DRAFT Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Mine sites in British Columbia (Price 1997) which has been updated in the document Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials (MEND 2009).

The MEND (2009) document represents best practice and industry standard approaches and methodologies for metal leaching / acid rock drainage (ML/ARD) sampling and characterization in Canada.

The standards for characterization, segregation and management of PAG rock for the RRP have been established based on site specific studies and best practices that are detailed in the Closure Plan and in accordance with Ontario standards.

3.2 PAG Rock Criteria

For the RRP a threshold of neutralization potential ratio of less than two (NPR <2) has been established previously to identify PAG rock:

- Mine Rock and Overburden Management Plan, Rainy River Project (AMEC 2014b).

For the open pit a further categorization of PAG rock has been developed on the basis of inferred time to acid onset (time to neutralization potential; NP depletion) as identified in Table 1.

Table 1: NP Threshold Values for Open Pit PAG Subdivision

PAG Class	Depletion of NP Years	Available NP* Threshold kg CaCO ₃ /t
PAG 1	<5	12.5
PAG 2	5 to 15	19
PAG 3	>15	>19

*Available NP = Measured Sobek NP minus 10 kg CaCO₃/t to account for assumed unavailable

4.0 OVERBURDEN GEOCHEMICAL MONITORING REQUIREMENTS

The overburden geochemical monitoring plan includes the following:

- Overburden excavation / management activities exempt from monitoring;
- A minimum monitoring requirement applicable to any excavation;
- Monitoring requirements for the Roen Road Pit; and
- Monitoring requirements where the potential for management of PAG overburden (inferred PAG in Whiteshell till) has already been identified.

In the event Whiteshell till material is identified it will be managed as PAG material, with tracking and documentation of appropriate onsite disposal.

4.1 Overburden Excavation Activities Exempt from Monitoring

The intent of the Geochemical Monitoring Plan is to identify and monitor overburden materials that represent a risk of ARD if disturbed and exposed to air. The following activities are considered low risk and are therefore exempt from overburden monitoring requirements:

- Topsoil stripping; and
- Narrow strip excavations (such as utilities and footings) where excavated overburden material will be backfilled in place.

Excess material from stripping (excavations) that requires removal with final placement at surface including stockpiles, is subject to minimum monitoring overburden requirements described in Section 4.2.

4.2 Minimum Overburden Monitoring Requirements

During construction, any excavation of overburden (with the exception of exclusions identified in Section 4.1) is subject to the following requirements to be conducted by suitably trained and supervised personnel:

- Review of excavation plans to confirm size, location and depth of planned excavation.
- Review of available geology information in proximity to the planned excavation to assess the presence of mineralized bedrock.

- Review of available surficial geology information in proximity to the planned excavation especially in terms of depth to bedrock and previously mapped or logged surficial geology.
- Where data is sufficient to reasonably rule out the possible presence of Whiteshell till or identify bedrock at more than 2 m below the maximum excavation depth, this will be supported by at least one documented inspection of the open excavation during the work to confirm Whiteshell till was not encountered.
- Where data is insufficient to reasonably rule out the possible presence of Whiteshell till within the planned excavation, the excavation will be monitored visually at a frequency or tonnage commensurate with progress to identify and document if Whiteshell till is encountered in the excavation.
- Where Whiteshell till is identified in the excavation, it will be handled and managed as PAG overburden material unless investigation is completed to confirm the material is non-potentially acid generating (NPAG) material.
- In the absence of a testing program, Whiteshell till will be visually segregated on the basis of textural contrast with the finer overlying material (consistent with previous investigations and testing results) and managed accordingly as PAG material.
- Quantities of Whiteshell till managed as PAG will be recorded and their storage in PAG management areas documented.

Note it is presently considered that the Whiteshell till material will be limited in extent in planned excavations and as a result, it is not cost effective to sample, analyse and segregate PAG from NPAG material for this unit. In the event that quantities dictate otherwise, a standard operating procedure and testing program will be developed to support such segregation. Such a testing program, if implemented, could take the form of sampling of the Whiteshell till material with ABA screening by carbon and sulphur analyses. Alternately testing could involve temporary stockpiling of the Whiteshell till material with sampling and routine ABA analysis.

4.3 Roen Road Pit Overburden

Amec Foster Wheeler has identified no concern regarding the potential for presence of PAG material within sand and gravel of the Roen Road Pit. On this basis, monitoring for the Roen Road Pit will include visual inspection at a frequency commensurate with the excavation progress and the risk of exposing PAG material. In the event any concerns are identified through visual inspection, additional testing and evaluation will be completed; and if appropriate, the minimum monitoring requirements identified in Section 4.2 will be applied.

4.4 Open Pit Overburden

The monitoring plan for overburden within the open pit will follow all requirements identified in Section 4.2 with the exception that previous investigations have already identified the presence of possible PAG material as Whiteshell till. Monitoring can be guided by available geological and geochemical investigations already completed.

4.5 Preparation of Mine Rock Stockpiles

Ditching and related activities required for the construction of the East and West Stockpiles will follow all requirements identified in Section 4.2.

5.0 MINE ROCK GEOCHEMICAL MONITORING PLAN

The mine rock monitoring plan includes the following:

- A generic monitoring requirement for excavation of bedrock where insufficient or no previous characterization has been conducted to confirm or refute the presence of PAG rock;
- A minimum on-going monitoring requirement applicable to any blasting and excavations with a low risk of PAG as defined by previous investigations and sampling; and
- Specific monitoring requirements for previously investigated project components.

Sampling conducted in support of this geochemistry monitoring plan will be carried out by suitably trained and supervised personnel following accepted technical practices.

For sampling of blast hole cuttings which are integral to both production and environmental sampling, the following approach is defined:

- For each blast hole to be sampled, a channel sample of cuttings will be collected by a suitably trained and supervised person, and placed in a labelled plastic rock bag; and
- Following sample collection, the sample will be either immediately placed into the sample queue for analysis under chain of custody, or placed on the drill hole marker (red hat placed in the drill collar) and picked up twice daily by a member of the New Gold geology team for placement in sample queue and chain of custody for analysis.

Any unanticipated sampling challenges will be documented by New Gold geologists or engineers, along with the means to mitigate and avoid in the future if applicable.

5.1 Generic Bedrock Geochemical Monitoring (Areas Not Investigated)

During construction, any blasting and/or excavation of bedrock sources not previously investigated (Sections 5.3 to 5.6 provide monitoring requirements for previously investigated areas) is subject to the following requirements that are to be conducted under the direction of suitably trained and supervised personnel:

- Review of excavation plans to confirm size, location and depth of planned excavation into bedrock.

- Review available bedrock geology and geochemical information in proximity to the planned excavation especially in terms of lithology, potential for sulphide mineralization, inspection of any detailed core logs and availability of previous geochemical testing.
- Conduct a reconnaissance geological inspection of surface outcrop or exposed subcrop and submit grab rock samples for geochemical testing (including visual worst case sampling) of at least one sample from each distinct lithological unit.
- Where excavations are to extend to more than 3 m below bedrock surface or where surficial cover limits surface inspection and sampling; drilling and sampling will be completed with sample selection, review and interpretation of results.
- Where investigations are completed and indicate a low potential for PAG rock, geochemical monitoring will proceed as described in Section 5.2.
- Where PAG rock is confirmed to be present or where screening investigations cannot be completed due to construction time constraints; sampling and analysis of blast hole cuttings or excavated rock will be completed for each blast hole drilled or at most every 2,000 m³ of material produced.
- Segregation and management of PAG materials will be directed by the testing results as interpreted by suitably trained and supervised personnel or per a plan prepared by suitably trained and supervised personnel.
- Quantities of PAG rock managed will be recorded and their management in appropriate PAG management areas documented.

5.2 Minimum Bedrock Monitoring Requirements (Low Risk of PAG)

Bedrock excavations that have been identified at the lowest risk for the presence of PAG material on the basis of previous geochemical investigation and sampling (Section 5.1), will be subject to the following minimum on-going monitoring by suitably trained and supervised personnel:

- For each active excavation, suitably trained and supervised personnel will routinely confirm continuity of observed geology with that described in characterization investigations, and conduct a more formal visual inspection with collection of a representative sample of each distinct lithology at every 100,000 cubic metres (m³) of material moved; and
- Photograph and document conditions at the time of the detailed assessment.

If unexpected sulphide mineralization not observed in prior investigations is encountered, suspect material will be left in place or stockpiled pending further assessment by suitably trained and supervised personnel.

5.3 Crushed Rock from Quarries

Available ML/ARD investigations for the Tait Quarry and Outcrop 3 Quarry have determined that there is low potential to encounter PAG material in development of these sources. Therefore, these sources will be subject to the minimum monitoring requirements specified in Section 5.2.

In the event additional quarries or aggregate sources are identified or the quarry designs change significantly with respect to aerial extent or depth, the requirements specified in Section 5.1 will apply.

5.4 Open Pit Mine Rock

Segregation of mine rock will be based on management of acid generation potential. Metal leaching in the absence of acidic conditions appears to be of minimal concern for the RRP mine rock wastes based on all testing to date.

Open pit mining at the RRP will follow the standard practice of an open pit operation, with a conventional drill and blast, load and haul cycle. The mine rock produced by the pit excavation will be segregated into either PAG or NPAG rock. The methodologies used will be the same that are employed for ore / waste grade control during operations.

Prior to the blast, blast hole cuttings will be sampled and analysed to confirm the geochemistry of the mining block. Mine rock blast holes will be spaced on a 7.0 m x 7.5 m pattern and a 10 m bench height. Sample collection protocols will follow those used for grade control, with subsamples collected from the cuttings surrounding the completed blast holes.

Blast hole subsamples will be analysed for total sulphur and inorganic carbon using an onsite instrumentation to generate surrogate AP and NP values and guide definition of PAG and NPAG rock for appropriate management.

During mine planning the ARD block model will be merged with the mine plan to classify the mine rock into the following categories and schedule its blasting and excavation from the pit:

- Ore;
- Low Grade Ore;
- NPAG mine rock;
- PAG 1 waste;
- PAG 2 waste; and
- PAG 3 waste.

The distribution of these material types will be determined for each blast (dig limits) and compared against the results of the blast hole sampling for confirmatory purposes prior to haulage. Dig limits will be defined using the same protocols as those used for grade control. Blast hole sampling results for ARD parameters (NP and AP derived from the carbon and sulphur analysis) will be provided to the mine geology department for calculation of NPR values for each blast hole and incorporation of this information into the grade control database. This information will be used to determine the dig limits of the mining blocks as: ore, low grade ore, or waste. Waste block dig limits will be further subdivided into NPAG, PAG 1, PAG 2 and PAG 3. Results from the mapping of these ore and waste categories will be transferred to the mine survey so that the dig limits can be mapped onto each individual blast pattern.

To track the removal and placement of mine rock, daily shift reports will be completed that describe the materials moved (by truck counts) from the pit to the stockpiles, or other locations on site. This information will be maintained in a database and used to cross check material inventories/volumes generated from the ARD block model and mine plan, plus as-built surveys of the mine rock stockpiles.

On a monthly basis, a comparison of the blast hole Leco analysis for C and S will be compared against the replicate samples analysed for ABA parameters (Section 6.0 and 7.2). These results will be used to improve the segregation of PAG and NPAG rock based on the on-going surrogate analyses. Based on analytical experience, the replicate ABA analysis may be reduced to a subset of ABA indicator parameters as supported by review of the on-going results.

The information collected from these confirmatory steps will be compiled and reported annually and reviewed to validate/correct the ML/ARD predictions and the ARD block model results. Where applicable, improvements to optimize the mine rock management plan will be identified and implemented. The frequency of duplicate checks and verification against the block model may be reduced as experience is gained with on-going sampling.

The above description reflects monitoring in close proximity to ore where segregation is expected to be complex. For regions of the RRP open pit away from the ore, the complexity in mine rock management may be substantially less. It is expected that experience gained with the block model and on-going testing will support establishing a reduced frequency of blast hole testing particularly in certain areas of the pit. Based on this experience, a standard operating procedure will be developed to guide blast hole sampling density requirements and methods that may vary by area within pit development.

Management of PAG rock within the pit will be in accordance with the open pit mine rock management plan.

Only NPAG rock defined on the basis of methods outlined above would be deemed suitable for use as site construction aggregate, with the exception that PAG may be used under the following condition as agreed to through the Environmental Assessment process:

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- Environmental Commitment #25: PAG material would only be used for fill material in areas where it can be maintained in a saturated state to exclude oxygen and inhibit Sulphide oxidation. These uses may include underground backfill and construction of the upstream portion of the TMA dams.

5.5 Plant Site Regrading

PAG rock has been identified as likely to be present within portions of the planned construction excavation areas in rock at the plant site. All excavated rock in support of plant site construction will be considered PAG and managed accordingly; or alternatively will be subject to segregation on the basis of screening analysis of blast hole cuttings. The specific sampling strategy for the screening analysis may be supported by available characterization data.

5.6 Diversion Channels

PAG rock has been identified within planned excavation limits of only the Stockpile Diversion Channel and none of the other diversion channels proposed at the RRP. All excavated rock in support of the Stockpile Diversion Channel will be considered PAG and managed accordingly; or alternatively will be subject to segregation on the basis of screening analysis of blast hole cuttings. The specific sampling strategy may be supported by available characterization data.

The presence of PAG rock within localized sections of the Stockpile Diversion Channel has a potential to lead to poorer quality drainage or add metal loadings to water draining through this channel. The following provisions have been made to manage this concern during the construction and operation of this diversion channel:

- Overblasting of the base of the channel section with suspected PAG rock by 1.3 m during construction, and lining the channel base of this section with 1 to 1.2 m of compacted local clay;
- Visual walkover and photo documentation inspection of rock sidewalls and channel twice annually (spring and late summer or fall) noting evidence of changes in rock or water condition (e.g. iron staining related to ARD);
- Annual sampling of water quality under low flow conditions (e.g. summer or early fall) to assess ARD and metal related loadings, and trends at the Stockpile Diversion Channel discharge; and
- Annual water sampling of water at the exit from the channel to include at a minimum a flow rate estimate, field measured temperature, pH and conductivity, and laboratory analysis consistent with the parameters specified for leachable metals analysis as identified in Table 2.

In the event mitigation of ML/ARD concerns from sidewalls is required, provision has been made for isolation of this material by application of shotcrete to problematic areas of the channel side walls.

5.7 Underground Mine Rock

Development of the Underground Mine is still in the planning stages with work scheduled to begin in 2017. A geochemical monitoring plan for underground mine rock will be developed prior to advancing the underground workings once the mine plan is complete and geochemical verification of the rock units to be encountered is understood.

Table 2: Analytical Methods for Geochemical Monitoring Plan

Test	Category	Parameter	Unit	Method Code	Detection Limit
S & C Analysis	ABA Screening	Carbon (Total)	%	CSA06V	0.005
		Sulphur (Total)	%	CSA06V	0.005
		Maximum Potential Acidity*	CarbNP/AP _{max}	Calc.	-
Modified Acid Base Accounting	Routine ABA	Paste pH	pH	Sobek	0.2
		Total Inorganic Carbon	%	CSB02V	0.1
		CaCO ₃ (CarbNP)	kg CaCO ₃ /t	Calc.	-
		Carbon (Total)	%	CSA06V	0.005
		Sulphur (Total)	%	CSA06V	0.005
		Sulphur (SO ₄)	%	CSA07V	0.01
		Sulphur (S ⁻²)	%	CSA08D	0.01
		Sulphur (S ⁻²)	%	Calc.	-
		Acid Potential (AP)	kg CaCO ₃ /t	Calc.	-
		Modified NP (NP)	kg CaCO ₃ /t	Modified	0.5
		NPR	NP/AP	Calc.	-
Fizz Test	-	Sobek	-		
Low Level Metals by Aqua-Regia Digestion with ICP-MS Finish	Metals Screening	Ag, Al, B, Ba, Ca, Cr, Cu, Fe, K, Li, Mg, Mn, Na, Ni, P, S, Sr, Ti, V, Zn, Zr, As, Be, Bi, Cd, 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	% and ppm	ICM14B	varies by element
Low-Level Selenium Assays	Metals Screening	Se	ppm	HAS14B	0.05
Shake Flask Extraction - (3:1 Liquid to Solid Ratio)	Leachable Metals	pH	pH	Meter	0.1
		Redox	mV	Meter	1
		Conductivity	uS/cm	Meter	1
		Acidity (to pH 4.5)	mg CaCO ₃ /L	Titration	1
		Total Acidity (to pH 8.3)	mg CaCO ₃ /L	Titration	1
		Alkalinity	mg CaCO ₃ /L	Titration	1
		Chloride	mg/L	Ion Chrom.	0.1
		Fluoride	mg/L	Spec. Ion Electrode	0.2
		Sulphate	mg/L	Turbidity	0.06
		Hardness CaCO ₃	mg/L	Calc.	-
		Major Anions	meq/L	Calc.	-
		Major Cations	meq/L	Calc.	-
		Difference	meq/L	Calc.	-
		Balance (%)	%	Calc.	-
		Al, Sb, As, Ba, Be, Bi, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Hg, Mo, Ni, P, K, Se, Si, Ag, Na, Sr, S, Tl, Sn, Ti, U, V, Zn, Zr			mg/L and µg/L

Note:
* maximum potential acidity assumes no iron carbonate present

6.0 ANALYTICAL TESTING METHODS

The analytical methods to be applied for the construction phase of the RRP as described in this Geochemical Monitoring Plan are provided in Table 2. Two general approaches to testing will occur at the RRP:

- Carbon and sulphur analyses (screening acid base accounting (ABA) analysis); and
- Follow-up ABA analyses (routine ABA analysis).

Screening of PAG materials at the RRP by analyzing carbon and sulphur is considered to be a conservative surrogate for full ABA analysis and is suitable for application in most areas (AMEC 2014b). This method provides data in a timely and cost-effective manner to support active excavations where PAG rock may be present. Determination of NPR on the basis of carbon and sulphur will be supported by routine ABA analysis as described in Table 2. For blast hole sampling, routine ABA analysis of laboratory splits (replicate analyses) will be completed at a rate of 1 in 20 samples to allow monitoring against the surrogate ABA analysis. Alternatively, supported by on-going test results, key target parameters within the routine ABA suite (rather than the full set) may be established for the program based on experience. The routine ABA analytical list will also form the basis of any additional characterization investigations should they be required. Metals screening and leachable metal testing will be also be completed on selected samples.

7.0 DOCUMENTATION AND QUALITY ASSURANCE / CONTROL OF DATA

The following sections outline specific documentation and quality assurance / control requirements related to geochemical monitoring.

7.1 Documentation

For each excavation a complete set of notes will be maintained documenting pertinent assessment, sampling and analysis completed.

A database will be established for all analytical data collected recording excavation identification, sample ID, sample location, lithology, and analytical results. For blast hole monitoring, the blast hole ID and bench references will also be included.

7.2 Analytical Quality Assurance and Quality Control

Standard operating procedures will be developed for all overburden and mine rock sampling at the RRP site. Samples will be submitted to onsite or offsite laboratories as appropriate under chain of custody documentation developed as part of the procedures.

Field duplicate and laboratory replicate samples will be submitted for analysis at a rate of 1 sample in 20 samples, or as established in the standard operating procedures. Laboratory replicate samples will be analysed at a qualified commercial laboratory for the routine ABA suite or a subset ABA parameters as identified in the standard operating procedures.

7.3 Reporting

An annual geochemical monitoring report including all characterization work completed for PAG rock segregation and mine rock and overburden quality assessment will be prepared in support of the annual Works Performance and Surface Water Monitoring reports.

8.0 QUALIFICATIONS OF AUTHOR AND REVIEWERS

Prepared by:

Dr. Stephen Walker, Ph.D. has more than 26 years of consulting and research experience, including specializing in mine waste hydrogeochemistry. He has conducted ARD assessments for proposed and operating mines across Canada and internationally. He has specific experience in assessing and managing water quality and metal mobility issues in the environment, under both acidic and neutral drainage conditions and for oxidized and reduced environments. Dr. Walker routinely conducts and manages geochemical assessment programs related to overburden, mine rock and tailings at mine sites. Dr. Walker has been involved in the RRP geochemistry program since 2011.

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Reviewed by:

Steve Sibbick, M.Sc., P.Geo. is a Principal Geochemist employed with Amec Foster Wheeler Environment & Infrastructure. Mr. Sibbick is a geochemist with 27 years' experience, specializing in acid rock drainage assessment and prediction, mine waste geochemistry and mine closure. He has conducted numerous acid rock drainage assessments throughout Canada and internationally of proposed, active and closed mine properties, and managed many multi-disciplinary geoscience and engineering projects related to mine development, closure, and the remediation of mines and industrial sites. Mr. Sibbick has lead the RRP geochemistry program on behalf of New Gold since 2011.

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- AMEC. 2014a. Rainy River Resources Ltd., Volume 2: Final Environmental Assessment Report (Environmental Impact Statement), Version 2, Rainy River Project, Township of Chapple, Ontario.
- AMEC. 2014b. Rainy River Resources Ltd., Report on Metal Leaching / Acid Rock Drainage Characterization of Mine Rock and Tailings. Appendix G of Volume 5: Final Environmental Assessment Report (Environmental Impact Statement), Version 2, Rainy River Project, Township of Chapple, Ontario.
- Amec Foster Wheeler. 2015. Rainy River Project Closure Plan.
- Mine Environment Neutral Drainage (MEND). 2009. Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials. Natural Resources Canada.

**NEW GOLD RAINY RIVER MINE
APPENDIX A.2
GEOCHEMICAL MONITORING
RESULTS**

Memorandum

To: Ally Toure, Hydrogeologist

From: Jared Robertson, Senior Geochemist

Cc: Garnet Cornell – New Gold Inc.

Our ref: 1003-231-001

Date: March 17, 2023

Re: **Rainy River Mine 2022 Annual Geochemical Monitoring Report**

The Rainy River Mine (RRM) has requested that Okane Consultants (Okane) compile and assess geochemical monitoring data collected in 2022 by RRM with respect to requirements defined in the "Construction and Operation Phases Geochemical Monitoring Plan" (Geochemical Monitoring Plan; AFW, 2016). Monitoring requirements outlined in the Geochemical Monitoring Plan were developed per Environmental Compliance Approvals #5781-9VJQ2J Condition 10 (10) and #5178-9TUPD9 Condition 8 (12). The approach and methodology provided in the Geochemical Monitoring Plan were developed in accordance with guidance in the Prediction Manual for Drainage Chemistry from Sulfidic Geologic Materials (MEND, 2009). This technical memorandum provides the following:

- Summary of current mine rock classification and segregation approach;
- Description of database developed to manage data and information per the Geochemical Monitoring Plan;
- Geochemical classification of mine rock produced from the open pit in 2022;
- Placement locations of all mine rock and overburden within the RRM site;

- Assessment of quality assurance/quality control audit data;
 - Laboratory duplicates analyzed for carbon and sulfur at the RRM onsite LECO facility to check precision of data used for operational classification of mine rock and overburden
 - Samples submitted to off-site laboratories for acid-base accounting (ABA) analysis to check accuracy of the onsite LECO analyses;
- Appendices that provide tabulated audit data and laboratory reports

Summary of Current Mine Rock Classification and Segregation Approach

Operationally, mine rock and overburden are classified as potentially acid generating (PAG) or not potentially acid generating (NPAG) based on the relative content of sulfur and carbon (assumed, based on ore-body knowledge, to be entirely present as inorganic carbon) in the material. Total sulfur and total carbon contents are determined using a LECO Carbon-Sulfur analyzer (combustion analysis with infrared detection) per method CSA06V. The acid potential (AP) and neutralization potential (NP) are calculated from the total carbon and sulfur using the following calculations provided in MEND (2009):

Neutralization Potential (kg CaCO₃/t rock) = Total Carbon (wt.%) * 83.4

Acid Potential (kg CaCO₃/t rock) = Total Sulfur (wt.%) * 31.25

In addition to the NP calculation above, RRM adjusts NP by a factor of 0.96 to correct for the presence of Fe-carbonate minerals that do not provide any NP (Okane, 2020a). The neutralization potential ratio (NPR) is calculated as the quotient of NP and AP such that NPR = NP/AP. If the NPR is greater than 2, the material is classified as NPAG and if the NPR is less than 2 the material is classified as PAG (AFW, 2013).

In addition, a second level of characterization was developed for PAG rock produced from the open pit based on inferred time to acid onset. The system was originally designed to account for three levels of PAG:

- PAG1 inferred to have the potential to generate acidic conditions within five years of production or fewer;
- PAG2 inferred to have the potential to generate acidic conditions within five to 15 years of productions;
- PAG3 inferred to remain circumneutral for at least 15 years.

The three PAG sub-classifications were based on NP with threshold values of available NP of < 12.5 kg CaCO₃/t, 12.5 to 19 kg CaCO₃/t and > 19 kg CaCO₃, respectively. Available NP was defined as the

measured Sobek NP minus 10 kg CaCO₃/t to account for the silicate-neutralization potential that reports to the Sobek analysis but may not react fast enough to neutralize acidity produced by oxidation of pyrite and other sulfide minerals. Operationally, RRM has only implemented the PAG1/PAG2 designation. PAG1 material is always deposited of in the EMRS. Some PAG 2/3 rock is used in construction of the upstream side of the TMA embankment, and in the downstream shells of the Cell 1 and 2 where it will be inundated by tailings. There is not currently any difference in the way PAG2 and PAG3 materials are managed or deposited of on site, which is conservative with respect to mine rock and overburden management because it does not overestimate the lag period to potential onset of acidic conditions for PAG materials.

Mine rock blast holes are arranged on a 7.0 x 7.5 m grid with a 10 m bench height. Cuttings from every blast hole are sampled and analyzed for total carbon and total sulfur and each mining block is classified as PAG1, PAG2/3, or NPAG and routed to the appropriate location.

Data Management

All blast hole and audit geochemistry data are maintained in an onsite database as specified in Section 7.1 of the Geochemical Monitoring Plan. The database is implemented in the MineSight database platform and includes (but is not limited to) sample identification, sample location, lithology, material destination, and analytical results. Data and analytical results included in the current monitoring report were provided to Okane from RRM via email.

Open Pit Geological Materials Classification

In 2022, RRM collected and analyzed 20,808 samples of geologic materials from the open pit. The geochemical classifications of these materials are summarized in Table 1.

Table 1: Geochemical Classification of Open Pit Samples

Geochemical Classification	No. of Samples	% of 2022 Open Pit Samples
PAG 1	283	1.4%
PAG 2/3	11,588	55.7%
NPAG	4,885	23.5%
HGO	2,805	13.5%
MGO	408	2.0%
LGO	839	4.0%
Total	20,808	100.0%

PAG – potentially acid generating; NAG – not potentially acid generating; LGO – low grade ore, includes material classified as Mineralized PAG; MGO – medium-grade ore; HGO – high grade ore.

Materials Destination

In 2022, RRM produced PAG 1 mine rock, PAG 2/3 mine rock, NPAG mine rock, and ore from the open pit. The destination of these materials is summarized in Table 2.

Table 2: Destination of open pit geologic materials.

Material Description	Destination
PAG 1 mine rock	EMRS
PAG 2/3 mine rock	EMRS / TMA upstream embankment
High-grade ore	Mill
Medium-grade ore	Mill
Low-grade ore	Low-grade ore stockpile
NPAG	WMRS / TMA
Overburden	EMRS / WMRS

Assessment of Quality Assurance/Quality Control Procedures

Two categories of quality assurance (QA) samples are submitted for analysis per the Geochemical Monitoring Plan:

- Laboratory duplicates are analyzed onsite to demonstrate acceptable method precision in total carbon and total sulfur analyses by combustion/IR (LECO); and

- Sample splits are sent to an independent laboratory for ABA analysis to check that the onsite laboratory produces data of sufficient accuracy to ensure that geologic materials produced from the open pit are assigned the correct geochemical classification.

Raw analytical data from laboratory duplicate and ABA audit samples collected in 2022 are provided in Appendix A. The goal, per the Geochemical Monitoring Plan, is for both laboratory duplicates and the sample splits to be submitted for 1 in 20 (5%) of the blast hole samples. In 2022 carbon/sulfur duplicate samples and ABA audit samples were submitted for 8.8% and 5.7% of samples collected, respectively. Additional ABA audit samples were submitted for 2022 samples; however, these results have not been received by New Gold and will be reported at a later date.

Assessment of Laboratory Duplicates

In 2022, 1,827 duplicates were analyzed for total carbon and total sulfur. Figure 1 and Figure 2 show the duplicate values plotted against each other with the 1:1 line for reference. Relative percent difference (RPD) was calculated for each duplicate pair using the following equation:

$$RPD = \frac{|S - D|}{\frac{S + D}{2}} \times 100$$

Where S is the sample result (original) and D is the duplicate result. The acceptable RPD range defined for this study is $\pm 20\%$ for those samples with concentrations greater than five times the detection limit based on U.S. Environmental Protection Agency (U.S. EPA) guidance (U.S.EPA, 2004). Original and duplicate data are provided in Appendix A.

Original and Duplicate Assessment: Carbon

Visual inspection of Figure 1 indicates that the match between total carbon analyses and duplicates is generally good with some scatter but no systematic deviation. The RPD was calculated for 1,827 pairs of duplicate total carbon analyses. Of the 1,827 pairs, 1,801 (98.6 %) meet the acceptable RPD range (i.e., they have RPDs below 20% and contain carbon at more than five times the detection limit of 0.005 wt.% defined in the Geochemical Monitoring Plan, Table 2). These results indicate that the LECO laboratory is providing effective precision for total carbon measurements of the mine rock.

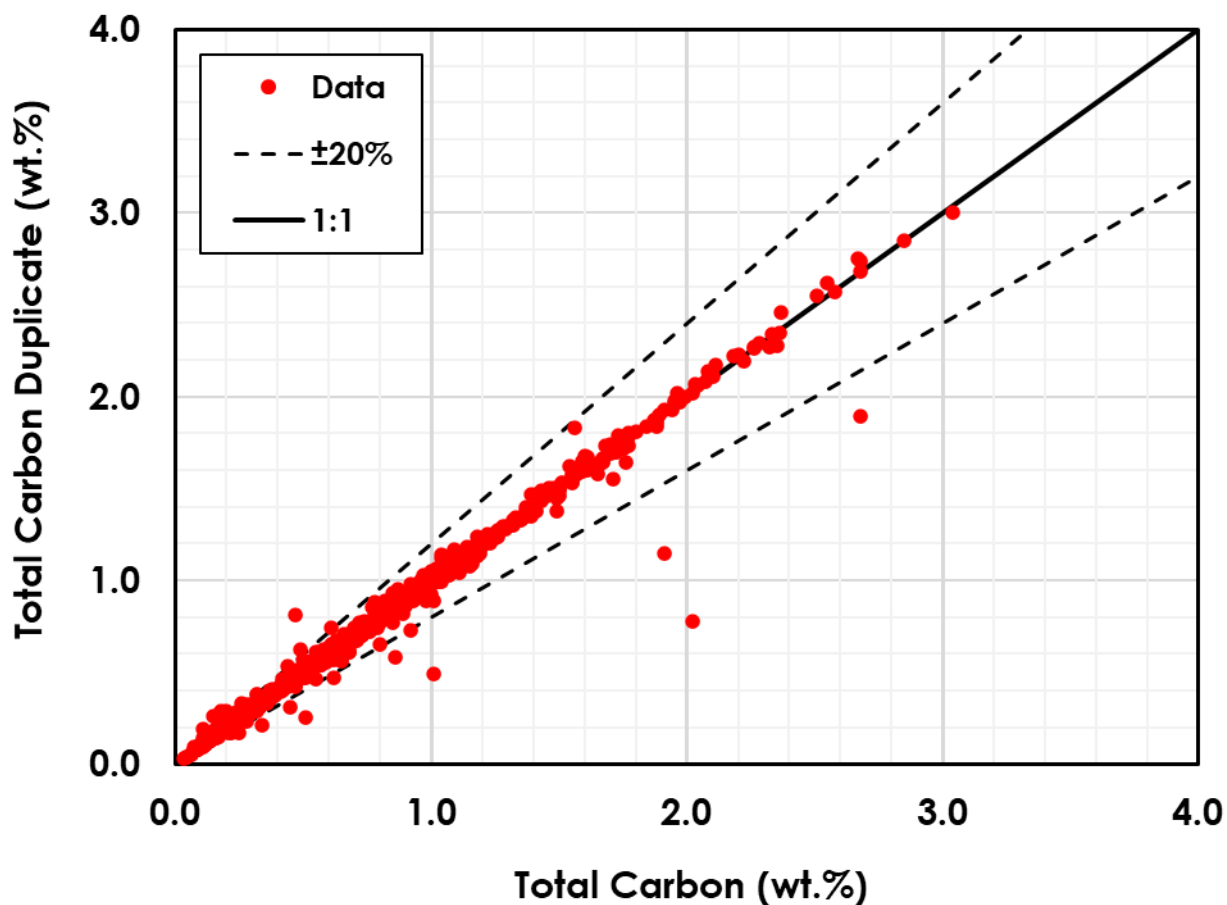


Figure 1: Comparison of original and duplicate carbon data from RRM onsite LECO facility.

Original and Duplicate Assessment: Sulfur

Visual inspection of Figure 2 indicates that the match between total sulfur analyses and duplicates is generally good with some scatter but no systematic error. The RPD was calculated for 1,827 pairs of duplicate total sulfur analyses. Of the 1,827 pairs, 1,814 (99.3%) meet the acceptable RPD range (i.e., they have RPDs below 20% and contain sulfur at more than five times the detection limit of 0.005 wt.%). These results indicate that the LECO laboratory is providing effective precision for total sulfur measurements of the mine rock.

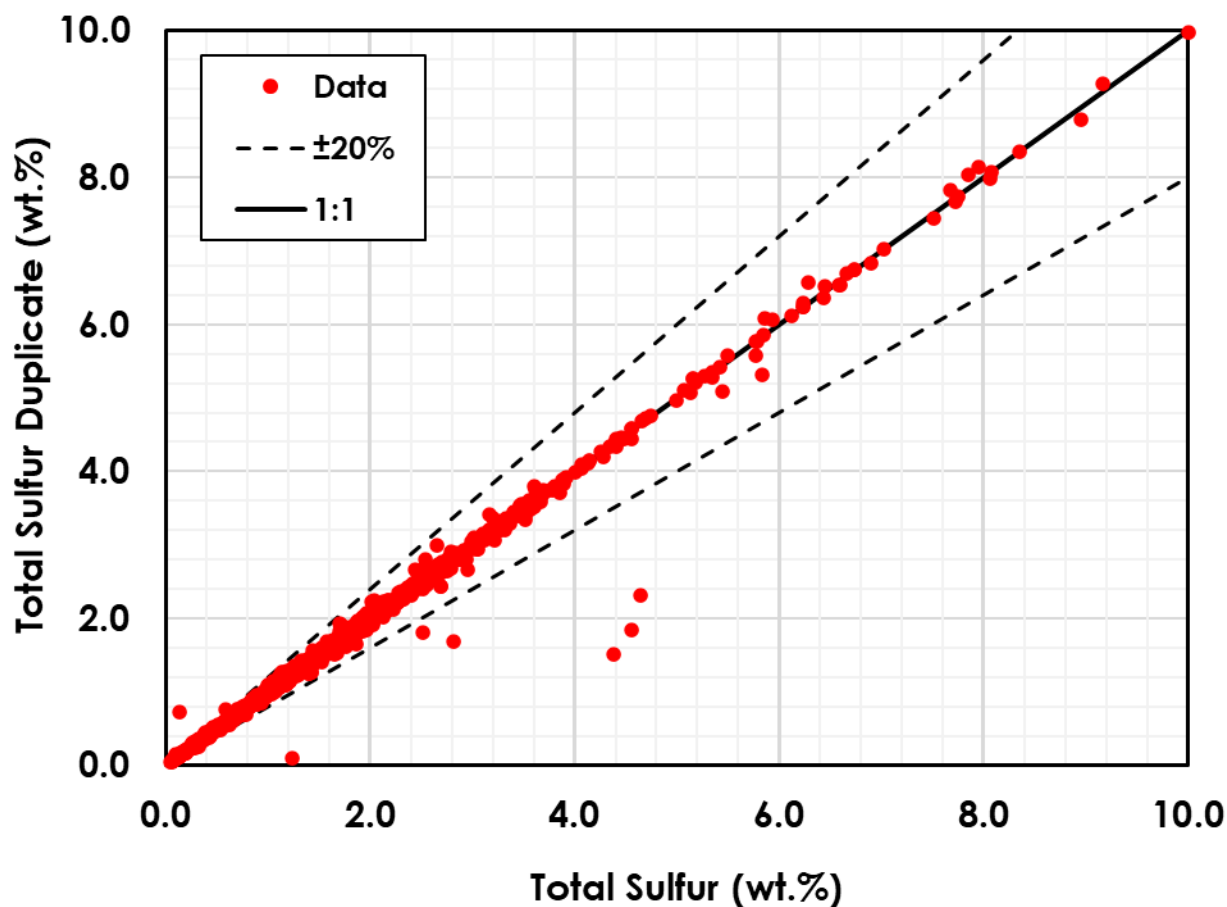


Figure 2: Comparison of original and duplicate sulfur data from RRM onsite LECO facility.

Acid-Base Accounting (ABA) Audit Results

As of March 2023, 1,187 results for samples submitted for auditing by an independent analytical laboratory were received. More samples from 2022 were submitted for auditing and data will be received at a later date and a final memorandum will be issued when available. Samples were sent to Activation Laboratories in Ancaster, Ontario, Canada. Laboratory reports are provided in Appendix B.

On-Site LECO NPR Determination vs. Independent Laboratories

Descriptive statistics are provided in Table 3; data are plotted in Figure 3 and box-and-whisker plots are shown in Figure 4. A correction factor of 0.96 is now being applied to the on-site LECO NP values to account for Fe-carbonate minerals that do not provide net neutralization potential. This change was recommended during the April 2020 ITRB (No. 10) meeting (Okane, 2020a; New Gold Independent

Technical Review Board, 2020). The median NPR values determined by modified Sobek (independent laboratory) and LECO (on-site laboratory) are in close agreement (0.89 and 0.85, respectively) and are consistent with previous Annual Geochemical Monitoring Reports (Okane, 2020b, 2021, and 2022).

Table 3: Descriptive statistics for Modified Sobek and LECO NPR values.

Descriptive Statistics	Modified Sobek NPR	LECO NPR
Sample Size	1,187	1,187
Minimum	0	0.02
Maximum	612	34.16
Median	0.89	0.85
Average	5.11	1.76
90th Percentile	6.14	3.91
10th Percentile	0.00	0.17

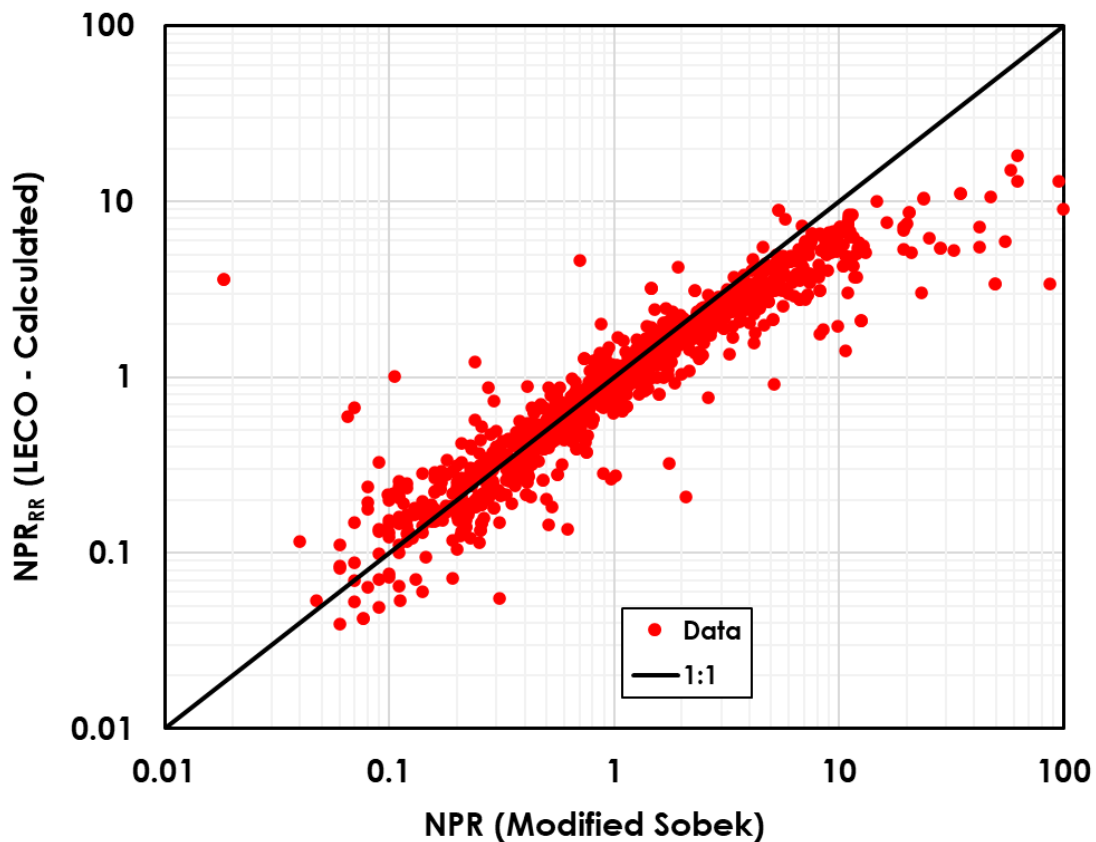


Figure 3: Scatter plot showing comparison of NPR calculated from on-site LECO carbon and sulfur to the modified Sobek method measured at an independent laboratory.

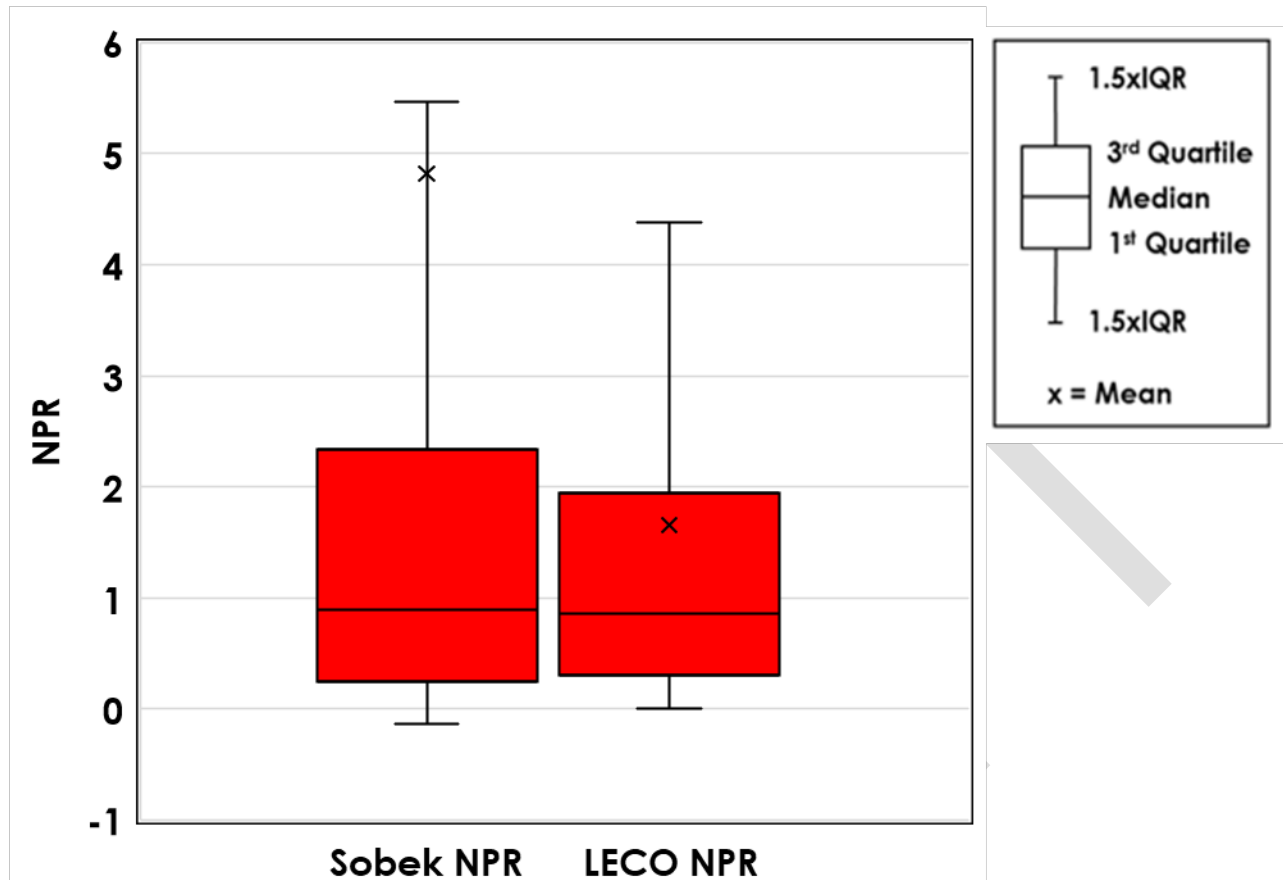


Figure 4: Box-and-whisker plots showing comparison of NPR calculated from on-site LECO carbon and sulfur and NPR from modified Sobek analyses. IQR = Inter-quartile range.

The match between on-site LECO NPR values and modified Sobek NPR duplicates is generally good except at NPR >10, within the classification of NPAG (Figure 3). At higher NPR values, the modified Sobek NPR was greater than the NPR calculated from LECO C and S, indicating more NP is available in NPAG rock than was calculated over 2022. The median NPR values between the two datasets in 2022 were closer than they were in 2021; however, averages were further apart, influenced by the increasing modified Sobek NP at greater NPR values. The implications for these results are minor, as the differences occur for NPAG mine rock and site methods are estimating less NP available in this NPAG rock than is being measured by the modified Sobek method. The comparable results between the independent laboratory and the on-site LECO laboratory for samples with NPR < 10 demonstrate that the accuracy of the LECO laboratory produced acceptable results during 2022 and mine rock is being segregated as intended.

Conclusions

Duplicate data and independent laboratory data were evaluated to verify the performance of mine rock classification for the purpose of segregating and properly handling PAG and NPAG material at RRM. Duplicate data indicated that a high level of precision was achieved in 2022 and that measured NPR values were repeatable at the on-site LECO laboratory. Independent ABA measurements confirmed that the NPR of mine rock samples being measured by the LECO laboratory were accurate during 2022 and that mine rock is being properly classified as PAG or NPAG. Overall, the Geochemical Monitoring Plan was executed as intended in 2022. Geochemical focused studies will continue into 2023 under the guidance and recommendations of the Independent Technical Review Board.

Closure

We trust information provided in this memorandum is satisfactory for your requirements. Please do not hesitate to contact me at 306-713-1695 or jrobertson@okc-sk.com should you have any questions or comments.

DRAFT

References

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Appendix A

Laboratory Results from the Rainy River Mine Onsite LECO Facility and Independent

Laboratory

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1317010188	2022-01-01	0.21	0.21	0.0%	1.50	1.45	3.4%
1317010233	2022-01-01	0.18	0.18	0.0%	1.75	1.77	1.1%
1317010238	2022-01-01	0.20	0.19	5.1%	1.65	1.62	1.8%
1317010283	2022-01-01	0.33	0.33	0.0%	2.55	2.57	0.8%
1318088015	2022-01-01	0.21	0.21	0.0%	1.80	1.78	1.1%
1318088030	2022-01-01	0.37	0.35	5.6%	2.93	2.88	1.7%
1318088030	2022-01-01	0.37	0.35	5.6%	2.93	2.88	1.7%
1318088034	2022-01-01	0.34	0.34	0.0%	0.57	0.54	5.4%
1318088046	2022-01-01	0.21	0.22	4.7%	3.00	3.02	0.7%
1318088048	2022-01-01	0.13	0.13	0.0%	2.32	2.26	2.6%
1317009033	2022-01-03	0.20	0.20	0.0%	0.73	0.75	2.7%
1317009055	2022-01-03	0.12	0.13	8.0%	0.70	0.73	4.2%
1317009084	2022-01-03	0.13	0.12	8.0%	1.01	1.04	2.9%
1317009102	2022-01-03	0.14	0.14	0.0%	0.61	0.59	3.3%
1317009107	2022-01-04	0.17	0.17	0.0%	1.06	1.08	1.9%
1317002216	2022-01-04	0.18	0.18	0.0%	1.64	1.62	1.2%
1317002232	2022-01-04	0.24	0.24	0.0%	2.89	2.87	0.7%
1317002246	2022-01-04	0.16	0.19	17.1%	0.20	0.20	0.0%
1325080218	2022-01-06	0.32	0.29	9.8%	0.42	0.37	12.7%
1325080248	2022-01-06	0.58	0.58	0.0%	0.44	0.44	0.0%
1325081232	2022-01-06	0.70	0.71	1.4%	0.44	0.43	2.3%
1317002016	2022-01-06	0.27	0.27	0.0%	0.70	0.76	8.2%
1317002013	2022-01-06	0.09	0.09	0.0%	3.33	3.36	0.9%
1317002034	2022-01-06	0.13	0.13	0.0%	2.81	2.80	0.4%
1317002036	2022-01-06	0.34	0.34	0.0%	2.81	2.83	0.7%
1325080246	2022-01-07	0.27	0.28	3.6%	0.20	0.20	0.0%
1325081214	2022-01-07	1.19	1.20	0.8%	0.64	0.64	0.0%
1325081252	2022-01-07	0.68	0.64	6.1%	0.46	0.46	0.0%
1325081274	2022-01-07	0.47	0.48	2.1%	0.37	0.37	0.0%
1317001106	2022-01-08	0.78	0.81	3.8%	1.59	1.62	1.9%
1317001163	2022-01-08	0.45	0.45	0.0%	1.76	1.75	0.6%
1317001174	2022-01-08	0.63	0.63	0.0%	1.58	1.57	0.6%
1317001205	2022-01-08	0.28	0.28	0.0%	2.17	2.24	3.2%
1325081184	2022-01-08	1.57	1.60	1.9%	0.54	0.53	1.9%
1325081188	2022-01-08	0.93	0.89	4.4%	1.40	1.40	0.0%
1325081210	2022-01-08	0.31	0.31	0.0%	0.16	0.15	6.5%
1317011080	2022-01-09	0.16	0.16	0.0%	1.11	1.08	2.7%
1317011093	2022-01-09	0.16	0.15	6.5%	1.66	1.70	2.4%
1317011094	2022-01-09	0.13	0.14	7.4%	1.80	1.82	1.1%
1317011120	2022-01-09	0.17	0.27	45.5%	1.43	1.26	12.6%
1317011120	2022-01-09	0.17	0.27	45.5%	1.43	1.26	12.6%
1325080008	2022-01-09	0.85	0.93	9.0%	0.46	0.51	10.3%
1325080014	2022-01-09	0.53	0.53	0.0%	0.33	0.31	6.3%
1325080034	2022-01-09	0.53	0.52	1.9%	0.46	0.48	4.3%
1325080076	2022-01-09	0.47	0.43	8.9%	0.44	0.40	9.5%
1317011041	2022-01-10	0.30	0.30	0.0%	1.66	1.64	1.2%
1317011048	2022-01-10	0.26	0.25	3.9%	1.62	1.63	0.6%
1317011062	2022-01-10	0.96	1.00	4.1%	0.49	0.50	2.0%
1317011098	2022-01-10	0.47	0.46	2.2%	1.60	1.55	3.2%
1317011195	2022-01-10	0.72	0.72	0.0%	0.37	0.34	8.5%
1320098009	2022-01-10	1.05	1.07	1.9%	2.07	2.08	0.5%
1317011154	2022-01-11	0.31	0.31	0.0%	1.38	1.33	3.7%
1317011174	2022-01-11	0.26	0.26	0.0%	1.65	1.67	1.2%
1317011176	2022-01-11	0.17	0.17	0.0%	1.89	1.93	2.1%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1317011186	2022-01-11	0.26	0.26	0.0%	0.54	0.52	3.8%
1317001009	2022-01-11	0.48	0.48	0.0%	1.86	1.83	1.6%
1317001026	2022-01-11	0.19	0.19	0.0%	1.54	1.52	1.3%
1317001095	2022-01-11	0.92	0.93	1.1%	2.11	2.05	2.9%
1317001101	2022-01-11	0.23	0.23	0.0%	2.21	2.21	0.0%
1317001117	2022-01-11	0.47	0.47	0.0%	1.99	2.00	0.5%
1317001128	2022-01-11	0.27	0.28	3.6%	1.41	1.39	1.4%
1317001142	2022-01-11	0.36	0.36	0.0%	0.92	0.90	2.2%
1317001154	2022-01-11	0.27	0.26	3.8%	2.37	2.42	2.1%
1317001158	2022-01-11	0.51	0.25	68.4%	4.64	2.31	67.1%
1317011035	2022-01-12	0.17	0.16	6.1%	0.88	0.85	3.5%
1317011246	2022-01-12	0.22	0.21	4.7%	1.56	1.60	2.5%
1317011277	2022-01-12	0.09	0.09	0.0%	2.36	2.38	0.8%
1317011285	2022-01-12	1.06	1.08	1.9%	0.28	0.27	3.6%
1317011289	2022-01-12	0.18	0.18	0.0%	1.44	1.38	4.3%
1317011316	2022-01-12	0.26	0.26	0.0%	1.72	1.73	0.6%
1317011355	2022-01-12	0.09	0.09	0.0%	2.18	2.23	2.3%
1317001191	2022-01-12	0.14	0.14	0.0%	0.38	0.37	2.7%
1317011005	2022-01-12	0.95	0.97	2.1%	0.16	0.15	6.5%
1317011031	2022-01-12	0.31	0.31	0.0%	0.71	0.72	1.4%
1325081024	2022-01-13	1.18	1.14	3.4%	1.50	1.43	4.8%
1325081064	2022-01-13	0.65	0.67	3.0%	0.47	0.50	6.2%
1325081066	2022-01-13	0.46	0.47	2.2%	1.16	1.10	5.3%
1325085170	2022-01-13	0.80	0.79	1.3%	0.65	0.67	3.0%
1325085216	2022-01-13	0.98	1.00	2.0%	0.43	0.41	4.8%
1318058047	2022-01-14	0.20	0.20	0.0%	0.79	0.81	2.5%
1318058051	2022-01-14	0.14	0.14	0.0%	0.97	0.99	2.0%
1318058056	2022-01-14	0.14	0.14	0.0%	0.25	0.26	3.9%
1318058072	2022-01-14	0.21	0.20	4.9%	0.90	0.88	2.2%
1318058094	2022-01-14	0.11	0.11	0.0%	0.17	0.17	0.0%
1324074136	2022-01-14	0.38	0.38	0.0%	1.26	1.23	2.4%
1324074194	2022-01-14	0.78	0.78	0.0%	1.64	1.60	2.5%
1325085122	2022-01-14	0.98	0.96	2.1%	0.25	0.25	0.0%
1317011322	2022-01-15	0.30	0.28	6.9%	1.52	1.41	7.5%
1324074068	2022-01-15	0.65	0.65	0.0%	0.30	0.31	3.3%
1324074108	2022-01-15	0.67	0.68	1.5%	1.81	1.82	0.6%
1324074152	2022-01-15	0.84	0.84	0.0%	1.12	1.07	4.6%
1318058010	2022-01-15	0.31	0.31	0.0%	0.53	0.54	1.9%
1318058010	2022-01-15	0.31	0.31	0.0%	0.53	0.54	1.9%
1325085020	2022-01-16	0.94	0.95	1.1%	0.15	0.15	0.0%
1325085074	2022-01-16	1.10	1.10	0.0%	1.89	1.82	3.8%
1324074010	2022-01-16	0.65	0.65	0.0%	1.47	1.49	1.4%
1324074056	2022-01-16	0.89	0.89	0.0%	1.52	1.55	2.0%
1324075142	2022-01-16	0.50	0.48	4.1%	0.62	0.60	3.3%
1324075150	2022-01-16	0.56	0.54	3.6%	2.58	2.50	3.1%
1324075272	2022-01-17	0.38	0.38	0.0%	1.21	1.19	1.7%
1324075028	2022-01-17	0.85	0.85	0.0%	0.42	0.44	4.7%
1324075052	2022-01-17	0.52	0.49	5.9%	0.70	0.67	4.4%
1324075104	2022-01-17	0.70	0.70	0.0%	1.50	1.50	0.0%
1324075130	2022-01-17	0.45	0.45	0.0%	0.78	0.77	1.3%
1319098013	2022-01-17	0.72	0.72	0.0%	1.82	1.79	1.7%
1319098030	2022-01-17	0.95	0.94	1.1%	2.03	2.02	0.5%
1324075062	2022-01-17	0.52	0.53	1.9%	0.59	0.58	1.7%
1324075168	2022-01-18	0.56	0.57	1.8%	0.37	0.37	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1324075220	2022-01-18	0.65	0.65	0.0%	1.01	1.02	1.0%
1324075227	2022-01-18	0.58	0.57	1.7%	0.74	0.72	2.7%
1324075175	2022-01-18	0.44	0.45	2.2%	0.45	0.46	2.2%
1317017017	2022-01-19	0.17	0.17	0.0%	0.91	0.87	4.5%
1317017061	2022-01-20	0.18	0.18	0.0%	0.12	0.12	0.0%
1317017086	2022-01-20	0.22	0.23	4.4%	1.97	2.01	2.0%
1317017132	2022-01-20	0.22	0.21	4.7%	0.13	0.13	0.0%
1317017004	2022-01-21	0.11	0.11	0.0%	2.35	2.32	1.3%
1317017080	2022-01-21	0.33	0.34	3.0%	1.92	1.94	1.0%
1317017094	2022-01-21	0.24	0.24	0.0%	1.78	1.84	3.3%
1317017151	2022-01-21	0.16	0.16	0.0%	3.04	2.95	3.0%
1317018146	2022-01-21	0.26	0.26	0.0%	0.69	0.68	1.5%
1317018165	2022-01-21	0.20	0.20	0.0%	2.43	2.47	1.6%
1316002056	2022-01-21	0.32	0.32	0.0%	0.38	0.37	2.7%
1316002093	2022-01-21	0.14	0.14	0.0%	0.17	0.16	6.1%
1317017072	2022-01-21	0.27	0.27	0.0%	2.51	2.43	3.2%
1317018007	2022-01-22	0.17	0.17	0.0%	0.12	0.11	8.7%
1317018043	2022-01-22	0.17	0.15	12.5%	1.91	1.85	3.2%
1317018046	2022-01-22	0.16	0.16	0.0%	0.32	0.36	11.8%
1317018089	2022-01-22	0.27	0.27	0.0%	2.02	1.99	1.5%
1317018106	2022-01-22	0.24	0.25	4.1%	3.78	3.76	0.5%
1317018130	2022-01-22	0.25	0.25	0.0%	2.02	1.98	2.0%
1317018131	2022-01-22	0.23	0.23	0.0%	1.84	1.87	1.6%
1317018141	2022-01-22	0.17	0.17	0.0%	3.05	2.94	3.7%
1316002011	2022-01-22	0.10	0.10	0.0%	0.15	0.16	6.5%
1316002066	2022-01-22	0.17	0.17	0.0%	1.09	1.10	0.9%
1316002068	2022-01-22	0.25	0.25	0.0%	1.24	1.27	2.4%
1316002072	2022-01-22	0.18	0.19	5.4%	2.69	2.44	9.7%
1316002072	2022-01-22	0.18	0.19	5.4%	2.69	2.44	9.7%
1316002110	2022-01-22	0.06	0.05	18.2%	3.44	3.39	1.5%
1317018034	2022-01-23	0.20	0.21	4.9%	0.24	0.24	0.0%
1317018091	2022-01-23	0.09	0.09	0.0%	3.85	3.71	3.7%
1316002045	2022-01-23	0.15	0.15	0.0%	2.16	2.12	1.9%
1316003097	2022-01-24	0.26	0.25	3.9%	1.71	1.72	0.6%
1316003149	2022-01-24	0.22	0.22	0.0%	2.23	2.24	0.4%
1316003170	2022-01-24	0.13	0.13	0.0%	2.04	2.24	9.3%
1316003173	2022-01-24	0.14	0.13	7.4%	2.84	2.89	1.7%
1316003266	2022-01-24	0.20	0.20	0.0%	2.34	2.31	1.3%
1324080024	2022-01-24	0.69	0.69	0.0%	0.52	0.53	1.9%
1324080040	2022-01-24	0.80	0.81	1.2%	1.08	1.16	7.1%
1316002035	2022-01-25	0.09	0.09	0.0%	1.93	1.83	5.3%
1316002114	2022-01-25	0.08	0.08	0.0%	3.63	3.64	0.3%
1316003061	2022-01-25	0.32	0.30	6.5%	1.32	1.33	0.8%
1324080010	2022-01-25	0.43	0.43	0.0%	0.21	0.20	4.9%
1316003023	2022-01-26	0.12	0.12	0.0%	0.65	0.65	0.0%
1316003181	2022-01-26	0.35	0.35	0.0%	1.88	1.85	1.6%
1319045012	2022-01-26	0.28	0.29	3.5%	1.89	1.85	2.1%
1319045034	2022-01-26	0.61	0.62	1.6%	2.10	2.16	2.8%
1319045052	2022-01-26	0.99	1.00	1.0%	2.39	2.35	1.7%
1319045087	2022-01-26	0.17	0.17	0.0%	0.57	0.58	1.7%
1319045102	2022-01-26	0.49	0.49	0.0%	2.15	2.21	2.8%
1319045115	2022-01-26	0.70	0.70	0.0%	1.55	1.50	3.3%
1319045123	2022-01-26	0.18	0.18	0.0%	3.12	3.06	1.9%
1319045151	2022-01-26	0.86	0.86	0.0%	1.54	1.55	0.6%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1319045171	2022-01-26	0.54	0.54	0.0%	1.66	1.67	0.6%
1319045187	2022-01-26	0.18	0.19	5.4%	0.11	0.12	8.7%
1319045225	2022-01-26	0.10	0.10	0.0%	5.77	5.58	3.3%
1319045234	2022-01-26	0.70	0.70	0.0%	2.28	2.23	2.2%
1316003089	2022-01-26	0.22	0.21	4.7%	1.61	1.63	1.2%
1316003222	2022-01-26	0.12	0.12	0.0%	1.50	1.48	1.3%
1316003226	2022-01-26	0.34	0.34	0.0%	1.46	1.43	2.1%
1316003016	2022-01-27	0.19	0.20	5.1%	0.28	0.28	0.0%
1324073158	2022-01-27	0.76	0.77	1.3%	0.16	0.15	6.5%
1324073122	2022-01-29	1.14	1.14	0.0%	1.87	1.86	0.5%
1324073144	2022-01-29	1.02	1.02	0.0%	1.29	1.27	1.6%
1324073176	2022-01-29	0.61	0.59	3.3%	0.33	0.32	3.1%
1324073204	2022-01-29	0.62	0.63	1.6%	0.31	0.28	10.2%
1318087005	2022-01-29	0.93	0.93	0.0%	1.90	1.88	1.1%
1318087005	2022-01-29	0.93	0.93	0.0%	1.90	1.88	1.1%
1318087030	2022-01-29	0.34	0.34	0.0%	2.40	2.31	3.8%
1318087037	2022-01-29	0.59	0.59	0.0%	2.99	2.96	1.0%
1318087148	2022-01-29	0.51	0.51	0.0%	1.65	1.57	5.0%
1318087165	2022-01-29	0.94	0.90	4.3%	2.90	2.84	2.1%
1324073022	2022-01-30	0.82	0.81	1.2%	1.00	1.02	2.0%
1324073096	2022-01-30	0.43	0.43	0.0%	0.26	0.24	8.0%
1316004012	2022-01-30	0.34	0.35	2.9%	1.33	1.34	0.7%
1316004047	2022-01-31	0.21	0.22	4.7%	1.92	1.89	1.6%
1316004089	2022-01-31	0.17	0.18	5.7%	1.32	1.32	0.0%
1317015024	2022-01-31	0.15	0.16	6.5%	0.34	0.33	3.0%
1317015028	2022-01-31	0.18	0.18	0.0%	0.94	0.85	10.1%
1316004107	2022-02-01	0.16	0.17	6.1%	1.51	1.51	0.0%
1316004116	2022-02-01	0.30	0.29	3.4%	1.40	1.25	11.3%
1316004116	2022-02-01	0.30	0.29	3.4%	1.40	1.25	11.3%
1317016006	2022-02-03	0.08	0.08	0.0%	1.21	1.26	4.0%
1317016013	2022-02-03	0.20	0.20	0.0%	0.63	0.61	3.2%
1317016024	2022-02-03	0.26	0.26	0.0%	1.38	1.37	0.7%
1317016047	2022-02-03	0.22	0.23	4.4%	0.67	0.64	4.6%
1318077121	2022-02-03	0.17	0.17	0.0%	1.33	1.30	2.3%
1318077151	2022-02-03	0.52	0.52	0.0%	1.87	1.95	4.2%
1318077046	2022-02-04	0.31	0.30	3.3%	1.19	1.16	2.6%
1319057035	2022-02-04	0.17	0.17	0.0%	3.10	3.09	0.3%
1319057056	2022-02-04	0.16	0.15	6.5%	3.16	3.20	1.3%
1319057056	2022-02-04	0.16	0.15	6.5%	3.16	3.20	1.3%
1319057064	2022-02-04	0.14	0.14	0.0%	3.15	3.16	0.3%
1317016031	2022-02-05	0.21	0.21	0.0%	0.68	0.70	2.9%
1317016061	2022-02-05	0.18	0.21	15.4%	0.55	0.54	1.8%
1318077093	2022-02-05	0.16	0.15	6.5%	1.74	1.67	4.1%
1318077096	2022-02-05	0.09	0.09	0.0%	1.70	1.82	6.8%
1318077105	2022-02-05	0.12	0.12	0.0%	1.91	1.98	3.6%
1318077113	2022-02-05	0.30	0.30	0.0%	2.02	1.94	4.0%
1318077155	2022-02-05	0.95	0.96	1.0%	1.45	1.42	2.1%
1324080178	2022-02-05	1.17	1.15	1.7%	0.50	0.51	2.0%
1324080190	2022-02-05	0.74	0.73	1.4%	0.67	0.67	0.0%
1318077161	2022-02-06	0.50	0.49	2.0%	1.82	1.76	3.4%
1324080080	2022-02-06	0.49	0.50	2.0%	0.63	0.62	1.6%
1324080282	2022-02-06	0.45	0.46	2.2%	0.31	0.31	0.0%
1318077174	2022-02-07	0.88	0.85	3.5%	1.88	1.87	0.5%
1324080136	2022-02-07	0.60	0.60	0.0%	0.56	0.56	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1324080270	2022-02-07	0.58	0.58	0.0%	0.87	0.86	1.2%
1317020077	2022-02-08	0.20	0.18	10.5%	0.82	0.80	2.5%
1317020114	2022-02-08	0.12	0.14	15.4%	1.01	1.04	2.9%
1317020113	2022-02-08	0.10	0.09	10.5%	1.12	1.08	3.6%
1317020157	2022-02-08	0.10	0.10	0.0%	0.09	0.09	0.0%
1317020027	2022-02-09	0.12	0.11	8.7%	0.78	0.76	2.6%
1317020028	2022-02-09	0.21	0.20	4.9%	0.82	0.84	2.4%
1317020028	2022-02-09	0.21	0.20	4.9%	0.82	0.84	2.4%
1317020036	2022-02-09	0.19	0.20	5.1%	0.76	0.75	1.3%
1317020086	2022-02-09	0.16	0.16	0.0%	0.93	0.94	1.1%
1317020139	2022-02-09	0.18	0.17	5.7%	1.10	1.08	1.8%
1317020142	2022-02-09	0.34	0.33	3.0%	2.26	2.21	2.2%
1317019025	2022-02-09	0.36	0.35	2.8%	0.85	0.90	5.7%
1317019026	2022-02-09	0.36	0.33	8.7%	0.88	0.84	4.7%
1317019030	2022-02-09	0.24	0.23	4.3%	2.01	2.02	0.5%
1317019040	2022-02-09	0.14	0.14	0.0%	0.19	0.19	0.0%
1317019044	2022-02-09	0.27	0.27	0.0%	0.81	0.79	2.5%
1317019076	2022-02-09	0.19	0.19	0.0%	1.75	1.75	0.0%
1317019090	2022-02-09	0.08	0.08	0.0%	0.10	0.11	9.5%
1316020122	2022-02-10	0.15	0.16	6.5%	0.98	0.98	0.0%
1317019058	2022-02-10	0.19	0.20	5.1%	1.15	1.18	2.6%
1318085004	2022-02-10	0.22	0.22	0.0%	1.40	1.41	0.7%
1318085020	2022-02-10	0.22	0.22	0.0%	2.17	2.24	3.2%
1318085096	2022-02-10	0.52	0.53	1.9%	1.88	1.85	1.6%
1316005124	2022-02-11	0.16	0.16	0.0%	1.57	1.56	0.6%
1316005125	2022-02-11	0.36	0.35	2.8%	0.92	0.96	4.3%
1316005135	2022-02-11	0.24	0.23	4.3%	0.97	0.98	1.0%
1316005010	2022-02-12	0.23	0.23	0.0%	2.15	2.10	2.4%
1318085026	2022-02-12	0.21	0.21	0.0%	1.39	1.40	0.7%
1318085030	2022-02-12	0.47	0.48	2.1%	2.06	2.15	4.3%
1318085030	2022-02-12	0.47	0.48	2.1%	2.06	2.15	4.3%
1318085100	2022-02-12	0.54	0.54	0.0%	2.22	2.24	0.9%
1316011007	2022-02-12	0.19	0.20	5.1%	2.03	1.97	3.0%
1316011021	2022-02-12	0.25	0.26	3.9%	1.27	1.25	1.6%
1316011348	2022-02-13	0.19	0.19	0.0%	3.10	3.16	1.9%
1316011307	2022-02-14	0.23	0.23	0.0%	2.12	2.11	0.5%
1316011066	2022-02-15	0.15	0.16	6.5%	0.87	0.89	2.3%
1316011109	2022-02-15	0.12	0.12	0.0%	1.24	1.27	2.4%
1316011157	2022-02-15	0.18	0.17	5.7%	0.62	0.62	0.0%
1316011332	2022-02-15	0.79	0.78	1.3%	0.29	0.30	3.4%
1318078028	2022-02-17	0.43	0.43	0.0%	1.73	1.76	1.7%
1323061135	2022-02-17	0.68	0.61	10.9%	0.20	0.16	22.2%
1323061135	2022-02-17	0.68	0.61	10.9%	0.20	0.16	22.2%
1323061143	2022-02-17	0.64	0.62	3.2%	0.78	0.79	1.3%
1323061199	2022-02-17	0.56	0.61	8.5%	0.58	0.76	26.9%
1323061208	2022-02-17	0.93	0.90	3.3%	1.86	1.65	12.0%
1323061276	2022-02-17	0.95	0.94	1.1%	1.99	1.94	2.5%
1323061225	2022-02-18	0.64	0.64	0.0%	0.61	0.61	0.0%
1323061292	2022-02-18	0.66	0.61	7.9%	0.72	0.69	4.3%
1323061294	2022-02-18	0.47	0.46	2.2%	0.93	0.91	2.2%
1323061082	2022-02-19	0.66	0.64	3.1%	0.63	0.63	0.0%
1323061151	2022-02-19	0.53	0.53	0.0%	0.76	0.76	0.0%
1323061270	2022-02-19	0.90	0.91	1.1%	2.23	2.23	0.0%
1323061188	2022-02-20	0.53	0.55	3.7%	0.76	0.76	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1323061226	2022-02-20	0.51	0.52	1.9%	0.51	0.51	0.0%
1323061307	2022-02-20	0.49	0.49	0.0%	1.13	1.12	0.9%
1323061009	2022-02-22	0.68	0.68	0.0%	0.55	0.56	1.8%
1323061015	2022-02-22	0.66	0.67	1.5%	0.25	0.26	3.9%
1323061015	2022-02-22	0.66	0.67	1.5%	0.25	0.26	3.9%
1323061037	2022-02-22	0.60	0.60	0.0%	0.41	0.39	5.0%
1323061044	2022-02-22	0.56	0.56	0.0%	0.29	0.27	7.1%
1323061055	2022-02-22	0.76	0.73	4.0%	0.12	0.11	8.7%
1323061064	2022-02-22	0.37	0.37	0.0%	3.46	3.43	0.9%
1323061066	2022-02-22	0.61	0.63	3.2%	0.30	0.31	3.3%
1323061125	2022-02-22	0.64	0.64	0.0%	0.29	0.28	3.5%
1323061242	2022-02-22	0.66	0.66	0.0%	1.33	1.32	0.8%
1324078020	2022-02-23	0.38	0.41	7.6%	0.72	0.75	4.1%
1324078032	2022-02-23	0.28	0.27	3.6%	0.08	0.09	11.8%
1324078061	2022-02-23	0.47	0.49	4.2%	0.75	0.79	5.2%
1324078082	2022-02-23	0.36	0.35	2.8%	0.36	0.37	2.7%
1324078152	2022-02-23	0.61	0.61	0.0%	0.28	0.28	0.0%
1324078186	2022-02-23	0.34	0.34	0.0%	0.36	0.37	2.7%
1324078234	2022-02-23	0.32	0.33	3.1%	0.14	0.14	0.0%
1324078264	2022-02-23	0.48	0.48	0.0%	0.83	0.81	2.4%
1432007005	2022-02-23	1.50	1.49	0.7%	1.07	1.15	7.2%
1432007020	2022-02-23	0.89	0.88	1.1%	1.87	1.94	3.7%
1432007046	2022-02-23	0.84	0.83	1.2%	1.71	1.71	0.0%
1432007051	2022-02-23	0.64	0.65	1.6%	1.20	1.22	1.7%
1432007064	2022-02-23	0.72	0.73	1.4%	1.84	1.83	0.5%
1432007215	2022-02-23	0.72	0.73	1.4%	0.87	0.83	4.7%
1432007107	2022-02-24	0.64	0.65	1.6%	1.26	1.28	1.6%
1432007128	2022-02-24	0.85	0.86	1.2%	0.83	0.83	0.0%
1432007138	2022-02-24	0.87	0.87	0.0%	0.69	0.68	1.5%
1432007164	2022-02-24	0.93	0.93	0.0%	1.85	1.92	3.7%
1432007201	2022-02-24	0.58	0.59	1.7%	1.41	1.44	2.1%
1432007282	2022-02-24	0.75	0.75	0.0%	0.93	0.94	1.1%
1324078118	2022-02-24	0.90	0.90	0.0%	0.21	0.21	0.0%
1324078140	2022-02-24	0.84	0.83	1.2%	0.07	0.07	0.0%
1324078154	2022-02-24	0.58	0.62	6.7%	0.19	0.17	11.1%
1324078182	2022-02-24	0.41	0.41	0.0%	0.53	0.52	1.9%
1432007284	2022-02-25	0.75	0.77	2.6%	1.01	1.04	2.9%
1432007306	2022-02-25	0.68	0.69	1.5%	1.38	1.38	0.0%
1432007406	2022-02-25	0.65	0.66	1.5%	0.68	0.72	5.7%
1316012083	2022-02-25	0.24	0.23	4.3%	1.38	1.35	2.2%
1316012187	2022-02-26	0.41	0.42	2.4%	0.89	0.89	0.0%
1324077010	2022-02-26	0.65	0.65	0.0%	0.52	0.55	5.6%
1324077028	2022-02-26	1.03	1.04	1.0%	0.86	0.86	0.0%
1324077028	2022-02-26	1.03	1.04	1.0%	0.86	0.86	0.0%
1324077038	2022-02-26	1.15	1.15	0.0%	0.88	0.89	1.1%
1324077052	2022-02-26	0.74	0.73	1.4%	0.97	0.99	2.0%
1324077128	2022-02-26	0.66	0.65	1.5%	0.82	0.83	1.2%
1324077106	2022-02-27	0.75	0.75	0.0%	0.47	0.52	10.1%
1324077120	2022-02-27	0.46	0.45	2.2%	0.97	0.95	2.1%
1316012331	2022-02-27	0.29	0.29	0.0%	1.36	1.38	1.5%
1316012135	2022-02-28	0.14	0.14	0.0%	2.48	2.51	1.2%
1316012234	2022-02-28	0.17	0.18	5.7%	2.65	2.61	1.5%
1316012274	2022-02-28	0.19	0.19	0.0%	2.57	2.58	0.4%
1316012296	2022-02-28	0.15	0.15	0.0%	2.44	2.47	1.2%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1316005170	2022-02-28	0.18	0.18	0.0%	3.64	3.63	0.3%
1316012234	2022-03-01	0.18	0.17	5.7%	0.64	0.66	3.1%
1324077028	2022-03-01	1.04	1.03	1.0%	2.95	2.66	10.3%
1324077028	2022-03-01	1.04	1.03	1.0%	3.04	3.04	0.0%
1324077038	2022-03-01	1.15	1.15	0.0%	2.75	2.65	3.7%
1316005010	2022-03-01	0.23	0.23	0.0%	1.76	1.61	8.9%
1316005081	2022-03-01	0.20	0.21	4.9%	3.63	3.64	0.3%
1316005170	2022-03-01	0.18	0.18	0.0%	0.10	0.09	10.5%
1316012135	2022-03-01	0.14	0.14	0.0%	1.63	1.69	3.6%
1316012274	2022-03-01	0.19	0.19	0.0%	1.05	1.06	0.9%
1316005025	2022-03-07	0.85	0.85	0.0%	10.00	9.97	0.3%
1316005052	2022-03-07	2.37	2.46	3.7%	5.27	5.29	0.4%
1316005086	2022-03-07	0.29	0.28	3.5%	2.26	2.28	0.9%
1316005093	2022-03-07	0.47	0.47	0.0%	1.87	1.82	2.7%
1316006102	2022-03-07	0.28	0.28	0.0%	2.10	2.11	0.5%
1316006199	2022-03-07	0.22	0.22	0.0%	2.02	2.06	2.0%
1323062091	2022-03-07	0.52	0.53	1.9%	0.14	0.12	15.4%
1323062086	2022-03-08	0.68	0.68	0.0%	2.05	2.02	1.5%
1323062150	2022-03-08	0.20	0.20	0.0%	0.40	0.39	2.5%
1323062164	2022-03-08	0.49	0.48	2.1%	0.86	0.91	5.6%
1323062007	2022-03-08	0.83	0.84	1.2%	1.33	1.32	0.8%
1323062023	2022-03-08	0.73	0.74	1.4%	0.80	0.80	0.0%
1323062029	2022-03-08	0.82	0.83	1.2%	0.54	0.54	0.0%
1323062072	2022-03-08	0.35	0.34	2.9%	0.51	0.51	0.0%
1323062079	2022-03-08	0.59	0.58	1.7%	0.62	0.62	0.0%
1323062110	2022-03-08	0.42	0.42	0.0%	0.29	0.29	0.0%
1323062122	2022-03-08	0.60	0.60	0.0%	0.08	0.08	0.0%
1316006017	2022-03-08	0.31	0.31	0.0%	0.20	0.20	0.0%
1316006033	2022-03-08	0.22	0.24	8.7%	2.45	2.64	7.5%
1316006041	2022-03-08	0.14	0.14	0.0%	2.46	2.47	0.4%
1316006083	2022-03-08	0.15	0.15	0.0%	1.48	1.47	0.7%
1316006113	2022-03-08	0.10	0.10	0.0%	2.66	2.71	1.9%
1316006139	2022-03-08	0.30	0.29	3.4%	1.95	1.92	1.6%
1316006160	2022-03-08	0.20	0.20	0.0%	1.97	1.89	4.1%
1316006165	2022-03-08	0.29	0.29	0.0%	3.40	3.43	0.9%
1318086004	2022-03-08	0.49	0.49	0.0%	1.76	1.77	0.6%
1318086012	2022-03-08	0.33	0.32	3.1%	2.01	1.94	3.5%
1318086043	2022-03-08	0.76	0.77	1.3%	2.12	2.09	1.4%
1318086050	2022-03-08	0.42	0.43	2.4%	1.95	1.92	1.6%
1318086085	2022-03-08	0.45	0.45	0.0%	1.91	1.92	0.5%
1318086113	2022-03-08	0.49	0.49	0.0%	1.96	1.92	2.1%
1323062208	2022-03-08	0.84	0.84	0.0%	0.17	0.17	0.0%
1323062282	2022-03-08	0.45	0.45	0.0%	0.41	0.41	0.0%
1323067028	2022-03-08	0.63	0.63	0.0%	0.65	0.65	0.0%
1323067032	2022-03-08	0.92	0.98	6.3%	6.28	6.58	4.7%
1323066178	2022-03-09	0.45	0.44	2.2%	1.11	1.05	5.6%
1323062238	2022-03-09	0.43	0.44	2.3%	0.50	0.51	2.0%
1323066164	2022-03-10	0.73	0.74	1.4%	1.26	1.27	0.8%
1323066102	2022-03-10	1.00	1.01	1.0%	0.62	0.61	1.6%
1323066108	2022-03-10	0.54	0.54	0.0%	0.10	0.10	0.0%
1316010048	2022-03-11	0.17	0.18	5.7%	2.47	2.44	1.2%
1316010049	2022-03-11	0.14	0.14	0.0%	0.75	0.75	0.0%
1323066132	2022-03-11	0.73	0.73	0.0%	1.34	1.41	5.1%
1323066232	2022-03-11	0.82	0.81	1.2%	0.21	0.22	4.7%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1315003202	2022-03-12	0.07	0.07	0.0%	1.05	1.12	6.5%
1323066022	2022-03-12	1.19	1.15	3.4%	0.28	0.32	13.3%
1323066086	2022-03-12	0.87	0.87	0.0%	1.48	1.49	0.7%
1315003174	2022-03-12	0.17	0.17	0.0%	0.39	0.40	2.5%
1316013078	2022-03-13	0.16	0.16	0.0%	1.04	1.06	1.9%
1316013095	2022-03-13	0.21	0.20	4.9%	1.51	1.48	2.0%
1432010099	2022-03-13	0.68	0.68	0.0%	3.57	3.49	2.3%
1432010104	2022-03-13	0.61	0.61	0.0%	2.70	2.62	3.0%
1432008010	2022-03-13	1.29	1.29	0.0%	1.69	1.71	1.2%
1432008094	2022-03-13	1.23	1.24	0.8%	5.13	5.07	1.2%
1315003249	2022-03-14	0.24	0.25	4.1%	0.73	0.74	1.4%
1316013045	2022-03-14	0.12	0.12	0.0%	1.09	1.09	0.0%
1316013086	2022-03-14	0.17	0.17	0.0%	0.49	0.49	0.0%
1432008016	2022-03-14	2.55	2.62	2.7%	0.81	0.82	1.2%
1315003262	2022-03-14	0.14	0.14	0.0%	0.31	0.30	3.3%
1316013070	2022-03-14	0.12	0.12	0.0%	0.96	1.00	4.1%
1316013074	2022-03-14	0.16	0.16	0.0%	2.61	2.65	1.5%
1316013025	2022-03-15	0.19	0.20	5.1%	0.93	0.96	3.2%
1322043275	2022-03-15	0.23	0.24	4.3%	2.31	2.27	1.7%
1322043335	2022-03-15	0.50	0.47	6.2%	0.59	0.58	1.7%
1322043351	2022-03-15	0.59	0.62	5.0%	0.42	0.44	4.7%
1315003204	2022-03-15	0.13	0.12	8.0%	1.44	1.42	1.4%
1322043147	2022-03-15	0.51	0.52	1.9%	2.13	2.12	0.5%
1322043155	2022-03-15	0.75	0.76	1.3%	1.92	1.90	1.0%
1322043160	2022-03-16	0.56	0.56	0.0%	0.69	0.72	4.3%
1322043144	2022-03-16	0.66	0.67	1.5%	2.12	2.07	2.4%
1315003006	2022-03-17	0.14	0.14	0.0%	3.41	3.42	0.3%
1322043102	2022-03-17	0.37	0.37	0.0%	0.63	0.63	0.0%
1322043169	2022-03-17	0.41	0.41	0.0%	0.64	0.59	8.1%
1315003011	2022-03-18	0.29	0.28	3.5%	1.31	1.34	2.3%
1322043303	2022-03-18	0.44	0.43	2.3%	1.05	1.14	8.2%
1322043140	2022-03-18	0.43	0.43	0.0%	1.85	1.82	1.6%
1322043307	2022-03-18	0.56	0.56	0.0%	0.21	0.20	4.9%
1316014113	2022-03-19	0.40	0.39	2.5%	0.24	0.23	4.3%
1322043176	2022-03-19	0.55	0.53	3.7%	1.75	1.79	2.3%
1322043239	2022-03-19	0.27	0.27	0.0%	1.54	1.56	1.3%
1322043242	2022-03-19	0.44	0.43	2.3%	1.32	1.28	3.1%
1322043264	2022-03-19	0.45	0.46	2.2%	1.25	1.33	6.2%
1316014048	2022-03-19	0.26	0.25	3.9%	1.69	1.62	4.2%
1316014097	2022-03-19	0.20	0.20	0.0%	1.93	1.95	1.0%
1322043086	2022-03-19	0.39	0.39	0.0%	1.96	2.07	5.5%
1322043113	2022-03-19	0.44	0.44	0.0%	1.14	1.13	0.9%
1322043177	2022-03-19	0.54	0.54	0.0%	0.95	0.94	1.1%
1316014017	2022-03-20	0.26	0.28	7.4%	2.78	2.76	0.7%
1316014038	2022-03-20	0.49	0.49	0.0%	1.29	1.32	2.3%
1316014040	2022-03-20	0.27	0.28	3.6%	0.89	0.93	4.4%
1316014050	2022-03-20	0.29	0.28	3.5%	1.72	1.71	0.6%
1316014069	2022-03-20	0.17	0.16	6.1%	0.37	0.37	0.0%
1322043011	2022-03-20	1.13	1.13	0.0%	0.27	0.26	3.8%
1322043060	2022-03-20	0.62	0.64	3.2%	1.87	1.96	4.7%
1322043315	2022-03-20	0.38	0.37	2.7%	1.44	1.37	5.0%
1315003417	2022-03-20	0.60	0.60	0.0%	2.42	2.43	0.4%
1322043029	2022-03-20	0.56	0.57	1.8%	1.13	1.15	1.8%
1322043191	2022-03-20	0.41	0.41	0.0%	1.31	1.39	5.9%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1316014030	2022-03-21	0.17	0.16	6.1%	1.44	1.41	2.1%
1322043035	2022-03-21	0.52	0.52	0.0%	1.92	1.91	0.5%
1315002197	2022-03-21	0.16	0.16	0.0%	1.10	1.11	0.9%
1315002197	2022-03-21	0.16	0.16	0.0%	1.10	1.11	0.9%
1322043075	2022-03-21	0.93	0.92	1.1%	0.11	0.11	0.0%
1315002114	2022-03-22	0.19	0.19	0.0%	1.47	1.48	0.7%
1315002114	2022-03-22	0.19	0.19	0.0%	1.47	1.48	0.7%
1315002116	2022-03-22	0.33	0.31	6.3%	1.43	1.47	2.8%
1315002116	2022-03-22	0.33	0.31	6.3%	1.43	1.47	2.8%
1315002234	2022-03-22	0.21	0.21	0.0%	1.88	1.87	0.5%
1315002234	2022-03-22	0.21	0.21	0.0%	1.88	1.87	0.5%
1432008154	2022-03-22	1.15	1.16	0.9%	3.27	3.26	0.3%
1315002059	2022-03-23	0.71	0.73	2.8%	2.15	2.09	2.8%
1315002059	2022-03-23	0.71	0.73	2.8%	2.15	2.09	2.8%
1315002186	2022-03-23	0.25	0.22	12.8%	0.57	0.59	3.4%
1315004155	2022-03-23	0.21	0.21	0.0%	1.78	1.72	3.4%
1432008059	2022-03-23	1.55	1.54	0.6%	1.46	1.45	0.7%
1432008108	2022-03-23	1.18	1.19	0.8%	1.92	2.02	5.1%
1315004502	2022-03-24	0.16	0.16	0.0%	2.37	2.39	0.8%
1432008049	2022-03-24	1.61	1.61	0.0%	0.70	0.77	9.5%
1324076106	2022-03-24	0.66	0.66	0.0%	2.37	2.33	1.7%
1432008046	2022-03-24	1.02	0.99	3.0%	1.15	1.19	3.4%
1432008226	2022-03-24	0.17	0.16	6.1%	0.90	0.86	4.5%
1432008309	2022-03-24	0.60	0.63	4.9%	1.00	1.00	0.0%
1324076132	2022-03-24	0.65	0.64	1.6%	4.41	4.44	0.7%
1432009524	2022-03-24	1.21	1.21	0.0%	1.30	1.23	5.5%
1432008121	2022-03-25	0.67	0.67	0.0%	3.59	3.54	1.4%
1315007123	2022-03-26	0.12	0.12	0.0%	1.79	1.74	2.8%
1315007154	2022-03-26	0.04	0.04	0.0%	2.19	2.18	0.5%
1324076030	2022-03-26	1.03	1.03	0.0%	5.83	5.32	9.1%
1324076042	2022-03-26	0.46	0.45	2.2%	3.17	3.42	7.6%
1315002044	2022-03-26	0.11	0.10	9.5%	1.62	1.58	2.5%
1315002044	2022-03-26	0.11	0.10	9.5%	1.62	1.58	2.5%
1315007039	2022-03-26	0.15	0.14	6.9%	0.88	0.90	2.2%
1315006038	2022-03-27	0.09	0.09	0.0%	2.14	2.23	4.1%
1315002078	2022-03-27	0.25	0.25	0.0%	1.83	1.86	1.6%
1315002080	2022-03-27	0.50	0.51	2.0%	6.90	6.84	0.9%
1315002096	2022-03-27	0.12	0.12	0.0%	0.79	0.79	0.0%
1432011116	2022-03-27	0.78	0.79	1.3%	1.14	1.12	1.8%
1432011148	2022-03-27	1.09	1.08	0.9%	1.28	1.28	0.0%
1432012003	2022-03-27	0.47	0.46	2.2%	8.06	7.98	1.0%
1432012035	2022-03-27	0.82	0.82	0.0%	1.80	1.85	2.7%
1432012058	2022-03-27	0.25	0.25	0.0%	1.81	1.76	2.8%
1432012068	2022-03-27	0.87	0.86	1.2%	3.79	3.77	0.5%
1432012095	2022-03-27	1.84	1.84	0.0%	1.57	1.59	1.3%
1315002126	2022-03-28	0.15	0.15	0.0%	0.88	0.83	5.8%
1315002126	2022-03-28	0.15	0.15	0.0%	0.88	0.83	5.8%
1432011066	2022-03-28	1.36	1.34	1.5%	2.28	2.22	2.7%
1432011115	2022-03-28	0.87	0.87	0.0%	3.60	3.60	0.0%
1315002153	2022-03-28	0.46	0.46	0.0%	0.64	0.62	3.2%
1432011105	2022-03-28	0.65	0.64	1.6%	3.14	3.12	0.6%
1315002249	2022-03-29	0.19	0.18	5.4%	2.00	1.94	3.0%
1432011044	2022-03-29	1.16	1.17	0.9%	1.64	1.71	4.2%
1432011150	2022-03-29	1.72	1.70	1.2%	1.34	1.41	5.1%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1316015102	2022-03-29	0.16	0.15	6.5%	2.37	2.42	2.1%
1432011003	2022-03-29	0.81	0.80	1.2%	1.59	1.66	4.3%
1315002051	2022-03-30	0.07	0.07	0.0%	5.16	5.26	1.9%
1315002051	2022-03-30	0.07	0.07	0.0%	5.16	5.26	1.9%
1316015021	2022-03-30	0.18	0.18	0.0%	1.78	1.81	1.7%
1316015053	2022-03-30	0.03	0.03	0.0%	1.03	1.04	1.0%
1316015095	2022-03-30	0.40	0.40	0.0%	2.51	2.48	1.2%
1432011097	2022-03-30	1.51	1.53	1.3%	2.53	2.68	5.8%
1432011159	2022-03-30	1.88	1.86	1.1%	3.55	3.61	1.7%
1432011184	2022-03-30	2.28	2.29	0.4%	5.18	5.21	0.6%
1432011196	2022-03-30	2.03	2.07	2.0%	4.13	4.11	0.5%
1432015201	2022-03-30	0.94	0.94	0.0%	3.20	3.37	5.2%
1432015232	2022-03-30	1.05	1.05	0.0%	0.83	0.83	0.0%
1316015076	2022-03-30	0.20	0.21	4.9%	1.28	1.28	0.0%
1432015211	2022-03-30	0.39	0.39	0.0%	6.24	6.30	1.0%
1315002209	2022-03-31	0.50	0.51	2.0%	1.24	1.23	0.8%
1316008007	2022-03-31	0.18	0.19	5.4%	0.80	0.80	0.0%
1316008029	2022-03-31	0.20	0.20	0.0%	2.64	2.63	0.4%
1316008034	2022-03-31	0.16	0.16	0.0%	1.34	1.33	0.7%
1316008057	2022-03-31	0.16	0.16	0.0%	2.28	2.35	3.0%
1316008065	2022-03-31	0.17	0.16	6.1%	1.44	1.47	2.1%
1316008089	2022-03-31	0.09	0.08	11.8%	2.58	2.57	0.4%
1316015036	2022-03-31	0.17	0.17	0.0%	0.27	0.28	3.6%
1315002142	2022-04-01	0.47	0.47	0.0%	0.97	0.92	5.3%
1315006021	2022-04-01	0.54	0.56	3.6%	1.14	1.09	4.5%
1323063227	2022-04-02	0.26	0.25	3.9%	0.32	0.31	3.2%
1323063238	2022-04-02	0.74	0.78	5.3%	1.52	1.49	2.0%
1323063251	2022-04-02	0.32	0.34	6.1%	0.61	0.61	0.0%
1323063254	2022-04-02	0.28	0.28	0.0%	0.76	0.76	0.0%
1323063211	2022-04-02	0.42	0.43	2.4%	1.19	1.19	0.0%
1323063145	2022-04-03	0.67	0.67	0.0%	0.79	0.80	1.3%
1323063202	2022-04-03	0.57	0.58	1.7%	0.45	0.43	4.5%
1323063260	2022-04-03	0.54	0.54	0.0%	0.69	0.73	5.6%
1323063062	2022-04-03	0.63	0.64	1.6%	0.30	0.29	3.4%
1323063164	2022-04-03	0.54	0.52	3.8%	0.15	0.16	6.5%
1323063057	2022-04-04	0.39	0.40	2.5%	1.06	1.02	3.8%
1323063156	2022-04-04	0.44	0.44	0.0%	0.14	0.14	0.0%
1323063021	2022-04-04	0.59	0.55	7.0%	1.26	1.27	0.8%
1323063080	2022-04-04	0.34	0.36	5.7%	0.39	0.39	0.0%
1323063171	2022-04-04	0.67	0.65	3.0%	0.97	1.03	6.0%
1432013028	2022-04-04	0.73	0.73	0.0%	2.66	2.73	2.6%
1432013029	2022-04-04	1.05	1.02	2.9%	7.72	7.67	0.6%
1432013069	2022-04-04	1.22	1.25	2.4%	2.10	2.20	4.7%
1432013131	2022-04-04	1.70	1.72	1.2%	2.31	2.30	0.4%
1315096021	2022-04-04	0.54	0.56	3.6%	1.73	1.81	4.5%
1315096021	2022-04-04	0.54	0.56	3.6%	1.73	1.81	4.5%
1432012031	2022-04-05	0.68	0.69	1.5%	5.86	6.08	3.7%
1432013072	2022-04-05	1.11	1.12	0.9%	1.11	1.18	6.1%
1432013075	2022-04-05	1.17	1.15	1.7%	5.93	6.06	2.2%
1432013096	2022-04-05	1.57	1.58	0.6%	1.07	1.08	0.9%
1432013097	2022-04-05	1.70	1.74	2.3%	1.33	1.36	2.2%
1323063177	2022-04-05	0.42	0.42	0.0%	0.32	0.26	20.7%
1323063182	2022-04-05	0.48	0.50	4.1%	0.43	0.47	8.9%
1323063187	2022-04-05	0.86	0.88	2.3%	1.10	1.10	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1323063187	2022-04-05	0.86	0.58	38.9%	0.14	0.72	134.9%
1323063188	2022-04-05	0.97	0.97	0.0%	0.41	0.42	2.4%
1432013118	2022-04-05	1.75	1.72	1.7%	1.14	1.16	1.7%
1432013154	2022-04-05	1.77	1.78	0.6%	4.07	4.10	0.7%
1432013164	2022-04-05	1.23	1.20	2.5%	3.67	3.72	1.4%
1432014180	2022-04-05	0.84	0.83	1.2%	3.51	3.39	3.5%
1323063013	2022-04-06	0.44	0.44	0.0%	0.68	0.68	0.0%
1432014071	2022-04-06	1.58	1.62	2.5%	2.10	2.10	0.0%
1432014129	2022-04-06	1.20	1.22	1.7%	2.07	2.06	0.5%
1315096044	2022-04-06	0.58	0.56	3.5%	1.94	2.01	3.5%
1315096078	2022-04-06	0.68	0.66	3.0%	2.10	2.15	2.4%
1315096078	2022-04-06	0.68	0.66	3.0%	2.10	2.15	2.4%
1432014036	2022-04-06	1.88	1.88	0.0%	0.08	0.09	11.8%
1432014036	2022-04-06	1.88	1.84	2.2%	2.23	2.25	0.9%
1315096075	2022-04-07	0.27	0.26	3.8%	2.41	2.38	1.3%
1432013149	2022-04-07	2.10	2.11	0.5%	1.29	1.32	2.3%
1432014161	2022-04-07	1.43	1.49	4.1%	2.54	2.81	10.1%
1315096067	2022-04-07	0.21	0.22	4.7%	1.65	1.55	6.2%
1315096125	2022-04-07	0.22	0.22	0.0%	7.85	8.03	2.3%
1432014109	2022-04-07	1.77	1.80	1.7%	3.61	3.79	4.9%
1315096006	2022-04-08	0.25	0.25	0.0%	0.35	0.35	0.0%
1316007015	2022-04-08	0.40	0.40	0.0%	2.51	2.58	2.8%
1316007034	2022-04-08	0.41	0.39	5.0%	2.27	2.29	0.9%
1316007065	2022-04-08	0.33	0.31	6.3%	1.16	1.15	0.9%
1316007079	2022-04-08	0.31	0.32	3.2%	1.83	1.82	0.5%
1316007044	2022-04-08	0.38	0.38	0.0%	0.72	0.72	0.0%
1316007047	2022-04-08	0.36	0.36	0.0%	0.79	0.79	0.0%
1323064005	2022-04-08	0.71	0.71	0.0%	0.54	0.55	1.8%
1323064055	2022-04-08	0.44	0.43	2.3%	0.39	0.39	0.0%
1315009160	2022-04-09	0.18	0.18	0.0%	3.46	3.53	2.0%
1323064032	2022-04-09	0.72	0.74	2.7%	0.17	0.18	5.7%
1323064082	2022-04-09	0.74	0.72	2.7%	0.82	0.81	1.2%
1315009681	2022-04-09	0.20	0.20	0.0%	1.04	1.02	1.9%
1323064021	2022-04-09	0.92	0.92	0.0%	0.83	0.87	4.7%
1323064030	2022-04-09	0.75	0.75	0.0%	1.26	1.28	1.6%
1323064038	2022-04-10	0.55	0.54	1.8%	0.89	0.86	3.4%
1315009702	2022-04-11	0.16	0.15	6.5%	0.79	0.77	2.6%
1322045002	2022-04-11	0.95	0.94	1.1%	0.90	0.90	0.0%
1322045044	2022-04-11	0.83	0.82	1.2%	0.70	0.70	0.0%
1322045074	2022-04-11	0.17	0.17	0.0%	0.36	0.38	5.4%
1315009543	2022-04-11	0.29	0.29	0.0%	1.50	1.49	0.7%
1315009718	2022-04-11	0.16	0.16	0.0%	0.85	0.85	0.0%
1322045036	2022-04-11	0.42	0.42	0.0%	0.52	0.51	1.9%
1322045014	2022-04-12	0.82	0.83	1.2%	1.62	1.63	0.6%
1322045023	2022-04-12	0.40	0.40	0.0%	1.54	1.54	0.0%
1322045056	2022-04-12	0.71	0.70	1.4%	0.61	0.61	0.0%
1315009571	2022-04-12	0.30	0.31	3.3%	0.23	0.24	4.3%
1315009631	2022-04-12	0.16	0.16	0.0%	1.04	1.03	1.0%
1315009696	2022-04-12	0.22	0.22	0.0%	1.04	1.01	2.9%
1322045139	2022-04-12	0.79	0.79	0.0%	1.92	1.93	0.5%
1315009569	2022-04-13	0.16	0.16	0.0%	1.89	1.82	3.8%
1315009754	2022-04-13	0.13	0.12	8.0%	1.31	1.34	2.3%
1322044246	2022-04-13	0.39	0.39	0.0%	0.11	0.10	9.5%
1322045059	2022-04-13	0.49	0.50	2.0%	1.18	1.19	0.8%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1322045135	2022-04-13	0.65	0.65	0.0%	1.14	1.15	0.9%
1315009651	2022-04-14	0.22	0.22	0.0%	1.09	1.09	0.0%
1322044142	2022-04-14	1.00	1.05	4.9%	1.41	1.46	3.5%
1322044174	2022-04-14	0.61	0.62	1.6%	0.72	0.67	7.2%
1322044251	2022-04-14	0.65	0.66	1.5%	0.66	0.67	1.5%
1322044282	2022-04-14	0.44	0.43	2.3%	0.87	0.88	1.1%
1322044148	2022-04-14	0.37	0.38	2.7%	1.52	1.55	2.0%
1322044046	2022-04-15	0.32	0.32	0.0%	0.57	0.57	0.0%
1322044253	2022-04-15	0.61	0.65	6.3%	0.40	0.40	0.0%
1322044265	2022-04-15	0.49	0.50	2.0%	0.89	0.96	7.6%
1323063003	2022-04-15	0.72	0.70	2.8%	1.71	1.75	2.3%
1322044123	2022-04-15	0.64	0.64	0.0%	0.83	0.85	2.4%
1322044151	2022-04-15	0.60	0.59	1.7%	0.86	0.86	0.0%
1322044213	2022-04-15	0.44	0.44	0.0%	2.94	2.80	4.9%
1322044240	2022-04-15	0.61	0.60	1.7%	1.54	1.56	1.3%
1322044264	2022-04-15	0.28	0.28	0.0%	0.67	0.63	6.2%
1322044122	2022-04-16	0.37	0.40	7.8%	0.24	0.24	0.0%
1322044179	2022-04-16	0.46	0.44	4.4%	0.46	0.45	2.2%
1322044185	2022-04-16	0.36	0.36	0.0%	1.16	1.22	5.0%
1315005111	2022-04-16	0.17	0.17	0.0%	2.55	2.45	4.0%
1315005118	2022-04-16	0.19	0.19	0.0%	1.05	1.10	4.7%
1315005068	2022-04-17	1.24	1.24	0.0%	1.54	1.55	0.6%
1315005108	2022-04-17	0.27	0.26	3.8%	1.50	1.45	3.4%
1431001160	2022-04-17	2.35	2.28	3.0%	1.12	1.08	3.6%
1315005009	2022-04-17	0.21	0.21	0.0%	2.70	2.76	2.2%
1315005029	2022-04-17	0.86	0.86	0.0%	2.13	2.01	5.8%
1315005037	2022-04-17	0.17	0.17	0.0%	3.48	3.56	2.3%
1315005043	2022-04-17	0.17	0.17	0.0%	1.24	1.31	5.5%
1315005048	2022-04-17	0.28	0.30	6.9%	8.35	8.36	0.1%
1315005083	2022-04-18	0.27	0.28	3.6%	1.05	1.02	2.9%
1315008004	2022-04-18	0.23	0.23	0.0%	0.13	0.13	0.0%
1315008089	2022-04-18	0.36	0.36	0.0%	2.12	2.23	5.1%
1315008019	2022-04-18	0.36	0.37	2.7%	1.28	1.30	1.6%
1315008029	2022-04-18	0.23	0.23	0.0%	1.41	1.43	1.4%
1315008080	2022-04-18	0.20	0.20	0.0%	0.42	0.42	0.0%
1431001227	2022-04-18	2.33	2.34	0.4%	1.12	1.23	9.4%
1315008020	2022-04-19	0.19	0.18	5.4%	0.75	0.74	1.3%
1431001223	2022-04-19	2.36	2.35	0.4%	2.18	2.15	1.4%
1431001173	2022-04-19	1.49	1.38	7.7%	1.70	1.93	12.7%
1431001173	2022-04-19	1.49	1.45	2.7%	2.09	2.14	2.4%
1322044089	2022-04-20	0.28	0.26	7.4%	0.56	0.54	3.6%
1322044029	2022-04-20	0.47	0.44	6.6%	0.04	0.05	22.2%
1322044034	2022-04-20	0.53	0.55	3.7%	0.39	0.40	2.5%
1431001245	2022-04-20	1.31	1.30	0.8%	1.81	1.88	3.8%
1315009010	2022-04-21	0.24	0.24	0.0%	2.46	2.40	2.5%
1315010079	2022-04-21	0.15	0.15	0.0%	1.19	1.21	1.7%
1315010146	2022-04-21	0.21	0.20	4.9%	1.21	1.15	5.1%
1315010085	2022-04-22	0.21	0.21	0.0%	3.21	3.07	4.5%
1315010140	2022-04-22	0.13	0.13	0.0%	1.08	1.04	3.8%
1315010140	2022-04-22	0.13	0.13	0.0%	1.03	0.97	6.0%
1315010163	2022-04-22	0.16	0.16	0.0%	0.15	0.14	6.9%
1315010076	2022-04-22	0.15	0.16	6.5%	2.38	2.34	1.7%
1315010093	2022-04-22	0.14	0.15	6.9%	1.79	1.83	2.2%
1315010137	2022-04-22	0.16	0.16	0.0%	2.11	2.03	3.9%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1321034064	2022-04-22	0.54	0.53	1.9%	1.34	1.37	2.2%
1315010007	2022-04-23	0.19	0.19	0.0%	1.26	1.36	7.6%
1322046104	2022-04-23	0.53	0.54	1.9%	0.21	0.20	4.9%
1315010014	2022-04-24	0.18	0.18	0.0%	0.94	0.96	2.1%
1321034001	2022-04-24	0.86	0.86	0.0%	1.58	1.60	1.3%
1321034072	2022-04-24	0.48	0.47	2.1%	1.32	1.33	0.8%
1322046046	2022-04-25	0.67	0.66	1.5%	0.07	0.07	0.0%
1322046053	2022-04-25	0.57	0.60	5.1%	0.09	0.09	0.0%
1322046066	2022-04-25	0.74	0.75	1.3%	0.13	0.15	14.3%
1322046078	2022-04-25	0.70	0.69	1.4%	1.00	1.10	9.5%
1322046078	2022-04-25	0.70	0.70	0.0%	0.15	0.15	0.0%
1322046097	2022-04-25	0.62	0.63	1.6%	5.45	5.09	6.8%
1322046097	2022-04-25	0.62	0.62	0.0%	0.10	0.10	0.0%
1322046098	2022-04-25	0.75	0.74	1.3%	0.25	0.26	3.9%
1322046033	2022-04-26	0.50	0.57	13.1%	0.65	0.68	4.5%
1322046034	2022-04-26	0.42	0.42	0.0%	1.98	1.97	0.5%
1321094017	2022-04-26	0.79	0.81	2.5%	0.55	0.55	0.0%
1322046012	2022-04-26	0.48	0.47	2.1%	0.88	0.90	2.2%
1321094008	2022-04-27	0.63	0.65	3.1%	0.39	0.40	2.5%
1321094019	2022-04-27	0.55	0.55	0.0%	0.11	0.10	9.5%
1322046017	2022-04-27	1.08	1.10	1.8%	0.14	0.13	7.4%
1431001253	2022-04-28	1.55	1.57	1.3%	0.10	0.12	18.2%
1431001286	2022-04-28	1.95	1.96	0.5%	0.44	0.44	0.0%
1432087032	2022-04-29	0.52	0.51	1.9%	1.91	1.90	0.5%
1431001255	2022-04-29	1.65	1.58	4.3%	2.77	2.80	1.1%
1432087022	2022-04-29	0.67	0.66	1.5%	2.62	2.64	0.8%
1431001430	2022-04-30	1.74	1.75	0.6%	0.36	0.37	2.7%
1431001440	2022-04-30	2.68	1.89	34.6%	2.82	1.69	50.1%
1431001440	2022-04-30	2.68	2.68	0.0%	4.34	4.33	0.2%
1431001443	2022-04-30	1.67	1.65	1.2%	1.66	1.65	0.6%
1431001509	2022-04-30	1.43	1.45	1.4%	2.66	2.64	0.8%
1431001515	2022-04-30	1.66	1.64	1.2%	4.99	4.97	0.4%
1431001184	2022-04-30	2.32	2.27	2.2%	2.55	2.66	4.2%
1431001265	2022-04-30	2.04	2.06	1.0%	0.64	0.68	6.1%
1431001282	2022-04-30	1.99	2.00	0.5%	0.54	0.53	1.9%
1431001461	2022-04-30	1.55	1.57	1.3%	3.56	3.52	1.1%
1431001499	2022-04-30	2.26	2.27	0.4%	1.93	1.99	3.1%
1431001527	2022-04-30	1.62	1.61	0.6%	0.77	0.81	5.1%
1431001606	2022-04-30	0.87	0.95	8.8%	4.41	4.33	1.8%
1323065023	2022-05-01	0.96	0.98	2.1%	0.26	0.29	10.9%
1323065054	2022-05-01	0.45	0.45	0.0%	1.64	1.64	0.0%
1431001129	2022-05-01	1.45	1.46	0.7%	3.89	3.83	1.6%
1431001190	2022-05-01	1.71	1.73	1.2%	0.71	0.75	5.5%
1431001564	2022-05-01	1.91	1.93	1.0%	1.46	1.41	3.5%
1431001607	2022-05-01	1.28	1.29	0.8%	1.01	1.02	1.0%
1431001711	2022-05-01	2.58	2.57	0.4%	7.95	8.15	2.5%
1431001722	2022-05-01	2.07	2.08	0.5%	3.67	3.58	2.5%
1323065006	2022-05-02	0.46	0.46	0.0%	0.20	0.20	0.0%
1323065055	2022-05-02	0.50	0.50	0.0%	0.42	0.44	4.7%
1323065085	2022-05-02	0.62	0.61	1.6%	0.55	0.55	0.0%
1431001547	2022-05-02	1.50	1.46	2.7%	2.94	2.92	0.7%
1431001557	2022-05-02	1.45	1.46	0.7%	1.90	1.94	2.1%
1431001626	2022-05-02	1.73	1.71	1.2%	6.24	6.24	0.0%
1431003263	2022-05-02	1.61	1.60	0.6%	1.57	1.56	0.6%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1323065112	2022-05-02	0.85	0.81	4.8%	0.29	0.29	0.0%
1323065119	2022-05-02	0.52	0.53	1.9%	1.78	1.77	0.6%
1431001144	2022-05-02	1.95	1.98	1.5%	3.37	3.30	2.1%
1431001495	2022-05-02	1.51	1.53	1.3%	6.66	6.70	0.6%
1431003317	2022-05-02	1.46	1.50	2.7%	0.50	0.51	2.0%
1320053016	2022-05-03	0.76	0.76	0.0%	1.85	1.89	2.1%
1320053032	2022-05-03	0.41	0.41	0.0%	1.65	1.67	1.2%
1323065124	2022-05-03	1.56	1.57	0.6%	0.49	0.47	4.2%
1323065124	2022-05-03	1.56	1.83	15.9%	2.01	2.06	2.5%
1431001706	2022-05-03	1.48	1.48	0.0%	0.63	0.59	6.6%
1431001706	2022-05-03	1.48	1.50	1.3%	4.38	1.52	96.9%
1431003257	2022-05-03	1.19	1.21	1.7%	1.58	1.62	2.5%
1431003364	2022-05-03	1.23	1.24	0.8%	2.86	2.88	0.7%
1431003389	2022-05-03	0.98	0.96	2.1%	2.11	2.11	0.0%
1431003389	2022-05-03	0.98	0.96	2.1%	1.15	1.22	5.9%
1320053023	2022-05-03	0.98	0.98	0.0%	1.37	1.40	2.2%
1320053036	2022-05-03	0.32	0.33	3.1%	2.01	1.97	2.0%
1431001734	2022-05-03	1.48	1.47	0.7%	1.94	1.93	0.5%
1431003227	2022-05-03	0.86	0.82	4.8%	1.33	1.43	7.2%
1431003340	2022-05-03	0.68	0.68	0.0%	1.65	1.52	8.2%
1320053066	2022-05-04	0.28	0.28	0.0%	1.82	1.82	0.0%
1431003021	2022-05-04	0.74	0.73	1.4%	2.63	2.70	2.6%
1431003031	2022-05-04	0.67	0.67	0.0%	5.07	5.11	0.8%
1320053051	2022-05-04	0.63	0.67	6.2%	1.95	1.92	1.6%
1320053081	2022-05-04	0.33	0.34	3.0%	1.62	1.61	0.6%
1431003198	2022-05-04	1.00	0.92	8.3%	0.78	0.78	0.0%
1320053041	2022-05-05	0.65	0.57	13.1%	1.61	1.57	2.5%
1320053041	2022-05-05	0.65	0.62	4.7%	2.03	1.92	5.6%
1320053043	2022-05-05	0.61	0.61	0.0%	2.02	2.15	6.2%
1431003050	2022-05-05	0.88	0.87	1.1%	1.85	1.86	0.5%
1431003106	2022-05-05	1.72	1.70	1.2%	1.00	1.02	2.0%
1431003108	2022-05-05	1.94	1.93	0.5%	0.81	0.84	3.6%
1431003164	2022-05-05	1.80	1.81	0.6%	2.66	2.67	0.4%
1431003362	2022-05-06	1.14	1.15	0.9%	4.28	4.20	1.9%
1432086011	2022-05-07	0.90	0.86	4.5%	1.75	1.78	1.7%
1431003324	2022-05-07	0.84	0.84	0.0%	1.62	1.63	0.6%
1431004008	2022-05-08	0.81	0.79	2.5%	4.48	4.44	0.9%
1431004034	2022-05-08	0.72	0.72	0.0%	1.52	1.55	2.0%
1431004046	2022-05-08	0.63	0.62	1.6%	1.95	1.89	3.1%
1431004052	2022-05-08	0.65	0.65	0.0%	7.51	7.44	0.9%
1431004065	2022-05-08	0.60	0.60	0.0%	1.24	1.21	2.4%
1431004116	2022-05-08	0.68	0.68	0.0%	1.19	1.22	2.5%
1431004151	2022-05-08	0.79	0.78	1.3%	1.20	1.18	1.7%
1431004171	2022-05-08	0.78	0.77	1.3%	0.74	0.74	0.0%
1431004191	2022-05-08	0.62	0.61	1.6%	1.78	1.82	2.2%
1431004208	2022-05-08	0.80	0.80	0.0%	6.60	6.54	0.9%
1431004217	2022-05-08	0.57	0.57	0.0%	1.65	1.66	0.6%
1431004232	2022-05-08	0.62	0.62	0.0%	1.48	1.42	4.1%
1431003128	2022-05-09	0.76	0.75	1.3%	2.82	2.78	1.4%
1431003131	2022-05-09	0.60	0.60	0.0%	4.00	3.99	0.3%
1431003289	2022-05-09	0.67	0.66	1.5%	0.58	0.58	0.0%
1431003230	2022-05-10	0.70	0.69	1.4%	1.68	1.66	1.2%
1431003078	2022-05-11	0.68	0.71	4.3%	6.45	6.52	1.1%
1431004021	2022-05-11	1.00	1.02	2.0%	4.66	4.69	0.6%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431004059	2022-05-11	1.10	1.11	0.9%	6.44	6.36	1.3%
1431004202	2022-05-11	0.72	0.72	0.0%	1.77	1.78	0.6%
1431004242	2022-05-11	0.63	0.63	0.0%	4.56	4.58	0.4%
1431005067	2022-05-12	0.21	0.22	4.7%	1.24	1.25	0.8%
1315013005	2022-05-13	0.19	0.20	5.1%	0.22	0.22	0.0%
1315013055	2022-05-13	0.22	0.23	4.4%	0.57	0.60	5.1%
1315013093	2022-05-13	0.14	0.13	7.4%	4.56	1.84	85.0%
1315013093	2022-05-13	0.14	0.14	0.0%	0.17	0.18	5.7%
1315013078	2022-05-13	0.12	0.13	8.0%	2.17	2.19	0.9%
1431005099	2022-05-13	1.44	1.47	2.1%	1.62	1.67	3.0%
1315013008	2022-05-14	0.25	0.17	38.1%	3.51	3.34	5.0%
1315013008	2022-05-14	0.25	0.26	3.9%	3.50	3.44	1.7%
1315013067	2022-05-14	0.28	0.30	6.9%	2.01	2.22	9.9%
1315013108	2022-05-14	0.20	0.22	9.5%	2.47	2.52	2.0%
1431005023	2022-05-14	0.91	0.94	3.2%	7.75	7.74	0.1%
1315014029	2022-05-14	0.21	0.21	0.0%	2.90	2.81	3.2%
1315014042	2022-05-14	0.16	0.16	0.0%	3.46	3.54	2.3%
1315014067	2022-05-14	0.18	0.29	46.8%	2.51	1.80	32.9%
1315014067	2022-05-14	0.18	0.18	0.0%	2.50	2.53	1.2%
1315014074	2022-05-14	0.60	0.59	1.7%	2.79	2.90	3.9%
1315014088	2022-05-14	0.21	0.22	4.7%	4.56	4.44	2.7%
1315014108	2022-05-14	0.16	0.16	0.0%	2.19	2.19	0.0%
1315014017	2022-05-15	0.23	0.25	8.3%	2.36	2.42	2.5%
1315014049	2022-05-15	0.28	0.23	19.6%	2.99	2.94	1.7%
1315014052	2022-05-15	0.16	0.16	0.0%	0.09	0.09	0.0%
1431005628	2022-05-15	1.45	1.48	2.0%	1.52	1.60	5.1%
1431005651	2022-05-15	0.41	0.41	0.0%	0.46	0.46	0.0%
1431005685	2022-05-15	0.71	0.71	0.0%	0.69	0.70	1.4%
1431003193	2022-05-15	0.62	0.62	0.0%	1.88	1.89	0.5%
1431005047	2022-05-15	2.02	2.02	0.0%	2.70	2.68	0.7%
1431005047	2022-05-15	2.02	0.78	88.6%	1.39	1.38	0.7%
1322047079	2022-05-16	1.04	1.12	7.4%	0.67	0.67	0.0%
1322047099	2022-05-16	0.84	0.88	4.7%	0.16	0.16	0.0%
1322047205	2022-05-16	0.98	0.89	9.6%	0.94	0.95	1.1%
1322047224	2022-05-16	0.67	0.68	1.5%	0.78	0.69	12.2%
1322047037	2022-05-17	0.69	0.71	2.9%	0.65	0.64	1.6%
1322047212	2022-05-17	1.59	1.63	2.5%	0.37	0.42	12.7%
1431003234	2022-05-17	0.63	0.63	0.0%	1.17	1.16	0.9%
1431003296	2022-05-17	0.47	0.44	6.6%	0.57	0.55	3.6%
1315015142	2022-05-17	0.27	0.27	0.0%	1.85	1.83	1.1%
1315015126	2022-05-18	0.19	0.19	0.0%	1.40	1.45	3.5%
1315015160	2022-05-18	0.29	0.29	0.0%	2.06	2.03	1.5%
1322047139	2022-05-18	0.85	0.77	9.9%	0.39	0.44	12.0%
1322047141	2022-05-18	0.94	0.97	3.1%	0.74	0.75	1.3%
1430097010	2022-05-18	0.85	0.86	1.2%	2.10	2.11	0.5%
1430097026	2022-05-18	1.03	1.04	1.0%	2.71	2.73	0.7%
1430097027	2022-05-18	2.18	2.22	1.8%	0.86	0.86	0.0%
1430097031	2022-05-18	1.39	1.35	2.9%	0.89	0.88	1.1%
1430097079	2022-05-18	1.32	1.30	1.5%	5.34	5.28	1.1%
1315015006	2022-05-19	0.32	0.31	3.2%	0.31	0.31	0.0%
1315015108	2022-05-19	0.30	0.28	6.9%	2.51	2.51	0.0%
1315015115	2022-05-19	0.20	0.19	5.1%	1.14	1.09	4.5%
1321070107	2022-05-19	0.38	0.38	0.0%	1.97	1.92	2.6%
1321070148	2022-05-19	0.62	0.62	0.0%	0.15	0.16	6.5%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1430097056	2022-05-19	1.10	1.14	3.6%	1.13	1.13	0.0%
1430097060	2022-05-19	0.89	0.89	0.0%	1.45	1.51	4.1%
1315015054	2022-05-20	0.24	0.25	4.1%	1.04	1.02	1.9%
1315015068	2022-05-20	0.23	0.23	0.0%	1.56	1.57	0.6%
1322047088	2022-05-20	0.65	0.65	0.0%	1.00	0.95	5.1%
1322047097	2022-05-20	0.89	0.89	0.0%	0.88	0.89	1.1%
1315015020	2022-05-20	0.15	0.15	0.0%	2.99	3.04	1.7%
1315015027	2022-05-20	0.13	0.14	7.4%	1.93	1.91	1.0%
1315015079	2022-05-20	0.25	0.24	4.1%	3.24	3.30	1.8%
1321070017	2022-05-20	0.74	0.75	1.3%	1.56	1.58	1.3%
1321070082	2022-05-20	0.56	0.56	0.0%	0.95	0.93	2.1%
1321070090	2022-05-20	0.27	0.28	3.6%	1.69	1.70	0.6%
1321070124	2022-05-20	0.61	0.62	1.6%	2.06	2.11	2.4%
1432083048	2022-05-20	1.59	1.65	3.7%	2.53	2.59	2.3%
1321070027	2022-05-21	0.30	0.30	0.0%	1.34	1.38	2.9%
1321070027	2022-05-21	0.30	0.29	3.4%	1.23	0.09	172.7%
1321070044	2022-05-21	0.77	0.77	0.0%	1.80	1.86	3.3%
1321070059	2022-05-21	0.44	0.43	2.3%	1.68	1.65	1.8%
1432083030	2022-05-21	1.37	1.38	0.7%	0.91	0.87	4.5%
1432083066	2022-05-21	1.96	2.02	3.0%	0.67	0.69	2.9%
1432083113	2022-05-21	0.94	0.94	0.0%	2.76	2.82	2.2%
1432083157	2022-05-22	0.78	0.79	1.3%	2.17	2.25	3.6%
1322047001	2022-05-22	0.89	0.92	3.3%	0.06	0.05	18.2%
1322047055	2022-05-22	0.48	0.48	0.0%	0.76	0.71	6.8%
1432083075	2022-05-22	1.67	1.66	0.6%	2.18	2.14	1.9%
1322047031	2022-05-23	0.66	0.66	0.0%	1.10	1.14	3.6%
1432083087	2022-05-23	1.40	1.39	0.7%	1.26	1.23	2.4%
1322047013	2022-05-23	0.51	0.50	2.0%	0.12	0.14	15.4%
1432082245	2022-05-24	0.23	0.22	4.4%	1.33	1.32	0.8%
1432082289	2022-05-25	0.39	0.39	0.0%	1.34	1.36	1.5%
1432082307	2022-05-26	0.32	0.32	0.0%	3.62	3.75	3.5%
1432082313	2022-05-26	0.39	0.40	2.5%	1.55	1.60	3.2%
1313001020	2022-05-26	0.12	0.11	8.7%	1.93	1.94	0.5%
1313001023	2022-05-26	0.23	0.23	0.0%	1.50	1.56	3.9%
1314004708	2022-05-26	0.21	0.17	21.1%	9.16	9.28	1.3%
1314004030	2022-05-27	0.24	0.22	8.7%	0.70	0.71	1.4%
1314004042	2022-05-27	0.12	0.13	8.0%	1.11	1.12	0.9%
1314004110	2022-05-27	0.33	0.34	3.0%	1.50	1.51	0.7%
1314004702	2022-05-27	0.11	0.11	0.0%	2.90	2.84	2.1%
1314004148	2022-05-28	0.80	0.81	1.2%	1.76	1.75	0.6%
1314004152	2022-05-28	0.75	0.73	2.7%	2.85	2.82	1.1%
1314004025	2022-05-29	0.25	0.25	0.0%	2.21	2.22	0.5%
1314004084	2022-05-29	0.65	0.65	0.0%	0.34	0.33	3.0%
1314004136	2022-05-29	0.43	0.44	2.3%	1.22	1.30	6.3%
1314004327	2022-05-29	0.20	0.20	0.0%	1.72	1.74	1.2%
1314004345	2022-05-29	0.24	0.25	4.1%	1.23	1.23	0.0%
1314004345	2022-05-29	0.24	0.28	15.4%	1.40	1.45	3.5%
1314004332	2022-05-30	0.18	0.19	5.4%	0.62	0.55	12.0%
1314004351	2022-05-30	0.23	0.22	4.4%	1.13	1.10	2.7%
1314004386	2022-05-30	0.26	0.33	23.7%	0.11	0.11	0.0%
1314004386	2022-05-30	0.26	0.26	0.0%	1.00	1.00	0.0%
1314004399	2022-05-30	0.20	0.21	4.9%	0.31	0.34	9.2%
1314004714	2022-05-30	0.72	0.72	0.0%	1.87	1.94	3.7%
1314008171	2022-06-30	0.32	0.31	3.2%	1.86	1.86	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1314008006	2022-07-01	0.18	0.18	0.0%	3.18	3.18	0.0%
1314008403	2022-07-01	0.14	0.14	0.0%	0.08	0.08	0.0%
1314008420	2022-07-01	0.14	0.15	6.9%	1.27	1.27	0.0%
1314008017	2022-07-01	0.22	0.23	4.4%	3.05	3.05	0.0%
1322049420	2022-07-01	1.41	1.38	2.2%	0.84	0.84	0.0%
1322049442	2022-07-01	0.60	0.62	3.3%	0.61	0.61	0.0%
1314010121	2022-07-01	0.24	0.24	0.0%	1.09	1.09	0.0%
1314010172	2022-07-02	0.22	0.23	4.4%	2.05	2.05	0.0%
1322049221	2022-07-02	1.97	1.97	0.0%	1.47	1.47	0.0%
1314010177	2022-07-02	0.15	0.15	0.0%	1.70	1.70	0.0%
1322049241	2022-07-02	0.88	0.90	2.2%	1.50	1.50	0.0%
1314010103	2022-07-03	0.40	0.39	2.5%	1.69	1.69	0.0%
1318083062	2022-07-03	0.15	0.15	0.0%	3.47	3.47	0.0%
1318083066	2022-07-03	0.10	0.10	0.0%	3.88	3.88	0.0%
1318083116	2022-07-03	0.18	0.18	0.0%	3.62	3.62	0.0%
1322049406	2022-07-03	0.57	0.54	5.4%	0.25	0.25	0.0%
1314010002	2022-07-03	0.16	0.19	17.1%	3.00	3.00	0.0%
1314010071	2022-07-03	0.27	0.26	3.8%	0.88	0.88	0.0%
1318083005	2022-07-03	0.58	0.59	1.7%	1.88	1.88	0.0%
1318083015	2022-07-03	0.30	0.31	3.3%	2.37	2.37	0.0%
1318083042	2022-07-03	0.47	0.47	0.0%	2.31	2.31	0.0%
1314010610	2022-07-04	0.30	0.31	3.3%	1.80	1.80	0.0%
1314010620	2022-07-04	0.25	0.26	3.9%	1.25	1.25	0.0%
1318083087	2022-07-04	0.21	0.20	4.9%	2.47	2.47	0.0%
1318083110	2022-07-04	0.29	0.29	0.0%	3.17	3.17	0.0%
1322049122	2022-07-04	0.60	0.61	1.7%	1.25	1.25	0.0%
1322049174	2022-07-04	0.82	0.89	8.2%	0.95	0.95	0.0%
1322049028	2022-07-04	1.02	1.06	3.8%	2.37	2.37	0.0%
1322049047	2022-07-04	1.25	1.23	1.6%	1.60	1.60	0.0%
1322049049	2022-07-04	1.03	1.02	1.0%	1.67	1.67	0.0%
1322049054	2022-07-04	1.01	0.89	12.6%	0.85	0.85	0.0%
1322049054	2022-07-04	1.01	1.02	1.0%	0.81	0.81	0.0%
1322049133	2022-07-04	1.18	1.24	5.0%	3.72	3.72	0.0%
1322049070	2022-07-05	0.50	0.50	0.0%	0.25	0.25	0.0%
1322049070	2022-07-05	0.50	0.52	3.9%	0.89	0.89	0.0%
1322049140	2022-07-05	1.43	1.47	2.8%	2.58	2.58	0.0%
1322049055	2022-07-05	0.43	0.44	2.3%	0.45	0.45	0.0%
1322049187	2022-07-05	0.57	0.57	0.0%	0.68	0.68	0.0%
1322049212	2022-07-05	0.45	0.46	2.2%	0.55	0.55	0.0%
1322049210	2022-07-06	0.90	0.89	1.1%	0.10	0.10	0.0%
1322049236	2022-07-06	0.78	0.75	3.9%	0.67	0.67	0.0%
1322049236	2022-07-06	0.78	0.79	1.3%	0.44	0.44	0.0%
1433006014	2022-07-06	0.47	0.47	0.0%	1.03	1.03	0.0%
1433006039	2022-07-06	0.87	0.88	1.1%	0.73	0.73	0.0%
1433006042	2022-07-06	0.61	0.61	0.0%	0.70	0.70	0.0%
1433006051	2022-07-07	0.48	0.48	0.0%	1.29	1.29	0.0%
1322048043	2022-07-07	0.66	0.68	3.0%	0.84	0.84	0.0%
1322048105	2022-07-07	1.50	1.50	0.0%	3.68	3.68	0.0%
1322048120	2022-07-07	0.97	0.96	1.0%	3.32	3.32	0.0%
1322048159	2022-07-07	0.42	0.40	4.9%	0.60	0.60	0.0%
1322048166	2022-07-07	0.28	0.28	0.0%	1.40	1.40	0.0%
1322048515	2022-07-07	0.65	0.65	0.0%	1.82	1.82	0.0%
1322048085	2022-07-08	0.69	0.68	1.5%	1.00	1.00	0.0%
1432081080	2022-07-08	0.58	0.56	3.5%	1.10	1.10	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1432081120	2022-07-08	0.32	0.34	6.1%	0.38	0.38	0.0%
1432081120	2022-07-08	0.32	0.38	17.1%	0.71	0.71	0.0%
1322048079	2022-07-08	0.62	0.61	1.6%	1.01	1.01	0.0%
1322048082	2022-07-08	0.48	0.50	4.1%	0.06	0.06	0.0%
1322048037	2022-07-09	0.70	0.71	1.4%	1.15	1.15	0.0%
1322048129	2022-07-09	1.03	1.03	0.0%	1.30	1.30	0.0%
1322051118	2022-07-09	0.80	0.80	0.0%	0.32	0.32	0.0%
1322051119	2022-07-09	0.56	0.57	1.8%	0.40	0.40	0.0%
1322051010	2022-07-09	0.49	0.62	23.4%	0.20	0.20	0.0%
1322051010	2022-07-09	0.49	0.49	0.0%	0.17	0.17	0.0%
1322051080	2022-07-09	0.69	0.70	1.4%	0.11	0.11	0.0%
1322050006	2022-07-10	0.53	0.55	3.7%	0.22	0.22	0.0%
1322050073	2022-07-10	0.60	0.60	0.0%	0.21	0.21	0.0%
1322051075	2022-07-10	0.87	0.85	2.3%	0.28	0.28	0.0%
1322048072	2022-07-10	0.89	0.87	2.3%	0.45	0.45	0.0%
1322050009	2022-07-10	0.57	0.55	3.6%	0.23	0.23	0.0%
1322050025	2022-07-10	0.55	0.54	1.8%	0.14	0.14	0.0%
1322050027	2022-07-10	0.59	0.58	1.7%	0.23	0.23	0.0%
1322050145	2022-07-10	0.64	0.63	1.6%	1.24	1.24	0.0%
1322051016	2022-07-10	0.54	0.54	0.0%	0.12	0.12	0.0%
1322050106	2022-07-11	0.60	0.61	1.7%	0.26	0.26	0.0%
1322050123	2022-07-11	0.67	0.67	0.0%	0.42	0.42	0.0%
1322050132	2022-07-11	0.56	0.55	1.8%	0.35	0.35	0.0%
1322050032	2022-07-11	0.85	0.85	0.0%	0.36	0.36	0.0%
1322050104	2022-07-11	0.71	0.71	0.0%	0.46	0.46	0.0%
1322050154	2022-07-11	0.76	0.77	1.3%	0.91	0.91	0.0%
1322051532	2022-07-11	0.70	0.72	2.8%	0.20	0.20	0.0%
1322051540	2022-07-11	0.67	0.66	1.5%	0.35	0.35	0.0%
1314010124	2022-07-12	0.08	0.08	0.0%	0.24	0.24	0.0%
1322050067	2022-07-12	0.60	0.59	1.7%	0.40	0.40	0.0%
1322050405	2022-07-12	1.05	1.04	1.0%	0.33	0.33	0.0%
1322051504	2022-07-12	0.49	0.50	2.0%	0.17	0.17	0.0%
1322051072	2022-07-12	0.43	0.43	0.0%	0.37	0.37	0.0%
1322051543	2022-07-12	0.87	0.87	0.0%	0.41	0.41	0.0%
1431011024	2022-07-12	1.60	1.68	4.9%	6.24	6.24	0.0%
1431011067	2022-07-12	1.73	1.79	3.4%	2.48	2.48	0.0%
1431011088	2022-07-12	2.51	2.55	1.6%	1.83	1.83	0.0%
1431011058	2022-07-12	0.88	0.87	1.1%	1.85	1.85	0.0%
1431011061	2022-07-12	1.59	1.59	0.0%	3.48	3.48	0.0%
1431011047	2022-07-12	1.76	1.64	7.1%	3.80	3.80	0.0%
1431011047	2022-07-12	1.76	1.76	0.0%	3.59	3.59	0.0%
1321072454	2022-07-13	0.32	0.32	0.0%	2.09	2.09	0.0%
1431011056	2022-07-13	1.64	1.63	0.6%	3.20	3.20	0.0%
1432023097	2022-07-13	1.55	1.53	1.3%	0.71	0.71	0.0%
1432023171	2022-07-13	1.68	1.73	2.9%	1.25	1.25	0.0%
1314007045	2022-07-14	0.15	0.14	6.9%	2.21	2.21	0.0%
1314007045	2022-07-14	0.15	0.26	53.7%	1.42	1.42	0.0%
1321072413	2022-07-14	0.17	0.17	0.0%	0.56	0.56	0.0%
1432023039	2022-07-14	3.04	3.00	1.3%	0.65	0.65	0.0%
1432023069	2022-07-14	1.38	1.38	0.0%	0.72	0.72	0.0%
1432023083	2022-07-14	2.68	2.74	2.2%	1.25	1.25	0.0%
1314007090	2022-07-14	0.18	0.18	0.0%	3.46	3.46	0.0%
1432023031	2022-07-14	1.87	1.87	0.0%	0.11	0.11	0.0%
1432023128	2022-07-14	1.16	1.09	6.2%	0.91	0.91	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1314007042	2022-07-15	0.23	0.24	4.3%	2.52	2.52	0.0%
1314007063	2022-07-15	0.30	0.29	3.4%	0.57	0.57	0.0%
1432023019	2022-07-15	2.85	2.85	0.0%	0.80	0.80	0.0%
1432023107	2022-07-15	0.45	0.47	4.3%	0.74	0.74	0.0%
1314007005	2022-07-15	0.37	0.36	2.7%	2.88	2.88	0.0%
1314007035	2022-07-16	0.15	0.15	0.0%	1.71	1.71	0.0%
1318089022	2022-07-16	0.40	0.40	0.0%	2.36	2.36	0.0%
1318089071	2022-07-16	0.70	0.74	5.6%	1.62	1.62	0.0%
1318089082	2022-07-16	0.80	0.82	2.5%	1.42	1.42	0.0%
1318089203	2022-07-16	0.20	0.19	5.1%	0.35	0.35	0.0%
1321071028	2022-07-16	0.56	0.58	3.5%	1.45	1.45	0.0%
1321071075	2022-07-16	0.41	0.41	0.0%	1.60	1.60	0.0%
1321071080	2022-07-16	1.01	1.05	3.9%	1.40	1.40	0.0%
1321071259	2022-07-16	0.47	0.45	4.3%	2.06	2.06	0.0%
1321071259	2022-07-16	0.47	0.81	53.1%	1.50	1.50	0.0%
1318089030	2022-07-16	0.79	0.81	2.5%	2.26	2.26	0.0%
1321071069	2022-07-16	0.63	0.62	1.6%	1.77	1.77	0.0%
1321071086	2022-07-16	0.45	0.45	0.0%	0.59	0.59	0.0%
1321071217	2022-07-16	0.62	0.61	1.6%	1.23	1.23	0.0%
1321071255	2022-07-16	0.69	0.69	0.0%	1.18	1.18	0.0%
1321072268	2022-07-16	0.68	0.68	0.0%	0.51	0.51	0.0%
1318089002	2022-07-17	0.19	0.18	5.4%	1.23	1.23	0.0%
1318089051	2022-07-17	0.96	0.96	0.0%	2.23	2.23	0.0%
1321071134	2022-07-17	0.63	0.65	3.1%	1.04	1.04	0.0%
1321071135	2022-07-17	0.69	0.68	1.5%	0.61	0.61	0.0%
1321071196	2022-07-17	0.48	0.48	0.0%	1.49	1.49	0.0%
1321072332	2022-07-17	0.44	0.45	2.2%	2.00	2.00	0.0%
1321071109	2022-07-17	0.81	0.81	0.0%	2.44	2.44	0.0%
1321072284	2022-07-17	0.30	0.30	0.0%	0.17	0.17	0.0%
1321072257	2022-07-18	0.16	0.15	6.5%	0.12	0.12	0.0%
1321071042	2022-07-18	1.07	1.03	3.8%	2.74	2.74	0.0%
1321071100	2022-07-18	0.53	0.54	1.9%	0.59	0.59	0.0%
1321071141	2022-07-18	0.68	0.66	3.0%	1.53	1.53	0.0%
1321071143	2022-07-19	0.92	0.91	1.1%	1.41	1.41	0.0%
1321071143	2022-07-19	0.92	0.73	23.0%	1.08	1.08	0.0%
1321071180	2022-07-19	0.46	0.47	2.2%	1.71	1.71	0.0%
1321074035	2022-07-19	0.61	0.61	0.0%	0.92	0.92	0.0%
1321074097	2022-07-19	0.42	0.46	9.1%	0.90	0.90	0.0%
1321074128	2022-07-19	0.83	0.84	1.2%	0.17	0.17	0.0%
1321074022	2022-07-19	0.47	0.46	2.2%	1.00	1.00	0.0%
1321074065	2022-07-19	0.50	0.48	4.1%	1.55	1.55	0.0%
1321074136	2022-07-19	0.36	0.36	0.0%	2.18	2.18	0.0%
1321074039	2022-07-20	0.21	0.22	4.7%	0.08	0.08	0.0%
1321074051	2022-07-20	0.62	0.60	3.3%	1.18	1.18	0.0%
1321074166	2022-07-20	0.57	0.57	0.0%	0.28	0.28	0.0%
1431012320	2022-07-20	1.11	1.11	0.0%	0.90	0.90	0.0%
1431012328	2022-07-20	0.59	0.61	3.3%	0.63	0.63	0.0%
1431012359	2022-07-20	0.74	0.74	0.0%	0.66	0.66	0.0%
1431012373	2022-07-20	0.67	0.67	0.0%	0.93	0.93	0.0%
1321074148	2022-07-21	0.49	0.50	2.0%	0.48	0.48	0.0%
1321074149	2022-07-21	0.58	0.58	0.0%	0.66	0.66	0.0%
1431012402	2022-07-21	0.50	0.50	0.0%	0.71	0.71	0.0%
1321074046	2022-07-21	0.38	0.38	0.0%	1.07	1.07	0.0%
1321074188	2022-07-21	0.51	0.50	2.0%	0.34	0.34	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431012412	2022-07-21	1.33	1.34	0.7%	0.81	0.81	0.0%
1431012459	2022-07-22	0.49	0.50	2.0%	0.71	0.71	0.0%
1431012514	2022-07-22	0.35	0.35	0.0%	0.47	0.47	0.0%
1321075056	2022-07-22	0.58	0.58	0.0%	0.47	0.47	0.0%
1321075101	2022-07-22	0.47	0.47	0.0%	0.08	0.08	0.0%
1431012612	2022-07-22	0.25	0.24	4.1%	1.44	1.44	0.0%
1321075040	2022-07-23	1.11	1.12	0.9%	1.20	1.20	0.0%
1321075083	2022-07-23	0.89	0.90	1.1%	0.23	0.23	0.0%
1321075160	2022-07-23	0.50	0.49	2.0%	0.95	0.95	0.0%
1432080116	2022-07-23	1.01	0.49	69.3%	0.97	0.97	0.0%
1432080116	2022-07-23	1.01	1.02	1.0%	0.70	0.70	0.0%
1321075062	2022-07-24	0.61	0.61	0.0%	0.15	0.15	0.0%
1321075116	2022-07-24	0.52	0.54	3.8%	1.06	1.06	0.0%
1321075186	2022-07-24	0.74	0.74	0.0%	1.31	1.31	0.0%
1321075164	2022-07-24	0.55	0.55	0.0%	0.71	0.71	0.0%
1321075020	2022-07-25	0.49	0.50	2.0%	0.30	0.30	0.0%
1321075202	2022-07-25	0.71	0.69	2.9%	1.57	1.57	0.0%
1321075053	2022-07-25	1.02	1.02	0.0%	0.89	0.89	0.0%
1321075231	2022-07-25	1.25	1.26	0.8%	5.35	5.35	0.0%
1321075432	2022-07-25	0.70	0.69	1.4%	0.56	0.56	0.0%
1432021034	2022-07-25	0.37	0.37	0.0%	3.12	3.12	0.0%
1432021058	2022-07-25	0.10	0.10	0.0%	8.08	8.08	0.0%
1432021092	2022-07-25	1.18	1.13	4.3%	4.46	4.46	0.0%
1321075439	2022-07-26	0.71	0.71	0.0%	0.67	0.67	0.0%
1321073431	2022-07-26	0.57	0.56	1.8%	1.30	1.30	0.0%
1321075447	2022-07-26	0.65	0.56	14.9%	1.90	1.90	0.0%
1321075453	2022-07-26	1.16	1.13	2.6%	1.77	1.77	0.0%
1321073217	2022-07-27	0.62	0.62	0.0%	1.33	1.33	0.0%
1321073217	2022-07-27	0.62	0.47	27.5%	1.61	1.61	0.0%
1321073224	2022-07-27	0.70	0.69	1.4%	2.27	2.27	0.0%
1321073247	2022-07-27	0.69	0.68	1.5%	2.56	2.56	0.0%
1321073218	2022-07-27	0.65	0.65	0.0%	1.33	1.33	0.0%
1321073342	2022-07-27	0.56	0.58	3.5%	0.95	0.95	0.0%
1321079054	2022-07-27	0.47	0.47	0.0%	0.90	0.90	0.0%
1321079016	2022-07-28	0.62	0.61	1.6%	0.70	0.70	0.0%
1321079022	2022-07-28	0.34	0.36	5.7%	1.53	1.53	0.0%
1321079097	2022-07-28	0.43	0.44	2.3%	0.41	0.41	0.0%
1321079100	2022-07-28	0.85	0.84	1.2%	0.95	0.95	0.0%
1321079107	2022-07-28	0.54	0.55	1.8%	1.60	1.60	0.0%
1321079138	2022-07-28	0.58	0.58	0.0%	0.17	0.17	0.0%
1321079046	2022-07-29	0.81	0.84	3.6%	0.74	0.74	0.0%
1313003109	2022-07-29	0.13	0.13	0.0%	1.22	1.22	0.0%
1321078023	2022-07-29	0.52	0.53	1.9%	0.26	0.26	0.0%
1321078055	2022-07-29	0.43	0.44	2.3%	0.45	0.45	0.0%
1313003006	2022-07-30	0.11	0.19	53.3%	0.89	0.89	0.0%
1313003006	2022-07-30	0.11	0.12	8.7%	0.98	0.98	0.0%
1321078609	2022-07-30	0.69	0.71	2.9%	0.10	0.10	0.0%
1321080006	2022-07-30	0.67	0.67	0.0%	1.15	1.15	0.0%
1321081044	2022-07-30	0.67	0.67	0.0%	0.69	0.69	0.0%
1321081144	2022-07-30	0.78	0.77	1.3%	0.93	0.93	0.0%
1321078021	2022-07-30	0.49	0.50	2.0%	0.19	0.19	0.0%
1321078073	2022-07-30	0.48	0.50	4.1%	0.22	0.22	0.0%
1321078600	2022-07-30	0.71	0.72	1.4%	0.29	0.29	0.0%
1321079091	2022-07-30	0.63	0.65	3.1%	0.25	0.25	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1321080059	2022-07-30	0.46	0.46	0.0%	0.10	0.10	0.0%
1321080149	2022-07-30	0.58	0.58	0.0%	0.22	0.22	0.0%
1321080165	2022-07-30	0.46	0.46	0.0%	0.24	0.24	0.0%
1321081122	2022-07-30	1.50	1.50	0.0%	2.65	2.65	0.0%
1321080164	2022-07-31	0.52	0.52	0.0%	0.33	0.33	0.0%
1321078029	2022-07-31	0.50	0.49	2.0%	0.77	0.77	0.0%
1321080108	2022-07-31	0.40	0.39	2.5%	0.26	0.26	0.0%
1321081438	2022-07-31	0.28	0.29	3.5%	0.72	0.72	0.0%
1321078076	2022-08-01	0.57	0.58	1.7%	0.50	0.50	0.0%
1321078115	2022-08-01	0.69	0.70	1.4%	0.97	0.97	0.0%
1321080020	2022-08-01	1.25	1.24	0.8%	1.80	1.80	0.0%
1321080716	2022-08-01	0.41	0.42	2.4%	0.07	0.07	0.0%
1321080745	2022-08-01	0.74	0.75	1.3%	0.32	0.32	0.0%
1321081416	2022-08-01	0.43	0.43	0.0%	0.82	0.82	0.0%
1321078031	2022-08-01	0.53	0.54	1.9%	0.22	0.22	0.0%
1321078130	2022-08-01	0.76	0.76	0.0%	0.28	0.28	0.0%
1321078465	2022-08-01	0.83	0.83	0.0%	0.53	0.53	0.0%
1321080062	2022-08-01	0.63	0.64	1.6%	0.55	0.55	0.0%
1321080130	2022-08-01	0.54	0.54	0.0%	0.18	0.18	0.0%
1321078435	2022-08-02	0.54	0.53	1.9%	0.31	0.31	0.0%
1321078098	2022-08-02	0.80	0.80	0.0%	0.76	0.76	0.0%
1321078098	2022-08-02	0.80	0.65	20.7%	0.45	0.45	0.0%
1321078123	2022-08-02	1.08	1.08	0.0%	0.55	0.55	0.0%
1321078094	2022-08-03	0.80	0.80	0.0%	0.11	0.11	0.0%
1321081099	2022-08-03	1.07	1.13	5.5%	2.67	2.67	0.0%
1321080031	2022-08-03	0.67	0.65	3.0%	0.93	0.93	0.0%
1321080066	2022-08-03	0.79	0.83	4.9%	1.01	1.01	0.0%
1321080095	2022-08-03	0.72	0.71	1.4%	0.13	0.13	0.0%
1321081013	2022-08-03	1.65	1.62	1.8%	1.98	1.98	0.0%
1321081136	2022-08-03	0.88	0.91	3.4%	1.30	1.30	0.0%
1313003245	2022-08-04	0.21	0.19	10.0%	1.42	1.42	0.0%
1321078405	2022-08-04	0.62	0.60	3.3%	0.39	0.39	0.0%
1321078449	2022-08-04	0.70	0.68	2.9%	0.13	0.13	0.0%
1321080720	2022-08-04	0.57	0.60	5.1%	0.12	0.12	0.0%
1321080734	2022-08-04	0.69	0.69	0.0%	0.15	0.15	0.0%
1321081026	2022-08-04	0.46	0.47	2.2%	2.51	2.51	0.0%
1321081026	2022-08-04	0.46	0.51	10.3%	2.62	2.62	0.0%
1321081061	2022-08-04	0.79	0.80	1.3%	1.52	1.52	0.0%
1313003176	2022-08-04	0.27	0.27	0.0%	0.87	0.87	0.0%
1313003203	2022-08-04	0.14	0.15	6.9%	1.12	1.12	0.0%
1321078444	2022-08-04	0.47	0.49	4.2%	0.31	0.31	0.0%
1313005103	2022-08-05	1.03	0.99	4.0%	0.40	0.40	0.0%
1313005186	2022-08-05	0.15	0.14	6.9%	0.98	0.98	0.0%
1313005328	2022-08-05	0.21	0.20	4.9%	0.64	0.64	0.0%
1313003123	2022-08-05	0.12	0.12	0.0%	1.28	1.28	0.0%
1313003154	2022-08-05	0.19	0.19	0.0%	1.26	1.26	0.0%
1313003022	2022-08-06	0.18	0.17	5.7%	1.01	1.01	0.0%
1313003034	2022-08-06	0.26	0.26	0.0%	1.38	1.38	0.0%
1313003187	2022-08-06	0.32	0.32	0.0%	0.43	0.43	0.0%
1313002016	2022-08-06	0.43	0.43	0.0%	1.50	1.50	0.0%
1313003132	2022-08-06	0.21	0.22	4.7%	1.00	1.00	0.0%
1313003041	2022-08-07	0.15	0.14	6.9%	0.65	0.65	0.0%
1313006025	2022-08-07	0.07	0.09	25.0%	5.42	5.42	0.0%
1313006310	2022-08-07	0.09	0.08	11.8%	3.28	3.28	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1313006314	2022-08-07	0.25	0.24	4.1%	3.36	3.36	0.0%
1313006330	2022-08-07	0.24	0.24	0.0%	1.24	1.24	0.0%
1320058107	2022-08-07	0.47	0.47	0.0%	1.48	1.48	0.0%
1320058125	2022-08-07	0.37	0.37	0.0%	1.17	1.17	0.0%
1320058057	2022-08-08	0.61	0.64	4.8%	1.18	1.18	0.0%
1320058063	2022-08-08	0.65	0.66	1.5%	0.68	0.68	0.0%
1320058064	2022-08-08	0.62	0.62	0.0%	0.43	0.43	0.0%
1320058089	2022-08-08	0.85	0.87	2.3%	1.35	1.35	0.0%
1320058140	2022-08-08	0.45	0.47	4.3%	1.71	1.71	0.0%
1432080108	2022-08-08	0.87	0.86	1.2%	0.82	0.82	0.0%
1432080175	2022-08-08	0.72	0.73	1.4%	1.03	1.03	0.0%
1313004010	2022-08-09	0.16	0.15	6.5%	1.82	1.82	0.0%
1313004060	2022-08-09	0.21	0.21	0.0%	2.00	2.00	0.0%
1313004315	2022-08-09	0.24	0.25	4.1%	0.22	0.22	0.0%
1320054070	2022-08-09	0.79	0.77	2.6%	1.35	1.35	0.0%
1320054101	2022-08-09	0.63	0.63	0.0%	1.38	1.38	0.0%
1320058160	2022-08-09	0.51	0.50	2.0%	1.54	1.54	0.0%
1320058182	2022-08-09	0.66	0.67	1.5%	1.67	1.67	0.0%
1320058185	2022-08-09	0.78	0.80	2.5%	1.52	1.52	0.0%
1320058190	2022-08-09	0.73	0.73	0.0%	1.24	1.24	0.0%
1432080167	2022-08-09	0.61	0.62	1.6%	0.65	0.65	0.0%
1432080430	2022-08-09	0.72	0.73	1.4%	0.83	0.83	0.0%
1313009409	2022-08-09	0.11	0.11	0.0%	1.50	1.50	0.0%
1313009416	2022-08-09	0.13	0.13	0.0%	2.22	2.22	0.0%
1313009429	2022-08-09	0.22	0.22	0.0%	0.65	0.65	0.0%
1320054140	2022-08-10	0.33	0.33	0.0%	0.52	0.52	0.0%
1320058041	2022-08-10	0.72	0.71	1.4%	0.30	0.30	0.0%
1432080100	2022-08-10	1.08	1.10	1.8%	0.81	0.81	0.0%
1432080155	2022-08-10	0.96	0.97	1.0%	1.47	1.47	0.0%
1313004310	2022-08-10	0.17	0.18	5.7%	0.35	0.35	0.0%
1320054061	2022-08-10	0.89	0.89	0.0%	1.72	1.72	0.0%
1320054117	2022-08-10	0.58	0.57	1.7%	1.36	1.36	0.0%
1320054137	2022-08-10	0.69	0.69	0.0%	1.47	1.47	0.0%
1320054124	2022-08-11	0.71	0.73	2.8%	1.49	1.49	0.0%
1320054124	2022-08-11	0.71	0.71	0.0%	1.52	1.52	0.0%
1320054125	2022-08-11	0.68	0.68	0.0%	1.59	1.59	0.0%
1313004019	2022-08-11	0.15	0.15	0.0%	1.44	1.44	0.0%
1313004028	2022-08-11	0.13	0.13	0.0%	1.87	1.87	0.0%
1320054077	2022-08-11	0.39	0.39	0.0%	1.24	1.24	0.0%
1313007321	2022-08-11	0.17	0.17	0.0%	3.60	3.60	0.0%
1313007322	2022-08-11	0.13	0.12	8.0%	3.26	3.26	0.0%
1320056044	2022-08-12	0.33	0.34	3.0%	1.37	1.37	0.0%
1320056405	2022-08-12	0.71	0.72	1.4%	1.62	1.62	0.0%
1320056421	2022-08-12	0.50	0.49	2.0%	1.22	1.22	0.0%
1320056433	2022-08-12	0.15	0.14	6.9%	0.32	0.32	0.0%
1313007312	2022-08-13	0.25	0.24	4.1%	3.59	3.59	0.0%
1320056129	2022-08-13	0.37	0.37	0.0%	2.00	2.00	0.0%
1320056172	2022-08-13	0.45	0.44	2.2%	1.19	1.19	0.0%
1320056046	2022-08-13	1.04	1.05	1.0%	1.13	1.13	0.0%
1320056617	2022-08-13	0.20	0.20	0.0%	0.33	0.33	0.0%
1320056617	2022-08-13	0.20	0.29	36.7%	0.31	0.31	0.0%
1320056674	2022-08-13	0.66	0.67	1.5%	1.25	1.25	0.0%
1320056823	2022-08-13	0.68	0.67	1.5%	1.81	1.81	0.0%
1313007037	2022-08-14	0.16	0.17	6.1%	2.56	2.56	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1313009007	2022-08-14	0.18	0.18	0.0%	1.19	1.19	0.0%
1313009019	2022-08-14	0.54	0.54	0.0%	0.61	0.61	0.0%
1313009023	2022-08-14	0.44	0.44	0.0%	1.60	1.60	0.0%
1313009063	2022-08-14	0.23	0.23	0.0%	1.64	1.64	0.0%
1313009083	2022-08-14	0.17	0.17	0.0%	1.88	1.88	0.0%
1320056727	2022-08-14	0.43	0.43	0.0%	1.02	1.02	0.0%
1320056789	2022-08-14	0.67	0.65	3.0%	1.53	1.53	0.0%
1320056814	2022-08-14	0.63	0.62	1.6%	2.06	2.06	0.0%
1313007134	2022-08-14	0.17	0.17	0.0%	0.25	0.25	0.0%
1320056707	2022-08-14	0.59	0.58	1.7%	1.49	1.49	0.0%
1320056713	2022-08-14	0.10	0.10	0.0%	0.12	0.12	0.0%
1320056780	2022-08-14	0.53	0.53	0.0%	1.89	1.89	0.0%
1313007060	2022-08-15	0.14	0.14	0.0%	2.21	2.21	0.0%
1313007060	2022-08-15	0.14	0.17	19.4%	2.04	2.04	0.0%
1313007137	2022-08-15	0.20	0.21	4.9%	0.11	0.11	0.0%
1320056656	2022-08-15	0.61	0.62	1.6%	1.43	1.43	0.0%
1313007162	2022-08-15	0.19	0.18	5.4%	2.17	2.17	0.0%
1320056650	2022-08-15	0.78	0.79	1.3%	2.05	2.05	0.0%
1320056650	2022-08-15	0.78	0.88	12.0%	4.14	4.14	0.0%
1320056704	2022-08-15	0.65	0.67	3.0%	0.99	0.99	0.0%
1320055018	2022-08-16	0.73	0.70	4.2%	1.10	1.10	0.0%
1320055091	2022-08-16	0.33	0.33	0.0%	2.02	2.02	0.0%
1320055023	2022-08-16	0.66	0.67	1.5%	1.55	1.55	0.0%
1313007146	2022-08-17	0.18	0.18	0.0%	1.82	1.82	0.0%
1320055136	2022-08-17	0.51	0.47	8.2%	1.81	1.81	0.0%
1313007107	2022-08-17	0.18	0.18	0.0%	0.15	0.15	0.0%
1320055039	2022-08-17	0.66	0.67	1.5%	2.50	2.50	0.0%
1320057121	2022-08-17	0.56	0.55	1.8%	1.57	1.57	0.0%
1313008223	2022-08-18	0.10	0.11	9.5%	0.07	0.07	0.0%
1320055069	2022-08-18	0.36	0.36	0.0%	1.57	1.57	0.0%
1320055114	2022-08-18	0.48	0.47	2.1%	1.70	1.70	0.0%
1320057166	2022-08-18	0.68	0.68	0.0%	1.67	1.67	0.0%
1320057170	2022-08-18	0.50	0.50	0.0%	1.27	1.27	0.0%
1320057342	2022-08-18	0.68	0.68	0.0%	1.75	1.75	0.0%
1320057113	2022-08-18	0.46	0.47	2.2%	2.11	2.11	0.0%
1313008210	2022-08-18	0.19	0.19	0.0%	1.97	1.97	0.0%
1313008608	2022-08-18	0.22	0.22	0.0%	1.63	1.63	0.0%
1320055027	2022-08-18	0.39	0.40	2.5%	1.41	1.41	0.0%
1320055127	2022-08-18	0.62	0.60	3.3%	2.24	2.24	0.0%
1320057047	2022-08-18	0.29	0.28	3.5%	1.58	1.58	0.0%
1320057054	2022-08-18	0.29	0.29	0.0%	0.14	0.14	0.0%
1320057060	2022-08-18	0.47	0.47	0.0%	2.56	2.56	0.0%
1320057130	2022-08-18	0.39	0.39	0.0%	2.61	2.61	0.0%
1320057180	2022-08-18	0.77	0.77	0.0%	1.84	1.84	0.0%
1320057321	2022-08-18	0.63	0.63	0.0%	1.31	1.31	0.0%
1320057334	2022-08-18	0.70	0.72	2.8%	1.22	1.22	0.0%
1320057357	2022-08-18	0.63	0.66	4.7%	1.48	1.48	0.0%
1313008165	2022-08-19	0.40	0.40	0.0%	1.39	1.39	0.0%
1320057070	2022-08-19	0.50	0.51	2.0%	1.04	1.04	0.0%
1320057137	2022-08-19	0.54	0.56	3.6%	1.79	1.79	0.0%
1320057137	2022-08-19	0.54	0.54	0.0%	1.62	1.62	0.0%
1313008194	2022-08-19	0.32	0.32	0.0%	1.78	1.78	0.0%
1320057140	2022-08-20	0.75	0.76	1.3%	2.69	2.69	0.0%
1313008083	2022-08-20	0.20	0.20	0.0%	2.38	2.38	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1313008083	2022-08-20	0.20	0.19	5.1%	2.69	2.69	0.0%
1313008018	2022-08-21	0.37	0.38	2.7%	2.42	2.42	0.0%
1320057011	2022-08-21	0.38	0.38	0.0%	1.46	1.46	0.0%
1320059016	2022-08-21	0.75	0.76	1.3%	1.08	1.08	0.0%
1320059017	2022-08-21	0.77	0.77	0.0%	1.60	1.60	0.0%
1320059115	2022-08-21	0.76	0.76	0.0%	0.68	0.68	0.0%
1320059037	2022-08-21	0.71	0.71	0.0%	0.94	0.94	0.0%
1320059079	2022-08-21	0.60	0.60	0.0%	1.07	1.07	0.0%
1320059097	2022-08-21	1.10	1.10	0.0%	2.83	2.83	0.0%
1320059167	2022-08-21	0.48	0.48	0.0%	0.12	0.12	0.0%
1320059013	2022-08-22	0.60	0.61	1.7%	0.81	0.81	0.0%
1320059054	2022-08-22	0.82	0.81	1.2%	1.65	1.65	0.0%
1320059089	2022-08-22	0.55	0.56	1.8%	0.10	0.10	0.0%
1320060029	2022-08-22	0.88	0.89	1.1%	0.26	0.26	0.0%
1320060043	2022-08-22	0.91	0.90	1.1%	0.31	0.31	0.0%
1320060153	2022-08-22	0.71	0.70	1.4%	1.52	1.52	0.0%
1320059074	2022-08-23	0.63	0.65	3.1%	3.52	3.52	0.0%
1320059140	2022-08-24	0.78	0.79	1.3%	0.08	0.08	0.0%
1320059191	2022-08-24	0.89	0.88	1.1%	1.57	1.57	0.0%
1320061324	2022-08-24	1.09	1.17	7.1%	0.95	0.95	0.0%
1320061324	2022-08-24	1.09	1.10	0.9%	0.93	0.93	0.0%
1320061362	2022-08-24	0.71	0.67	5.8%	0.63	0.63	0.0%
1320061382	2022-08-24	0.45	0.46	2.2%	0.27	0.27	0.0%
1320061385	2022-08-24	0.38	0.39	2.6%	0.38	0.38	0.0%
1320062892	2022-08-24	0.49	0.49	0.0%	0.43	0.43	0.0%
1320062924	2022-08-24	1.26	1.27	0.8%	0.61	0.61	0.0%
1320059855	2022-08-25	0.95	0.95	0.0%	0.09	0.09	0.0%
1320059805	2022-08-25	0.32	0.38	17.1%	1.41	1.41	0.0%
1320060105	2022-08-25	0.70	0.68	2.9%	1.52	1.52	0.0%
1320060145	2022-08-25	0.49	0.47	4.2%	1.57	1.57	0.0%
1320061345	2022-08-25	0.63	0.63	0.0%	0.45	0.45	0.0%
1320059827	2022-08-26	1.00	0.98	2.0%	0.73	0.73	0.0%
1320060080	2022-08-26	0.79	0.79	0.0%	0.64	0.64	0.0%
1320062838	2022-08-26	1.13	1.16	2.6%	0.38	0.38	0.0%
1320062868	2022-08-26	0.51	0.53	3.8%	0.52	0.52	0.0%
1320059832	2022-08-26	0.63	0.62	1.6%	0.93	0.93	0.0%
1320059847	2022-08-26	0.74	0.72	2.7%	0.38	0.38	0.0%
1320062852	2022-08-26	0.55	0.56	1.8%	0.45	0.45	0.0%
1320060003	2022-08-27	0.67	0.65	3.0%	0.61	0.61	0.0%
1320060205	2022-08-27	0.57	0.57	0.0%	0.99	0.99	0.0%
1432026052	2022-08-27	0.70	0.71	1.4%	1.42	1.42	0.0%
1320060078	2022-08-27	0.94	0.94	0.0%	1.19	1.19	0.0%
1320060166	2022-08-27	0.68	0.67	1.5%	1.18	1.18	0.0%
1320060192	2022-08-27	0.56	0.55	1.8%	1.26	1.26	0.0%
1320060192	2022-08-27	0.56	0.56	0.0%	1.24	1.24	0.0%
1320060541	2022-08-27	0.76	0.72	5.4%	0.19	0.19	0.0%
1320060547	2022-08-27	0.78	0.79	1.3%	1.15	1.15	0.0%
1432026003	2022-08-27	0.55	0.55	0.0%	1.46	1.46	0.0%
1432026003	2022-08-27	0.55	0.61	10.3%	1.50	1.50	0.0%
1432026063	2022-08-27	0.47	0.46	2.2%	1.67	1.67	0.0%
1432026104	2022-08-27	0.49	0.51	4.0%	1.04	1.04	0.0%
1320060518	2022-08-28	1.39	1.39	0.0%	4.26	4.26	0.0%
1320060501	2022-08-28	0.04	0.04	0.0%	0.07	0.07	0.0%
1320062917	2022-08-28	0.42	0.41	2.4%	0.23	0.23	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1432026088	2022-08-28	0.69	0.69	0.0%	1.60	1.60	0.0%
1320062875	2022-08-29	0.61	0.60	1.7%	0.56	0.56	0.0%
1432026137	2022-08-29	0.57	0.59	3.4%	1.66	1.66	0.0%
1432026153	2022-08-29	0.36	0.37	2.7%	2.03	2.03	0.0%
1320061636	2022-08-29	1.04	1.03	1.0%	1.12	1.12	0.0%
1432026120	2022-08-29	0.77	0.77	0.0%	1.45	1.45	0.0%
1320062415	2022-08-30	0.56	0.56	0.0%	0.08	0.08	0.0%
1432027220	2022-08-30	0.82	0.82	0.0%	2.51	2.51	0.0%
1432027245	2022-08-30	0.53	0.54	1.9%	2.21	2.21	0.0%
1320062445	2022-08-30	0.48	0.47	2.1%	0.38	0.38	0.0%
1432027259	2022-08-30	0.31	0.32	3.2%	1.73	1.73	0.0%
1432027265	2022-08-30	0.63	0.63	0.0%	1.96	1.96	0.0%
1320060046	2022-08-31	0.89	0.88	1.1%	0.54	0.54	0.0%
1320060046	2022-08-31	0.89	0.82	8.2%	0.40	0.40	0.0%
1320062427	2022-08-31	1.09	1.09	0.0%	0.08	0.08	0.0%
1432027272	2022-08-31	0.66	0.66	0.0%	1.46	1.46	0.0%
1320060076	2022-09-01	0.72	0.70	2.8%	1.08	1.08	0.0%
1432027305	2022-09-01	0.63	0.60	4.9%	1.07	1.07	0.0%
1319060146	2022-09-01	0.78	0.77	1.3%	0.82	0.82	0.0%
1319060268	2022-09-01	0.46	0.46	0.0%	2.29	2.29	0.0%
1319060363	2022-09-01	0.65	0.66	1.5%	1.88	1.88	0.0%
1432027328	2022-09-01	0.62	0.63	1.6%	1.34	1.34	0.0%
1432027343	2022-09-01	0.67	0.68	1.5%	1.69	1.69	0.0%
1313010039	2022-09-02	0.16	0.14	13.3%	1.06	1.06	0.0%
1319060214	2022-09-02	0.73	0.70	4.2%	1.86	1.86	0.0%
1319060274	2022-09-02	0.37	0.36	2.7%	1.70	1.70	0.0%
1319060274	2022-09-02	0.37	0.38	2.7%	1.83	1.83	0.0%
1313010023	2022-09-03	0.42	0.42	0.0%	0.77	0.77	0.0%
1319060054	2022-09-03	0.56	0.56	0.0%	1.64	1.64	0.0%
1319060150	2022-09-03	0.28	0.28	0.0%	1.75	1.75	0.0%
1319060309	2022-09-03	0.47	0.47	0.0%	2.61	2.61	0.0%
1319060339	2022-09-03	0.15	0.15	0.0%	4.75	4.75	0.0%
1431015045	2022-09-03	0.65	0.67	3.0%	1.04	1.04	0.0%
1431015096	2022-09-03	1.02	1.01	1.0%	2.44	2.44	0.0%
1319060025	2022-09-03	0.65	0.66	1.5%	1.76	1.76	0.0%
1319060105	2022-09-03	0.45	0.44	2.2%	1.22	1.22	0.0%
1319060235	2022-09-03	0.43	0.44	2.3%	2.21	2.21	0.0%
1319060277	2022-09-03	0.44	0.43	2.3%	1.83	1.83	0.0%
1319060277	2022-09-03	0.44	0.42	4.7%	2.03	2.03	0.0%
1431015048	2022-09-03	0.43	0.43	0.0%	1.17	1.17	0.0%
1319060184	2022-09-04	0.66	0.68	3.0%	1.73	1.73	0.0%
1319060222	2022-09-04	0.66	0.63	4.7%	1.64	1.64	0.0%
1319060224	2022-09-04	0.38	0.37	2.7%	1.29	1.29	0.0%
1319060290	2022-09-04	0.42	0.43	2.4%	1.37	1.37	0.0%
1431015092	2022-09-04	0.46	0.46	0.0%	1.06	1.06	0.0%
1319060013	2022-09-04	0.60	0.60	0.0%	2.10	2.10	0.0%
1319060042	2022-09-04	0.22	0.22	0.0%	0.75	0.75	0.0%
1319060125	2022-09-04	0.76	0.76	0.0%	2.34	2.34	0.0%
1319060183	2022-09-04	0.96	0.96	0.0%	2.07	2.07	0.0%
1319060033	2022-09-05	0.37	0.35	5.6%	1.49	1.49	0.0%
1319060318	2022-09-05	0.73	0.74	1.4%	3.09	3.09	0.0%
1431014125	2022-09-05	1.34	1.33	0.7%	3.10	3.10	0.0%
1431014104	2022-09-05	0.22	0.22	0.0%	1.16	1.16	0.0%
1431014121	2022-09-05	0.93	0.92	1.1%	3.35	3.35	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431014138	2022-09-05	0.32	0.33	3.1%	1.21	1.21	0.0%
1317021110	2022-09-05	0.37	0.38	2.7%	2.28	2.28	0.0%
1317021071	2022-09-06	0.29	0.28	3.5%	2.06	2.06	0.0%
1317021100	2022-09-06	0.26	0.26	0.0%	1.94	1.94	0.0%
1317021100	2022-09-06	0.26	0.26	0.0%	1.88	1.88	0.0%
1319061304	2022-09-06	0.29	0.29	0.0%	1.64	1.64	0.0%
1431014028	2022-09-06	0.65	0.64	1.6%	3.62	3.62	0.0%
1431014038	2022-09-06	0.27	0.28	3.6%	7.02	7.02	0.0%
1431014048	2022-09-06	0.25	0.25	0.0%	2.51	2.51	0.0%
1431014112	2022-09-06	1.00	1.01	1.0%	3.58	3.58	0.0%
1431014137	2022-09-06	0.26	0.25	3.9%	1.36	1.36	0.0%
1319061322	2022-09-06	0.06	0.06	0.0%	0.22	0.22	0.0%
1319062448	2022-09-06	0.31	0.32	3.2%	0.31	0.31	0.0%
1431014130	2022-09-06	0.59	0.58	1.7%	1.78	1.78	0.0%
1317022021	2022-09-07	0.42	0.41	2.4%	1.91	1.91	0.0%
1317022079	2022-09-07	0.48	0.51	6.1%	1.86	1.86	0.0%
1319062423	2022-09-07	0.51	0.52	1.9%	0.82	0.82	0.0%
1319061025	2022-09-07	0.29	0.29	0.0%	3.51	3.51	0.0%
1319062047	2022-09-07	0.70	0.70	0.0%	1.57	1.57	0.0%
1317022081	2022-09-08	0.52	0.51	1.9%	1.89	1.89	0.0%
1317022028	2022-09-08	0.46	0.45	2.2%	2.31	2.31	0.0%
1317022092	2022-09-08	0.48	0.47	2.1%	1.68	1.68	0.0%
1319061011	2022-09-08	0.11	0.10	9.5%	0.19	0.19	0.0%
1319061036	2022-09-08	0.63	0.64	1.6%	0.60	0.60	0.0%
1319061092	2022-09-08	0.07	0.07	0.0%	0.10	0.10	0.0%
1319062011	2022-09-09	0.76	0.73	4.0%	2.46	2.46	0.0%
1319061103	2022-09-09	0.22	0.22	0.0%	1.61	1.61	0.0%
1431016404	2022-09-09	0.62	0.57	8.4%	0.71	0.71	0.0%
1431016327	2022-09-09	0.46	0.49	6.3%	1.30	1.30	0.0%
1431016353	2022-09-09	0.50	0.52	3.9%	0.86	0.86	0.0%
1431016385	2022-09-09	0.46	0.46	0.0%	1.18	1.18	0.0%
1431016395	2022-09-09	0.40	0.40	0.0%	1.11	1.11	0.0%
1431016011	2022-09-10	1.14	1.12	1.8%	1.52	1.52	0.0%
1317022017	2022-09-10	0.63	0.62	1.6%	1.92	1.92	0.0%
1317022150	2022-09-10	0.95	0.95	0.0%	1.89	1.89	0.0%
1431016139	2022-09-10	0.50	0.51	2.0%	2.20	2.20	0.0%
1431016182	2022-09-10	0.47	0.48	2.1%	2.27	2.27	0.0%
1317022117	2022-09-11	0.65	0.65	0.0%	1.95	1.95	0.0%
1431016042	2022-09-11	1.10	1.06	3.7%	0.58	0.58	0.0%
1431016202	2022-09-11	0.63	0.63	0.0%	1.73	1.73	0.0%
1317022144	2022-09-11	0.64	0.64	0.0%	2.28	2.28	0.0%
1317022158	2022-09-11	0.39	0.39	0.0%	1.77	1.77	0.0%
1319063090	2022-09-11	0.44	0.44	0.0%	1.18	1.18	0.0%
1431017049	2022-09-11	0.28	0.32	13.3%	1.30	1.30	0.0%
1431017070	2022-09-11	0.11	0.13	16.7%	1.31	1.31	0.0%
1431017070	2022-09-11	0.11	0.09	20.0%	1.35	1.35	0.0%
1431017075	2022-09-12	0.10	0.10	0.0%	2.88	2.88	0.0%
1319063119	2022-09-13	0.40	0.40	0.0%	1.43	1.43	0.0%
1319063129	2022-09-13	0.44	0.44	0.0%	0.26	0.26	0.0%
1319063141	2022-09-13	0.55	0.56	1.8%	1.33	1.33	0.0%
1319063153	2022-09-13	0.39	0.38	2.6%	0.29	0.29	0.0%
1319063125	2022-09-13	0.52	0.53	1.9%	1.33	1.33	0.0%
1319063165	2022-09-13	0.73	0.72	1.4%	0.73	0.73	0.0%
1319063177	2022-09-13	0.47	0.47	0.0%	2.93	2.93	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1319063409	2022-09-13	0.54	0.54	0.0%	0.86	0.86	0.0%
1317023005	2022-09-14	0.27	0.28	3.6%	2.92	2.92	0.0%
1317023057	2022-09-14	0.19	0.18	5.4%	2.01	2.01	0.0%
1319063193	2022-09-14	0.56	0.57	1.8%	0.77	0.77	0.0%
1319063239	2022-09-14	0.89	0.90	1.1%	0.12	0.12	0.0%
1319064430	2022-09-14	0.42	0.45	6.9%	1.20	1.20	0.0%
1317023059	2022-09-14	0.14	0.14	0.0%	2.05	2.05	0.0%
1319063232	2022-09-14	0.81	0.84	3.6%	1.50	1.50	0.0%
1319063417	2022-09-14	0.34	0.35	2.9%	2.47	2.47	0.0%
1319064121	2022-09-14	0.52	0.53	1.9%	1.92	1.92	0.0%
1319064457	2022-09-14	0.40	0.39	2.5%	1.11	1.11	0.0%
1317023028	2022-09-15	0.36	0.36	0.0%	1.31	1.31	0.0%
1317023118	2022-09-15	0.23	0.22	4.4%	1.27	1.27	0.0%
1319064080	2022-09-15	0.21	0.21	0.0%	1.87	1.87	0.0%
1319064126	2022-09-15	0.71	0.71	0.0%	1.31	1.31	0.0%
1317023123	2022-09-16	0.34	0.35	2.9%	1.11	1.11	0.0%
1317023148	2022-09-16	0.46	0.46	0.0%	1.88	1.88	0.0%
1319064046	2022-09-16	0.36	0.37	2.7%	2.22	2.22	0.0%
1319064431	2022-09-16	0.43	0.42	2.4%	1.30	1.30	0.0%
1319064026	2022-09-16	0.25	0.23	8.3%	2.07	2.07	0.0%
1319064145	2022-09-16	0.51	0.54	5.7%	1.23	1.23	0.0%
1319064020	2022-09-17	0.44	0.44	0.0%	1.86	1.86	0.0%
1319064039	2022-09-17	0.50	0.50	0.0%	2.00	2.00	0.0%
1319064054	2022-09-17	0.33	0.33	0.0%	1.82	1.82	0.0%
1319064114	2022-09-17	1.03	1.03	0.0%	1.61	1.61	0.0%
1319067601	2022-09-17	0.38	0.37	2.7%	1.91	1.91	0.0%
1319067807	2022-09-17	0.43	0.43	0.0%	1.32	1.32	0.0%
1319067811	2022-09-17	0.41	0.40	2.5%	1.11	1.11	0.0%
1319067824	2022-09-17	0.55	0.46	17.8%	1.23	1.23	0.0%
1319067831	2022-09-17	0.37	0.37	0.0%	0.95	0.95	0.0%
1319067659	2022-09-18	0.38	0.38	0.0%	0.68	0.68	0.0%
1319067675	2022-09-18	0.35	0.35	0.0%	1.60	1.60	0.0%
1319067670	2022-09-19	0.51	0.51	0.0%	1.70	1.70	0.0%
1319068929	2022-09-20	0.91	0.92	1.1%	1.16	1.16	0.0%
1319068956	2022-09-21	1.35	1.33	1.5%	2.05	2.05	0.0%
1432019013	2022-09-23	0.92	0.94	2.2%	6.74	6.74	0.0%
1432019033	2022-09-23	0.60	0.62	3.3%	2.36	2.36	0.0%
1432019070	2022-09-23	1.49	1.49	0.0%	1.78	1.78	0.0%
1432019106	2022-09-23	0.26	0.27	3.8%	4.39	4.39	0.0%
1432019165	2022-09-24	0.69	0.68	1.5%	2.14	2.14	0.0%
1432019134	2022-09-24	0.92	0.91	1.1%	4.14	4.14	0.0%
1432019154	2022-09-24	1.67	1.64	1.8%	5.85	5.85	0.0%
1432019186	2022-09-24	1.91	1.15	49.7%	3.22	3.22	0.0%
1432019215	2022-09-24	0.72	0.74	2.7%	3.91	3.91	0.0%
1432019141	2022-09-25	0.91	0.91	0.0%	3.92	3.92	0.0%
1432019202	2022-09-25	1.26	1.24	1.6%	1.92	1.92	0.0%
1432019241	2022-09-25	1.39	1.47	5.6%	5.77	5.77	0.0%
1432019276	2022-09-25	2.22	2.19	1.4%	6.74	6.74	0.0%
1319065140	2022-09-25	0.85	0.85	0.0%	0.38	0.38	0.0%
1432019117	2022-09-25	1.36	1.34	1.5%	2.23	2.23	0.0%
1432019129	2022-09-25	0.80	0.77	3.8%	6.12	6.12	0.0%
1319065032	2022-09-26	0.51	0.50	2.0%	0.43	0.43	0.0%
1319065116	2022-09-26	0.64	0.65	1.6%	0.64	0.64	0.0%
1319065138	2022-09-26	0.69	0.69	0.0%	0.31	0.31	0.0%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1319065111	2022-09-27	0.58	0.60	3.4%	0.49	0.49	0.0%
1319065178	2022-09-27	0.63	0.64	1.6%	0.27	0.27	0.0%
1319071156	2022-09-27	0.61	0.60	1.7%	1.76	1.76	0.0%
1319071156	2022-09-27	0.61	0.74	19.3%	1.83	1.83	0.0%
1319065096	2022-09-27	0.69	0.69	0.0%	0.66	0.66	0.0%
1319065175	2022-09-27	0.78	0.84	7.4%	0.74	0.74	0.0%
1319069048	2022-09-28	0.42	0.43	2.4%	1.57	1.57	0.0%
1319069055	2022-09-28	1.20	1.20	0.0%	0.10	0.10	0.0%
1319069077	2022-09-28	0.78	0.78	0.0%	0.12	0.12	0.0%
1319071011	2022-09-28	1.32	1.33	0.8%	1.69	1.69	0.0%
1319071014	2022-09-28	1.14	1.18	3.4%	1.53	1.53	0.0%
1319071046	2022-09-28	0.86	0.86	0.0%	2.29	2.29	0.0%
1319069007	2022-09-28	0.95	0.94	1.1%	0.54	0.54	0.0%
1319069037	2022-09-28	0.50	0.50	0.0%	1.54	1.54	0.0%
1319071027	2022-09-28	0.72	0.71	1.4%	1.31	1.31	0.0%
1319065043	2022-09-29	0.48	0.47	2.1%	0.34	0.34	0.0%
1319065081	2022-09-29	0.39	0.38	2.6%	0.49	0.49	0.0%
1319065301	2022-09-29	0.77	0.78	1.3%	0.60	0.60	0.0%
1319065363	2022-09-29	0.92	0.92	0.0%	0.27	0.27	0.0%
1319070124	2022-09-29	0.50	0.50	0.0%	0.62	0.62	0.0%
1319065107	2022-09-29	0.70	0.70	0.0%	0.49	0.49	0.0%
1319065341	2022-09-29	0.58	0.58	0.0%	0.61	0.61	0.0%
1319065364	2022-09-29	0.63	0.63	0.0%	0.83	0.83	0.0%
1319066020	2022-09-29	0.51	0.52	1.9%	0.07	0.07	0.0%
1319066024	2022-09-29	2.11	2.17	2.8%	0.62	0.62	0.0%
1319066324	2022-09-29	0.83	0.82	1.2%	0.78	0.78	0.0%
1319070141	2022-09-29	0.54	0.53	1.9%	0.27	0.27	0.0%
1319070148	2022-09-29	0.78	0.79	1.3%	1.26	1.26	0.0%
1432019288	2022-09-25	1.61	1.67	3.7%	1.87	1.94	3.7%
1319071033	2022-09-29	1.21	1.21	0.0%	0.95	0.99	4.1%
1319070102	2022-09-30	0.79	0.77	2.6%	1.71	1.92	11.6%
1319070102	2022-09-30	0.79	0.78	1.3%	1.71	1.92	11.6%
1319066027	2022-09-30	0.65	0.66	1.5%	0.80	0.79	1.3%
1319066033	2022-09-30	0.54	0.56	3.6%	0.30	0.30	0.0%
1312002040	2022-10-01	0.15	0.15	0.0%	2.46	2.47	0.4%
1312002119	2022-10-01	0.18	0.18	0.0%	2.17	2.21	1.8%
1319066144	2022-10-01	1.17	1.19	1.7%	2.42	2.46	1.6%
1319070075	2022-10-01	0.52	0.55	5.6%	0.06	0.06	0.0%
1319066136	2022-10-01	0.75	0.76	1.3%	0.74	0.73	1.4%
1319066096	2022-10-01	0.63	0.63	0.0%	0.10	0.10	0.0%
1319066113	2022-10-01	0.90	0.90	0.0%	0.19	0.20	5.1%
1312002038	2022-10-02	0.22	0.22	0.0%	2.17	2.17	0.0%
1319066151	2022-10-02	0.15	0.15	0.0%	1.09	1.05	3.7%
1319070501	2022-10-03	0.58	0.56	3.5%	0.25	0.23	8.3%
1319070506	2022-10-04	0.87	0.87	0.0%	1.45	1.44	0.7%
1318002182	2022-10-04	0.12	0.12	0.0%	0.36	0.37	2.7%
1318002365	2022-10-04	0.25	0.25	0.0%	8.95	8.79	1.8%
1318002381	2022-10-04	0.16	0.16	0.0%	1.24	1.31	5.5%
1312003421	2022-10-06	0.28	0.28	0.0%	1.99	1.94	2.5%
1312003461	2022-10-06	0.18	0.19	5.4%	0.08	0.08	0.0%
1312003431	2022-10-06	0.25	0.25	0.0%	1.72	1.69	1.8%
1312003450	2022-10-06	0.22	0.23	4.4%	2.40	2.33	3.0%
1312003450	2022-10-06	0.22	0.17	25.6%	2.40	2.33	3.0%
1312003161	2022-10-07	0.12	0.11	8.7%	6.59	6.53	0.9%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431022138	2022-10-08	0.44	0.45	2.2%	1.96	1.84	6.3%
1312004141	2022-10-08	0.58	0.57	1.7%	1.57	1.69	7.4%
1431022047	2022-10-08	1.09	1.08	0.9%	1.47	1.53	4.0%
1431022075	2022-10-08	1.05	1.07	1.9%	1.36	1.31	3.7%
1432028281	2022-10-10	1.15	1.16	0.9%	1.24	1.25	0.8%
1432028281	2022-10-10	1.15	1.08	6.3%	1.24	1.25	0.8%
1432028300	2022-10-10	1.13	1.12	0.9%	1.19	1.21	1.7%
1432028272	2022-10-10	0.96	0.95	1.0%	1.64	1.62	1.2%
1432028115	2022-10-11	0.84	0.83	1.2%	1.41	1.35	4.3%
1432028216	2022-10-11	1.00	1.01	1.0%	1.57	1.57	0.0%
1318004125	2022-10-11	0.46	0.44	4.4%	2.08	2.07	0.5%
1312003405	2022-10-11	0.14	0.14	0.0%	5.79	5.77	0.3%
1318004167	2022-10-11	0.55	0.56	1.8%	1.61	1.62	0.6%
1432028205	2022-10-12	1.01	1.02	1.0%	1.51	1.54	2.0%
1318004032	2022-10-12	0.23	0.23	0.0%	1.61	1.66	3.1%
1318004096	2022-10-12	0.45	0.44	2.2%	1.32	1.35	2.2%
1318004008	2022-10-13	0.58	0.57	1.7%	0.69	0.69	0.0%
1312004081	2022-10-14	0.14	0.15	6.9%	3.29	3.32	0.9%
1312004108	2022-10-15	0.21	0.21	0.0%	1.98	1.99	0.5%
1318005091	2022-10-16	0.29	0.29	0.0%	2.88	2.80	2.8%
1318006134	2022-10-16	0.66	0.63	4.7%	1.56	1.58	1.3%
1318006263	2022-10-16	0.26	0.26	0.0%	1.21	1.21	0.0%
1318005005	2022-10-16	0.67	0.66	1.5%	1.31	1.29	1.5%
1318005010	2022-10-16	0.62	0.62	0.0%	2.98	2.98	0.0%
1318006304	2022-10-16	0.44	0.44	0.0%	1.21	1.25	3.3%
1318005066	2022-10-17	0.08	0.08	0.0%	0.11	0.11	0.0%
1318005066	2022-10-17	0.08	0.08	0.0%	0.11	0.11	0.0%
1318005057	2022-10-17	0.23	0.23	0.0%	4.70	4.72	0.4%
1318005117	2022-10-17	0.52	0.50	3.9%	2.69	2.72	1.1%
1318005020	2022-10-17	0.11	0.11	0.0%	0.12	0.13	8.0%
1318005146	2022-10-17	0.45	0.45	0.0%	1.19	1.19	0.0%
1318005146	2022-10-17	0.45	0.31	36.8%	1.19	1.19	0.0%
1318005173	2022-10-17	0.18	0.18	0.0%	0.78	0.80	2.5%
1318005131	2022-10-17	0.38	0.38	0.0%	4.56	4.59	0.7%
1318005167	2022-10-18	0.25	0.25	0.0%	0.24	0.25	4.1%
1318005153	2022-10-18	0.71	0.71	0.0%	1.60	1.60	0.0%
1312005032	2022-10-19	0.26	0.26	0.0%	1.29	1.30	0.8%
1312005030	2022-10-21	0.84	0.85	1.2%	0.76	0.77	1.3%
1431023098	2022-10-23	1.43	1.43	0.0%	1.76	1.77	0.6%
1318006003	2022-10-24	0.56	0.55	1.8%	0.96	0.98	2.1%
1318006397	2022-10-24	0.21	0.21	0.0%	0.44	0.47	6.6%
1318007624	2022-10-24	0.71	0.71	0.0%	0.63	0.63	0.0%
1431023377	2022-10-24	2.20	2.23	1.4%	1.59	1.60	0.6%
1318012223	2022-10-25	0.20	0.22	9.5%	0.88	0.87	1.1%
13180120244	2022-10-25	0.16	0.16	0.0%	1.01	0.99	2.0%
13180120207	2022-10-26	0.22	0.22	0.0%	1.30	1.32	1.5%
1318003048	2022-10-26	0.41	0.41	0.0%	1.19	1.29	8.1%
13180120114	2022-10-26	0.21	0.21	0.0%	2.65	3.00	12.4%
1318003140	2022-10-26	0.26	0.27	3.8%	0.95	0.93	2.1%
1318003009	2022-10-27	0.86	0.86	0.0%	1.66	1.65	0.6%
1318003095	2022-10-27	0.78	0.79	1.3%	0.58	0.57	1.7%
1318003149	2022-10-27	0.56	0.56	0.0%	1.77	1.77	0.0%
1430001091	2022-10-28	1.36	1.35	0.7%	3.49	3.55	1.7%
13180120101	2022-10-28	0.26	0.26	0.0%	1.32	1.29	2.3%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
13180120146	2022-10-28	0.20	0.22	9.5%	1.00	1.08	7.7%
13180120094	2022-10-28	0.55	0.55	0.0%	1.35	1.32	2.2%
13180120173	2022-10-28	0.28	0.28	0.0%	0.90	0.93	3.3%
13180120013	2022-10-28	0.86	0.85	1.2%	1.32	1.31	0.8%
13180120077	2022-10-29	0.44	0.43	2.3%	1.69	1.66	1.8%
13180120019	2022-10-29	0.44	0.43	2.3%	2.05	2.08	1.5%
1430001094	2022-10-30	1.04	1.06	1.9%	3.56	3.57	0.3%
13180120009	2022-10-30	0.72	0.73	1.4%	1.92	1.94	1.0%
13180120046	2022-10-30	0.27	0.29	7.1%	1.53	1.44	6.1%
13180120001	2022-10-30	0.30	0.29	3.4%	2.41	2.47	2.5%
1318006720	2022-10-31	0.77	0.75	2.6%	0.28	0.27	3.6%
1430001019	2022-10-31	1.37	1.40	2.2%	3.40	3.45	1.5%
1430001114	2022-10-31	0.52	0.53	1.9%	1.18	1.11	6.1%
1430001121	2022-10-31	1.11	1.12	0.9%	1.07	1.04	2.8%
1430001122	2022-10-31	0.80	0.81	1.2%	1.34	1.35	0.7%
1430001168	2022-11-01	1.47	1.47	0.0%	1.91	1.85	3.2%
1430001050	2022-11-01	1.20	1.20	0.0%	1.45	1.48	2.0%
1431027149	2022-11-01	1.04	1.02	1.9%	1.76	1.77	0.6%
1431027149	2022-11-01	1.04	1.14	9.2%	1.76	1.77	0.6%
1318011005	2022-11-02	0.34	0.34	0.0%	1.69	1.67	1.2%
1318011025	2022-11-02	0.29	0.32	9.8%	0.92	0.91	1.1%
1431027068	2022-11-02	1.13	1.15	1.8%	2.14	2.12	0.9%
1431027085	2022-11-02	1.12	1.12	0.0%	1.84	1.80	2.2%
1431027059	2022-11-03	0.78	0.78	0.0%	1.93	1.85	4.2%
1431027155	2022-11-03	0.86	0.87	1.2%	1.56	1.56	0.0%
1431027176	2022-11-03	0.23	0.22	4.4%	0.98	0.97	1.0%
1431027230	2022-11-03	0.55	0.56	1.8%	1.39	1.43	2.8%
1431027038	2022-11-03	0.85	0.86	1.2%	1.80	1.87	3.8%
1431024019	2022-11-04	0.93	0.92	1.1%	1.20	1.20	0.0%
1431024038	2022-11-04	1.11	1.12	0.9%	1.42	1.43	0.7%
1431027117	2022-11-04	0.11	0.14	24.0%	2.59	2.60	0.4%
1431027162	2022-11-04	0.19	0.19	0.0%	0.51	0.55	7.5%
1431024046	2022-11-04	1.05	1.06	0.9%	4.43	4.43	0.0%
1431027002	2022-11-04	0.47	0.48	2.1%	1.64	1.58	3.7%
1431027078	2022-11-04	0.11	0.11	0.0%	0.77	0.76	1.3%
1318011011	2022-11-04	0.27	0.27	0.0%	0.19	0.19	0.0%
1431024158	2022-11-06	1.41	1.47	4.2%	2.45	2.44	0.4%
1318013327	2022-11-06	0.56	0.55	1.8%	1.88	1.87	0.5%
1431024181	2022-11-07	1.67	1.66	0.6%	2.48	2.42	2.4%
1431028008	2022-11-07	0.93	0.93	0.0%	1.18	1.16	1.7%
1431028012	2022-11-07	0.44	0.44	0.0%	0.88	0.86	2.3%
1431028016	2022-11-07	0.54	0.55	1.8%	1.31	1.28	2.3%
1312007033	2022-11-07	0.23	0.23	0.0%	0.96	0.97	1.0%
1312007038	2022-11-07	0.16	0.16	0.0%	1.21	1.15	5.1%
1312006040	2022-11-07	0.21	0.20	4.9%	0.24	0.22	8.7%
1318010022	2022-11-07	0.72	0.72	0.0%	0.45	0.48	6.5%
1318010061	2022-11-07	0.45	0.45	0.0%	1.44	1.45	0.7%
1318010087	2022-11-07	0.26	0.27	3.8%	1.19	1.23	3.3%
1318016676	2022-11-08	0.26	0.26	0.0%	0.46	0.45	2.2%
1431024193	2022-11-08	1.77	1.73	2.3%	4.07	4.05	0.5%
1431024807	2022-11-08	0.51	0.52	1.9%	1.02	1.05	2.9%
1312006619	2022-11-08	0.15	0.16	6.5%	0.73	0.75	2.7%
1318016659	2022-11-08	0.56	0.56	0.0%	0.74	0.73	1.4%
1431024824	2022-11-08	0.43	0.43	0.0%	1.82	1.72	5.6%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431025672	2022-11-08	1.08	1.08	0.0%	2.85	2.81	1.4%
1431025712	2022-11-08	0.43	0.43	0.0%	1.25	1.22	2.4%
1431025742	2022-11-08	0.39	0.40	2.5%	2.19	2.20	0.5%
1431025793	2022-11-08	0.84	0.83	1.2%	1.25	1.31	4.7%
1431025735	2022-11-09	0.55	0.55	0.0%	3.19	3.21	0.6%
1431025625	2022-11-09	0.67	0.66	1.5%	1.83	1.74	5.0%
1431025629	2022-11-09	0.39	0.40	2.5%	5.50	5.58	1.4%
1318008004	2022-11-09	0.89	0.89	0.0%	0.17	0.17	0.0%
1312006304	2022-11-09	0.19	0.19	0.0%	1.83	1.86	1.6%
1431025416	2022-11-10	1.00	1.00	0.0%	1.19	1.18	0.8%
1318008851	2022-11-10	1.01	1.01	0.0%	0.15	0.14	6.9%
1318014015	2022-11-10	1.10	1.10	0.0%	1.83	1.84	0.5%
1318014066	2022-11-10	0.96	0.95	1.0%	2.10	2.15	2.4%
1431025433	2022-11-11	0.82	0.81	1.2%	1.15	1.18	2.6%
1318014056	2022-11-11	1.18	1.19	0.8%	1.80	1.84	2.2%
1318008034	2022-11-11	0.49	0.49	0.0%	0.33	0.33	0.0%
1317026150	2022-11-11	0.21	0.20	4.9%	1.04	1.04	0.0%
1318008824	2022-11-13	0.70	0.69	1.4%	1.38	1.37	0.7%
1318008829	2022-11-13	0.70	0.70	0.0%	1.30	1.29	0.8%
1317026017	2022-11-13	0.35	0.36	2.8%	1.46	1.47	0.7%
1317026024	2022-11-13	0.21	0.21	0.0%	1.72	1.69	1.8%
1317028317	2022-11-13	0.33	0.32	3.1%	1.32	1.32	0.0%
1318008836	2022-11-13	0.87	0.87	0.0%	2.31	2.28	1.3%
1317028374	2022-11-13	0.46	0.45	2.2%	3.31	3.21	3.1%
1318008042	2022-11-14	0.72	0.73	1.4%	0.48	0.48	0.0%
1318008810	2022-11-14	0.47	0.45	4.3%	0.29	0.30	3.4%
1317026099	2022-11-14	1.01	1.01	0.0%	1.70	1.73	1.7%
1317026105	2022-11-14	0.59	0.58	1.7%	3.69	3.75	1.6%
1317026121	2022-11-14	0.83	0.83	0.0%	1.78	1.79	0.6%
1317028393	2022-11-16	0.15	0.15	0.0%	1.51	1.54	2.0%
1317026174	2022-11-16	0.34	0.34	0.0%	1.26	1.24	1.6%
1317025529	2022-11-16	0.34	0.33	3.0%	3.27	3.20	2.2%
1317025529	2022-11-16	0.34	0.21	47.3%	3.27	3.20	2.2%
1317025544	2022-11-16	0.33	0.34	3.0%	1.29	1.29	0.0%
1317025552	2022-11-16	0.15	0.15	0.0%	2.28	2.29	0.4%
1317025558	2022-11-16	0.25	0.23	8.3%	1.26	1.34	6.2%
1317025571	2022-11-16	0.37	0.36	2.7%	2.86	2.84	0.7%
1317028310	2022-11-16	0.32	0.32	0.0%	1.07	1.07	0.0%
1317028326	2022-11-16	0.35	0.35	0.0%	1.68	1.65	1.8%
1317028331	2022-11-16	0.51	0.52	1.9%	2.87	2.86	0.3%
1317026059	2022-11-17	0.52	0.51	1.9%	1.73	1.75	1.1%
1317025499	2022-11-17	0.29	0.29	0.0%	1.50	1.49	0.7%
1317025523	2022-11-17	0.20	0.20	0.0%	1.66	1.69	1.8%
1317025464	2022-11-17	0.45	0.45	0.0%	1.93	1.92	0.5%
1317025464	2022-11-17	0.45	0.50	10.5%	1.93	1.92	0.5%
1317025422	2022-11-17	0.75	0.75	0.0%	1.65	1.67	1.2%
1317025425	2022-11-17	0.44	0.53	18.6%	1.48	1.51	2.0%
1317025425	2022-11-17	0.44	0.45	2.2%	1.48	1.51	2.0%
1317025408	2022-11-18	0.42	0.41	2.4%	2.33	2.36	1.3%
1317025428	2022-11-18	0.29	0.28	3.5%	1.88	1.86	1.1%
1317026092	2022-11-18	0.34	0.34	0.0%	1.46	1.45	0.7%
1431030153	2022-11-19	0.99	0.99	0.0%	1.12	1.09	2.7%
1432030127	2022-11-19	1.40	1.39	0.7%	0.14	0.14	0.0%
1431030084	2022-11-20	0.49	0.49	0.0%	1.25	1.27	1.6%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1431030128	2022-11-20	0.75	0.76	1.3%	1.45	1.51	4.1%
1431030141	2022-11-20	0.83	0.80	3.7%	0.90	0.89	1.1%
1431030414	2022-11-20	0.70	0.71	1.4%	0.69	0.69	0.0%
1431030056	2022-11-21	0.68	0.68	0.0%	1.12	1.11	0.9%
1431030066	2022-11-21	1.04	1.04	0.0%	1.73	1.79	3.4%
1431030066	2022-11-21	1.04	0.99	4.9%	1.73	1.79	3.4%
1431030065	2022-11-21	0.82	0.81	1.2%	1.28	1.22	4.8%
1432030010	2022-11-21	0.90	0.89	1.1%	1.39	1.45	4.2%
1432030053	2022-11-21	1.71	1.71	0.0%	1.14	1.26	10.0%
1432030053	2022-11-21	1.71	1.55	9.8%	1.14	1.26	10.0%
1431030053	2022-11-22	0.91	0.89	2.2%	1.45	1.39	4.2%
1318015177	2022-11-23	0.96	0.94	2.1%	1.22	1.25	2.4%
1318015182	2022-11-23	0.59	0.61	3.3%	0.40	0.45	11.8%
1431030027	2022-11-23	0.63	0.62	1.6%	1.22	1.22	0.0%
1318015114	2022-11-27	0.66	0.67	1.5%	0.59	0.59	0.0%
1317027185	2022-11-27	0.58	0.57	1.7%	1.62	1.69	4.2%
1317027226	2022-11-27	0.99	0.97	2.0%	1.16	1.15	0.9%
1318015041	2022-11-27	1.02	1.02	0.0%	1.13	1.16	2.6%
1311002030	2022-11-28	0.25	0.24	4.1%	1.74	1.68	3.5%
1318015122	2022-11-28	0.83	0.82	1.2%	0.10	0.15	40.0%
1317027045	2022-11-28	0.47	0.50	6.2%	1.80	1.86	3.3%
1317027117	2022-11-28	0.36	0.34	5.7%	0.93	0.93	0.0%
1311002033	2022-11-28	0.20	0.20	0.0%	2.11	2.14	1.4%
1318015060	2022-11-28	0.65	0.66	1.5%	0.38	0.38	0.0%
1311002002	2022-11-29	0.12	0.12	0.0%	2.37	2.36	0.4%
1311002011	2022-11-29	0.17	0.17	0.0%	2.33	2.32	0.4%
1311002438	2022-11-30	0.13	0.13	0.0%	1.22	1.24	1.6%
1311002410	2022-11-30	0.10	0.10	0.0%	2.06	2.03	1.5%
1317036063	2022-12-01	0.51	0.52	1.9%	1.25	1.26	0.8%
1431034019	2022-12-02	1.00	0.98	2.0%	0.88	0.86	2.3%
1431034096	2022-12-02	1.01	1.01	0.0%	1.76	1.82	3.4%
1431034100	2022-12-02	1.13	1.16	2.6%	2.87	2.86	0.3%
1431034156	2022-12-02	1.21	1.22	0.8%	3.10	3.10	0.0%
1317036167	2022-12-03	0.41	0.42	2.4%	1.57	1.66	5.6%
1431030031	2022-12-03	0.79	0.79	0.0%	1.01	1.03	2.0%
1311003082	2022-12-04	0.15	0.14	6.9%	2.52	2.47	2.0%
91431030055	2022-12-05	0.89	0.90	1.1%	1.11	1.21	8.6%
91431030142	2022-12-05	0.67	0.66	1.5%	1.09	1.05	3.7%
91431030057	2022-12-05	1.02	1.03	1.0%	1.35	1.43	5.8%
91431030129	2022-12-05	1.19	1.19	0.0%	1.44	1.56	8.0%
1318017041	2022-12-05	0.39	0.39	0.0%	0.14	0.14	0.0%
1318017056	2022-12-06	0.68	0.69	1.5%	0.75	0.70	6.9%
1318017073	2022-12-06	0.57	0.57	0.0%	0.42	0.43	2.4%
1318017086	2022-12-06	0.66	0.67	1.5%	0.41	0.41	0.0%
1318017100	2022-12-06	1.11	1.04	6.5%	0.13	0.14	7.4%
1318018033	2022-12-06	0.52	0.51	1.9%	0.28	0.29	3.5%
1318018054	2022-12-06	0.48	0.47	2.1%	0.19	0.19	0.0%
1318018072	2022-12-06	0.57	0.57	0.0%	0.41	0.42	2.4%
1318018075	2022-12-06	0.59	0.58	1.7%	0.90	0.91	1.1%
1318018089	2022-12-06	0.47	0.48	2.1%	0.28	0.31	10.2%
1311004074	2022-12-06	0.13	0.14	7.4%	1.51	1.54	2.0%
1311003612	2022-12-07	0.35	0.35	0.0%	3.78	3.74	1.1%
1318018062	2022-12-07	0.49	0.49	0.0%	0.65	0.66	1.5%
1311004125	2022-12-08	0.14	0.14	0.0%	2.14	2.13	0.5%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1311004072	2022-12-09	0.16	0.16	0.0%	1.80	1.75	2.8%
1432078017	2022-12-09	0.82	0.86	4.8%	1.81	1.82	0.6%
1432078025	2022-12-09	0.35	0.35	0.0%	2.10	2.12	0.9%
1432078044	2022-12-09	0.97	1.03	6.0%	2.44	2.66	8.6%
1432078062	2022-12-09	0.28	0.29	3.5%	1.69	1.75	3.5%
1432078082	2022-12-09	0.17	0.15	12.5%	0.56	0.57	1.8%
1432078116	2022-12-09	1.18	1.17	0.9%	2.39	2.39	0.0%
1432078009	2022-12-09	0.39	0.37	5.3%	2.35	2.36	0.4%
1432078016	2022-12-09	0.77	0.85	9.9%	1.85	1.89	2.1%
1318012139	2022-12-09	0.38	0.38	0.0%	2.79	2.68	4.0%
1318019047	2022-12-10	0.79	0.79	0.0%	0.51	0.52	1.9%
1318019052	2022-12-10	0.72	0.77	6.7%	1.17	1.16	0.9%
1318019009	2022-12-10	0.66	0.71	7.3%	0.35	0.36	2.8%
1318019016	2022-12-10	0.65	0.60	8.0%	0.28	0.28	0.0%
1431034104	2022-12-12	1.36	1.35	0.7%	1.09	1.08	0.9%
1430012005	2022-12-12	0.50	0.52	3.9%	1.22	1.25	2.4%
1430012014	2022-12-12	0.57	0.54	5.4%	1.59	1.61	1.3%
1317040208	2022-12-12	0.60	0.58	3.4%	0.44	0.43	2.3%
1317037066	2022-12-12	0.47	0.48	2.1%	0.71	0.71	0.0%
1430012031	2022-12-13	0.69	0.69	0.0%	1.58	1.51	4.5%
1430012038	2022-12-13	0.17	0.17	0.0%	1.74	1.69	2.9%
1430012040	2022-12-13	0.16	0.14	13.3%	1.68	1.53	9.3%
1317040133	2022-12-13	0.32	0.31	3.2%	1.17	1.20	2.5%
1430012047	2022-12-13	0.73	0.74	1.4%	1.86	1.77	5.0%
1431034008	2022-12-13	2.09	2.12	1.4%	0.77	0.75	2.6%
1431034053	2022-12-13	2.08	2.14	2.8%	0.27	0.28	3.6%
1431034062	2022-12-14	1.89	1.90	0.5%	0.21	0.21	0.0%
1431034262	2022-12-14	1.56	1.57	0.6%	0.90	0.95	5.4%
1431034002	2022-12-14	2.67	2.75	3.0%	0.64	0.64	0.0%
1431034277	2022-12-14	1.75	1.72	1.7%	1.45	1.48	2.0%
1431034195	2022-12-15	2.26	2.26	0.0%	1.50	1.42	5.5%
1431034203	2022-12-15	1.55	1.55	0.0%	0.65	0.63	3.1%
1431040085	2022-12-15	0.33	0.32	3.1%	1.86	1.86	0.0%
1431040117	2022-12-15	1.23	1.23	0.0%	1.37	1.37	0.0%
1317040014	2022-12-15	0.50	0.50	0.0%	1.84	1.87	1.6%
1317040089	2022-12-15	0.49	0.49	0.0%	2.23	2.18	2.3%
1317040122	2022-12-15	0.45	0.46	2.2%	0.44	0.44	0.0%
1431040198	2022-12-16	0.83	0.83	0.0%	1.75	1.75	0.0%
1431040209	2022-12-16	1.08	1.11	2.7%	2.22	2.13	4.1%
1431040704	2022-12-17	0.99	0.98	1.0%	1.49	1.55	3.9%
1431040180	2022-12-17	0.56	0.56	0.0%	1.89	1.92	1.6%
1317040193	2022-12-17	0.46	0.45	2.2%	0.85	0.85	0.0%
1431040725	2022-12-17	0.62	0.63	1.6%	1.95	1.92	1.6%
1317039310	2022-12-17	0.64	0.63	1.6%	2.67	2.70	1.1%
1317040153	2022-12-18	0.47	0.46	2.2%	1.10	1.14	3.6%
1431040030	2022-12-18	0.74	0.74	0.0%	1.12	1.12	0.0%
1317038481	2022-12-18	0.36	0.35	2.8%	0.94	0.93	1.1%
1431040102	2022-12-18	0.18	0.18	0.0%	1.25	1.23	1.6%
1317038123	2022-12-18	0.29	0.29	0.0%	1.24	1.28	3.2%
1317040110	2022-12-18	0.16	0.16	0.0%	0.26	0.30	14.3%
1431040192	2022-12-18	0.83	0.83	0.0%	1.77	1.78	0.6%
1317034006	2022-12-18	0.37	0.36	2.7%	3.61	3.51	2.8%
1431040165	2022-12-19	0.50	0.51	2.0%	2.70	2.67	1.1%
1317034026	2022-12-19	0.36	0.37	2.7%	2.76	2.73	1.1%

Appendix A-1: Carbon and Sulfur Duplicate Data from Rainy River Mine Onsite LECO Facility

Sample Site Name	Sample Date	Total Carbon (wt.%)	Total Carbon Duplicate (wt.%)	Carbon Relative Percent Difference (RPD)	Total Sulfur (wt.%)	Total Sulfur Duplicate (wt.%)	Sulfur Relative Percent Difference (RPD)
1317034056	2022-12-19	0.48	0.49	2.1%	2.51	2.41	4.1%
1317029088	2022-12-20	0.34	0.33	3.0%	0.88	0.88	0.0%
1317039016	2022-12-20	0.19	0.20	5.1%	0.42	0.44	4.7%
1317038014	2022-12-20	0.88	0.87	1.1%	1.50	1.50	0.0%
1317034121	2022-12-20	0.78	0.77	1.3%	2.30	2.36	2.6%
1317042031	2022-12-21	0.64	0.65	1.6%	2.68	2.72	1.5%
1317042110	2022-12-21	0.45	0.44	2.2%	0.82	0.83	1.2%
1317029137	2022-12-21	0.34	0.35	2.9%	0.53	0.49	7.8%
1317039023	2022-12-21	0.26	0.27	3.8%	2.12	2.07	2.4%
1317042008	2022-12-21	0.38	0.37	2.7%	1.72	1.73	0.6%
1317033034	2022-12-22	0.57	0.56	1.8%	1.55	1.55	0.0%
1317034131	2022-12-22	0.61	0.62	1.6%	2.05	2.06	0.5%
1317042038	2022-12-22	0.75	0.75	0.0%	1.61	1.64	1.8%
1317042060	2022-12-22	1.00	1.00	0.0%	1.82	1.84	1.1%
1317033017	2022-12-22	0.45	0.46	2.2%	1.14	1.13	0.9%
1317033106	2022-12-23	0.47	0.42	11.2%	1.89	1.89	0.0%
1311006047	2022-12-23	0.08	0.08	0.0%	0.66	0.66	0.0%
1317030029	2022-12-23	0.31	0.33	6.3%	0.63	0.62	1.6%
1317030030	2022-12-23	0.68	0.71	4.3%	1.20	1.23	2.5%
1317030067	2022-12-23	0.29	0.27	7.1%	1.97	1.96	0.5%
1317030074	2022-12-23	0.29	0.28	3.5%	0.67	0.65	3.0%
1317033001	2022-12-24	0.48	0.48	0.0%	0.64	0.63	1.6%
1317033042	2022-12-24	0.70	0.69	1.4%	0.28	0.23	19.6%
1317031032	2022-12-24	0.16	0.16	0.0%	1.11	1.09	1.8%
1317031043	2022-12-25	0.22	0.21	4.7%	0.84	0.87	3.5%
1317031059	2022-12-25	0.26	0.27	3.8%	0.84	0.89	5.8%
1317033312	2022-12-25	0.37	0.36	2.7%	1.17	1.10	6.2%
1317031016	2022-12-25	0.22	0.22	0.0%	1.38	1.36	1.5%
1317031080	2022-12-25	0.30	0.30	0.0%	1.35	1.37	1.5%
1317031121	2022-12-25	0.34	0.35	2.9%	0.80	0.80	0.0%
1317031084	2022-12-25	0.37	0.37	0.0%	0.79	0.78	1.3%
1317031152	2022-12-25	0.79	0.74	6.5%	0.98	0.98	0.0%
1430010064	2022-12-26	1.20	1.19	0.8%	1.70	1.69	0.6%
1430010090	2022-12-26	1.54	1.62	5.1%	2.65	2.56	3.5%
1430010114	2022-12-26	1.70	1.69	0.6%	3.01	3.10	2.9%
1317031140	2022-12-26	0.91	0.91	0.0%	0.82	0.83	1.2%
1317041051	2022-12-26	0.76	0.76	0.0%	2.63	2.58	1.9%
1430010068	2022-12-26	1.29	1.28	0.8%	1.31	1.29	1.5%
1317041209	2022-12-27	0.87	0.86	1.2%	1.64	1.56	5.0%
1317041100	2022-12-27	0.34	0.34	0.0%	1.92	1.86	3.2%
1317051004	2022-12-27	0.96	0.94	2.1%	1.68	1.68	0.0%
1317030018	2022-12-28	0.25	0.24	4.1%	0.82	0.79	3.7%
1317030021	2022-12-28	0.52	0.52	0.0%	2.21	2.20	0.5%
1430014046	2022-12-30	0.99	1.00	1.0%	1.07	1.01	5.8%
1430014096	2022-12-30	1.40	1.38	1.4%	7.68	7.83	1.9%

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1319021111	2022-03-16	0.18	1.36	29	71	0.41	14	64	0.23
1319021179	2022-03-16	0.50	2.03	26	65	0.40	16	54	0.3
1319021183	2022-03-16	0.14	1.07	23	76	0.31	17	66	0.26
1319021189	2022-03-16	0.24	1.15	10	147	0.07	12	135	0.09
1319022009	2022-03-16	0.15	1.99	10	9	1.02	10	7.3	1.4
1319023282	2022-03-16	0.19	2.60	22	11.3	1.92	0.01	7.2	0.0014
1319023312	2022-03-16	0.11	0.10	18	9.7	1.82	19	7.1	2.7
1319046060	2022-03-16	0.21	0.60	22	10.9	2.05	21	2.7	3.2
1319046177	2022-03-16	0.25	1.27	62	32	1.94	43	8.4	2.5
1319046404	2022-03-16	0.11	1.27	42	3	12.34	67	24	86
1319046416	2022-03-16	0.21	0.74	66	48	1.39	32	0.51	1.7
1319048073	2022-03-16	0.14	1.73	58	46	1.25	77	42	1.8
1319048075	2022-03-16	0.12	1.88	99	19	5.12	127	41	17
1319048124	2022-03-16	0.15	1.42	16	63	0.25	0.01	5.3	0.00
1319050022	2022-03-16	0.09	0.19	13	83	0.15	14	80	0.13
1319050038	2022-03-16	0.15	0.83	5	72.5	0.07	19	76	0.14
1319050126	2022-03-16	0.10	0.14	8	106	0.08	0.01	67	0.00
1319050134	2022-03-16	0.09	0.12	13	7	1.95	81	40	9.9
1319050150	2022-03-16	0.17	2.14	8	4	2.14	12	4.6	5.1
1319050170	2022-03-16	0.21	1.33	10	30	0.35	0.01	1.9	0.00
1319050251	2022-03-16	0.18	0.84	10	21	0.45	17	25	0.56
1320011159	2022-03-16	0.08	1.30	14	3	5.44	69	49	28
1320011186	2022-03-16	0.11	1.18	10	70	0.14	0.01	0.75	0.00
1320011195	2022-03-16	0.13	1.67	30	13	2.37	84	64	3.4
1320011196	2022-03-16	0.19	0.99	47	26.9	1.76	30	8.8	1.9
1320011206	2022-03-16	0.38	0.89	34	25	1.36	68	23	3.3
1320011227	2022-03-16	0.17	1.80	41	41.6	0.98	23	20	1.1
1320011230	2022-03-16	0.44	2.61	21	6.88	3.03	60	37	11
1320011249	2022-03-16	0.18	2.45	33	4	7.50	37	2.4	20
1320012014	2022-03-16	0.30	2.66	22	20	1.08	21	1.8	2.2
1320012087	2022-03-16	0.17	2.08	46	16	2.81	52	17	3.9
1320013001	2022-03-16	0.11	0.68	34	17	2.08	36	12	2.9
1320013006	2022-03-16	0.06	0.88	20	7	2.91	32	13	6.3
1320013007	2022-03-16	0.09	1.48	38	24	1.58	33	3.6	2.5
1320013067	2022-03-16	0.15	1.06	47	21.3	2.22	46	20	2.6
1320013125	2022-03-16	0.62	2.59	74	39	1.91	47	17	2.0
1320013131	2022-03-16	0.20	1.34	48	23	2.14	58	32	2.5
1320013198	2022-03-16	0.53	1.94	12	9	1.37	26	18	2.3
1320013272	2022-03-16	0.40	2.07	68	11	6.05	52	6.2	7.4
1320013283	2022-03-16	0.11	0.17	86	7	13.05	70	7.2	62
1320013319	2022-03-16	0.50	2.51	119	62	1.92	26	1.0	1.5
1320013334	2022-03-16	0.30	2.56	8	62	0.13	8.4	53	0.22
1320013349	2022-03-16	0.28	0.94	10	3	3.42	75	57	49
1320015037	2022-03-16	0.76	1.89	10	63	0.17	0.01	0.38	0.00
1320015115	2022-03-16	0.60	2.66	21	48	0.44	35	54	0.54
1320015197	2022-03-16	0.76	1.45	14	68	0.20	0.01	41	0.00
1320016051	2022-03-16	0.36	1.07	38	57	0.68	43	59	0.68
1320016098	2022-03-16	0.36	0.70	16	83.1	0.19	0.01	50	0.00
1320016134	2022-03-16	0.63	0.90	5	26	0.18	58	76	0.24
1320016143	2022-03-16	0.18	0.51	42	46	0.93	18	24	0.86
1320016144	2022-03-16	0.14	0.51	11	68	0.16	0.01	40	0.00
1320016184	2022-03-16	0.21	1.32	17	62	0.27	29	62	0.38
1320016203	2022-03-16	0.23	0.48	38	7	5.73	74	54	7.2
1320016243	2022-03-16	0.23	0.67	61	20	3.09	40	3.3	3.3
1320016250	2022-03-16	0.23	0.48	22	46	0.47	0.01	16	-0.01
1320016264	2022-03-16	0.22	1.20	16	71.3	0.22	0.01	40	0.00
1320016280	2022-03-16	0.26	1.15	32	52.5	0.61	43	63	0.56
1320016323	2022-03-16	0.12	0.56	10	50	0.19	17	46	0.35
1320016337	2022-03-16	0.19	0.63	64	73	0.87	46	43	1.1
1320018011	2022-03-16	0.19	1.36	50	17	2.93	77	56	2.6
1320018017	2022-03-16	0.15	0.80	26.4	22	1.23	22	13	1.5
1320018023	2022-03-16	0.16	1.49	32.8	63	0.52	0.01	18	0.00
1320018045	2022-03-16	0.15	0.10	30	54	0.54	33	55	0.55
1320018142	2022-03-16	0.16	1.89	44	19	2.35	76	49	2.8
1320018171	2022-03-16	0.22	1.75	36	60	0.60	0.01	15	0.00
1320018215	2022-03-16	0.34	0.10	22	36	0.60	22	50	0.065
1320018253	2022-03-16	0.15	1.34	16	21	0.78	25	30	0.64
1320021005	2022-03-16	0.11	0.15	30	18	1.65	37	17	2.4
1320021117	2022-03-16	0.23	2.16		0	#DIV/0!	4.3	14	0.75
1320021205	2022-03-16	0.01	0.01	40	66.3	0.60	29	40	0.77
1320021242	2022-03-16	0.01	2.57	18	5.6	3.27	59	50	4.5
1320021260	2022-03-16	0.08	0.22	12	23.1	0.52	0.01	2.8	0.00
1320021264	2022-03-16	0.13	2.50	37	30	1.23	36	20	1.7
1320021274	2022-03-16	0.07	0.16	101	14	7.17	117	21	19
1320021281	2022-03-16	0.03	2.59	120	6	20.23	121	5.2	111
1320021316	2022-03-16	0.07	2.89	160	28	5.69	102	1.1	8.7
1320021329	2022-03-16	0.02	2.47	85	18	4.68	46	13	4.2
1320021391	2022-03-16	0.14	0.09	143	13	11.12	187	10	35
1320022073	2022-03-16	0.09	2.69	7	96	0.07	0.01	5.2	0.00
1320022110	2022-03-16	0.18	3.58	8	64.1	0.12	42	89	0.21
1320022254	2022-03-16	0.15	0.72	13	78.4	0.16	1.4	58	0.2
1320022272	2022-03-16	0.24	0.51	17	57	0.29	42	71	0.4
1320022280	2022-03-16	0.15	2.12	14	79.1	0.18	0.01	48	0.00
1320022306	2022-03-16	0.21	0.47	14	44	0.33	48	73	0.37

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1320022311	2022-03-16	0.14	0.68	10	40	0.24	17	39	0.36
1320022379	2022-03-16	0.24	0.39	18	54.7	0.32	3.7	36	0.33
1320022395	2022-03-16	0.13	0.12	10	103	0.10	0.01	48	0.000083
1320025002	2022-03-16	0.31	0.18	14	63	0.23	50	93	0.21
1320025023	2022-03-16	0.16	2.24	19	63	0.30	13	55	0.27
1320025026	2022-03-16	0.28	2.93	7	53	0.13	23	58	0.26
1320025045	2022-03-16	0.33	1.33	15	75	0.20	0.01	47	0.00
1320025085	2022-03-16	0.20	2.35	10	52	0.20	32	68	0.25
1320028011	2022-03-16	0.34	0.50	9	59	0.15	7.0	48	0.26
1320028020	2022-03-16	0.83	0.95	13	76	0.17	0.01	55	0.00
1320028062	2022-03-16	0.98	1.76	5	20	0.24	51	70	0.23
1320028087	2022-03-16	0.62	1.27	7	78	0.09	0.01	25	0.00
1320032010	2022-03-16	0.17	0.31	12	95	0.13	0.01	55	0.00
1320032027	2022-03-16	0.27	0.28	11	60.9	0.18	42	84	0.23
1320032044	2022-03-16	0.38	2.30	10	85.9	0.11	0.01	55	0.00
1320099001	2022-03-16	0.35	2.18	17	88.8	0.19	27	93	0.15
1321021403	2022-03-16	0.34	2.38	34	50.6	0.68	63	78	0.71
1321026046	2022-03-16	0.16	5.09	30	40.0	0.74	0.01	0	0.00
1321028072	2022-03-16	0.14	0.30	32	47	0.68	23	34	0.73
1321028086	2022-03-16	0.34	0.34	13	13	1.02	49	42	1.7
1321028094	2022-03-16	0.27	0.30	47	38	1.26	24	9.4	1.4
1321028111	2022-03-16	0.24	2.46	52	44	1.17	48	33	1.4
1321028119	2022-03-16	0.31	0.44	67	37	1.82	75	38	2.2
1321028159	2022-03-16	0.26	2.44	34	49	0.70	29	31	0.97
1321028163	2022-03-16	0.23	2.83	62	48	1.29	37	42	0.86
1321028200	2022-03-16	0.13	0.42	70	58	1.22	77	41	1.7
1321029006	2022-03-16	0.27	1.52	61	48	1.26	71	51	1.5
1321029027	2022-03-16	0.25	1.14	34	39	0.85	43	41	1.1
1321029054	2022-03-16	0.82	1.49	23	13	1.73	51	34	2.7
1321029260	2022-03-16	0.19	0.93	55	3	16.07	69	9.9	119
1321029265	2022-03-16	0.19	3.07	37	21	1.79	20	0.5	2.2
1321030073	2022-03-16	0.60	1.89	50	23	2.21	52	16	3.1
1321030082	2022-03-16	0.21	0.08	34	19.4	1.78	64	17	4.2
1321030089	2022-03-16	0.68	0.63	20	47	0.43	0.32	15	0.65
1321030121	2022-03-16	0.14	0.12	111	206	0.54	0.01	41	0.00
1321030145	2022-03-16	0.75	1.34	19	26	0.74	151	151	1.0
1321030153	2022-03-16	0.45	1.33	30	16	1.86	40	22	2.6
1321030169	2022-03-16	0.14	0.09	70	58	1.23	31	11	1.4
1321030177	2022-03-16	0.60	1.37	15	9	1.62	56	50	2.0
1321031002	2022-03-16	0.49	2.26	44	36	1.24	21	6.5	1.5
1321031008	2022-03-16	0.57	2.17	45	10	4.63	29	30	0.71
1321031027	2022-03-16	0.93	2.25	43	15	2.82	43	5.3	4.3
1321031037	2022-03-16	0.58	1.45	38	24	1.62	33	11	2.2
1321031079	2022-03-16	0.92	1.53	7	17	0.43	14	18	0.74
1321031081	2022-03-16	0.67	2.15	14	14	0.99	21	14	1.6
1321031096	2022-03-16	1.06	2.05	58	22	2.63	50	11	3.3
1321031113	2022-03-16	0.32	2.22	38	31	1.20	29	17	1.5
1321031202	2022-03-16	0.77	2.24	90	80	1.13	27	23	1.1
1321033330	2022-03-16	0.33	2.40	8	44	0.18	38	67	0.29
1325077022	2022-03-16	0.52	0.52	16	78	0.21	0.01	41	0.00
1325077028	2022-03-16	0.54	0.47	12	88	0.14	39	69	0.62
1325077030	2022-03-16	0.65	0.40	22	49	0.46	0.01	0	0.00
1325077058	2022-03-16	0.82	0.35	35	42	0.84	43	44	0.98
1325077108	2022-03-16	0.82	1.12	46	8	6.19	87	38	25
1325077150	2022-03-16	0.85	0.53	41	8	4.84	45	2.1	11
1325077186	2022-03-16	0.86	1.26	10	32	0.33	0.01	4.3	0.00
1325077246	2022-03-16	0.76	0.82	23	47	0.50	3.7	28	0.42
1325077250	2022-03-16	0.69	0.71	25	46	0.54	27	41	0.64
1325077260	2022-03-16	1.22	2.12	24	52	0.46	0.01	0	0.00
1325077280	2022-03-16	0.70	0.77	42	7.2	5.90	91	45	55
1325077312	2022-03-16	1.17	0.74	38	4	10.25	46	0.87	254
1325078040	2022-03-16	0.72	0.46	18	35	0.50	0.01	0.18	0.00
1325078052	2022-03-16	0.64	0.37	22	54	0.41	3.2	29	0.44
1325078090	2022-03-16	0.61	0.20	12	55	0.22	13	46	0.32
1325078150	2022-03-16	0.44	0.92	44	5	8.81	119	49	155
1325078210	2022-03-16	0.76	0.65	13	54	0.24	0.01	0.46	0.00
1316012277	2022-03-18	0.20	2.66	14	100	0.14	7.7	89	0.09
1323061072	2022-03-18	0.43	0.32	48	32	1.49	39	27	1.5
1323061128	2022-03-18	0.62	1.12	26	11.9	2.16	19	7.3	2.6
1323061167	2022-03-18	0.51	0.37	76	41.3	1.84	57	34	1.7
1323061186	2022-03-18	0.46	0.73	45	15	3.05	44	11	4.0
1323061269	2022-03-18	0.89	2.92	25	88	0.28	11	77	0.14
1324078084	2022-03-18	0.49	0.43	15	102	0.15	6.0	92	0.07
1324078222	2022-03-18	0.38	0.42	15	74	0.21	7.7	69	0.11
1432007018	2022-03-18	0.97	0.68	14	92	0.15	7.5	78	0.1
1324078226	2022-03-18	0.64	0.30	38	57	0.68	28	50	0.57
1323061045	2022-03-18	0.60	0.62	31	61	0.51	21	54	0.39
1323061259	2022-03-18	0.41	0.32	16	3	5.69	15	1.4	10
1324080130	2022-03-18	0.33	0.20	6	3	1.86	17	2.1	8.5
1324078056	2022-03-18	0.47	0.20	28	82.8	0.34	30	75	0.41
1324078024	2022-03-18	0.39	0.32	9	5.6	1.57	98	88	4.2
1323061031	2022-03-18	0.59	0.18	10	8.1	1.28	1.6	3.3	0.74
1324078295	2022-03-18	0.32	0.37	6	36	0.16	0.01	6.5	0.00
1432007001	2022-03-18	0.82	1.07	6	68	0.09	0.01	32	0.00

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1323061030	2022-03-18	0.58	0.12	40	41	0.98	65	63	1.1
1432007021	2022-03-18	0.70	1.15	6	79	0.08	0.01	36	0.00
1432007085	2022-03-18	0.76	1.51	93	163.8	0.57	34	73	0.71
1324077026	2022-03-18	1.55	1.07	113	101	1.12	155	131	1.3
1316012270	2022-03-18	0.22	2.01	50	207	0.24	0.01	86	0.00
1316005108	2022-03-18	0.40	2.99	17	36	0.47	142	164	0.28
1316012298	2022-03-18	0.20	2.69	40	54	0.74	22	31	0.82
1316005142	2022-03-18	0.09	2.41	17	8	2.07	61	48	3.6
1316012206	2022-03-18	0.15	3.52	42	26	1.62	27	5.0	2.1
1316002063	2022-03-18	0.19	0.24	19	36	0.53	13	33	0.4
1317002245	2022-03-18	0.14	0.12	15	51	0.30	12	43	0.29
1317009103	2022-03-18	0.14	0.97	9	25	0.35	9.5	21	0.44
1317009124	2022-03-18	0.13	0.73	12	55	0.22	15	51	0.3
1317011058	2022-03-18	0.15	0.54	27	38	0.71	18	33	0.55
1317011075	2022-03-18	0.27	1.35	23	54	0.43	19	48	0.4
1317011123	2022-03-18	0.19	0.50	8	24	0.33	2.0	22	0.09
1317011158	2022-03-18	0.35	0.29	30	53	0.57	19	37	0.5
1317011187	2022-03-18	0.31	0.31	75	66	1.15	48	58	0.83
1317018008	2022-03-18	0.17	0.13	28	22	1.30	27	17	1.6
1317018048	2022-03-18	0.13	2.51	17	43	0.39	24	53	0.23
1318088001	2022-03-18	0.30	0.14	17	53	0.32	11	38	0.43
1318088005	2022-03-18	0.27	0.28	15	72	0.21	2.9	47	0.31
1318088041	2022-03-18	0.20	2.26	14.4	57	0.25	26	65	0.24
1319045091	2022-03-18	0.48	1.86	90	160	0.56	10	51	0.65
1319045099	2022-03-18	0.19	0.11	163	169	0.97	130	116	1.1
1319045119	2022-03-18	0.16	2.40	7	34	0.21	85	103	0.41
1324075170	2022-03-18	0.41	0.40	15	85	0.18	0.01	29	0.00
1324075183	2022-03-18	0.64	0.95	39	108.4	0.36	18	76	0.31
1324075218	2022-03-18	0.46	0.80	36	26	1.37	101	85	1.8
1324075239	2022-03-18	0.56	1.32	19	64	0.30	0.01	21	0.00
1325080040	2022-03-18	0.29	0.23	12	64	0.19	16	58	0.26
1325080056	2022-03-18	0.47	0.14	15	102	0.15	0.01	57	0.00
1325080203	2022-03-18	0.33	0.56	12	46	0.26	73	95	0.48
1325080234	2022-03-18	0.64	0.54	18	71	0.26	0.01	41	0.00
1325080252	2022-03-18	0.49	0.56	54	18	2.95	105	64	4.3
1325080300	2022-03-18	0.30	0.22	3	77	0.04	0.01	13	0.00
1325081140	2022-03-18	0.50	0.75	59	23	2.53	112	68	3.5
1325081196	2022-03-18	0.96	1.24	14	70	0.19	44	93	0.21
1325081218	2022-03-18	0.67	0.67	34	35	0.97	70	62	1.3
1325081288	2022-03-18	0.93	0.36	61	37	1.66	42	9.0	2.1
1325085114	2022-03-18	1.11	0.20	6	82	0.07	0.01	29	0.00
1320098003	2022-03-18	1.53	1.88	20	65	0.31	37	74	0.35
1317010341	2022-03-18	0.15	1.99	20	52	0.39	30	56	0.41
1317010421	2022-03-18	0.17	0.09	20	5	4.27	59	44	10
1317018032	2022-03-18	0.14	1.91	13	59	0.22	0.01	1.5	0.00
1317011281	2022-03-18	0.28	1.48	50	57	0.87	0.26	0	1.0
1317001175	2022-03-18	0.52	1.78	10	3	3.42	70	58	87
1317002004	2022-03-18	0.22	2.75	9	5	1.76	12	0.14	8.2
1317009080	2022-03-18	0.11	0.89	38	41	0.94	2.6	1.6	1.0
1317011284	2022-03-18	0.56	1.48	7	3	2.10	45	35	13
1317017019	2022-03-18	0.18	2.24	14	41	0.35	0.01	0.89	0.00
1317017040	2022-03-18	0.25	1.93	10	135	0.08	0.01	35	0.00
1325080048	2022-03-18	0.50	0.22	31	9	3.45	154	123	7.4
1325085222	2022-03-18	0.82	0.62	47	38	1.25	19	4.9	1.5
1317011161	2022-03-18	0.32	1.49	35	8.8	4.03	61	31	8.9
1317018090	2022-03-18	0.24	2.24	57	18	3.19	50	0	5.7
1317011071	2022-03-18	0.44	1.59	26	3	9.11	38	11	100
1318088023	2022-03-18	0.13	1.50	34	6	5.38	32	0	19
1319045047	2022-03-18	0.85	2.47	18	5	3.93	18	1.7	8.1
1325080010	2022-03-18	0.70	0.52	45	9	4.95	0.01	2.3	0.002
1325080262	2022-03-18	0.38	0.71	30	6	5.27	33	4.5	32
1317001039	2022-03-18	0.45	2.00	26	5	5.47	29	0.91	42
1317001043	2022-03-18	0.43	1.68	55	11	5.05	58	0.68	12
1324075112	2022-03-18	0.61	0.60	37	14	2.68	32	5.3	3.9
1317001042	2022-03-18	0.49	1.95	34	42	0.80	20	9.5	1.3
1317001084	2022-03-18	0.33	1.09	34	13	2.50	66	36	4.5
1317001031	2022-03-18	0.24	0.66	52	22.2	2.35	41	8.7	3.0
1324075187	2022-03-18	0.40	0.57	26	29.1	0.91	115	16	5.1
1317010134	2022-03-18	0.38	1.46	16	38	0.42	2.5	24	0.35
1324073186	2022-03-18	0.53	2.18	13	133	0.10	0.01	33	0.00
1317017095	2022-03-18	0.30	0.20	46	113	0.41	66	121	0.44
1318060038	2022-03-18	0.17	0.74	42	80.0	0.53	63	98	0.5
1324073040	2022-03-18	0.50	0.89	18	80	0.23	8.6	69	0.17
1325081094	2022-03-18	1.30	0.45	166	58.1	2.85	157	73	2.9
1325081112	2022-03-18	1.52	0.18	104	69	1.51	81	45	1.7
1325081176	2022-03-18	2.08	0.96	31	71	0.44	19	54	0.43
1325081178	2022-03-18	1.10	0.56	17	73	0.23	7.5	62	0.17
1325081072	2022-03-18	1.84	0.44	15	124	0.12	0.01	65	0.00
1317002033	2022-03-18	0.52	0.55	20	22	0.90	107	112	0.78
1317017007	2022-03-18	0.13	1.99	25	56	0.44	0.01	18	0.00
1317018062	2022-03-18	0.21	2.50	15	28.8	0.53	38	50	0.51
1317010466	2022-03-18	0.21	2.45	123	51	2.44	123	55	2.7
1317011050	2022-03-18	0.22	1.51	34	67	0.51	17	40	0.6
1317011064	2022-03-18	0.15	1.37	18	35	0.51	41	58	0.41

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1317017009	2022-03-18	0.26	1.67	11	28	0.40	17	29	0.5
1319045144	2022-03-18	0.16	3.52	14	29	0.50	15	24	0.63
1317011203	2022-03-18	0.21	1.93	133	158.1	0.84	59	24	1.4
1317002027	2022-03-18	0.28	1.95	153	153	1.00	151	96	1.7
1317001160	2022-03-18	0.21	2.29	49	60	0.82	59	62	0.92
1317011251	2022-03-18	0.15	1.63	12	77	0.16	0.01	51	0.00
1318088077	2022-03-18	0.15	1.80	34	41	0.85	72	70	1.1
1317011190	2022-03-18	0.17	2.35	7	18	0.39	29	34	0.68
1317009029	2022-03-18	0.12	0.94	11	59	0.19	0.01	15	0.00
1317002209	2022-03-18	0.11	2.57	11	23	0.48	44	51	0.63
1317011232	2022-03-18	0.19	1.62	11	41	0.28	20	20	1.0
1317011347	2022-03-18	0.24	1.91	13	44	0.29	70	100	0.23
1317018074	2022-03-18	0.20	2.72	13	48	0.27	11	39	0.27
1317018133	2022-03-18	0.23	2.96	63	24	2.66	76	39	2.9
1317010240	2022-03-18	0.17	1.94	66	13	5.00	63	20	6.0
1317002228	2022-03-18	0.14	2.80	58	8	7.38	64	8.7	20
1317017067	2022-03-18	0.35	2.20	6	3	1.99	31	21	9.4
1317018167	2022-03-18	0.17	2.98	16	8	1.90	17	1.3	3.7
1317011240	2022-03-18	0.20	2.73	53	25	2.14	41	5.8	2.9
1318086089	2022-03-18	0.47	1.79	38	37	1.03	29	19	1.3
1322043089	2022-03-18	0.40	0.69	17	35	0.48	16	30	0.52
1322043096	2022-03-18	0.41	1.29	9	43	0.20	1.9	30	0.24
1322043208	2022-03-18	0.43	1.50	12	105.3	0.11	0.01	37	0.00
1322043229	2022-03-18	0.18	0.37	14	67	0.21	49	99	0.21
1322043292	2022-03-18	0.61	1.19	62	28	2.24	99	63	2.6
1322043306	2022-03-18	0.68	1.40	40	37.2	1.08	39	36	1.1
1322043340	2022-03-18	0.86	1.12	14	29.7	0.49	15	31	0.37
1323062003	2022-03-18	0.52	1.59	42	49	0.85	27	26	1.0
1323062022	2022-03-18	0.82	1.55	8.8	28	0.31	26	42	0.33
1323062049	2022-03-18	0.93	1.83	40	50.9	0.79	20	24	0.9
1323062052	2022-03-18	0.80	1.50	15	35	0.43	24	45	0.32
1323062087	2022-03-18	0.44	1.22	31	55	0.57	9.7	30	0.56
1323062144	2022-03-18	0.31	0.41	54	8	7.15	103	47	42
1323062270	2022-03-18	0.71	0.09	60	6	9.61	62	1.4	612
1323062280	2022-03-18	0.48	0.63	23	72	0.32	0.01	0.1	0.00
1316013015	2022-03-18	0.70	0.71	14	40.9	0.33	0.01	0	0.00
1322043091	2022-03-18	0.45	0.58	49	52	0.94	22	36	0.68
1322043299	2022-03-18	0.70	1.47	50	23.8	2.09	79	44	2.9
1432008012	2022-03-18	1.44	6.42	32	44	0.73	14	18	0.89
1316013058	2022-03-18	0.25	0.75	6	27.8	0.20	27	39	0.5
1322043048	2022-03-18	0.41	0.51	46	19	2.36	51	24	2.9
1322043348	2022-03-18	0.89	1.80	94	67	1.42	37	14	1.4
1315003001	2022-03-18	0.21	0.27	43	16	2.66	79	54	3.1
1323062055	2022-03-18	0.59	1.14	150	73	2.06	86	12	2.4
1323062234	2022-03-18	0.58	0.34	98	51	1.93	111	55	2.4
1323066010	2022-03-18	0.56	0.52	40	22	1.80	59	39	2.1
1322043093	2022-03-18	0.51	0.72	58	23	2.49	52	18	3.0
1315003132	2022-03-18	0.11	0.52	215	77.8	2.77	121	17	2.7
1315003138	2022-03-18	0.19	0.40	94	32.2	2.91	139	60	4.4
1323067020	2022-03-18	0.50	0.96	104	147	0.71	0.01	20	0.00
1315003168	2022-03-18	0.23	0.87	159	145	1.09	133	121	1.1
1432008018	2022-03-18	1.19	2.53	123	115	1.07	143	118	1.3
1316013021	2022-03-18	0.13	1.47	58	15	3.90	148	95	6.7
1316006044	2022-03-18	0.22	2.44	130	50.3	2.58	105	9.3	3.6
1316006015	2022-03-18	0.19	2.88	109	81.6	1.34	73	36	1.6
1318086029	2022-03-18	0.74	2.23	21	8	2.47	80	61	4.5
1322043262	2022-03-19	0.29	1.55	132	52.2	2.53	81	5.4	2.8
1322043304	2022-03-19	0.46	1.35	104	62	1.67	91	41	2.0
1322043043	2022-03-19	0.60	0.23	153	147	1.04	107	49	2.0
1322043134	2022-03-19	0.54	0.25	143	42	3.40	131	27	4.1
1316014098	2022-03-19	0.15	1.05	64	17	3.80	84	34	5.8
1316014111	2022-03-19	0.31	1.53	122	109	1.12	8.5	10	0.98
1316014114	2022-03-19	0.33	1.50	60	48	1.26	108	93	1.4
1316014010	2022-03-20	0.41	1.30	114	33	3.43	152	38	6.2
1316014013	2022-03-20	0.32	1.61	141	35	3.99	136	22	5.3
1322043012	2022-03-20	0.55	0.22	74	16	4.53	79	27	6.1
1322043038	2022-03-20	0.48	0.11	122	155	0.79	17	10	1.1
1315003418	2022-03-20	0.23	1.09	128	108.4	1.18	107	110	0.97
1316014034	2022-03-20	0.30	1.76	18	54	0.32	55	83	0.41
1316014061	2022-03-20	0.17	1.75	53	59	0.89	44	48	0.92
1322043021	2022-03-20	0.57	0.16	141	129	1.09	51	53	0.98
1316014059	2022-03-20	0.18	1.71	140	108	1.30	145	100	1.5
1322043122	2022-03-21	0.60	0.33	105	105	1.00	97	89	1.1
1322043190	2022-03-21	0.47	1.12	85	51	1.66	122	92	1.7
1322043024	2022-03-21	0.63	0.59	110	110.9	0.99	48	45	1.0
1322043118	2022-03-21	0.65	1.56	131	142	0.92	95	87	1.1
1322043082	2022-03-21	0.46	0.15	94	179	0.52	67	104	0.71
1432008151	2022-03-21	1.05	7.80	101	72	1.40	136	129	1.1
1316014027	2022-03-21	0.16	6.61	99	13	7.56	142	64	11
1315002115	2022-03-22	0.22	1.77	45	19	2.35	37	7.8	2.8
1315002184	2022-03-22	0.24	1.82	23	22.2	1.05	19	24	0.77
1322043302	2022-03-24	0.60	1.65	18	27	0.66	12	20	0.69
1316015116	2022-03-29	0.02	1.94	9	57.2	0.15	0.01	24	0.00
1318062287	2022-03-29	0.30	2.93	26	19	1.39	21	17	1.3

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1318064003	2022-03-29	0.08	2.14	48	26.3	1.83	41	22	1.9
1318064037	2022-03-29	0.14	3.31	14	17	0.85	10	15	0.68
1318064039	2022-03-29	0.10	3.29	14	19	0.73	9.9	17	0.58
1318064070	2022-03-29	0.20	1.79	17	46	0.37	11	45	0.25
1318064078	2022-03-29	0.28	2.45	17	14	1.20	12	13	0.9
1318064085	2022-03-29	0.16	2.27	16	20	0.79	14	18	0.79
1318064136	2022-03-29	0.53	3.74	18	14.4	1.23	11	12	0.89
1318064200	2022-03-29	0.22	1.45	15	36	0.42	11	33	0.32
1318064207	2022-03-29	0.21	2.59	19	34	0.56	13	34	0.38
1318064213	2022-03-29	0.06	2.58	10	17	0.57	3.9	16	0.24
1318064244	2022-03-29	0.22	2.60	14	19	0.70	8.3	18	0.47
1318064256	2022-03-29	0.22	0.09	12	40.0	0.30	13	37	0.36
1318066119	2022-03-29	0.40	0.90	10	26	0.40	11	22	0.51
1318069043	2022-03-29	0.61	1.19	13	109	0.12	19	101	0.19
1318069044	2022-03-29	0.36	1.75	11	22	0.52	7.8	19	0.4
1318069132	2022-03-29	0.08	1.54	18	16.3	1.08	14	13	1.1
1318075098	2022-03-29	0.19	1.98	63	29.4	2.15	49	24	2.0
1318075124	2022-03-29	0.36	0.87	76	56	1.35	64	47	1.4
1319020010	2022-03-29	0.57	0.70	20	8	2.37	12	6.7	1.8
1319025106	2022-03-29	0.48	2.77	16	73.4	0.22	13	71	0.19
1319025137	2022-03-29	0.83	2.74	22	14	1.50	21	11	1.9
1319025222	2022-03-29	0.80	1.49	18	70.3	0.26	17	65	0.26
1319025228	2022-03-29	1.28	1.68	16	82	0.20	11	76	0.14
1319026004	2022-03-29	0.39	2.05	9	12.8	0.69	10	10	1.0
1319026010	2022-03-29	0.34	1.40	20	48	0.42	16	44	0.35
1319026020	2022-03-29	0.42	1.23	17	35	0.48	20	30	0.68
1319026037	2022-03-29	0.34	0.66	63	44	1.43	54	39	1.4
1319026175	2022-03-29	0.22	1.29	13	28	0.46	11	25	0.44
1319031002	2022-03-29	0.19	2.28	13	100	0.13	10.0	85	0.12
1319031003	2022-03-29	0.20	2.35	45	60	0.75	45	54	0.83
1319031071	2022-03-29	0.14	3.26	15	3	5.41	15	1.2	12
1319031145	2022-03-29	0.20	2.36	52	19	2.69	48	16	3.0
1319033097	2022-03-29	0.40	1.66	11	3.8	2.99	13	2.3	6.0
1319033098	2022-03-29	0.32	1.93	57	41	1.38	32	38	0.86
1319033156	2022-03-29	0.35	1.45	34	42	0.80	26	38	0.69
1319033158	2022-03-29	0.39	1.40	10	3	3.70	15	1.3	12
1319033206	2022-03-29	0.42	1.24	45	41	1.09	29	37	0.78
1319033242	2022-03-29	0.12	1.45	36	69	0.52	28	63	0.43
1319033278	2022-03-29	0.15	1.88	42	69	0.62	37	61	0.6
1319033306	2022-03-29	0.14	1.47	72	70	1.03	65	63	1.0
1319033319	2022-03-29	0.67	1.82	44	44.1	1.00	44	41	1.1
1319033344	2022-03-29	0.91	1.87	71	48	1.47	65	42	1.5
1319033503	2022-03-29	0.12	1.18	52	68.1	0.76	45	61	0.75
1319035058	2022-03-29	0.81	2.86	40	14	2.78	31	8.0	3.9
1319035084	2022-03-29	0.85	1.77	47	12	3.88	38	8.6	4.5
1319035086	2022-03-29	1.31	2.09	63	11	5.62	57	8.0	7.2
1319035094	2022-03-29	0.62	2.85	62	33	1.86	56	25	2.3
1319037055	2022-03-29	0.25	1.11	63	16	3.89	47	10	4.5
1319037333	2022-03-29	0.25	1.32	65	36	1.79	44	28	1.6
1319037339	2022-03-29	0.23	1.38	54	25	2.15	50	17	3.0
1319037343	2022-03-29	0.16	1.51	52	21	2.52	48	18	2.7
1319041039	2022-03-29	0.31	2.13	94	62	1.53	71	51	1.4
1319041043	2022-03-29	0.47	2.00	53	24	2.17	48	19	2.5
1319041080	2022-03-29	0.13	3.13	94	23	4.03	78	19	4.1
1319041082	2022-03-29	0.32	1.88	54	14	3.81	44	12	3.8
1319041129	2022-03-29	0.30	2.68	49	11	4.47	44	8.0	5.4
1319041151	2022-03-29	0.28	2.76	50	9	5.57	47	6.4	7.5
1319041184	2022-03-29	0.19	3.30	33	28	1.17	29	25	1.2
1319044016	2022-03-29	0.63	0.97	35	6	6.26	42	0.93	28
1319044027	2022-03-29	0.36	0.38	30	11	2.71	24	1.5	4.6
1319044053	2022-03-29	1.02	1.25	43	6	7.69	44	6.4	15
1319049308	2022-03-29	0.55	0.45	26	87.8	0.30	0.69	57	0.3
1319051008	2022-03-29	0.32	2.67	11	16.6	0.68	20	19	1.1
1319051040	2022-03-29	0.22	3.34			#DIV/0!	0.01	13	0.00
1319051072	2022-03-29	0.22	2.36	12	16	0.74	38	37	1.1
1319051111	2022-03-29	0.19	2.82	26	11	2.42	36	14	3.9
1319053084	2022-03-29	0.49	1.78	22.4	9	2.39	26	7.8	3.6
1320030022	2022-03-29	0.41	1.81	18	60	0.29	1.1	45	0.19
1320052040	2022-03-29	0.22	0.10	11	143	0.08	0.01	79	0.00
1320052042	2022-03-29	0.10	0.11	25	71	0.35	88	134	0.29
1320052185	2022-03-29	0.36	2.69	10	99	0.10	0.01	65	0.00
1316015091	2022-03-30	0.07	0.27	24	88	0.27	0.01	28	0.00
1316015030	2022-03-30	0.16	0.25	55	26.3	2.10	100	74	2.2
1316015001	2022-03-30	0.05	1.14	70	17	4.21	46	22	2.8
1316015043	2022-03-30	0.02	2.22	33	6	5.53	49	13	2.3
1432015237	2022-03-30	0.45	1.26	74	16	4.71	68	1.7	9.4
1316015011	2022-03-30	0.01	2.59	45	23	1.94	34	7.9	2.3
1432011063	2022-03-30	1.27	5.02	22	7	3.01	38	20	7.3
1432011090	2022-03-31	1.46	3.46	33	9	3.62	36	2.9	12
1315002211	2022-04-01	0.68	6.56	20	41	0.49	0.01	3.1	0.00
1316008035	2022-04-02	0.23	1.09	16	27.2	0.59	22	35	0.48
1323063246	2022-04-02	0.54	1.60	28	58	0.49	0.01	24	0.00
1323063217	2022-04-02	0.55	0.85	75	38	1.97	63	30	2.4
1323063152	2022-04-03	0.36	1.30	12	19	0.63	23	24	0.92

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1323063209	2022-04-03	0.52	0.27	18	96	0.18	0.01	44	0.00
1323063273	2022-04-03	0.49	0.85	74	132	0.56	18	57	0.65
1323063064	2022-04-03	0.66	0.51	13	75.3	0.17	31	89	0.18
1323063036	2022-04-03	0.67	0.54	17	38	0.44	45	70	0.25
1323063173	2022-04-04	0.65	0.25	18	54.7	0.32	71	34	1.8
1432013133	2022-04-04	1.59	3.18	18	38	0.47	29	50	0.38
1323063018	2022-04-04	0.50	0.60	54	70	0.77	19	34	0.76
1323063129	2022-04-04	0.59	0.47	57	4	12.99	122	64	95
1323063031	2022-04-04	0.81	0.45	69	56	1.22	11	0.62	1.2
1323063126	2022-04-04	0.68	0.56	12	65	0.18	0.01	49	-0.01
1323063270	2022-04-04	0.55	0.22	14	46	0.30	15	61	-0.13
1323063176	2022-04-04	0.58	0.04	54	21	2.52	50	16	2.9
1432013060	2022-04-04	1.42	4.98	83	36	2.30	60	18	2.3
1432013023	2022-04-04	1.06	3.36	47	18	2.61	64	31	3.2
1432014090	2022-04-07	1.33	1.83	47	30.3	1.56	36	14	1.8
1432014026	2022-04-07	1.38	2.78	54	42.5	1.26	36	27	1.3
1432014024	2022-04-07	1.23	1.01	38	137	0.28	0.01	38	0.00
1432013037	2022-04-07	1.56	2.08	39	28	1.43	136	116	2.2
1317005175	2022-04-07	0.18	4.33	7	3	2.10	6.1	2.7	2.2
1317007056	2022-04-07	0.15	2.96	11	67	0.17	9.1	60	0.15
1317007118	2022-04-07	0.17	1.31	14	43	0.34	6.9	39	0.18
1317010027	2022-04-07	0.21	2.07	11	25	0.44	7.7	22	0.34
1317010060	2022-04-07	0.28	1.16	8	37	0.22	8.8	34	0.26
1317010106	2022-04-07	0.24	0.26	9	52	0.17	9.5	46	0.21
1317010113	2022-04-07	0.18	1.44	14	33.1	0.44	13	30	0.42
1317010152	2022-04-07	0.14	1.73	28	28.8	0.97	32	24	1.3
1317010217	2022-04-07	0.25	1.99	13	56.9	0.23	11	53	0.21
1317010248	2022-04-07	0.16	1.96	33	83	0.40	29	74	0.39
1317010327	2022-04-07	0.15	2.36	11	79	0.14	8.8	71	0.12
1317010354	2022-04-07	0.20	0.51	21	83	0.25	8.7	75	0.12
1317010377	2022-04-07	0.14	0.17	12	68	0.18	5.0	61	0.08
1317012001	2022-04-07	0.56	1.30	9	22.2	0.40	7.5	19	0.38
1317012020	2022-04-07	0.22	1.83	2	29.1	0.06	7.5	24	0.31
1317012036	2022-04-07	0.36	3.33	6	47	0.12	0.01	43	0.0023
1317012119	2022-04-07	0.59	0.79	11	33.8	0.33	14	31	0.46
1317012128	2022-04-07	0.30	1.12	48	81	0.59	41	72	0.57
1317012314	2022-04-07	0.28	3.77	14	43	0.32	9.9	39	0.25
1318068013	2022-04-07	1.06	2.14	6	73	0.09	4.9	69	0.07
1318068019	2022-04-07	0.14	2.58	6	6.9	0.93	5.2	5.5	0.95
1318068084	2022-04-07	0.35	2.89	9	79	0.11	4.5	71	0.06
1318068186	2022-04-07	0.25	1.69	6	84	0.08	7.6	75	0.1
1318072004	2022-04-07	0.29	2.04	12	68	0.18	7.9	60	0.13
1318072035	2022-04-07	0.20	0.71	14	14	0.99	10	12	0.84
1318072053	2022-04-07	0.27	1.13	10	21	0.50	9.8	18	0.55
1318072070	2022-04-07	0.22	1.64	18	12.2	1.51	16	10	1.5
1318072209	2022-04-07	0.14	0.83	9	3	3.13	8.6	1.5	5.6
1318076004	2022-04-07	0.16	1.78	58	44	1.30	47	36	1.3
1318076009	2022-04-07	0.36	1.23	12.0	10	1.24	7.0	8.7	0.81
1319043069	2022-04-07	0.31	1.72	38	11	3.42	64	34	4.5
1319043102	2022-04-07	0.12	0.77	67	96	0.70	23	19	1.1
1319043108	2022-04-07	0.44	1.61	34	14	2.34	79	64	2.2
1319043195	2022-04-07	0.88	2.12	45	19	2.39	42	6.8	3.3
1325079327	2022-04-07	0.36	0.66	10	195	0.05	25	200	0.048
1315096052	2022-04-08	0.23	1.32	154	45	3.42	111	17	3.7
1316007001	2022-04-08	0.23	1.57	143	67	2.13	110	35	2.4
1316015078	2022-04-08	0.23	2.38	113	164	0.69	38	54	0.87
1316007081	2022-04-08	0.20	1.82	89	44.4	2.00	157	126	1.9
1432014086	2022-04-08	1.17	5.15	123	215	0.57	2.3	37	0.77
1432014165	2022-04-08	2.10	5.29	51	27	1.91	174	154	1.9
1316008017	2022-04-08	0.12	1.06	78	62	1.27	15	24	0.84
1316007056	2022-04-08	0.22	2.64	27	35	0.78	49	53	0.85
1316007061	2022-04-08	0.52	3.62	58	16.9	3.42	67	30	3.6
1323064001	2022-04-09	0.47	0.79	36.8	51	0.73	2.5	14	0.75
1316007050	2022-04-09	0.28	2.00	54	43	1.24	55	45	1.3
1316007037	2022-04-09	0.17	1.97	47	34	1.37	56	38	1.6
1315009155	2022-04-10	0.21	3.35	46	35	1.33	36	30	1.2
1316008003	2022-04-10	0.17	1.45	54	37	1.49	47	30	1.5
1323064078	2022-04-10	0.71	0.60	65	22	2.92	55	17	3.1
1315009709	2022-04-10	0.05	2.40	16	76.3	0.21	0.01	18	0.00
1323064051	2022-04-10	0.75	0.72	12	80	0.15	14	71	0.15
1316008061	2022-04-10	0.24	3.30	9	33	0.27	50	67	0.42
1315009672	2022-04-11	0.19	2.19	12	4	3.20	29	28	1.5
1323064035	2022-04-11	0.45	1.05	13	13	0.98	0.01	2.1	-0.04
1323064025	2022-04-11	0.67	0.49	13	83	0.15	0.01	11	0.00
1322045047	2022-04-11	0.77	1.11	8	10	0.80	81	76	1.6
1315009737	2022-04-11	0.09	2.63	11	66	0.17	0.01	7.5	0.00
1315009504	2022-04-11	0.29	2.19	14	71.3	0.19	3.1	60	0.12
1315009503	2022-04-12	0.29	1.51	133	55	2.43	152	64	3.0
1322045051	2022-04-12	0.29	0.16	213	39	5.50	150	45	4.6
1315009025	2022-04-12	0.18	1.85	44.8	14	3.12	60	29	3.8
1315009733	2022-04-12	0.12	0.07	18	5	3.68	23	11	5.5
1322045103	2022-04-12	0.68	1.89	10	51	0.20	0.01	2.7	0.00
1322045132	2022-04-12	0.77	1.97	11	2	5.12	59	46	21
1315009692	2022-04-13	0.15	0.10	212	37	5.75	170	0.66	7.3

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1315009731	2022-04-13	0.13	0.17	16	70	0.23	0.01	27	0.00
1315009522	2022-04-13	0.22	1.20	48	21	2.26	53	35	2.0
1315009748	2022-04-13	0.16	4.37	86	52	1.66	36	18	1.4
1322044112	2022-04-14	0.47	0.31	51	19	2.64	72	46	2.7
1322044270	2022-04-14	0.63	1.16	87.3	22	4.05	71	16	4.4
1322044113	2022-04-14	0.46	0.25	74	13	5.96	69	16	7.1
1322044306	2022-04-14	0.37	0.11	44	92	0.48	0.01	8.8	0.00
1322044220	2022-04-14	0.75	0.58	64	26	2.47	114	83	2.5
1322044047	2022-04-15	0.34	0.06	54	22.8	2.35	49	21	2.5
1322044025	2022-04-15	0.37	0.07	104	49	2.14	75	19	2.4
1322044052	2022-04-15	0.45	0.20	124	98	1.27	32	39	0.92
1322044204	2022-04-15	0.22	0.15	69	9	7.34	140	87	11
1322044255	2022-04-15	0.56	0.29	18	49.7	0.35	0.01	5.4	0.00
1322044312	2022-04-15	0.38	0.18	55	15.6	3.54	90	44	5.1
1322044214	2022-04-15	0.33	0.15	10	3	3.03	23	11	2.3
1322044117	2022-04-15	0.70	0.35	74	21	3.47	60	0.53	5.1
1322044178	2022-04-16	0.46	0.44	11	60	0.19	13	50	0.25
1322044184	2022-04-16	0.44	1.31	6	106	0.05	6.3	96	0.07
1322044180	2022-04-16	0.44	0.44	21	45.0	0.46	28	36	0.76
1322044068	2022-04-16	0.67	0.69	18	62	0.30	22	54	0.41
1322044237	2022-04-16	0.35	0.95	10	54	0.19	4.0	51	0.08
1315005121	2022-04-16	0.23	1.08	35	31	1.14	34	26	1.3
1315005096	2022-04-16	0.19	4.31	40	31.3	1.28	34	26	1.3
1315005022	2022-04-17	0.61	3.59	14	79.7	0.17	14	68	0.2
1315005071	2022-04-17	0.58	2.63	7	54.7	0.13	4.8	51	0.09
1315005045	2022-04-18	0.25	2.66	17	43	0.39	18	37	0.49
1431001158	2022-04-18	2.14	1.76	12	51.9	0.23	8.9	45	0.2
1315005031	2022-04-18	0.42	2.26	28	32	0.89	27	25	1.1
1315005058	2022-04-18	0.23	2.34	18	82.8	0.21	8.8	77	0.11
1315005006	2022-04-18	0.20	4.18	12	40	0.30	7.7	34	0.23
1315008091	2022-04-18	0.27	0.70	12	41	0.30	12	32	0.39
1315008034	2022-04-18	0.35	1.69	14	18	0.76	38	15	2.6
1315008077	2022-04-18	0.22	0.89	6	142	0.04	7.3	119	0.06
1315005082	2022-04-18	0.29	1.93	7	48.4	0.15	12	40	0.31
1431001220	2022-04-19	1.53	1.54	25	15.3	1.62	14	13	1.1
1318080042	2022-04-19	0.43	2.10	21	21.3	0.98	11	18	0.65
1315008016	2022-04-19	0.24	1.01	21	23.8	0.88	11	22	0.51
1315008058	2022-04-19	0.15	0.88	14	21	0.68	11	18	0.59
1315008049	2022-04-19	0.19	0.89	10	32	0.30	9.0	27	0.33
1431001209	2022-04-19	1.90	5.24	18	37	0.48	12	30	0.4
1431001232	2022-04-20	2.21	4.99	31	59	0.53	30	50	0.61
1322044156	2022-04-21	0.38	0.10	20	108.8	0.18	13	95	0.14
1315009653	2022-04-21	0.18	2.23	10	79.4	0.13	9.5	66	0.14
1318086020	2022-04-21	0.66	1.98	12	120.3	0.10	12	106	0.11
1316008078	2022-04-21	0.16	2.43	11	20	0.55	9.0	17	0.53
1315010130	2022-04-22	0.51	1.22	14	35	0.41	10	28	0.36
1315010142	2022-04-22	0.12	0.57	8	20.6	0.39	9.2	19	0.49
1315010001	2022-04-22	0.17	1.87	35	51	0.69	32	42	0.75
1315010081	2022-04-22	0.18	0.74	26	30	0.88	10	25	0.41
1315010126	2022-04-22	0.18	1.27	10	55	0.19	10	49	0.21
1318077072	2022-04-22	0.18	1.31	28	43	0.65	12	20	0.77
1318077095	2022-04-22	0.17	1.43	54	51	1.05	45	37	1.2
1324077044	2022-04-22	0.84	0.77	41	8	4.84	82	44	1.1
1324077098	2022-04-22	0.86	0.40	38	28	1.37	20	3.7	1.7
1324080172	2022-04-22	0.75	0.24	49	16	3.06	60	22	4.3
1432007123	2022-04-22	0.69	0.76	53	16	3.32	48	11	4.7
1317020156	2022-04-22	0.09	0.10	51	7.5	6.83	57	10.0	19
1324078174	2022-04-22	0.24	0.28	127	102	1.25	30	2.6	1.3
1432007160	2022-04-22	0.74	0.79	39	18	2.13	111	85	2.9
1432007130	2022-04-22	0.54	1.28	45	14	3.12	50	14	5.0
1317016064	2022-04-22	0.22	1.06	61	14	4.23	53	9.0	6.9
1317020126	2022-04-22	0.12	1.43	54	17.2	3.12	46	7.4	4.7
1316012172	2022-04-22	0.19	3.45	42	6	7.15	45	11	20
1317019032	2022-04-22	0.20	2.15	114	154	0.74	0.01	0	0.00
1432007037	2022-04-23	0.81	0.88	82	105	0.78	88	130	0.52
1315010129	2022-04-23	0.55	1.12	36	40	0.89	37	32	1.2
1315010103	2022-04-23	0.20	0.93	12.8	53.8	0.24	10	50	0.2
1321034026	2022-04-23	0.58	1.50	14	90	0.16	9.0	83	0.11
1315010068	2022-04-23	0.15	0.86	10	3	3.70	12	1.5	8.2
1321034014	2022-04-24	0.57	1.59	30	60	0.49	15	50	0.3
1315010009	2022-04-24	0.23	1.07	10	73	0.13	13	61	0.21
1321034090	2022-04-24	0.43	1.65	5	75	0.06	7.3	68	0.11
1322046035	2022-04-25	0.76	0.23	22	30.9	0.70	20	25	0.8
1322046074	2022-04-25	0.85	0.19	4	66	0.06	8.0	59	0.14
1321034075	2022-04-25	0.34	2.19	15	217	0.07	12	191	0.07
1322046023	2022-04-26	0.60	0.07	17	55	0.31	14	47	0.29
1322046024	2022-04-26	0.49	0.10	21	66	0.31	11	55	0.2
1315010013	2022-04-27	0.20	1.27	10	54	0.19	9.7	44	0.22
1321094016	2022-04-27	0.70	1.61	21	59	0.35	23	52	0.44
1322046062	2022-04-27	0.70	0.64	26	59	0.44	28	51	0.55
1321094003	2022-04-27	0.45	1.25	27	55	0.49	23	48	0.49
1315010089	2022-04-27	0.09	0.90	22	58	0.39	23	49	0.48
1322046001	2022-04-28	0.60	0.58	30	58	0.51	28	51	0.56
1431001166	2022-04-28	1.22	2.05	70	75	0.94	56	61	0.92

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1432087021	2022-04-29	0.59	0.46	13	83	0.15	8.8	74	0.12
1431001192	2022-04-29	1.89	2.20	10	35	0.29	9.3	33	0.28
1431001182	2022-04-29	1.25	1.56	11	42	0.27	5.8	37	0.16
1432087017	2022-04-30	0.61	0.71	66	64	1.04	58	53	1.1
1432087043	2022-04-30	0.75	0.74	27	152	0.18	27	138	0.2
1431001516	2022-04-30	2.66	2.30	84	54	1.56	86	46	1.9
1431001608	2022-04-30	1.34	1.02	57	62	0.92	53	51	1.0
1431001584	2022-04-30	1.20	0.98	62	73.1	0.85	0.01	63	0.00016
1431001278	2022-04-30	1.49	4.71	32	56	0.57	35	49	0.72
1431001454	2022-04-30	2.00	4.64	32	76	0.42	14	63	0.21
1431001541	2022-05-01	1.71	3.58	71	63	1.14	72	52	1.4
1323065099	2022-05-01	0.83	0.48	51	62	0.82	47	54	0.89
1431001582	2022-05-01	1.83	1.48	64	78	0.83	61	63	0.98
1431001191	2022-05-01	1.52	2.59	55	77	0.72	55	63	0.88
1323065012	2022-05-01	0.32	0.27	13	98	0.13	8.7	84	0.1
1431001143	2022-05-01	1.68	1.59	43	63	0.68	0.01	15	0.00
1431001578	2022-05-01	1.50	1.89	67	48	1.39	67	55	1.3
1431001189	2022-05-01	1.94	4.40	117	213	0.55	0.01	41	0.00
1431001714	2022-05-02	1.83	1.45	29	25	1.17	15	10.0	1.2
1323065110	2022-05-02	0.84	0.52	6	23	0.28	12	21	0.56
1431003217	2022-05-02	1.55	3.56	16	48	0.33	0.01	20	0.00
1323065033	2022-05-02	0.81	1.51	47	32	1.47	61	44	1.6
1431001560	2022-05-02	1.97	1.66	6	6	0.94	28	29	0.84
1431001613	2022-05-02	1.81	1.25	9	27	0.33	0.01	6.0	0.00
1323065116	2022-05-03	0.94	0.56	51	63	0.81	17	24	0.87
1431003204	2022-05-03	1.55	5.05	13	46	0.28	23	57	0.18
1431003328	2022-05-03	1.64	3.45	18	19	0.92	39	42	0.87
1320053097	2022-05-03	0.25	1.73	22	21.6	1.04	18	17	1.1
1431003304	2022-05-03	0.71	1.93	31	43.8	0.71	14	19	0.87
1431001725	2022-05-03	1.79	4.14	34	45	0.77	38	39	0.98
1431001148	2022-05-03	1.81	3.50	39	29.1	1.35	48	39	1.4
1431001150	2022-05-03	1.35	3.37	25	53	0.47	0.01	26	-0.01
1431003379	2022-05-03	1.10	1.70	13	63	0.20	0.01	48	-0.04
1431003332	2022-05-03	1.41	3.59	39	100	0.39	6.8	58	0.44
1431001704	2022-05-03	1.67	4.50	7	59.4	0.12	45	91	0.13
1431001735	2022-05-03	1.23	5.86	15	43.8	0.35	24	53	0.28
1431003368	2022-05-04	1.30	2.34	14	46	0.30	9.7	40	0.26
1431003013	2022-05-04	1.28	0.42	13	2.2	5.86	56	41	12
1431003080	2022-05-04	0.57	0.62	56	45	1.25	8.4	1.4	1.2
1317020004	2022-05-04	0.36	0.68	106	58	1.83	121	88	1.8
1317020063	2022-05-04	0.24	0.89	108	93	1.16	64	41	1.3
1317020091	2022-05-04	0.15	1.80	95	31	3.05	148	76	4.4
1317020119	2022-05-04	0.23	1.06	122	64	1.90	63	21	1.8
1318077110	2022-05-04	0.31	2.80	14	123	0.11	13	126	0.11
1324077002	2022-05-04	0.73	0.80	11	91	0.12	8.6	84	0.1
1324077064	2022-05-04	0.94	0.49	12	40	0.30	9.1	37	0.25
1324080192	2022-05-04	0.42	0.20	16	67	0.24	15	63	0.23
1324080238	2022-05-04	0.97	0.51	20	36	0.56	18	32	0.56
1432007240	2022-05-04	0.60	0.62	16	8	1.97	14	5.0	2.9
1324080206	2022-05-04	0.30	0.24	12	46	0.26	40	42	0.97
1324080254	2022-05-04	0.43	0.29	10	52	0.20	11	44	0.24
1317019113	2022-05-04	0.26	1.05	19	61	0.31	21	56	0.37
1317020043	2022-05-04	0.23	0.85	10	63	0.17	7.8	56	0.14
1317019086	2022-05-04	0.41	1.81	11	78.8	0.14	9.7	70	0.14
1432007140	2022-05-04	0.73	1.29	13	15	0.84	12	13	0.91
1324077140	2022-05-04	0.97	1.26	10	5	2.05	10	2.6	4.0
1317020016	2022-05-04	0.19	0.63	41	39.7	1.03	36	37	0.97
1316012048	2022-05-04	0.21	1.57	16	56	0.29	9.0	55	0.16
1317019036	2022-05-04	0.22	2.99	26	105	0.25	20	85	0.23
1431001127	2022-05-05	1.32	1.40	26	16	1.63	28	13	2.1
1317020102	2022-05-05	0.19	2.37	44	24	1.83	33	21	1.6
1318077116	2022-05-05	0.23	1.14	20	34.4	0.58	17	30	0.56
1318077127	2022-05-05	0.25	1.69	20	121	0.17	13	105	0.13
1317020117	2022-05-05	0.26	1.16	81	70.0	1.16	67	58	1.2
1318077139	2022-05-05	0.71	2.16	10	82	0.12	9.2	77	0.12
1324080012	2022-05-05	0.72	0.14	26	90.9	0.29	14	83	0.17
1318077164	2022-05-05	0.94	1.81	18	54.7	0.34	17	50	0.35
1317020148	2022-05-05	0.17	1.96	21	63	0.33	13	60	0.21
1318077087	2022-05-05	0.18	1.38	15	23	0.67	18	21	0.89
1431003026	2022-05-05	0.69	0.68	13	77	0.17	0.01	39	0.00
1431003210	2022-05-05	1.07	1.16	15	52	0.29	41	72	0.36
1431003022	2022-05-05	0.62	0.59	13	62	0.21	7.5	48	0.28
1431003009	2022-05-05	0.61	0.98	68	58	1.18	61	56	1.1
1431003150	2022-05-05	0.69	1.36	40	27	1.47	49	52	0.95
1323065025	2022-05-05	0.50	4.41	26	33	0.81	41	51	0.67
1323065092	2022-05-05	0.51	0.86	46	68	0.67	9.6	30	0.66
1431001641	2022-05-05	1.93	1.48	34	52	0.66	36	60	0.49
1431001627	2022-05-05	1.83	2.27	12.0	6	2.02	52	48	1.7
1431003321	2022-05-07	1.46	5.48	10	72	0.14	0.01	5.1	0.00
1432086002	2022-05-07	1.16	1.41	48	41	1.17	68	67	1.0
1431003070	2022-05-08	1.63	6.98	15	76	0.20	0.01	36	0.00
1431004228	2022-05-08	0.65	0.94	58	73	0.80	50	69	0.71
1431004146	2022-05-08	1.02	2.07	33	31	1.06	70	66	1.2
1431004004	2022-05-08	0.37	1.08	26	33	0.79	27	28	0.97

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1431004140	2022-05-08	0.76	0.54	48	52.8	0.91	29	30	0.98
1431004042	2022-05-08	0.50	1.74	54	48	1.11	54	46	1.2
1431004048	2022-05-08	0.69	1.40	50	45	1.13	50	43	1.2
1431004108	2022-05-09	0.62	1.14	18	38.4	0.48	25	40	0.57
1431003090	2022-05-10	0.63	1.14	50	114	0.44	0.01	35	0.00
1431003086	2022-05-11	0.70	1.17	63	54	1.18	106	95	1.3
1431004017	2022-05-12	1.01	0.78	14	51	0.27	9.5	45	0.23
1431004161	2022-05-13	0.83	0.75	8	151	0.05	0.01	46	0.00
1315013097	2022-05-13	0.23	2.55	9	60	0.15	94	134	0.26
1315013039	2022-05-13	0.17	2.64	68	68	1.00	50	54	0.94
1315013025	2022-05-14	0.13	1.08	46	3	16.51	93	58	119
1315014038	2022-05-14	0.17	0.12	46	18	2.61	37	0	3.8
1315014080	2022-05-14	0.17	0.42	62	75	0.82	14	13	1.0
1315013069	2022-05-14	0.17	2.59	44	18	2.52	78	60	2.5
1315013030	2022-05-14	0.11	0.28	32	1	34.16	63	12	327
1315013059	2022-05-14	0.16	2.11	53	57	0.92	34	0	1.9
1315013015	2022-05-14	0.19	2.23	44	23	1.88	71	40	2.7
1431005065	2022-05-14	1.73	1.90	50	15.6	3.23	54	18	4.0
1431005617	2022-05-15	2.73	1.28	93	38	2.44	70	12	3.2
1431005676	2022-05-15	0.58	0.44	47	13	3.69	50	27	3.4
1315014085	2022-05-15	0.25	0.18	39	14	2.85	31	9.6	2.9
1315014005	2022-05-15	0.15	1.64	42	15	2.78	37	11	3.4
1315014044	2022-05-15	0.14	0.09	46	16	2.86	40	11	3.6
1431005620	2022-05-15	2.67	1.27	34	12	2.76	36	12	3.8
1315014061	2022-05-15	0.21	2.31	38	13	2.87	35	8.6	4.1
1315014025	2022-05-15	0.21	2.52	61	13.8	4.43	46	8.6	4.7
1431003382	2022-05-15	1.11	1.33	72	23.8	3.03	59	10	3.6
1431005028	2022-05-15	0.64	0.73	119	24	4.96	92	19	5.3
1431003371	2022-05-15	1.11	1.77	33	35.3	0.93	24	17	1.3
1322047202	2022-05-16	0.68	0.64	50	40.9	1.23	41	26	1.4
1322047206	2022-05-16	1.13	0.69	56	31	1.81	66	35	2.2
1322047122	2022-05-17	0.95	0.39	32	53	0.60	6.9	26	0.62
1431003298	2022-05-17	1.00	3.22	24	41	0.59	32	49	0.55
1322047194	2022-05-17	0.85	0.83	59	72	0.82	33	37	0.93
1322047213	2022-05-17	0.69	0.77	64	53	1.21	73	58	1.3
1431005679	2022-05-17	1.37	1.61	18	44	0.41	21	45	0.39
1431003343	2022-05-17	1.61	3.14	76	65	1.17	54	39	1.3
1322047177	2022-05-17	0.89	0.26	48	28	1.71	70	49	2.0
1315015141	2022-05-17	0.24	1.63	53	11	4.97	65	22	7.3
1322047127	2022-05-18	0.73	0.48	67	54	1.24	21	6.8	1.3
1315015155	2022-05-18	0.14	0.10	57	61	0.93	53	49	1.1
1322047146	2022-05-18	0.95	0.71	48	67	0.72	27	45	0.68
1317004014	2022-05-18	0.17	1.93	13	45	0.29	9.9	42	0.23
1317004032	2022-05-18	0.11	3.56	38	63	0.59	36	56	0.64
1317004061	2022-05-18	0.29	1.41	11	37	0.30	12	32	0.38
1317004065	2022-05-18	0.25	1.66	18	37	0.48	15	31	0.46
1317004085	2022-05-18	0.16	1.85	10	66	0.15	6.7	59	0.11
1317004100	2022-05-18	0.48	1.05	14	83	0.16	9.4	76	0.12
1317004111	2022-05-18	0.52	0.97	10	3	3.42	7.0	1.9	3.6
1317004153	2022-05-18	0.23	2.63	15	18	0.83	13	17	0.76
1317004156	2022-05-18	0.11	1.79	22	35	0.64	17	31	0.53
1317004170	2022-05-18	0.24	1.39	7	40	0.18	4.8	38	0.13
1317004219	2022-05-18	0.18	1.65	15	23	0.67	10.0	20	0.49
1317005006	2022-05-18	0.12	1.61	10	53	0.18	25	47	0.53
1317005047	2022-05-18	0.39	1.02	10	59	0.18	8.5	51	0.16
1317005065	2022-05-18	0.28	2.65	11	43	0.26	9.2	38	0.24
1317005166	2022-05-18	0.17	1.34	7	5	1.44	7.1	4.3	1.7
1317005173	2022-05-18	0.18	1.26	11	24	0.47	9.9	21	0.47
1317005179	2022-05-18	0.20	0.56	7	3	2.10	4.1	2.3	1.8
1317010033	2022-05-18	0.08	4.58	5	39	0.12	8.5	37	0.23
1317098001	2022-05-18	0.11	1.46	40	68	0.59	34	58	0.59
1318059023	2022-05-18	0.34	0.48	29	68	0.43	31	58	0.53
1318059031	2022-05-18	0.31	0.71	7	6	1.21	1.3	5.2	0.24
1318059050	2022-05-18	0.31	0.73	38	78	0.48	32	67	0.49
1318062002	2022-05-18	0.18	0.54	20	79	0.25	14	72	0.2
1318062063	2022-05-18	0.15	1.02	20	32	0.63	12	27	0.44
1318062071	2022-05-18	0.24	1.19	58	57	1.01	58	52	1.1
1318062134	2022-05-18	0.43	1.90	42	74.7	0.56	40	68	0.59
1318062178	2022-05-18	0.30	3.54	71	56.6	1.26	60	50	1.2
1318062225	2022-05-18	0.15	2.39	26	33	0.77	21	30	0.7
1318067014	2022-05-18	0.19	4.27	10	45.9	0.23	12	43	0.28
1318067106	2022-05-18	0.15	0.61	10	2.8	3.70	12	1.1	12
1318067117	2022-05-18	0.21	1.09	11	60.3	0.19	10.0	53	0.19
1318067184	2022-05-18	0.14	0.66	16	55.3	0.29	12	50	0.24
1318067237	2022-05-18	0.50	1.61	25	3	7.22	13	1.9	6.8
1318067266	2022-05-18	0.37	0.93	10	42	0.25	16	38	0.41
1318067326	2022-05-18	0.16	1.78	8	4.1	1.97	5.4	2.5	2.2
1318067342	2022-05-18	0.51	1.25	16	63	0.25	13	61	0.21
1318067356	2022-05-18	0.19	1.64	9	3	3.13	6.9	1.4	5.1
1318068094	2022-05-18	0.20	2.96	6	4	1.28	5.6	3.3	1.7
1318068101	2022-05-18	0.16	0.11	10	69	0.15	11	68	0.16
1318068125	2022-05-18	0.43	1.99	6	88	0.06	6.0	80	0.08
1318068144	2022-05-18	0.15	2.21	11	97	0.12	3.5	94	0.04
1318068159	2022-05-18	0.08	2.43	10	2.8	3.42	4.2	1.2	3.6

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1318073018	2022-05-18	0.30	0.88	22	5.3	4.22	6.1	3.2	1.9
1318073050	2022-05-18	0.11	2.31	10	68	0.15	6.5	66	0.1
1318074001	2022-05-18	0.21	7.46	18	90.9	0.20	22	83	0.27
1318075008	2022-05-18	0.25	1.66	25	37	0.67	16	38	0.43
1318075057	2022-05-18	0.28	2.00	10	52	0.20	4.9	51	0.1
1318075070	2022-05-18	0.16	1.63	26	15.3	1.67	19	13	1.5
1319034003	2022-05-18	0.30	1.83	82	67	1.23	76	55	1.4
1319034028	2022-05-18	0.35	1.84	24	66	0.36	25	59	0.42
1319034050	2022-05-18	0.39	1.70	60.0	69.7	0.86	55	63	0.87
1319034077	2022-05-18	0.32	1.82	21	68	0.31	17	65	0.26
1319034080	2022-05-18	0.39	1.86	40	16	2.46	22	13	1.7
1319043001	2022-05-18	0.95	2.19	61	62.2	0.98	51	57	0.89
1319043019	2022-05-18	0.18	2.49	15	84	0.18	0.01	0	0.00
1319043027	2022-05-18	0.15	1.13	33	10	3.18	106	77	5.8
1319043051	2022-05-18	0.17	1.14	48	39	1.22	21	6.1	1.4
1319043086	2022-05-18	0.89	1.89	34.4	22.8	1.51	25	8.6	1.9
1319043117	2022-05-18	0.36	4.79	28	13.8	2.04	27	12	2.5
1319043121	2022-05-18	1.10	1.65	77	22	3.56	57	10	3.7
1319043155	2022-05-18	0.78	1.71	46	10	4.64	60	17	7.4
1319043211	2022-05-18	0.84	2.25	31	10	3.22	46	15	7.5
1319043226	2022-05-18	0.44	1.73	24	7	3.66	27	4.7	2.5
1319055033	2022-05-18	0.41	2.29	11.2	3	3.59	0.01	6.9	0.018
1319055037	2022-05-18	0.94	1.90	7	80	0.09	0.01	1.3	0.00
1319055059	2022-05-18	0.68	1.90	21	4	5.12	85	74	13
1319055066	2022-05-18	0.87	2.43	18	8	2.17	15	0.91	3.7
1319056062	2022-05-18	0.71	2.31	15.2	73	0.21	0.01	5.2	0.00038
1319056068	2022-05-18	0.19	2.97	35	55	0.64	56	67	0.78
1430097001	2022-05-18	0.54	2.07	18	72	0.26	18	58	0.34
1430097013	2022-05-18	0.88	1.54	42	30	1.41	77	61	1.7
1430097030	2022-05-18	1.49	7.25	48	83.1	0.58	0.01	25	-0.01
1325079088	2022-05-18	0.37	0.39	46	10.6	4.37	89	48	8.1
1325079121	2022-05-18	0.26	0.24	35	35.3	1.00	14	5.8	1.3
1325079196	2022-05-18	0.59	0.24	48	19	2.52	89	28	5.6
1325079240	2022-05-18	0.92	0.24	48	50	0.95	23	13	1.3
1325079280	2022-05-18	0.40	0.21	36	5	7.21	39	39	#N/A
1325079305	2022-05-18	0.55	0.97	81	243	0.33	0.01	0	0.00
1325079425	2022-05-18	0.43	0.59	14	58	0.25	147	183	0.29
1322047120	2022-05-19	0.96	0.72	62	6.9	8.97	139	74	5.4
1321070103	2022-05-19	0.73	1.39	13	95	0.14	0.01	15	0.00
1430097061	2022-05-19	1.11	5.77	29	68	0.42	52	83	0.5
1431003058	2022-05-19	0.85	0.79	16	43	0.37	41	63	0.43
1430097065	2022-05-19	0.86	2.96	61	57	1.07	46	39	1.2
1315015169	2022-05-19	0.19	2.20	30	61.9	0.48	25	49	0.55
1315015063	2022-05-19	0.28	2.67	31	5	6.24	73	53	8.5
1321070144	2022-05-20	0.42	1.80	45	32	1.41	19	2.6	1.6
1322047098	2022-05-20	0.94	0.93			#DIV/0!	0.00	0	#N/A
1315015016	2022-05-20	0.13	1.39			#DIV/0!	0.00	0	#N/A
1322047075	2022-05-20	1.03	0.48			#DIV/0!	0.00	0	#N/A
1321070143	2022-05-20	0.65	1.69		0	#DIV/0!	0.00	0	#N/A
1315015098	2022-05-20	0.19	0.15		0	#DIV/0!	0.00	0	#N/A
1315015050	2022-05-20	0.26	2.51			#DIV/0!	0.00	0	#N/A
1315015047	2022-05-20	0.27	2.47			#DIV/0!	0.00	0	#N/A
1315015012	2022-05-20	0.19	2.15			#DIV/0!	0.00	0	#N/A
1321070006	2022-05-21	0.52	1.44			#DIV/0!	0.00	0	#N/A
1321070120	2022-05-21	0.62	1.37			#DIV/0!	0.00	0	#N/A
1321070036	2022-05-21	0.57	1.36			#DIV/0!	0.00	0	#N/A
1321070045	2022-05-21	0.58	1.53			#DIV/0!	0.00	0	#N/A
1321070055	2022-05-21	0.39	1.31			#DIV/0!	0.00	0	#N/A
1324079155	2022-06-04	0.68	0.34	18	7	2.56	17	4.3	3.8
1324079129	2022-06-05	1.13	0.66	43	8	5.12	41	4.4	9.3
1324079403	2022-06-05	0.69	0.26	67	8	8.61	66	3.2	2.1
1431099044	2022-06-06	1.35	0.59	28	8	3.32	22	4.5	4.8
1324081013	2022-06-07	0.69	0.19	40.0	29.4	1.36	52	22	2.4
1324081203	2022-06-07	0.92	0.14	30	18	1.74	28	14	2.0
1324079001	2022-06-07	0.69	0.32	73	23	3.19	206	163	3.7
1324081001	2022-06-08	0.74	0.32	56	42	1.34	43	16	1.7
1324081403	2022-06-08	1.42	0.44	86	173	0.50	0.01	37	0.00
1324081044	2022-06-08	0.64	0.24	62	23	2.70	192	150	3.2
1324081409	2022-06-08	0.55	0.38	66	89.7	0.74	0.09	19	0.76
1324081225	2022-06-09	0.92	0.31	14	62.8	0.22	27	78	0.1
1314005013	2022-06-09	0.24	3.11	22	81	0.27	1.0	57	0.24
1314005105	2022-06-09	0.20	3.21	32	54	0.59	58	74	0.67
1314005088	2022-06-09	0.44	0.60	60	24	2.50	94	49	3.4
1314005006	2022-06-09	0.17	0.73	9	43	0.21	0.01	18	0.00
1314005026	2022-06-09	0.23	3.18	82	15.3	5.33	96	38	6.6
1314005606	2022-06-09	0.07	3.04	48	53	0.91	8.2	10	0.95
1314005049	2022-06-09	0.09	3.68	14	4	3.11	61	47	8.2
1324081034	2022-06-09	0.63	0.93	18	76	0.24	0.01	1.9	0.00
1314005524	2022-06-09	0.38	1.37	18	73	0.25	31	70	0.41
1314005528	2022-06-09	0.62	1.54	14	67	0.20	21	66	0.25
1314005057	2022-06-09	0.22	1.55	39	45	0.88	59	59	1.
1314005003	2022-06-10	0.11	2.55	48	45	1.07	53	39	1.4
1314005542	2022-06-10	0.29	1.23	44	42	1.04	43	37	1.2
1314003082	2022-06-10	0.17	1.61	42	45	0.92	42	38	1.1

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1314003145	2022-06-11	0.14	0.49	27	42	0.65	26	40	0.64
1314003053	2022-06-11	0.18	1.32	39	45.9	0.85	34	37	0.92
1314002129	2022-06-11	0.21	1.47	82	46.6	1.77	76	40	1.9
1314003210	2022-06-11	0.29	1.09	138	99	1.39	34	39	0.93
1314003092	2022-06-11	0.14	0.92	42	47.5	0.88	72	79	0.84
1314002013	2022-06-11	2.13	0.99	26	41	0.63	31	42	0.7
1314003132	2022-06-11	0.19	0.70	63	20.3	3.11	97	35	5.2
1314003066	2022-06-11	0.15	1.46	71	42.8	1.66	40	15	1.7
1314002137	2022-06-11	0.27	4.10	48	39	1.23	63	37	1.8
1314003077	2022-06-11	0.10	1.37	98	28	3.43	92	34	3.7
1314002060	2022-06-12	0.58	1.29	54	28	1.89	33	22	1.4
1314003209	2022-06-12	0.70	1.24	36	20	1.83	40	24	2.0
1314003520	2022-06-13	0.19	0.62	43	41	1.06	23	16	1.2
1314003531	2022-06-13	0.27	1.83	11	33	0.34	15	35	0.31
1323068031	2022-06-14	0.82	5.27	53	58	0.90	27	30	0.94
1314002045	2022-06-14	0.75	1.38	121	39	3.07	117	51	3.3
1323068011	2022-06-14	0.84	2.27	46	49	0.94	27	29	0.95
1314002100	2022-06-14	0.27	1.93	46	18	2.61	78	42	4.0
1323068082	2022-06-14	1.57	1.56	16	29	0.55	7.3	12	0.8
1314002140	2022-06-14	0.50	2.91	18	33	0.57	14	25	0.63
1314003178	2022-06-15	0.19	0.47	22	93	0.23	0.01	28	0.00
1314002096	2022-06-15	0.23	1.60	14	56	0.26	48	81	0.33
1314002125	2022-06-15	0.21	0.99	16.0	24	0.67	42	50	0.62
1323068141	2022-06-15	1.05	2.44	7	35	0.21	2.6	20	0.42
1323068164	2022-06-15	1.52	2.01	6	39	0.14	14	31	0.51
1314002177	2022-06-15	0.44	3.78	33	43	0.76	29	35	0.83
1323068013	2022-06-15	0.55	1.14	24	25.3	0.95	39	37	1.1
1314002169	2022-06-15	0.23	2.15	6	44	0.13	0.01	21	0.00
1314002160	2022-06-15	0.39	0.63	85	11	7.54	120	39	16
1314002020	2022-06-15	0.24	2.23	57	21	2.68	60	5.2	4.9
1323069066	2022-06-16	0.78	0.33	10	71.6	0.15	0.01	14	0.00
1323068050	2022-06-16	0.64	0.42	24	34	0.71	53	65	0.57
1323069131	2022-06-16	0.72	0.38	84	27	3.16	90	29	4.6
1323068401	2022-06-16	0.63	0.64	11	57	0.20	0.01	17	0.00
1323069064	2022-06-16	0.80	0.36	14	55	0.26	14	52	0.23
1323069141	2022-06-16	0.62	0.78	18	37	0.47	34	49	0.55
1323069043	2022-06-16	0.67	0.38	15	41	0.37	7.2	33	0.3
1323068418	2022-06-16	0.59	0.45	34	26	1.28	41	36	1.2
1323069311	2022-06-16	0.65	0.32	68	36	1.88	59	22	2.3
1323069324	2022-06-16	0.63	0.66	18	23	0.75	27	28	0.96
1323069035	2022-06-17	0.72	0.30	61	23	2.63	61	20	3.3
1323069051	2022-06-17	0.56	0.16	32	19.1	1.68	52	18	3.4
1323069019	2022-06-17	0.67	0.18	20	56	0.36	0.01	14	0.00
1323069343	2022-06-17	0.72	0.95	14	30	0.46	43	50	0.69
1314003549	2022-06-18	0.32	0.80	18	39	0.47	2.1	23	0.37
1323069167	2022-06-18	0.81	0.24	42	24	1.76	58	34	2.3
1314002131	2022-06-18	0.70	2.45	11	30	0.37	12	18	0.76
1314003014	2022-06-18	0.19	1.31	14	81	0.17	0.01	27	0.00
1323070412	2022-06-18	0.56	0.40	50	9	5.48	117	75	9.0
1323069063	2022-06-19	0.78	0.40	44	13	3.44	34	5.3	4.3
1431007084	2022-06-19	0.49	1.38	47	12	3.88	49	8.9	6.4
1323069181	2022-06-19	0.58	0.81	50	14	3.51	45	7.3	4.6
1314003528	2022-06-19	0.28	1.11	74	11	6.93	67	11	11
1323070023	2022-06-20	0.57	0.39	65	10	6.29	59	5.6	11
1323070047	2022-06-20	0.57	0.16	42	3	13.58	53	5.2	306
1431007061	2022-06-20	0.63	2.26	48	17	2.79	30	0	3.5
1323069001	2022-06-20	0.77	0.60	41	3	14.52	49	12	238
1431007349	2022-06-20	1.90	2.14	45	7	6.24	41	0	12
1431007276	2022-06-20	1.72	3.06	59	10	5.92	55	3.8	9.9
1323070039	2022-06-20	0.61	0.36	20	2	9.15	140	111	#N/A
1314012169	2022-06-20	0.19	2.53	38	15	2.62	32	5.8	3.5
1431007284	2022-06-21	1.80	2.31	52	12	4.38	45	10	5.2
1431007401	2022-06-22	2.08	3.69	87	21	4.11	63	0	4.8
1431007089	2022-06-22	0.94	2.08	51	8	6.31	59	17	9.1
1431007375	2022-06-22	1.71	5.21	106	19	5.59	94	5.3	7.0
1314012114	2022-06-22	0.21	2.18	55	7	8.42	55	15	11
1314012226	2022-06-22	0.26	1.94	74	4	18.13	62	3.9	62
1431007037	2022-06-22	0.54	1.89	54	10	5.62	46	0.96	8.7
1431007158	2022-06-22	1.12	1.98	57	11	5.20	80	5.9	9.8
1431007035	2022-06-22	0.65	1.79	112	14	7.97	58	8.4	5.8
1431007290	2022-06-22	1.91	3.52	49	7	6.79	58	10	11
1431007246	2022-06-22	1.63	2.28	42	12	3.48	36	4.7	4.3
1431007156	2022-06-22	0.84	1.99	72	11	6.59	58	9.4	7.6
1432017404	2022-06-23	0.95	1.94	15	93	0.16	0.01	7.4	0.00
1431007233	2022-06-23	0.91	1.73	13	98	0.13	6.9	87	0.12
1431007206	2022-06-23	0.88	0.77	33	20	1.67	103	91	1.7
1431007234	2022-06-23	0.74	1.48	12	25	0.48	4.8	17	0.46
1432017011	2022-06-23	0.44	2.80	17	97	0.17	0.01	22	0.00
1432017044	2022-06-24	0.57	7.85	4	94	0.04	8.8	90	0.077
1432017073	2022-06-24	0.44	4.03	6	110	0.05	0.01	89	0.00
1432017031	2022-06-24	0.60	4.40	49	30	1.65	110	103	1.3
1432017113	2022-06-24	0.71	2.36	28	42	0.66	7.6	25	0.55
1432017116	2022-06-24	1.69	1.73	46	48	0.94	29	39	0.78
1432017133	2022-06-24	1.55	1.21	16	48	0.34	11	43	0.28

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1432017081	2022-06-24	1.20	4.85	8	81	0.10	0.01	43	0.00
1432017118	2022-06-24	0.73	2.25	22	41	0.52	47	75	0.26
1432017057	2022-06-24	0.41	8.12	12	50	0.24	4.6	37	0.27
1323070012	2022-06-25	0.57	0.22	10	16	0.64	46	45	1.1
1432017198	2022-06-25	0.25	2.58	13	41.9	0.31	0.01	14	0.00
1432017141	2022-06-25	0.34	5.25	15	46	0.33	14	38	0.43
1323070002	2022-06-25	0.51	0.37	22	35	0.63	26	41	0.52
1432018196	2022-06-25	0.26	3.47	10	30	0.32	21	32	0.59
1432018064	2022-06-25	1.36	1.72	135	28	4.89	130	27	5.6
1432018025	2022-06-25	1.87	2.65	14	23	0.63	11	22	0.44
1432018195	2022-06-25	0.17	2.94	11	47	0.24	0.01	21	0.00
1432018137	2022-06-26	0.31	3.80	21	122	0.17	0.01	43	0.00
1323070092	2022-06-26	0.80	0.42	6	41.6	0.15	83	113	0.2
1432017149	2022-06-26	0.80	1.75	44	42	1.04	36	38	0.93
1432018085	2022-06-26	0.61	5.55	55	40	1.39	46	38	1.2
1314012117	2022-06-26	0.31	2.03	14	20.9	0.69	28	35	0.67
1314012215	2022-06-26	0.28	2.74	22	55.0	0.39	0.01	19	-0.01
1432018178	2022-06-27	0.62	0.99	63	160	0.39	0.01	51	0.00
1314012122	2022-06-27	0.19	0.22	56	43	1.30	140	134	1.2
1323070130	2022-06-27	0.71	0.29	66	72	0.92	42	38	1.1
1432018804	2022-06-27	0.73	1.58	20	60	0.33	16	51	0.34
1314012101	2022-06-27	0.14	2.95	124	49	2.51	116	54	2.7
1314012093	2022-06-27	0.18	0.09	38	88	0.43	0.01	37	0.00
1323070519	2022-06-28	0.65	0.55	14.4	17.8	0.81	79	81	0.91
1323070536	2022-06-28	0.41	0.37	15	51	0.30	0.01	16	0.00
1314012060	2022-06-28	0.20	2.10	15	31	0.50	31	46	0.48
1314012885	2022-06-28	0.19	0.60	82	75	1.10	63	28	1.7
1314012067	2022-06-28	0.17	0.12	118	63	1.88	134	48	3.1
1314012022	2022-06-28	0.18	3.94	32	116	0.28	0.01	42	0.00
1314012883	2022-06-29	0.21	2.95	43	37	1.17	121	106	1.6
1314012818	2022-06-29	0.26	2.83	16	63.1	0.25	0.01	27	0.00
1314008086	2022-06-29	0.11	2.99	29	20	1.46	63	58	1.3
1314012870	2022-06-29	0.14	2.78	15	68	0.22	0.01	17	0.00
1314008149	2022-06-29	0.22	2.04	58	10	5.84	108	64	7.5
1314012033	2022-06-29	0.17	0.24	50	14	3.67	43	6.9	5.5
1314012007	2022-06-29	0.27	1.31	56	13	4.48	53	8.1	6.8
1314008128	2022-06-29	0.17	1.74	47	21	2.29	33	7.7	2.5
1314008079	2022-06-29	0.07	4.74	62	13	4.87	63	17	6.1
1314008062	2022-06-30	0.09	1.99	48	24	1.97	41	9.1	2.6
1323069114	2022-06-30	0.66	0.29	53	13	4.23	62	20	5.6
1323070506	2022-06-30	0.69	0.49	42	13	3.23	40	9.0	4.1
1323070568	2022-06-30	0.67	1.27	51	10.0	5.12	52	10	7.3
1431007260	2022-06-30	1.19	2.89	46	19.7	2.32	39	6.8	3.0
1314008107	2022-06-30	0.17	2.56	56	8.4	6.64	54	16	9.1
1314010050	2022-07-01	0.21	1.54	43	5	8.65	41	4.7	21
1314008176	2022-07-01	0.24	1.88	52	5	10.41	46	1.9	24
1314010088	2022-07-01	0.16	0.55	55	33	1.70	24	2.0	1.8
1314008002	2022-07-01	0.07	1.58	24	24	1.01	8.1	27	0.11
1314010084	2022-07-01	0.23	1.66	62	7.8	7.99	75	21	11
1322049419	2022-07-01	1.79	0.91	27	66	0.41	0.01	5.3	0.00
1314008010	2022-07-01	0.16	4.28	9	33	0.27	39	60	0.28
1322049438	2022-07-01	1.29	1.35	54	73	0.74	74	116	0.29
1322049001	2022-07-02	0.41	0.65	132	54	2.43	83	58	1.5
1314010156	2022-07-03	0.14	2.07	18	42	0.44	0.01	8.4	0.00
1314008094	2022-07-03	0.18	1.42	18	122.2	0.15	0.01	37	0.00
1314010115	2022-07-03	0.25	1.49	44	13.1	3.36	62	29	4.2
1314010073	2022-07-03	0.50	0.92	127	40.9	3.09	91	47	2.3
1322049228	2022-07-03	0.89	0.67	94	149	0.63	0.01	35	0.00
1318083002	2022-07-04	0.65	2.47	60	13	4.58	57	10	6.0
1318083038	2022-07-04	0.32	2.70	36	41	0.88	5.7	9.4	0.9
1314010043	2022-07-04	0.51	1.27	40	24	1.69	51	37	1.7
1314010180	2022-07-04	0.27	2.56	24	64	0.37	0.01	21	0.00
1314010024	2022-07-04	0.17	1.88	43	13	3.22	88	59	3.7
1318083023	2022-07-04	0.89	2.50	56	69	0.82	122	135	0.78
1318083082	2022-07-04	0.10	3.34	30	230	0.13	0.01	60	0.00
1322049170	2022-07-05	0.39	0.28	42	6	7.15	46	11	10
1322049031	2022-07-05	0.68	0.83	47	70	0.67	0.01	3.9	0.00
1314010611	2022-07-05	0.25	0.85	59	18.8	3.16	101	62	3.5
1322049116	2022-07-05	0.64	3.90	147	68.1	2.15	68	15	2.0
1322049068	2022-07-05	1.27	2.27	134	91	1.47	86	55	1.4
1322049108	2022-07-05	1.03	3.14	46	12	3.84	113	80	4.5
1322049053	2022-07-05	0.96	2.96	14	77	0.19	0.01	9.3	0.00
1318083100	2022-07-05	0.18	5.25	131	67	1.94	92	69	1.4
1318083059	2022-07-05	0.22	3.55	161	112	1.43	108	57	1.5
1314010606	2022-07-05	0.32	3.34	70	64	1.09	102	95	1.1
1322049035	2022-07-05	0.64	0.58	42	7	6.17	256	213	9.8
1322049034	2022-07-05	1.62	2.05	19	85	0.23	0.01	4.8	0.00
1322049138	2022-07-05	1.13	1.77	26	173	0.15	0.01	73	0.00
1314010190	2022-07-06	0.08	1.45	135	157.5	0.85	23	58	0.74
1322049084	2022-07-06	0.65	1.20	39	13	3.14	197	157	4.6
1433006010	2022-07-06	0.52	0.27	18	109	0.17	0.01	11	0.00
1433006038	2022-07-07	0.75	1.02	106	55	1.92	133	99	1.7
1322049135	2022-07-07	1.06	0.79	151	85.6	1.76	101	47	1.7
1322048034	2022-07-07	0.86	0.72	13	105	0.12	0.01	73	0.00

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1322048147	2022-07-07	0.60	0.41	23	108	0.22	9.2	97	0.099
1322048517	2022-07-07	0.65	0.96	62	14	4.38	158	97	#N/A
1322048509	2022-07-07	0.74	0.94	59	49.1	1.21	0.01	0	0.00
1433006020	2022-07-07	0.22	0.57	45	180	0.25	0.01	43	0.00
1322048116	2022-07-07	1.12	3.34	22	58	0.37	139	177	0.29
1322048150	2022-07-08	0.54	0.62	20	77.8	0.26	1.6	53	0.29
1432081116	2022-07-08	1.14	1.37	48	28	1.69	86	72	1.6
1322048049	2022-07-08	0.70	1.52	14	7	1.98	41	25	4.7
1322048114	2022-07-08	0.63	0.10	56	8.4	6.64	56	4.6	10
1322051107	2022-07-09	0.96	0.33	55	48	1.16	34	5.6	1.7
1322051109	2022-07-09	0.65	1.02	10	85	0.12	0.01	43	0.00
1322048076	2022-07-09	0.49	1.87	12	3	4.27	95	80	12
1322051095	2022-07-09	0.60	0.23	46	14.7	3.11	39	1.4	4.6
1322051020	2022-07-10	0.39	0.21	30	12	2.56	28	11	2.8
1322051078	2022-07-10	1.09	0.28	13	63	0.20	0.01	9.8	0.00
1322050418	2022-07-10	0.56	0.48	14	19	0.71	59	58	1.1
1322050428	2022-07-10	0.62	0.26	11	4	2.76	29	16	6.7
1322051064	2022-07-10	0.51	0.15	10	115	0.09	0.01	2.3	0.00
1322050090	2022-07-10	0.46	0.31	14	88	0.16	45	107	0.22
1314010089	2022-07-12	0.17	1.17	18	86	0.21	23	80	0.28
1322048068	2022-07-12	0.64	1.56	6	91	0.07	5.6	78	0.13
1314012827	2022-07-12	0.13	3.13	15	65	0.23	90	136	0.21
1323069175	2022-07-12	0.72	0.87	19	58	0.33	22	58	0.32
1431007150	2022-07-12	0.78	1.96	40	58	0.69	39	53	0.72
1431007212	2022-07-12	1.01	1.83	86	62	1.38	66	52	1.3
1323069069	2022-07-12	0.76	0.36	48	53	0.91	47	55	0.83
1323070124	2022-07-12	0.79	0.32	148	106	1.39	73	47	1.3
1431007261	2022-07-12	0.90	1.42	125	69	1.80	138	92	1.8
1314007001	2022-07-15	0.21	1.25	8	84	0.10	18	84	0.15
1314007085	2022-07-15	0.29	2.64	14	63	0.23	38	77	0.3
1432023145	2022-07-15	0.74	1.58	10	8	1.28	64	57	2.4
1432023077	2022-07-15	1.46	1.08	15	42	0.36	0.01	5.5	0.00
1321071029	2022-07-16	0.51	1.15	10	54	0.19	0.55	38	0.25
1318089205	2022-07-16	0.85	2.25	3	146	0.02	0.01	49	0.00
1321071202	2022-07-16	0.56	2.45	3	60	0.05	69	119	0.11
1321071014	2022-07-16	0.53	0.06	48	9	5.30	100	56	8.3
1321071251	2022-07-16	0.93	1.26	52	15	3.47	47	5.9	4.6
1318089010	2022-07-16	0.93	2.68	46	36	1.28	26	12	1.5
1318089052	2022-07-16	0.87	2.15	92	91	1.01	34	32	1.0
1314007032	2022-07-16	0.32	1.21	8	77	0.10	24	79	0.2
1321071163	2022-07-17	0.28	2.46	13	46	0.28	45	69	0.42
1321071226	2022-07-17	0.39	1.25	15	60	0.25	3.9	42	0.28
1321071115	2022-07-17	0.49	0.35	10	17	0.58	50	53	0.81
1321072203	2022-07-17	0.13	0.61	3	50	0.06	0.01	15	0.00
1321072277	2022-07-17	0.17	0.97	14	52.5	0.27	13	44	0.34
1321071091	2022-07-17	0.62	1.14	140	28.1	4.98	150	47	6.8
1321072310	2022-07-17	0.50	0.30	10	131	0.07	0.01	18	0.00
1321071101	2022-07-19	0.87	0.79	98	41	2.37	90	48	2.4
1321074074	2022-07-19	0.43	0.05	30	20	1.52	46	31	1.9
1321071110	2022-07-19	0.71	1.10	9	58	0.15	73	118	0.16
1321074003	2022-07-19	0.31	0.56	11	46	0.24	24	54	0.29
1321074061	2022-07-19	0.57	0.79	16	48	0.33	13	42	0.34
1321074001	2022-07-20	0.38	0.98	36	30	1.20	31	16	1.6
1321074132	2022-07-20	0.57	1.31	67	20	3.31	73	26	4.1
1321074049	2022-07-20	0.50	0.11	49	76	0.64	24	43	0.72
1431012442	2022-07-20	0.99	1.33	24	83	0.29	12	67	0.25
1314012233	2022-07-21	0.11	2.16	63	61	1.04	65	60	1.1
1318089020	2022-07-21	0.44	2.65	38	38	0.99	80	73	1.2
1321071211	2022-07-21	0.63	1.24	21	78	0.27	0.01	34	0.00
1321074162	2022-07-21	0.71	2.33	12	57	0.21	32	72	0.25
1431012329	2022-07-21	0.58	0.97	67	76	0.89	19	15	1.1
1321074175	2022-07-21	0.68	0.23	6	102	0.06	0.01	67	0.00
1321074125	2022-07-21	0.45	0.22	29	8	3.55	83	52	6.7
1431012362	2022-07-21	0.47	0.82	52	28	1.89	34	5.3	2.3
1321074085	2022-07-22	0.37	0.22	17	27	0.63	14	22	0.64
1431012418	2022-07-22	0.55	0.56	50	120.3	0.42	0.01	23	0.00
1321074084	2022-07-22	0.56	0.42	98	70.6	1.39	145	99	1.9
1431012322	2022-07-22	1.14	0.90	79	91.3	0.87	24	53	0.57
1431012566	2022-07-22	0.36	1.79	75	93.8	0.80	36	66	0.55
1321075151	2022-07-22	0.79	1.03	12	153	0.08	0.01	68	0.00
1431012570	2022-07-23	0.28	0.70	17	109.1	0.15	60	140	0.17
1321075123	2022-07-23	0.46	0.90	22	100	0.22	19	97	0.16
1432021054	2022-07-25	0.37	1.48	50	18	2.74	131	91	3.7
1432021090	2022-07-25	0.95	5.85	122	60	2.04	56	15	1.9
1321073245	2022-07-27	0.75	1.49	75	62	1.21	68	54	1.3
1321073304	2022-07-27	0.34	1.33	68	53.1	1.28	68	54	1.3
1321075401	2022-07-27	1.05	1.61	70	25	2.75	89	48	2.9
1321073232	2022-07-27	0.54	1.33	57	48	1.20	31	21	1.2
1321073288	2022-07-27	0.70	1.12	35	97	0.36	0.01	43	0.00
1321079122	2022-07-27	0.45	0.48	42	223	0.19	0.01	87	0.00
1321073429	2022-07-27	0.64	1.35	33	117	0.28	117	204	0.17
1321073444	2022-07-28	0.68	1.63	43	132	0.33	0.01	105	0.00
1321074114	2022-07-29	0.24	0.20	86	53	1.64	92	47	2.1
1321079119	2022-08-03	0.38	1.99	6	45	0.14	60	93	0.22

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1321081020	2022-08-04	0.94	1.63	49	35	1.38	75	40	2.4
1321081041	2022-08-04	1.07	3.65	38	7	5.35	63	25	9.5
1313003009	2022-08-04	0.19	0.77	58	32	1.83	30	4.4	2.0
1313003070	2022-08-04	0.21	0.47	79	24	3.34	79	26	3.9
1313003073	2022-08-05	0.20	0.81	65	23	2.88	64	18	4.5
1313005138	2022-08-05	0.16	0.36	45	13	3.42	48	13	4.4
1313003047	2022-08-05	0.37	0.74	15	61	0.25	0.01	10	0.00
1313005163	2022-08-05	0.09	0.75	54	29	1.87	86	55	2.3
1313003083	2022-08-06	0.22	1.61	16	19	0.85	31	24	1.4
1320056001	2022-08-13	0.61	1.03	78	102.5	0.76	4.5	16	0.85
1320056631	2022-08-13	0.08	0.18	41	18	2.29	98	73	2.8
1320056090	2022-08-13	0.13	0.92	90	41	2.19	67	14	2.5
1320056816	2022-08-13	0.71	2.06	54	47	1.17	40	35	1.1
1313009055	2022-08-13	0.20	1.44	47	3	15.12	85	37	58
1320056673	2022-08-14	0.25	0.62	74	11	6.55	57	0.84	8.3
1320056772	2022-08-14	0.30	0.73	50	31	1.60	29	7.7	1.8
1320056793	2022-08-14	0.42	1.43	38	57	0.66	11	27	0.7
1320056168	2022-08-14	0.46	1.41	46	8	6.08	86	55	7.6
1320056719	2022-08-14	0.54	0.95	30	6	4.99	34	4.7	8.9
1313009001	2022-08-14	0.33	1.86	85	8	10.06	71	3.7	15
1313007017	2022-08-14	0.20	2.25	44	14.7	3.00	32	4.8	3.4
1313009079	2022-08-14	0.52	3.18	46	7	6.75	50	11	9.4
1313009059	2022-08-14	0.11	1.99	39	5	8.37	35	4.6	12
1313009041	2022-08-14	0.22	1.50	35	9	3.89	38	2.9	7.4
1313009014	2022-08-14	0.19	1.41	12	37	0.32	0.01	5.5	0.00
1313007126	2022-08-15	0.18	0.08	50	50	0.99	43	29	1.5
1320056647	2022-08-15	0.74	1.42	8	93	0.09	0.01	42	0.00
1313007161	2022-08-15	0.19	2.85	38	19	1.94	122	86	3.4
1313007034	2022-08-15	0.21	1.66	58	61	0.95	27	15	1.2
1320055077	2022-08-16	0.26	2.44	75	54	1.40	66	54	1.3
1320056699	2022-08-16	0.91	1.87	57	13	4.55	97	47	6.6
1320056745	2022-08-16	0.79	2.01	62	11	5.71	69	9.0	#N/A
1320055009	2022-08-17	0.35	1.04	68	45	1.51	21	0	1.5
1320055132	2022-08-17	0.60	2.14	14	40	0.34	6.3	33	0.27
1320057112	2022-08-17	0.45	1.61	19	81	0.24	0.01	36	0.00
1313007082	2022-08-17	0.17	0.16	59	48	1.22	91	73	1.4
1313007059	2022-08-17	0.15	2.23	110	35	3.16	102	40	3.2
1320055055	2022-08-18	0.64	1.34	38	35	1.10	25	29	0.89
1313007416	2022-08-18	0.22	2.43	65	68	0.96	34	31	1.0
1320057158	2022-08-18	0.76	2.17	42	70	0.60	36	61	0.6
1320057169	2022-08-18	0.44	1.01	38	1.3	30.74	106	64	273
1320057209	2022-08-18	0.36	1.03	69	40.9	1.68	1.6	0	1.0
1320055043	2022-08-18	0.64	1.66	66	76	0.86	21	37	0.76
1320055123	2022-08-18	0.70	1.62	64	65	0.99	67	66	1.0
1320057003	2022-08-19	0.64	1.42	23	37	0.64	46	59	0.61
1320057025	2022-08-19	0.24	1.23	20	73	0.27	0.01	32	0.00
1320057182	2022-08-19	0.66	3.79	30.4	37.8	0.80	71	67	1.1
1320059066	2022-08-21	0.81	1.67	36	11	3.39	53	27	4.2
1313008094	2022-08-21	0.19	1.62	7	17.5	0.41	0.01	8.1	0.00
1313008082	2022-08-21	0.13	4.69	10	28.8	0.36	0.27	15	0.34
1313008056	2022-08-21	0.13	2.03	47	38	1.26	42	23	1.6
1320059117	2022-08-21	0.88	2.06	39	10	4.05	61	32	5.1
1320059130	2022-08-21	0.61	0.11	66	24	2.76	109	7.1	7.1
1320059196	2022-08-21	0.61	0.54	33	2	15.01	54	17	135
1320059031	2022-08-21	0.80	2.41	56	43	1.31	0.01	0	-0.01
1320059120	2022-08-22	0.58	0.52	22	18	1.22	45	36	1.7
1320059161	2022-08-22	0.62	0.15	44	24	1.83	40	15	2.6
1320059043	2022-08-22	1.05	3.40	29	29	0.99	25	15	1.4
1320059028	2022-08-23	0.57	0.75	42	40	1.05	34	25	1.3
1320060026	2022-08-23	0.64	0.50	40	4	10.68	81	33	47
1320059059	2022-08-24	1.14	1.28	78	41	1.90	53	1.0	2.5
1320061371	2022-08-24	0.61	0.38	6	69	0.09	0.01	40	0.00
1320061389	2022-08-24	0.51	0.42	30	82	0.37	0.01	34	0.00
1320061317	2022-08-24	0.55	0.43	47	39	1.20	85	73	1.4
1320061353	2022-08-25	0.59	0.49	54	72.8	0.74	29	34	0.92
1320061383	2022-08-25	0.47	0.32	42	31	1.36	73	63	1.4
1320062897	2022-08-25	0.47	0.40	51	5	10.25	74	26	24
1320061400	2022-08-27	0.77	0.45	35	7	4.90	40	2.1	11
1320059011	2022-08-27	0.94	0.75	37	26	1.44	21	3.9	1.8
1320060030	2022-08-27	1.49	0.77	28	5	5.60	54	21	13
1320060097	2022-08-27	0.42	1.19	43	16	2.66	38	2.7	3.7
1320060179	2022-08-27	0.67	1.32	44	14	3.13	46	13	4.3
1320060189	2022-08-27	0.72	1.03	90	29	3.08	74	10	3.7
1432026039	2022-08-27	0.44	1.80	28	56.6	0.50	1.5	24	0.56
1432026059	2022-08-27	0.30	1.36	61	30	2.01	48	50	0.88
1320060143	2022-08-27	0.77	2.33	22	21	1.07	27	21	1.3
1320056776	2022-08-28	0.82	1.77	36	28	1.28	33	18	1.7
1432026170	2022-08-28	0.21	1.18	26	48	0.56	0.01	23	0.00
1320060546	2022-08-28	0.99	2.17	71.3	180	0.40	0.01	42	0.00
1320061310	2022-08-28	0.63	0.94	58	46	1.26	84	62	1.6
1320062914	2022-08-29	0.40	0.19	29	42	0.68	27	36	0.78
1432026081	2022-08-29	0.88	1.73	81	49.1	1.65	79	39	1.9
1320060048	2022-08-29	0.04	0.12	41	40	1.01	45	45	0.99
1319060207	2022-09-02	0.62	2.18	54	34	1.58	52	36	1.5

Appendix A-2: Acid-Base Accounting Audit Data

Sample Site Name	Sample Date	LECO Total Carbon (wt.%)	LECO Total Sulfur (wt.%)	Site LECO NP (Fe-carbonate adjusted) (kg CaCO ₃ /tonne)	Site LECO AP (kg CaCO ₃ /tonne)	Site LECO NPR	Independent Modified Sobek NP (kg CaCO ₃ /tonne)	Independent AP (kg CaCO ₃ /tonne)	Independent Modified Sobek NPR
1319060390	2022-09-02	0.24	2.31	35	15	2.30	62	32	4.2
1319060399	2022-09-02	0.54	0.92	50	42	1.19	23	9.3	1.4
1319060329	2022-09-03	0.59	2.91	54	52	1.03	42	37	1.1
1431015079	2022-09-03	1.20	0.66	18	6	2.95	188	165	7.2
1319060338	2022-09-03	0.16	3.08	26	59	0.44	0.01	3.6	0.00
1319060200	2022-09-03	0.38	2.10	74	52	1.43	82	53	1.7
1313010026	2022-09-03	0.19	1.39	82	115	0.72	22	41	0.8
1313010008	2022-09-03	0.72	1.66	12	22	0.54	84	95	0.46
1319060148	2022-09-03	0.39	1.94	14	13	1.04	21	20	1.1
1320059128	2022-09-08	0.42	0.14	13	24	0.53	2.9	11	0.6
1320056693	2022-12-13	0.58	1.07	12	12	0.99	24	21	1.3

Appendix B

Independent Laboratory Certificates of Analysis



Report No.: A22-01403
Report Date: 11-Aug-22
Date Submitted: 04-Feb-22
Your Reference: 2022_Jan_Check_Assays

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Lisa McGlinchey

CERTIFICATE OF ANALYSIS

205 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Testing Date, and details. Rows include 1A2-50-Tbay, 1E3-Tbay NewGold, QOP AA-Au (Au - Fire Assay AA), QOP AquaGeo (Aqua Regia ICPOES), 2022-04-13 14:29:28, 2022-05-10 21:42:05

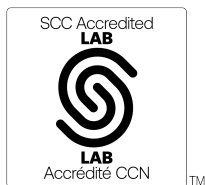
REPORT A22-01403

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 673

ACTIVATION LABORATORIES LTD.
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E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Report No.: A22-01403
Report Date: 11-Aug-22
Date Submitted: 04-Feb-22
Your Reference: 2022_Jan_Check_Assays

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Lisa McGlinchey

CERTIFICATE OF ANALYSIS

205 Pulp samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
11 ABA Modified Sobek Package	Acid Base Accounting	2022-04-28 09:57:14
4F-C, S	Infrared	2022-04-22 22:04:05

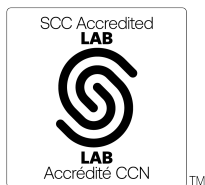
REPORT A22-01403

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 266

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	AP (T- Sulphur)	NP	MPA	NP:MP A Ratio	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	kg CaC O3/t	kg CaC O3/t	kg H2S O4/t	Ratio	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit					0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	Calc	TITR	Calc	Calc	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0127-013					9.52	0.41	338	0.3	< 0.5	147	309	1	4	< 2	32	2.13	3	10	43	< 0.5	12	0.53	6
GC22-0128-009FD					10.0	0.15	79	< 0.2	< 0.5	38	842	1	98	4	71	2.69	2	14	599	< 0.5	< 2	3.69	26
GC22-0126-018					9.37	0.36	307	0.7	< 0.5	263	339	1	10	< 2	29	2.44	3	12	43	< 0.5	7	0.71	6
1324073186					9.44	1.60	171	1.2	0.9	126	1610	< 1	62	< 2	419	3.19	8	13	27	< 0.5	< 2	2.04	37
GC22-0130-006					9.87	0.60	97	< 0.2	< 0.5	13	380	< 1	13	< 2	39	1.81	7	12	18	< 0.5	3	1.29	11
GC22-0131-002					9.84	0.58	176	0.3	< 0.5	48	493	< 1	7	4	84	2.31	5	< 10	40	< 0.5	< 2	0.86	8
1319045099					9.59	0.17	5	< 0.2	< 0.5	110	514	< 1	48	< 2	47	4.68	< 2	20	12	< 0.5	< 2	3.48	24
1319045047					9.79	1.67	239	3.8	0.9	826	1930	2	585	41	259	1.80	28	14	32	< 0.5	< 2	2.44	38
1319045144					9.30	0.94	372	5.3	2.1	250	1140	< 1	22	91	616	2.02	141	12	20	< 0.5	3	0.70	10
1319045119					9.58	0.72	198	4.8	4.7	58	1170	< 1	21	73	1330	1.99	93	16	21	< 0.5	< 2	0.84	10
GC22-0132-021					9.23	0.47	557	0.4	< 0.5	331	207	< 1	3	< 2	25	2.96	5	11	31	< 0.5	3	1.49	6
GC22-0033-001					9.53	0.35	135	< 0.2	< 0.5	49	516	< 1	8	< 2	68	2.20	4	11	38	< 0.5	3	0.70	7
1324073040					9.59	0.82	432	0.5	1.3	112	1440	< 1	52	< 2	576	3.26	3	11	49	< 0.5	< 2	2.81	37
1319045091					9.58	0.55	67	1.0	< 0.5	38	756	< 1	11	18	105	1.70	44	15	35	< 0.5	< 2	2.30	8
GC22-0134-007					9.29	0.43	83	< 0.2	< 0.5	51	410	1	6	< 2	65	2.81	4	12	42	< 0.5	< 2	1.40	6
GC22-0132-012					9.36	0.59	727	0.3	< 0.5	309	249	< 1	4	< 2	23	1.92	5	11	29	< 0.5	5	0.93	6
F009106							526	0.2	< 0.5	159	768	< 1	55	12	90	3.62	23	35	17	< 0.5	< 2	3.31	29
1324075112					9.84	0.39	69	1.4	0.7	23	755	4	21	5	298	1.89	8	15	69	< 0.5	< 2	2.14	10
GC22-0070-007					9.76	0.54	1240	4.7	< 0.5	27	1330	< 1	11	44	107	0.55	153	11	23	< 0.5	< 2	1.68	10
1324075183					9.80	0.45	21	0.3	< 0.5	20	803	< 1	62	5	195	1.65	5	15	83	< 0.5	< 2	2.21	19
GC22-0072-016					9.90	0.49	97	1.7	1.0	28	999	1	11	257	288	2.21	27	13	38	< 0.5	< 2	3.04	8
GC22-0073-012					9.35	0.72	521	1.7	1.2	29	1330	< 1	10	45	276	1.93	62	13	22	< 0.5	< 2	2.56	10
GC22-0068-014					9.60	0.59	161	2.8	2.1	66	1660	1	12	87	619	1.95	52	14	29	< 0.5	< 2	2.43	8
1324075218					9.72	0.46	100	2.2	1.1	56	713	< 1	15	6	374	1.85	8	21	43	< 0.5	< 2	2.21	9
1324075187					10.0	0.39	34	0.2	< 0.5	34	743	< 1	14	5	124	2.39	15	21	78	< 0.5	< 2	2.20	10
GC22-0071-020					9.84	0.52	87	0.4	< 0.5	12	1530	< 1	9	40	124	1.04	26	< 10	39	< 0.5	< 2	2.83	7
GC22-0083-017					8.40	2.50	622	1.4	< 0.5	91	753	< 1	57	6	167	2.95	92	12	< 10	< 0.5	13	0.99	52
GC22-0076-001					9.65	0.42	318	0.9	1.0	17	850	< 1	8	26	285	1.21	143	15	24	< 0.5	< 2	2.10	7
1324075239					9.67	0.51	312	0.5	0.5	22	906	< 1	6	65	244	1.67	46	14	42	< 0.5	< 2	2.05	7
1324075170					9.15	0.36	16	0.3	< 0.5	15	711	< 1	16	6	171	2.22	7	17	50	< 0.5	< 2	2.09	9
GC22-0075-001					8.85	1.31	195	1.9	13.3	32	244	< 1	9	25	3580	1.25	200	12	11	0.5	5	0.37	8
GC22-0077-015					9.13	0.49	83	3.6	2.7	71	1320	< 1	12	56	690	1.48	55	14	22	< 0.5	< 2	1.09	10
1317017019					8.54	0.51	58	0.2	< 0.5	20	395	1	8	5	63	2.99	11	11	29	< 0.5	< 2	1.77	8
GC22-0074-009					9.34	0.52	358	3.1	0.9	53	1320	< 1	7	131	242	1.05	66	11	26	< 0.5	< 2	3.15	9
GC22-0078-011					9.01	0.81	94	1.2	4.7	42	1790	< 1	14	43	1130	1.87	77	21	25	< 0.5	< 2	1.85	9
GC22-0075-011					9.13	0.57	97	1.4	1.2	32	1320	1	11	124	318	1.22	86	12	25	< 0.5	< 2	2.63	9
1325085222					9.30	0.37	82	0.6	< 0.5	48	679	1	9	3	58	1.01	7	14	40	< 0.5	< 2	2.03	9
F009108							1020	0.3	< 0.5	163	785	< 1	56	17	114	3.65	43	38	23	< 0.5	< 2	3.38	28
1317010134					9.04	0.47	404	0.4	2.3	36	800	< 1	8	5	726	1.84	24	13	35	< 0.5	< 2	1.71	8
1317010421					9.08	0.22	5	< 0.2	< 0.5	112	505	< 1	45	< 2	51	4.84	2	15	< 10	< 0.5	< 2	3.44	24
1318088077					8.86	0.44	236	0.4	< 0.5	42	438	< 1	10	4	50	2.40	26	< 10	33	< 0.5	4	1.55	8
1318088041					8.80	0.58	91	0.2	< 0.5	40	391	< 1	10	3	51	1.90	14	13	38	< 0.5	< 2	0.99	9
1318088005					9.08	0.29	47	0.3	< 0.5	160	656	< 1	51	< 2	71	3.98	2	13	< 10	< 0.5	< 2	2.73	26
1317009080					8.92	0.28	96	< 0.2	< 0.5	48	301	1	10	40	44	2.26	< 2	14	19	< 0.5	< 2	0.62	9
1318088023					8.97	0.48	604	0.6	< 0.5	77	541	2	11	8	78	2.50	10	14	40	< 0.5	< 2	1.80	8
1317010240					8.99	0.57	361	0.6	< 0.5	218	428	< 1	8	6	71	2.57	10	12	29	< 0.5	5	1.36	7

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	AP (T- Sulphur)	NP	MPA	NP:MP A Ratio	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	kg CaC O3/t	kg CaC O3/t	kg H2S O4/t	Ratio	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit					0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	Calc	TITR	Calc	Calc	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1317010341					8.78	0.51	56	< 0.2	< 0.5	45	536	< 1	8	4	59	2.87	10	13	28	< 0.5	< 2	1.70	8
1317010466					8.85	0.61	53	0.5	< 0.5	87	422	4	12	4	62	1.85	8	14	23	< 0.5	2	1.31	10
1317009029					8.79	0.35	137	0.3	< 0.5	55	545	3	10	3	79	2.58	4	12	39	< 0.5	4	0.43	7
1318088001					9.05	0.30	14	< 0.2	< 0.5	127	515	< 1	42	< 2	50	4.92	< 2	21	< 10	< 0.5	< 2	3.48	24
1317009103					8.96	0.36	124	0.2	< 0.5	100	464	< 1	8	3	40	3.11	2	14	24	< 0.5	< 2	1.24	9
1317009124					9.01	0.33	585	0.4	< 0.5	29	580	< 1	12	14	173	2.76	6	16	43	< 0.5	< 2	0.90	8
1317002228					9.02	0.69	245	0.8	< 0.5	199	354	< 1	9	< 2	76	1.73	11	12	23	< 0.5	6	0.48	8
1317002209					9.03	0.64	222	0.4	< 0.5	91	354	< 1	12	< 2	165	2.01	8	11	17	< 0.5	5	0.44	9
1325080262					9.54	0.37	5	< 0.2	< 0.5	28	666	2	14	< 2	106	1.38	4	16	64	< 0.5	< 2	1.38	8
1317002245					9.29	0.18	7	< 0.2	< 0.5	102	399	< 1	40	< 2	46	5.06	< 2	15	< 10	< 0.5	< 2	3.64	21
1317002027					9.03	0.55	78	0.2	< 0.5	110	345	1	8	130	119	1.75	8	12	29	< 0.5	3	1.07	11
F009109							528	0.2	< 0.5	169	815	< 1	59	9	96	3.93	24	37	19	< 0.5	< 2	3.55	30
1317002004					9.05	0.71	33	0.2	0.7	18	505	1	13	3	276	2.18	10	12	24	< 0.5	< 2	1.20	10
1317002033					8.77	0.74	227	0.5	< 0.5	103	324	< 1	10	< 2	122	1.91	9	11	12	< 0.5	11	0.24	10
1325080252					9.44	0.38	7	< 0.2	< 0.5	15	756	< 1	47	< 2	300	2.53	6	22	89	< 0.5	< 2	2.45	12
1325080300					9.42	0.31	16	< 0.2	< 0.5	106	567	< 1	185	< 2	81	2.69	< 2	16	31	< 0.5	< 2	2.08	36
1325080234					9.39	0.37	9	< 0.2	< 0.5	18	674	< 1	17	6	156	1.87	3	15	49	< 0.5	< 2	2.53	9
1325081284					9.52	0.23	< 5	< 0.2	< 0.5	14	426	< 1	11	6	82	1.98	3	15	40	< 0.5	< 2	0.92	10
1325081218					9.42	0.44	30	< 0.2	< 0.5	17	929	< 1	14	3	126	2.91	17	17	62	< 0.5	< 2	2.73	9
GC22-0004-018					9.12	0.38	44	0.9	< 0.5	8	411	1	7	8	65	2.46	9	15	30	< 0.5	< 2	1.35	9
GC22-0007-005					9.13	0.50	369	3.0	1.3	16	710	1	11	39	343	2.07	39	14	26	< 0.5	< 2	1.83	9
GC22-0004-001					9.06	0.58	319	2.9	< 0.5	35	722	< 1	13	16	156	3.03	25	12	26	< 0.5	< 2	2.24	10
1325081288					9.37	0.39	7	< 0.2	0.6	13	799	< 1	23	9	252	1.65	6	14	46	< 0.5	< 2	2.62	8
1325081156					9.28	0.44	49	< 0.2	1.2	17	796	< 1	13	2	330	2.19	21	14	39	< 0.5	< 2	2.61	9
GC21-0001-001					9.15	0.63	301	0.4	1.3	61	1080	< 1	14	13	430	2.56	146	15	33	< 0.5	< 2	2.14	9
1325081176					8.88	1.46	70	0.9	1.3	86	2030	< 1	43	4	417	3.39	13	13	74	< 0.5	< 2	5.20	31
1325081178					9.34	0.75	86	0.2	0.5	60	1320	< 1	29	12	276	3.07	6	13	78	< 0.5	< 2	4.48	25
GC22-0002-001					9.09	0.63	396	6.3	< 0.5	44	1180	< 1	13	28	90	0.97	33	11	27	< 0.5	< 2	1.90	10
GC22-0003-001					9.34	0.52	566	2.7	1.1	32	580	< 1	10	14	287	1.79	20	12	30	< 0.5	< 2	1.49	7
1325081196					9.08	0.67	106	0.6	2.9	35	634	< 1	13	3	788	1.20	19	12	47	< 0.5	< 2	2.46	9
GC22-0006-001					8.99	0.57	96	0.6	< 0.5	25	1260	< 1	10	38	158	1.42	64	12	29	< 0.5	< 2	2.45	8
1325081112					8.86	0.47	9	< 0.2	< 0.5	98	1140	< 1	53	< 2	131	2.61	21	15	62	< 0.5	< 2	5.28	41
F009091							340	< 0.2	< 0.5	166	767	< 1	51	4	80	3.69	15	35	14	< 0.5	< 2	3.40	29
GC22-0086-005					8.90	0.67	233	0.5	< 0.5	100	399	1	16	2	87	1.44	31	11	14	< 0.5	10	0.91	15
GC22-0088-002					9.00	0.62	334	4.4	< 0.5	183	459	< 1	9	6	76	2.04	33	10	23	< 0.5	8	0.33	9
1317017095					8.88	0.26	8	< 0.2	< 0.5	117	425	< 1	40	< 2	45	5.16	< 2	14	< 10	< 0.5	< 2	3.80	21
GC22-0089-005					8.82	0.94	106	0.5	< 0.5	46	526	1	37	< 2	86	2.79	19	15	25	< 0.5	3	1.79	18
1317017082					8.76	0.60	107	0.7	< 0.5	101	482	3	13	16	70	2.05	9	14	36	< 0.5	2	1.50	9
1317017067					8.61	0.60	12	0.4	< 0.5	55	395	2	13	3	39	2.57	10	12	37	< 0.5	8	1.55	11
1317017040					8.92	0.79	317	0.7	< 0.5	80	581	1	10	9	231	2.23	8	16	40	< 0.5	< 2	1.79	8
1317017009					8.66	0.59	283	0.7	< 0.5	159	471	< 1	13	6	53	2.91	10	11	44	< 0.5	3	1.63	8
1317017007					8.47	0.58	335	0.7	< 0.5	124	427	< 1	9	7	46	2.51	8	14	39	< 0.5	2	1.36	8
131701798					9.20	0.19	8	< 0.2	< 0.5	117	533	< 1	46	< 2	78	5.05	< 2	16	< 10	< 0.5	< 2	3.54	24
GC22-0092-001					9.22	0.38	< 5	< 0.2	< 0.5	10	525	1	4	8	59	0.89	< 2	17	244	< 0.5	< 2	2.21	4
GC22-0091-004					9.27	0.25	69	< 0.2	< 0.5	22	618	1	4	12	58	0.77	< 2	16	220	< 0.5	< 2	1.99	5
GC22-0091-016					8.87	0.41	382	0.5	< 0.5	264	252	< 1	5	2	27	3.16	4	13	40	< 0.5	2	1.55	6
1317018167					8.72	0.65	515	1.0	< 0.5	202	377	< 1	7	10	114	1.41	22	12	27	< 0.5	9	0.46	8

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	AP (T- Sulphur)	NP	MPA	NP:MP A Ratio	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	kg CaC O3/t	kg CaC O3/t	kg H2S O4/t	Ratio	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit					0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	Calc	TITR	Calc	Calc	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0088-013					8.88	0.46	279	0.4	< 0.5	79	231	2	6	5	28	2.48	7	15	33	< 0.5	4	0.97	9
GC22-0090-009					8.90	0.37	237	0.5	< 0.5	200	287	< 1	9	5	31	2.44	9	12	37	< 0.5	2	1.20	7
GC22-0095-018					8.67	0.54	362	1.0	< 0.5	606	257	< 1	7	3	26	2.41	9	< 10	25	< 0.5	20	1.35	9
GC22-0094-012					9.38	0.33	61	< 0.2	< 0.5	67	457	1	5	7	65	1.02	< 2	16	51	< 0.5	< 2	2.04	5
GC22-0093-001					8.34	2.40	1100	2.7	52.5	368	1110	< 1	21	16	> 10000	2.19	75	12	19	< 0.5	7	0.26	18
GC22-0095-020					9.05	0.29	726	1.0	< 0.5	327	228	< 1	2	4	28	2.64	5	12	43	< 0.5	6	1.54	4
GC22-0093-003					8.86	0.55	158	0.9	1.1	23	860	< 1	7	11	411	1.76	91	12	23	< 0.5	5	0.27	9
F009092							> 5000	1.5	< 0.5	170	767	< 1	52	26	128	3.65	62	35	28	< 0.5	< 2	3.52	28
1317001031					8.88	0.34	64	< 0.2	< 0.5	44	535	1	8	5	85	3.02	8	14	45	< 0.5	< 2	1.44	8
1317011190					8.84	0.53	99	2.7	< 0.5	60	328	1	13	24	69	1.47	39	15	26	< 0.5	4	1.19	9
1317011225					9.06	0.44	99	0.5	< 0.5	58	312	1	7	3	44	1.95	9	15	26	< 0.5	3	0.94	7
1317011284					8.93	0.53	294	1.2	< 0.5	135	593	1	30	21	64	1.99	14	16	24	< 0.5	< 2	1.85	15
1317001039					8.68	0.58	1100	0.8	< 0.5	172	545	4	9	3	103	1.75	9	12	38	< 0.5	< 2	1.86	9
1317001043					8.92	0.51	356	0.6	< 0.5	188	439	4	9	3	194	1.66	8	14	31	< 0.5	< 2	1.72	8
1317011203					8.58	0.56	777	0.9	< 0.5	82	439	< 1	10	11	45	2.14	24	16	36	< 0.5	3	1.49	7
1317011187					9.59	0.24	26	< 0.2	< 0.5	18	753	< 1	8	< 2	224	1.44	3	18	73	< 0.5	< 2	1.13	6
GC22-0021-010					8.83	0.44	210	0.9	< 0.5	428	211	20	7	< 2	31	2.68	12	15	41	< 0.5	< 2	1.37	5
GC22-0023-001					8.76	0.41	971	0.4	< 0.5	212	216	1	8	< 2	25	2.38	3	12	35	< 0.5	5	1.13	6
GC22-0022-003					8.99	0.58	76	1.6	< 0.5	426	383	26	10	< 2	101	3.29	8	14	44	< 0.5	< 2	1.55	11
1317011251					8.82	0.57	432	0.7	< 0.5	112	392	< 1	12	6	57	1.85	10	15	26	< 0.5	4	0.93	8
1317011232					8.82	0.42	355	0.4	< 0.5	36	431	< 1	7	3	224	2.02	9	12	35	< 0.5	5	1.18	8
1317011240					8.75	0.70	100	1.3	< 0.5	26	371	1	8	7	54	1.99	19	12	32	< 0.5	9	1.03	8
GC22-0023-002					8.88	0.33	578	< 0.2	< 0.5	59	217	< 1	4	< 2	23	2.11	10	14	45	< 0.5	4	0.73	7
GC22-0026-019					9.12	0.44	410	0.8	< 0.5	525	343	< 1	4	< 2	35	2.86	3	13	54	< 0.5	10	1.41	2
GC22-0024-007					9.03	0.36	352	< 0.2	< 0.5	99	231	< 1	3	< 2	24	2.15	10	12	45	< 0.5	< 2	1.03	5
1317011281					8.88	0.58	186	0.5	< 0.5	52	438	< 1	19	5	49	2.08	11	15	24	< 0.5	< 2	1.16	10
1317001175					8.68	0.63	146	0.4	0.5	44	836	1	15	8	236	1.93	17	11	42	< 0.5	< 2	2.09	10
1317001084					8.88	0.48	250	0.4	< 0.5	171	605	9	8	6	333	2.91	8	11	44	< 0.5	< 2	1.62	8
F009096							1180	0.3	< 0.5	166	752	< 1	52	24	118	3.55	50	33	25	< 0.5	< 2	3.39	27
1325080048					9.60	0.33	6	< 0.2	< 0.5	27	580	1	29	5	124	1.90	4	16	45	< 0.5	< 2	2.04	11
GC22-0014-014					8.51	3.97	1640	2.3	75.4	664	1120	< 1	17	7	> 10000	2.14	77	11	18	< 0.5	6	0.16	15
1325080040					9.45	0.44	8	< 0.2	< 0.5	28	599	< 1	46	7	139	2.15	3	16	47	< 0.5	< 2	1.73	14
1317011075					9.45	0.54	54	0.3	< 0.5	51	658	< 1	9	8	188	1.53	10	16	59	< 0.5	< 2	0.95	8
GC22-0014-019					9.21	1.37	208	1.1	21.1	221	660	< 1	16	9	5110	2.40	77	12	27	< 0.5	3	0.40	16
GC22-0016-010					9.01	0.86	131	0.9	1.6	34	481	< 1	12	9	483	1.61	109	11	25	< 0.5	7	0.26	11
1317001160					8.61	0.68	296	0.7	0.8	84	519	4	9	4	294	1.53	12	14	28	< 0.5	3	1.14	9
GC22-0018-001					9.12	0.56	616	1.5	< 0.5	805	410	< 1	5	< 2	46	2.58	3	12	62	< 0.5	32	0.91	3
GC22-0018-002					9.25	0.60	760	1.7	< 0.5	930	361	< 1	3	< 2	60	2.52	3	12	68	< 0.5	18	1.15	3
1317011058					9.03	0.28	32	< 0.2	< 0.5	24	524	< 1	7	52	147	2.91	9	18	43	< 0.5	< 2	1.29	7
GC22-0019-001					8.79	0.40	> 5000	0.9	< 0.5	427	157	1	5	< 2	25	1.23	10	13	45	< 0.5	3	0.50	5
1317011071					9.11	0.57	68	0.7	0.9	81	723	2	8	32	345	0.92	9	15	49	< 0.5	< 2	1.39	8
GC22-0015-018					9.06	0.41	36	0.2	< 0.5	38	342	1	13	3	101	3.35	2	12	24	< 0.5	< 2	1.77	8
1317001003					8.76	0.63	89	0.4	1.8	63	494	1	11	5	490	1.45	11	14	34	< 0.5	< 2	0.99	8
GC22-0018-021					9.13	0.57	138	0.2	< 0.5	24	245	1	10	< 2	29	2.43	7	15	32	< 0.5	< 2	1.37	8
GC22-0019-020					8.86	2.54	537	1.2	< 0.5	58	410	1	25	4	78	2.55	51	13	17	< 0.5	15	1.71	19
GC22-0020-020					9.23	0.79	47	0.5	< 0.5	29	593	< 1	182	< 2	88	2.80	9	12	32	< 0.5	9	3.71	20
1317011161					9.01	0.54	143	0.7	< 0.5	86	503	1	10	4	60	1.93	16	15	45	< 0.5	< 2	1.56	8

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	AP (T- Sulphur)	NP	MPA	NP:MP A Ratio	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	kg CaC O3/t	kg CaC O3/t	kg H2S O4/t	Ratio	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit					0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	Calc	TITR	Calc	Calc	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1317001042					9.07	0.92	599	1.0	< 0.5	273	420	5	9	3	187	2.13	8	12	46	< 0.5	< 2	2.06	8
1317011158					9.52	0.32	582	0.3	< 0.5	32	677	< 1	8	3	156	1.69	4	16	60	< 0.5	< 2	1.22	7
F009097							541	< 0.2	< 0.5	157	788	< 1	57	10	92	3.77	24	37	18	< 0.5	< 2	3.43	29
GC22-0097-014					8.99	0.26	176	< 0.2	< 0.5	57	167	7	6	7	22	1.34	5	11	33	< 0.5	5	0.32	8
GC22-0096-020					8.71	0.61	740	1.2	< 0.5	189	232	1	4	< 2	27	2.54	59	12	24	< 0.5	3	1.60	7
1317018032					8.65	0.71	65	< 0.2	< 0.5	24	235	< 1	10	< 2	29	2.03	10	15	48	< 0.5	< 2	1.21	10
1317018008					9.07	0.17	6	< 0.2	< 0.5	122	507	< 1	42	84	91	4.57	< 2	17	< 10	< 0.5	< 2	3.38	24
1316002063					8.88	0.20	22	< 0.2	< 0.5	129	429	< 1	40	< 2	64	5.17	< 2	15	12	< 0.5	< 2	3.75	21
1317018090					8.89	0.70	72	< 0.2	0.5	36	607	1	8	10	232	2.85	< 2	12	42	< 0.5	< 2	1.97	8
1317018133					8.72	0.63	166	0.5	< 0.5	84	504	< 1	9	4	61	1.71	8	13	30	< 0.5	5	1.00	7
GC22-0099-018					8.59	2.29	319	0.9	< 0.5	36	577	< 1	22	4	72	2.73	54	11	16	< 0.5	15	0.75	20
GC22-0100-017					9.19	0.21	33	< 0.2	< 0.5	41	376	2	11	2	83	3.49	6	19	66	< 0.5	< 2	1.99	8
GC22-0099-006					9.13	0.46	64	1.6	< 0.5	544	345	33	10	< 2	86	2.98	8	16	73	< 0.5	2	1.67	12
1317018048					8.53	0.65	62	0.3	< 0.5	34	490	< 1	9	9	72	2.03	3	15	29	< 0.5	< 2	0.70	8
GC22-0099-009FD					8.90	0.49	180	1.0	< 0.5	346	267	5	15	< 2	101	2.26	13	14	48	< 0.5	< 2	0.76	15
1317018074					8.64	0.77	346	1.0	< 0.5	284	510	< 1	16	3	62	1.95	16	13	24	< 0.5	5	0.80	10
GC22-0101-001					8.73	0.58	279	0.3	< 0.5	111	245	1	5	3	45	1.92	12	13	51	< 0.5	< 2	1.15	6
GC22-0101-007					8.85	0.34	475	0.3	< 0.5	96	299	< 1	3	< 2	29	3.07	6	13	44	< 0.5	< 2	1.72	4
1317018062					8.57	0.72	160	0.3	< 0.5	40	383	1	12	6	70	1.80	19	15	37	< 0.5	2	1.08	9
F009399							1090	0.4	< 0.5	161	780	1	54	18	111	3.63	43	37	23	< 0.5	2	3.41	28
GC22-0027-001					9.22	0.63	325	0.4	< 0.5	162	280	4	7	< 2	77	2.54	7	12	51	< 0.5	< 2	1.70	6
GC22-0039-009					9.32	0.61	260	0.6	6.6	40	805	< 1	2	7	1930	2.53	11	12	45	< 0.5	< 2	1.11	5
GC22-0030-009FD					9.06	0.44	761	1.1	< 0.5	514	253	< 1	3	< 2	26	1.69	10	13	54	< 0.5	9	0.61	4
GC22-0033-015					9.16	0.67	173	0.4	1.5	31	882	1	20	4	528	2.95	27	11	28	< 0.5	9	0.72	14
GC22-0029-011					9.02	0.54	287	0.9	< 0.5	456	293	2	8	< 2	35	2.08	4	12	31	< 0.5	13	1.09	5
1317011299					8.08	0.87	128	0.5	< 0.5	10	282	< 1	7	8	128	1.17	20	11	22	< 0.5	6	0.39	6
GC22-0029-012					9.18	0.33	352	0.7	< 0.5	398	321	< 1	3	< 2	43	2.70	3	11	48	< 0.5	11	1.05	3
1325081072					8.86	0.72	12	< 0.2	< 0.5	64	1370	< 1	111	< 2	173	4.15	7	11	15	< 0.5	3	4.84	35
GC22-0040-002					8.97	0.71	868	2.7	1.5	117	832	< 1	13	3	590	2.97	21	11	35	< 0.5	2	1.51	15
1325085114					9.23	0.53	10	< 0.2	< 0.5	14	583	< 1	10	2	145	0.86	5	13	41	< 0.5	< 2	2.28	7
GC22-0036-014					8.76	1.40	94	0.5	< 0.5	39	905	1	27	7	201	2.78	58	12	26	< 0.5	4	0.73	23
GC22-0038-011					9.08	0.64	129	0.5	1.6	53	877	< 1	8	4	625	2.70	16	12	44	< 0.5	3	1.22	10
GC22-0032-001					9.46	0.35	86	0.2	1.0	33	655	< 1	7	2	371	2.24	3	12	79	< 0.5	< 2	0.76	7
GC22-0032-018					8.67	2.95	378	3.1	2.0	261	1530	1	49	16	690	4.19	165	10	15	< 0.5	20	0.37	40
GC22-0031-005					8.82	0.47	426	0.8	< 0.5	416	280	< 1	4	< 2	36	2.76	4	14	44	< 0.5	16	1.22	5
1317011347					8.82	0.52	85	0.4	< 0.5	34	416	< 1	8	5	87	1.94	18	15	36	< 0.5	5	0.91	8
GC22-0034-012					8.69	0.73	117	0.9	< 0.5	79	698	< 1	11	5	193	2.17	25	11	29	< 0.5	5	0.56	12
GC22-0035-009					9.07	0.60	198	0.4	< 0.5	16	508	< 1	9	2	113	2.40	16	13	33	< 0.5	3	1.13	8
1325081094					9.26	0.84	44	0.3	0.5	111	1310	< 1	51	< 2	204	2.88	15	14	91	< 0.5	< 2	4.95	35
GC22-0036-019					8.95	1.27	156	2.1	< 0.5	82	811	1	26	13	223	3.43	85	11	27	< 0.5	11	0.58	19
*GC22-0037-015					8.82	1.32	175	3.2	0.7	89	710	4	14	23	309	2.74	65	10	25	< 0.5	9	0.60	16
F009398							335	< 0.2	< 0.5	174	798	< 1	54	5	82	3.95	12	38	15	< 0.5	< 2	3.63	30
GC22-0008-013					9.06	0.46	35	0.6	< 0.5	24	571	3	9	8	71	2.52	14	15	31	< 0.5	< 2	0.98	11
GC22-0009-003					9.35	0.63	120	0.9	3.8	28	598	< 1	11	29	1010	2.16	39	14	33	< 0.5	< 2	1.90	8
GC22-0009-019					9.60	0.17	10	0.3	< 0.5	14	257	2	11	2	50	1.39	9	14	34	< 0.5	< 2	0.52	11
GC22-0010-001					9.25	0.50	220	2.1	2.4	17	502	< 1	9	28	580	1.96	17	15	28	< 0.5	< 2	1.53	8

Analyte Symbol	AP (T- Sulphur)	NP	MPA	NP:MP A Ratio	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	kg CaC O3/t	kg CaC O3/t	kg H2S O4/t	Ratio	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit					0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	Calc	TITR	Calc	Calc	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0010-019					9.01	0.84	86	0.5	6.6	50	738	2	31	31	1290	2.68	34	13	41	< 0.5	< 2	1.48	42
1317011064					8.84	0.45	904	1.7	< 0.5	362	546	< 1	7	6	110	2.22	9	16	47	< 0.5	3	0.96	7
1325081140					9.27	0.44	20	< 0.2	1.7	10	971	< 1	13	24	487	2.37	20	16	60	< 0.5	< 2	2.48	8
GC22-0011-002					9.43	0.71	215	8.4	1.6	43	1350	< 1	11	93	520	1.42	27	12	35	< 0.5	< 2	2.12	8
1320098003					8.04	0.90	4750	2.7	1.4	56	872	< 1	11	98	375	1.34	19	12	38	1.2	< 2	3.25	8
1317011123					9.63	0.23	28	< 0.2	< 0.5	12	717	< 1	9	4	93	1.56	4	16	74	< 0.5	< 2	0.57	7
1317011050					8.89	0.44	530	0.9	< 0.5	152	589	< 1	10	14	124	1.82	11	18	35	< 0.5	3	1.07	7
1325080056					9.36	0.24	< 5	< 0.2	< 0.5	18	577	< 1	21	< 2	86	1.68	< 2	23	43	< 0.5	< 2	1.98	10
GC22-0012-014					9.33	0.21	18	0.4	0.9	16	157	2	11	7	351	1.19	9	17	37	< 0.5	< 2	0.41	14
1325080203					9.36	0.33	47	0.5	< 0.5	17	531	< 1	11	8	136	1.70	6	17	42	< 0.5	< 2	1.44	7
GC22-0013-010					9.32	0.21	15	0.2	1.8	17	104	2	8	5	834	1.31	11	18	49	< 0.5	< 2	0.48	10
1325080010					9.30	0.43	19	0.6	< 0.5	168	662	2	15	4	122	2.49	7	18	74	< 0.5	< 2	2.22	11
GC22-0013-008					9.25	0.20	32	0.3	0.7	24	106	2	9	6	287	0.92	11	17	37	< 0.5	< 2	0.31	12
F009397							553	< 0.2	< 0.5	157	775	< 1	55	8	91	3.70	20	39	18	< 0.5	< 2	3.39	29
F007774							1770	0.5	< 0.5	164	789	1	88	6	67	3.80	12	32	18	< 0.5	< 2	3.50	30
F007265							551	0.2	< 0.5	161	793	< 1	56	10	92	3.79	21	41	18	< 0.5	< 2	3.45	29
GC21-0937-001					8.34	1.12	397	5.1	1.7	334	1190	< 1	22	58	526	2.27	133	12	26	< 0.5	5	0.24	9
1318060038					8.80	0.28	17	< 0.2	< 0.5	8	548	< 1	6	21	155	3.94	4	13	47	< 0.5	< 2	2.32	7
GC21-1069-002					8.98	0.72	483	2.1	4.8	27	1030	< 1	12	69	1310	1.16	164	13	36	< 0.5	< 2	1.47	8

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
1317009103	7	3.19	<10	<1	0.11	13	1.22	0.131	0.036	0.97	2	2	111	0.02	<1	<2	<10	16	<10	2	6	0.13	0.95
1317009124	9	3.33	<10	<1	0.20	18	1.62	0.074	0.050	0.67	2	2	55	0.03	<1	<2	<10	19	<10	3	14	0.12	0.68
1317002228	7	3.28	<10	<1	0.16	14	1.20	0.058	0.044	2.68	<2	<1	31	<0.01	<1	<2	<10	9	<10	3	18	0.12	2.75
1317002209	7	3.44	<10	<1	0.20	13	1.51	0.058	0.042	2.40	2	<1	20	0.02	<1	<2	<10	15	<10	2	20	0.09	2.49
1325080262	15	2.22	<10	<1	0.44	20	0.88	0.082	0.052	0.68	<2	2	31	0.09	<1	<2	<10	28	<10	3	10	0.33	0.69
1317002245	46	4.04	<10	<1	0.03	<10	1.54	0.565	0.020	0.11	<2	4	58	0.20	<1	<2	<10	118	<10	3	3	0.10	0.12
1317002027	7	2.85	<10	<1	0.14	18	1.11	0.132	0.054	2.04	<2	1	78	0.02	<1	<2	<10	16	<10	3	6	0.24	2.03
F009109	21	6.43	10	<1	0.08	<10	1.80	0.139	0.040	0.21	2	6	41	0.41	<1	<2	<10	167	<10	9	15	0.10	0.22
1317002004	7	2.96	<10	<1	0.21	17	1.35	0.175	0.047	2.72	2	1	55	<0.01	<1	<2	<10	12	<10	3	17	0.20	2.66
1317002033	6	3.81	<10	<1	0.26	15	1.42	0.041	0.045	3.02	<2	<1	18	<0.01	<1	<2	<10	11	<10	3	22	0.09	3.08
1325080252	51	2.81	<10	<1	0.43	24	1.57	0.098	0.065	0.53	2	3	68	0.14	<1	<2	<10	43	<10	3	8	0.43	0.53
1325080300	297	4.28	<10	<1	0.10	<10	2.91	0.143	0.059	0.20	3	8	103	0.18	<1	<2	<10	116	<10	3	8	0.25	0.22
1325080234	14	1.94	<10	<1	0.23	20	1.23	0.049	0.057	0.53	<2	1	66	0.05	<1	<2	<10	18	<10	2	7	0.57	0.52
1325081284	8	2.07	<10	<1	0.20	20	0.87	0.127	0.052	0.25	<2	2	53	0.05	<1	<2	<10	18	<10	3	5	0.15	0.28
1325081218	16	2.32	<10	<1	0.43	21	1.26	0.250	0.057	0.69	<2	2	76	0.05	<1	<2	<10	22	<10	3	4	0.60	0.72
GC22-0004-018	5	2.02	<10	<1	0.18	14	0.69	0.152	0.047	1.55	2	<1	168	<0.01	1	<2	<10	6	<10	2	12	0.06	1.61
GC22-0007-005	6	2.41	<10	<1	0.19	14	0.77	0.096	0.047	2.30	2	<1	72	0.04	<1	<2	<10	6	<10	2	11	0.24	2.23
GC22-0004-001	14	2.65	<10	<1	0.18	14	0.94	0.229	0.048	2.25	<2	<1	107	0.01	<1	<2	<10	10	<10	2	10	0.21	2.33
1325081288	20	2.29	<10	<1	0.23	17	1.05	0.089	0.054	0.36	2	2	73	0.03	<1	<2	<10	18	<10	3	3	0.85	0.36
1325081156	14	2.30	<10	<1	0.23	18	1.05	0.158	0.049	0.69	<2	1	64	0.04	<1	<2	<10	16	<10	3	5	0.59	0.68
GC21-0001-001	9	2.16	<10	<1	0.15	16	0.81	0.065	0.048	1.29	<2	1	74	<0.01	<1	<2	<10	12	<10	1	6	0.45	1.31
1325081176	41	7.50	10	<1	0.58	<10	1.38	0.272	0.066	0.84	4	11	106	0.14	<1	<2	<10	142	<10	8	8	2.00	0.90
1325081178	34	6.01	10	<1	0.41	<10	1.08	0.262	0.070	0.54	3	12	99	0.17	<1	<2	<10	119	<10	9	7	1.06	0.58
GC22-0002-001	4	2.30	<10	<1	0.24	16	0.66	0.024	0.053	2.43	4	<1	32	0.03	1	<2	<10	5	<10	2	5	0.52	2.28
GC22-0003-001	4	2.07	<10	<1	0.23	15	0.65	0.108	0.042	2.11	<2	<1	79	0.03	<1	<2	<10	5	<10	2	15	0.21	2.12
1325081196	8	2.34	<10	<1	0.23	20	0.79	0.052	0.043	1.26	2	<1	37	<0.01	<1	<2	<10	9	<10	3	7	0.93	1.25
GC22-0006-001	7	2.25	<10	<1	0.18	14	0.87	0.080	0.051	1.97	<2	<1	85	<0.01	<1	<2	<10	7	<10	3	7	0.67	1.95
1325081112	60	6.93	10	<1	0.30	<10	0.95	0.109	0.069	0.17	3	18	35	0.14	<1	<2	<10	188	<10	12	2	1.50	0.19
F009091	12	5.84	10	<1	0.07	<10	1.65	0.098	0.038	0.17	<2	6	52	0.39	2	<2	<10	162	<10	8	13	0.07	0.19
GC22-0086-005	9	3.75	<10	<1	0.22	13	1.09	0.034	0.050	3.13	3	1	30	<0.01	<1	<2	<10	14	<10	3	25	0.23	3.23
GC22-0088-002	6	3.10	<10	<1	0.22	12	1.73	0.049	0.042	2.13	<2	<1	27	<0.01	2	<2	<10	10	<10	3	23	0.04	2.21
1317017095	39	4.22	10	<1	0.03	<10	1.38	0.607	0.022	0.16	<2	4	58	0.21	<1	<2	<10	132	<10	3	3	0.23	0.18
GC22-0089-005	70	5.18	<10	<1	0.14	19	2.39	0.068	0.069	2.82	<2	4	81	0.05	<1	<2	<10	45	<10	5	16	0.37	3.00
1317017082	11	2.68	<10	<1	0.15	12	0.88	0.191	0.040	1.74	<2	1	114	0.02	<1	<2	<10	19	<10	2	13	0.21	1.83
1317017067	7	3.50	<10	<1	0.15	18	1.09	0.212	0.050	2.17	<2	2	171	<0.01	<1	<2	<10	17	27	3	10	0.31	2.27
1317017040	7	2.52	<10	<1	0.22	13	0.75	0.235	0.041	1.91	2	1	119	0.03	<1	<2	<10	14	<10	2	19	0.21	1.98
1317017009	8	3.35	<10	<1	0.15	13	0.89	0.236	0.043	1.66	<2	1	167	0.02	<1	<2	<10	12	<10	2	16	0.22	1.75
1317017007	7	3.22	<10	<1	0.18	13	0.70	0.270	0.039	2.03	<2	1	157	0.03	<1	<2	<10	12	<10	2	18	0.10	2.05
131701798	61	4.50	<10	<1	0.02	<10	1.74	0.547	0.021	0.10	<2	5	62	0.20	<1	<2	<10	123	<10	3	3	0.15	0.10
GC22-0092-001	7	1.55	<10	<1	0.28	68	0.27	0.066	0.087	0.14	<2	<1	116	<0.01	<1	<2	<10	7	<10	5	<1	0.65	0.13
GC22-0091-004	5	1.48	<10	<1	0.25	55	0.27	0.060	0.076	0.20	<2	<1	178	<0.01	<1	<2	<10	6	<10	5	<1	0.58	0.20
GC22-0091-016	4	2.68	<10	<1	0.19	<10	0.68	0.319	0.034	1.46	<2	<1	200	<0.01	<1	<2	<10	8	<10	2	12	0.07	1.48
1317018167	4	3.79	<10	<1	0.16	14	1.04	0.032	0.041	3.10	2	<1	17	<0.01	<1	<2	<10	6	<10	2	22	0.13	3.18
GC22-0088-013	6	3.29	<10	<1	0.15	12	1.23	0.117	0.040	1.75	<2	<1	85	<0.01	2	<2	<10	10	<10	2	16	0.08	1.80
GC22-0090-009	8	2.33	<10	<1	0.12	11	1.03	0.148	0.034	1.31	<2	<1	96	<0.01	<1	<2	<10	9	<10	2	18	0.09	1.37
GC22-0095-018	5	3.43	<10	<1	0.13	<10	0.68	0.168	0.035	2.32	<2	<1	99	<0.01	<1	<2	<10	7	<10	2	16		
GC22-0094-012	5	1.76	<10	1	0.22	47	0.44	0.048	0.074	0.79	<2	<1	99	<0.01	<1	<2	<10	6	<10	4	1	0.52	0.77
GC22-0093-001	12	5.23	<10	1	0.16	13	1.88	0.019	0.052	3.82	2	2	11	0.02	2	<2	<10	31	<10	7	23	0.06	3.97
GC22-0095-020	4	2.26	<10	<1	0.19	<10	0.67	0.171	0.032	1.19	<2	<1	105	<0.01	<1	<2	<10	6	<10	2	15	0.09	1.20
GC22-0093-003	4	3.50	<10	<1	0.18	18	1.51	0.022	0.054	2.39	<2	<1	12	<0.01	<1	<2	<10	9	<10	3	21	0.08	2.41
F009092	23	5.76	10	<1	0.14	<10	1.58	0.268	0.039	0.37	2	7	61	0.37	<1	<2	<10	148	23	9	17	0.15	0.39

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
1317001031	8	2.37	<10	<1	0.13	16	0.88	0.130	0.052	0.66	3	<1	87	<0.01	<1	2	<10	12	<10	2	2	0.20	0.66
1317011190	8	2.78	<10	<1	0.19	15	0.57	0.109	0.047	2.46	2	1	39	0.03	<1	<2	<10	10	<10	2	12	0.16	2.42
1317011225	7	3.15	<10	<1	0.24	12	0.81	0.066	0.039	1.60	2	1	56	0.04	2	<2	<10	10	<10	2	21	0.09	1.71
1317011284	43	3.97	<10	<1	0.53	32	1.65	0.024	0.110	1.34	<2	6	97	0.11	<1	<2	<10	48	<10	4	10	0.53	1.46
1317001039	8	2.75	<10	<1	0.16	13	0.80	0.172	0.042	2.01	<2	1	116	0.03	<1	<2	<10	13	<10	3	16	0.41	2.03
1317001043	11	2.31	<10	<1	0.12	12	0.74	0.183	0.039	1.68	<2	1	100	0.01	<1	<2	<10	13	<10	2	13	0.37	1.74
1317011203	10	2.74	<10	<1	0.22	14	0.72	0.172	0.044	1.93	<2	1	63	0.04	1	<2	<10	13	<10	2	13	0.18	2.01
1317011187	12	1.95	<10	<1	0.39	12	1.06	0.071	0.039	0.31	<2	2	34	0.07	<1	<2	<10	21	<10	2	14	0.28	0.30
GC22-0021-010	5	2.36	<10	<1	0.16	11	0.72	0.158	0.037	1.58	<2	<1	123	<0.01	<1	<2	<10	9	<10	2	13		
GC22-0023-001	4	2.83	<10	<1	0.18	<10	0.64	0.184	0.037	1.84	<2	<1	128	<0.01	<1	<2	<10	7	<10	2	18	0.06	1.88
GC22-0022-003	8	2.70	<10	<1	0.18	14	1.05	0.143	0.051	1.48	<2	2	147	<0.01	<1	<2	<10	18	<10	2	16	0.09	1.54
1317011251	12	3.35	<10	<1	0.24	16	0.94	0.055	0.049	1.68	<2	2	53	0.04	<1	<2	<10	14	<10	2	13	0.13	1.66
1317011232	7	2.63	<10	<1	0.21	12	0.77	0.147	0.039	1.71	<2	1	61	0.02	<1	<2	<10	10	<10	2	13		
1317011240	5	3.14	<10	<1	0.21	14	1.00	0.155	0.043	2.84	<2	<1	69	<0.01	<1	<2	<10	8	<10	2	21	0.21	2.84
GC22-0023-002	4	2.37	<10	<1	0.14	11	0.53	0.074	0.037	1.35	<2	<1	55	<0.01	<1	<2	<10	7	<10	2	15	0.04	1.38
GC22-0026-019	4	2.91	<10	<1	0.21	10	1.01	0.222	0.037	1.04	3	<1	159	0.02	1	<2	<10	9	<10	2	15	0.10	1.00
GC22-0024-007	4	2.17	<10	<1	0.18	11	0.56	0.097	0.038	1.23	<2	<1	59	<0.01	<1	<2	<10	6	<10	2	12	0.09	1.23
1317011281	39	3.29	<10	<1	0.33	19	1.24	0.060	0.064	1.45	<2	3	66	0.04	3	<2	<10	24	<10	3	10	0.26	1.53
1317001175	8	2.41	<10	<1	0.18	19	0.84	0.183	0.053	1.76	2	1	86	0.04	<1	<2	<10	14	<10	3	16	0.48	1.82
1317001084	7	2.43	<10	<1	0.12	15	0.86	0.162	0.051	1.06	<2	<1	114	<0.01	<1	<2	<10	12	<10	2	11	0.27	1.16
F009096	23	5.54	<10	<1	0.14	<10	1.56	0.201	0.038	0.34	2	7	57	0.36	<1	<2	<10	146	17	8	17	0.14	0.38
1325080048	23	1.99	<10	<1	0.23	11	1.30	0.059	0.043	0.20	<2	2	57	0.07	<1	<2	<10	26	<10	2	10	0.47	0.21
GC22-0014-014	13	5.59	<10	4	0.19	<10	1.79	0.023	0.045	4.83	2	2	11	<0.01	<1	<2	<10	24	<10	3	21	0.02	5.25
1325080040	26	2.12	<10	<1	0.25	12	1.29	0.068	0.045	0.23	<2	2	61	0.09	<1	<2	<10	30	<10	3	12	0.26	0.22
1317011075	8	2.18	<10	<1	0.35	13	1.03	0.076	0.041	1.34	<2	2	34	0.05	<1	<2	<10	19	<10	2	21		
GC22-0014-019	11	4.42	<10	1	0.22	17	2.01	0.043	0.059	3.08	<2	2	24	<0.01	<1	<2	<10	25	<10	5	23	0.05	3.26
GC22-0016-010	6	3.83	<10	<1	0.22	20	1.27	0.030	0.058	3.31	3	<1	19	<0.01	<1	<2	<10	9	<10	4	30	0.06	3.47
1317001160	5	2.54	<10	<1	0.14	15	0.76	0.150	0.045	2.37	<2	<1	53	<0.01	<1	<2	<10	9	<10	3	21	0.19	2.41
GC22-0018-001	4	3.61	<10	<1	0.26	<10	0.94	0.097	0.036	1.01	<2	<1	60	0.02	1	<2	<10	8	<10	2	20	0.06	0.98
GC22-0018-002	4	3.31	<10	<1	0.27	<10	0.87	0.106	0.032	1.15	<2	<1	62	0.01	<1	<2	<10	8	<10	2	20	0.09	1.17
1317011058	7	2.20	<10	<1	0.16	11	1.05	0.115	0.038	0.50	<2	1	90	0.03	<1	<2	<10	13	<10	2	16	0.14	0.53
GC22-0019-001	4	2.50	<10	<1	0.14	<10	0.34	0.054	0.035	1.93	<2	<1	38	<0.01	1	<2	<10	4	<10	2	21	0.05	1.95
1317011071	7	2.22	<10	<1	0.23	13	0.74	0.049	0.045	1.65	<2	1	31	0.02	<1	<2	<10	13	<10	2	25	0.40	1.68
GC22-0015-018	12	2.41	<10	<1	0.12	<10	1.19	0.197	0.041	1.27	<2	1	124	<0.01	<1	<2	<10	10	<10	2	16	0.09	1.33
1317001003	8	2.24	<10	<1	0.17	15	0.77	0.135	0.043	2.07	<2	<1	41	<0.01	<1	<2	<10	7	<10	2	24	0.17	2.16
GC22-0018-021	8	2.56	<10	<1	0.14	12	1.09	0.288	0.041	2.05	<2	1	146	<0.01	<1	<2	<10	14	<10	2	21		
GC22-0019-020	16	6.41	<10	<1	0.17	11	1.73	0.170	0.059	5.79	3	4	94	0.01	<1	<2	<10	53	<10	4	30	0.35	6.06
GC22-0020-020	384	3.17	<10	<1	0.13	17	3.22	0.135	0.079	1.09	2	6	129	<0.01	1	<2	<10	43	<10	3	9	1.55	1.20
1317011161	8	2.29	<10	<1	0.24	15	0.86	0.150	0.045	1.46	<2	1	68	0.03	2	<2	<10	14	<10	2	19	0.27	1.47
1317001042	9	2.55	<10	<1	0.16	13	0.72	0.268	0.041	1.93	<2	1	136	0.01	<1	<2	<10	15	<10	2	16	0.45	1.92
1317011158	10	2.09	<10	<1	0.33	12	1.29	0.061	0.039	0.36	<2	2	42	0.05	<1	<2	<10	20	<10	2	17	0.33	0.35
F009097	21	6.09	<10	<1	0.08	<10	1.72	0.131	0.039	0.20	3	6	39	0.41	3	<2	<10	164	11	9	17	0.09	0.22
GC22-0097-014	3	2.20	<10	<1	0.17	<10	0.69	0.045	0.036	0.97	<2	<1	36	<0.01	<1	<2	<10	6	<10	2	16	0.03	0.91
GC22-0096-020	4	3.52	<10	<1	0.12	<10	0.83	0.175	0.031	2.29	<2	<1	122	<0.01	1	<2	<10	7	<10	2	15	0.18	2.46
1317018032	9	2.66	<10	<1	0.38	11	0.94	0.080	0.039	1.92	<2	2	39	0.05	1	<2	<10	18	<10	2	26	0.13	2.00
1317018008	55	4.52	<10	<1	0.02	<10	1.64	0.457	0.022	0.08	2	5	59	0.26	<1	<2	<10	145	<10	3	4	0.14	0.10
1316002063	41	4.13	<10	<1	0.04	<10	1.37	0.622	0.022	0.19	3	4	63	0.20	<1	<2	<10	120	<10	3	4	0.16	0.21
1317018090	6	2.41	<10	<1	0.20	14	1.05	0.168	0.044	2.16	<2	<1	150	<0.01	2	<2	<10	8	<10	2	16	0.20	2.28
1317018133	5	3.14	<10	<1	0.21	12	0.94	0.073	0.041	2.84	<2	<1	42	0.02	<1	<2	<10	7	<10	2	26		
GC22-0099-018	19	7.52	<10	<1	0.16	<10	1.68	0.135	0.054	5.78	3	5	82	0.02	<1	<2	<10	62	<10	4	24	0.09	6.41
GC22-0100-017	11	1.62	<10	<1	0.25	<10	1.37	0.140	0.041	0.22	<2	2	129	0.05	<1	<2	<10	29	<10	2	16		

Results

Activation Laboratories Ltd.

Report: A22-01403

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
GC22-0099-006	7	2.34	< 10	< 1	0.28	11	1.30	0.175	0.040	1.14	< 2	1	192	0.01	2	< 2	< 10	17	< 10	2	26		
1317018048	7	3.25	< 10	< 1	0.14	12	1.23	0.055	0.039	2.42	< 2	1	45	0.01	< 1	< 2	< 10	11	< 10	2	23	0.09	2.57
GC22-0099-009FD	9	3.79	< 10	< 1	0.20	12	1.26	0.073	0.046	1.82	< 2	2	64	0.02	< 1	< 2	< 10	17	< 10	4	30		
1317018074	10	3.97	< 10	< 1	0.15	16	1.38	0.070	0.048	3.08	2	1	38	0.03	< 1	< 2	< 10	16	< 10	3	25	0.15	3.03
GC22-0101-001	5	2.41	< 10	< 1	0.19	11	0.61	0.098	0.037	1.50	2	< 1	68	0.02	< 1	< 2	< 10	8	< 10	2	21	0.12	1.49
GC22-0101-007	4	2.45	< 10	< 1	0.16	< 10	0.74	0.127	0.034	0.96	< 2	< 1	102	0.02	< 1	< 2	< 10	8	< 10	2	15		
1317018062	8	3.13	< 10	< 1	0.20	17	1.02	0.085	0.047	2.51	< 2	1	64	0.04	< 1	< 2	< 10	14	< 10	3	26	0.16	2.51
F009399	22	5.87	10	< 1	0.11	< 10	1.64	0.189	0.039	0.28	5	6	43	0.38	2	< 2	< 10	156	19	9	18	0.12	0.33
GC22-0027-001	6	2.40	< 10	< 1	0.23	14	1.11	0.182	0.050	1.44	< 2	1	135	0.01	< 1	< 2	< 10	12	< 10	2	16	0.23	1.50
GC22-0039-009	2	2.62	< 10	< 1	0.21	17	1.08	0.165	0.048	1.32	2	< 1	72	0.01	< 1	< 2	< 10	7	< 10	2	14	0.06	1.35
GC22-0030-009FD	3	2.35	< 10	< 1	0.23	10	0.60	0.095	0.039	1.18	< 2	< 1	73	< 0.01	< 1	< 2	< 10	5	< 10	2	15	0.06	1.22
GC22-0033-015	16	4.18	< 10	< 1	0.18	12	2.35	0.082	0.049	2.16	2	3	39	< 0.01	< 1	< 2	< 10	37	< 10	5	18	0.08	2.25
GC22-0029-011	9	2.74	< 10	< 1	0.12	< 10	0.91	0.185	0.029	1.39	< 2	1	145	< 0.01	2	< 2	< 10	12	< 10	2	22	0.14	1.45
1317011299	6	4.53	< 10	< 1	0.18	10	0.85	0.037	0.039	4.42	2	< 1	14	< 0.01	< 1	< 2	< 10	5	< 10	2	30	0.14	4.57
GC22-0029-012	3	2.94	< 10	< 1	0.22	10	1.12	0.166	0.035	0.79	< 2	< 1	130	< 0.01	< 1	< 2	< 10	9	< 10	2	13	0.08	0.86
1325081072	99	7.49	10	< 1	0.12	< 10	2.96	0.142	0.039	0.36	3	10	63	0.07	< 1	< 2	< 10	123	< 10	6	4	1.78	0.41
GC22-0040-002	8	3.51	< 10	< 1	0.16	14	1.22	0.204	0.050	2.25	2	1	80	0.01	2	< 2	< 10	19	< 10	3	15	0.09	2.24
1325085114	7	1.96	< 10	< 1	0.18	12	0.74	0.050	0.043	0.20	< 2	< 1	40	0.02	< 1	< 2	< 10	9	< 10	3	10	1.07	0.21
GC22-0036-014	13	5.89	< 10	< 1	0.20	20	2.28	0.093	0.061	4.64	2	2	44	< 0.01	< 1	< 2	< 10	24	< 10	7	33	0.09	4.74
GC22-0038-011	6	3.40	< 10	< 1	0.22	17	1.09	0.180	0.051	2.00	2	1	72	< 0.01	1	< 2	< 10	15	< 10	3	15	0.08	2.02
GC22-0032-001	6	1.76	< 10	< 1	0.29	14	1.12	0.166	0.045	0.68	3	1	70	< 0.01	< 1	< 2	< 10	11	< 10	2	16	0.09	0.74
GC22-0032-018	34	11.1	10	< 1	0.18	< 10	4.05	0.029	0.079	8.08	6	9	17	< 0.01	3	< 2	< 10	111	< 10	10	22	0.06	8.93
GC22-0031-005	4	3.30	< 10	< 1	0.18	11	0.84	0.290	0.035	1.68	< 2	< 1	183	< 0.01	1	< 2	< 10	8	< 10	2	16	0.09	1.72
1317011347	6	2.64	< 10	< 1	0.20	14	0.92	0.134	0.040	1.97	< 2	< 1	63	< 0.01	< 1	< 2	< 10	9	< 10	2	21	0.22	1.92
GC22-0034-012	7	4.21	< 10	< 1	0.19	14	1.75	0.070	0.043	3.21	4	1	38	< 0.01	< 1	< 2	< 10	11	< 10	3	28	0.07	3.18
GC22-0035-009	8	3.08	< 10	< 1	0.17	12	1.32	0.118	0.049	2.07	< 2	< 1	80	< 0.01	2	< 2	< 10	9	< 10	2	20	0.13	2.06
1325081094	55	6.90	10	< 1	0.53	< 10	1.00	0.203	0.069	0.42	5	17	44	0.22	< 1	< 2	< 10	174	< 10	12	3	1.26	0.45
GC22-0036-019	16	6.53	< 10	< 1	0.19	21	3.30	0.044	0.069	4.43	2	2	31	0.02	< 1	< 2	< 10	29	< 10	6	38	0.06	4.58
*GC22-0037-015	13	5.49	< 10	< 1	0.17	15	2.62	0.046	0.054	4.21	< 2	2	33	0.01	< 1	< 2	< 10	19	< 10	4	31	0.08	4.29
F009398	14	6.15	10	< 1	0.08	< 10	1.73	0.104	0.039	0.17	2	6	59	0.43	3	< 2	< 10	172	< 10	9	18	0.07	0.20
GC22-0008-013	6	2.48	< 10	< 1	0.16	15	0.69	0.123	0.044	1.54	2	< 1	111	< 0.01	< 1	< 2	< 10	9	< 10	3	14	0.06	1.57
GC22-0009-003	6	2.29	< 10	< 1	0.21	14	0.72	0.150	0.045	2.25	< 2	< 1	56	0.04	< 1	< 2	< 10	7	< 10	2	21	0.22	2.25
GC22-0009-019	6	0.83	< 10	< 1	0.17	16	0.29	0.127	0.046	0.63	< 2	< 1	91	0.02	< 1	< 2	< 10	6	< 10	2	16	0.03	0.62
GC22-0010-001	5	2.08	< 10	< 1	0.20	13	0.70	0.094	0.044	2.12	2	< 1	65	0.02	< 1	< 2	< 10	6	< 10	2	22	0.16	2.13
GC22-0010-019	5	3.31	< 10	< 1	0.21	14	0.67	0.220	0.047	1.80	2	1	210	< 0.01	< 1	< 2	< 10	11	< 10	2	15	0.13	1.81
1317011064	6	3.26	< 10	< 1	0.17	12	0.78	0.088	0.041	1.32	< 2	< 1	49	0.04	< 1	< 2	< 10	11	< 10	2	21	0.12	1.28
1325081140	12	2.30	< 10	< 1	0.32	20	1.04	0.163	0.055	0.80	2	1	59	0.06	< 1	< 2	< 10	17	< 10	3	15	0.48	0.78
GC22-0011-002	4	2.22	< 10	< 1	0.25	15	0.73	0.091	0.047	2.32	3	< 1	73	< 0.01	1	< 2	< 10	6	< 10	2	24	0.55	2.36
1320098003	5	2.12	< 10	< 1	0.22	< 10	0.61	0.044	0.045	2.04	< 2	< 1	36	< 0.01	< 1	< 2	< 10	5	< 10	1	9	1.49	1.99
1317011123	13	2.04	< 10	< 1	0.47	13	1.18	0.075	0.039	0.46	< 2	2	27	0.08	< 1	< 2	< 10	24	< 10	2	19	0.15	0.52
1317011050	9	2.48	< 10	< 1	0.16	12	0.73	0.147	0.040	1.40	< 2	1	71	0.04	< 1	< 2	< 10	14	< 10	2	22	0.18	1.41
1325080056	20	2.19	< 10	< 1	0.19	20	1.01	0.043	0.052	0.13	< 2	2	101	0.08	< 1	< 2	< 10	28	< 10	2	12	0.41	0.14
GC22-0012-014	6	0.83	< 10	< 1	0.13	15	0.15	0.102	0.039	0.62	< 2	< 1	94	< 0.01	< 1	< 2	< 10	5	< 10	2	14	0.08	0.62
1325080203	9	1.99	< 10	< 1	0.22	16	0.87	0.101	0.046	0.58	< 2	1	47	0.06	< 1	< 2	< 10	17	< 10	3	18	0.27	0.64
GC22-0013-010	6	0.66	< 10	< 1	0.18	15	0.09	0.103	0.045	0.56	< 2	< 1	117	< 0.01	< 1	< 2	< 10	5	< 10	2	11	0.04	0.57
1325080010	17	2.43	< 10	< 1	0.45	29	1.01	0.231	0.070	0.52	2	2	115	0.11	< 1	< 2	< 10	32	< 10	4	6	0.63	0.55
GC22-0013-008	6	0.90	< 10	< 1	0.16	15	0.10	0.084	0.038	0.76	< 2	< 1	77	< 0.01	< 1	< 2	< 10	4	< 10	2	16	0.04	0.73
F009397	21	6.00	10</																				

Results

Activation Laboratories Ltd.

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Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
GC21-0937-001	225	4.69	< 10	< 1	0.29	< 10	1.92	0.025	0.045	3.27	3	1	7	< 0.01	1	< 2	< 10	14	< 10	2	14	0.11	3.34
1318060038	6	2.05	10	< 1	0.13	15	1.00	0.145	0.051	0.71	< 2	< 1	209	< 0.01	< 1	< 2	< 10	14	< 10	2	8	0.15	0.74
GC21-1069-002	118	2.59	< 10	< 1	0.31	12	0.59	0.020	0.045	2.37	5	< 1	25	< 0.01	< 1	< 2	< 10	7	< 10	1	19	0.40	2.27

Results

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Analyte Symbol	Fizz Rating	NNP	Modified-NP	NPR	AP (Sulphide)
Unit Symbol	-	-	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t
Lower Limit					0.01
Method Code	none	Calc	TITR	Calc	Calc
GC22-0127-013	None	-32.3	15.4	0.323	47.75
GC22-0128-009FD	Slight	80.9	80.9	0.000	< 0.01
GC22-0126-018	None	-28.6	6.98	0.196	35.62
1324073186	Slight	-11.6	38.0	0.766	49.57
GC22-0130-006	Slight	-12.3	35.7	0.744	47.91
GC22-0131-002	Slight	-26.7	15.0	0.360	41.65
1319045099	None	20.4	21.2	28.2	0.75
1319045047	Slight	2.87	59.0	1.05	56.12
1319045144	Slight	-96.9	-3.74	-0.0401	93.15
1319045119	Slight	-62.8	0.748	0.0118	63.55
GC22-0132-021	None	-53.0	7.96	0.131	60.93
GC22-0033-001	None	-23.7	9.46	0.285	33.17
1324073040	Slight	15.8	37.2	1.74	21.45
1319045091	Slight	-11.0	37.9	0.775	48.92
GC22-0134-007	None	-16.2	14.5	0.471	30.69
GC22-0132-012	Slight	-69.0	-0.499	0.00728	68.49
F009106					
1324075112	Slight	26.3	41.0	2.79	14.71
GC22-0070-007	Slight	-7.10	54.4	0.885	61.54
1324075183	Slight	21.0	44.3	1.90	23.29
GC22-0072-016	Slight	-0.960	50.1	0.981	51.10
GC22-0073-012	None	-40.3	46.8	0.538	87.10
GC22-0068-014	None	-13.1	47.5	0.783	60.65
1324075218	Slight	44.6	64.4	3.26	19.77
1324075187	Slight	20.2	34.7	2.40	14.46
GC22-0071-020	Slight	14.9	53.1	1.39	38.24
GC22-0083-017	Slight	-361	20.7	0.0542	382.15
GC22-0076-001	Slight	21.9	45.2	1.94	23.31
1324075239	Slight	3.28	39.8	1.09	36.54
1324075170	Slight	20.8	29.6	3.35	8.83
GC22-0075-001	None	-90.6	7.99	0.0811	98.58
GC22-0077-015	Slight	-24.5	22.5	0.479	46.97
1317017019	None	-47.9	14.2	0.229	62.16
GC22-0074-009	Slight	25.8	72.5	1.55	46.73
GC22-0078-011	Slight	-30.9	45.2	0.594	76.07
GC22-0075-011	Slight	8.05	61.2	1.15	53.10
1325085222	Slight	36.6	52.6	3.30	15.90
F009108					
1317010134	Slight	-10.2	30.2	0.748	40.34
1317010421	None	18.3	18.7	49.3	0.38
1318088077	None	-40.6	14.0	0.256	54.53
1318088041	None	-87.2	-20.7	-0.311	66.51
1318088005	None	13.8	19.0	3.66	5.19
1317009080	None	-17.8	5.73	0.244	23.50
1318088023	None	-28.2	15.2	0.350	43.45
1317010240	None	-42.3	12.7	0.231	54.97
1317010341	None	-44.3	12.2	0.216	56.59
1317010466	Slight	-71.6	0.995	0.0137	72.60

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Analyte Symbol	Fizz Rating	NNP	Modified-NP	NPR	AP (Sulphide)
Unit Symbol	-	-	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t
Lower Limit					0.01
Method Code	none	Calc	TITR	Calc	Calc
1317009029	Slight	-18.8	5.73	0.233	24.57
1318088001	None	11.1	12.0	13.2	0.91
1317009103	None	-14.9	10.2	0.407	25.17
1317009124	None	-8.24	10.5	0.560	18.73
1317002228	None	-71.1	7.48	0.0952	78.59
1317002209	None	-64.2	7.00	0.0983	71.17
1325080262	Slight	9.06	26.9	1.51	17.83
1317002245	None	7.62	9.49	5.09	1.87
1317002027	Slight	-41.9	15.7	0.273	57.57
F009109					
1317002004	Slight	-56.8	18.7	0.248	75.54
1317002033	None	-83.0	5.50	0.0621	88.50
1325080252	Slight	23.6	36.2	2.88	12.55
1325080300	Slight	19.1	22.7	6.34	3.58
1325080234	Slight	35.9	48.2	3.92	12.31
1325081284	Slight	7.98	14.2	2.28	6.23
1325081218	Slight	26.3	44.2	2.47	17.84
GC22-0004-018	None	-36.9	9.45	0.204	46.31
GC22-0007-005	Slight	-43.3	21.0	0.326	64.29
GC22-0004-001	Slight	-13.5	50.3	0.788	63.75
1325081288	Slight	46.0	53.2	7.38	7.21
1325081156	Slight	26.3	42.9	2.58	16.64
GC21-0001-001	Slight	4.73	38.1	1.14	33.41
1325081176	Slight	101	114	8.72	13.03
1325081178	Slight	33.1	43.6	4.16	10.47
GC22-0002-001	Slight	-24.2	40.5	0.626	64.71
GC22-0003-001	Slight	-41.0	19.0	0.316	59.99
1325081196	Slight	30.8	63.0	1.96	32.14
GC22-0006-001	Slight	-4.81	50.1	0.912	54.90
1325081112	Slight	116	117	111	1.06
F009091					
GC22-0086-005	Slight	-73.1	20.2	0.216	93.32
GC22-0088-002	None	-56.2	6.24	0.100	62.41
1317017095	None	9.71	12.5	4.49	2.78
GC22-0089-005	Slight	35.2	35.2	0.000	< 0.01
1317017082	Slight	-28.6	19.0	0.399	47.60
1317017067	Slight	-46.0	18.7	0.289	64.71
1317017040	Slight	-33.6	20.2	0.375	53.79
1317017009	Slight	-32.2	16.2	0.334	48.44
1317017007	None	-46.1	12.0	0.206	58.04
131701798	None	11.6	12.7	11.2	1.13
GC22-0092-001	Slight	44.6	44.9	172	0.26
GC22-0091-004	Slight	37.4	41.1	10.9	3.77
GC22-0091-016	None	-34.6	7.23	0.173	41.86
1317018167	None	-88.2	4.49	0.0484	92.71
GC22-0088-013	None	-42.4	8.48	0.167	50.86
GC22-0090-009	None	-29.7	8.24	0.217	37.98
GC22-0095-018	None	-61.4	7.22	0.105	68.66
GC22-0094-012	Slight	25.1	43.7	2.36	18.54
GC22-0093-001	None	-92.9	5.98	0.0605	98.85

Results

Activation Laboratories Ltd.

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Analyte Symbol	Fizz Rating	NNP	Modified-NP	NPR	AP (Sulphide)
Unit Symbol	-	-	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t
Lower Limit					0.01
Method Code	none	Calc	TITR	Calc	Calc
GC22-0095-020	None	-22.6	10.7	0.322	33.38
GC22-0093-003	None	-63.5	4.50	0.0662	68.00
F009092					
1317001031	None	-5.92	10.7	0.644	16.63
1317011190	None	-55.9	14.0	0.200	69.86
1317011225	None	-35.0	12.0	0.255	46.97
1317011284	Slight	-5.60	34.4	0.860	39.95
1317001039	Slight	-24.8	30.5	0.551	55.24
1317001043	Slight	-22.1	27.4	0.554	49.49
1317011203	None	-43.3	11.5	0.210	54.85
1317011187	Slight	17.8	24.7	3.59	6.88
GC22-0021-010	Slight	-35.7	11.2	0.239	46.91
GC22-0023-001	None	-46.8	7.48	0.138	54.33
GC22-0022-003	None	-30.3	12.7	0.296	42.99
1317011251	None	-35.6	12.0	0.252	47.60
1317011232	Slight	-31.0	14.2	0.315	45.18
1317011240	None	-66.0	12.0	0.154	77.98
GC22-0023-002	None	-34.4	5.48	0.137	39.83
GC22-0026-019	Slight	-17.0	11.7	0.408	28.74
GC22-0024-007	None	-22.7	11.2	0.330	33.91
1317011281	Slight	-19.0	22.0	0.537	40.93
1317001175	Slight	-16.0	34.2	0.682	50.22
1317001084	None	-28.5	1.99	0.0654	30.49
F009096					
1325080048	Slight	20.2	23.4	7.21	3.25
GC22-0014-014	None	-116	6.74	0.0549	122.77
1325080040	Slight	23.8	26.3	10.9	2.41
1317011075	Slight	-18.9	17.7	0.484	36.65
GC22-0014-019	None	-86.4	1.25	0.0142	87.62
GC22-0016-010	None	-93.6	5.75	0.0578	99.34
1317001160	Slight	-50.6	17.4	0.256	68.02
GC22-0018-001	None	-7.33	17.2	0.701	24.50
GC22-0018-002	Slight	-16.3	14.2	0.467	30.49
1317011058	Slight	1.73	14.2	1.14	12.50
GC22-0019-001	None	-41.0	15.7	0.277	56.73
1317011071	Slight	-20.0	25.7	0.563	45.65
GC22-0015-018	None	-31.3	6.00	0.161	37.26
1317001003	Slight	-43.2	16.2	0.272	59.43
GC22-0018-021	Slight	-41.6	18.5	0.307	60.10
GC22-0019-020	Slight	-128	34.7	0.213	162.87
GC22-0020-020	Slight	91.4	121	4.12	29.26
1317011161	Slight	-16.8	23.5	0.583	40.26
1317001042	Slight	-18.6	31.7	0.631	50.30
1317011158	Slight	22.1	29.9	3.86	7.75
F009097					
GC22-0097-014	None	-45.1	-19.5	-0.760	25.65
GC22-0096-020	Slight	-52.1	18.2	0.259	70.37
1317018032	Slight	-39.1	14.4	0.270	53.53
1317018008	None	-10.8	-9.48	-7.15	1.33

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Analyte Symbol	Fizz Rating	NNP	Modified-NP	NPR	AP (Sulphide)
Unit Symbol	-	-	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t
Lower Limit					0.01
Method Code	none	Calc	TITR	Calc	Calc
1316002063	None	40.6	45.1	9.87	4.57
1317018090	Slight	-44.7	18.7	0.295	63.48
1317018133	Slight	-71.2	12.7	0.152	83.87
GC22-0099-018	None	-166	10.2	0.0579	176.30
GC22-0100-017	Slight	12.4	17.7	3.34	5.30
GC22-0099-006	Slight	-14.4	17.9	0.555	32.36
1317018048	None	-65.9	7.75	0.105	73.66
GC22-0099-009FD	Slight	-41.8	12.5	0.230	54.33
1317018074	None	-76.2	10.5	0.121	86.69
GC22-0101-001	Slight	-27.1	13.3	0.328	40.38
GC22-0101-007	None	-0.0602	20.7	0.997	20.74
1317018062	None	-56.6	14.2	0.201	70.86
F009399					
GC22-0027-001	Slight	-21.7	18.7	0.463	40.34
GC22-0039-009	None	-26.0	9.72	0.272	35.72
GC22-0030-009FD	None	-24.9	8.49	0.254	33.43
GC22-0033-015	None	-75.9	-12.5	-0.197	63.42
GC22-0029-011	Slight	0.492	40.1	1.01	39.60
1317011299	None	-131	2.75	0.0205	133.89
GC22-0029-012	None	-34.2	-11.7	-0.523	22.46
1325081072	Slight	177	182	34.8	5.24
GC22-0040-002	Slight	-49.0	13.5	0.216	62.48
1325085114	Slight	63.1	64.1	62.1	1.03
GC22-0036-014	Slight	-111	22.5	0.168	133.50
GC22-0038-011	Slight	-43.5	13.2	0.233	56.69
GC22-0032-001	Slight	-5.03	14.5	0.742	19.50
GC22-0032-018	None	-236	12.5	0.0502	248.33
GC22-0031-005	None	-39.0	9.96	0.204	48.91
1317011347	None	-44.1	10.5	0.192	54.54
GC22-0034-012	None	-83.2	8.46	0.0924	91.65
GC22-0035-009	Slight	-61.3	-3.00	-0.0514	58.29
1325081094	Slight	95.7	101	19.4	5.21
GC22-0036-019	None	-119	10.5	0.0806	129.87
*GC22-0037-015	None	-110	10.7	0.0893	120.30
F009398					
GC22-0008-013	None	-25.2	19.0	0.429	44.18
GC22-0009-003	Slight	-37.9	25.9	0.406	63.76
GC22-0009-019	None	-11.5	6.24	0.352	17.71
GC22-0010-001	Slight	-42.9	18.4	0.300	61.32
GC22-0010-019	Slight	-32.0	15.7	0.330	47.75
1317011064	Slight	-22.9	13.0	0.361	35.86
1325081140	Slight	29.8	49.6	2.51	19.76
GC22-0011-002	Slight	-17.8	48.5	0.731	66.29
1320098003	Slight	24.9	77.6	1.47	52.71
1317011123	None	1.05	14.7	1.08	13.68
1317011050	Slight	-25.0	14.4	0.366	39.40
1325080056	Slight	34.1	35.9	20.0	1.80
GC22-0012-014	None	-12.2	5.00	0.290	17.23

Results

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Analyte Symbol	Fizz Rating	NNP	Modified-NP	NPR	AP (Sulphide)
Unit Symbol	-	-	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t
Lower Limit					0.01
Method Code	none	Calc	TITR	Calc	Calc
1325080203	Slight	19.2	35.7	2.16	16.55
GC22-0013-010	None	-9.96	5.50	0.356	15.45
1325080010	Slight	21.0	33.9	2.63	12.86
GC22-0013-008	None	-17.2	3.49	0.168	20.73
F009397					
F007774					
F007265					
GC21-0937-001	None	-89.7	2.99	0.0323	92.70
1318060038	None	-5.24	15.0	0.741	20.24
GC21-1069-002	Slight	-26.4	37.0	0.584	63.37

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas				0.3	< 0.5	66	1090	1	24	102	129	6.52	219	20	809	0.9	< 2	0.15	13	81	5.61	20	2
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
GXR-6 Meas				0.3	< 0.5	66	1090	2	22	99	126	6.54	223	19	830	0.9	< 2	0.15	13	79	5.62	20	< 1
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
GXR-6 Meas				0.3	< 0.5	66	1070	2	22	96	124	6.50	221	20	830	0.9	< 2	0.15	13	78	5.58	20	< 1
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
BaSO4 Meas		41.8																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.4																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.2																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.6																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.8																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.8																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.3																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.8																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.5																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.9																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.3																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.9																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.3																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.9																					
BaSO4 Cert		41.94																					
BaSO4 Meas		43.0																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.3																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.9																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.5																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.0																					
BaSO4 Cert		41.94																					
BaSO4 Meas		41.6																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.0																					
BaSO4 Cert		41.94																					
BaSO4 Meas		42.1																					

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BaSO4 Cert		41.94																					
OREAS 98 (Aqua Regia) Meas				39.9		> 10000				285	1210						35		101				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
OREAS 98 (Aqua Regia) Meas				41.4		> 10000				289	1240						44		105				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
OREAS 98 (Aqua Regia) Meas				41.1		> 10000				294	1250						40		106				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
OREAS 98 (Aqua Regia) Meas				40.4		> 10000				282	1220						23		104				
OREAS 98 (Aqua Regia) Cert				42.8		147000				343	1300						93		111				
RTS-3a Meas		29.7																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.6																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.7																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.6																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.5																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.0																					
RTS-3a Cert		29.90																					
RTS-3a Meas		28.9																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.4																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.5																					
RTS-3a Cert		29.90																					
RTS-3a Meas		29.7																					
RTS-3a Cert		29.90																					
GS311-4 Meas																							
GS311-4 Cert																							
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GS311-4 Meas																							

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
GS311-4 Cert																								
GS311-4 Meas																								
GS311-4 Cert																								
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GS311-4 Meas																								
GS311-4 Cert																								
GS311-4 Meas																								
GS311-4 Cert																								
GS311-4 Meas																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		0.06																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		< 0.05																						
SiO2 Cert																								
SiO2 Meas		0.07																						
SiO2 Cert																								
SiO2 Meas		0.07																						
SiO2 Cert																								
SiO2 Meas																								
SiO2 Cert																								
SiO2 Meas																								
SiO2 Cert																								
NBM-1 (slight fzz) Meas	8.56																							
NBM-1 (slight fzz) Cert	8.53																							
NBM-1 (slight fzz) Meas	8.53																							
NBM-1 (slight fzz) Cert	8.53																							
NBM-1 (slight fzz) Meas	9.20																							
NBM-1 (slight fzz) Cert	8.53																							

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 922 (AQUA REGIA) Meas				0.8	< 0.5	2100	800	< 1	33	66	266	2.60	6		71	0.8	6	0.41	19	45	4.96	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.8	< 0.5	2190	814	< 1	35	64	274	2.73	4		74	0.8	10	0.42	19	47	5.30	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.8	< 0.5	2320	843	< 1	37	63	286	2.80	2		74	0.8	8	0.43	20	48	5.52	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 922 (AQUA REGIA) Meas				0.8	< 0.5	2170	791	< 1	33	65	257	2.59	4		68	0.7	11	0.40	19	45	5.11	< 10	
OREAS 922 (AQUA REGIA) Cert				0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05	7.62	
OREAS 923 (AQUA REGIA) Meas				1.6	< 0.5	4240	913	< 1	33	90	354	2.68	6		60	0.7	18	0.42	21	43	5.90	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
OREAS 923 (AQUA REGIA) Meas				2.3	< 0.5	4340	926	< 1	32	83	356	2.73	7		60	0.7	22	0.42	22	43	6.07	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
OREAS 923 (AQUA REGIA) Meas				1.6	< 0.5	4500	937	< 1	36	88	361	2.79	7		58	0.7	24	0.42	22	44	6.21	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
OREAS 923 (AQUA REGIA) Meas				1.9	< 0.5	4400	917	< 1	32	94	350	2.67	5		56	0.7	20	0.41	22	42	6.05	< 10	
OREAS 923 (AQUA REGIA) Cert				1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91	8.01	
Oreas 96 (Aqua Regia) Meas				10.9		> 10000				94	435						16		44				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
Oreas 96 (Aqua Regia) Meas				10.6		> 10000				89	424						16		44				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
Oreas 96 (Aqua Regia) Meas				11.1		> 10000				95	439						25		46				
Oreas 96 (Aqua				11.50		39100.				100	448						27.9		49.2				

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Regia) Cert						00																	
Oreas 96 (Aqua Regia) Meas				10.8		> 10000				93	435						19		45				
Oreas 96 (Aqua Regia) Cert				11.50		39100.00				100	448						27.9		49.2				
OREAS 45f (Aqua Regia) Meas						348	181	< 1	227	7	26	6.68			134	1.1	< 2	0.07	38	358	13.8	20	1
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 45f (Aqua Regia) Meas						375	187	< 1	240	9	28	6.97			141	1.1	2	0.07	39	376	14.7	20	< 1
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 45f (Aqua Regia) Meas						361	179	< 1	235	9	27	6.69			141	1.1	< 2	0.07	39	371	14.5	20	2
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 45f (Aqua Regia) Meas						360	182	< 1	230	8	26	6.51			139	1.1	< 2	0.07	38	363	14.3	20	3
OREAS 45f (Aqua Regia) Cert						336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7	20.3	0.0310
OREAS 238 (Fire Assay) Meas			3070																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3080																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			2950																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3050																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3080																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3010																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3020																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			2950																				
OREAS 238 (Fire Assay) Cert			3030																				
OREAS 238 (Fire Assay) Meas			3110																				
OREAS 238 (Fire Assay) Cert			3030																				

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay Cert			510.000																				
Oreas E1336 (Fire Assay) Meas			502																				
Oreas E1336 (Fire Assay) Cert			510.000																				
Oreas E1336 (Fire Assay) Meas			502																				
Oreas E1336 (Fire Assay) Cert			510.000																				
Oreas E1336 (Fire Assay) Meas			517																				
Oreas E1336 (Fire Assay) Cert			510.000																				
Oreas E1336 (Fire Assay) Meas			520																				
Oreas E1336 (Fire Assay) Cert			510.000																				
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
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GS317-5 Meas																							
GS317-5 Cert																							
Oreas 620 (Aqua Regia) Meas				41.0	164	1740	477	10	14	> 5000	> 10000	1.22	50		13	0.7	< 2	1.40	13	17	2.60	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
Oreas 620 (Aqua Regia) Meas				42.0	167	1880	485	10	16	> 5000	> 10000	1.25	50		13	0.7	2	1.43	14	22	2.71	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
Oreas 620 (Aqua Regia) Meas				42.5	168	1800	479	11	14	> 5000	> 10000	1.24	49		< 10	0.7	3	1.44	14	18	2.71	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 620 (Aqua Regia) Meas				41.1	164	1840	473	10	16	> 5000	> 10000	1.18	49		16	0.7	2	1.41	13	21	2.65	< 10	2
Oreas 620 (Aqua Regia) Cert				38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58	6	2
OREAS L15 Meas			> 5000																				
OREAS L15 Cert			7180																				
GC22-0130-006 Orig				< 0.2	< 0.5	13	380	< 1	13	< 2	39	1.81	7	12	18	< 0.5	3	1.29	11	15	3.72	< 10	< 1
GC22-0130-006 Dup				< 0.2	< 0.5	13	383	< 1	13	3	38	1.80	7	14	19	< 0.5	< 2	1.30	11	15	3.72	< 10	< 1
1319045144 Orig			372																				
1319045144 Dup			389																				
1319045119 Orig		0.72																					
1319045119 Dup		0.73																					
GC22-0132-012 Orig			727																				
GC22-0132-012 Dup			752																				
1324075183 Orig		0.45		0.3	< 0.5	20	803	< 1	62	5	195	1.65	5	15	83	< 0.5	< 2	2.21	19	131	2.93	< 10	< 1
1324075183 Dup		0.46		0.3	< 0.5	20	806	< 1	63	5	198	1.68	5	16	58	< 0.5	< 2	2.22	20	132	2.98	< 10	< 1
1324075187 Orig			34																				
1324075187 Dup			37																				
GC22-0083-017 Orig		2.50																					
GC22-0083-017 Dup		2.73																					
1324075239 Orig				0.5	0.5	22	906	< 1	6	65	244	1.67	46	14	42	< 0.5	< 2	2.05	7	5	1.86	< 10	< 1
1324075239 Dup				0.5	0.5	23	901	1	9	66	244	1.69	47	16	43	< 0.5	< 2	2.05	7	5	1.88	< 10	< 1
GC22-0075-001 Orig																							
GC22-0075-001 Dup																							
1317017019 Orig		0.51																					
1317017019 Dup		0.61																					
1317010421 Orig			5																				
1317010421 Dup			6																				
1318088077 Orig																							
1318088077 Dup																							
1318088005 Orig		0.29																					

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1318088005 Dup		0.29																						
1317010466 Orig				0.5	< 0.5	87	422		4	12	4	62	1.85	8	14	23	< 0.5	2	1.31	10	10	3.06	< 10	< 1
1317010466 Dup				0.5	< 0.5	87	420		3	12	5	62	1.80	8	14	19	< 0.5	2	1.29	10	10	3.03	< 10	< 1
1317009029 Orig			137																					
1317009029 Dup			141																					
1317009124 Orig																								
1317009124 Dup																								
1317002245 Orig		0.18																						
1317002245 Dup		0.17																						
1325080300 Orig																								
1325080300 Dup																								
1325080234 Orig				< 0.2	< 0.5	18	674	< 1	17	6	156	1.87	3	15	49	< 0.5	< 2	2.53	9	14	1.94	< 10	< 1	
1325080234 Dup				< 0.2	< 0.5	17	697	< 1	16	6	158	1.88	2	13	50	< 0.5	< 2	2.55	9	14	1.95	< 10	< 1	
GC22-0004-018 Orig		0.38																						
GC22-0004-018 Dup		0.38																						
1325081178 Orig	9.34																							
1325081178 Dup	9.36																							
1325081112 Orig			9	< 0.2	< 0.5	98	1140	< 1	53	< 2	131	2.61	21	15	62	< 0.5	< 2	5.28	41	60	6.93	10	< 1	
1325081112 Dup			9	0.2	0.5	102	1180	< 1	56	< 2	133	2.70	28	12	63	< 0.5	< 2	5.37	43	60	7.22	10	< 1	
GC22-0086-005 Orig		0.67																						
GC22-0086-005 Dup		0.80																						
GC22-0089-005 Orig																								
GC22-0089-005 Dup																								
1317017082 Orig																								
1317017082 Dup																								
1317017009 Orig				0.7	< 0.5	159	471	< 1	13	6	53	2.91	10	11	44	< 0.5	3	1.63	8	8	3.35	< 10	< 1	
1317017009 Dup				0.5	< 0.5	162	479	< 1	9	5	55	2.95	8	13	44	< 0.5	2	1.65	7	7	3.40	< 10	< 1	
131701798 Orig		0.19																						
131701798 Dup		0.21																						

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0095-018 Orig																							
GC22-0095-018 Dup																							
GC22-0093-003 Orig																							
GC22-0093-003 Dup																							
1317011190 Orig		0.53																					
1317011190 Dup		0.53																					
1317011225 Orig			99																				
1317011225 Dup			124																				
1317001039 Orig				0.8	< 0.5	172	545	4	9	3	103	1.75	9	12	38	< 0.5	< 2	1.86	9	8	2.75	< 10	< 1
1317001039 Dup				0.8	< 0.5	173	541	4	8	3	103	1.75	7	12	36	< 0.5	< 2	1.85	8	8	2.76	< 10	< 1
GC22-0022-003 Orig		0.58																					
GC22-0022-003 Dup		0.54																					
1317011251 Orig																							
1317011251 Dup																							
1317011232 Orig			355																				
1317011232 Dup			235																				
1317001084 Orig			250																				
1317001084 Dup			198																				
1325080040 Orig																							
1325080040 Dup																							
1317011075 Orig		0.54		0.3	< 0.5	51	658	< 1	9	8	188	1.53	10	16	59	< 0.5	< 2	0.95	8	8	2.18	< 10	< 1
1317011075 Dup		0.56		0.4	< 0.5	49	653	< 1	8	9	187	1.51	7	18	57	< 0.5	< 2	0.93	8	8	2.17	< 10	< 1
GC22-0018-001 Orig			616																				
GC22-0018-001 Dup			595																				
GC22-0019-001 Orig																							
GC22-0019-001 Dup																							
GC22-0015-018 Orig		0.41																					
GC22-0015-018 Dup		0.38																					
1317001042				1.0	< 0.5	273	420	5	9	3	187	2.13	8	12	46	< 0.5	< 2	2.06	8	9	2.55	< 10	< 1

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Orig																							
1317001042 Dup				1.0	< 0.5	276	416	5	9	3	188	2.11	10	13	46	< 0.5	< 2	2.04	8	9	2.55	< 10	< 1
GC22-0096-020 Orig																							
GC22-0096-020 Dup																							
1317018032 Orig																							
1317018032 Dup																							
1317018008 Orig	9.07																						
1317018008 Dup	9.09																						
1317018090 Orig		0.70																					
1317018090 Dup		0.77																					
1317018133 Orig				0.5	< 0.5	84	504	< 1	9	4	61	1.71	8	13	30	< 0.5	5	1.00	7	5	3.14	< 10	< 1
1317018133 Dup				0.4	< 0.5	86	518	< 1	7	4	62	1.76	6	13	36	< 0.5	4	1.02	7	5	3.20	< 10	< 1
1317018048 Orig			62																				
1317018048 Dup			72																				
GC22-0101-001 Orig			279																				
GC22-0101-001 Dup			264																				
GC22-0101-007 Orig		0.30																					
GC22-0101-007 Dup		0.31																					
GC22-0101-007 Orig		0.34																					
GC22-0101-007 Dup		0.43																					
GC22-0029-012 Orig																							
GC22-0029-012 Dup																							
GC22-0040-002 Orig				2.7	1.5	117	832	< 1	13	3	590	2.97	21	11	35	< 0.5	2	1.51	15	8	3.51	< 10	< 1
GC22-0040-002 Dup				3.0	1.5	120	858	< 1	14	3	603	3.10	22	11	38	< 0.5	< 2	1.55	15	9	3.64	< 10	< 1
GC22-0038-011 Orig		0.64																					
GC22-0038-011 Dup		0.61																					
GC22-0035-009 Orig																							
GC22-0035-009 Dup																							
*GC22-0037-015 Orig		1.32																					

Analyte Symbol	Paste pH	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	pH	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	pH Meter	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	20	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	17	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	18	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	18	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	17	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	GS	CS	none	Calc	TITR	Calc
BaSO4 Cert																							
OREAS 98 (Aqua Regia) Meas							19																
OREAS 98 (Aqua Regia) Cert							15																
OREAS 98 (Aqua Regia) Meas							20																
OREAS 98 (Aqua Regia) Cert							15																
OREAS 98 (Aqua Regia) Meas							16																
OREAS 98 (Aqua Regia) Cert							15																
OREAS 98 (Aqua Regia) Meas							17																
OREAS 98 (Aqua Regia) Cert							15																
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
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RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
GS311-4 Meas																		1.11	0.56				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.54				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.11	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.10	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.08	0.56				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.08	0.57				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.53				

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modifie d-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.10	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.55				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.57				
GS311-4 Cert																		1.11	0.54				
GS311-4 Meas																		1.09	0.56				
GS311-4 Cert																		1.11	0.54				
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	0.04				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
SiO2 Meas																		< 0.01	< 0.01				
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
OREAS 922 (AQUA REGIA) Meas	0.39	34	1.23	0.022	0.064	0.36	3	4	15			< 2	< 10	34	< 10	16	23						
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		0.14	1.98	29.4	1.12	16.0	22.3							
OREAS 922 (AQUA REGIA) Meas	0.41	36	1.31	0.023	0.066	0.36	2	4	17			< 2	< 10	35	< 10	16	22						
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		0.14	1.98	29.4	1.12	16.0	22.3							
OREAS 922 (AQUA REGIA) Meas	0.41	37	1.36	0.023	0.067	0.38	3	4	17			< 2	< 10	35	< 10	17	6						
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		0.14	1.98	29.4	1.12	16.0	22.3							
OREAS 922 (AQUA REGIA) Meas	0.38	34	1.26	0.022	0.062	0.36	3	4	16			< 2	< 10	33	< 10	15	6						
OREAS 922 (AQUA REGIA) Cert	0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0		0.14	1.98	29.4	1.12	16.0	22.3							
OREAS 923 (AQUA REGIA) Meas	0.35	32	1.36		0.062	0.65	3	4	14			< 2	< 10	34	< 10	15	31						
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		0.12	1.80	30.6	1.96	14.3	22.5							
OREAS 923 (AQUA REGIA) Meas	0.35	33	1.40		0.063	0.65	3	4	15			< 2	< 10	34	< 10	15	27						
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		0.12	1.80	30.6	1.96	14.3	22.5							
OREAS 923 (AQUA REGIA) Meas	0.34	33	1.42		0.062	0.68	3	4	15			< 2	< 10	34	< 10	15	8						
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		0.12	1.80	30.6	1.96	14.3	22.5							
OREAS 923 (AQUA REGIA) Meas	0.33	32	1.39		0.061	0.66	< 2	4	15			< 2	< 10	33	< 10	14	9						
OREAS 923 (AQUA REGIA) Cert	0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6		0.12	1.80	30.6	1.96	14.3	22.5							
Oreas 96 (Aqua Regia) Meas						3.64	5																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
Oreas 96 (Aqua Regia) Meas						3.65	7																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
Oreas 96 (Aqua Regia) Meas						3.78	7																
Oreas 96 (Aqua						4.38	4.53																

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
Regia) Cert																							
Oreas 96 (Aqua Regia) Meas						3.83	6																
Oreas 96 (Aqua Regia) Cert						4.38	4.53																
OREAS 45f (Aqua Regia) Meas	0.10	< 10	0.17	0.040	0.022	0.02		26	14	0.13		< 2	< 10	202		4	27						
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0						
OREAS 45f (Aqua Regia) Meas	0.10	< 10	0.18	0.041	0.023	0.02		28	14	0.12		< 2	< 10	214		4	20						
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0						
OREAS 45f (Aqua Regia) Meas	0.09	< 10	0.17	0.041	0.021	0.02		28	14	0.10		< 2	< 10	209		4	16						
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0						
OREAS 45f (Aqua Regia) Meas	0.09	< 10	0.17	0.042	0.022	0.02		28	14	0.12		< 2	< 10	209		4	22						
OREAS 45f (Aqua Regia) Cert	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0						
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
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OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
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OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
GS316-3 Meas																		0.06	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.06	0.35				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.04	0.35				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.33				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.35				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.04	0.34				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.36				
GS316-3 Cert																		0.0600	0.340				
GS316-3 Meas																		0.05	0.34				
GS316-3 Cert																		0.0600	0.340				
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
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Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
GS317-5 Meas																		8.56	15.1				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.66	15.2				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.69	15.0				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.40	14.9				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.39	14.9				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.37	15.1				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.23	14.8				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.41	14.7				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.42	14.8				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.49	14.9				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.30	15.1				
GS317-5 Cert																		8.46	15.5				
GS317-5 Meas																		8.36	15.0				
GS317-5 Cert																		8.46	15.5				
Oreas 620 (Aqua Regia) Meas	0.29	25	0.27	0.123	0.032	2.50	66		20			< 2	< 10	9	< 10	7	63						
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57						
Oreas 620 (Aqua Regia) Meas	0.30	26	0.28	0.128	0.033	2.61	68		20			< 2	< 10	9	< 10	7	65						
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57						
Oreas 620 (Aqua Regia) Meas	0.29	26	0.28	0.125	0.031	2.61	53		20			< 2	< 10	9	< 10	7	37						
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57						

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
Oreas 620 (Aqua Regia) Meas	0.28	25	0.27	0.123	0.031	2.56	58		20			< 2	< 10	9	< 10	7	44						
Oreas 620 (Aqua Regia) Cert	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57						
OREAS L15 Meas																							
OREAS L15 Cert																							
GC22-0130-006 Orig	0.25	28	1.37	0.020	0.070	1.65	< 2	2	94	0.02	< 1	< 2	< 10	20	< 10	3	10						
GC22-0130-006 Dup	0.25	27	1.37	0.020	0.071	1.67	< 2	2	95	0.02	< 1	< 2	< 10	20	< 10	3	13						
1319045144 Orig																							
1319045144 Dup																							
1319045119 Orig																		0.12	2.25				
1319045119 Dup																		0.13	2.30				
GC22-0132-012 Orig																							
GC22-0132-012 Dup																							
1324075183 Orig	0.35	20	1.34	0.073	0.065	0.90	< 2	3	70	0.12	< 1	< 2	< 10	38	< 10	3	9						
1324075183 Dup	0.35	20	1.36	0.071	0.065	0.91	< 2	3	69	0.12	< 1	< 2	< 10	38	< 10	3	6						
1324075187 Orig																							
1324075187 Dup																							
GC22-0083-017 Orig																							
GC22-0083-017 Dup																							
1324075239 Orig	0.27	15	0.60	0.132	0.040	1.33	< 2	< 1	45	< 0.01	< 1	< 2	< 10	7	< 10	2	6						
1324075239 Dup	0.27	15	0.60	0.133	0.039	1.32	< 2	< 1	45	< 0.01	< 1	< 2	< 10	7	< 10	2	7						
GC22-0075-001 Orig																		0.08	3.63				
GC22-0075-001 Dup																		0.08	3.55				
1317017019 Orig																							
1317017019 Dup																							
1317010421 Orig																							
1317010421 Dup																							
1318088077 Orig																		0.11	1.90				
1318088077 Dup																		0.11	1.88				
1318088005 Orig																							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modifie d-NP	NPR	
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio	
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01					
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc	
1318088005 Dup																								
1317010466 Orig	0.14	15	0.97	0.170	0.046	2.54	< 2	1	87	0.03	< 1	< 2	< 10	18	< 10	3	18				Slight			
1317010466 Dup	0.13	15	0.96	0.165	0.044	2.55	< 2	1	86	0.04	1	< 2	< 10	18	< 10	3	16				Slight			
1317009029 Orig																								
1317009029 Dup																								
1317009124 Orig																		0.12	0.68					
1317009124 Dup																		0.12	0.72					
1317002245 Orig																								
1317002245 Dup																								
1325080300 Orig																		0.25	0.22					
1325080300 Dup																		0.25	0.22					
1325080234 Orig	0.23	20	1.23	0.049	0.057	0.53	< 2	1	66	0.05	< 1	< 2	< 10	18	< 10	2	7							
1325080234 Dup	0.23	21	1.24	0.050	0.058	0.51	< 2	1	68	0.05	< 1	< 2	< 10	18	< 10	2	7							
GC22-0004-018 Orig																								
GC22-0004-018 Dup																								
1325081178 Orig																		1.06	0.58					
1325081178 Dup																		1.06	0.59					
1325081112 Orig	0.30	< 10	0.95	0.109	0.069	0.17	3	18	35	0.14	< 1	< 2	< 10	188	< 10	12	2							
1325081112 Dup	0.30	< 10	0.96	0.113	0.070	0.17	5	19	37	0.15	< 1	< 2	< 10	193	< 10	12	3							
GC22-0086-005 Orig																								
GC22-0086-005 Dup																								
GC22-0089-005 Orig																		0.37	3.00					
GC22-0089-005 Dup																		0.37	3.00					
1317017082 Orig																						-28.6	19.0	0.399
1317017082 Dup																						-28.4	19.2	0.403
1317017009 Orig	0.15	13	0.89	0.236	0.043	1.66	< 2	1	167	0.02	< 1	< 2	< 10	12	< 10	2	16							
1317017009 Dup	0.15	13	0.91	0.241	0.042	1.69	< 2	1	170	0.02	< 1	< 2	< 10	13	< 10	2	11							
131701798 Orig																								
131701798 Dup																								

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaCO ₃ /t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
GC22-0095-018 Orig																				None	-61.4	7.22	0.105
GC22-0095-018 Dup																				None	-61.4	7.24	0.105
GC22-0093-003 Orig																		0.08	2.41				
GC22-0093-003 Dup																		0.08	2.39				
1317011190 Orig																							
1317011190 Dup																							
1317011225 Orig																							
1317011225 Dup																							
1317001039 Orig	0.16	13	0.80	0.172	0.042	2.01	< 2	1	116	0.03	< 1	< 2	< 10	13	< 10	3	16						
1317001039 Dup	0.16	13	0.81	0.169	0.042	2.02	< 2	1	113	0.03	< 1	< 2	< 10	13	< 10	3	16						
GC22-0022-003 Orig																							
GC22-0022-003 Dup																							
1317011251 Orig																		0.13	1.66				
1317011251 Dup																		0.13	1.74				
1317011232 Orig																							
1317011232 Dup																							
1317001084 Orig																							
1317001084 Dup																							
1325080040 Orig																		0.26	0.22				
1325080040 Dup																		0.26	0.23				
1317011075 Orig	0.35	13	1.03	0.076	0.041	1.34	< 2	2	34	0.05	< 1	< 2	< 10	19	< 10	2	21						
1317011075 Dup	0.34	13	1.02	0.074	0.040	1.33	2	2	33	0.05	< 1	< 2	< 10	19	< 10	2	21						
GC22-0018-001 Orig																							
GC22-0018-001 Dup																							
GC22-0019-001 Orig																		0.05	1.95				
GC22-0019-001 Dup																		0.04	1.91				
GC22-0015-018 Orig																							
GC22-0015-018 Dup																							
1317001042 Orig	0.16	13	0.72	0.268	0.041	1.93	< 2	1	136	0.01	< 1	< 2	< 10	15	< 10	2	16						

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR	
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio	
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01					
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc	
Orig																								
1317001042 Dup	0.16	13	0.71	0.265	0.041	1.94	2	1	135	0.01	2	< 2	< 10	15	< 10	2	16							
GC22-0096-020 Orig																					Slight	-52.1	18.2	0.259
GC22-0096-020 Dup																					Slight	-52.4	18.0	0.256
1317018032 Orig																		0.13	2.00					
1317018032 Dup																		0.12	1.90					
1317018008 Orig																								
1317018008 Dup																								
1317018090 Orig																								
1317018090 Dup																								
1317018133 Orig	0.21	12	0.94	0.073	0.041	2.84	< 2	< 1	42	0.02	< 1	< 2	< 10	7	< 10	2	26							
1317018133 Dup	0.22	13	0.97	0.075	0.041	2.86	< 2	< 1	44	0.02	< 1	< 2	< 10	7	< 10	2	27							
1317018048 Orig																								
1317018048 Dup																								
GC22-0101-001 Orig																		0.12	1.49					
GC22-0101-001 Dup																		0.12	1.48					
GC22-0101-007 Orig																		0.09	0.94					
GC22-0101-007 Dup																		0.10	0.91					
GC22-0101-007 Orig																								
GC22-0101-007 Dup																								
GC22-0029-012 Orig																		0.08	0.86					
GC22-0029-012 Dup																		0.09	0.80					
GC22-0040-002 Orig	0.16	14	1.22	0.204	0.050	2.25	2	1	80	0.01	2	< 2	< 10	19	< 10	3	15							
GC22-0040-002 Dup	0.17	14	1.26	0.214	0.053	2.30	< 2	1	84	0.01	3	< 2	< 10	20	< 10	3	15							
GC22-0038-011 Orig																								
GC22-0038-011 Dup																								
GC22-0035-009 Orig																		0.13	2.06					
GC22-0035-009 Dup																		0.13	2.08					
*GC22-0037-015 Orig																								

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR	
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaC O3/t	Ratio	
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01					
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc	
*GC22-0037-015 Dup																								
GC22-0008-013 Orig																								
GC22-0008-013 Dup																								
GC22-0009-003 Orig	0.21	14	0.72	0.150	0.045	2.25	< 2	< 1	56	0.04	< 1	< 2	< 10	7	< 10	2	21							
GC22-0009-003 Dup	0.21	14	0.72	0.147	0.045	2.25	2	< 1	56	0.04	< 1	< 2	< 10	7	< 10	2	20							
1317011064 Orig																		0.12	1.28					
1317011064 Dup																		0.12	1.32					
1317011050 Orig																				Slight	-25.0	14.4	0.366	
1317011050 Dup																				Slight	-24.9	14.5	0.367	
GC22-0012-014 Orig																								
GC22-0012-014 Dup																								
1325080010 Orig																								
1325080010 Dup																								
GC22-0013-008 Orig	0.16	15	0.10	0.084	0.038	0.76	< 2	< 1	77	< 0.01	< 1	< 2	< 10	4	< 10	2	16	0.04	0.73					
GC22-0013-008 Dup	0.16	15	0.10	0.083	0.038	0.75	< 2	< 1	77	< 0.01	< 1	< 2	< 10	4	< 10	2	16	0.04	0.73					
1318060038 Orig																					None	-5.24	15.0	0.741
1318060038 Dup																					None	-5.31	14.9	0.738
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
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Method Blank																								
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Method Blank																								
Method Blank	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1							
Method Blank	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1							

Analyte Symbol	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	NNP	Modified-NP	NPR
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	-	kg CaCO ₃ /t	Ratio
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01				
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	Calc	TITR	Calc
Method Blank	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1						
Method Blank	< 0.01	< 10	< 0.01	0.003	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1						
Method Blank	< 0.01	< 10	< 0.01	0.003	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1						
Method Blank	< 0.01	< 10	< 0.01	0.003	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1						
Method Blank	< 0.01	< 10	< 0.01	0.003	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1						

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
GXR-6 Meas	
GXR-6 Cert	
GXR-6 Meas	
GXR-6 Cert	
GXR-6 Meas	
GXR-6 Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	
BaSO ₄ Cert	
BaSO ₄ Meas	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
BaSO ₄ Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
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GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
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SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
SiO ₂ Cert	
SiO ₂ Meas	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	
GS316-3 Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
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GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
OREAS L15 Meas	
OREAS L15 Cert	
GC22-0130-006 Orig	
GC22-0130-006 Dup	
1319045144 Orig	
1319045144 Dup	
1319045119 Orig	
1319045119 Dup	
GC22-0132-012 Orig	
GC22-0132-012 Dup	
1324075183 Orig	
1324075183 Dup	
1324075187 Orig	
1324075187 Dup	
GC22-0083-017 Orig	
GC22-0083-017 Dup	
1324075239 Orig	
1324075239 Dup	
GC22-0075-001 Orig	
GC22-0075-001 Dup	
1317017019 Orig	
1317017019 Dup	
1317010421 Orig	
1317010421 Dup	
1318088077 Orig	
1318088077 Dup	
1318088005 Orig	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
1318088005 Dup	
1317010466 Orig	
1317010466 Dup	
1317009029 Orig	
1317009029 Dup	
1317009124 Orig	
1317009124 Dup	
1317002245 Orig	
1317002245 Dup	
1325080300 Orig	
1325080300 Dup	
1325080234 Orig	
1325080234 Dup	
GC22-0004-018 Orig	
GC22-0004-018 Dup	
1325081178 Orig	
1325081178 Dup	
1325081112 Orig	
1325081112 Dup	
GC22-0086-005 Orig	
GC22-0086-005 Dup	
GC22-0089-005 Orig	
GC22-0089-005 Dup	
1317017082 Orig	47.60
1317017082 Dup	47.60
1317017009 Orig	
1317017009 Dup	
131701798 Orig	
131701798 Dup	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
GC22-0095-018 Orig	68.66
GC22-0095-018 Dup	68.66
GC22-0093-003 Orig	
GC22-0093-003 Dup	
1317011190 Orig	
1317011190 Dup	
1317011225 Orig	
1317011225 Dup	
1317001039 Orig	
1317001039 Dup	
GC22-0022-003 Orig	
GC22-0022-003 Dup	
1317011251 Orig	
1317011251 Dup	
1317011232 Orig	
1317011232 Dup	
1317001084 Orig	
1317001084 Dup	
1325080040 Orig	
1325080040 Dup	
1317011075 Orig	
1317011075 Dup	
GC22-0018-001 Orig	
GC22-0018-001 Dup	
GC22-0019-001 Orig	
GC22-0019-001 Dup	
GC22-0015-018 Orig	
GC22-0015-018 Dup	
1317001042	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
Orig	
1317001042	
Dup	
GC22-0096-020	70.37
Orig	
GC22-0096-020	70.37
Dup	
1317018032	
Orig	
1317018032	
Dup	
1317018008	
Orig	
1317018008	
Dup	
1317018090	
Orig	
1317018090	
Dup	
1317018133	
Orig	
1317018133	
Dup	
1317018048	
Orig	
1317018048	
Dup	
GC22-0101-001	
Orig	
GC22-0101-001	
Dup	
GC22-0101-007	
Orig	
GC22-0101-007	
Dup	
GC22-0101-007	
Orig	
GC22-0101-007	
Dup	
GC22-0029-012	
Orig	
GC22-0029-012	
Dup	
GC22-0040-002	
Orig	
GC22-0040-002	
Dup	
GC22-0038-011	
Orig	
GC22-0038-011	
Dup	
GC22-0035-009	
Orig	
GC22-0035-009	
Dup	
GC22-0037-015	
Orig	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
*GC22-0037-015 Dup	
GC22-0008-013 Orig	
GC22-0008-013 Dup	
GC22-0009-003 Orig	
GC22-0009-003 Dup	
1317011064 Orig	
1317011064 Dup	
1317011050 Orig	39.40
1317011050 Dup	39.40
GC22-0012-014 Orig	
GC22-0012-014 Dup	
1325080010 Orig	
1325080010 Dup	
GC22-0013-008 Orig	
GC22-0013-008 Dup	
1318060038 Orig	20.24
1318060038 Dup	20.24
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	

Analyte Symbol	AP (Sulphide)
Unit Symbol	kg CaCO ₃ /t
Lower Limit	0.01
Method Code	Calc
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	



Report No.: A22-07064
Report Date: 10-Aug-22
Date Submitted: 25-May-22
Your Reference: 2022 FEB,MARCH,APRIL CHECK ASSAYS

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Lisa McGlinchey

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, Testing Date. Rows include 11 ABA Modified Sobek Package, 4F-C, S, Acid Base Accounting, and Infrared.

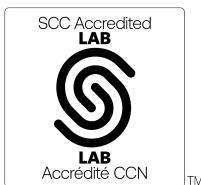
REPORT A22-07064

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 266

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Report No.: A22-07064
Report Date: 10-Aug-22
Date Submitted: 25-May-22
Your Reference: 2022 FEB,MARCH,APRIL
CHECK ASSAYS

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Lisa McGlinchey

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Tbay	QOP AA-Au (Au - Fire Assay AA)	2022-06-21 12:49:17
1E3-Tbay NewGold	QOP AquaGeo (Aqua Regia ICPOES)	2022-06-10 18:58:14

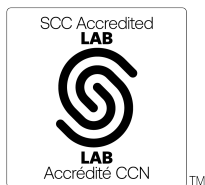
REPORT **A22-07064**

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 673

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CERTIFIED BY:

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1318077072	9.01	
1318077095	8.89	
1324080172	9.76	
1318077087	9.05	
1318077127	9.22	
1324080238	9.60	
1317016064	9.09	
1318077139	9.12	
1318077110	9.12	
1318077164	9.27	
1324080012	9.52	
1318077116	9.36	
1324080130	9.35	
1324080206	9.40	
1324080254	9.20	
1324080192	9.31	
F009381		
F010367		
1317020043	8.71	
1317019036	8.52	
1317020148	8.31	
1317020102	8.52	
1317020126	8.93	
1317020156	9.32	
1317020004	9.00	
1317020117	8.59	
1317020119	8.65	
1317020063	9.07	
1317019113	9.16	
1317019086	8.87	
1317020091	8.80	
1317020016	8.82	
1317019032	8.63	
F009373		
F010369		
GC22-0186-012	8.88	
1323061167	9.77	
GC22-0187-001	9.54	
1323061072	9.71	
GC22-0182-001	8.61	
1323061045	9.69	
GC22-0185-002	9.84	
GC22-0185-009	9.30	
1323061031	9.69	
1323061030	9.81	
GC22-0187-018	9.35	
1323061128	9.44	
GC22-0186-001	9.70	
GC22-0192-001	8.41	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GC22-0191-015	9.15	
GC22-0188-001	9.67	
GC22-0189-020	8.99	
F009573		
F009581		
1324078295	9.48	
1432007085	8.98	
1324078226	9.28	
1324078222	9.34	
GC22-0202-018	9.08	
1432007018	9.24	
1324078056	9.51	
GC22-0209-005	8.80	
GC22-0205-002	9.25	
1432007021	9.26	
GC22-0208-001	9.04	
1324078174	9.70	
GC22-0211-001	8.83	
GC22-0205-007	9.15	
GC22-0211-020	8.63	
1432007160	9.69	
1432007123	9.48	
1432007130	9.40	
F009630		
F009604		
GC22-0230-013	9.14	
GC22-0235-014	8.95	
GC22-0229-005	9.14	
1324077140	9.29	
GC22-0223-012	9.21	
GC22-0217-020	7.84	
1432007240	9.14	
GC22-0224-012	8.91	
GC22-0223-001	8.89	
1316012048	8.83	
GC22-0230-017	9.00	
GC22-0226-014	8.88	
1432007140	8.87	
GC22-0233-008	8.35	
GC22-0227-011	9.12	
GC22-0221-015	9.00	
GC22-0221-020	8.71	
F009754		
F009759		
1324077064	9.20	
GC22-0231-015	8.90	
1316012277	8.58	
GC22-0237-018	9.20	
GC22-0238-015	9.18	
GC22-0237-001	9.11	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1324077026	8.71	
1324077044	9.02	
1316012298	8.56	
GC22-0239-011	9.00	
1316012270	8.85	
GC22-0232-011	8.74	
GC22-0234-001	8.55	
GC22-0234-018	8.93	
1324077098	8.19	
1324077002	8.98	
GC22-0236-001	8.80	
1316012172	8.20	
1316012206	8.36	
1316005108	8.38	
1316005142	8.76	
F009622		
F009636		
GC22-0190-008	7.97	
1323061186	9.25	
GC22-0191-017	8.45	
GC22-0193-004	8.43	
1324078084	9.02	
GC22-0194-021	8.48	
GC22-0193-013	8.68	
1432007037	9.39	
GC22-0196-015	9.03	
GC22-0197-001	8.73	
GC22-0197-018	8.95	
GC22-0201-017	8.45	
GC22-0198-017	9.09	
GC22-0200-015	9.05	
GC22-0195-018	8.95	
1432007001	9.20	
GC22-0202-001	7.49	
1324078024	9.41	
GC22-0200-013	8.35	
F009753		5.51
F009758		5.53
GC22-0174-002	8.81	
GC22-0184-001	8.30	
GC22-0175-019	9.60	
GC22-0173-005	8.91	
GC22-0175-006	8.52	
GC22-0176-001	8.87	
GC22-0174-004	8.81	
GC22-0177-001	9.17	
1323061259	9.35	
1323061269	8.77	
GC22-0180-017	9.29	

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas							0.3	< 0.5	63	1020	2	23	91	115	6.55	217	< 10	860	0.9	< 2	0.18	13	77
GXR-6 Cert							1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0
GXR-6 Meas							0.2	< 0.5	64	1040	1	24	95	118	6.69	213	< 10	851	0.9	< 2	0.18	13	77
GXR-6 Cert							1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0
BaSO4 Meas					42.1																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.6																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.3																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.6																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.6																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.5																		
BaSO4 Cert					41.94																		
BaSO4 Meas					40.1																		
BaSO4 Cert					41.94																		
BaSO4 Meas					39.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					40.0																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.1																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.5																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.6																		
BaSO4 Cert					41.94																		
OREAS 98 (Aqua Regia) Meas							37.8		> 10000				300	1130							< 2		102
OREAS 98 (Aqua Regia) Cert							42.8		147000				343	1300							90		111
OREAS 98 (Aqua Regia) Meas							38.6		> 10000				314	1190							< 2		104
OREAS 98 (Aqua Regia) Cert							42.8		147000				343	1300							90		111
RTS-3a Meas					29.6																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.6																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.5																		
RTS-3a Cert					29.90																		
RTS-3a Meas					28.8																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.3																		
RTS-3a Cert					29.90																		

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaCO ₃ /t	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
RTS-3a Meas					29.7																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.5																		
RTS-3a Cert					29.90																		
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas							1.0	< 0.5	2340	806	< 1	35	61	259	2.80	6		71	0.7	3	0.42	19	47
OREAS 922 (AQUA REGIA) Cert							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7
OREAS 922 (AQUA REGIA) Meas							0.8	< 0.5	2370	815	< 1	33	60	260	2.83	6		71	0.8	3	0.43	19	46
OREAS 922 (AQUA REGIA) Cert							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7
OREAS 922							0.8	< 0.5	2370	803	< 1	33	64	258	2.79	5		71	0.8	9	0.42	19	46

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
(AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7
OREAS 923 (AQUA REGIA) Meas							1.9	< 0.5	4690	929	< 1	33	83	342	2.87	6		58	0.7	16	0.43	22	43
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
OREAS 923 (AQUA REGIA) Meas							1.9	< 0.5	4690	927	< 1	35	84	338	2.83	8		58	0.7	11	0.42	23	43
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
OREAS 923 (AQUA REGIA) Meas							1.5	< 0.5	4470	880	< 1	30	86	332	2.80	6		56	0.7	15	0.41	21	42
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
Oreas 96 (Aqua Regia) Meas							10.6		> 10000					93	408						< 2		46
Oreas 96 (Aqua Regia) Cert							11.50		39100.00					100	448						27.9		49.2
Oreas 96 (Aqua Regia) Meas							11.0		> 10000					96	418						< 2		47
Oreas 96 (Aqua Regia) Cert							11.50		39100.00					100	448						27.9		49.2
Oreas 96 (Aqua Regia) Meas							10.5		> 10000					94	413						< 2		45
Oreas 96 (Aqua Regia) Cert							11.50		39100.00					100	448						27.9		49.2
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas									339	175	< 1	216	8	26	6.89			132	1.1	4	0.08	39	363
OREAS 45f (Aqua Regia) Cert									336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341
OREAS 45f (Aqua Regia) Meas									335	170	< 1	213	11	25	6.76			129	1.1	4	0.08	39	360
OREAS 45f (Aqua Regia) Cert									336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341
OREAS 45f (Aqua Regia) Meas									329	168	< 1	210	11	25	6.77			128	1.1	3	0.08	38	353
OREAS 45f (Aqua Regia) Cert									336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341
OREAS 238 (Fire Assay) Meas							2960																
OREAS 238 (Fire Assay) Cert							3030																
OREAS 238 (Fire Assay) Meas							3060																
OREAS 238 (Fire Assay) Cert							3030																

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay) Cert																							
OREAS 238 (Fire Assay) Meas						2980																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3010																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3000																	
OREAS 238 (Fire Assay) Cert						3030																	
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas						518																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						493																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						498																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						503																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						502																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						494																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						490																	
Oreas E1336 (Fire Assay) Cert						510.000																	

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
GS317-5 Meas																								
GS317-5 Cert																								
GS317-5 Meas																								
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GS317-5 Cert																								
GS317-5 Meas																								
GS317-5 Cert																								
GS317-5 Meas																								
GS317-5 Cert																								
Oreas 620 (Aqua Regia) Meas								40.8	161	1910	468	10	16	> 5000	> 10000	1.22	51	23	0.7	4	1.40	13	18	
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47	450	0.6	2	1.29	12	17	
Oreas 620 (Aqua Regia) Meas								41.1	166	1960	469	10	18	> 5000	> 10000	1.22	51	18	0.7	< 2	1.41	14	24	
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9.0	14	7740	31200	1.12	47	450	0.6	2	1.29	12	17	
Oreas 620 (Aqua Regia) Meas								40.7	165	1960	468	10	17	> 5000	> 10000	1.23	50	< 10	0.7	< 2	1.41	14	23	
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9.0	14	7740	31200	1.12	47	450	0.6	2	1.29	12	17	
OREAS L15 Meas								> 5000																
OREAS L15 Cert								7180																
1318077110 Orig								619																
1318077110 Dup								655																
1318077164 Orig								0.63																
1318077164 Dup								0.64																
1324080012 Orig								0.3	< 0.5	86	559	< 1	98	< 2	53	2.11	4	< 10	38	< 0.5	< 2	3.22	28	165
1324080012 Dup								0.2	< 0.5	85	548	< 1	95	2	54	2.08	6	< 10	38	< 0.5	< 2	3.18	28	162
1317020043 Orig								54																
1317020043 Dup								38																
1317020148 Orig								0.46																
1317020148 Dup								0.43																
1317020126 Orig																								
1317020126 Dup																								
1317020119 Orig								< 0.2	< 0.5	62	445	< 1	9	2	69	3.27	7	< 10	39	< 0.5	< 2	1.46	8	7
1317020119 Dup								< 0.2	< 0.5	63	447	< 1	9	< 2	68	3.27	7	< 10	40	< 0.5	< 2	1.45	7	7
1317019113 Orig								652																
1317019113 Dup								653																
1317019032 Orig																								
1317019032 Dup																								
GC22-0186-012 Orig								0.37																
GC22-0186-012 Dup								0.40																
1323061072 Orig								14																
1323061072 Dup								14																

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit			0.01	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0185-002 Orig							< 0.2	< 0.5	27	604	< 1	9	< 2	94	1.55	4	< 10	59	< 0.5	< 2	0.82	7	12
GC22-0185-002 Dup							< 0.2	< 0.5	26	599	< 1	7	< 2	94	1.55	4	< 10	59	< 0.5	< 2	0.82	7	11
1323061030 Orig					0.29																		
1323061030 Dup					0.28																		
GC22-0187-018 Orig																							
GC22-0187-018 Dup																							
GC22-0192-001 Orig						102																	
GC22-0192-001 Dup						115																	
GC22-0191-015 Orig	0.0791	-81.5	7.00	88.53																			
GC22-0191-015 Dup	0.0902	-80.5	7.98	88.53																			
1324078222 Orig							0.3	0.7	15	674	< 1	11	12	284	1.70	4	< 10	43	< 0.5	< 2	1.75	8	12
1324078222 Dup							0.3	0.5	15	668	< 1	10	10	280	1.69	5	< 10	43	< 0.5	< 2	1.75	8	13
GC22-0202-018 Orig						59																	
GC22-0202-018 Dup						64																	
1432007018 Orig					0.44																		
1432007018 Dup					0.44																		
GC22-0211-020 Orig					0.70	798																	
GC22-0211-020 Dup					0.67	783																	
1324077140 Orig																							
1324077140 Dup																							
GC22-0223-012 Orig						162																	
GC22-0223-012 Dup						208																	
1432007240 Orig																							
1432007240 Dup																							
GC22-0223-001 Orig							< 0.2	< 0.5	83	400	2	8	< 2	74	1.58	13	< 10	30	< 0.5	< 2	0.57	7	6
GC22-0223-001 Dup							< 0.2	< 0.5	86	409	2	6	3	75	1.60	14	< 10	29	< 0.5	< 2	0.58	7	6
1316012048 Orig					0.45																		
1316012048 Dup					0.50																		
1324077064 Orig																							
1324077064 Dup																							
GC22-0231-015 Orig					0.48																		
GC22-0231-015 Dup					0.42																		
GC22-0237-001 Orig						3480	4.3	< 0.5	422	1280	4	68	112	151	2.34	169	< 10	23	< 0.5	6	0.21	8	9
GC22-0237-001 Dup						3180	5.4	< 0.5	418	1300	3	69	106	150	2.35	196	< 10	24	< 0.5	7	0.22	8	9
1324077026 Orig	17.2	85.6	90.9	5.29																			

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit			0.01	0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1316012298 Orig																							
1316012298 Dup																							
1316012270 Orig																							
1316012270 Dup																							
1324077098 Orig	5.95	43.2	51.9	8.72	0.42																		
1324077098 Dup	5.92	43.0	51.7	8.73	0.42																		
1324077002 Orig						41																	
1324077002 Dup						44																	
1316012206 Orig							0.2	< 0.5	22	453	< 1	10	< 2	69	2.04	4	< 10	19	< 0.5	6	0.92	9	6
1316012206 Dup							0.6	< 0.5	22	444	< 1	12	< 2	67	1.98	< 2	< 10	19	< 0.5	7	0.91	9	6
GC22-0190-008 Orig																							
GC22-0190-008 Dup																							
GC22-0191-017 Orig					0.62	269																	
GC22-0191-017 Dup					0.58	204																	
GC22-0197-018 Orig																							
GC22-0197-018 Dup																							
GC22-0201-017 Orig							0.4	< 0.5	10	424	1	10	2	53	1.96	18	< 10	27	< 0.5	3	1.52	7	12
GC22-0201-017 Dup							0.3	< 0.5	10	419	2	11	2	52	1.96	17	< 10	29	< 0.5	2	1.50	7	12
GC22-0198-017 Orig						190																	
GC22-0198-017 Dup						271																	
1432007001 Orig					0.73																		
1432007001 Dup					0.80																		
GC22-0175-019 Orig																							
GC22-0175-019 Dup																							
GC22-0173-005 Orig						164																	
GC22-0173-005 Dup						171																	
GC22-0176-001 Orig					0.82																		
GC22-0176-001 Dup					0.73																		
1323061259 Orig							0.2	0.6	25	771	< 1	18	7	155	2.38	3	< 10	57	< 0.5	< 2	2.19	13	14
1323061259 Dup							< 0.2	< 0.5	25	778	< 1	15	9	154	2.35	4	< 10	56	< 0.5	< 2	2.16	13	16
1323061269 Orig																							
1323061269 Dup																							
GC22-0180-017 Orig	0.000	104	104	< 0.01	0.13																		
GC22-0180-017 Dup	0.000	105	105	< 0.01	0.13																		
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	
Method Blank						< 5																	

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating		
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-		
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01			
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	
RTS-3a Cert																									
RTS-3a Meas																									
RTS-3a Cert																									
GS311-4 Meas																						1.11	0.58		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.11	0.57		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.11	0.57		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.10	0.42		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.11	0.56		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.10	0.42		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.11	0.56		
GS311-4 Cert																						1.11	0.54		
SiO2 Meas																						< 0.01	0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						0.01	0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						0.01	0.01		
SiO2 Cert																									
NBM-1 (slight fzz) Meas																									
NBM-1 (slight fzz) Cert																									
NBM-1 (slight fzz) Meas																									
NBM-1 (slight fzz) Cert																									
OREAS 922 (AQUA REGIA) Meas	5.27	< 10		0.40	33	1.32	0.031	0.067	0.38	< 2	4	15			< 2	< 10	34	< 10	21	10					
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	5.35	< 10		0.40	34	1.34	0.029	0.068	0.38	2	4	16			< 2	< 10	34	< 10	21	12					
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	5.29	< 10		0.40	33	1.33	0.029	0.067	0.38	2	4	16			< 2	< 10	34	< 10	21	17					

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3				
OREAS 923 (AQUA REGIA) Meas	6.17	< 10		0.34	31	1.44		0.063	0.70	2	4	14			< 2	< 10	34	< 10	19	13				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
OREAS 923 (AQUA REGIA) Meas	6.17	< 10		0.34	31	1.44		0.064	0.70	2	4	14			< 2	< 10	34	< 10	19	16				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
OREAS 923 (AQUA REGIA) Meas	6.01	< 10		0.33	30	1.41		0.062	0.68	3	4	14			< 2	< 10	33	< 10	19	22				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
Oreas 96 (Aqua Regia) Meas									3.76	6														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
Oreas 96 (Aqua Regia) Meas									3.73	5														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
Oreas 96 (Aqua Regia) Meas									3.59	7														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
OREAS 229b (Fire Assay) Meas																								
OREAS 229b (Fire Assay) Cert																								
OREAS 45f (Aqua Regia) Meas	14.1	20	< 1	0.08	10	0.17	0.051	0.022	0.02		34	15	0.12		< 2	< 10	209		7	26				
OREAS 45f (Aqua Regia) Cert	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 45f (Aqua Regia) Meas	14.0	20	2	0.08	11	0.17	0.048	0.022	0.03		33	14	0.12		< 2	< 10	209		7	29				
OREAS 45f (Aqua Regia) Cert	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 45f (Aqua Regia) Meas	13.8	20	< 1	0.08	10	0.17	0.048	0.021	0.02		33	14	0.11		< 2	< 10	203		7	29				
OREAS 45f (Aqua Regia) Cert	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	-
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
GS316-3 Meas																						0.06	0.36
GS316-3 Cert																						0.0600	0.340
GS316-3 Meas																						0.05	0.35
GS316-3 Cert																						0.0600	0.340
GS316-3 Meas																						0.05	0.34
GS316-3 Cert																						0.0600	0.340
GS316-3 Meas																						0.06	0.34
GS316-3 Cert																						0.0600	0.340
GS316-3 Meas																						0.06	0.34
GS316-3 Cert																						0.0600	0.340
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
GS317-5 Meas																						8.41	14.8
GS317-5 Cert																						8.46	15.5
GS317-5 Meas																						8.43	14.8
GS317-5 Cert																						8.46	15.5

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating		
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-		
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01			
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none		
GS317-5 Meas																						8.34	14.7		
GS317-5 Cert																							8.46	15.5	
GS317-5 Meas																							8.44	14.9	
GS317-5 Cert																							8.46	15.5	
GS317-5 Meas																							8.37	14.9	
GS317-5 Cert																							8.46	15.5	
GS317-5 Meas																							8.44	14.9	
GS317-5 Cert																							8.46	15.5	
GS317-5 Meas																							8.37	14.9	
GS317-5 Cert																							8.46	15.5	
Oreas 620 (Aqua Regia) Meas	2.78	< 10	2	0.30	24	0.27	0.128	0.034	2.61	67		20			< 2	< 10	9	< 10	8	67					
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	2.80	< 10	2	0.29	24	0.28	0.126	0.033	2.64	56		19			< 2	< 10	9	< 10	8	53					
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	2.78	< 10	2	0.29	24	0.28	0.127	0.033	2.63	60		19			< 2	< 10	9	< 10	9	55					
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
OREAS L15 Meas																									
OREAS L15 Cert																									
1318077110 Orig																									
1318077110 Dup																									
1318077164 Orig																							0.86	1.80	
1318077164 Dup																							0.87	1.77	
1324080012 Orig	2.92	< 10	< 1	0.10	< 10	2.16	0.128	0.052	0.13	< 2	11	94	0.14	4	< 2	< 10	75	< 10	4	9					
1324080012 Dup	2.89	< 10	< 1	0.09	< 10	2.13	0.128	0.052	0.13	< 2	10	94	0.14	3	< 2	< 10	77	< 10	4	9					
1317020043 Orig																									
1317020043 Dup																									
1317020148 Orig																									
1317020148 Dup																									
1317020126 Orig																							0.11	1.38	
1317020126 Dup																							0.10	1.40	
1317020119 Orig	2.92	< 10	< 1	0.11	14	0.84	0.137	0.051	1.03	< 2	1	153	0.02	< 1	< 2	< 10	13	< 10	3	8					
1317020119 Dup	2.90	< 10	< 1	0.11	14	0.83	0.138	0.050	1.03	< 2	1	151	0.02	2	< 2	< 10	12	< 10	3	11					
1317019113 Orig																									
1317019113 Dup																									
1317019032 Orig																							0.18	2.15	
1317019032 Dup																							0.17	2.17	
GC22-0186-012 Orig																									
GC22-0186-012 Dup																									
1323061072 Orig																									
1323061072 Dup																									
GC22-0185-002 Orig	2.09	< 10	< 1	0.33	12	1.30	0.063	0.044	0.47	< 2	2	29	0.05	< 1	< 2	< 10	22	< 10	3	22					
GC22-0185-002 Dup	2.11	< 10	< 1	0.33	12	1.29	0.063	0.043	0.48	< 2	2	29	0.05	< 1	< 2	< 10	21	< 10	3	23					
1323061030 Orig																									

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
1323061030 Dup																								
GC22-0187-018 Orig																						0.98	0.04	
GC22-0187-018 Dup																						1.01	0.04	
GC22-0192-001 Orig																								
GC22-0192-001 Dup																								
GC22-0191-015 Orig																								None
GC22-0191-015 Dup																								None
1324078222 Orig	2.27	< 10	< 1	0.25	14	1.02	0.046	0.049	0.44	< 2	2	25	0.10	< 1	< 2	< 10	26	< 10	3	19	0.35	0.44		
1324078222 Dup	2.25	< 10	< 1	0.25	14	1.01	0.047	0.050	0.43	< 2	2	26	0.10	< 1	< 2	< 10	26	< 10	3	19	0.35	0.44		
GC22-0202-018 Orig																								
GC22-0202-018 Dup																								
1432007018 Orig																								
1432007018 Dup																								
GC22-0211-020 Orig																						0.05	2.10	
GC22-0211-020 Dup																						0.05	2.03	
1324077140 Orig																								
1324077140 Dup																								
GC22-0223-012 Orig																								
GC22-0223-012 Dup																								
1432007240 Orig																						0.56	0.74	
1432007240 Dup																						0.56	0.73	
GC22-0223-001 Orig	2.08	< 10	< 1	0.13	14	0.81	0.129	0.048	1.88	< 2	1	69	< 0.01	< 1	< 2	< 10	10	< 10	3	25				
GC22-0223-001 Dup	2.14	< 10	< 1	0.13	14	0.83	0.132	0.049	1.93	2	1	70	< 0.01	1	< 2	< 10	10	< 10	3	23				
1316012048 Orig																								
1316012048 Dup																								
1324077064 Orig																						0.87	0.53	
1324077064 Dup																						0.85	0.52	
GC22-0231-015 Orig																								
GC22-0231-015 Dup																								
GC22-0237-001 Orig	4.63	< 10	< 1	0.23	12	2.01	0.024	0.049	2.73	3	1	6	< 0.01	< 1	< 2	< 10	13	< 10	2	21				
GC22-0237-001 Dup	4.67	< 10	< 1	0.23	12	2.03	0.025	0.050	2.78	2	1	6	< 0.01	2	< 2	< 10	12	< 10	2	22				
1324077026 Orig																								
1316012298 Orig																								None
1316012298 Dup																								None
1316012270 Orig																						0.20	2.02	
1316012270 Dup																						0.20	2.03	
1324077098 Orig																								

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
1324077098 Dup																								
1324077002 Orig																								
1324077002 Dup																								
1316012206 Orig	3.69	< 10	< 1	0.18	15	1.05	0.100	0.048	3.34	< 2	< 1	75	< 0.01	< 1	< 2	< 10	9	< 10	4	26				
1316012206 Dup	3.68	< 10	< 1	0.17	15	1.03	0.098	0.048	3.38	< 2	< 1	73	< 0.01	< 1	< 2	< 10	9	< 10	4	26				
GC22-0190-008 Orig																						0.10	7.10	
GC22-0190-008 Dup																						0.09	7.49	
GC22-0191-017 Orig																								
GC22-0191-017 Dup																								
GC22-0197-018 Orig																						0.16	1.89	
GC22-0197-018 Dup																						0.16	1.88	
GC22-0201-017 Orig	2.87	< 10	< 1	0.11	11	0.77	0.191	0.039	2.09	< 2	1	96	0.03	2	< 2	< 10	15	< 10	2	29				
GC22-0201-017 Dup	2.83	< 10	< 1	0.11	12	0.75	0.192	0.037	2.03	< 2	1	96	0.03	2	< 2	< 10	15	< 10	2	31				
GC22-0198-017 Orig																								
GC22-0198-017 Dup																								
1432007001 Orig																								
1432007001 Dup																								
GC22-0175-019 Orig																						0.22	0.48	
GC22-0175-019 Dup																						0.22	0.48	
GC22-0173-005 Orig																								
GC22-0173-005 Dup																								
GC22-0176-001 Orig																								
GC22-0176-001 Dup																								
1323061259 Orig	3.27	< 10	< 1	0.28	12	0.80	0.189	0.051	0.29	4	5	114	0.13	1	< 2	< 10	61	< 10	6	19				
1323061259 Dup	3.34	< 10	< 1	0.27	12	0.79	0.186	0.052	0.30	< 2	5	114	0.13	< 1	< 2	< 10	61	< 10	6	19				
1323061269 Orig																						0.84	3.07	
1323061269 Dup																						0.83	2.98	
GC22-0180-017 Orig																								Slight
GC22-0180-017 Dup																								Slight
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank																								
Method Blank																								
Method Blank																								

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GXR-6 Meas		
GXR-6 Cert		
GXR-6 Meas		
GXR-6 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
NBM-1 (slight fzz) Meas	8.63	
NBM-1 (slight fzz) Cert	8.53	
NBM-1 (slight fzz) Meas	9.10	
NBM-1 (slight fzz) Cert	8.53	
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
(AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
OREAS 229b (Fire Assay) Meas		11.8
OREAS 229b (Fire Assay) Cert		11.95
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Meas		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
OREAS 257b (Fire Assay) Meas		14.4
OREAS 257b (Fire Assay) Cert		14.220
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
OREAS L15 Meas		
OREAS L15 Cert		
1318077110 Orig		
1318077110 Dup		
1318077164 Orig		
1318077164 Dup		
1324080012 Orig		
1324080012 Dup		
1317020043 Orig		
1317020043 Dup		
1317020148 Orig		
1317020148 Dup		
1317020126 Orig		
1317020126 Dup		
1317020119 Orig		
1317020119 Dup		
1317019113 Orig		
1317019113 Dup		
1317019032 Orig		
1317019032 Dup		
GC22-0186-012 Orig		
GC22-0186-012 Dup		
1323061072 Orig		
1323061072 Dup		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GC22-0185-002 Orig		
GC22-0185-002 Dup		
1323061030 Orig		
1323061030 Dup		
GC22-0187-018 Orig		
GC22-0187-018 Dup		
GC22-0192-001 Orig		
GC22-0192-001 Dup		
GC22-0191-015 Orig		
GC22-0191-015 Dup		
1324078222 Orig		
1324078222 Dup		
GC22-0202-018 Orig		
GC22-0202-018 Dup		
1432007018 Orig		
1432007018 Dup		
GC22-0211-020 Orig		
GC22-0211-020 Dup		
1324077140 Orig	9.29	
1324077140 Dup	9.26	
GC22-0223-012 Orig		
GC22-0223-012 Dup		
1432007240 Orig		
1432007240 Dup		
GC22-0223-001 Orig		
GC22-0223-001 Dup		
1316012048 Orig		
1316012048 Dup		
1324077064 Orig		
1324077064 Dup		
GC22-0231-015 Orig		
GC22-0231-015 Dup		
GC22-0237-001 Orig		
GC22-0237-001 Dup		
1324077026 Orig		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1316012298 Orig		
1316012298 Dup		
1316012270 Orig		
1316012270 Dup		
1324077098 Orig		
1324077098 Dup		
1324077002 Orig		
1324077002 Dup		
1316012206 Orig		
1316012206 Dup		
GC22-0190-008 Orig		
GC22-0190-008 Dup		
GC22-0191-017 Orig		
GC22-0191-017 Dup		
GC22-0197-018 Orig		
GC22-0197-018 Dup		
GC22-0201-017 Orig		
GC22-0201-017 Dup		
GC22-0198-017 Orig		
GC22-0198-017 Dup		
1432007001 Orig		
1432007001 Dup		
GC22-0175-019 Orig		
GC22-0175-019 Dup		
GC22-0173-005 Orig		
GC22-0173-005 Dup		
GC22-0176-001 Orig		
GC22-0176-001 Dup		
1323061259 Orig		
1323061259 Dup		
1323061269 Orig		
1323061269 Dup		
GC22-0180-017 Orig	9.29	
GC22-0180-017 Dup	9.30	
Method Blank		
Method Blank		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		< 0.02



Report No.: A22-07070
 Report Date: 17-Aug-22
 Date Submitted: 25-May-22
 Your Reference: 2022 FEB,MARCH,APRIL
 CHECK ASSAYS

New Gold Inc.
 317 Heatwole
 Barwick Ontario
 Canada

ATTN: Caroline Daost

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

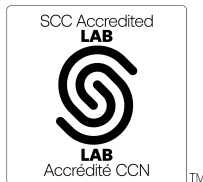
The following analytical package(s) were requested:		Testing Date:
1A2-50-Tbay	QOP AA-Au (Au - Fire Assay AA)	2022-06-24 16:15:37
1A3-50-Tbay	QOP AA-Au (Au - Fire Assay Gravimetric)	2022-06-27 18:20:36
1E3-Tbay NewGold	QOP AquaGeo (Aqua Regia ICPOES)	2022-06-16 19:19:21

REPORT **A22-07070**

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3
 Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 673

ACTIVATION LABORATORIES LTD.
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 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:

Emmanuel Esemé , Ph.D.
 Quality Control Coordinator

Report No.: A22-07070
Report Date: 17-Aug-22
Date Submitted: 25-May-22
Your Reference: 2022 FEB,MARCH,APRIL CHECK ASSAYS

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Caroline Daost

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, Testing Date. Includes rows for '11 ABA Modified Sobek Package' and '4F-C, S'.

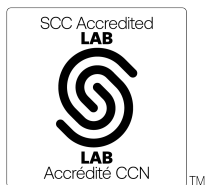
REPORT A22-07070

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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 266

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A22-07070

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	
Lower Limit				0.01		5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1432008151	0.304	-139	60.8	199.73		50	0.5	< 0.5	109	1630	< 1	46	2	210	2.07	29	< 10	15	< 0.5	2	1.61	37	29	
F009917						337																		
F009937						340																		
1432008012	0.548	-68.3	82.9	151.18		57	0.5	0.8	167	1660	< 1	40	2	293	2.64	14	< 10	19	< 0.5	< 2	2.68	33	38	
1316013015	3.12	35.2	51.8	16.57		48	< 0.2	< 0.5	22	573	< 1	46	< 2	62	2.80	4	< 10	57	< 0.5	< 2	2.44	15	119	
1316013058	1.01	0.245	22.5	22.24		89	0.4	< 0.5	44	562	< 1	5	3	102	3.02	3	< 10	50	< 0.5	< 2	1.71	6	6	
1315003168	0.993	-0.153	22.9	23.06		> 5000	2.3	< 0.5	472	344	2	8	4	56	3.45	24	< 10	40	< 0.5	< 2	2.11	9	7	
1432008018	1.06	4.13	71.5	67.35		1210	4.9	0.7	159	1100	< 1	24	6	179	1.37	45	< 10	36	< 0.5	2	2.69	14	10	
1315003138	1.55	6.04	17.1	11.03		223	0.4	< 0.5	141	343	8	10	< 2	77	3.00	4	< 10	50	< 0.5	< 2	1.76	5	7	
1322043348	1.39	19.5	69.3	49.72		142	2.4	0.8	29	1100	1	7	247	283	0.66	57	< 10	42	< 0.5	< 2	2.92	7	4	
1322043292	1.43	14.1	46.6	32.54		515	1.8	1.9	29	1060	< 1	6	25	518	1.12	41	< 10	37	< 0.5	< 2	2.09	7	4	
1322043340	2.22	37.3	67.9	30.56		304	1.8	1.6	32	1150	< 1	6	63	483	1.10	53	< 10	31	< 0.5	< 2	2.90	7	4	
1316013021	0.292	-29.3	12.1	41.37		246	1.5	< 0.5	219	527	1	3	3	149	2.23	9	< 10	51	< 0.5	2	1.15	7	4	
1315003001	1.97	6.26	12.7	6.45		101	< 0.2	< 0.5	42	374	1	12	< 2	43	3.64	6	< 10	39	< 0.5	< 2	2.20	5	10	
1322043229	1.73	6.82	16.2	9.41		29	0.4	0.7	29	960	< 1	10	56	479	2.22	7	< 10	64	< 0.5	< 2	1.43	10	6	
1322043096	0.943	-1.92	31.9	33.84		168	2.6	1.6	52	626	< 1	9	391	594	1.39	21	< 10	32	< 0.5	< 2	1.58	8	7	
1322043208	0.734	-11.2	31.0	42.19		145	0.8	0.8	24	748	< 1	8	83	301	1.38	42	< 10	37	< 0.5	< 2	1.64	7	7	
1315003132	0.741	-3.75	10.7	14.49		177	0.4	< 0.5	149	217	6	5	2	39	2.25	11	< 10	21	< 0.5	< 2	1.09	5	6	
1322043093	2.18	21.4	39.6	18.19		82	0.6	0.8	57	689	2	15	16	349	1.70	15	< 10	49	< 0.5	< 2	2.16	11	15	
F009911						548																		
F009936						557																		
1432011120	1.07	5.77	93.6	87.84		91	0.6	< 0.5	81	851	3	29	4	74	1.13	8	< 10	27	< 0.5	3	3.04	19	8	
1316015116	0.264	-39.6	14.2	53.83		68	< 0.2	< 0.5	21	310	< 1	14	3	21	2.60	5	< 10	35	< 0.5	< 2	1.74	11	14	
1316015091	4.17	10.5	13.7	3.29		5	< 0.2	< 0.5	112	551	< 1	49	< 2	43	4.57	< 2	< 10	< 10	< 0.5	< 2	3.23	25	72	
1432011063	0.705	-38.7	92.4	131.18		75	0.3	< 0.5	79	1110	2	55	4	112	2.78	9	< 10	21	< 0.5	2	3.44	33	74	
1432015237	1.07	2.59	38.4	35.82		45	0.2	< 0.5	49	373	4	14	3	40	1.21	6	< 10	32	< 0.5	< 2	1.69	10	12	
1316015011	0.0976	-65.7	7.11	72.83		744	0.8	< 0.5	145	415	< 1	11	2	52	2.37	10	< 10	31	< 0.5	11	0.92	7	10	
1316015043	0.163	-52.5	10.2	62.75		41	0.2	< 0.5	50	390	1	8	5	56	2.39	26	< 10	32	< 0.5	< 2	1.50	8	8	
1432011090	1.28	23.7	109	85.64		26	0.2	< 0.5	90	1550	< 1	59	< 2	107	3.24	3	< 10	19	< 0.5	< 2	3.93	30	119	
1316015001	0.231	-24.9	7.49	32.38		111	0.2	0.6	76	392	< 1	7	29	226	2.93	3	< 10	35	< 0.5	< 2	1.14	8	6	
1316015030	0.736	-1.70	4.75	6.45		30	< 0.2	< 0.5	36	294	< 1	10	< 2	68	2.98	5	< 10	19	< 0.5	< 2	0.76	7	10	
1316008003	0.483	-21.1	19.7	40.77		58	0.4	< 0.5	77	601	< 1	8	5	280	3.76	10	< 10	48	< 0.5	< 2	2.22	8	8	
1316008017	0.406	-17.2	11.7	28.90		588	0.2	< 0.5	78	438	< 1	6	5	68	3.44	6	< 10	40	< 0.5	2	1.29	8	6	
1316015078	0.313	-44.4	20.2	64.61		44	< 0.2	< 0.5	64	308	< 1	12	2	30	1.69	19	< 10	27	< 0.5	< 2	1.24	9	6	
1316008035	0.283	-22.1	8.75	30.88		171	0.2	< 0.5	99	544	< 1	9	3	58	3.53	6	< 10	48	< 0.5	< 2	2.14	7	11	
1316015041	0.176	-52.4	11.2	63.57		63	< 0.2	< 0.5	35	357	< 1	9	3	109	3.37	9	< 10	34	< 0.5	< 2	1.83	8	8	
1316008061	0.140	-79.9	13.0	92.87		88	0.3	< 0.5	150	394	4	9	6	66	2.86	20	< 10	30	< 0.5	5	1.55	7	9	
1315002211	0.252	-123	41.5	164.29		2340	2.7	< 0.5	710	818	2	65	9	127	3.40	57	< 10	20	< 0.5	7	1.97	26	100	
F009974						349																		
F009957						352																		
1432014026	1.30	22.9	99.0	76.13		238	1.4	0.6	303	1410	< 1	58	< 2	164	3.33	17	< 10	18	< 0.5	< 2	3.83	37	22	
1432014024	4.36	71.5	92.8	21.26		36	0.8	< 0.5	347	1430	< 1	74	< 2	158	3.46	11	< 10	< 10	< 0.5	< 2	3.63	47	20	
1432013037	1.78	41.9	95.4	53.49		71	0.3	0.7	43	1270	< 1	29	3	225	1.90	14	< 10	42	< 0.5	2	2.88	20	17	
1432014090	1.82	33.6	74.7	41.10		129	0.9	0.8	84	1190	< 1	41	4	219	2.82	22	< 10	40	< 0.5	< 2	3.59	27	47	
1316007056	0.182	-62.3	13.8	76.16		322	1.3	< 0.5	305	468	2	10	4	50	2.08	9	< 10	27	< 0.5	3	1.24	8	8	
1315096052	0.232	-29.0	8.73	37.68		59	0.3	< 0.5	37	495	< 1	9	< 2	129	1.82	9	< 10	44	< 0.5	< 2	0.93	10	10	
1432014165	1.14	14.6	117	102.51		191	1.1	< 0.5	48	2090	< 1	54	< 2	212	3.12	34	< 10	18	< 0.5	< 2	3.29	32	46	
1432014086	0.646	-41.0	74.9	115.82		872	2.2	< 0.5	110	1360	1	31	7	162	2.91	53	< 10	19	< 0.5	< 2	2.73	29	28	
1316007050	0.207	-45.9	12.0	57.89		104	0.6	< 0.5	110	451	1	9	4	55	1.63	10	< 10	31	< 0.5	< 2	0.94	9	9	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1323062003	9.27	
GC22-0264-010	9.36	
GC22-0265-019	9.19	
GC22-0265-002	9.16	
1323062022	9.23	
GC22-0263-011	8.95	
GC22-0266-001	8.73	
1323062049	9.03	
GC22-0266-011	9.16	
GC22-0269-001	8.73	
F009611		
F009602		
1323062087	9.30	
1323062144	9.61	
GC22-0277-012	9.61	
GC22-0277-001	9.07	
1323062055	9.17	
1323062234	9.69	
GC22-0278-001	9.02	
GC22-0279-018	8.97	
GC22-0278-013	9.23	
GC22-0281-008	8.58	
GC22-0279-001	8.90	
GC22-0280-010	9.36	
GC22-0281-001	8.70	
1323062270	9.60	
GC22-0282-019	9.33	
GC22-0283-007	9.36	
GC22-0282-012	9.15	
F009608		
F009582		
GC22-0243-005	8.91	
GC22-0242-004	8.80	
GC22-0241-013	9.70	
1318086089	8.98	
GC22-0254-018	9.30	
GC22-0243-002	8.68	
GC22-0254-002	8.69	6.45
GC22-0255-018	9.03	
GC22-0257-013	9.10	
1318086029	9.01	
GC22-0255-001	8.89	
1323067020	9.05	
1316006044	8.73	
1318086020	8.88	
GC22-0258-011	9.46	
GC22-0256-019	8.96	
GC22-0256-002	8.66	
1316006015	8.65	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
F009614		
F009601		
1323062280	9.47	
1323062052	9.23	
GC22-0285-020	9.18	
GC22-0289-019	9.50	
GC22-0284-002	8.39	
GC22-0286-001	8.65	
GC22-0284-019	8.66	
GC22-0288-019	8.96	
GC22-0287-018	9.13	
1323066010	9.63	
GC22-0287-001	9.23	
GC22-0290-003	8.90	
1323066162	9.40	
F009724		
F009477		
1322043091	9.57	
1322043089	9.70	
GC22-0292-019	9.16	
1322043302	9.26	
1322043299	9.00	
1322043262	9.32	
1322043304	9.29	
1322043082	9.59	
1322043134	9.61	
1322043043	9.59	
1322043048	9.47	
1322043306	9.10	
1316014111	8.99	
1316014098	8.69	
1316014114	8.96	
F009919		
F009934		
1316014013	8.72	
1316014010	8.92	
1322043038	9.37	
1322043012	9.13	
1322043021	9.46	
1316014034	8.41	
1316014059	8.47	
1316014061	8.84	
1322043024	9.49	
1322043118	8.99	
1315003418	8.92	
1315002184	8.80	
1322043122	9.52	
1322043190	8.91	
1316014027	7.38	
1315002115	8.50	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1432008151	7.67	
F009917		
F009937		
1432008012	7.97	
1316013015	8.39	
1316013058	8.88	
1315003168	9.25	17.1
1432008018	8.51	
1315003138	9.22	
1322043348	8.92	
1322043292	8.99	
1322043340	9.11	
1316013021	8.88	
1315003001	9.34	
1322043229	9.31	
1322043096	8.87	
1322043208	8.68	
1315003132	9.05	
1322043093	9.16	
F009911		
F009936		
1432011120	8.61	
1316015116	8.75	
1316015091	8.98	
1432011063	8.36	
1432015237	9.14	
1316015011	8.26	
1316015043	8.66	
1432011090	8.58	
1316015001	8.66	
1316015030	8.90	
1316008003	8.79	
1316008017	8.58	
1316015078	8.26	
1316008035	8.85	
1316015041	8.34	
1316008061	8.08	
1315002211	8.01	
F009974		
F009957		
1432014026	8.48	
1432014024	8.82	
1432013037	8.93	
1432014090	8.29	
1316007056	8.54	
1315096052	8.95	
1432014165	8.24	
1432014086	8.19	
1316007050	8.73	

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaCO ₃ /t	kg CaCO ₃ /t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit			0.01	0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
SiO2 Meas																							
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
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SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas						0.8	< 0.5	2130	766	< 1	32	64	264	2.56	4		69	0.7	8	0.41	19	45	5.01
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 922 (AQUA REGIA) Meas						0.7	< 0.5	2160	781	< 1	34	68	265	2.60	5		67	0.7	3	0.40	19	45	5.15
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 922 (AQUA REGIA) Meas						0.8	< 0.5	2270	837	< 1	34	63	256	2.67	5		71	0.8	3	0.42	20	45	5.27
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 922 (AQUA REGIA) Meas						0.8	< 0.5	2250	810	< 1	33	74	266	2.76	5		72	0.7	7	0.42	20	45	5.48

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaCO ₃ /t	kg CaCO ₃ /t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit				0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 922 (AQUA REGIA) Meas						0.9	< 0.5	2190	796	< 1	34	71	266	2.68	5		70	0.7	7	0.41	19	44	5.39
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 922 (AQUA REGIA) Meas						1.2	< 0.5	2180	814	< 1	34	66	265	2.81	4		77	0.8	10	0.43	20	47	5.40
OREAS 922 (AQUA REGIA) Cert						0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7	5.05
OREAS 923 (AQUA REGIA) Meas						2.1	< 0.5	4160	883	< 1	31	91	341	2.64	5		57	0.7	12	0.41	21	42	5.90
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
OREAS 923 (AQUA REGIA) Meas						1.9	< 0.5	4260	890	< 1	33	93	347	2.66	5		56	0.7	15	0.41	22	43	6.04
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
OREAS 923 (AQUA REGIA) Meas						1.6	< 0.5	4290	907	< 1	35	83	331	2.66	6		56	0.7	15	0.42	23	42	5.96
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
OREAS 923 (AQUA REGIA) Meas						1.7	0.6	4240	913	< 1	31	90	346	2.73	5		58	0.7	14	0.42	22	42	6.25
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
OREAS 923 (AQUA REGIA) Meas						1.5	0.5	4350	921	< 1	32	89	345	2.76	6		55	0.7	16	0.41	23	41	6.29
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
OREAS 923 (AQUA REGIA) Meas						2.0	< 0.5	4340	920	< 1	32	91	346	2.81	6		61	0.7	18	0.43	22	42	6.27
OREAS 923 (AQUA REGIA) Cert						1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4	5.91
Oreas 96 (Aqua Regia) Meas						10.7		> 10000				94	416						< 2		45		
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9		49.2		
Oreas 96 (Aqua Regia) Meas						10.8		> 10000				96	419						< 2		46		
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9		49.2		

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaCO ₃ /t	kg CaCO ₃ /t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit				0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 96 (Aqua Regia) Meas						10.9		> 10000				94	412						9			46	
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9			49.2	
Oreas 96 (Aqua Regia) Meas						10.7		> 10000				92	399						24			44	
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9			49.2	
Oreas 96 (Aqua Regia) Meas						11.0		> 10000				94	414						12			45	
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9			49.2	
Oreas 96 (Aqua Regia) Meas						11.1		> 10000				95	416						12			46	
Oreas 96 (Aqua Regia) Cert						11.50		39100.00				100	448						27.9			49.2	
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas								335	174	< 1	223	9	26	6.42			135	1.1	3	0.07	41	355	13.9
OREAS 45f (Aqua Regia) Cert								336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7
OREAS 45f (Aqua Regia) Meas								336	175	< 1	217	10	25	6.39			137	1.1	< 2	0.08	40	354	14.0
OREAS 45f (Aqua Regia) Cert								336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7
OREAS 45f (Aqua Regia) Meas								339	183	< 1	231	6	27	6.94			138	1.1	< 2	0.08	39	361	14.0
OREAS 45f (Aqua Regia) Cert								336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2	341	13.7
OREAS 238 (Fire Assay) Meas						3090																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3160																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3080																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3030																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						2990																	
OREAS 238 (Fire Assay) Cert						3030																	
GS316-3 Meas																							

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit				0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS316-3 Cert																							
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GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas						516																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						510																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						528																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						506																	
Oreas E1336 (Fire Assay) Cert						510.000																	
Oreas E1336 (Fire Assay) Meas						492																	
Oreas E1336 (Fire Assay) Cert						510.000																	
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit				0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
Oreas 620 (Aqua Regia) Meas						39.8	162	1680	460	9	13	> 5000	> 10000	1.11	48		11	0.6	< 2	1.35	13	18	2.51
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
Oreas 620 (Aqua Regia) Meas						42.1	172	1730	463	9	14	> 5000	> 10000	1.19	51		< 10	0.7	< 2	1.41	14	17	2.68
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
Oreas 620 (Aqua Regia) Meas						43.9	163	1900	479	10	14	> 5000	> 10000	1.22	50		14	0.7	< 2	1.44	14	17	2.75
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
Oreas 620 (Aqua Regia) Meas						43.6	173	1810	468	10	15	> 5000	> 10000	1.22	50		15	0.7	3	1.40	13	18	2.76
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
Oreas 620 (Aqua Regia) Meas						43.8	176	1810	462	9	15	> 5000	> 10000	1.17	49		13	0.6	3	1.40	14	17	2.75
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
Oreas 620 (Aqua Regia) Meas						44.9	179	1890	480	9	15	> 5000	> 10000	1.27	52		12	0.7	2	1.45	14	17	2.82
Oreas 620 (Aqua Regia) Cert						38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17	2.58
GC22-0266-011 Orig					61																		
GC22-0266-011 Dup					57																		
GC22-0269-001 Orig						0.2	< 0.5	281	171	< 1	2	< 2	19	1.96	6	< 10	21	< 0.5	< 2	1.01	8	4	3.14
GC22-0269-001 Dup						0.3	< 0.5	283	173	< 1	5	< 2	18	1.92	7	< 10	21	< 0.5	< 2	1.00	8	4	3.23
GC22-0278-001 Orig					190																		
GC22-0278-001 Dup					124																		
GC22-0279-001 Orig																							
GC22-0279-001 Dup																							
GC22-0282-019 Orig						< 0.2	< 0.5	5	376	1	8	< 2	82	2.33	6	< 10	41	< 0.5	< 2	1.39	6	8	2.26
GC22-0282-019 Dup						< 0.2	< 0.5	5	375	< 1	9	3	81	2.35	5	< 10	43	< 0.5	< 2	1.39	6	8	2.25
GC22-0282-012 Orig					28																		
GC22-0282-012 Dup					29																		
1318086089 Orig																							
1318086089 Dup																							

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	Fe
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%
Lower Limit			0.01	0.01	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01
Method Code	Calc	Calc	TITR	Calc	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0254-002 Orig						1.0	< 0.5	265	117	< 1	3	< 2	12	1.76	13	< 10	38	< 0.5	11	0.50	6	2	2.32
GC22-0254-002 Dup						0.9	< 0.5	236	110	1	2	< 2	12	1.68	14	< 10	46	< 0.5	11	0.47	6	2	2.20
GC22-0255-018 Orig					184																		
GC22-0255-018 Dup					166																		
GC22-0258-011 Orig																							
GC22-0258-011 Dup																							
1316006015 Orig					252																		
1316006015 Dup					255																		
1323062280 Orig																							
1323062280 Dup																							
GC22-0284-019 Orig																							
GC22-0284-019 Dup																							
GC22-0288-019 Orig					1190																		
GC22-0288-019 Dup					1570																		
GC22-0287-018 Orig						0.5	< 0.5	254	183	< 1	3	< 2	21	2.47	10	< 10	46	< 0.5	3	1.23	6	3	2.20
GC22-0287-018 Dup						0.7	< 0.5	264	187	< 1	3	< 2	21	2.56	10	< 10	47	< 0.5	< 2	1.26	7	3	2.27
GC22-0292-019 Orig					242																		
GC22-0292-019 Dup					213																		
1322043302 Orig																							
1322043302 Dup																							
1322043299 Orig																							
1322043299 Dup																							
1322043262 Orig	0.709	-12.7	30.9	43.61																			
1322043262 Dup	0.720	-12.2	31.4	43.61																			
1322043304 Orig	0.975	-0.926	36.7	37.60																			
1322043304 Dup	0.943	-2.15	35.4	37.60																			
1322043048 Orig						0.8	1.2	65	755	1	11	13	412	1.57	7	< 10	62	< 0.5	< 2	1.66	9	11	2.15
1322043048 Dup						0.8	1.3	65	753	1	11	13	403	1.57	8	< 10	62	< 0.5	< 2	1.67	9	11	2.16
1322043306 Orig																							
1322043306 Dup																							
1316014111 Orig	0.422	-23.9	17.4	41.36	43																		
1316014111 Dup	0.416	-24.2	17.2	41.36	43																		
1316014114 Orig																							
1316014114 Dup																							
1322043038 Orig																							
1322043038 Dup																							
1316014034 Orig					448																		
1316014034 Dup					462																		
1315003418 Orig						0.8	< 0.5	293	335	13	9	3	86	2.39	7	< 10	48	< 0.5	< 2	1.63	7	11	2.36

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH		
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH		
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter	
BaSO4 Meas																							13.8		
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.5	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.2	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.3	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.5	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.3	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.2	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.0	
BaSO4 Cert																								14.0	
BaSO4 Meas																								14.4	
BaSO4 Cert																								14.0	
OREAS 98 (Aqua Regia) Meas														16											
OREAS 98 (Aqua Regia) Cert														15											
OREAS 98 (Aqua Regia) Meas														17											
OREAS 98 (Aqua Regia) Cert														15											
OREAS 98 (Aqua Regia) Meas														19											
OREAS 98 (Aqua Regia) Cert														15											
OREAS 98 (Aqua Regia) Meas														17											
OREAS 98 (Aqua Regia) Cert														15											
OREAS 98 (Aqua Regia) Meas														17											
OREAS 98 (Aqua Regia) Cert														15											
OREAS 98 (Aqua Regia) Meas														14											
OREAS 98 (Aqua Regia) Cert														15											
GS311-4 Meas																					1.12	0.55			
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																					1.10	0.54			
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																					1.09	0.54			
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																					1.11	0.58			
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																					1.14	0.59			
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																					1.09	0.56			

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH		
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH		
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter	
GS311-4 Cert																					1.11	0.54			
GS311-4 Meas																						1.10	0.57		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.09	0.56		
GS311-4 Cert																						1.11	0.54		
GS311-4 Meas																						1.09	0.59		
GS311-4 Cert																						1.11	0.54		
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						0.04	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						0.01	< 0.01		
SiO2 Cert																									
SiO2 Meas																						< 0.01	0.02		
SiO2 Cert																									
NBM-1 (slight fzz) Meas																									8.72
NBM-1 (slight fzz) Cert																									8.53
NBM-1 (slight fzz) Meas																									8.69
NBM-1 (slight fzz) Cert																									8.53
OREAS 922 (AQUA REGIA) Meas	< 10		0.38	33	1.28	0.026	0.065	0.35	6	4	16			< 2	< 10	33	< 10	16	18						
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3						
OREAS 922 (AQUA REGIA) Meas	< 10		0.38	34	1.31	0.025	0.065	0.34	2	4	16			< 2	< 10	33	< 10	16	17						
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3						
OREAS 922 (AQUA REGIA) Meas	< 10		0.40	34	1.34	0.028	0.068	0.37	3	4	16			< 2	< 10	34	< 10	16	20						
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3						
OREAS 922 (AQUA REGIA) Meas	< 10		0.39	35	1.34	0.026	0.067	0.38	2	4	16			< 2	< 10	34	< 10	16	12						

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH	
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH	
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	< 10		0.37	34	1.32	0.027	0.066	0.37	2	4	16			< 2	< 10	32	< 10	15	16					
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	< 10		0.42	35	1.33	0.027	0.066	0.36	2	4	16			< 2	< 10	35	< 10	17	18					
OREAS 922 (AQUA REGIA) Cert	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 923 (AQUA REGIA) Meas	< 10		0.34	31	1.39		0.063	0.64	2	4	14			< 2	< 10	33	< 10	15	24					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	< 10		0.33	31	1.42		0.063	0.63	3	4	14			< 2	< 10	33	< 10	14	23					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	< 10		0.33	30	1.41		0.061	0.63	4	4	15			< 2	< 10	33	< 10	14	23					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	< 10		0.33	32	1.42		0.063	0.67	3	4	15			< 2	< 10	33	< 10	14	21					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	< 10		0.32	31	1.43		0.064	0.68	3	4	15			< 2	< 10	33	< 10	14	21					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
OREAS 923 (AQUA REGIA) Meas	< 10		0.35	32	1.43		0.063	0.67	3	4	15			< 2	< 10	34	< 10	15	20					
OREAS 923 (AQUA REGIA) Cert	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5					
Oreas 96 (Aqua Regia) Meas								3.28	5															
Oreas 96 (Aqua Regia) Cert								4.38	4.53															
Oreas 96 (Aqua Regia) Meas								3.35	7															
Oreas 96 (Aqua Regia) Cert								4.38	4.53															

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter
Oreas 96 (Aqua Regia) Meas								3.49	6														
Oreas 96 (Aqua Regia) Cert								4.38	4.53														
Oreas 96 (Aqua Regia) Meas								3.49	5														
Oreas 96 (Aqua Regia) Cert								4.38	4.53														
Oreas 96 (Aqua Regia) Meas								3.66	6														
Oreas 96 (Aqua Regia) Cert								4.38	4.53														
Oreas 96 (Aqua Regia) Meas								3.70	6														
Oreas 96 (Aqua Regia) Cert								4.38	4.53														
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas	20	< 1	0.09	10	0.17	0.042	0.021	0.02		31	14	0.10		< 2	< 10	200		5	31				
OREAS 45f (Aqua Regia) Cert	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 45f (Aqua Regia) Meas	20	< 1	0.09	10	0.17	0.043	0.022	0.02		31	14	0.10		< 2	< 10	203		5	33				
OREAS 45f (Aqua Regia) Cert	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 45f (Aqua Regia) Meas	20	< 1	0.10	11	0.17	0.043	0.022	0.02		32	15	0.13		< 2	< 10	207		5	50				
OREAS 45f (Aqua Regia) Cert	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0				
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
GS316-3 Meas																				0.05	0.33		

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH	
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH	
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter	
GS316-3 Cert																				0.0600	0.340			
GS316-3 Meas																					0.05	0.34		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.06	0.34		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.05	0.34		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.05	0.36		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.06	0.35		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.06	0.36		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.06	0.35		
GS316-3 Cert																					0.0600	0.340		
GS316-3 Meas																					0.05	0.35		
GS316-3 Cert																					0.0600	0.340		
OREAS 257b (Fire Assay) Meas																								
OREAS 257b (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
GS317-5 Meas																					8.29	14.9		
GS317-5 Cert																					8.46	15.5		
GS317-5 Meas																					8.39	15.7		
GS317-5 Cert																					8.46	15.5		
GS317-5 Meas																					8.09	14.8		
GS317-5 Cert																					8.46	15.5		
GS317-5 Meas																					8.53	15.2		
GS317-5 Cert																					8.46	15.5		
GS317-5 Meas																					8.56	15.2		
GS317-5 Cert																					8.46	15.5		
GS317-5 Meas																					8.37	15.2		
GS317-5 Cert																					8.46	15.5		

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH	
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH	
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter
GS317-5 Meas																				8.55	14.8			
GS317-5 Cert																				8.46	15.5			
GS317-5 Meas																				8.56	15.1			
GS317-5 Cert																				8.46	15.5			
GS317-5 Meas																				8.36	15.0			
GS317-5 Cert																				8.46	15.5			
Oreas 620 (Aqua Regia) Meas	< 10	2	0.26	24	0.26	0.113	0.032	2.36	57		19			< 2	< 10	8	< 10	6	64					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	< 10	2	0.28	25	0.28	0.121	0.033	2.51	65		20			< 2	< 10	9	< 10	7	62					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	< 10	2	0.29	25	0.28	0.124	0.033	2.63	58		20			< 2	< 10	9	< 10	7	57					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	< 10	2	0.28	25	0.27	0.120	0.032	2.59	58		20			< 2	< 10	9	< 10	7	90					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	< 10	2	0.27	24	0.28	0.115	0.031	2.58	51		19			< 2	< 10	8	< 10	6	56					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
Oreas 620 (Aqua Regia) Meas	< 10	2	0.30	25	0.28	0.126	0.032	2.68	58		20			< 2	< 10	9	< 10	7	79					
Oreas 620 (Aqua Regia) Cert	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57					
GC22-0266-011 Orig																								
GC22-0266-011 Dup																								
GC22-0269-001 Orig	< 10	< 1	0.12	< 10	0.70	0.111	0.036	2.49	2	< 1	85	< 0.01	2	< 2	< 10	6	< 10	2	22	0.11	2.59			
GC22-0269-001 Dup	< 10	< 1	0.11	< 10	0.71	0.111	0.036	2.56	< 2	< 1	82	< 0.01	1	< 2	< 10	6	< 10	2	22	0.10	2.56			
GC22-0278-001 Orig																								
GC22-0278-001 Dup																								
GC22-0279-001 Orig																					0.14	0.97		
GC22-0279-001 Dup																					0.14	0.95		
GC22-0282-019 Orig	< 10	< 1	0.16	14	0.90	0.242	0.039	1.54	< 2	1	112	0.01	< 1	< 2	< 10	12	< 10	2	26					
GC22-0282-019 Dup	< 10	< 1	0.17	15	0.90	0.245	0.038	1.51	< 2	1	112	0.01	< 1	< 2	< 10	12	< 10	2	24					
GC22-0282-012 Orig																								
GC22-0282-012 Dup																								
1318086089 Orig																					0.43	1.62		
1318086089 Dup																					0.41	1.73		

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH	
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH	
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter
GC22-0254-002 Orig	< 10	< 1	0.17	< 10	0.36	0.070	0.038	1.72	< 2	< 1	51	< 0.01	1	< 2	< 10	6	< 10	2	20					
GC22-0254-002 Dup	< 10	< 1	0.16	< 10	0.33	0.066	0.038	1.64	< 2	< 1	49	< 0.01	4	< 2	< 10	5	< 10	1	21					
GC22-0255-018 Orig																								
GC22-0255-018 Dup																								
GC22-0258-011 Orig																				0.53	1.55			
GC22-0258-011 Dup																				0.54	1.57			
1316006015 Orig																								
1316006015 Dup																								
1323062280 Orig																							Slight	
1323062280 Dup																							Slight	
GC22-0284-019 Orig																				0.08	2.22			
GC22-0284-019 Dup																				0.09	2.24			
GC22-0288-019 Orig																								
GC22-0288-019 Dup																								
GC22-0287-018 Orig	< 10	< 1	0.23	11	0.59	0.114	0.040	1.33	< 2	< 1	72	< 0.01	3	< 2	< 10	6	< 10	2	13					
GC22-0287-018 Dup	< 10	< 1	0.23	10	0.59	0.116	0.040	1.39	< 2	< 1	72	< 0.01	< 1	< 2	< 10	6	< 10	2	13					
GC22-0292-019 Orig																								
GC22-0292-019 Dup																								
1322043302 Orig																				0.58	1.71			
1322043302 Dup																				0.58	1.73			
1322043299 Orig																				0.25	1.49			
1322043299 Dup																				0.26	1.49			
1322043262 Orig																								
1322043262 Dup																								
1322043304 Orig																								
1322043304 Dup																								
1322043048 Orig	< 10	< 1	0.34	15	0.84	0.072	0.044	0.49	< 2	2	35	0.10	< 1	< 2	< 10	20	< 10	3	15					
1322043048 Dup	< 10	< 1	0.34	15	0.84	0.073	0.046	0.51	4	2	35	0.10	< 1	2	< 10	20	< 10	3	15					
1322043306 Orig																							9.10	
1322043306 Dup																							8.96	
1316014111 Orig																								
1316014111 Dup																								
1316014114 Orig																				0.31	1.47			
1316014114 Dup																				0.30	1.45			
1322043038 Orig																							slight	
1322043038 Dup																							slight	
1316014034 Orig																								
1316014034 Dup																								
1315003418 Orig	< 10	< 1	0.14	12	0.93	0.234	0.038	1.15	< 2	1	171	0.02	< 1	< 2	< 10	16	< 10	2	19	0.22	1.13			

Analyte Symbol	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	Paste pH	
Unit Symbol	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	pH
Lower Limit	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	pH Meter
1315003418 Dup	< 10	< 1	0.13	11	0.90	0.220	0.037	1.11	2	1	164	0.02	1	< 2	< 10	16	< 10	2	18	0.21	1.09			
1315002115 Orig																								
1315002115 Dup																								
1316013015 Orig																							Slight	
1316013015 Dup																							Slight	
1315003168 Orig																					0.22	0.91		
1315003168 Dup																					0.22	0.90		
1322043348 Orig																								
1322043348 Dup																								
1315003132 Orig																					0.09	0.54		
1315003132 Dup																					0.10	0.55		
1322043093 Orig																								
1322043093 Dup																								
1316015011 Orig	< 10	< 1	0.16	10	1.02	0.084	0.035	2.50	< 2	1	84	0.02	2	< 2	< 10	10	< 10	2	34					
1316015011 Dup	< 10	< 1	0.16	10	1.02	0.084	0.034	2.47	< 2	1	83	0.02	< 1	< 2	< 10	10	< 10	2	34					
1316015001 Orig																					0.07	1.15		
1316015001 Dup																					0.07	1.14		
1316015030 Orig																							none	
1316015030 Dup																							none	
1432013037 Orig																					1.53	2.06		
1432013037 Dup																					1.53	2.02		
1432014165 Orig																					2.04	5.40		
1432014165 Dup																					2.05	5.47		
1316007050 Orig	< 10	< 1	0.15	12	0.65	0.157	0.042	1.98	< 2	1	75	0.01	5	< 2	< 10	11	< 10	2	24	0.24	2.04		8.73	
1316007050 Dup	< 10	< 1	0.15	13	0.65	0.155	0.040	1.96	< 2	1	74	0.01	1	< 2	< 10	11	< 10	2	23	0.23	1.93		8.75	
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	< 0.001	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1					
Method Blank																								
Method Blank																								
Method Blank																								
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Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	
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BaSO4 Meas	
BaSO4 Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
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OREAS 98 (Aqua Regia) Cert	
OREAS 98 (Aqua Regia) Meas	
OREAS 98 (Aqua Regia) Cert	
GS311-4 Meas	
GS311-4 Cert	
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GS311-4 Cert	
GS311-4 Meas	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
GS311-4 Meas	
GS311-4 Cert	
SiO2 Meas	
SiO2 Cert	
SiO2 Meas	
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SiO2 Meas	
SiO2 Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
(AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
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OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
OREAS 229b (Fire Assay) Meas	12.4
OREAS 229b (Fire Assay) Cert	11.95
OREAS 229b (Fire Assay) Meas	12.0
OREAS 229b (Fire Assay) Cert	11.95
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
GS316-3 Meas	
GS316-3 Cert	
GS316-3 Meas	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
GS317-5 Meas	
GS317-5 Cert	
GS317-5 Meas	
GS317-5 Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
GC22-0266-011 Orig	
GC22-0266-011 Dup	
GC22-0269-001 Orig	
GC22-0269-001 Dup	
GC22-0278-001 Orig	
GC22-0278-001 Dup	
GC22-0279-001 Orig	
GC22-0279-001 Dup	
GC22-0282-019 Orig	
GC22-0282-019 Dup	
GC22-0282-012 Orig	
GC22-0282-012 Dup	
1318086089 Orig	
1318086089 Dup	
GC22-0254-002 Orig	
GC22-0254-002	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
Dup	
GC22-0255-018 Orig	
GC22-0255-018 Dup	
GC22-0258-011 Orig	
GC22-0258-011 Dup	
1316006015 Orig	
1316006015 Dup	
1323062280 Orig	
1323062280 Dup	
GC22-0284-019 Orig	
GC22-0284-019 Dup	
GC22-0288-019 Orig	
GC22-0288-019 Dup	
GC22-0287-018 Orig	
GC22-0287-018 Dup	
GC22-0292-019 Orig	
GC22-0292-019 Dup	
1322043302 Orig	
1322043302 Dup	
1322043299 Orig	
1322043299 Dup	
1322043262 Orig	
1322043262 Dup	
1322043304 Orig	
1322043304 Dup	
1322043048 Orig	
1322043048 Dup	
1322043306 Orig	
1322043306 Dup	
1316014111 Orig	
1316014111 Dup	
1316014114 Orig	
1316014114 Dup	
1322043038 Orig	
1322043038 Dup	
1316014034 Orig	
1316014034 Dup	
1315003418 Orig	
1315003418 Dup	
1315002115 Orig	
1315002115 Dup	

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.02
Method Code	FA- GRA
1316013015 Orig	
1316013015 Dup	
1315003168 Orig	17.1
1315003168 Dup	21.7
1322043348 Orig	
1322043348 Dup	
1315003132 Orig	
1315003132 Dup	
1322043093 Orig	
1322043093 Dup	
1316015011 Orig	
1316015011 Dup	
1316015001 Orig	
1316015001 Dup	
1316015030 Orig	
1316015030 Dup	
1432013037 Orig	
1432013037 Dup	
1432014165 Orig	
1432014165 Dup	
1316007050 Orig	
1316007050 Dup	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	< 0.02
Method Blank	< 0.02
Method Blank	< 0.02
Method Blank	< 0.02



Report No.: A22-07074
Report Date: 17-Aug-22
Date Submitted: 25-May-22
Your Reference: 2022 FEB,MARCH,APRIL CHECK ASSAYS

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Caroline Daost

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Testing Date, and details. Rows include 1A2-50-Tbay, 1A3-50-Tbay, and 1E3-Tbay NewGold.

REPORT A22-07074

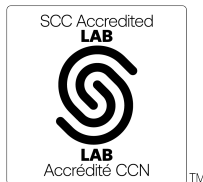
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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Foot Note: Insufficient material for 1A3 analysis on sample : F009980



LabID: 673

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé , Ph.D.
Quality Control Coordinator

Report No.: A22-07074
Report Date: 17-Aug-22
Date Submitted: 25-May-22
Your Reference: 2022 FEB,MARCH,APRIL CHECK ASSAYS

New Gold Inc.
317 Heatwole
Barwick Ontario
Canada

ATTN: Caroline Daost

CERTIFICATE OF ANALYSIS

148 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Testing Date, and Test Results. Includes rows for '11 ABA Modified Sobek Package' and '4F-C, S'.

REPORT A22-07074

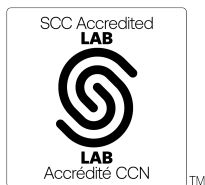
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Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Foot Note: Insufficient material for 1A3 analysis on sample : F009980



LabID: 266

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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CERTIFIED BY:

Handwritten signature of Emmanuel Esemé

Emmanuel Esemé, Ph.D.
Quality Control Coordinator

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
1322044156	2.90	< 10	< 1	0.21	< 10	3.25	0.167	0.041	0.08	4	9	82	0.08	< 1	< 2	< 10	63	< 10	2	10	0.35	0.08	None	
1315010001	2.39	< 10	< 1	0.17	< 10	0.53	0.245	0.042	1.82	< 2	< 1	136	0.02	< 1	< 2	< 10	10	< 10	2	17	0.14	1.89	None	
1315010142	2.50	10	< 1	0.10	12	1.20	0.276	0.041	0.59	< 2	1	240	< 0.01	2	< 2	< 10	15	< 10	2	9	0.09	0.59	None	
1315010126	3.11	< 10	< 1	0.15	15	0.79	0.184	0.046	1.24	< 2	1	84	0.04	5	< 2	< 10	11	< 10	2	23	0.14	1.30	None	
1315010129	3.32	< 10	< 1	0.57	28	1.31	0.072	0.104	1.08	< 2	5	102	0.09	< 1	< 2	< 10	43	< 10	4	16	0.50	1.19	None	
1315010068	2.79	< 10	< 1	0.09	14	1.04	0.164	0.042	0.85	< 2	1	136	0.01	3	< 2	< 10	14	< 10	2	14	0.11	0.90	None	
1321034026	2.02	< 10	< 1	0.21	14	0.75	0.026	0.041	1.51	2	< 1	21	< 0.01	< 1	< 2	< 10	8	< 10	2	22	0.52	1.56	None	
1315010103	2.79	< 10	< 1	0.10	< 10	0.74	0.121	0.040	0.93	< 2	1	67	0.03	< 1	< 2	< 10	11	< 10	2	16	0.18	0.95	None	
1321034014	1.93	< 10	< 1	0.19	15	0.62	0.021	0.043	1.59	< 2	< 1	20	0.01	< 1	< 2	< 10	5	< 10	2	19	0.50	1.63	None	
1315010009	2.62	< 10	< 1	0.07	13	0.93	0.116	0.038	1.03	< 2	1	81	0.01	1	< 2	< 10	13	< 10	2	18	0.19	1.13	None	
1315010013	3.06	< 10	< 1	0.13	11	0.93	0.186	0.036	1.21	< 2	1	125	0.02	< 1	< 2	< 10	12	< 10	2	21	0.17	1.31	None	
F010165																								
F010210																								
1432087043	1.76	< 10	< 1	0.12	12	0.61	0.061	0.046	0.75	< 2	1	51	< 0.01	< 1	< 2	< 10	12	< 10	2	9	0.72	0.74	None	
1432087017	1.74	< 10	< 1	0.11	14	0.64	0.050	0.045	0.70	< 2	1	29	< 0.01	< 1	< 2	< 10	14	< 10	2	8	0.50	0.71	None	
1431001584	10.5	10	2	0.06	< 10	3.30	0.018	0.050	0.85	5	11	37	0.09	7	< 2	< 10	457	< 10	4	5	1.06	0.99	Slight	
1431001191	9.40	10	3	0.23	< 10	2.20	0.158	0.079	2.28	4	14	65	0.14	2	< 2	< 10	166	< 10	9	8	1.36	2.61	None	
1431001278	10.7	20	2	0.33	< 10	2.15	0.200	0.120	3.94	5	14	77	0.15	< 1	< 2	< 10	108	< 10	11	11	1.30	4.71	None	
1431001608	8.52	10	< 1	0.14	< 10	2.72	0.050	0.049	0.93	3	9	25	0.14	4	< 2	< 10	202	< 10	6	4	1.17	1.03	None	
1431001454	9.95	10	< 1	0.11	< 10	2.73	0.070	0.053	3.75	5	17	52	0.14	4	< 2	< 10	347	10	6	7	1.98	4.64	None	
1431001582	10.1	10	< 1	0.08	< 10	2.77	0.026	0.045	1.34	3	17	39	0.14	2	< 2	< 10	469	< 10	6	5	1.62	1.61	None	
1431001541	6.81	< 10	< 1	0.08	< 10	2.31	0.062	0.046	3.42	4	7	38	< 0.01	< 1	< 2	< 10	81	< 10	5	12	1.54	3.68	None	
1323065099	3.03	< 10	< 1	0.34	19	1.24	0.098	0.059	0.44	< 2	4	65	0.07	1	< 2	< 10	49	< 10	4	13	0.73	0.48	None	
1431001189	9.80	10	2	0.34	< 10	2.61	0.093	0.087	3.55	4	12	80	0.12	7	< 2	< 10	159	< 10	7	10	1.91	4.70	None	
1431001127	9.90	10	2	0.15	< 10	2.11	0.121	0.075	3.93	4	12	49	0.13	4	< 2	< 10	203	< 10	7	9	0.92	4.23	Slight	
1431001143	5.51	< 10	< 1	0.13	11	1.68	0.036	0.072	1.48	< 2	6	47	0.02	< 1	< 2	< 10	51	< 10	5	9	1.65	1.67	None	
1323065012	2.08	< 10	< 1	0.19	21	0.92	0.136	0.059	0.26	< 2	2	61	0.04	< 1	< 2	< 10	19	< 10	3	5	0.26	0.27	Slight	
1431001578	8.30	10	< 1	0.22	< 10	2.55	0.154	0.050	1.78	3	8	51	0.14	1	< 2	< 10	200	< 10	5	4	1.30	1.99	Slight	
F010325																								
F010333																								
1321034090	1.57	< 10	< 1	0.25	< 10	0.08	0.016	0.046	1.68	< 2	< 1	18	< 0.01	< 1	< 2	< 10	4	< 10	1	13	0.39	1.75	None	
1322046062	2.62	< 10	< 1	0.23	20	1.13	0.054	0.066	0.61	5	3	71	0.07	< 1	< 2	< 10	40	< 10	4	16	0.62	0.76	None	
1322046035	2.24	< 10	< 1	0.06	10	1.67	0.095	0.030	0.23	< 2	9	56	0.10	4	< 2	< 10	55	< 10	3	14	0.67	0.24	Slight	
1321034075	2.10	< 10	< 1	0.20	< 10	0.13	0.019	0.040	2.17	3	< 1	20	< 0.01	< 1	< 2	< 10	4	< 10	1	15	0.29	2.29	Slight	
1322046074	2.16	< 10	< 1	0.06	< 10	1.53	0.116	0.037	0.19	< 2	11	98	0.14	5	< 2	< 10	68	< 10	3	8	0.75	0.20	None	
1322046024	2.91	< 10	< 1	0.24	< 10	3.20	0.131	0.041	0.09	3	7	75	0.08	3	< 2	< 10	61	< 10	2	7	0.43	0.09	Slight	
1322046023	2.91	< 10	< 1	0.22	< 10	3.30	0.117	0.042	0.06	4	7	85	0.07	< 1	< 2	< 10	59	< 10	2	7	0.53	0.07	None	
1321094003	1.54	< 10	< 1	0.17	11	0.39	0.013	0.044	1.21	2	< 1	8	< 0.01	1	< 2	< 10	3	< 10	1	7	0.40	1.41	None	
1315010089	2.85	10	< 1	0.11	15	1.08	0.207	0.040	0.84	< 2	1	179	< 0.01	< 1	< 2	< 10	15	< 10	2	12	0.07	0.89	Slight	
1321094016	1.60	< 10	< 1	0.23	< 10	0.47	0.016	0.042	1.56	3	< 1	21	< 0.01	< 1	< 2	< 10	4	< 10	2	15	0.61	1.66	None	
1432087021	1.52	< 10	< 1	0.12	14	0.65	0.050	0.042	0.46	< 2	1	29	0.01	< 1	< 2	< 10	14	< 10	2	7	0.54	0.52	None	
1322046001	2.56	< 10	< 1	0.33	20	1.30	0.141	0.069	0.52	< 2	3	166	0.09	1	< 2	< 10	41	< 10	3	13	0.57	0.62	Slight	
1431001166	6.92	< 10	< 1	0.10	< 10	1.66	0.040	0.076	1.77	3	8	37	0.07	4	< 2	< 10	76	< 10	7	12	1.18	2.13	Slight	
1431001192	8.40	10	< 1	0.33	< 10	2.29	0.096	0.094	1.87	4	12	85	0.13	2	< 2	< 10	142	< 10	8	10	1.87	2.33	Slight	
1431001516	9.31	10	< 1	0.06	< 10	2.82	0.022	0.078	2.03	3	17	86	0.08	< 1	< 2	< 10	272	< 10	5	7	2.69	2.49	Slight	
1431001182	9.48	10	< 1	0.12	< 10	2.64	0.140	0.068	1.34	5	9	62	0.12	< 1	< 2	< 10	223	< 10	5	5	1.22	1.62	Slight	
F010335																								
F010307																								

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1316007037	8.89	
1315009025	8.69	
1316007001	9.05	
1316007081	8.87	
1316007061	8.47	
1323064001	9.31	
1323064051	9.41	
1323064078	9.45	
1315009709	8.64	
1315009155	8.54	
F009963		5.69
F009980		
1323063246	8.98	
1432013133	8.74	
1316008078	8.53	
1323063237	9.09	
1315006116	8.98	
1323063129	9.59	
1323063173	9.40	
1323063018	9.36	
1323063176	9.59	
1323063270	9.60	
1323063255	9.63	
1323063217	9.37	
1323063209	9.67	
1323063152	9.15	
1323063273	9.43	
1323063064	9.41	
1432013060	8.47	
1323063126	9.43	
1323063031	9.47	
1432013023	8.49	
1323063036	9.30	
F009961		
F009941		
1322044068	9.43	
1315008049	9.27	
1315005121	9.01	
1315005096	8.22	
1315005022	8.62	
1315005031	8.72	
1315005071	8.70	
1431001158	8.81	
1315005058	8.76	
1431001164	8.74	
1315005045	8.80	
1315005006	8.38	
1315005082	8.71	
1315008034	8.89	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1315008091	9.30	
1315008077	9.02	
1315008016	9.13	
1318080042	9.00	
1431001220	8.86	
1315008058	9.20	
F010173		
F010206		
1322044047	9.76	
1322044052	9.58	
1322044025	9.69	
1315009632	9.09	
1322044112	9.59	
1322044270	9.11	
1322044214	9.48	
1322044178	9.36	
1322044180	9.45	
1322045121	9.15	
1322044113	9.57	
1322044220	9.51	
1322044306	9.53	
1322044204	9.68	
1322044255	9.76	
1322044312	9.39	
1322044117	9.47	
1322044237	9.31	
1322044184	9.14	
F010192		
F010188		
1323064025	9.48	
1323064035	9.12	
1315009672	8.59	
1315009737	8.55	
1322045047	9.05	
1315009653	8.58	
1315009504	5.67	
1315009692	8.85	
1322045051	9.14	
1315009503	8.81	
1315009733	8.92	
1322045132	8.82	
1322045103	9.05	
1315009731	8.84	
1315009522	9.09	
1315009748	8.31	
F010161		
F010193		
1315010081	9.11	
1315010130	8.99	
1431001209	8.15	

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1431001232	8.45	
1322044156	9.57	
1315010001	8.84	
1315010142	9.09	
1315010126	8.81	
1315010129	8.99	
1315010068	8.86	
1321034026	8.89	
1315010103	8.82	
1321034014	8.93	
1315010009	8.86	
1315010013	8.85	
F010165		5.61
F010210		5.61
1432087043	9.37	
1432087017	9.37	
1431001584	8.82	
1431001191	8.47	
1431001278	8.03	
1431001608	8.82	
1431001454	8.35	
1431001582	8.62	
1431001541	8.73	
1323065099	9.42	
1431001189	8.39	
1431001127	8.34	
1431001143	8.81	
1323065012	9.42	
1431001578	8.65	
F010325		
F010333		
1321034090	9.11	
1322046062	9.39	
1322046035	9.30	
1321034075	8.64	
1322046074	9.29	
1322046024	9.45	
1322046023	9.46	
1321094003	8.94	
1315010089	8.93	
1321094016	8.99	
1432087021	9.47	
1322046001	9.02	
1431001166	8.59	
1431001192	8.59	
1431001516	8.56	
1431001182	8.82	
F010335		
F010307		

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaCO3/t	kg CaCO3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BaSO4 Meas					42.4																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.0																		
BaSO4 Cert					41.94																		
BaSO4 Meas					40.5																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.7																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.1																		
BaSO4 Cert					41.94																		
BaSO4 Meas					41.9																		
BaSO4 Cert					41.94																		
BaSO4 Meas					40.7																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.0																		
BaSO4 Cert					41.94																		
BaSO4 Meas					42.0																		
BaSO4 Cert					41.94																		
OREAS 98 (Aqua Regia) Meas							39.3		> 10000				290	1150						< 2		105	
OREAS 98 (Aqua Regia) Cert							42.8		147000				343	1300						90		111	
OREAS 98 (Aqua Regia) Meas							40.5		> 10000				295	1190						< 2		108	
OREAS 98 (Aqua Regia) Cert							42.8		147000				343	1300						90		111	
OREAS 98 (Aqua Regia) Meas							38.0		> 10000				287	1170						55		102	
OREAS 98 (Aqua Regia) Cert							42.8		147000				343	1300						93		111	
RTS-3a Meas					29.7																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.5																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.4																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.2																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.3																		
RTS-3a Cert					29.90																		
RTS-3a Meas					29.4																		
RTS-3a Cert					29.90																		
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaCO3/t	kg CaCO3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit			0.01	0.05	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
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GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
SiO2 Meas					0.06																		
SiO2 Cert																							
SiO2 Meas					0.06																		
SiO2 Cert																							
SiO2 Meas					0.06																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas					< 0.05																		
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas							0.8	< 0.5	2130	766	< 1	32	64	264	2.56	4		69	0.7	8	0.41	19	45
OREAS 922 (AQUA REGIA) Cert							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7
OREAS 922 (AQUA REGIA) Meas							0.7	< 0.5	2160	781	< 1	34	68	265	2.60	5		67	0.7	3	0.40	19	45
OREAS 922 (AQUA REGIA) Cert							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7
OREAS 922 (AQUA REGIA) Meas							0.8	< 0.5	2270	837	< 1	34	63	256	2.67	5		71	0.8	3	0.42	20	45
OREAS 922							0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4	40.7

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaCO3/t	kg CaCO3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
(AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas							2.1	< 0.5	4160	883	< 1	31	91	341	2.64	5		57	0.7	12	0.41	21	42
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
OREAS 923 (AQUA REGIA) Meas							1.9	< 0.5	4260	890	< 1	33	93	347	2.66	5		56	0.7	15	0.41	22	43
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
OREAS 923 (AQUA REGIA) Meas							1.6	< 0.5	4290	907	< 1	35	83	331	2.66	6		56	0.7	15	0.42	23	42
OREAS 923 (AQUA REGIA) Cert							1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2	39.4
Oreas 96 (Aqua Regia) Meas							10.7		> 10000				94	416							< 2		45
Oreas 96 (Aqua Regia) Cert							11.50		39100.00				100	448							27.9		49.2
Oreas 96 (Aqua Regia) Meas							10.8		> 10000				96	419							< 2		46
Oreas 96 (Aqua Regia) Cert							11.50		39100.00				100	448							27.9		49.2
Oreas 96 (Aqua Regia) Meas							10.9		> 10000				94	412							9		46
Oreas 96 (Aqua Regia) Cert							11.50		39100.00				100	448							27.9		49.2
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas						3070																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3080																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3090																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3110																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3020																	
OREAS 238 (Fire Assay) Cert						3030																	
OREAS 238 (Fire Assay) Meas						3050																	

Analyte Symbol	NPR	NNP	Modifie d-NP	AP (Sul phide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr	
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	
Lower Limit				0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
GS317-5 Cert																								
GS317-5 Meas																								
GS317-5 Cert																								
GS317-5 Meas																								
GS317-5 Cert																								
GS317-5 Meas																								
GS317-5 Cert																								
GS317-5 Meas																								
Oreas 620 (Aqua Regia) Meas								39.8	162	1680	460	9	13	> 5000	> 10000	1.11	48		11	0.6	< 2	1.35	13	18
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17
Oreas 620 (Aqua Regia) Meas								42.1	172	1730	463	9	14	> 5000	> 10000	1.19	51		< 10	0.7	< 2	1.41	14	17
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17
Oreas 620 (Aqua Regia) Meas								43.9	163	1900	479	10	14	> 5000	> 10000	1.22	50		14	0.7	< 2	1.44	14	17
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9.0	14	7740	31200	1.12	47		450	0.6	2	1.29	12	17
1315009155 Orig					0.72	201																		
1315009155 Dup					0.79	238																		
1315006116 Orig							0.7	2.4	95	681	1	14	6	652	1.77	22	< 10	15	< 0.5	4	1.45	11	12	
1315006116 Dup							0.6	2.3	100	683	1	13	5	642	1.78	26	< 10	15	< 0.5	3	1.46	12	13	
1323063018 Orig						12																		
1323063018 Dup						12																		
1323063176 Orig					0.15																			
1323063176 Dup					0.15																			
1323063255 Orig																								
1323063255 Dup																								
1323063152 Orig							0.8	< 0.5	26	563	< 1	9	23	113	1.91	30	< 10	43	< 0.5	< 2	1.76	7	7	
1323063152 Dup							0.6	< 0.5	25	555	< 1	9	23	110	1.88	32	< 10	40	< 0.5	< 2	1.74	7	7	
1323063031 Orig						15																		
1323063031 Dup						15																		
1323063036 Orig																								
1323063036 Dup																								
1322044068 Orig					0.63																			
1322044068 Dup					0.57																			
1315005071 Orig						169																		
1315005071 Dup						184																		
1431001164 Orig					1.47																			
1431001164 Dup					1.34																			
1315005045 Orig																								
1315005045 Dup																								
1315005082 Orig							0.6	< 0.5	94	335	2	11	3	100	1.77	13	< 10	35	< 0.5	4	1.05	9	9	
1315005082 Dup							0.8	< 0.5	94	335	2	12	2	93	1.79	14	< 10	35	< 0.5	4	1.05	9	9	
1315008091 Orig	0.777	-4.09	14.2	18.34																				
1315008091 Dup	0.763	-4.34	14.0	18.34																				
1431001220 Orig						82																		
1431001220 Dup						83																		
1322044047 Orig																								
1322044047 Dup																								

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit			0.01	0.05	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1322044025 Orig					0.23																		
1322044025 Dup					0.23																		
1322044178 Orig							0.3	< 0.5	28	675	< 1	13	6	164	2.33	4	< 10	58	< 0.5	< 2	2.38	9	12
1322044178 Dup							0.4	< 0.5	27	681	< 1	12	5	168	2.34	5	< 10	60	< 0.5	< 2	2.38	9	12
1322045121 Orig						157																	
1322045121 Dup						146																	
1322044220 Orig					0.69																		
1322044220 Dup					0.67																		
1322044184 Orig																							
1322044184 Dup																							
1323064035 Orig						18																	
1323064035 Dup						20																	
1315009672 Orig																							
1315009672 Dup																							
1315009737 Orig							< 0.2	< 0.5	30	322	< 1	13	2	65	2.20	3	< 10	22	< 0.5	2	0.69	12	19
1315009737 Dup							< 0.2	< 0.5	29	322	< 1	14	4	64	2.16	3	< 10	26	< 0.5	3	0.69	12	19
1315009653 Orig					0.81																		
1315009653 Dup					0.85																		
1322045132 Orig						107																	
1322045132 Dup						96																	
1315009731 Orig																							
1315009731 Dup																							
1315009522 Orig					0.55																		
1315009522 Dup					0.54																		
1322044156 Orig						23																	
1322044156 Dup						24																	
1315010001 Orig	0.239	-38.9	12.2	51.16																			
1315010001 Dup	0.229	-39.4	11.7	51.16																			
1315010126 Orig																							
1315010126 Dup																							
1315010103 Orig					0.41																		
1315010103 Dup					0.41																		
1315010013 Orig						158																	
1315010013 Dup						161																	
1432087043 Orig							< 0.2	< 0.5	64	259	2	11	3	37	0.97	5	< 10	38	< 0.5	< 2	2.27	8	12
1432087043 Dup							< 0.2	< 0.5	64	255	2	10	3	37	0.96	5	< 10	39	< 0.5	< 2	2.24	8	13
1431001191 Orig																							
1431001191 Dup																							
1431001608 Orig					0.91																		
1431001608 Dup					0.86																		
1431001189 Orig						1500																	
1431001189 Dup						1530																	
1323065012 Orig																							
1323065012 Dup																							
1321034075 Orig					0.82																		
1321034075 Dup					0.83																		
1322046024 Orig							< 0.2	< 0.5	39	453	< 1	278	< 2	50	2.04	6	< 10	92	< 0.5	< 2	2.03	36	707
1322046024 Dup							< 0.2	< 0.5	38	433	< 1	261	2	46	1.94	5	< 10	88	< 0.5	< 2	1.94	35	668
1322046023 Orig						28																	
1322046023 Dup						19																	

Analyte Symbol	NPR	NNP	Modified-NP	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co	Cr
Unit Symbol	Ratio	-	kg CaC O3/t	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit			0.01	0.05	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1
Method Code	Calc	Calc	TITR	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1321094016 Orig																							
1321094016 Dup																							
1431001166 Orig					1.25																		
1431001166 Dup					1.20																		
1431001192 Orig						293																	
1431001192 Dup						306																	
1431001182 Orig	2.44	55.5	94.1	38.63		44																	
1431001182 Dup	2.44	55.6	94.2	38.63		43																	
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1
Method Blank							< 5																
Method Blank							< 5																
Method Blank							5																
Method Blank							5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank							< 5																
Method Blank																							

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
BaSO4 Meas																							14.5
BaSO4 Cert																							14.0
BaSO4 Meas																							13.1
BaSO4 Cert																							14.0
BaSO4 Meas																							13.0
BaSO4 Cert																							14.0
BaSO4 Meas																							14.0
BaSO4 Cert																							14.0
BaSO4 Meas																							14.1
BaSO4 Cert																							14.0
BaSO4 Meas																							14.1
BaSO4 Cert																							14.0
BaSO4 Meas																							14.1
BaSO4 Cert																							14.0
BaSO4 Meas																							14.7
BaSO4 Cert																							14.0
BaSO4 Meas																							
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BaSO4 Meas																							
BaSO4 Cert																							
OREAS 98 (Aqua Regia) Meas																							
OREAS 98 (Aqua Regia) Cert																							
OREAS 98 (Aqua Regia) Meas																							
OREAS 98 (Aqua Regia) Cert																							
OREAS 98 (Aqua Regia) Meas																							
OREAS 98 (Aqua Regia) Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
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RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
GS311-4 Meas																						1.09	0.55
GS311-4 Cert																						1.11	0.54
GS311-4 Meas																						1.01	0.54
GS311-4 Cert																						1.11	0.54

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating		
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-		
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01			
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	
GS311-4 Meas																						1.01	0.52		
GS311-4 Cert																							1.11	0.54	
GS311-4 Meas																							1.10	0.54	
GS311-4 Cert																							1.11	0.54	
GS311-4 Meas																							1.11	0.54	
GS311-4 Cert																							1.11	0.54	
GS311-4 Meas																							1.11	0.55	
GS311-4 Cert																							1.11	0.54	
GS311-4 Meas																							1.12	0.54	
GS311-4 Cert																							1.11	0.54	
GS311-4 Meas																							1.11	0.58	
GS311-4 Cert																							1.11	0.54	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
SiO2 Meas																							< 0.01	< 0.01	
SiO2 Cert																							< 0.01	< 0.01	
NBM-1 (slight fzz) Meas																									
NBM-1 (slight fzz) Cert																									
NBM-1 (slight fzz) Meas																									
NBM-1 (slight fzz) Cert																									
OREAS 922 (AQUA REGIA) Meas	5.01	< 10		0.38	33	1.28	0.026	0.065	0.35	6	4	16			< 2	< 10	33	< 10	16	18					
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	5.15	< 10		0.38	34	1.31	0.025	0.065	0.34	2	4	16			< 2	< 10	33	< 10	16	17					
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	5.27	< 10		0.40	34	1.34	0.028	0.068	0.37	3	4	16			< 2	< 10	34	< 10	16	20					
OREAS 922 (AQUA REGIA) Cert	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
OREAS 923 (AQUA REGIA) Meas	5.90	< 10		0.34	31	1.39		0.063	0.64	2	4	14			< 2	< 10	33	< 10	15	24				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
OREAS 923 (AQUA REGIA) Meas	6.04	< 10		0.33	31	1.42		0.063	0.63	3	4	14			< 2	< 10	33	< 10	14	23				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
OREAS 923 (AQUA REGIA) Meas	5.96	< 10		0.33	30	1.41		0.061	0.63	4	4	15			< 2	< 10	33	< 10	14	23				
OREAS 923 (AQUA REGIA) Cert	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5				
Oreas 96 (Aqua Regia) Meas									3.28	5														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
Oreas 96 (Aqua Regia) Meas									3.35	7														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
Oreas 96 (Aqua Regia) Meas									3.49	6														
Oreas 96 (Aqua Regia) Cert									4.38	4.53														
OREAS 229b (Fire Assay) Meas																								
OREAS 229b (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
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OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none	
GS316-3 Meas																						0.04	0.33	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.35	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.33	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.33	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.33	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.34	
GS316-3 Cert																						0.0600	0.340	
GS316-3 Meas																						0.05	0.35	
GS316-3 Cert																						0.0600	0.340	
OREAS 257b (Fire Assay) Meas																								
OREAS 257b (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
GS317-5 Meas																						8.67	15.6	
GS317-5 Cert																						8.46	15.5	
GS317-5 Meas																						7.44	14.7	
GS317-5 Cert																						8.46	15.5	
GS317-5 Meas																						7.75	14.8	
GS317-5 Cert																						8.46	15.5	
GS317-5 Meas																						8.27	14.6	
GS317-5 Cert																						8.46	15.5	
GS317-5 Meas																						8.22	15.1	
GS317-5 Cert																						8.46	15.5	
GS317-5 Meas																						8.10	14.8	
GS317-5 Cert																						8.46	15.5	

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
GS317-5 Meas																					8.43	14.8	
GS317-5 Cert																					8.46	15.5	
GS317-5 Meas																					8.07	15.3	
GS317-5 Cert																					8.46	15.5	
Oreas 620 (Aqua Regia) Meas	2.51	< 10	2	0.26	24	0.26	0.113	0.032	2.36	57		19			< 2	< 10	8	< 10	6	64			
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57			
Oreas 620 (Aqua Regia) Meas	2.68	< 10	2	0.28	25	0.28	0.121	0.033	2.51	65		20			< 2	< 10	9	< 10	7	62			
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57			
Oreas 620 (Aqua Regia) Meas	2.75	< 10	2	0.29	25	0.28	0.124	0.033	2.63	58		20			< 2	< 10	9	< 10	7	57			
Oreas 620 (Aqua Regia) Cert	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57			
1315009155 Orig																					0.19	3.27	
1315009155 Dup																					0.19	3.29	
1315006116 Orig	3.51	< 10	< 1	0.25	32	1.52	0.036	0.065	2.10	< 2	2	89	< 0.01	< 1	< 2	< 10	19	< 10	4	12			
1315006116 Dup	3.55	< 10	< 1	0.25	32	1.54	0.037	0.066	2.13	< 2	2	90	< 0.01	< 1	< 2	< 10	19	< 10	4	13			
1323063018 Orig																							
1323063018 Dup																							
1323063176 Orig																							
1323063176 Dup																							
1323063255 Orig																					0.21	0.26	
1323063255 Dup																					0.20	0.26	
1323063152 Orig	1.99	< 10	< 1	0.24	15	0.74	0.166	0.042	1.31	< 2	< 1	88	< 0.01	< 1	< 2	< 10	12	< 10	2	17			
1323063152 Dup	2.00	< 10	< 1	0.24	15	0.73	0.161	0.043	1.33	< 2	< 1	86	< 0.01	< 1	< 2	< 10	11	< 10	2	16			
1323063031 Orig																							
1323063031 Dup																							
1323063036 Orig																					0.66	0.51	
1323063036 Dup																					0.66	0.53	
1322044068 Orig																							
1322044068 Dup																							
1315005071 Orig																							
1315005071 Dup																							
1431001164 Orig																							
1431001164 Dup																							
1315005045 Orig																					0.23	2.56	
1315005045 Dup																					0.22	2.62	
1315005082 Orig	2.62	< 10	< 1	0.15	12	0.98	0.137	0.045	1.92	< 2	1	84	< 0.01	< 1	< 2	< 10	12	< 10	2	25			
1315005082 Dup	2.63	< 10	< 1	0.15	13	0.99	0.139	0.044	1.92	< 2	1	84	< 0.01	2	< 2	< 10	12	< 10	2	24			
1315008091 Orig																							None
1315008091 Dup																							None
1431001220 Orig																							
1431001220 Dup																							
1322044047 Orig																					0.32	0.09	
1322044047 Dup																					0.32	0.10	
1322044025 Orig																							
1322044025 Dup																							
1322044178 Orig	2.31	< 10	< 1	0.32	16	0.93	0.202	0.050	0.45	< 2	2	103	0.08	< 1	< 2	< 10	26	< 10	3	15			
1322044178 Dup	2.30	< 10	< 1	0.32	16	0.93	0.208	0.050	0.43	< 2	2	105	0.09	< 1	< 2	< 10	25	< 10	3	16			

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
1322045121 Orig																								
1322045121 Dup																								
1322044220 Orig																						0.71	0.57	
1322044220 Dup																						0.72	0.58	
1322044184 Orig																								
1322044184 Dup																								
1323064035 Orig																								
1323064035 Dup																								
1315009672 Orig																						0.17	2.24	
1315009672 Dup																						0.17	2.21	
1315009737 Orig	3.78	< 10	< 1	0.39	15	1.49	0.060	0.047	2.61	< 2	3	30	0.02	< 1	< 2	< 10	23	< 10	3	25				
1315009737 Dup	3.71	< 10	< 1	0.38	16	1.49	0.059	0.047	2.53	< 2	3	30	0.02	3	< 2	< 10	23	< 10	3	25				
1315009653 Orig																								
1315009653 Dup																								
1322045132 Orig																								
1322045132 Dup																								
1315009731 Orig																						0.11	0.16	
1315009731 Dup																						0.12	0.16	
1315009522 Orig																								
1315009522 Dup																								
1322044156 Orig																								
1322044156 Dup																								
1315010001 Orig																								None
1315010001 Dup																								None
1315010126 Orig																						0.14	1.30	
1315010126 Dup																						0.15	1.33	
1315010103 Orig																						0.18	0.95	
1315010103 Dup																						0.18	0.97	
1315010013 Orig																								
1315010013 Dup																								
1432087043 Orig	1.76	< 10	< 1	0.12	12	0.61	0.061	0.046	0.75	< 2	1	51	< 0.01	< 1	< 2	< 10	12	< 10	2	9				
1432087043 Dup	1.74	< 10	< 1	0.12	12	0.60	0.062	0.045	0.75	< 2	1	52	< 0.01	2	< 2	< 10	12	< 10	2	9				
1431001191 Orig																						1.36	2.61	
1431001191 Dup																						1.36	2.61	
1431001608 Orig																								
1431001608 Dup																								
1431001189 Orig																								
1431001189 Dup																								
1323065012 Orig																						0.26	0.27	
1323065012 Dup																						0.27	0.27	
1321034075 Orig																						0.29	2.29	
1321034075 Dup																						0.29	2.29	
1322046024 Orig	2.91	< 10	< 1	0.24	< 10	3.20	0.131	0.041	0.09	3	7	75	0.08	3	< 2	< 10	61	< 10	2	7				
1322046024 Dup	2.74	< 10	< 1	0.23	< 10	3.02	0.124	0.040	0.09	3	6	71	0.08	< 1	< 2	< 10	58	< 10	2	8				
1322046023 Orig																								
1322046023 Dup																								
1321094016 Orig																						0.61	1.66	
1321094016 Dup																						0.61	1.66	
1431001166 Orig																								
1431001166 Dup																								

Analyte Symbol	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	Fizz Rating	
Unit Symbol	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	-	
Lower Limit	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01		
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	none
1431001192 Orig																						1.87	2.33	
1431001192 Dup																						1.86	2.33	
1431001182 Orig																								Slight
1431001182 Dup																								Slight
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.008	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.007	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1				
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
NBM-1 (slight fzz) Meas	8.71	
NBM-1 (slight fzz) Cert	8.53	
NBM-1 (slight fzz) Meas	8.40	
NBM-1 (slight fzz) Cert	8.53	
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA-GRA
(AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
OREAS 229b (Fire Assay) Meas		12.0
OREAS 229b (Fire Assay) Cert		11.95
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
OREAS 238 (Fire Assay) Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
OREAS 257b (Fire Assay) Meas		13.6
OREAS 257b (Fire Assay) Cert		14.220
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
Oreass E1336 (Fire Assay) Meas		
Oreass E1336 (Fire Assay) Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
1315009155 Orig		
1315009155 Dup		
1315006116 Orig		
1315006116 Dup		
1323063018 Orig		
1323063018 Dup		
1323063176 Orig		
1323063176 Dup		
1323063255 Orig		
1323063255 Dup		
1323063152 Orig		
1323063152 Dup		
1323063031 Orig		
1323063031 Dup		
1323063036 Orig		
1323063036 Dup		
1322044068 Orig		
1322044068 Dup		
1315005071 Orig		
1315005071 Dup		
1431001164 Orig		
1431001164 Dup		
1315005045 Orig		
1315005045 Dup		
1315005082 Orig		
1315005082 Dup		
1315008091 Orig		
1315008091 Dup		
1431001220 Orig		
1431001220 Dup		
1322044047 Orig		
1322044047 Dup		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1322044025 Orig		
1322044025 Dup		
1322044178 Orig		
1322044178 Dup		
1322045121 Orig		
1322045121 Dup		
1322044220 Orig		
1322044220 Dup		
1322044184 Orig	9.14	
1322044184 Dup	9.14	
1323064035 Orig		
1323064035 Dup		
1315009672 Orig		
1315009672 Dup		
1315009737 Orig		
1315009737 Dup		
1315009653 Orig		
1315009653 Dup		
1322045132 Orig		
1322045132 Dup		
1315009731 Orig		
1315009731 Dup		
1315009522 Orig		
1315009522 Dup		
1322044156 Orig		
1322044156 Dup		
1315010001 Orig		
1315010001 Dup		
1315010126 Orig		
1315010126 Dup		
1315010103 Orig		
1315010103 Dup		
1315010013 Orig		
1315010013 Dup		
1432087043 Orig		
1432087043 Dup		
1431001191 Orig		
1431001191 Dup		
1431001608 Orig		
1431001608 Dup		
1431001189 Orig		
1431001189 Dup		
1323065012 Orig		
1323065012 Dup		
1321034075 Orig		
1321034075 Dup		
1322046024 Orig		
1322046024 Dup		
1322046023 Orig		
1322046023 Dup		

Analyte Symbol	Paste pH	Au
Unit Symbol	pH	g/tonne
Lower Limit	0.01	0.02
Method Code	pH Meter	FA- GRA
1321094016 Orig		
1321094016 Dup		
1431001166 Orig		
1431001166 Dup		
1431001192 Orig		
1431001192 Dup		
1431001182 Orig	8.82	
1431001182 Dup	8.80	
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
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Method Blank		
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Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		< 0.02
Method Blank		< 0.02



Report No.: A22-14587
 Report Date: 30-Dec-22
 Date Submitted: 07-Oct-22
 Your Reference: ASSAYS FROM PULP

New Gold Inc.
 1800-Two Bentall Centre
 555 Burrard Street, Box 212
 Vancouver BC V7X 1M9
 Canada

ATTN: Laura Battison

CERTIFICATE OF ANALYSIS

230 Pulp samples were submitted for analysis.

The following analytical package(s) were requested:		Testing Date:
1A2-50-Tbay	QOP AA-Au (Au - Fire Assay AA)	2022-10-17 07:16:24
1A3-50-Tbay	QOP AA-Au (Au - Fire Assay Gravimetric)	2022-10-20 17:25:19
1E3-Tbay NewGold	QOP AquaGeo (Aqua Regia ICPOES)	2022-10-31 15:01:00

REPORT **A22-14587**

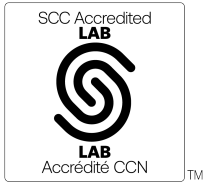
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Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 673

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

Elitsa Hrischeva, Ph.D.
Quality Control Coordinator

Report No.: A22-14587
Report Date: 30-Dec-22
Date Submitted: 07-Oct-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Laura Battison

CERTIFICATE OF ANALYSIS

230 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, Testing Date. Rows include 11 ABA Modified Sobek Package (Acid Base Accounting) and 4F-C, S (Infrared).

REPORT A22-14587

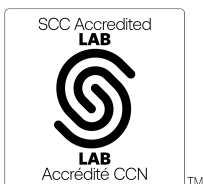
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Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.) For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 266

ACTIVATION LABORATORIES LTD.
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:

<original signed by>

Elitsa Hrischeva, Ph.D.
Quality Control Coordinator

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
F010744								545																
F010759								541																
1314010156	None	-45.3	8.57	8.78	0.162	54.05	0.45	> 5000	4.5	< 0.5	332	265	< 1	3	< 2	84	2.45	10	24	30	< 0.5	24	1.03	
1314010043	Slight	6.76	8.69	40.5	1.20	33.74	0.41	416	0.3	< 0.5	213	363	2	37	3	52	2.16	6	27	56	< 0.5	< 2	1.75	
1314010611	None	-8.30	9.02	15.0	0.643	23.27	0.30	111	0.5	< 0.5	216	241	15	9	< 2	59	2.18	8	28	59	< 0.5	< 2	0.73	
1318083002	None	-18.8	8.78	47.9	0.719	66.73	0.91	149	3.3	7.6	41	1310	< 1	17	203	2000	1.67	91	29	30	< 0.5	< 2	1.93	
1322049108	Slight	-28.5	8.47	37.9	0.571	66.48	2.38	241	2.6	4.7	133	1730	< 1	64	< 2	835	3.72	12	29	20	< 0.5	< 2	2.92	
1318083038	Slight	-54.9	8.68	18.0	0.247	72.91	0.91	275	4.9	8.8	67	1220	< 1	22	112	2040	1.79	114	31	29	< 0.5	< 2	1.18	
1314010024	Slight	-39.3	8.55	13.0	0.248	52.32	0.47	641	0.5	< 0.5	366	227	< 1	4	< 2	68	2.23	12	26	34	< 0.5	3	1.17	
1322049170	Slight	30.4	9.25	35.7	6.70	5.34	0.28	29	< 0.2	< 0.5	17	504	< 1	12	< 2	120	2.36	7	28	80	< 0.5	< 2	1.39	
1314010606	Slight	-77.8	8.42	14.8	0.160	92.63	0.71	341	1.0	< 0.5	59	284	< 1	16	2	57	2.54	26	24	20	< 0.5	8	1.05	
1318083100	Slight	-126	8.15	14.0	0.0998	139.92	1.23	1180	18.8	6.6	1130	703	< 1	13	624	1620	1.19	281	25	15	< 0.5	5	0.49	
1314010180	Slight	-51.5	8.68	20.0	0.279	71.52	0.67	264	1.2	0.9	128	698	< 1	17	< 2	400	2.01	20	21	21	< 0.5	2	0.74	
1314010190	None	-32.7	8.57	9.24	0.220	41.92	0.35	68	< 0.2	< 0.5	73	225	7	8	< 2	38	2.37	4	31	22	< 0.5	< 2	0.78	
1318083059	Slight	-80.4	8.41	16.7	0.172	97.07	1.16	527	9.4	11.0	297	1210	< 1	18	169	2530	2.04	142	28	24	< 0.5	6	0.60	
1322049068	Slight	46.2	8.30	99.1	1.87	52.88	1.69	43	0.6	< 0.5	90	1540	< 1	57	< 2	207	3.53	12	26	41	< 0.5	< 2	3.21	
1322049031	Slight	28.7	9.10	51.0	2.29	22.28	0.50	89	0.4	0.9	43	658	< 1	22	2	330	2.38	12	29	42	< 0.5	< 2	2.08	
1322049116	Slight	-48.6	8.40	50.5	0.510	99.18	2.02	666	10.5	4.4	159	1220	< 1	60	< 2	950	3.52	37	26	13	< 0.5	< 2	1.99	
1322049053	Slight	-30.2	8.36	37.4	0.553	67.65	2.51	191	1.8	1.2	120	1960	< 1	54	< 2	452	3.77	19	25	30	< 0.5	< 2	2.03	
F011931								> 5000																
F011947								> 5000																
GC22-2023-009FD	None	5.89	8.75	31.9	1.23	25.99	0.29	78	< 0.2	< 0.5	78	274	1	9	< 2	35	2.68	2	27	35	< 0.5	< 2	0.71	
GC22-5031-009FD	Slight	-36.5	8.34	10.4	0.223	46.94	0.40	316	0.4	< 0.5	179	366	< 1	1	< 2	36	2.41	3	26	30	< 0.5	19	0.77	
1321073245	Slight	22.4	8.78	58.4	1.62	36.00	0.97	86	1.2	0.5	26	901	< 1	12	15	146	1.15	52	31	37	< 0.5	< 2	2.37	
1321075401	Slight	39.6	8.89	84.6	1.88	45.03	0.37	100	1.4	0.8	46	1410	< 1	31	10	336	3.71	13	32	30	< 0.5	< 2	3.21	
1321073304	Slight	-8.83	8.96	30.5	0.775	39.29	0.19	141	0.8	0.7	26	709	< 1	19	7	45	251	1.86	27	34	44	< 0.5	< 2	1.55
GC22-2023-011	None	-7.81	8.84	9.49	0.548	17.29	0.27	156	0.3	< 0.5	203	363	1	7	< 2	33	2.80	3	28	46	< 0.5	< 2	0.86	
GC22-0307-013	Slight	-26.9	8.53	11.0	0.290	37.86	0.26	1680	0.2	< 0.5	104	230	< 1	3	< 2	23	1.89	4	26	45	< 0.5	< 2	0.77	
GC22-5027-015	None	-11.7	8.79	13.0	0.527	24.72	0.20	105	1.0	< 0.5	524	161	23	7	< 2	29	1.76	6	26	26	< 0.5	< 2	0.45	
GC22-2009-005	None	-15.3	8.64	5.99	0.281	21.31	0.48	196	0.3	< 0.5	30	419	1	7	< 2	53	2.36	4	29	50	< 0.5	3	0.47	
GC22-2024-009FD	Slight	12.0	8.85	41.6	1.41	29.63	0.18	273	0.3	< 0.5	83	780	1	40	< 2	118	3.06	8	28	23	< 0.5	< 2	1.53	
GC22-2004-010	Slight	1.26	9.03	15.7	1.09	14.47	0.22	74	< 0.2	< 0.5	110	393	1	7	< 2	58	3.38	2	26	33	< 0.5	3	1.41	
GC22-2007-009FD	Slight	-3.00	9.02	12.9	0.812	15.93	0.19	67	< 0.2	< 0.5	85	334	< 1	7	< 2	38	3.02	13	26	26	< 0.5	< 2	1.52	
GC22-2014-009	Slight	-18.6	8.77	11.9	0.390	30.47	0.41	103	0.4	< 0.5	241	265	2	14	< 2	34	1.74	7	27	53	< 0.5	< 2	0.65	
1321073232	Slight	-0.314	8.98	35.4	0.991	35.75	0.45	100	0.8	0.9	30	721	< 1	10	53	276	1.61	30	31	42	< 0.5	< 2	1.73	
1321073429	Slight	13.6	9.07	50.5	1.37	36.91	0.48	104	1.1	0.5	31	963	< 1	8	66	193	1.61	38	32	41	< 0.5	< 2	2.20	
1321073288	Slight	16.7	8.99	49.1	1.52	32.37	0.16	207	23.3	0.7	13	2760	< 1	8	165	277	0.59	67	29	47	< 0.5	< 2	1.50	
GC22-2012-002	None	-1.19	8.83	11.9	0.909	13.07	0.33	78	< 0.2	< 0.5	64	396	1	6	< 2	47	4.22	5	29	47	< 0.5	< 2	1.77	
1321079122	Slight	29.7	9.40	38.9	4.20	9.28	0.57	38	0.4	< 0.5	22	652	< 1	12	7	141	1.43	10	31	69	< 0.5	< 2	1.79	
1321073444	Slight	5.23	8.80	53.1	1.11	47.87	0.38	490	25.0	1.4	46	1590	< 1	8	161	479	0.47	46	29	35	< 0.5	< 2	2.03	
F011916								1070																
F011933								1030																
1323070002	Slight	40.2	9.50	51.3	4.64	11.05	0.14	43	< 0.2	< 0.5	42	568	< 1	9	3	64	1.27	5	29	65	< 0.5	< 2	1.55	
1314012122	Slight	16.8	9.04	21.4	4.66	4.60	0.15	24	< 0.2	< 0.5	125	456	< 1	41	< 2	48	5.12	< 2	28	15	< 0.5	< 2	3.17	
1323070124	Slight	60.2	8.65	60.2	0.000	< 0.01	1.44	37	< 0.2	< 0.5	47	452	< 1	14	< 2	36	1.31	4	29	77	< 0.5	< 2	2.23	
1432018085	Slight	-139	9.39	37.8	0.214	176.83	0.28	111	0.5	0.9	156	1810	< 1	55	< 2	482	3.35	18	25	13	< 0.5	3	0.92	

Results

Activation Laboratories Ltd.

Report: A22-14587

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1323070092	Slight	60.8	7.98	60.8	0.000	< 0.01	29.6	33	< 0.2	< 0.5	39	449	1	19	< 2	36	1.39	3	30	51	< 0.5	< 2	2.22
1314012093	Slight	14.7	8.88	16.1	11.6	1.38	0.13	11	< 0.2	< 0.5	116	423	< 1	46	< 2	47	5.22	< 2	32	< 10	< 0.5	< 2	3.16
1314012233	None	-52.0	8.62	9.91	0.160	61.91	0.63	58	< 0.2	< 0.5	43	314	< 1	8	< 2	43	2.28	< 2	27	21	< 0.5	< 2	1.00
1323070568	Slight	14.5	8.79	46.2	1.46	31.64	0.46	112	0.5	< 0.5	48	689	< 1	10	< 2	76	1.25	15	31	49	< 0.5	< 2	1.60
1323070519	Slight	37.5	9.51	48.1	4.55	10.56	0.38	49	< 0.2	< 0.5	4	504	< 1	7	< 2	34	1.42	3	27	41	< 0.5	< 2	1.80
1323070536	Slight	17.5	9.48	27.2	2.79	9.77	0.22	40	< 0.2	< 0.5	61	348	2	8	< 2	48	1.15	6	30	54	< 0.5	< 2	1.07
1323070506	Slight	41.1	9.42	52.6	4.57	11.51	0.33	26	< 0.2	< 0.5	34	580	< 1	13	< 2	66	1.33	5	31	77	< 0.5	< 2	1.95
1314012060	Slight	-48.1	8.42	9.91	0.171	57.97	0.51	106	0.5	< 0.5	44	516	< 1	5	< 2	122	1.88	12	27	36	< 0.5	2	0.64
1432086821	Slight	-0.525	7.97	67.4	0.992	67.96	0.85	604	2.7	0.6	56	951	2	30	3	186	1.76	18	26	35	< 0.5	< 2	2.36
1314012067	Slight	13.0	8.95	15.2	6.68	2.28	0.17	15	< 0.2	< 0.5	117	411	< 1	42	< 2	46	4.88	< 2	32	< 10	< 0.5	< 2	2.96
1314012022	Slight	-94.1	8.30	12.5	0.117	106.57	0.75	66	< 0.2	< 0.5	26	378	1	14	3	56	2.07	9	23	17	< 0.5	3	0.80
F011948								549															
F011914								531															
1314012827	Slight	-73.5	8.47	12.7	0.147	86.23	0.69	190	0.4	< 0.5	61	253	3	9	3	36	1.95	9	27	22	< 0.5	5	0.90
1314012818	Slight	-56.7	8.40	21.7	0.277	78.40	0.68	91	0.2	< 0.5	52	476	3	8	6	77	2.70	17	25	23	< 0.5	< 2	1.75
1314012870	None	-66.2	8.49	11.2	0.145	77.38	0.65	165	0.5	< 0.5	90	247	3	9	4	38	1.93	11	27	23	< 0.5	4	0.90
1314012885	Slight	0.976	8.98	16.9	1.06	15.93	0.30	66	< 0.2	< 0.5	131	508	< 1	41	< 2	54	4.24	< 2	29	36	< 0.5	< 2	2.48
1314012883	Slight	-62.0	8.64	17.9	0.224	79.99	0.73	83	0.3	< 0.5	78	444	2	10	5	172	2.00	17	27	25	< 0.5	< 2	1.36
1314008086	Slight	-72.8	8.39	11.0	0.131	83.76	0.70	126	1.0	< 0.5	105	427	< 1	16	7	127	2.34	52	22	26	< 0.5	3	0.59
1314008128	Slight	-37.0	8.53	12.5	0.252	49.47	0.47	96	0.3	< 0.5	52	500	< 1	11	2	96	2.72	11	22	33	< 0.5	2	1.15
1314008149	Slight	-39.3	8.87	17.2	0.304	56.56	0.67	215	0.4	2.1	72	713	< 1	11	< 2	679	2.45	13	27	31	< 0.5	< 2	1.05
1314012033	None	7.67	8.86	13.2	2.39	5.51	0.20	34	< 0.2	< 0.5	116	484	< 1	40	< 2	92	4.82	< 2	31	16	< 0.5	< 2	2.88
1314008107	None	-55.3	8.63	13.9	0.201	69.25	0.73	171	0.5	3.4	64	576	< 1	12	4	902	2.43	29	26	28	< 0.5	3	0.94
1314012007	Slight	-25.4	8.59	12.2	0.325	37.55	0.45	1080	0.4	< 0.5	280	372	< 1	13	< 2	35	2.53	4	30	48	< 0.5	< 2	1.11
1314008079	None	-109	8.18	9.75	0.0821	118.78	2.56	333	3.2	43.2	548	958	1	20	9	> 10000	2.69	87	25	15	< 0.5	6	0.33
1314008062	None	-50.0	8.56	6.23	0.111	56.24	0.46	413	0.4	< 0.5	26	314	< 1	8	3	62	1.94	25	25	34	< 0.5	< 2	0.40
1314008094	None	-29.6	8.82	12.0	0.288	41.55	0.46	65	< 0.2	0.6	25	431	< 1	7	< 2	249	2.10	15	27	43	< 0.5	3	0.73
1314010115	Slight	-28.1	8.54	14.4	0.339	42.51	0.51	2780	0.7	< 0.5	390	279	< 1	5	< 2	52	2.40	8	27	30	< 0.5	5	1.31
1314010050	Slight	-24.6	8.44	17.7	0.418	42.22	0.39	699	0.6	< 0.5	220	243	< 1	4	3	53	2.23	13	25	39	< 0.5	< 2	1.20
1314008176	Slight	-38.3	8.62	14.7	0.277	52.98	0.65	149	0.8	3.2	91	861	< 1	15	< 2	918	2.75	13	28	37	< 0.5	< 2	1.07
1314010088	Slight	-2.83	8.93	11.7	0.806	14.53	0.20	891	< 0.2	< 0.5	107	218	3	6	2	56	2.64	10	30	41	< 0.5	< 2	1.16
1314008002	None	-34.1	8.61	10.2	0.231	44.30	0.52	96	0.3	< 0.5	97	371	1	19	< 2	136	2.88	5	31	40	< 0.5	< 2	1.33
1314010084	Slight	-31.0	8.43	15.9	0.340	46.89	0.55	367	1.1	1.0	540	326	28	8	5	232	2.31	14	28	38	< 0.5	< 2	1.15
1322049419	Slight	103	8.70	121	6.79	17.86	0.98	23	0.2	< 0.5	124	1320	< 1	72	4	228	4.44	4	28	50	< 0.5	< 2	3.52
1314008010	Slight	-100	8.22	17.7	0.150	118.05	1.22	595	1.1	1.4	116	1020	< 1	41	4	947	2.83	25	25	18	< 0.5	2	1.00
F011940								1050															
F011918								1080															

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1432086821	15	30	4.26	< 10	< 1	0.16	11	1.31	0.076	0.043	2.40	3	2	38	0.02	4	< 2	< 10	30	< 10	3	10	0.92
1314012067	22	50	4.13	< 10	< 1	0.03	< 10	1.52	0.489	0.019	0.11	2	5	59	0.23	2	< 2	< 10	118	< 10	3	3	0.14
1314012022	9	9	4.01	< 10	< 1	0.21	19	1.02	0.164	0.054	3.69	< 2	1	79	< 0.01	< 1	< 2	< 10	12	< 10	3	15	0.13
F011948																							
F011914																							
1314012827	9	8	3.69	< 10	< 1	0.16	12	0.83	0.191	0.040	3.03	3	1	159	< 0.01	1	< 2	< 10	12	< 10	2	15	0.10
1314012818	8	6	3.07	< 10	< 1	0.22	14	0.95	0.159	0.040	2.84	< 2	< 1	122	0.03	< 1	< 2	< 10	9	< 10	3	13	0.22
1314012870	9	8	3.50	< 10	< 1	0.17	13	0.81	0.174	0.040	2.76	< 2	1	150	0.01	< 1	< 2	< 10	12	< 10	3	16	0.10
1314012885	21	58	4.21	< 10	< 1	0.13	< 10	1.67	0.361	0.025	0.63	3	4	53	0.18	< 1	< 2	< 10	88	< 10	3	5	0.17
1314012883	9	5	2.96	< 10	< 1	0.13	15	0.89	0.108	0.044	2.69	3	< 1	85	0.03	< 1	< 2	< 10	9	< 10	3	13	0.18
1314008086	14	11	4.25	< 10	< 1	0.17	15	1.65	0.060	0.054	2.92	3	1	43	0.01	5	< 2	< 10	16	< 10	4	14	0.08
1314008128	8	10	2.76	< 10	< 1	0.14	11	1.11	0.179	0.039	1.70	< 2	1	98	< 0.01	< 1	< 2	< 10	10	< 10	2	6	0.13
1314008149	10	9	3.22	< 10	< 1	0.28	13	1.61	0.112	0.043	2.00	< 2	1	55	0.05	< 1	< 2	< 10	17	< 10	4	11	0.18
1314012033	22	45	4.42	< 10	< 1	0.05	< 10	1.64	0.490	0.022	0.23	3	6	61	0.21	< 1	< 2	< 10	121	< 10	4	4	0.12
1314008107	12	9	3.68	< 10	< 1	0.15	11	1.49	0.094	0.043	2.56	3	1	57	0.01	1	< 2	< 10	16	< 10	3	11	0.10
1314012007	12	14	3.18	< 10	< 1	0.18	11	1.43	0.131	0.038	1.25	< 2	2	28	0.10	3	< 2	< 10	31	< 10	3	9	0.19
1314008079	17	13	5.79	< 10	< 1	0.19	10	2.21	0.051	0.046	4.47	3	2	20	< 0.01	< 1	< 2	< 10	29	< 10	5	17	0.04
1314008062	8	6	3.03	< 10	< 1	0.19	14	1.21	0.063	0.036	1.93	< 2	< 1	34	< 0.01	< 1	< 2	< 10	8	< 10	2	14	0.04
1314008094	9	7	2.49	< 10	< 1	0.20	16	1.07	0.149	0.047	1.48	< 2	1	67	0.01	2	< 2	< 10	12	< 10	3	6	0.14
1314010115	9	7	2.84	< 10	< 1	0.22	12	0.54	0.137	0.037	1.55	< 2	< 1	95	0.02	< 1	< 2	< 10	11	< 10	2	7	0.20
1314010050	5	5	2.54	< 10	< 1	0.15	< 10	0.64	0.099	0.035	1.51	< 2	< 1	72	< 0.01	< 1	< 2	< 10	7	< 10	2	8	0.16
1314008176	12	13	3.39	< 10	< 1	0.29	11	1.79	0.152	0.041	1.81	< 2	2	69	0.08	4	< 2	< 10	28	< 10	4	10	0.19
1314010088	4	7	1.23	< 10	< 1	0.15	< 10	0.82	0.132	0.037	0.53	< 2	< 1	124	< 0.01	< 1	< 2	< 10	10	< 10	2	4	0.12
1314008002	15	16	3.42	< 10	< 1	0.22	< 10	1.19	0.234	0.034	1.64	< 2	2	57	0.06	5	< 2	< 10	39	< 10	3	8	0.04
1314010084	8	8	2.95	< 10	< 1	0.13	13	0.81	0.090	0.037	1.67	< 2	< 1	74	0.01	< 1	< 2	< 10	12	< 10	3	9	0.18
1322049419	35	76	8.09	10	< 1	0.24	< 10	2.54	0.287	0.053	0.81	3	13	116	0.15	< 1	< 2	< 10	170	< 10	8	5	1.75
1314008010	30	28	6.48	< 10	< 1	0.17	< 10	1.87	0.098	0.065	4.07	3	4	43	0.14	7	< 2	< 10	68	< 10	8	9	0.12
F011940																							
F011918																							

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1314005026	3.09	
1314005006	0.80	
1314005088	0.63	
1314003092	0.96	
1314005003	2.58	
1314005542	1.32	
1314003053	1.34	
1314003145	0.52	
1314005528	1.55	
1314005524	1.35	
1314005057	1.52	
1314003082	1.59	
1314002129	1.46	
1314003178	0.57	6.82
1314002137	3.91	
1314002013	0.88	
F010766		
F010758		
1432017057	7.36	
1432017081	4.78	
1432017133	1.31	
1432017198	2.71	
1323070012	0.22	
1432017141	5.52	
1432018178	0.91	
1432018064	1.76	
1432018025	2.74	
1432018196	3.48	
1432018195	3.36	
1323070130	0.27	
1432018804	1.52	
1432017149	1.57	
1314012101	2.71	
1432018137	3.44	
1314012215	2.49	
1314012117	1.85	
F010763		5.73
F010779		5.82
1323069181	0.76	
1323069069	0.40	
1431007084	1.31	
1323069175	0.62	
1431007261	1.44	
1431007212	1.72	
1431007150	1.96	
1323069114	0.29	
1323069063	0.42	
1431007061	2.24	
1431007349	2.18	
1314012114	2.08	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1323070023	0.43	
1323069001	0.60	
1323070047	0.19	
1323070039	0.38	
1314012169	2.46	
1431007276	2.92	
1431007284	2.15	
1431007260	2.92	
1314012226	1.85	
1431007401	3.59	
1431007089	2.04	
F010761		
F010747		
1314002020	2.19	
1323068141	2.40	
1314002125	0.98	
1314002169	2.02	
1314002160	0.63	
1323069066	0.32	
1323068013	1.18	
1323068050	0.44	
1323069131	0.40	
1323069343	1.04	
1323068401	0.66	
1323068418	0.42	
1323069064	0.41	
1323069141	0.78	
1323069324	0.63	
1323069043	0.40	
1323069311	0.32	
1323069051	0.16	
1323069035	0.27	
1323069019	0.16	
1323070412	0.42	
1323069167	0.25	
F010762		
F010748		
1432017113	2.33	
1431007375	5.04	
1431007037	1.85	
1431007290	3.40	
1431007035	1.69	
1431007158	1.98	
1431007246	2.22	
1431007156	1.94	
1432017404	1.99	
1431007233	1.70	
1431007234	1.52	
1431007206	0.81	
1432017011	3.10	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1432017044	7.12	
1432017116	1.74	
1432017073	3.73	
1432017031	4.23	
1432017118	2.20	
F010756		5.81
F010746		5.86
1314003210	1.13	
1314003077	1.33	
1314003066	1.50	
1314003132	0.73	
1314002060	1.35	
1314003014	1.05	
1314003209	1.27	
1314003549	0.76	
1314002131	2.12	
1314003531	1.76	
1314003528	2.06	
1314003520	0.67	
1314002140	2.82	
1323068082	1.58	
1314002100	1.93	
1323068031	5.13	
1314002045	1.38	
1323068011	2.30	
1323068164	2.00	
1314002096	1.63	
1314002177	3.70	
F010757		
F010745		
1324079155	0.07	
1324079129	0.68	
1324079001	0.31	
1431099044	0.61	
1324079403	0.26	
1324081403	0.45	
1324081001	0.35	
1324081409	0.39	
1324081044	0.23	
1324081013	0.21	
1324081203	0.13	
1314005105	3.13	
1324081034	0.95	
1314005606	3.02	
1314005049	3.51	
1314005013	2.98	
1324081225	0.35	
F010744		
F010759		
1314010156	1.85	54.0

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1314010043	1.22	
1314010611	0.85	
1318083002	2.44	
1322049108	2.92	
1318083038	2.64	
1314010024	1.83	
1322049170	0.26	
1314010606	3.20	
1318083100	4.89	
1314010180	2.51	
1314010190	1.45	
1318083059	3.49	
1322049068	2.26	
1322049031	0.88	
1322049116	3.85	
1322049053	3.00	
F011931		5.76
F011947		5.70
GC22-2023-009FD	0.93	
GC22-5031-009FD	1.63	
1321073245	1.48	
1321075401	1.57	
1321073304	1.35	
GC22-2023-011	0.64	
GC22-0307-013	1.30	
GC22-5027-015	0.86	
GC22-2009-005	0.84	
GC22-2024-009FD	1.01	
GC22-2004-010	0.54	
GC22-2007-009FD	0.59	
GC22-2014-009	1.11	
1321073232	1.29	
1321073429	1.34	
1321073288	1.10	
GC22-2012-002	0.53	
1321079122	0.49	
1321073444	1.66	
F011916		
F011933		
1323070002	0.40	
1314012122	0.22	
1323070124	0.35	
1432018085	5.75	
1323070092	0.45	
1314012093	0.09	
1314012233	2.20	
1323070568	1.16	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1323070519	0.47	
1323070536	0.38	
1323070506	0.48	
1314012060	2.03	
1432086821	2.46	
1314012067	0.13	
1314012022	3.67	
F011948		
F011914		
1314012827	2.99	
1314012818	2.74	
1314012870	2.69	
1314012885	0.61	
1314012883	2.80	
1314008086	2.91	
1314008128	1.74	
1314008149	2.03	
1314012033	0.24	
1314008107	2.46	
1314012007	1.35	
1314008079	4.66	
1314008062	1.92	
1314008094	1.48	
1314010115	1.53	
1314010050	1.48	
1314008176	1.91	
1314010088	0.53	
1314008002	1.59	
1314010084	1.68	
1322049419	0.90	
1314008010	4.19	
F011940		
F011918		

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas									0.2	< 0.5	65	1030	< 1	23	94	119	6.73	213	31	1170	1.0	< 2	0.16
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
GXR-6 Meas									< 0.2	< 0.5	66	1020	< 1	23	93	119	6.63	218	31	1090	1.0	< 2	0.15
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.5																
BaSO4 Cert							41.94																
BaSO4 Meas							42.0																
BaSO4 Cert							41.94																
BaSO4 Meas							40.8																
BaSO4 Cert							41.94																
BaSO4 Meas							1.57																
BaSO4 Cert							41.94																
BaSO4 Meas							41.5																
BaSO4 Cert							41.94																
BaSO4 Meas							41.8																
BaSO4 Cert							41.94																
BaSO4 Meas							42.2																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							42.2																
BaSO4 Cert							41.94																
BaSO4 Meas							42.7																
BaSO4 Cert							41.94																
BaSO4 Meas							43.0																
BaSO4 Cert							41.94																
BaSO4 Meas							41.5																
BaSO4 Cert							41.94																
BaSO4 Meas							42.0																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
BaSO4 Meas							41.1																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
OREAS 98 (Aqua Regia) Meas									41.7		> 10000				272	1130						10	
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						90	
OREAS 98 (Aqua Regia) Meas									40.6		> 10000				267	1120						19	
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						93	
OREAS 98 (Aqua Regia) Meas									42.1		> 10000				270	1110						10	
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						90	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
RTS-3a Meas							29.7																
RTS-3a Cert							29.90																
RTS-3a Meas							29.2																
RTS-3a Cert							29.90																
RTS-3a Meas							41.1																
RTS-3a Cert							29.90																
RTS-3a Meas							29.4																
RTS-3a Cert							29.90																
RTS-3a Meas							29.6																
RTS-3a Cert							29.90																
RTS-3a Meas							30.2																
RTS-3a Cert							29.90																
RTS-3a Meas							29.7																
RTS-3a Cert							29.90																
RTS-3a Meas							29.7																
RTS-3a Cert							29.90																
RTS-3a Meas							29.3																
RTS-3a Cert							29.90																
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
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GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							0.42																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
NBM-1 (slight fzz) Meas			8.35																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.81																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.30																				
NBM-1 (slight fzz) Cert			8.53																				
OREAS 922 (AQUA REGIA) Meas									0.6	< 0.5	2300	788	< 1	35	74	259	2.80	5		90	0.9	7	0.37
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.8	< 0.5	2260	781	< 1	38	63	261	2.79	4		89	0.8	9	0.37
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.6	< 0.5	2280	802	< 1	36	64	263	2.84	3		94	0.9	7	0.38
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 923 (AQUA REGIA) Meas									2.4	< 0.5	4470	890	< 1	33	83	330	2.83	5		73	0.8	14	0.37
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									2.4	< 0.5	4380	874	< 1	34	82	334	2.78	7		70	0.7	15	0.37
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.5	< 0.5	4370	880	< 1	32	85	331	2.77	8		73	0.8	17	0.37
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Cert																							
Oreas 96 (Aqua Regia) Meas									11.7		> 10000				91	421							14
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									11.2		> 10000				88	409							11
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									11.3		> 10000				90	410							17
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas											338	168	< 1	228	6	25	6.77			171	1.2	< 2	0.07
OREAS 45f (Aqua Regia) Cert											336	150	1.19	192	12.4	22.2	4.81		158	0.980	0.170	0.0750	
OREAS 45f (Aqua Regia) Meas											332	164	< 1	224	5	24	6.68			169	1.2	< 2	0.07
OREAS 45f (Aqua Regia) Cert											336	150	1.19	192	12.4	22.2	4.81		158	0.980	0.170	0.0750	
OREAS 45f (Aqua Regia) Meas											348	174	< 1	234	5	25	6.74			176	1.2	< 2	0.07
OREAS 45f (Aqua Regia) Cert											336	150	1.19	192	12.4	22.2	4.81		158	0.980	0.170	0.0750	
OREAS 238 (Fire Assay) Meas								3080															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3070															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3070															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3120															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3040															
OREAS 238 (Fire Assay) Cert								3030															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay) Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
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GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas								514															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								514															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								517															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								520															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								494															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								526															
Oreas E1336 (Fire Assay) Cert								510.000															
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
Oreas 620 (Aqua Regia) Meas									42.3	162	1860	444	8	15	> 5000	> 10000	1.23	50		14	0.8	< 2	1.27
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									42.9	164	1860	456	8	17	> 5000	> 10000	1.23	53		11	0.8	3	1.29
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									43.1	165	1850	449	8	14	> 5000	> 10000	1.20	49		14	0.8	4	1.28
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
1314005528 Orig									0.6	1.1	129	682	2	8	6	346	1.33	10	30	41	< 0.5	< 2	1.28
1314005528 Dup									0.6	1.0	127	672	2	9	6	342	1.28	12	28	34	< 0.5	< 2	1.25
1314005524 Orig							0.44	252															
1314005524 Dup							0.44	250															
1314003178 Orig																							
1314003178 Dup																							
1432017081 Orig		-66.1		68.9	0.511	135.01		161															
1432017081 Dup		-67.3		67.7	0.501	135.01		157															
1432017133 Orig							0.55																
1432017133 Dup							0.64																
1323070012 Orig																							
1323070012 Dup																							
1432017141 Orig									5.3	5.6	226	1670	< 1	50	< 2	1280	3.87	59	25	18	< 0.5	< 2	0.38
1432017141 Dup									5.6	5.4	229	1700	< 1	51	< 2	1320	3.94	57	25	22	< 0.5	2	0.39
1432018804 Orig								113															
1432018804 Dup								115															
1314012101 Orig																							
1314012101 Dup																							
1432018137 Orig							0.98																
1432018137 Dup							0.99																
1323069069 Orig									< 0.2	0.7	23	544	< 1	8	3	240	1.26	8	31	55	< 0.5	< 2	1.89
1323069069 Dup									< 0.2	0.7	23	514	< 1	9	< 2	233	1.19	9	28	54	< 0.5	< 2	1.77
1323069175 Orig								68															
1323069175 Dup								85															
1431007150 Orig							0.72																
1431007150 Dup							0.69																
1323069114 Orig																							

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1323069114 Dup																							
1314012114 Orig	None	-46.3		11.9	0.205	58.20																	
1314012114 Dup	None	-45.3		12.9	0.221	58.20																	
1323070039 Orig								59															
1323070039 Dup								62															
1431007276 Orig																							
1431007276 Dup																							
1431007260 Orig							1.09																
1431007260 Dup							1.22																
1323068141 Orig									0.9	< 0.5	169	1160	< 1	60	< 2	372	3.24	9	25	36	< 0.5	< 2	2.83
1323068141 Dup									0.9	< 0.5	169	1180	< 1	59	< 2	377	3.25	7	24	37	< 0.5	< 2	2.86
1314002169 Orig								346															
1314002169 Dup								338															
1323069066 Orig							0.31																
1323069066 Dup							0.31																
1323069064 Orig			9.31																				
1323069064 Dup			9.33																				
1323069043 Orig									< 0.2	< 0.5	11	582	< 1	9	3	79	1.37	8	28	56	< 0.5	< 2	1.90
1323069043 Dup									< 0.2	< 0.5	11	590	< 1	9	4	78	1.40	10	30	56	< 0.5	< 2	1.91
1323069311 Orig								30															
1323069311 Dup								29															
1323069035 Orig							0.36																
1323069035 Dup							0.35																
1431007037 Orig								357															
1431007037 Dup								341															
1431007035 Orig																							
1431007035 Dup																							
1431007158 Orig							0.67																
1431007158 Dup							0.67																
1431007246 Orig									0.4	< 0.5	41	1330	< 1	116	< 2	177	4.33	9	23	38	< 0.5	< 2	3.36
1431007246 Dup									0.5	< 0.5	38	1330	< 1	115	< 2	169	4.26	6	26	38	< 0.5	2	3.33
1432017011 Orig	Slight	-58.1		28.4	0.328	86.54																	
1432017011 Dup	Slight	-58.3		28.2	0.326	86.54																	
1432017044 Orig								412															
1432017044 Dup								395															
1432017116 Orig																							
1432017116 Dup																							
1314003210 Orig							0.31																
1314003210 Dup							0.31																
1314003066 Orig									0.6	< 0.5	331	272	< 1	4	< 2	39	2.88	8	28	44	< 0.5	5	1.47
1314003066 Dup									0.6	< 0.5	333	270	< 1	4	< 2	38	2.84	9	27	44	< 0.5	4	1.45
1314002060 Orig								108															
1314002060 Dup								116															
1314003549 Orig																							
1314003549 Dup																							
1314003531 Orig							0.40																
1314003531 Dup							0.43																
1314002045 Orig								163															
1314002045 Dup								97															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1323068011 Orig																							
1323068011 Dup																							
1323068164 Orig									1.0	2.0	78	1780	< 1	47	< 2	484	4.22	9	29	30	< 0.5	< 2	3.69
1323068164 Dup									1.0	1.9	79	1770	< 1	47	< 2	486	4.27	11	29	30	< 0.5	< 2	3.70
1324079129 Orig							0.46																
1324079129 Dup							0.45																
1324081001 Orig								35															
1324081001 Dup								37															
1324081409 Orig																							
1324081409 Dup																							
1324081203 Orig							0.29																
1324081203 Dup							0.29																
1314005105 Orig									0.6	< 0.5	17	347	< 1	8	6	63	1.57	20	25	19	< 0.5	3	0.83
1314005105 Dup									0.5	< 0.5	16	351	< 1	7	5	65	1.55	22	26	22	< 0.5	4	0.82
1314010156 Orig								> 5000															
1314010156 Dup								> 5000															
1314010611 Orig	None																						
1314010611 Dup	None																						
1322049108 Orig			8.47																				
1322049108 Dup			8.47																				
1314010024 Orig							0.47																
1314010024 Dup							0.47																
1322049170 Orig									< 0.2	< 0.5	17	504	< 1	12	< 2	120	2.36	7	28	80	< 0.5	< 2	1.39
1322049170 Dup									< 0.2	< 0.5	16	506	< 1	12	< 2	121	2.36	4	28	79	< 0.5	< 2	1.40
1314010180 Orig								264															
1314010180 Dup								271															
1314010190 Orig																							
1314010190 Dup																							
1322049116 Orig							2.02																
1322049116 Dup							2.00																
1321073245 Orig								86															
1321073245 Dup								64															
1321073304 Orig									0.8	0.7	26	709	< 1	7	45	251	1.86	27	34	44	< 0.5	< 2	1.55
1321073304 Dup									0.9	0.7	25	717	< 1	7	44	252	1.86	24	34	48	< 0.5	< 2	1.55
GC22-2007-009FD Orig							0.19																
GC22-2007-009FD Dup							0.29																
1321073232 Orig								100															
1321073232 Dup								87															
1321073288 Orig																							
1321073288 Dup																							
1314012122 Orig							0.15																
1314012122 Dup							0.29																
1323070092 Orig								33															
1323070092 Dup								30															
1314012233 Orig																							
1314012233 Dup																							
1323070519 Orig									< 0.2	< 0.5	4	504	< 1	7	< 2	34	1.42	3	27	41	< 0.5	< 2	1.80

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modifie d-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1323070519 Dup									< 0.2	< 0.5	4	509	< 1	9	< 2	35	1.42	4	30	42	< 0.5	< 2	1.82
1432086821 Orig	Slight	-0.525		67.4	0.992	67.96																	
1432086821 Dup	Slight	-0.547		67.4	0.992	67.96																	
1314012022 Orig							0.75																
1314012022 Dup							0.78																
1314012827 Orig								190															
1314012827 Dup								159															
1314012870 Orig																							
1314012870 Dup																							
1314012883 Orig								83															
1314012883 Dup								91															
1314008149 Orig									0.4	2.1	72	713	< 1	11	< 2	679	2.45	13	27	31	< 0.5	< 2	1.05
1314008149 Dup									0.4	2.1	71	715	< 1	9	< 2	675	2.48	13	29	30	< 0.5	< 2	1.05
1314012033 Orig							0.20																
1314012033 Dup							0.21																
1314008062 Orig																							
1314008062 Dup																							
1314008094 Orig								65															
1314008094 Dup								62															
1322049419 Orig			8.70					23	0.2	< 0.5	124	1320	< 1	72	4	228	4.44	4	28	50	< 0.5	< 2	3.52
1322049419 Dup			8.73					23	0.2	< 0.5	126	1350	< 1	73	3	233	4.56	4	29	51	< 0.5	< 2	3.57
1314008010 Orig	Slight	-100		17.7	0.150	118.05	1.22																
1314008010 Dup	Slight	-104		16.7	0.139	120.47	1.09																
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								5															
Method Blank								< 5															
Method Blank								5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank																							
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	2	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	40	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	42	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	40	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	2	< 2	< 2	< 0.01	< 2	41	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas	20	45	5.41	< 10		0.40	34	1.30	0.020	0.064	0.38	2	4	17			< 2	< 10	33	< 10	16	3	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	44	5.36	< 10		0.39	34	1.30	0.020	0.064	0.38	4	4	16			< 2	< 10	32	< 10	16	4	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	45	5.45	< 10		0.41	35	1.34	0.021	0.065	0.38	3	4	17			< 2	< 10	33	< 10	17	4	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 923 (AQUA REGIA) Meas	23	41	6.18	< 10		0.34	31	1.39		0.061	0.69	3	3	15			< 2	< 10	32	< 10	15	5	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	22	41	6.08	< 10		0.32	31	1.39		0.060	0.68	2	3	14			< 2	< 10	31	< 10	14	4	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	23	40	6.04	< 10		0.34	31	1.39		0.060	0.68	3	3	15			< 2	< 10	32	< 10	15	9	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
Oreas 96 (Aqua Regia) Meas	49										4.05	7											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	48										3.68	6											

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	48										4.01	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas	39	342	13.9	20	1	0.09	< 10	0.17	0.034	0.021	0.02		29	14	0.12		< 2	< 10	197		5	14	
OREAS 45f (Aqua Regia) Cert	39.2	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0	
OREAS 45f (Aqua Regia) Meas	38	335	13.7	20	< 1	0.09	< 10	0.17	0.033	0.021	0.02		28	14	0.12		< 2	< 10	194		5	15	
OREAS 45f (Aqua Regia) Cert	39.2	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0	
OREAS 45f (Aqua Regia) Meas	40	351	14.0	20	1	0.09	10	0.17	0.034	0.021	0.02		28	15	0.14		< 2	< 10	198		5	18	
OREAS 45f (Aqua Regia) Cert	39.2	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0	
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
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OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.06

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	
GS316-3 Cert																							0.0600	
GS316-3 Meas																							0.06	
GS316-3 Cert																							0.0600	
GS316-3 Meas																							0.06	
GS316-3 Cert																							0.0600	
GS316-3 Meas																							0.06	
GS316-3 Cert																							0.0600	
OREAS 257b (Fire Assay) Meas																								
OREAS 257b (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
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Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
GS317-5 Meas																								8.16
GS317-5 Cert																								8.46
GS317-5 Meas																								8.08
GS317-5 Cert																								8.46
GS317-5 Meas																								8.13
GS317-5 Cert																								8.46
GS317-5 Meas																								8.10
GS317-5 Cert																								8.46
GS317-5 Meas																								8.33
GS317-5 Cert																								8.46
GS317-5 Meas																								7.70
GS317-5 Cert																								8.46
GS317-5 Meas																								8.06
GS317-5 Cert																								8.46
GS317-5 Meas																								8.06
GS317-5 Cert																								8.46
GS317-5 Meas																								8.39
GS317-5 Cert																								8.46
GS317-5 Meas																								8.36
GS317-5 Cert																								8.46

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	
Oreas 620 (Aqua Regia) Meas	14	20	2.75	< 10	2	0.29	25	0.27	0.117	0.031	2.59	60		21			< 2	< 10	8	< 10	7	34		
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57		
Oreas 620 (Aqua Regia) Meas	14	24	2.78	< 10	2	0.28	24	0.27	0.115	0.031	2.62	58		20			< 2	< 10	8	< 10	7	29		
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57		
Oreas 620 (Aqua Regia) Meas	14	18	2.75	< 10	2	0.28	24	0.27	0.115	0.030	2.60	55		19			< 2	< 10	8	< 10	7	18		
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57		
1314005528 Orig	8	10	2.62	< 10	< 1	0.20	13	0.92	0.074	0.041	1.56	< 2	1	59	< 0.01	< 1	< 2	< 10	14	< 10	2	9		
1314005528 Dup	8	9	2.61	< 10	< 1	0.20	12	0.91	0.072	0.041	1.55	< 2	1	58	< 0.01	< 1	< 2	< 10	14	< 10	2	7		
1314005524 Orig																							0.35	
1314005524 Dup																								0.35
1314003178 Orig																								
1314003178 Dup																								
1432017081 Orig																								
1432017081 Dup																								
1432017133 Orig																								
1432017133 Dup																								
1323070012 Orig																								0.53
1323070012 Dup																								0.56
1432017141 Orig	46	55	12.3	10	2	0.07	< 10	2.20	0.023	0.072	4.93	5	14	8	0.02	2	< 2	< 10	144	< 10	7	6		
1432017141 Dup	47	56	12.6	10	1	0.07	< 10	2.25	0.023	0.073	5.09	5	15	8	0.02	2	< 2	< 10	146	< 10	7	6		
1432018804 Orig																								
1432018804 Dup																								
1314012101 Orig																								0.13
1314012101 Dup																								0.13
1432018137 Orig																								
1432018137 Dup																								
1323069069 Orig	7	9	2.39	< 10	< 1	0.16	12	0.83	0.038	0.040	0.41	2	1	35	0.02	2	< 2	< 10	14	< 10	3	6		
1323069069 Dup	7	8	2.25	< 10	< 1	0.15	11	0.78	0.036	0.038	0.39	< 2	1	33	0.02	2	< 2	< 10	13	< 10	3	8		
1323069175 Orig																								
1323069175 Dup																								
1431007150 Orig																								
1431007150 Dup																								
1323069114 Orig																								0.60
1323069114 Dup																								0.61
1314012114 Orig																								
1314012114 Dup																								
1323070039 Orig																								
1323070039 Dup																								
1431007276 Orig																								1.67
1431007276 Dup																								1.68
1431007260 Orig																								
1431007260 Dup																								
1323068141 Orig	40	44	10.7	10	< 1	0.14	< 10	1.63	0.070	0.069	2.20	6	11	57	0.15	1	< 2	< 10	171	< 10	11	4		
1323068141 Dup	41	45	10.8	10	< 1	0.15	< 10	1.65	0.071	0.069	2.18	6	11	58	0.16	< 1	< 2	< 10	170	< 10	11	4		
1314002169 Orig																								
1314002169 Dup																								
1323069066 Orig																								0.73

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	
1323069066 Dup																							0.73	
1323069064 Orig																								
1323069064 Dup																								
1323069043 Orig	8	9	2.11	< 10	< 1	0.20	13	0.92	0.046	0.040	0.37	< 2	< 1	37	0.02	1	< 2	< 10	13	< 10	3	6	0.66	
1323069043 Dup	8	9	2.12	< 10	< 1	0.20	12	0.93	0.047	0.041	0.37	< 2	1	38	0.02	< 1	< 2	< 10	13	< 10	3	7	0.67	
1323069311 Orig																								
1323069311 Dup																								
1323069035 Orig																								
1323069035 Dup																								
1431007037 Orig																								
1431007037 Dup																								
1431007035 Orig																								0.60
1431007035 Dup																								0.61
1431007158 Orig																								
1431007158 Dup																								
1431007246 Orig	35	97	7.43	< 10	< 1	0.08	< 10	2.90	0.313	0.039	2.04	4	5	116	0.02	< 1	< 2	< 10	101	< 10	4	5		
1431007246 Dup	35	96	7.28	< 10	1	0.08	< 10	2.87	0.305	0.038	2.03	3	5	114	0.02	< 1	< 2	< 10	99	< 10	4	5		
1432017011 Orig																								
1432017011 Dup																								
1432017044 Orig																								
1432017044 Dup																								
1432017116 Orig																								1.65
1432017116 Dup																								1.65
1314003210 Orig																								
1314003210 Dup																								
1314003066 Orig	5	7	3.08	< 10	< 1	0.18	< 10	0.82	0.137	0.033	1.48	2	< 1	110	0.02	< 1	< 2	< 10	9	< 10	2	11		
1314003066 Dup	5	7	3.05	< 10	< 1	0.18	< 10	0.82	0.135	0.032	1.43	< 2	< 1	109	0.02	< 1	< 2	< 10	9	< 10	2	11		
1314002060 Orig																								
1314002060 Dup																								
1314003549 Orig																								0.30
1314003549 Dup																								0.30
1314003531 Orig																								
1314003531 Dup																								
1314002045 Orig																								
1314002045 Dup																								
1323068011 Orig																								0.83
1323068011 Dup																								0.82
1323068164 Orig	30	62	9.26	10	1	0.45	< 10	1.93	0.238	0.075	1.74	5	14	92	0.18	< 1	< 2	< 10	184	< 10	11	4		
1323068164 Dup	31	63	9.39	10	< 1	0.46	< 10	1.93	0.241	0.076	1.77	6	14	92	0.19	< 1	< 2	< 10	184	< 10	11	4		
1324079129 Orig																								
1324079129 Dup																								
1324081001 Orig																								
1324081001 Dup																								
1324081409 Orig																								0.53
1324081409 Dup																								0.53
1324081203 Orig																								
1324081203 Dup																								
1314005105 Orig	8	5	3.36	< 10	< 1	0.16	13	0.92	0.085	0.041	3.21	2	< 1	35	< 0.01	3	< 2	< 10	6	< 10	2	16		
1314005105 Dup	8	5	3.33	< 10	< 1	0.16	13	0.91	0.084	0.041	3.17	< 2	< 1	35	< 0.01	2	< 2	< 10	6	< 10	2	17		
1314010156 Orig																								0.11
1314010156 Dup																								0.12

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1314010611 Orig																							
1314010611 Dup																							
1322049108 Orig																							
1322049108 Dup																							
1314010024 Orig																							
1314010024 Dup																							
1322049170 Orig	9	9	2.53	< 10	< 1	0.18	20	0.99	0.170	0.053	0.26	< 2	2	61	0.04	< 1	< 2	< 10	23	< 10	3	3	
1322049170 Dup	9	9	2.54	< 10	< 1	0.18	21	0.98	0.169	0.053	0.26	< 2	2	61	0.04	< 1	< 2	< 10	23	< 10	3	2	
1314010180 Orig																							
1314010180 Dup																							
1314010190 Orig																							0.08
1314010190 Dup																							0.07
1322049116 Orig																							
1322049116 Dup																							
1321073245 Orig																							
1321073245 Dup																							
1321073304 Orig	8	6	2.05	< 10	< 1	0.28	16	0.70	0.094	0.040	1.36	< 2	< 1	41	0.03	2	< 2	< 10	9	< 10	2	7	0.36
1321073304 Dup	8	6	2.06	< 10	< 1	0.28	17	0.71	0.094	0.040	1.39	2	< 1	41	0.03	3	< 2	< 10	9	< 10	2	9	0.36
GC22-2007-009FD Orig																							
GC22-2007-009FD Dup																							
1321073232 Orig																							
1321073232 Dup																							
1321073288 Orig																							0.68
1321073288 Dup																							0.69
1314012122 Orig																							
1314012122 Dup																							
1323070092 Orig																							
1323070092 Dup																							
1314012233 Orig																							0.08
1314012233 Dup																							0.08
1323070519 Orig	7	11	2.52	< 10	< 1	0.11	12	0.83	0.076	0.040	0.56	< 2	2	37	< 0.01	2	< 2	< 10	16	< 10	2	6	
1323070519 Dup	7	12	2.56	< 10	< 1	0.11	13	0.84	0.078	0.041	0.57	< 2	2	37	< 0.01	< 1	< 2	< 10	16	< 10	2	6	
1432086821 Orig																							
1432086821 Dup																							
1314012022 Orig																							
1314012022 Dup																							
1314012827 Orig																							
1314012827 Dup																							
1314012870 Orig																							0.10
1314012870 Dup																							0.10
1314012883 Orig																							
1314012883 Dup																							
1314008149 Orig	10	9	3.22	< 10	< 1	0.28	13	1.61	0.112	0.043	2.00	< 2	1	55	0.05	< 1	< 2	< 10	17	< 10	4	11	
1314008149 Dup	11	9	3.21	< 10	< 1	0.29	13	1.60	0.113	0.043	2.05	7	1	56	0.05	2	< 2	< 10	17	< 10	4	12	
1314012033 Orig																							
1314012033 Dup																							
1314008062 Orig																							0.04
1314008062 Dup																							0.06
1314008094 Orig																							
1314008094 Dup																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1322049419 Orig	35	76	8.09	10	< 1	0.24	< 10	2.54	0.287	0.053	0.81	3	13	116	0.15	< 1	< 2	< 10	170	< 10	8	5		
1322049419 Dup	35	77	8.27	10	1	0.25	< 10	2.60	0.293	0.055	0.83	4	13	118	0.16	< 1	< 2	< 10	175	< 10	8	5		
1314008010 Orig																							0.12	
1314008010 Dup																								0.12
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank																								
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
OREAS 229b (Fire Assay) Meas		12.3
OREAS 229b (Fire Assay) Cert		11.95
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.36	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GS316-3 Cert	0.340	
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.34	
GS316-3 Cert	0.340	
GS316-3 Meas	0.36	
GS316-3 Cert	0.340	
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
OREAS 257b (Fire Assay) Meas		14.2
OREAS 257b (Fire Assay) Cert		14.220
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
GS317-5 Meas	15.2	
GS317-5 Cert	15.5	
GS317-5 Meas	14.5	
GS317-5 Cert	15.5	
GS317-5 Meas	15.0	
GS317-5 Cert	15.5	
GS317-5 Meas	14.9	
GS317-5 Cert	15.5	
GS317-5 Meas	15.2	
GS317-5 Cert	15.5	
GS317-5 Meas	13.5	
GS317-5 Cert	15.5	
GS317-5 Meas	14.3	
GS317-5 Cert	15.5	
GS317-5 Meas	14.2	
GS317-5 Cert	15.5	
GS317-5 Meas	14.7	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GS317-5 Cert	15.5	
GS317-5 Meas	14.5	
GS317-5 Cert	15.5	
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
1314005528 Orig		
1314005528 Dup		
1314005524 Orig	1.35	
1314005524 Dup	1.42	
1314003178 Orig		6.82
1314003178 Dup		5.95
1432017081 Orig		
1432017081 Dup		
1432017133 Orig		
1432017133 Dup		
1323070012 Orig	0.22	
1323070012 Dup	0.25	
1432017141 Orig		
1432017141 Dup		
1432018804 Orig		
1432018804 Dup		
1314012101 Orig	2.71	
1314012101 Dup	2.80	
1432018137 Orig		
1432018137 Dup		
1323069069 Orig		
1323069069 Dup		
1323069175 Orig		
1323069175 Dup		
1431007150 Orig		
1431007150 Dup		
1323069114 Orig	0.29	
1323069114 Dup	0.28	
1314012114 Orig		
1314012114 Dup		
1323070039 Orig		
1323070039 Dup		
1431007276 Orig	2.92	
1431007276 Dup	2.96	
1431007260 Orig		
1431007260 Dup		
1323068141 Orig		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1323068141 Dup		
1314002169 Orig		
1314002169 Dup		
1323069066 Orig	0.32	
1323069066 Dup	0.33	
1323069064 Orig		
1323069064 Dup		
1323069043 Orig	0.40	
1323069043 Dup	0.37	
1323069311 Orig		
1323069311 Dup		
1323069035 Orig		
1323069035 Dup		
1431007037 Orig		
1431007037 Dup		
1431007035 Orig	1.69	
1431007035 Dup	1.70	
1431007158 Orig		
1431007158 Dup		
1431007246 Orig		
1431007246 Dup		
1432017011 Orig		
1432017011 Dup		
1432017044 Orig		
1432017044 Dup		
1432017116 Orig	1.74	
1432017116 Dup	1.75	
1314003210 Orig		
1314003210 Dup		
1314003066 Orig		
1314003066 Dup		
1314002060 Orig		
1314002060 Dup		
1314003549 Orig	0.76	
1314003549 Dup	0.77	
1314003531 Orig		
1314003531 Dup		
1314002045 Orig		
1314002045 Dup		
1323068011 Orig	2.30	
1323068011 Dup	2.28	
1323068164 Orig		
1323068164 Dup		
1324079129 Orig		
1324079129 Dup		
1324081001 Orig		
1324081001 Dup		
1324081409 Orig	0.39	
1324081409 Dup	0.39	
1324081203 Orig		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1324081203 Dup		
1314005105 Orig		
1314005105 Dup		
1314010156 Orig	1.85	54.0
1314010156 Dup	1.91	66.9
1314010611 Orig		
1314010611 Dup		
1322049108 Orig		
1322049108 Dup		
1314010024 Orig		
1314010024 Dup		
1322049170 Orig		
1322049170 Dup		
1314010180 Orig		
1314010180 Dup		
1314010190 Orig	1.45	
1314010190 Dup	1.47	
1322049116 Orig		
1322049116 Dup		
1321073245 Orig		
1321073245 Dup		
1321073304 Orig	1.35	
1321073304 Dup	1.29	
GC22-2007-009FD Orig		
GC22-2007-009FD Dup		
1321073232 Orig		
1321073232 Dup		
1321073288 Orig	1.10	
1321073288 Dup	1.08	
1314012122 Orig		
1314012122 Dup		
1323070092 Orig		
1323070092 Dup		
1314012233 Orig	2.20	
1314012233 Dup	2.19	
1323070519 Orig		
1323070519 Dup		
1432086821 Orig		
1432086821 Dup		
1314012022 Orig		
1314012022 Dup		
1314012827 Orig		
1314012827 Dup		
1314012870 Orig	2.69	
1314012870 Dup	2.69	
1314012883 Orig		
1314012883 Dup		
1314008149 Orig		
1314008149 Dup		



Report No.: A22-14590
Report Date: 16-Jan-23
Date Submitted: 07-Oct-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Corey Lablans

CERTIFICATE OF ANALYSIS

140 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package requested, Test name, and Testing Date. Rows include 1A2-50-Tbay, 1E3-Tbay NewGold, QOP AA-Au (Au - Fire Assay AA), and QOP AquaGeo (Aqua Regia ICPOES).

REPORT A22-14590

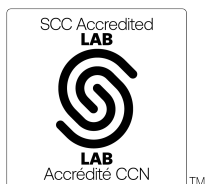
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Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 673

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

<original signed by>

Mark Vandergeest
Quality Control Coordinator

Report No.: A22-14590
Report Date: 16-Jan-23
Date Submitted: 07-Oct-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Corey Lablans

CERTIFICATE OF ANALYSIS

140 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, and Testing Date. Rows include 11 ABA Modified Sobek Package (Acid Base Accounting, 2022-12-01 09:40:59) and 4F-C, S (Infrared, 2022-11-24 21:32:50).

REPORT A22-14590

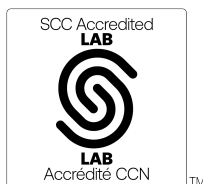
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Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.



LabID: 266

ACTIVATION LABORATORIES LTD.
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CERTIFIED BY:

<original signed by>

Mark Vandergeest
Quality Control Coordinator

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1321074049	Slight	47.9	9.54	48.9	47.3	1.03	0.26	15	< 0.2	< 0.5	46	880	< 1	315	< 2	96	3.04	4	28	64	< 0.5	< 2	2.17	
1432021090	None	-103	8.14	62.5	0.378	165.12	1.47	702	4.2	4.3	143	1770	< 1	39	10	555	1.94	23	24	13	< 0.5	< 2	1.49	
1431012329	Slight	10.9	8.79	37.4	1.41	26.46	0.47	71	0.2	< 0.5	325	440	3	55	< 2	85	1.73	6	32	42	< 0.5	< 2	1.58	
GC22-0299-001	Slight	-10.7	8.25	22.7	0.681	33.35	0.58	32	< 0.2	< 0.5	18	526	< 1	11	29	83	2.45	11	28	34	< 0.5	< 2	1.55	
GC22-0293-010	None	-74.7	8.50	7.46	0.0908	82.17	0.58	72	0.4	< 0.5	5	298	< 1	7	3	62	1.85	20	27	19	< 0.5	3	0.77	
GC22-5014-007	Slight	-47.0	7.69	17.5	0.271	64.45	0.73	73	0.4	< 0.5	23	376	1	7	5	59	2.13	17	26	23	< 0.5	3	1.08	
GC22-0300-014	Slight	-33.8	7.95	10.5	0.237	44.22	0.65	213	0.2	< 0.5	65	340	< 1	9	3	46	2.31	7	28	35	< 0.5	4	0.87	
GC22-5018-024	Slight	-35.3	8.11	12.2	0.257	47.51	0.52	353	0.3	< 0.5	485	279	< 1	2	< 2	23	2.09	7	26	28	< 0.5	7	0.93	
1431012362	Slight	17.1	9.00	38.4	1.80	21.31	0.42	51	< 0.2	< 0.5	129	651	3	103	< 2	80	2.24	4	30	25	< 0.5	< 2	1.97	
1321074125	Slight	37.9	9.47	41.8	10.7	3.92	0.32	10	< 0.2	< 0.5	75	462	< 1	151	3	44	2.05	6	24	44	< 0.5	< 2	2.67	
GC22-5014-024	Slight	-12.5	8.22	14.7	0.541	27.24	0.50	336	0.7	< 0.5	243	458	< 1	9	< 2	66	2.33	3	26	33	< 0.5	3	0.79	
1321074114	Slight	22.5	9.36	26.1	7.22	3.62	0.26	8	< 0.2	< 0.5	89	427	< 1	324	< 2	57	2.31	4	26	66	< 0.5	< 2	1.49	
GC22-5015-015	Slight	-20.8	8.52	20.0	0.490	40.77	0.50	85	0.8	0.9	92	640	4	10	5	356	2.61	33	28	32	< 0.5	< 2	1.65	
1321074162	Slight	-4.86	8.82	57.7	0.922	62.57	0.97	49	0.5	< 0.5	101	917	1	59	17	288	2.51	9	28	16	< 0.5	< 2	2.56	
GC22-5018-007	None	-25.7	8.09	10.7	0.294	36.46	0.40	114	0.3	< 0.5	60	320	< 1	9	< 2	42	2.08	6	25	32	< 0.5	2	0.89	
1431012442	Slight	52.1	8.40	85.9	2.54	33.78	0.73	69	0.2	< 0.5	228	537	1	69	3	72	2.15	3	26	23	< 0.5	< 2	2.67	
GC22-0299-017	Slight	-20.5	8.76	10.5	0.338	31.04	0.48	314	0.2	< 0.5	94	418	< 1	10	5	50	2.06	4	23	26	< 0.5	< 2	0.64	
GC22-0298-016	Slight	-46.3	8.41	14.0	0.232	60.27	0.52	68	0.3	< 0.5	7	368	< 1	7	4	66	2.51	13	21	24	< 0.5	3	1.30	
F011391								1210																
F011388								1220																
1322049084	Slight	34.6	8.83	59.5	2.39	24.90	0.98	129	1.1	1.4	69	923	< 1	32	3	429	2.66	12	24	46	< 0.5	< 2	2.09	
1433006010	Slight	37.8	9.33	42.2	9.54	4.42	0.25	13	< 0.2	< 0.5	42	531	< 1	51	3	99	4.08	9	29	71	< 0.5	< 2	2.87	
1322048150	Slight	25.0	9.31	38.9	2.80	13.91	0.38	33	< 0.2	< 0.5	23	597	< 1	8	4	187	1.73	6	28	49	< 0.5	< 2	1.78	
1433006020	Slight	6.51	9.05	22.2	1.41	15.69	0.31	7	< 0.2	< 0.5	47	630	< 1	28	6	90	3.24	4	30	62	< 0.5	< 2	2.32	
1322048509	Slight	30.6	9.42	55.0	2.26	24.38	0.44	16	< 0.2	< 0.5	32	837	< 1	26	4	134	2.45	6	32	39	< 0.5	< 2	2.41	
1432081116	Slight	53.1	8.74	87.6	2.54	34.50	0.60	63	0.3	< 0.5	145	924	< 1	134	< 2	126	2.61	6	25	19	< 0.5	< 2	3.13	
1322048517	Slight	-38.3	8.98	17.0	0.307	55.25	0.51	224	0.7	< 0.5	23	295	< 1	7	37	139	0.96	44	25	25	< 0.5	< 2	0.65	
20220706005	None	11.6	9.24	16.2	3.48	4.67	0.15	25	< 0.2	< 0.5	105	413	< 1	38	4	82	4.40	2	31	16	< 0.5	< 2	2.64	
1322048116	Slight	-11.2	8.46	62.2	0.847	73.38	1.84	145	2.4	1.3	78	1480	< 1	44	4	401	3.15	27	26	17	< 0.5	< 2	2.82	
1318083023	Slight	3.73	8.89	70.9	1.06	67.20	0.81	304	6.5	0.9	32	1950	< 1	21	101	308	1.34	80	22	20	< 0.5	< 2	2.31	
1322049438	Slight	41.8	8.63	72.8	2.35	30.96	0.99	32	0.2	0.9	90	1080	< 1	68	3	283	3.87	7	25	17	< 0.5	< 2	2.64	
1322049001	Slight	15.3	9.11	31.6	1.94	16.34	0.35	36	< 0.2	< 0.5	25	535	2	19	5	105	2.11	11	28	62	< 0.5	< 2	1.61	
1322049228	Slight	47.4	9.15	62.5	4.14	15.08	0.50	36	0.3	0.7	47	999	< 1	27	7	287	3.18	7	28	80	< 0.5	< 2	2.61	
1314010073	Slight	15.1	9.25	41.1	1.58	25.98	0.38	53	< 0.2	< 0.5	14	435	< 1	5	4	62	1.69	2	26	74	< 0.5	< 2	1.60	
1318083082	None	-82.9	8.48	7.74	0.0855	90.61	1.05	2210	7.8	1.8	501	1100	< 1	16	169	452	2.42	162	24	22	< 0.5	6	0.18	
1322049035	Slight	40.5	9.40	55.4	3.72	14.89	0.31	19	< 0.2	< 0.5	16	755	< 1	12	3	90	1.84	7	24	34	< 0.5	< 2	2.14	
1322049138	Slight	45.1	8.70	85.4	2.12	40.26	1.21	54	0.5	0.8	86	1250	< 1	36	4	328	2.43	14	23	41	< 0.5	< 2	2.77	
1322049034	Slight	41.0	8.72	88.0	1.87	46.99	1.23	199	1.0	0.9	101	1520	< 1	31	3	299	2.40	16	24	31	< 0.5	< 2	3.02	
1314010089	Slight	-7.84	9.06	20.7	0.725	28.55	0.41	701	0.6	< 0.5	306	258	3	10	< 2	60	2.99	12	29	44	< 0.5	< 2	1.61	
1433006038	Slight	25.7	9.17	51.8	1.98	26.12	0.51	45	0.2	< 0.5	39	707	< 1	15	3	194	2.10	13	26	51	< 0.5	< 2	2.27	
1322049135	Slight	52.9	9.38	71.2	3.90	18.28	0.53	12	< 0.2	0.6	38	710	3	34	3	207	1.41	9	27	51	< 0.5	< 2	2.44	
1322048147	Slight	34.4	9.30	44.6	4.39	10.16	0.29	19	< 0.2	< 0.5	27	562	< 1	11	11	84	2.12	5	28	33	< 0.5	< 2	2.06	
1322048034	Slight	45.3	9.32	58.5	4.45	13.13	0.89	29	0.3	< 0.5	41	969	< 1	34	4	143	2.41	5	27	86	< 0.5	< 2	2.41	
F011410								1050																
F011390								1060																
GC22-0301-001	None	-43.9	8.17	9.47	0.177	53.36	0.47	196	< 0.2	< 0.5	74	480	< 1	7	3	65	3.48	4	29	34	< 0.5	3	1.67	
1321074085	Slight	32.2	9.58	34.9	12.9	2.70	0.22	6	< 0.2	< 0.5	13	398	< 1	13	4	98	1.16	3	28	40	< 0.5	< 2	1.24	
GC22-5017-014	Slight	-10.2	8.89	29.1	0.741	39.31	0.55	235	0.4	< 0.5	154	627	1	8	3	66	2.92	12	26	40	< 0.5	4	1.92	
1431012418	Slight	35.7	8.80	49.0	3.68	13.31	0.29	41	< 0.2	< 0.5	196	700	< 1	123	< 2	46	2.25	2	22	12	< 0.5	< 2	2.40	

Results

Activation Laboratories Ltd.

Report: A22-14590

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1321074175	Slight	47.5	9.36	49.6	23.7	2.09	0.29	7	< 0.2	< 0.5	97	377	< 1	115	< 2	32	1.12	5	26	23	< 0.5	< 2	2.52	
GC22-0301-011	None	-49.7	8.49	13.5	0.213	63.13	0.62	718	1.0	< 0.5	359	426	< 1	7	3	82	2.38	22	22	28	< 0.5	5	0.91	
GC22-5011-001	Slight	-38.1	8.67	17.5	0.314	55.57	0.45	323	0.8	< 0.5	182	409	< 1	7	3	100	2.34	25	23	29	< 0.5	4	0.89	
GC22-5021-001	Slight	-86.9	8.03	12.7	0.127	99.53	0.62	543	1.0	< 0.5	399	385	< 1	7	4	52	1.66	33	28	19	< 0.5	14	0.54	
GC22-5019-001	None	-60.9	8.62	8.93	0.128	69.85	0.47	1220	0.2	< 0.5	38	386	< 1	6	2	82	2.26	14	27	29	< 0.5	9	0.52	
GC22-5021-018	Slight	-27.0	8.64	20.8	0.435	47.71	0.49	28	< 0.2	< 0.5	9	370	< 1	10	2	46	1.98	15	25	27	< 0.5	2	1.15	
1431012322	Slight	63.6	8.66	87.4	3.68	23.76	0.55	49	< 0.2	< 0.5	188	1030	< 1	168	< 2	272	3.37	6	25	35	< 0.5	< 2	3.12	
1321074084	Slight	33.1	9.57	43.2	4.29	10.07	0.37	< 5	< 0.2	< 0.5	16	515	< 1	10	4	106	1.05	5	33	50	< 0.5	< 2	1.81	
GC22-0471-015	None	-18.0	8.93	6.11	0.254	24.06	0.23	72	0.3	< 0.5	51	388	< 1	7	3	46	2.08	< 2	28	35	< 0.5	< 2	0.43	
1321075123	Slight	15.1	8.97	37.7	1.67	22.55	0.53	13	< 0.2	< 0.5	46	961	2	23	7	178	2.60	8	25	66	< 0.5	< 2	1.95	
1431012566	Slight	-22.3	8.77	28.1	0.557	50.46	0.58	45	< 0.2	< 0.5	97	700	< 1	51	4	85	2.04	8	32	30	< 0.5	< 2	1.31	
GC22-5011-036	Slight	101	9.26	102	101	1.00	0.36	6	< 0.2	< 0.5	27	813	< 1	74	5	62	2.91	< 2	29	318	0.5	< 2	3.31	
GC22-0470-009	Slight	-14.0	8.72	24.8	0.640	38.77	0.36	17	< 0.2	< 0.5	6	383	< 1	11	3	43	2.20	9	31	26	< 0.5	2	1.13	
1431012570	Slight	5.85	8.94	23.5	1.33	17.63	0.31	52	0.2	< 0.5	114	638	1	90	2	97	2.31	6	25	29	< 0.5	< 2	1.20	
GC22-5011-018	None	-79.9	8.33	8.56	0.0968	88.42	0.56	159	< 0.2	< 0.5	10	373	< 1	9	3	93	1.63	21	29	16	< 0.5	< 2	0.76	
1321075151	Slight	-2.57	9.12	18.7	0.879	21.30	0.87	15	< 0.2	< 0.5	37	1030	< 1	29	5	204	2.75	7	30	63	< 0.5	< 2	2.57	
F011400								> 5000																
F011389								> 5000																
1321074074	Slight	37.6	9.33	37.8	135	< 0.31	0.19	8	< 0.2	< 0.5	39	487	< 1	277	< 2	68	2.46	2	29	20	< 0.5	< 2	2.01	
GC22-5003-001	None	-45.5	8.60	16.5	0.266	61.98	0.50	63	0.5	< 0.5	160	364	3	9	4	54	1.90	10	28	25	< 0.5	2	1.09	
GC22-5002-001	None	-14.4	9.03	13.7	0.487	28.10	0.37	185	0.6	< 0.5	14	350	1	7	3	54	2.04	22	28	40	< 0.5	< 2	0.92	
1321071101	Slight	102	9.06	118	7.08	16.73	0.70	19	< 0.2	< 0.5	54	1050	< 1	36	< 2	157	2.47	5	29	76	< 0.5	< 2	2.73	
GC22-5003-018	Slight	-19.3	8.75	15.9	0.452	35.25	0.39	2020	0.7	< 0.5	106	435	< 1	2	3	72	2.48	9	26	27	< 0.5	3	1.30	
1321071110	Slight	-0.957	8.49	34.6	0.973	35.53	0.70	104	1.0	2.1	23	870	2	16	9	561	1.33	15	29	49	< 0.5	< 2	2.09	
GC22-5002-018	None	-1.45	8.59	11.5	0.888	12.95	0.22	93	0.4	< 0.5	147	448	< 1	11	< 2	72	2.84	5	26	33	< 0.5	< 2	0.76	
1321074003	Slight	9.90	8.76	25.0	1.66	15.08	0.31	48	0.4	< 0.5	27	597	< 1	19	20	122	2.44	7	31	63	0.6	< 2	1.65	
GC22-5001-001	Slight	6.69	9.04	30.7	1.28	24.05	0.50	19	< 0.2	< 0.5	19	827	< 1	8	4	75	2.77	26	25	49	< 0.5	< 2	1.94	
1321074061	Slight	25.2	8.32	40.6	2.62	15.49	0.84	80	1.0	< 0.5	83	1020	< 1	49	10	198	3.42	6	27	42	< 0.5	< 2	3.20	
1321074001	Slight	9.06	8.98	34.0	1.36	24.97	0.38	44	< 0.2	< 0.5	27	786	< 1	31	22	122	2.27	4	29	55	< 0.5	< 2	1.78	
GC22-5007-018	Slight	-28.9	8.59	12.0	0.294	40.92	0.30	292	0.7	< 0.5	75	404	< 1	3	< 2	31	2.00	4	24	40	< 0.5	3	0.62	
GC22-5007-001	None	-30.0	8.50	11.4	0.276	41.40	0.56	171	< 0.2	< 0.5	31	426	< 1	13	3	84	2.06	11	26	36	< 0.5	2	0.70	
GC22-5006-001	Slight	9.65	9.02	32.0	1.43	22.35	0.44	83	0.3	< 0.5	36	837	< 1	11	5	62	2.52	27	24	67	< 0.5	< 2	1.80	
1432021054	None	-25.1	8.44	17.0	0.403	42.10	0.54	41	0.2	0.6	56	1260	< 1	37	3	233	1.88	4	20	25	< 0.5	< 2	0.57	
1321074132	Slight	9.51	8.65	42.5	1.29	33.03	0.69	50	0.6	0.6	105	830	1	32	8	305	2.62	4	32	43	< 0.5	< 2	2.26	
GC22-5010-009FD	None	-21.7	8.72	14.2	0.396	35.88	0.34	266	0.6	< 0.5	164	390	< 1	8	< 2	68	2.35	7	26	41	< 0.5	2	0.91	
GC22-5001-018	Slight	70.0	9.06	75.0	15.0	5.00	0.41	25	< 0.2	< 0.5	20	769	< 1	23	4	76	2.20	3	28	146	0.5	< 2	2.70	
GC22-5009-001	Slight	-51.7	8.88	14.9	0.224	66.63	0.47	99	0.3	< 0.5	17	369	< 1	7	7	53	1.87	22	29	24	< 0.5	2	0.86	
GC22-5009-018	None	-2.67	9.08	12.0	0.818	14.65	0.34	205	0.6	< 0.5	155	361	< 1	6	< 2	57	2.98	3	23	37	< 0.5	< 2	1.25	
GC22-5008-009FD	Slight	-14.2	9.04	26.5	0.651	40.80	0.45	68	0.6	< 0.5	8	461	< 1	12	4	58	2.20	14	29	33	< 0.5	2	1.12	
F011409								> 5000																
F011669								> 5000																
1322048114	Slight	48.2	9.63	49.0	58.2	0.84	0.22	< 5	< 0.2	< 0.5	11	363	< 1	4	< 2	57	1.09	< 2	27	49	< 0.5	< 2	1.76	
1432021002	Slight	11.5	8.96	47.9	1.32	36.44	0.51	131	0.5	0.7	76	813	< 1	26	34	213	1.15	23	28	28	< 0.5	< 2	1.67	
20220707F1	Slight	26.8	9.48	39.2	3.16	12.42	0.26	56	< 0.2	< 0.5	32	410	< 1	15	< 2	63	1.65	7	30	42	< 0.5	< 2	1.66	
1322051109	Slight	21.0	8.99	48.2	1.77	27.16	0.37	84	< 0.2	< 0.5	36	488	< 1	10	2	41	1.31	14	29	41	< 0.5	< 2	1.71	
1322050418	Slight	26.8	9.33	38.3	3.35	11.44	0.32	36	< 0.2	< 0.5	27	483	< 1	8	3	100	1.60	9	28	40	< 0.5	< 2	1.49	
1322050090	Slight	35.2	9.46	40.6	7.40	5.49	0.35	24	< 0.2	2.7	42	467	< 1	8	< 2	765	1.13	8	30	45	< 0.5	< 2	1.42	

Results

Activation Laboratories Ltd.

Report: A22-14590

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1322051020	Slight	29.2	9.66	32.9	8.85	3.72	0.20	16	< 0.2	< 0.5	24	398	< 1	6	4	64	1.17	4	25	55	< 0.5	< 2	1.21
1322051078	Slight	66.9	9.42	71.7	14.8	4.84	0.33	27	< 0.2	< 0.5	101	546	1	11	< 2	47	1.27	4	26	59	< 0.5	< 2	2.47
1322050428	Slight	38.6	9.57	43.1	9.42	4.58	0.23	10	< 0.2	< 0.5	18	591	< 1	9	2	73	1.84	5	27	27	< 0.5	< 2	1.71
1322048068	Slight	14.5	8.61	47.1	1.45	32.61	1.69	88	0.6	0.7	97	1420	< 1	46	< 2	339	2.78	7	24	38	< 0.5	< 2	2.32
1322051064	Slight	30.9	9.62	33.8	11.5	2.94	0.17	33	< 0.2	< 0.5	34	386	< 1	8	< 2	44	1.08	2	25	55	< 0.5	< 2	1.25
1322048076	Slight	-16.5	8.54	38.2	0.698	54.71	0.18	52	0.4	< 0.5	38	918	< 1	31	5	178	2.14	19	27	29	< 0.5	< 2	1.96
1322051095	Slight	31.2	9.51	35.9	7.60	4.72	0.26	24	< 0.2	< 0.5	23	430	1	10	< 2	44	1.19	4	26	47	< 0.5	< 2	1.45
1322051107	Slight	55.8	9.34	63.5	8.26	7.69	0.35	26	< 0.2	< 0.5	21	483	< 1	11	2	43	1.25	6	25	39	< 0.5	< 2	2.27
1322048049	Slight	5.37	8.96	42.6	1.14	37.25	0.91	31	0.4	< 0.5	75	968	< 1	38	4	250	3.02	16	30	36	< 0.5	< 2	2.69
F011634								1220															
F011624								1210															
GC22-5023-024	Slight	0.245	8.99	13.7	1.02	13.49	0.24	> 5000	0.6	< 0.5	319	203	3	6	4	28	3.44	7	28	30	< 0.5	< 2	1.75
1314007032	Slight	-12.6	8.59	19.6	0.609	32.14	0.41	123	0.5	< 0.5	265	253	5	8	< 2	37	1.79	4	29	32	< 0.5	< 2	1.23
1321071251	Slight	1.57	8.97	38.2	1.04	36.67	0.40	81	0.3	< 0.5	19	1440	< 1	4	25	56	0.86	53	28	20	< 0.5	< 2	1.84
1318089010	Slight	-15.7	8.67	50.5	0.762	66.23	0.92	82	4.3	0.6	191	1090	5	13	59	213	1.15	72	29	25	< 0.5	< 2	1.95
1321071014	Slight	42.5	9.72	42.7	273	< 0.31	0.15	< 5	< 0.2	< 0.5	8	298	< 1	2	< 2	54	0.88	< 2	33	49	< 0.5	< 2	1.54
1321071202	Slight	-25.5	8.65	38.3	0.600	63.82	0.58	214	0.7	0.5	17	828	< 1	5	46	153	1.52	32	28	21	< 0.5	< 2	1.63
1321072203	None	-11.0	8.73	4.47	0.289	15.47	0.20	126	6.0	1.3	21	186	< 1	9	65	355	1.44	77	30	20	< 0.5	< 2	0.43
1321071163	None	-45.5	8.74	21.9	0.324	67.40	0.53	127	0.8	< 0.5	16	508	< 1	6	54	127	1.28	42	28	22	< 0.5	< 2	1.07
1321071091	Slight	19.4	8.99	51.1	1.61	31.69	0.55	101	1.1	2.8	23	802	1	13	5	780	1.31	11	31	52	< 0.5	< 2	1.79
1321071226	Slight	3.68	8.86	30.2	1.14	26.50	0.37	225	0.8	< 0.5	21	657	< 1	7	45	152	1.79	60	29	27	< 0.5	< 2	1.49
1321072310	Slight	29.1	9.21	36.2	5.07	7.14	0.23	45	0.5	< 0.5	22	528	< 1	49	10	69	1.48	23	30	55	< 0.5	< 2	1.55
1321072277	None	-15.2	8.86	7.68	0.335	22.93	0.56	146	5.2	10.3	59	199	< 1	7	196	2800	0.73	34	28	27	< 0.5	< 2	0.38
1321071115	Slight	26.2	9.20	34.2	4.24	8.08	0.24	43	< 0.2	< 0.5	14	498	< 1	6	15	148	1.77	7	31	32	< 0.5	< 2	1.64
1318089052	Slight	0.489	8.70	59.4	1.01	58.95	0.57	85	1.3	< 0.5	39	1230	1	15	27	111	1.37	67	30	26	< 0.5	< 2	2.27
1318089205	Slight	2.56	8.75	63.7	1.04	61.17	0.60	58	0.9	0.6	30	992	< 1	18	27	216	1.52	36	35	31	< 0.5	< 2	2.64
1432023145	Slight	17.1	8.72	56.9	1.43	39.75	0.84	60	0.8	6.1	161	1330	< 1	128	< 2	868	4.46	13	25	28	< 0.5	< 2	1.68
1321071029	Slight	-3.28	9.05	27.8	0.894	31.05	0.37	100	0.3	< 0.5	29	797	< 1	13	33	188	1.92	26	30	30	< 0.5	< 2	1.71
1321071211	Slight	12.2	8.95	46.1	1.36	33.90	0.38	48	0.7	< 0.5	18	1260	< 1	7	54	137	1.31	49	27	32	< 0.5	< 2	1.72
1432023077	Slight	62.2	8.77	90.9	3.17	28.67	0.61	146	2.5	5.5	69	1320	< 1	56	< 2	1130	2.65	17	26	28	< 0.5	4	2.50
1318089020	Slight	-59.2	8.68	13.5	0.185	72.66	0.86	312	1.4	6.5	65	1180	< 1	19	65	1700	2.29	85	45	28	< 0.5	< 2	1.45
1314007085	Slight	-52.3	8.50	21.1	0.288	73.42	0.68	361	1.1	2.6	347	704	1	14	3	803	2.13	15	28	23	< 0.5	3	0.83
1314007001	None	-26.3	8.78	9.57	0.267	35.83	0.37	37	< 0.2	0.6	81	402	2	7	< 2	244	1.78	4	31	37	< 0.5	< 2	0.70
F011622								1070															
F011626								1100															
1321080115	Slight	19.6	9.45	29.4	3.01	9.78	0.32	34	< 0.2	1.8	38	476	< 1	7	3	562	1.11	14	31	51	< 0.5	< 2	1.21
GC22-5056-001	None	-22.6	8.68	14.9	0.398	37.53	0.39	135	< 0.2	< 0.5	58	382	< 1	13	3	56	2.18	11	29	34	< 0.5	< 2	0.91
GC22-5046-001	Slight	-41.3	8.60	14.6	0.262	55.96	0.56	84	< 0.2	< 0.5	126	362	< 1	8	2	59	2.06	12	30	34	< 0.5	< 2	1.10
GC22-5046-003	None	-54.3	8.38	12.2	0.184	66.48	0.51	127	0.5	< 0.5	287	392	1	8	3	73	1.98	12	29	21	< 0.5	3	1.13
1321079119	Slight	-16.9	8.91	36.5	0.683	53.41	0.58	93	0.5	< 0.5	29	702	< 1	35	11	160	2.29	7	37	34	< 0.5	< 2	2.03
GC22-5013-005	None	-33.7	8.36	10.6	0.240	44.31	0.35	663	0.3	< 0.5	167	251	1	6	< 2	28	2.85	10	24	33	< 0.5	3	1.59
1321080107	Slight	21.3	9.23	34.1	2.67	12.74	0.38	35	0.4	1.9	59	550	< 1	8	4	656	1.17	8	33	56	< 0.5	< 2	1.29
GC22-0316-009	Slight	-30.1	8.67	26.4	0.467	56.57	0.47	58	< 0.2	< 0.5	25	225	7	8	< 2	24	1.96	3	25	27	0.7	< 2	1.46
GC22-0312-005	Slight	-36.0	8.46	14.6	0.289	50.64	0.45	135	0.6	< 0.5	386	247	11	7	< 2	23	2.07	4	22	30	< 0.5	2	1.10

Results

Activation Laboratories Ltd.

Report: A22-14590

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1322048076	22	25	4.91	< 10	< 1	0.37	21	1.10	0.114	0.079	1.81	3	5	80	0.19	4	< 2	< 10	83	< 10	5	16	0.47
1322051095	7	11	2.16	< 10	< 1	0.15	12	0.61	0.052	0.040	0.25	< 2	1	26	0.02	2	< 2	< 10	14	< 10	2	6	0.57
1322051107	10	12	2.52	< 10	< 1	0.13	13	0.83	0.046	0.051	0.35	< 2	2	50	0.02	< 1	< 2	< 10	20	< 10	3	5	0.92
1322048049	30	55	6.98	10	1	0.43	< 10	1.43	0.149	0.076	1.47	3	10	89	0.24	< 1	< 2	< 10	155	< 10	9	6	0.68
F011634																							
F011624																							
GC22-5023-024	6	11	1.60	< 10	< 1	0.14	< 10	0.75	0.367	0.038	0.56	< 2	< 1	309	< 0.01	3	< 2	< 10	11	< 10	2	7	0.09
1314007032	6	10	2.30	< 10	< 1	0.07	11	0.75	0.174	0.033	1.23	< 2	1	190	< 0.01	< 1	< 2	< 10	11	< 10	2	11	0.29
1321071251	9	3	1.84	< 10	< 1	0.19	< 10	0.81	0.015	0.038	1.30	2	< 1	28	< 0.01	3	< 2	< 10	4	< 10	2	5	0.86
1318089010	10	6	2.61	< 10	< 1	0.28	15	0.68	0.034	0.048	2.59	3	< 1	23	< 0.01	3	< 2	< 10	7	< 10	2	9	0.82
1321071014	5	6	1.87	< 10	< 1	0.16	17	0.42	0.052	0.048	0.05	< 2	< 1	29	0.03	2	< 2	< 10	13	< 10	2	5	0.48
1321071202	6	5	2.60	< 10	< 1	0.21	14	1.00	0.045	0.038	2.30	2	< 1	31	< 0.01	< 1	< 2	< 10	7	< 10	2	8	0.52
1321072203	8	11	1.25	< 10	< 1	0.09	< 10	0.32	0.038	0.036	0.59	< 2	1	29	< 0.01	2	< 2	< 10	9	< 10	< 1	4	0.09
1321071163	7	3	2.41	< 10	< 1	0.17	15	0.66	0.080	0.040	2.33	2	< 1	28	< 0.01	< 1	< 2	< 10	5	< 10	2	17	0.25
1321071091	10	13	2.77	< 10	< 1	0.34	19	0.74	0.061	0.058	1.21	< 2	2	41	0.09	3	< 2	< 10	22	< 10	3	11	0.59
1321071226	7	7	1.96	< 10	< 1	0.20	14	0.89	0.105	0.039	1.26	4	< 1	64	< 0.01	< 1	< 2	< 10	8	< 10	2	10	0.38
1321072310	13	161	1.75	< 10	< 1	0.17	16	1.08	0.029	0.071	0.32	< 2	3	45	0.02	< 1	< 2	< 10	24	< 10	2	3	0.49
1321072277	6	14	1.13	< 10	< 1	0.17	15	0.16	0.020	0.041	0.97	< 2	< 1	18	< 0.01	3	< 2	< 10	4	< 10	< 1	5	0.13
1321071115	6	8	2.05	< 10	< 1	0.15	18	0.68	0.140	0.049	0.34	< 2	1	98	0.03	1	< 2	< 10	14	< 10	2	5	0.45
1318089052	10	8	2.45	< 10	< 1	0.20	13	0.96	0.051	0.043	2.13	2	< 1	32	< 0.01	< 1	< 2	< 10	10	< 10	2	8	0.80
1318089205	11	10	2.61	< 10	< 1	0.22	18	1.02	0.061	0.052	2.21	< 2	1	34	0.03	2	< 2	< 10	17	< 10	3	7	0.81
1432023145	48	202	8.71	10	< 1	0.07	< 10	3.33	0.042	0.045	1.44	6	12	35	0.01	4	< 2	< 10	142	< 10	5	4	0.74
1321071029	10	11	2.49	< 10	< 1	0.17	19	0.98	0.114	0.058	1.16	2	1	61	0.03	< 1	< 2	< 10	16	< 10	3	6	0.48
1321071211	7	5	1.94	< 10	< 1	0.22	14	0.79	0.028	0.039	1.27	< 2	< 1	26	< 0.01	4	< 2	< 10	6	< 10	2	9	0.59
1432023077	25	60	5.52	< 10	< 1	0.10	< 10	1.98	0.057	0.042	1.09	3	5	34	< 0.01	4	< 2	< 10	55	< 10	5	7	1.38
1318089020	10	15	3.29	< 10	< 1	0.35	18	1.65	0.112	0.055	2.63	< 2	1	26	0.05	< 1	< 2	< 10	18	< 10	2	14	0.38
1314007085	12	12	4.02	< 10	< 1	0.17	13	1.68	0.065	0.043	2.55	2	1	43	0.02	2	< 2	< 10	19	< 10	4	15	0.24
1314007001	8	8	2.37	< 10	< 1	0.12	17	1.14	0.108	0.051	1.24	< 2	1	61	0.02	3	< 2	< 10	16	< 10	2	11	0.17
F011622																							
F011626																							
1321080115	7	8	2.18	< 10	< 1	0.21	12	0.70	0.039	0.040	0.47	< 2	1	24	0.05	3	< 2	< 10	17	< 10	3	9	0.46
GC22-5056-001	8	19	3.10	< 10	< 1	0.26	16	1.21	0.081	0.049	1.36	< 2	2	91	0.03	< 1	< 2	< 10	15	< 10	3	12	0.14
GC22-5046-001	22	9	2.55	< 10	< 1	0.26	13	0.91	0.159	0.040	1.99	< 2	1	94	0.02	< 1	< 2	< 10	12	< 10	2	15	0.16
GC22-5046-003	9	8	2.64	< 10	< 1	0.18	15	0.86	0.197	0.044	2.45	< 2	1	118	0.03	< 1	< 2	< 10	10	< 10	2	15	0.12
1321079119	19	50	3.96	< 10	< 1	0.40	32	1.13	0.148	0.094	2.06	< 2	3	147	0.17	< 1	< 2	< 10	48	< 10	5	11	0.33
GC22-5013-005	6	7	2.63	< 10	< 1	0.13	11	0.95	0.114	0.037	1.60	< 2	1	88	< 0.01	< 1	< 2	< 10	12	< 10	3	13	0.11
1321080107	8	8	2.30	< 10	< 1	0.28	12	0.74	0.044	0.041	0.55	< 2	2	25	0.07	1	< 2	< 10	20	< 10	3	11	0.45
GC22-0316-009	8	7	2.96	< 10	< 1	0.13	14	0.75	0.106	0.049	2.00	< 2	< 1	96	< 0.01	< 1	< 2	< 10	8	< 10	3	10	0.36
GC22-0312-005	5	9	2.92	< 10	< 1	0.12	11	0.77	0.166	0.034	1.86	< 2	< 1	116	< 0.01	2	< 2	< 10	9	< 10	2	9	0.14

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1321074049	0.12	
1432021090	5.77	
1431012329	1.00	
GC22-0299-001	1.40	
GC22-0293-010	2.85	
GC22-5014-007	2.31	
GC22-0300-014	1.63	
GC22-5018-024	1.70	
1431012362	0.82	
1321074125	0.23	
GC22-5014-024	1.04	
1321074114	0.20	
GC22-5015-015	1.59	
1321074162	2.33	
GC22-5018-007	1.37	
1431012442	1.31	
GC22-0299-017	1.22	
GC22-0298-016	2.10	
F011391		
F011388		
1322049084	1.13	
1433006010	0.23	
1322048150	0.57	
1433006020	0.60	
1322048509	0.93	
1432081116	1.31	
1322048517	1.94	
20220706005	0.20	
1322048116	3.28	
1318083023	2.42	
1322049438	1.32	
1322049001	0.64	
1322049228	0.65	
1314010073	0.96	
1318083082	3.25	
1322049035	0.58	
1322049138	1.69	
1322049034	1.92	
1314010089	1.19	
1433006038	1.01	
1322049135	0.76	
1322048147	0.42	
1322048034	0.72	
F011410		
F011390		
GC22-0301-001	1.87	
1321074085	0.16	
GC22-5017-014	1.44	
1431012418	0.52	
1321074175	0.16	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GC22-0301-011	2.23	
GC22-5011-001	1.93	
GC22-5021-001	3.39	
GC22-5019-001	2.39	
GC22-5021-018	1.69	
1431012322	0.94	
1321074084	0.45	
GC22-0471-015	0.85	
1321075123	0.90	
1431012566	1.81	
GC22-5011-036	0.15	
GC22-0470-009	1.36	
1431012570	0.67	
GC22-5011-018	3.01	
1321075151	0.97	
F011400		5.70
F011389		5.53
1321074074	0.07	
GC22-5003-001	2.16	
GC22-5002-001	1.17	
1321071101	0.77	
GC22-5003-018	1.26	
1321071110	1.37	
GC22-5002-018	0.49	
1321074003	0.59	
GC22-5001-001	1.04	
1321074061	0.77	
1321074001	0.93	
GC22-5007-018	1.40	
GC22-5007-001	1.51	
GC22-5006-001	0.86	
1432021054	1.52	
1321074132	1.29	
GC22-5010-009FD	1.26	
GC22-5001-018	0.30	
GC22-5009-001	2.29	
GC22-5009-018	0.58	
GC22-5008-009FD	1.46	
F011409		5.62
F011669		5.78
1322048114	0.10	
1432021002	1.33	
20220707F1	0.48	
1322051109	0.99	
1322050418	0.47	
1322050090	0.29	
1322051020	0.19	
1322051078	0.27	
1322050428	0.22	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1322048068	1.61	
1322051064	0.15	
1322048076	1.82	
1322051095	0.24	
1322051107	0.36	
1322048049	1.49	
F011634		
F011624		
GC22-5023-024	0.51	14.9
1314007032	1.17	
1321071251	1.31	
1318089010	2.43	
1321071014	0.04	
1321071202	2.23	
1321072203	0.56	
1321071163	2.33	
1321071091	1.20	
1321071226	1.21	
1321072310	0.31	
1321072277	0.92	
1321071115	0.34	
1318089052	2.08	
1318089205	2.16	
1432023145	1.55	
1321071029	1.12	
1321071211	1.26	
1432023077	1.12	
1318089020	2.61	
1314007085	2.58	
1314007001	1.27	
F011622		
F011626		
1321080115	0.42	
GC22-5056-001	1.33	
GC22-5046-001	1.98	
GC22-5046-003	2.30	
1321079119	1.90	
GC22-5013-005	1.53	
1321080107	0.52	
GC22-0316-009	1.98	
GC22-0312-005	1.77	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
BaSO4 Meas							42.3																
BaSO4 Cert							41.94																
BaSO4 Meas							41.9																
BaSO4 Cert							41.94																
BaSO4 Meas							41.1																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							42.1																
BaSO4 Cert							41.94																
BaSO4 Meas							42.3																
BaSO4 Cert							41.94																
BaSO4 Meas							41.9																
BaSO4 Cert							41.94																
BaSO4 Meas							41.9																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
OREAS 98 (Aqua Regia) Meas								40.3		> 10000				305	1220						< 2		104
OREAS 98 (Aqua Regia) Cert								42.8		147000				343	1300						90		111
OREAS 98 (Aqua Regia) Meas								39.4		> 10000				296	1190						< 2		103
OREAS 98 (Aqua Regia) Cert								42.8		147000				343	1300						90		111
OREAS 98 (Aqua Regia) Meas								39.4		> 10000				306	1230						< 2		104
OREAS 98 (Aqua Regia) Cert								42.8		147000				343	1300						90		111
OREAS 98 (Aqua Regia) Meas								38.6		> 10000				277	1130						< 2		110
OREAS 98 (Aqua Regia) Cert								42.8		147000				343	1300						90		111
RTS-3a Meas							29.8																
RTS-3a Cert							29.90																
RTS-3a Meas							29.4																
RTS-3a Cert							29.90																
RTS-3a Meas							29.4																
RTS-3a Cert							29.90																
RTS-3a Meas							29.9																
RTS-3a Cert							29.90																
RTS-3a Meas							29.4																
RTS-3a Cert							29.90																
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS311-4 Cert																							
GS311-4 Meas																							
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GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
SiO2 Meas								< 0.05															
SiO2 Cert																							
SiO2 Meas								< 0.05															
SiO2 Cert																							
SiO2 Meas								< 0.05															
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SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
NBM-1 (slight fzz) Meas			8.12																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.69																				
NBM-1 (slight fzz) Cert			8.53																				
OREAS 922 (AQUA REGIA) Meas								0.8	< 0.5	2220	771	< 1	34	64	265	2.80	5		86	0.9	15	0.38	20
OREAS 922 (AQUA REGIA) Cert								0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4
OREAS 922 (AQUA REGIA) Meas								0.7	< 0.5	2310	787	< 1	35	64	261	2.82	5		86	0.9	9	0.38	20
OREAS 922 (AQUA REGIA) Cert								0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4
OREAS 922								0.9	< 0.5	2330	790	< 1	35	63	268	2.83	6		86	0.9	9	0.38	20

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
(AQUA REGIA) Meas																							
OREAS 922 (AQUA REGIA) Cert								0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4
OREAS 922 (AQUA REGIA) Meas								0.7	< 0.5	2230	773	< 1	34	62	267	2.77	7		73	0.9	7	0.36	20
OREAS 922 (AQUA REGIA) Cert								0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4
OREAS 922 (AQUA REGIA) Meas								0.7	< 0.5	2230	775	< 1	35	63	260	2.77	6		74	0.9	10	0.37	20
OREAS 922 (AQUA REGIA) Cert								0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324	19.4
OREAS 923 (AQUA REGIA) Meas								1.6	< 0.5	4460	878	< 1	32	92	339	2.79	6		69	0.8	13	0.37	22
OREAS 923 (AQUA REGIA) Cert								1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2
OREAS 923 (AQUA REGIA) Meas								1.5	< 0.5	4390	883	< 1	32	89	342	2.80	5		69	0.8	15	0.37	22
OREAS 923 (AQUA REGIA) Cert								1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2
OREAS 923 (AQUA REGIA) Meas								1.4	< 0.5	4440	887	< 1	35	96	345	2.82	6		70	0.8	17	0.38	23
OREAS 923 (AQUA REGIA) Cert								1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2
OREAS 923 (AQUA REGIA) Meas								1.6	< 0.5	4700	924	< 1	35	93	363	2.94	7		61	0.8	21	0.38	25
OREAS 923 (AQUA REGIA) Cert								1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2
OREAS 923 (AQUA REGIA) Meas								1.2	< 0.5	4270	861	< 1	31	80	331	2.76	7		58	0.8	13	0.36	22
OREAS 923 (AQUA REGIA) Cert								1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326	22.2
Oreas 96 (Aqua Regia) Meas								11.1		> 10000				96	425							< 2	47
Oreas 96 (Aqua Regia) Cert								11.50		39100.00				100	448							27.9	49.2
Oreas 96 (Aqua Regia) Meas								11.1		> 10000				97	427							< 2	46
Oreas 96 (Aqua Regia) Cert								11.50		39100.00				100	448							27.9	49.2
Oreas 96 (Aqua Regia) Meas								11.3		> 10000				96	428							< 2	47
Oreas 96 (Aqua								11.50		39100.				100	448							27.9	49.2

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Regia) Cert										00													
Oreas 96 (Aqua Regia) Meas								10.2		> 10000				88	401						8		47
Oreas 96 (Aqua Regia) Cert								11.50		39100.00				100	448						27.9		49.2
Oreas 96 (Aqua Regia) Meas								10.4		> 10000				91	409						20		48
Oreas 96 (Aqua Regia) Cert								11.50		39100.00				100	448						27.9		49.2
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 45f (Aqua Regia) Meas										337	166	< 1	230	8	25	6.68			134	1.2	< 2	0.06	40
OREAS 45f (Aqua Regia) Cert										336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2
OREAS 45f (Aqua Regia) Meas										346	172	< 1	231	8	25	6.89			137	1.2	< 2	0.06	41
OREAS 45f (Aqua Regia) Cert										336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750	39.2
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
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GS316-3 Meas																							
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Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
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GS317-5 Meas																							
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GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
Oreas 620 (Aqua Regia) Meas								42.2	166	1790	450	8	14	> 5000	> 10000	1.21	50	< 10	0.8	< 2	1.26	14	
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47	450	0.6	2	1.29	12	
Oreas 620 (Aqua Regia) Meas								42.1	157	1850	440	8	13	> 5000	> 10000	1.20	50	< 10	0.8	< 2	1.27	14	
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47	450	0.6	2	1.29	12	
Oreas 620 (Aqua Regia) Meas								41.6	168	1960	441	8	15	> 5000	> 10000	1.21	50	14	0.8	< 2	1.26	14	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12
Oreas 620 (Aqua Regia) Meas								42.6	176	1940	467	8	14	> 5000	> 10000	1.32	54		< 10	0.8	< 2	1.32	15
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12
Oreas 620 (Aqua Regia) Meas								38.9	161	1800	436	8	15	> 5000	> 10000	1.23	50		13	0.8	2	1.23	14
Oreas 620 (Aqua Regia) Cert								38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29	12
1432021090 Orig		-103		62.5	0.378	165.12																	
1432021090 Dup		-103		61.7	0.374	165.12																	
1431012329 Orig								0.2	< 0.5	325	440	3	55	< 2	85	1.73	6	32	42	< 0.5	< 2	1.58	19
1431012329 Dup								0.3	< 0.5	318	442	3	57	< 2	81	1.73	5	27	38	< 0.5	< 2	1.59	19
GC22-0293-010 Orig																							
GC22-0293-010 Dup																							
1431012362 Orig																							
1431012362 Dup																							
1321074125 Orig							0.32																
1321074125 Dup							0.31																
1431012442 Orig								0.2	< 0.5	228	537	1	69	3	72	2.15	3	26	23	< 0.5	< 2	2.67	21
1431012442 Dup								< 0.2	< 0.5	226	526	2	66	3	70	2.11	5	25	23	< 0.5	< 2	2.70	20
1322049084 Orig							0.98																
1322049084 Dup							0.99																
1322048150 Orig																							
1322048150 Dup																							
1322048509 Orig																							
1322048509 Dup																							
1322049001 Orig								< 0.2	< 0.5	25	535	2	19	5	105	2.11	11	28	62	< 0.5	< 2	1.61	10
1322049001 Dup								< 0.2	< 0.5	25	525	1	19	5	103	2.12	11	27	74	< 0.5	< 2	1.58	10
1322049228 Orig																							
1322049228 Dup																							
1314010073 Orig							0.38																
1314010073 Dup							0.37																
1433006038 Orig																							
1433006038 Dup																							
1322048034 Orig							0.89																
1322048034 Dup							0.90																
GC22-0301-001 Orig																							
GC22-0301-001 Dup																							
1431012418 Orig																							
1431012418 Dup																							
1321074175 Orig	Slight	47.5	9.36	49.6	23.7	2.09		< 0.2	< 0.5	97	377	< 1	115	< 2	32	1.12	5	26	23	< 0.5	< 2	2.52	26
1321074175 Dup	Slight	47.7	9.37	49.8	23.8	2.09		< 0.2	< 0.5	98	377	< 1	115	< 2	33	1.13	7	28	23	< 0.5	< 2	2.59	26
GC22-5011-001 Orig																							
GC22-5011-001 Dup																							

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1431012322 Orig																							
1431012322 Dup																							
GC22-0471-015 Orig							0.23																
GC22-0471-015 Dup							0.23																
GC22-5011-018 Orig								< 0.2	< 0.5	10	373	< 1	9	3	93	1.63	21	29	16	< 0.5	< 2	0.76	7
GC22-5011-018 Dup								0.2	< 0.5	11	372	< 1	7	4	89	1.65	24	26	19	< 0.5	< 2	0.76	7
GC22-5003-001 Orig							0.50																
GC22-5003-001 Dup							0.51																
1321074003 Orig																							
1321074003 Dup																							
GC22-5001-001 Orig								< 0.2	< 0.5	19	827	< 1	8	4	75	2.77	26	25	49	< 0.5	< 2	1.94	7
GC22-5001-001 Dup								< 0.2	< 0.5	19	828	< 1	9	4	75	2.79	21	25	50	< 0.5	< 2	1.95	8
1321074001 Orig								< 0.2	< 0.5	27	786	< 1	31	22	122	2.27	4	29	55	< 0.5	< 2	1.78	14
1321074001 Dup								< 0.2	< 0.5	28	797	< 1	34	24	120	2.31	3	33	55	< 0.5	< 2	1.79	14
GC22-5007-018 Orig								0.7	< 0.5	75	404	< 1	3	< 2	31	2.00	4	24	40	< 0.5	3	0.62	5
GC22-5007-018 Dup								0.4	< 0.5	75	400	< 1	1	2	32	1.97	4	21	40	< 0.5	4	0.61	5
1432021054 Orig							0.54																
1432021054 Dup							0.52																
1432021002 Orig																							
1432021002 Dup																							
20220707F1 Orig							0.26																
20220707F1 Dup							0.26																
1322050418 Orig								< 0.2	< 0.5	27	483	< 1	8	3	100	1.60	9	28	40	< 0.5	< 2	1.49	9
1322050418 Dup								< 0.2	< 0.5	27	491	< 1	8	3	101	1.62	9	25	41	< 0.5	< 2	1.50	9
1322048068 Orig	Slight	14.5	8.61	47.1	1.45	32.61																	
1322048068 Dup	Slight	13.9	8.61	46.5	1.43	32.61																	
1322048076 Orig																							
1322048076 Dup																							
1322051107 Orig																							
1322051107 Dup																							
GC22-5023-024 Orig							0.24																
GC22-5023-024 Dup							0.24																
1321072203 Orig																							
1321072203 Dup																							
1321071163 Orig																							
1321071163 Dup																							
1321071226 Orig							0.37																
1321071226 Dup							0.38																
1321071115 Orig								< 0.2	< 0.5	14	498	< 1	6	15	148	1.77	7	31	32	< 0.5	< 2	1.64	6
1321071115 Dup								< 0.2	< 0.5	14	507	< 1	9	15	148	1.80	8	34	32	< 0.5	< 2	1.65	6

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	Co
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm
Lower Limit			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1318089052 Orig																							
1318089052 Dup																							
1321071211 Orig																							
1321071211 Dup																							
1314007001 Orig																							
1314007001 Dup																							
1321080115 Orig							0.32																
1321080115 Dup							0.33																
1321079119 Orig								0.5	< 0.5	29	702	< 1	35	11	160	2.29	7	37	34	< 0.5	< 2	2.03	19
1321079119 Dup								0.6	< 0.5	31	700	< 1	33	10	158	2.27	6	26	24	< 0.5	< 2	2.03	19
1321080107 Orig																							
1321080107 Dup																							
GC22-0316-009 Orig																							
GC22-0316-009 Dup																							
GC22-0312-005 Orig	Slight	-36.0	8.46	14.6	0.289	50.64																	
GC22-0312-005 Dup	Slight	-36.2	8.46	14.4	0.285	50.64																	
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	2	< 2	< 2	< 0.01	< 2	34	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	33	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	30	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	34	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	23	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	22	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	21	< 10	< 0.5	< 2	< 0.01	< 1
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	22	< 10	< 0.5	< 2	< 0.01	< 1

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
BaSO4 Meas																							13.9
BaSO4 Cert																							14.0
BaSO4 Meas																							13.8
BaSO4 Cert																							14.0
BaSO4 Meas																							13.7
BaSO4 Cert																							14.0
BaSO4 Meas																							13.8
BaSO4 Cert																							14.0
BaSO4 Meas																							14.2
BaSO4 Cert																							14.0
BaSO4 Meas																							14.2
BaSO4 Cert																							14.0
BaSO4 Meas																							14.2
BaSO4 Cert																							14.0
BaSO4 Meas																							14.0
BaSO4 Cert																							14.0
BaSO4 Meas																							14.3
BaSO4 Cert																							14.0
BaSO4 Meas																							
BaSO4 Cert																							
BaSO4 Meas																							
BaSO4 Cert																							
OREAS 98 (Aqua Regia) Meas																19							
OREAS 98 (Aqua Regia) Cert																15							
OREAS 98 (Aqua Regia) Meas																22							
OREAS 98 (Aqua Regia) Cert																15							
OREAS 98 (Aqua Regia) Meas																20							
OREAS 98 (Aqua Regia) Cert																15							
OREAS 98 (Aqua Regia) Meas																17							
OREAS 98 (Aqua Regia) Cert																15							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
RTS-3a Meas																							
RTS-3a Cert																							
GS311-4 Meas																						1.12	0.56
GS311-4 Cert																						1.11	0.54
GS311-4 Meas																						1.10	0.55
GS311-4 Cert																						1.11	0.54
GS311-4 Meas																						1.11	0.56
GS311-4 Cert																						1.11	0.54
GS311-4 Meas																						1.11	0.56
GS311-4 Cert																						1.11	0.54
GS311-4 Meas																						1.11	0.56

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S			
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%			
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01			
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS			
GS311-4 Cert																							1.11	0.54		
GS311-4 Meas																								1.11	0.55	
GS311-4 Cert																								1.11	0.54	
GS311-4 Meas																								1.08	0.55	
GS311-4 Cert																								1.11	0.54	
GS311-4 Meas																								1.08	0.55	
GS311-4 Cert																								1.11	0.54	
GS311-4 Meas																								1.10	0.55	
GS311-4 Cert																								1.11	0.54	
GS311-4 Meas																								1.09	0.56	
GS311-4 Cert																								1.11	0.54	
SiO2 Meas																								< 0.01	0.03	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
SiO2 Meas																								< 0.01	< 0.01	
SiO2 Cert																										
NBM-1 (slight fzz) Meas																										
NBM-1 (slight fzz) Cert																										
NBM-1 (slight fzz) Meas																										
NBM-1 (slight fzz) Cert																										
OREAS 922 (AQUA REGIA) Meas	45	5.33	< 10		0.41	35	1.34	0.020	0.065	0.37	< 2	4	15			< 2	< 10	33	< 10	16	21					
OREAS 922 (AQUA REGIA) Cert	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	45	5.35	< 10		0.40	36	1.34	0.020	0.065	0.39	4	4	16			< 2	< 10	33	< 10	17	23					
OREAS 922 (AQUA REGIA) Cert	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					
OREAS 922 (AQUA REGIA) Meas	46	5.37	< 10		0.40	36	1.34	0.020	0.064	0.37	3	4	16			< 2	< 10	33	< 10	17	8					
OREAS 922 (AQUA REGIA) Cert	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3					

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
OREAS 922 (AQUA REGIA) Meas	46	5.36	< 10		0.41	34	1.32	0.020	0.065	0.39	2	4	17			< 2	< 10	33	< 10	16	4		
OREAS 922 (AQUA REGIA) Cert	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3		
OREAS 922 (AQUA REGIA) Meas	46	5.34	< 10		0.41	35	1.30	0.020	0.065	0.38	3	3	17			< 2	< 10	33	< 10	16	6		
OREAS 922 (AQUA REGIA) Cert	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3		
OREAS 923 (AQUA REGIA) Meas	42	6.09	< 10		0.34	33	1.41		0.061	0.69	3	4	14			< 2	< 10	32	< 10	15	23		
OREAS 923 (AQUA REGIA) Cert	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5		
OREAS 923 (AQUA REGIA) Meas	41	6.08	< 10		0.33	33	1.41		0.061	0.69	3	4	14			< 2	< 10	32	< 10	15	24		
OREAS 923 (AQUA REGIA) Cert	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5		
OREAS 923 (AQUA REGIA) Meas	41	6.12	< 10		0.34	33	1.43		0.061	0.70	3	4	14			< 2	< 10	32	< 10	15	10		
OREAS 923 (AQUA REGIA) Cert	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5		
OREAS 923 (AQUA REGIA) Meas	45	6.45	< 10		0.35	34	1.48		0.065	0.74	3	4	16			< 2	< 10	34	< 10	15	3		
OREAS 923 (AQUA REGIA) Cert	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5		
OREAS 923 (AQUA REGIA) Meas	41	5.99	< 10		0.34	32	1.39		0.062	0.68	3	3	15			< 2	< 10	32	< 10	14	11		
OREAS 923 (AQUA REGIA) Cert	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5		
Oreas 96 (Aqua Regia) Meas										3.80	8												
Oreas 96 (Aqua Regia) Cert										4.38	4.53												
Oreas 96 (Aqua Regia) Meas										3.95	7												
Oreas 96 (Aqua Regia) Cert										4.38	4.53												
Oreas 96 (Aqua Regia) Meas										3.97	6												
Oreas 96 (Aqua Regia) Cert										4.38	4.53												
Oreas 96 (Aqua Regia) Meas										3.96	6												
Oreas 96 (Aqua Regia) Cert										4.38	4.53												
Oreas 96 (Aqua Regia) Meas										4.05	6												
Oreas 96 (Aqua Regia) Cert										4.38	4.53												

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	
Regia) Cert																								
OREAS 229b (Fire Assay) Meas																								
OREAS 229b (Fire Assay) Cert																								
OREAS 45f (Aqua Regia) Meas	350	13.7	20	< 1	0.09	< 10	0.17	0.033	0.021	0.02		28	15	0.12		< 2	< 10	195			4	14		
OREAS 45f (Aqua Regia) Cert	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217			6.74	30.0		
OREAS 45f (Aqua Regia) Meas	356	14.1	20	< 1	0.09	< 10	0.17	0.034	0.021	0.02		28	15	0.14		< 2	< 10	199			4	17		
OREAS 45f (Aqua Regia) Cert	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217			6.74	30.0		
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
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OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
OREAS 238 (Fire Assay) Meas																								
OREAS 238 (Fire Assay) Cert																								
GS316-3 Meas																							0.05	0.32
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.36
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.34
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.04	0.34
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.33
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.33
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.34
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.34
GS316-3 Cert																							0.0600	0.340
GS316-3 Meas																							0.05	0.34
GS316-3 Cert																							0.0600	0.340
OREAS 257b (Fire Assay) Meas																								
OREAS 257b (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	
Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
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Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas																								
Oreas E1336 (Fire Assay) Cert																								
GS317-5 Meas																							8.00	15.3
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							8.21	14.8
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							8.32	14.8
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							8.28	14.8
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							8.05	14.9
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							7.93	14.5
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																							7.86	14.6
GS317-5 Cert																							8.46	15.5
GS317-5 Meas																								14.4
GS317-5 Cert																								15.5
Oreas 620 (Aqua Regia) Meas	19	2.68	< 10	2	0.28	26	0.27	0.115	0.030	2.58	67		19		< 2	< 10	8	< 10	7	55				
Oreas 620 (Aqua Regia) Cert	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20		0.5	2.2	7	0.79	7	57				
Oreas 620 (Aqua Regia) Meas	17	2.68	< 10	2	0.28	25	0.27	0.116	0.030	2.59	61		19		< 2	< 10	8	< 10	7	58				
Oreas 620 (Aqua Regia) Cert	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20		0.5	2.2	7	0.79	7	57				
Oreas 620 (Aqua Regia) Meas	21	2.68	< 10	2	0.28	26	0.27	0.115	0.030	2.59	60		19		< 2	< 10	8	< 10	7	59				
Oreas 620 (Aqua Regia) Cert	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20		0.5	2.2	7	0.79	7	57				
Oreas 620 (Aqua Regia) Meas	18	2.93	< 10	2	0.31	26	0.29	0.125	0.032	2.82	59		21		< 2	< 10	9	< 10	7	24				
Oreas 620 (Aqua Regia) Cert	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20		0.5	2.2	7	0.79	7	57				
Oreas 620 (Aqua Regia) Meas	19	2.74	< 10	2	0.29	25	0.27	0.117	0.031	2.65	62		20		< 2	< 10	8	< 10	6	32				
Oreas 620 (Aqua Regia) Cert	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20		0.5	2.2	7	0.79	7	57				
1432021090 Orig																								
1432021090 Dup																								
1431012329 Orig	109	3.35	< 10	< 1	0.40	16	1.51	0.042	0.057	0.98	3	4	77	0.12	2	< 2	< 10	44	< 10	3	8			

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
1431012329 Dup	108	3.36	< 10	< 1	0.40	16	1.51	0.042	0.057	0.99	< 2	4	78	0.12	3	< 2	< 10	45	< 10	3	8		
GC22-0293-010 Orig																						0.03	2.85
GC22-0293-010 Dup																						0.04	2.86
1431012362 Orig																							
1431012362 Dup																							
1321074125 Orig																						0.44	0.23
1321074125 Dup																						0.44	0.23
1431012442 Orig	155	4.42	< 10	< 1	0.07	17	2.11	0.040	0.060	1.34	< 2	7	66	0.01	< 1	< 2	< 10	73	< 10	4	6		
1431012442 Dup	151	4.32	< 10	< 1	0.06	17	2.07	0.039	0.058	1.32	4	7	65	0.01	< 1	< 2	< 10	73	< 10	3	6		
1322049084 Orig																							
1322049084 Dup																							
1322048150 Orig																						0.51	0.57
1322048150 Dup																						0.52	0.58
1322048509 Orig																							
1322048509 Dup																							
1322049001 Orig	20	2.28	< 10	< 1	0.24	13	0.91	0.189	0.045	0.66	< 2	2	126	0.06	< 1	< 2	< 10	22	< 10	3	6		
1322049001 Dup	18	2.23	< 10	< 1	0.24	13	0.88	0.196	0.045	0.66	< 2	2	129	0.07	2	< 2	< 10	22	< 10	3	10		
1322049228 Orig																						0.84	0.65
1322049228 Dup																						0.84	0.65
1314010073 Orig																							
1314010073 Dup																							
1433006038 Orig																							
1433006038 Dup																							
1322048034 Orig																							
1322048034 Dup																							
GC22-0301-001 Orig																						0.14	1.87
GC22-0301-001 Dup																						0.15	1.86
1431012418 Orig																							
1431012418 Dup																							
1321074175 Orig	203	1.75	< 10	< 1	0.07	< 10	1.35	0.104	0.027	0.17	< 2	8	64	0.11	< 1	< 2	< 10	43	< 10	3	5		
1321074175 Dup	205	1.78	< 10	< 1	0.07	< 10	1.37	0.107	0.027	0.17	< 2	9	65	0.11	3	< 2	< 10	43	< 10	3	6		
GC22-5011-001 Orig																							
GC22-5011-001 Dup																							
1431012322 Orig																						1.13	0.94
1431012322 Dup																						1.13	0.95
GC22-0471-015 Orig																							
GC22-0471-015 Dup																							
GC22-5011-018 Orig	7	3.74	< 10	< 1	0.21	13	0.81	0.048	0.042	3.05	2	< 1	22	0.04	1	< 2	< 10	9	< 10	2	17		
GC22-5011-018 Dup	7	3.77	< 10	< 1	0.22	13	0.80	0.048	0.041	3.07	2	< 1	22	0.04	< 1	< 2	< 10	9	< 10	2	17		
GC22-5003-001 Orig																						0.15	2.16
GC22-5003-001 Dup																						0.14	2.14
1321074003 Orig																							

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S	
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01	
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS	
1321074003 Dup																								
GC22-5001-001 Orig	9	2.11	< 10	< 1	0.30	13	1.02	0.286	0.038	1.11	2	1	141	0.02	4	< 2	< 10	12	< 10	2	7			
GC22-5001-001 Dup	9	2.14	< 10	< 1	0.31	13	1.02	0.286	0.038	1.13	< 2	1	143	0.02	< 1	< 2	< 10	12	< 10	2	10			
1321074001 Orig	34	2.71	< 10	< 1	0.36	24	1.35	0.109	0.082	0.98	< 2	2	94	0.10	2	< 2	< 10	27	< 10	4	7			
1321074001 Dup	34	2.76	< 10	< 1	0.36	24	1.37	0.110	0.084	1.00	< 2	2	96	0.10	< 1	< 2	< 10	27	< 10	4	6			
GC22-5007-018 Orig	4	3.84	< 10	< 1	0.14	< 10	0.77	0.044	0.034	1.41	< 2	< 1	41	0.03	1	< 2	< 10	8	< 10	2	13	0.07	1.40	
GC22-5007-018 Dup	4	3.80	< 10	< 1	0.14	< 10	0.77	0.043	0.034	1.39	< 2	< 1	40	0.03	3	< 2	< 10	8	< 10	2	13	0.06	1.42	
1432021054 Orig																								
1432021054 Dup																								
1432021002 Orig																							0.75	1.33
1432021002 Dup																							0.75	1.34
20220707F1 Orig																								
20220707F1 Dup																								
1322050418 Orig	8	2.31	< 10	< 1	0.20	14	0.84	0.091	0.038	0.48	< 2	1	50	0.03	< 1	< 2	< 10	15	< 10	3	8			
1322050418 Dup	8	2.33	< 10	< 1	0.20	13	0.84	0.091	0.039	0.49	< 2	1	51	0.03	1	< 2	< 10	15	< 10	3	7			
1322048068 Orig																								
1322048068 Dup																								
1322048076 Orig																							0.47	1.82
1322048076 Dup																							0.46	1.80
1322051107 Orig																								
1322051107 Dup																								
GC22-5023-024 Orig																								
GC22-5023-024 Dup																								
1321072203 Orig																								
1321072203 Dup																								
1321071163 Orig																							0.25	2.33
1321071163 Dup																							0.24	2.34
1321071226 Orig																							0.38	1.21
1321071226 Dup																							0.38	1.19
1321071115 Orig	8	2.05	< 10	< 1	0.15	18	0.68	0.140	0.049	0.34	< 2	1	98	0.03	1	< 2	< 10	14	< 10	2	5			
1321071115 Dup	8	2.08	< 10	< 1	0.15	18	0.70	0.141	0.049	0.34	< 2	1	99	0.03	< 1	< 2	< 10	15	< 10	2	4			
1318089052 Orig																								
1318089052 Dup																								
1321071211 Orig																							0.59	1.26
1321071211 Dup																							0.53	1.16
1314007001 Orig																								
1314007001 Dup																								
1321080115 Orig																								
1321080115 Dup																								
1321079119 Orig	50	3.96	< 10	< 1	0.40	32	1.13	0.148	0.094	2.06	< 2	3	147	0.17	< 1	< 2	< 10	48	< 10	5	11			
1321079119 Dup	50	3.98	< 10	< 1	0.40	32	1.14	0.146	0.095	2.05	< 2	3	146	0.16	1	< 2	< 10	48	< 10	5	9			
1321080107 Orig																							0.45	0.52
1321080107 Dup																							0.45	0.55
GC22-0316-009 Orig																							0.36	1.98
GC22-0316-009 Dup																							0.37	1.96

Analyte Symbol	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total	Total S
Unit Symbol	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%
Lower Limit	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS	CS
GC22-0312-005 Orig																							
GC22-0312-005 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		
Method Blank	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.004	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
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BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
GS311-4 Meas		
GS311-4 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
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SiO2 Cert		
SiO2 Meas		
SiO2 Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
(AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
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OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
OREAS 229b (Fire Assay) Meas		12.1
OREAS 229b (Fire Assay) Cert		11.95
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 45f (Aqua Regia) Meas		
OREAS 45f (Aqua Regia) Cert		
OREAS 238 (Fire Assay) Meas	3100	
OREAS 238 (Fire Assay) Cert	3030	
OREAS 238 (Fire Assay) Meas	3120	
OREAS 238 (Fire Assay) Cert	3030	
OREAS 238 (Fire Assay) Meas	3170	
OREAS 238 (Fire Assay) Cert	3030	
OREAS 238 (Fire Assay) Meas	3050	
OREAS 238 (Fire Assay) Cert	3030	
OREAS 238 (Fire Assay) Meas	3110	
OREAS 238 (Fire Assay) Cert	3030	
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
GS316-3 Meas		
GS316-3 Cert		
OREAS 257b (Fire Assay) Meas		14.4
OREAS 257b		14.220

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
(Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas	510	
Oreas E1336 (Fire Assay) Cert	510.000	
Oreas E1336 (Fire Assay) Meas	517	
Oreas E1336 (Fire Assay) Cert	510.000	
Oreas E1336 (Fire Assay) Meas	530	
Oreas E1336 (Fire Assay) Cert	510.000	
Oreas E1336 (Fire Assay) Meas	506	
Oreas E1336 (Fire Assay) Cert	510.000	
Oreas E1336 (Fire Assay) Meas	506	
Oreas E1336 (Fire Assay) Cert	510.000	
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
GS317-5 Meas		
GS317-5 Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
Oreas 620 (Aqua Regia) Cert		
1432021090 Orig		
1432021090 Dup		
1431012329 Orig		
1431012329 Dup		
GC22-0293-010 Orig		
GC22-0293-010 Dup		
1431012362 Orig	51	
1431012362 Dup	51	
1321074125 Orig		
1321074125 Dup		
1431012442 Orig	69	
1431012442 Dup	71	
1322049084 Orig		
1322049084 Dup		
1322048150 Orig		
1322048150 Dup		
1322048509 Orig	16	
1322048509 Dup	16	
1322049001 Orig		
1322049001 Dup		
1322049228 Orig		
1322049228 Dup		
1314010073 Orig		
1314010073 Dup		
1433006038 Orig	45	
1433006038 Dup	43	
1322048034 Orig		
1322048034 Dup		
GC22-0301-001 Orig		
GC22-0301-001 Dup		
1431012418 Orig	41	
1431012418 Dup	45	
1321074175 Orig		
1321074175 Dup		
GC22-5011-001 Orig	323	
GC22-5011-001 Dup	304	
1431012322 Orig		
1431012322 Dup		
GC22-0471-015 Orig		
GC22-0471-015 Dup		
GC22-5011-018 Orig		
GC22-5011-018		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
Dup		
GC22-5003-001		
Orig		
GC22-5003-001		
Dup		
1321074003 Orig	48	
1321074003 Dup	47	
GC22-5001-001		
Orig		
GC22-5001-001		
Dup		
1321074001 Orig	44	
1321074001 Dup	43	
GC22-5007-018		
Orig		
GC22-5007-018		
Dup		
1432021054 Orig		
1432021054 Dup		
1432021002 Orig		
1432021002 Dup		
20220707F1 Orig	56	
20220707F1 Dup	56	
1322050418 Orig		
1322050418 Dup		
1322048068 Orig		
1322048068 Dup		
1322048076 Orig		
1322048076 Dup		
1322051107 Orig	26	
1322051107 Dup	27	
GC22-5023-024		
Orig		
GC22-5023-024		
Dup		
1321072203 Orig	126	
1321072203 Dup	117	
1321071163 Orig		
1321071163 Dup		
1321071226 Orig		
1321071226 Dup		
1321071115 Orig		
1321071115 Dup		
1318089052 Orig	85	
1318089052 Dup	82	
1321071211 Orig		
1321071211 Dup		
1314007001 Orig	37	
1314007001 Dup	38	
1321080115 Orig		
1321080115 Dup		
1321079119 Orig		

Analyte Symbol	Au	Au
Unit Symbol	ppb	g/tonne
Lower Limit	5	0.02
Method Code	FA-AA	FA- GRA
1321079119 Dup		
1321080107 Orig		
1321080107 Dup		
GC22-0316-009 Orig		
GC22-0316-009 Dup		
GC22-0312-005 Orig		
GC22-0312-005 Dup		
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
Method Blank	< 5	
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Method Blank		
Method Blank	< 5	
Method Blank	< 5	
Method Blank		< 0.02
Method Blank		< 0.02
Method Blank		
Method Blank		
Method Blank		
Method Blank		



Report No.: A22-14601
Report Date: 13-Feb-23
Date Submitted: 07-Oct-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
5967 Highway 11/71
PO Box 5
Emo ON P0W 1E0
Canada

ATTN: Accounts Payable (RC/Rainy River)(inv)

CERTIFICATE OF ANALYSIS

213 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package requested, Method, and Testing Date. Rows include 1A2-50-Tbay, 1A3-50-Tbay, and 1E3-Tbay NewGold.

REPORT A22-14601

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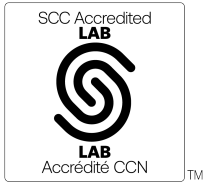
Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: Sample FO11854 was insufficient for further analysis.



LabID: 673

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
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E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:

<original signed by>

Mark Vandergeest
Quality Control Coordinator

Report No.: A22-14601
Report Date: 13-Feb-23
Date Submitted: 07-Oct-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
5967 Highway 11/71
PO Box 5
Emo ON P0W 1E0
Canada

ATTN: Accounts Payable (RC/Rainy River)(inv)

CERTIFICATE OF ANALYSIS

213 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, Testing Date. Rows include 11 ABA Modified Sobek Package, 4F-C, S, Acid Base Accounting, and Infrared.

REPORT A22-14601

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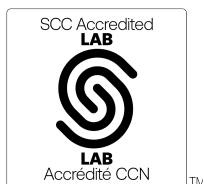
Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: Sample FO11854 was insufficient for further analysis.



LabID: 266

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

CERTIFIED BY:
<original signed by>

Mark Vandergeest
Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A22-14601

Analyte Symbol	Au	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	ppb	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	5			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	FA-AA	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0413-002	1660	None	-67.3	8.58	19.5	0.224	86.80	1.10	5.0	16.3	224	440	< 1	7	91	3670	0.63	154	23	14	< 0.5	< 2	0.74
1319060207	904	Slight	-18.5	8.82	40.0	0.684	58.42	0.78	0.9	3.2	22	1180	< 1	7	97	720	0.42	22	28	17	< 0.5	< 2	1.44
1319060399	203	Slight	16.5	9.54	41.4	1.66	24.96	0.49	1.6	6.8	82	669	< 1	5	912	1600	0.42	38	26	34	< 0.5	< 2	1.50
1319060390	510	None	-40.0	9.18	21.0	0.344	60.97	1.05	1.2	21.3	52	265	< 1	13	11	4920	0.40	96	26	18	< 0.5	< 2	0.77
GC22-0375-006	211	None	4.50	9.06	17.2	1.35	12.72	0.27	0.4	1.4	115	676	< 1	42	11	331	5.27	80	33	16	< 0.5	< 2	3.17
GC22-0424-001	108	None	14.3	9.33	28.2	2.04	13.82	0.28	1.7	0.9	114	321	< 1	10	72	317	1.12	14	27	31	< 0.5	< 2	1.40
GC22-0414-005	7	None	9.47	9.20	12.5	4.13	3.03	0.10	< 0.2	< 0.5	132	463	< 1	47	< 2	51	5.26	< 2	38	< 10	< 0.5	< 2	3.28
1313010008	103	Slight	7.70	9.11	57.0	1.16	49.29	0.74	0.3	< 0.5	30	399	< 1	99	< 2	61	2.54	10	27	24	< 0.5	5	2.38
GC22-0426-009FD	508	None	-68.7	8.70	12.7	0.156	81.43	0.71	0.4	4.8	52	251	< 1	9	4	1170	0.99	34	27	13	< 0.5	< 2	0.61
1319060338	616	None	-74.7	8.54	8.73	0.105	83.44	1.08	3.1	17.0	170	277	< 1	6	1160	4340	0.49	103	25	15	< 0.5	< 2	0.37
GC22-0417-013	8	None	15.5	8.83	16.9	11.9	1.42	0.11	< 0.2	< 0.5	130	532	< 1	46	< 2	61	5.28	2	36	11	< 0.5	< 2	3.10
GC22-0365-013	455	None	-180	7.73	8.72	0.0463	188.49	1.49	11.7	3.1	694	626	1	17	79	884	1.27	288	17	17	< 0.5	6	0.31
GC22-0421-001	409	None	-29.3	8.64	43.6	0.598	72.92	0.86	20.9	5.2	26	959	< 1	14	847	1770	0.57	73	25	18	< 0.5	< 2	1.76
1319060200	888	Slight	-31.3	9.11	31.2	0.499	62.54	0.57	2.3	1.9	18	252	1	20	11	482	0.51	28	27	20	< 0.5	< 2	1.18
GC22-0425-006	63	None	-13.8	9.15	33.0	0.705	46.79	0.43	0.7	< 0.5	17	580	< 1	10	38	107	1.02	42	30	26	< 0.5	< 2	1.40
1431015079	62	Slight	64.6	9.35	79.3	5.37	14.76	0.36	< 0.2	< 0.5	71	666	< 1	30	4	80	1.77	6	24	44	< 0.5	< 2	2.84
GC22-0419-001	106	Slight	36.0	9.30	50.9	3.43	14.84	0.62	0.4	0.7	31	1250	< 1	8	36	234	1.08	15	26	25	< 0.5	< 2	2.06
GC22-0588-009	232	Slight	-11.5	9.00	53.8	0.824	65.24	0.59	1.1	0.7	41	708	< 1	10	55	305	0.68	71	25	18	< 0.5	< 2	2.01
GC22-0362-006	306	Slight	5.28	9.31	46.6	1.13	41.35	0.46	8.7	0.8	23	625	1	13	150	204	0.64	37	29	25	< 0.5	< 2	2.04
1313010026	134	None	-22.0	8.61	16.5	0.427	38.50	0.46	< 0.2	< 0.5	124	422	1	17	3	101	3.31	9	28	31	< 0.5	< 2	1.74
1319060329	1070	Slight	-25.6	8.79	48.3	0.654	73.98	0.90	1.6	5.8	64	631	< 1	10	1080	1730	0.40	45	28	11	< 0.5	< 2	1.81
1319060148	3040	None	-24.0	8.81	29.2	0.549	53.27	0.81	34.8	9.1	122	466	1	4	1110	2580	0.42	24	26	< 10	< 0.5	< 2	1.14
F011864	1040																						
F011897	1040																						
GC22-2050-009	41	Slight	84.3	8.94	100	6.35	15.74	0.76	1.1	< 0.5	288	1500	< 1	44	< 2	128	3.35	23	25	< 10	< 0.5	< 2	3.45
1313008082	209	None	-123	8.26	10.9	0.0817	133.97	1.64	2.3	2.3	314	974	< 1	25	10	666	3.13	85	25	< 10	< 0.5	7	0.39
GC22-0368-006	63	Moderate	71.2	8.76	99.5	3.52	28.28	0.81	0.5	< 0.5	190	1310	< 1	62	< 2	160	3.85	11	27	< 10	< 0.5	< 2	3.73
GC22-0495-008	658	Moderate	55.5	8.51	111	2.01	55.01	1.22	2.4	1.7	176	1060	< 1	66	< 2	473	4.32	16	25	43	< 0.5	< 2	3.66
GC22-2035-004	111	Moderate	125	8.55	153	5.44	28.16	0.97	1.0	1.1	451	1240	< 1	57	36	304	3.81	21	25	< 10	< 0.5	< 2	4.50
GC22-0371-013	174	Slight	19.4	8.54	74.3	1.35	54.92	1.13	1.4	< 0.5	261	1040	< 1	64	4	179	4.38	18	31	22	< 0.5	< 2	3.04
GC22-0348-010	371	Moderate	76.8	8.45	181	1.74	104.42	2.89	1.7	< 0.5	154	1610	< 1	51	4	138	2.54	27	22	< 10	< 0.5	2	5.05
GC22-2017-006	25	Slight	89.3	9.01	93.3	23.1	4.03	0.45	0.4	< 0.5	297	874	< 1	51	< 2	134	3.18	24	25	< 10	< 0.5	< 2	3.45
GC22-2022-001	1600	Slight	87.5	8.87	117	4.00	29.19	1.11	1.5	< 0.5	392	1220	< 1	55	< 2	143	3.56	34	26	< 10	< 0.5	< 2	3.98
1313008094	125	None	-35.1	8.90	10.5	0.230	45.61	0.47	0.6	2.0	98	786	< 1	9	4	603	1.84	17	24	27	< 0.5	< 2	0.51
GC22-0520-017	26	Slight	107	8.91	112	24.7	4.54	0.51	0.5	< 0.5	236	1160	< 1	78	< 2	214	3.55	7	29	< 10	< 0.5	< 2	4.06
GC22-0520-002	810	Slight	-25.0	8.49	83.4	0.770	108.33	3.53	4.4	2.8	415	1600	271	10	4	710	3.26	66	24	16	< 0.5	< 2	2.55
GC22-0521-011	97	Slight	69.4	9.06	91.2	4.19	21.79	0.49	0.6	0.6	21	964	1	18	7	197	1.71	27	24	55	< 0.5	< 2	3.16
1320059066	69	Slight	11.8	9.02	56.5	1.27	44.62	0.88	0.8	1.2	39	950	< 1	26	5	347	1.76	23	30	30	< 0.5	< 2	2.17
GC22-5127-014	1150	Slight	-8.50	8.95	61.7	0.879	70.24	0.62	2.3	3.7	37	1340	< 1	11	123	973	0.78	38	24	22	< 0.5	< 2	1.50
1313008056	180	None	-40.1	8.86	13.9	0.258	54.05	0.53	0.3	< 0.5	53	782	< 1	11	< 2	266	2.39	10	27	33	< 0.5	< 2	0.85
1320059117	100	Slight	-3.66	8.85	54.6	0.937	58.26	0.95	1.2	1.9	44	896	< 1	22	3	568	1.57	24	31	37	< 0.5	< 2	2.22
F011877	326																						
F011876	324																						
1321081020	73	Slight	28.2	9.12	69.2	1.69	40.98	1.02	0.3	< 0.5	56	1360	< 1	50	3	126	3.10	6	30	22	< 0.5	< 2	2.98
GC22-0474-007	330	None	-51.6	8.46	9.00	0.148	60.60	0.49	0.4	< 0.5	142	386	< 1	5	< 2	43	2.47	8	25	34	< 0.5	4	0.56

Results

Activation Laboratories Ltd.

Report: A22-14601

Analyte Symbol	Au	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	ppb	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit	5			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	FA-AA	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1321081041	154	Slight	-19.4	8.26	75.7	0.796	95.03	1.77	1.3	< 0.5	85	1670	< 1	55	< 2	283	3.18	37	31	24	< 0.5	< 2	3.25	
1321078401	15	Slight	41.1	9.84	43.3	19.3	2.24	0.29	< 0.2	< 0.5	27	483	1	9	2	69	1.22	3	31	53	< 0.5	< 2	1.81	
GC22-0308-011	160	None	-35.7	8.73	13.7	0.278	49.41	0.41	0.3	< 0.5	206	321	< 1	8	< 2	36	2.06	9	29	33	< 0.5	2	0.63	
1321081449	33	Moderate	58.9	9.03	84.2	3.33	25.28	0.77	< 0.2	< 0.5	36	1330	< 1	28	5	176	3.72	8	30	61	< 0.5	< 2	3.74	
1313003009	666	None	-10.7	8.97	8.99	0.456	19.70	0.23	0.4	< 0.5	177	413	< 1	7	4	65	3.01	8	27	22	< 0.5	< 2	1.14	
1313003070	163	None	1.32	9.35	12.5	1.12	11.14	0.20	< 0.2	< 0.5	58	226	< 1	7	2	38	1.92	7	28	34	< 0.5	< 2	0.89	
1313003083	72	None	-29.3	8.87	15.2	0.341	44.48	0.38	0.2	< 0.5	48	246	1	8	< 2	90	2.56	4	25	31	< 0.5	< 2	1.22	
GC22-2030-013	148	None	-40.4	8.72	13.0	0.243	53.36	0.45	0.4	< 0.5	45	370	< 1	9	2	78	2.75	14	29	39	< 0.5	< 2	0.85	
GC22-0475-002	401	None	-40.0	8.22	10.7	0.211	50.72	0.46	1.5	< 0.5	643	241	20	7	< 2	33	2.98	13	29	28	< 0.5	6	1.17	
GC22-0331-010	108	None	-48.7	8.73	9.22	0.159	57.91	0.43	0.4	< 0.5	84	358	< 1	6	2	89	2.66	18	26	29	< 0.5	2	1.10	
GC22-0326-006	27	Slight	38.9	9.70	44.0	8.75	5.03	0.33	< 0.2	< 0.5	15	485	< 1	3	4	41	1.02	< 2	31	177	< 0.5	< 2	1.84	
1313005138	112	None	3.26	9.00	13.2	1.33	9.97	0.20	< 0.2	< 0.5	9	604	< 1	10	< 2	91	3.34	3	26	40	< 0.5	< 2	0.98	
1313003047	59	None	4.58	8.97	25.4	1.22	20.86	0.36	< 0.2	< 0.5	98	266	2	6	3	33	1.98	6	27	36	< 0.5	< 2	1.24	
1313005163	860	None	-8.84	9.23	11.2	0.559	20.05	0.27	6.4	< 0.5	29	531	< 1	11	2	89	2.57	4	26	30	< 0.5	6	0.54	
GC22-2011-001	64	None	-64.2	9.20	17.0	0.209	81.13	0.60	< 0.2	< 0.5	7	291	< 1	7	4	142	2.51	10	24	24	< 0.5	< 2	1.59	
GC22-0334-013	102	None	-68.9	8.38	5.00	0.0676	73.93	0.52	0.3	< 0.5	11	354	< 1	6	5	39	2.46	27	27	26	< 0.5	< 2	0.59	
1313003073	174	None	-8.29	7.85	12.5	0.601	20.78	0.30	0.3	< 0.5	138	326	< 1	6	2	36	2.06	6	26	36	< 0.5	< 2	1.06	
GC22-0305-001	3500	None	-17.0	9.04	16.2	0.489	33.17	0.32	< 0.2	< 0.5	124	305	2	8	< 2	36	3.68	10	26	27	< 0.5	< 2	1.69	
F011896	> 5000																							
F011854	> 5000																							
1313009041	570	None	-28.9	8.75	10.9	0.275	39.85	0.39	0.9	< 0.5	471	302	2	3	< 2	32	2.47	11	27	33	< 0.5	8	1.11	
GC22-0329-009	134	None	-30.5	8.52	14.2	0.318	44.78	0.45	0.4	< 0.5	50	440	< 1	7	6	77	2.98	9	28	30	< 0.5	3	1.34	
1320056693	4420	Moderate	16.5	9.31	43.9	1.60	27.39	0.44	32.8	2.2	66	703	< 1	5	497	879	0.40	105	31	30	< 0.5	< 2	1.74	
GC22-0400-001	440	None	55.1	8.79	88.5	2.65	33.37	0.55	0.6	2.3	73	1060	< 1	15	3	645	1.49	14	30	49	< 0.5	2	2.46	
GC22-0400-018	223	Slight	21.5	8.76	73.5	1.41	52.01	1.66	1.8	13.3	231	1710	< 1	98	4	2420	6.35	14	29	23	< 0.5	< 2	4.42	
GC22-5044-024	50	None	-8.20	9.46	6.47	0.441	14.66	0.24	0.8	< 0.5	438	319	5	14	< 2	46	2.40	9	27	21	< 0.5	< 2	0.56	
1320056699	429	Slight	5.20	8.85	57.3	1.10	52.14	0.53	7.4	1.0	12	1350	< 1	5	230	363	0.40	140	30	30	< 0.5	< 2	2.29	
GC22-0388-001	1470	Slight	-85.1	8.45	47.1	0.356	132.22	3.28	6.1	8.2	932	1010	1	15	6	1510	1.54	102	27	< 10	< 0.5	< 2	1.81	
GC22-0388-018	349	Moderate	23.0	8.79	93.5	1.33	70.51	2.14	2.1	< 0.5	316	2520	< 1	3	4	259	4.24	25	30	36	< 0.5	< 2	4.45	
GC22-0387-015	161	Moderate	75.5	8.61	96.3	4.62	20.84	1.15	0.8	0.5	84	2700	< 1	1	3	344	4.22	9	27	21	< 0.5	< 2	4.25	
GC22-0390-001	114	Moderate	42.8	8.98	106	1.68	63.23	1.29	0.5	< 0.5	59	1700	< 1	61	< 2	272	3.86	12	26	26	< 0.5	< 2	3.93	
1320055077	405	Slight	-40.5	8.94	15.5	0.276	56.01	0.60	1.5	4.6	36	127	< 1	10	46	1120	0.49	29	31	32	< 0.5	< 2	0.60	
GC22-0385-015	131	Slight	54.2	8.67	97.4	2.25	43.22	0.89	0.6	1.5	118	1200	< 1	81	5	532	5.68	14	27	36	< 0.5	2	4.18	
GC22-0391-018	77	Moderate	120	8.62	152	4.69	32.39	0.85	0.3	< 0.5	62	1470	< 1	95	4	235	4.72	17	30	57	< 0.5	2	4.63	
1313007126	10	None	15.4	9.02	16.7	12.3	1.36	0.09	< 0.2	< 0.5	128	454	< 1	45	< 2	56	5.65	< 2	34	< 10	< 0.5	< 2	3.38	
1313007034	269	Slight	-30.9	8.55	17.2	0.357	48.04	0.39	0.4	< 0.5	111	424	< 1	6	3	57	2.36	19	27	28	< 0.5	3	1.23	
GC22-0396-001	43	Slight	21.8	8.92	59.4	1.58	37.60	0.51	< 0.2	< 0.5	16	801	< 1	22	2	90	2.18	11	29	43	< 0.5	< 2	2.21	
1320056647	254	Slight	7.08	9.06	46.2	1.18	39.16	0.52	20.3	< 0.5	13	2580	< 1	7	112	206	0.48	124	29	34	< 0.5	< 2	1.64	
1313007161	66	None	-59.8	8.05	11.7	0.164	71.53	0.56	0.2	< 0.5	109	393	< 1	8	3	67	2.63	7	27	27	< 0.5	3	1.26	
GC22-0397-021	27	Moderate	145	8.68	157	12.8	12.27	0.93	0.3	< 0.5	67	1760	< 1	238	3	178	4.23	12	28	42	< 0.5	3	4.91	
GC22-0399-016	121	Slight	36.1	9.19	65.7	2.22	29.57	0.60	0.5	< 0.5	59	1120	< 1	30	4	163	2.94	13	27	49	< 0.5	< 2	2.63	
GC22-0398-012	490	Moderate	16.3	8.53	92.7	1.21	76.37	1.52	1.4	2.5	141	1530	< 1	47	4	560	3.25	30	28	27	< 0.5	< 2	3.58	
GC22-0302-017	79	None	16.9	9.51	17.5	31.2	0.56	0.07	< 0.2	< 0.5	21	326	2	10	< 2	87	2.59	4	34	55	< 0.5	< 2	1.40	

Results

Activation Laboratories Ltd.

Report: A22-14601

Analyte Symbol	Au	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	ppb	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit	5			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	FA-AA	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
1320056745	278	Slight	-2.80	8.81	48.6	0.945	51.41	0.58	4.1	2.1	50	637	2	9	344	753	0.51	69	28	19	< 0.5	< 2	2.04	
GC22-0386-015	29	None	-8.48	9.01	36.4	0.811	44.91	0.56	0.3	< 0.5	5	602	< 1	13	3	77	2.15	7	25	45	< 0.5	< 2	1.71	
F011869	1250																							
F011868	1230																							
1320060179	144	Slight	14.8	9.09	49.7	1.42	34.89	0.58	0.7	2.4	35	1020	< 1	12	38	747	1.99	35	29	46	< 0.5	< 2	2.15	
1320060097	195	None	7.37	9.15	33.4	1.28	26.02	0.90	0.6	< 0.5	110	1400	< 1	63	< 2	314	2.50	3	29	55	< 0.5	< 2	2.13	
1320059011	20	Slight	49.1	9.18	68.1	3.57	19.05	0.44	< 0.2	< 0.5	11	840	< 1	20	< 2	157	1.58	3	34	65	< 0.5	< 2	2.52	
GC22-0451-012	499	Slight	-29.3	8.75	43.7	0.599	73.02	0.92	2.7	2.5	64	2410	< 1	30	< 2	865	2.58	44	24	27	< 0.5	< 2	2.19	
1320060030	17	Slight	72.7	8.65	89.8	5.25	17.11	0.67	< 0.2	< 0.5	41	1100	< 1	40	5	147	2.45	8	30	76	< 0.5	< 2	3.59	
1432026039	202	None	-18.7	9.00	30.0	0.616	48.68	0.45	2.0	< 0.5	32	546	< 1	13	9	163	1.34	16	31	30	< 0.5	< 2	1.09	
1320060143	73	Slight	-4.31	8.25	53.6	0.926	57.93	1.33	0.6	< 0.5	89	1260	< 1	35	2	267	3.26	12	29	25	< 0.5	< 2	2.66	
1432026059	142	None	-16.6	8.89	20.4	0.551	36.93	0.39	2.0	< 0.5	19	495	< 1	12	10	144	1.66	36	30	28	< 0.5	< 2	0.83	
1320060189	64	Slight	31.2	9.06	56.8	2.22	25.64	0.51	< 0.2	< 0.5	25	1020	< 1	31	< 2	164	1.89	9	32	69	< 0.5	< 2	2.42	
1432026170	85	None	-24.0	8.96	15.2	0.388	39.15	0.51	4.4	1.3	54	682	1	15	14	416	1.58	39	25	30	< 0.5	< 2	0.76	
1320061310	67	Slight	21.3	9.22	43.5	1.96	22.14	0.58	0.3	1.1	43	752	< 1	16	< 2	415	1.45	10	29	52	< 0.5	< 2	1.70	
GC22-5140-024	216	None	-53.8	8.82	4.25	0.0732	58.01	0.42	3.4	2.0	62	93	< 1	9	19	618	0.73	51	24	22	< 0.5	< 2	0.19	
1320060546	70	Slight	14.9	8.56	63.5	1.31	48.59	1.58	1.0	1.8	152	1670	< 1	50	19	574	3.89	15	27	31	< 0.5	< 2	3.19	
GC22-0536-003	56	None	-48.8	8.64	15.2	0.238	63.99	0.92	0.8	2.6	35	2300	< 1	19	< 2	852	1.09	23	21	29	< 0.5	< 2	0.45	
GC22-0537-012	49	Moderate	86.1	9.04	107	5.08	21.10	0.78	0.3	< 0.5	49	1460	< 1	122	< 2	133	4.04	10	25	24	< 0.5	2	4.02	
GC22-0537-009	133	Moderate	79.1	8.62	114	3.24	35.30	0.93	0.6	< 0.5	104	2260	< 1	184	2	196	4.69	10	28	12	< 0.5	2	4.23	
GC22-0544-014	133	None	13.1	8.90	52.9	1.33	39.72	0.56	0.8	0.6	16	754	2	13	2	241	1.27	33	26	40	< 0.5	< 2	2.13	
1320060048	130	Slight	3.82	8.46	49.0	1.08	45.16	1.53	1.1	0.7	122	1410	< 1	61	< 2	397	3.67	5	27	37	< 0.5	< 2	2.76	
1320062914	27	Slight	43.0	9.72	49.8	7.30	6.83	0.36	< 0.2	< 0.5	14	452	< 1	13	< 2	50	1.39	2	27	41	< 0.5	< 2	1.94	
1432026081	163	Slight	14.6	8.82	63.6	1.30	48.96	0.50	1.3	0.5	51	967	1	10	21	210	1.10	30	28	29	< 0.5	< 2	1.73	
GC22-5050-025	419	None	-21.5	8.53	10.2	0.322	31.74	0.37	0.8	< 0.5	532	231	< 1	2	< 2	26	1.72	7	26	29	< 0.5	9	0.84	
F011880	323																							
F011875	340																							
GC22-0350-014	27	Moderate	107	8.75	116	13.3	8.67	0.52	< 0.2	< 0.5	23	1520	< 1	18	< 2	183	3.17	4	29	< 10	< 0.5	< 2	4.17	
GC22-0389-018	306	Moderate	63.5	8.87	93.0	3.16	29.47	1.01	1.5	2.7	163	1770	< 1	70	4	600	5.78	18	29	54	< 0.5	< 2	5.11	
GC22-0356-010	456	Moderate	85.4	8.45	117	3.72	31.41	0.99	1.6	< 0.5	326	1790	< 1	38	3	243	3.11	24	29	45	< 0.5	< 2	3.77	
GC22-0336-018	116	Slight	92.6	8.72	116	4.93	23.58	0.83	0.8	< 0.5	242	1190	< 1	67	12	282	4.88	9	30	71	< 0.5	< 2	4.71	
GC22-0336-001	102	Slight	44.2	8.48	84.2	2.11	39.94	0.89	0.6	< 0.5	84	1840	< 1	5	< 2	197	3.61	10	26	13	< 0.5	2	3.19	
GC22-0351-014	34	Slight	67.3	8.89	77.4	7.69	10.06	0.43	0.4	< 0.5	109	1300	< 1	67	< 2	188	4.00	5	28	39	< 0.5	< 2	3.28	
1320055055	400	None	1.16	8.86	37.4	1.03	36.26	0.45	0.9	4.6	36	1090	< 1	6	307	1230	0.69	83	28	24	< 0.5	< 2	1.44	
1313007416	755	None	-58.9	8.48	10.5	0.151	69.41	0.64	1.1	< 0.5	393	485	2	8	< 2	80	1.90	19	26	23	< 0.5	5	0.70	
1320057209	254	Slight	-0.875	9.04	29.5	0.971	30.37	0.29	0.6	< 0.5	23	650	< 1	4	40	222	1.43	27	33	32	< 0.5	< 2	1.48	
1320055123	87	Slight	7.86	8.64	50.5	1.18	42.61	0.57	0.8	< 0.5	51	694	1	108	10	148	1.60	15	30	31	< 0.5	< 2	2.13	
1320057003	637	Slight	7.11	8.86	47.2	1.18	40.07	0.44	1.4	1.2	35	1100	< 1	7	296	436	0.94	44	27	24	< 0.5	< 2	1.83	
1320057025	70	Slight	-15.4	8.98	20.0	0.565	35.34	0.30	0.6	< 0.5	20	707	< 1	7	46	187	1.62	8	32	28	< 0.5	< 2	1.20	
1320057182	102	Slight	-45.4	8.17	49.1	0.520	94.56	1.83	1.5	1.1	97	1160	1	49	10	419	3.12	95	31	16	< 0.5	< 2	2.42	
GC22-0347-018	53	None	1.78	8.82	61.2	1.03	59.46	0.76	0.5	< 0.5	9	683	1	13	2	52	1.21	8	30	31	< 0.5	< 2	1.82	
GC22-0355-008	491	Moderate	-19.5	8.79	81.8	0.807	101.33	2.33	1.7	1.8	122	1760	1	4	4	582	3.41	38	29	26	< 0.5	< 2	3.23	
1320057112	664	Slight	-24.8	8.14	23.5	0.486	48.29	0.38	2.8	2.3	23	586	< 1	7	34	691	0.58	59	31	20	< 0.5	< 2	1.07	
1313007059	2350	None	-58.0	9.03	8.72	0.131	66.73	0.51	2.3	< 0.5	496	418	< 1	8	3	60	2.43	14	25	24	< 0.5	19	0.79	

Results

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Analyte Symbol	Au	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	ppb	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	5			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	FA-AA	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-5153-002	148	None	-1.72	8.98	32.2	0.949	33.93	0.57	1.0	< 0.5	56	746	1	20	19	139	1.94	29	28	40	< 0.5	< 2	1.53
1320059043	89	Slight	34.2	8.50	74.3	1.85	40.14	1.63	0.7	1.1	101	1220	< 1	49	54	465	3.74	34	32	25	< 0.5	< 2	3.30
GC22-5136-008	299	None	-44.0	8.82	11.7	0.209	55.66	0.43	2.1	1.7	49	453	< 1	9	99	524	0.46	45	27	21	< 0.5	< 2	0.35
GC22-5153-013	288	None	-9.54	8.96	53.2	0.848	62.72	0.64	2.5	0.6	38	1330	< 1	11	96	198	0.60	38	22	20	< 0.5	< 2	1.38
1320059128	8	Slight	19.7	9.60	22.3	8.47	2.63	0.23	< 0.2	< 0.5	23	361	< 1	23	5	131	1.56	< 2	30	38	< 0.5	< 2	1.15
F011943	1050																						
F011946	1060																						
GC22-0366-018	276	Moderate	85.1	8.68	127	3.04	41.75	1.37	0.5	2.2	111	1470	< 1	106	7	501	4.16	32	32	26	< 0.5	2	4.80
1320060026	25	Slight	35.5	9.66	47.4	3.97	11.94	0.36	0.2	< 0.5	7	736	< 1	17	3	95	1.49	5	35	90	< 0.5	< 2	1.89
GC22-5154-008	142	None	-29.8	8.87	25.4	0.460	55.26	0.45	1.8	< 0.5	25	421	1	9	10	54	1.38	15	27	24	< 0.5	< 2	0.88
1320061400	50	Slight	37.9	9.63	48.1	4.71	10.23	0.35	< 0.2	< 0.5	18	771	< 1	12	3	75	1.07	7	31	41	< 0.5	< 2	1.94
GC22-5155-004	456	None	-13.0	9.16	44.2	0.773	57.21	0.49	1.4	< 0.5	11	528	< 1	10	10	68	1.03	9	27	23	< 0.5	< 2	1.27
GC22-5155-025	91	None	9.80	8.92	50.5	1.24	40.66	0.49	0.3	< 0.5	25	947	< 1	7	29	211	1.19	41	29	17	< 0.5	< 2	1.62
GC22-2020-009FD	205	Moderate	61.5	9.20	100	2.58	38.96	0.97	0.9	< 0.5	211	1290	< 1	111	< 2	204	4.41	14	30	24	< 0.5	2	3.59
1320061389	33	Slight	21.4	9.67	32.6	2.90	11.25	0.28	0.3	< 0.5	20	487	< 1	13	< 2	96	1.16	3	29	42	< 0.5	< 2	1.34
1320061371	31	Slight	23.1	9.52	32.7	3.40	9.62	0.32	< 0.2	< 0.5	34	453	< 1	11	2	76	1.21	4	34	49	< 0.5	< 2	1.43
1320061317	28	Slight	25.7	9.66	36.6	3.37	10.85	0.40	< 0.2	1.1	31	564	1	8	< 2	465	1.25	7	29	51	< 0.5	< 2	1.38
1320059059	36	Moderate	58.2	8.92	85.4	3.15	27.11	1.06	0.6	< 0.5	92	1140	< 1	36	9	203	3.21	10	31	49	< 0.5	< 2	3.39
GC22-5148-003	294	None	-31.9	8.96	32.7	0.507	64.59	0.51	5.0	1.2	53	1010	< 1	10	119	413	0.46	50	26	18	< 0.5	< 2	0.89
GC22-5159-006	315	None	1.31	9.30	54.0	1.02	52.64	0.55	2.2	< 0.5	35	1280	< 1	11	32	85	1.23	40	24	22	< 0.5	< 2	1.41
1320061383	18	Slight	24.3	9.64	32.9	3.82	8.62	0.34	0.2	< 0.5	33	391	< 1	9	3	66	1.29	6	30	51	< 0.5	< 2	1.39
GC22-0348-017	23	Moderate	119	8.87	125	21.4	5.83	0.58	0.3	1.4	111	1430	< 1	198	< 2	524	4.96	5	28	< 10	< 0.5	3	3.96
GC22-5156-009FD	254	Slight	15.5	9.19	47.2	1.49	31.68	0.36	4.0	< 0.5	29	1080	< 1	10	7	96	1.65	55	26	19	< 0.5	< 2	1.72
GC22-5147-002	1160	None	-14.7	9.31	47.7	0.764	62.37	0.67	13.5	4.5	288	1380	< 1	9	714	1220	0.45	132	25	18	< 0.5	< 2	1.76
GC22-0495-021	363	Moderate	20.0	8.44	73.1	1.38	53.10	1.64	1.8	1.2	208	2360	< 1	112	< 2	490	4.84	17	27	44	< 0.5	< 2	3.80
GC22-5146-007	167	None	0.290	9.25	55.1	1.01	54.84	0.52	2.3	1.0	43	1010	< 1	11	66	310	0.71	42	25	23	< 0.5	< 2	1.84
GC22-5145-013	265	None	-15.9	9.03	34.8	0.687	50.63	0.48	1.4	1.9	26	1340	< 1	9	20	562	1.13	39	24	27	< 0.5	< 2	1.15
F011913	1150																						
F011942	1170																						
GC22-0544-007	297	Slight	60.0	9.36	85.9	3.31	25.91	0.44	1.5	< 0.5	27	1170	< 1	10	4	143	0.94	29	25	44	< 0.5	< 2	2.64
1320061353	13	Slight	29.4	9.45	41.0	3.55	11.56	0.41	< 0.2	< 0.5	28	408	< 1	10	3	139	1.23	5	32	42	< 0.5	< 2	1.54
GC22-5140-007	369	None	-7.41	9.11	49.2	0.869	56.66	0.54	6.6	1.1	43	1600	< 1	10	80	308	0.68	31	28	21	< 0.5	< 2	1.64
1320062897	29	Slight	26.4	9.58	35.0	4.08	8.57	0.44	0.4	1.4	24	474	< 1	10	4	468	1.28	7	32	62	< 0.5	< 2	1.40
GC22-0541-012	245	None	1.21	9.16	59.1	1.02	57.90	0.58	1.5	< 0.5	44	1190	2	13	12	109	0.79	31	27	22	< 0.5	< 2	1.81

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Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
GC22-5156-009FD	7	6	1.90	< 10	< 1	0.08	< 10	0.97	0.035	0.036	1.21	< 2	< 1	41	< 0.01	2	< 2	< 10	6	< 10	2	4	0.66
GC22-5147-002	7	4	2.11	< 10	< 1	0.11	< 10	1.00	0.019	0.045	2.35	20	< 1	37	< 0.01	< 1	< 2	< 10	3	< 10	1	6	1.05
GC22-0495-021	41	75	10.1	10	2	0.38	< 10	3.09	0.207	0.058	2.10	5	11	83	0.14	< 1	< 2	< 10	206	< 10	8	4	1.94
GC22-5146-007	7	4	1.94	< 10	< 1	0.13	< 10	0.83	0.023	0.036	2.04	3	< 1	39	< 0.01	2	< 2	< 10	3	< 10	1	5	0.93
GC22-5145-013	7	5	1.97	< 10	< 1	0.11	< 10	0.70	0.031	0.039	1.86	3	< 1	34	< 0.01	< 1	< 2	< 10	4	< 10	2	5	0.48
F011913																							
F011942																							
GC22-0544-007	4	7	2.35	< 10	< 1	0.17	11	1.25	0.025	0.039	0.99	< 2	< 1	33	< 0.01	< 1	< 2	< 10	7	< 10	2	3	1.47
1320061353	9	8	2.16	< 10	< 1	0.16	13	0.72	0.048	0.039	0.50	< 2	1	28	0.04	< 1	< 2	< 10	16	< 10	3	6	0.57
GC22-5140-007	7	4	2.05	< 10	< 1	0.13	< 10	1.06	0.028	0.036	2.10	6	< 1	35	< 0.01	< 1	< 2	< 10	3	< 10	1	5	0.97
1320062897	7	11	2.09	< 10	< 1	0.28	13	0.70	0.049	0.042	0.41	< 2	2	25	0.08	< 1	< 2	< 10	21	< 10	3	8	0.47
GC22-0541-012	8	5	2.30	< 10	< 1	0.10	< 10	1.10	0.022	0.038	2.23	3	< 1	47	< 0.01	< 1	< 2	< 10	4	< 10	2	6	1.02

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GC22-0413-002	3.14	
1319060207	2.13	
1319060399	0.96	
1319060390	2.30	
GC22-0375-006	0.50	
GC22-0424-001	0.53	
GC22-0414-005	0.13	
1313010008	1.82	
GC22-0426- 009FD	2.84	
1319060338	3.03	
GC22-0417-013	0.08	
GC22-0365-013	6.53	
GC22-0421-001	2.62	
1319060200	2.19	
GC22-0425-006	1.64	
1431015079	0.22	
GC22-0419-001	0.68	
GC22-0588-009	2.29	
GC22-0362-006	1.47	
1313010026	1.38	
1319060329	2.66	
1319060148	1.98	
F011864		
F011897		
GC22-2050-009	0.76	
1313008082	4.83	
GC22-0368-006	1.18	
GC22-0495-008	2.17	
GC22-2035-004	1.22	
GC22-0371-013	2.13	
GC22-0348-010	4.31	
GC22-2017-006	0.28	
GC22-2022-001	1.31	
1313008094	1.62	
GC22-0520-017	0.32	
GC22-0520-002	4.65	
GC22-0521-011	0.86	
1320059066	1.72	
GC22-5127-014	2.45	
1313008056	1.91	
1320059117	2.18	
F011877		
F011876		
1321081020	1.65	
GC22-0474-007	2.11	
1321081041	3.67	
1321078401	0.17	
GC22-0308-011	1.72	
1321081449	1.07	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1313003009	0.71	
1313003070	0.42	
1313003083	1.55	
GC22-2030-013	1.86	
GC22-0475-002	1.78	
GC22-0331-010	2.00	
GC22-0326-006	0.27	
1313005138	0.39	
1313003047	0.79	
1313005163	0.73	
GC22-2011-001	2.80	
GC22-0334-013	2.54	
1313003073	0.77	
GC22-0305-001	1.17	
F011896		5.63
F011854		
1313009041	1.40	
GC22-0329-009	1.58	
1320056693	1.02	
GC22-0400-001	1.25	
GC22-0400-018	2.22	
GC22-5044-024	0.55	
1320056699	1.85	
GC22-0388-001	5.32	
GC22-0388-018	2.97	
GC22-0387-015	1.05	
GC22-0390-001	2.45	
1320055077	1.99	
GC22-0385-015	1.68	
GC22-0391-018	1.33	
1313007126	0.07	
1313007034	1.67	
GC22-0396-001	1.37	
1320056647	1.43	
1313007161	2.47	
GC22-0397-021	0.70	
GC22-0399-016	1.15	
GC22-0398-012	2.95	
GC22-0302-017	0.04	
1320056745	0.87	
GC22-0386-015	1.62	
F011869		
F011868		
1320060179	1.31	
1320060097	1.13	
1320059011	0.76	
GC22-0451-012	2.64	
1320060030	0.77	
1432026039	1.71	
1320060143	2.30	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1432026059	1.31	
1320060189	0.99	
1432026170	1.42	
1320061310	0.90	
GC22-5140-024	2.00	
1320060546	2.08	
GC22-0536-003	2.36	
GC22-0537-012	0.93	
GC22-0537-009	1.44	
GC22-0544-014	1.46	
1320060048	1.96	
1320062914	0.34	
1432026081	1.73	
GC22-5050-025	1.15	
F011880		
F011875		
GC22-0350-014	0.45	
GC22-0389-018	1.28	
GC22-0356-010	1.34	
GC22-0336-018	1.03	
GC22-0336-001	1.58	
GC22-0351-014	0.47	
1320055055	1.31	
1313007416	2.44	
1320057209	1.07	
1320055123	1.55	
1320057003	1.43	
1320057025	1.23	
1320057182	3.64	
GC22-0347-018	2.16	
GC22-0355-008	4.04	
1320057112	1.67	
1313007059	2.31	
1320055009	1.04	
1313007082	0.19	
1320055132	2.19	
1320057169	0.99	
1320055043	1.69	4.90
1320057158	2.33	
F011866		
F011890		
GC22-5054-010	0.38	
GC22-0465- 009FD	2.85	
GC22-0639-001	2.07	
GC22-0666-012	0.56	
1320056090	0.85	
GC22-0337-001	1.05	
GC22-5062-003	0.46	
1320056168	1.44	
1320056631	0.19	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
1320056816	2.03	
1320056001	1.03	
1313009055	1.46	
1320056772	0.69	
1313007017	2.01	
1313009059	1.90	
1320056673	0.61	
1320056793	1.40	
1313009014	1.47	
1313009079	3.21	
1313009001	1.70	
1320056719	0.93	
GC22-0330-012	2.75	
1320056776	1.70	
F011941		
F011938		
1320059031	2.40	
GC22-5133-001	0.60	
GC22-0368- 009FD	2.45	
1320059196	0.57	
1320059130	0.09	
1320059161	0.03	
GC22-5135-007	1.91	
1320059028	0.75	
GC22-5128-001	1.83	
1320059120	0.56	
GC22-5134-001	0.64	
GC22-5144-002	1.41	
GC22-5138-003	1.44	
GC22-0522-010	3.52	
GC22-5153-002	1.28	
1320059043	1.83	
GC22-5136-008	1.87	
GC22-5153-013	2.22	
1320059128	0.16	
F011943		
F011946		
GC22-0366-018	1.79	
1320060026	0.50	
GC22-5154-008	1.92	
1320061400	0.44	
GC22-5155-004	1.99	
GC22-5155-025	1.46	
GC22-2020- 009FD	1.57	
1320061389	0.44	
1320061371	0.41	
1320061317	0.48	
1320059059	1.22	
GC22-5148-003	2.24	

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GC22-5159-006	1.87	
1320061383	0.39	
GC22-0348-017	0.38	
GC22-5156- 009FD	1.13	
GC22-5147-002	2.22	
GC22-0495-021	2.25	
GC22-5146-007	1.87	
GC22-5145-013	1.75	
F011913		
F011942		
GC22-0544-007	0.98	
1320061353	0.51	
GC22-5140-007	1.99	
1320062897	0.42	
GC22-0541-012	2.04	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas									0.2	< 0.5	68	1060	< 1	21	101	136	6.64	234	27	736	1.1	< 2	0.13
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
GXR-6 Meas									0.2	< 0.5	66	1030	2	21	102	131	6.49	231	22	719	1.0	< 2	0.12
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
BaSO4 Meas							41.8																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.1																
BaSO4 Cert							41.94																
BaSO4 Meas							40.9																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
BaSO4 Meas							41.1																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.3																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.8																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
BaSO4 Meas							40.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.8																
BaSO4 Cert							41.94																
BaSO4 Meas							40.4																
BaSO4 Cert							41.94																
BaSO4 Meas							39.9																
BaSO4 Cert							41.94																
BaSO4 Meas							42.2																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
OREAS 98 (Aqua Regia) Meas									42.3		> 10000				272	1280						33	
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						93	
OREAS 98 (Aqua Regia) Meas									42.5		> 10000				275	1320						50	
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						93	
OREAS 98 (Aqua Regia) Meas									43.7		> 10000				290	1340						47	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 98 (Aqua Regia) Cert									42.8		147000				343	1300						93	
RTS-3a Meas							29.5																
RTS-3a Cert							29.90																
RTS-3a Meas							29.0																
RTS-3a Cert							29.90																
RTS-3a Meas							28.8																
RTS-3a Cert							29.90																
RTS-3a Meas							29.1																
RTS-3a Cert							29.90																
RTS-3a Meas							29.8																
RTS-3a Cert							29.90																
RTS-3a Meas							28.9																
RTS-3a Cert							29.90																
RTS-3a Meas							29.3																
RTS-3a Cert							29.90																
RTS-3a Meas							28.5																
RTS-3a Cert							29.90																
RTS-3a Meas							29.6																
RTS-3a Cert							29.90																
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
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GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
SiO2 Cert																							
SiO2 Meas							0.07																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
NBM-1 (slight fzz) Meas			8.53																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.53																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.53																				
NBM-1 (slight fzz) Cert			8.53																				
OREAS 922 (AQUA REGIA) Meas									0.7	< 0.5	2110	740	< 1	33	60	267	2.57	5		69	0.9	7	0.35
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.6	< 0.5	2230	766	< 1	34	65	276	2.74	5		75	0.9	7	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.7	< 0.5	2390	797	< 1	35	58	260	2.93	7		72	0.8	8	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.9	< 0.5	2380	802	< 1	36	57	263	2.88	4		69	0.8	11	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.9	< 0.5	2410	814	< 1	37	62	267	2.96	4		72	0.8	8	0.37
OREAS 922									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
(AQUA REGIA) Cert																							
OREAS 923 (AQUA REGIA) Meas									1.3	< 0.5	4050	815	< 1	28	86	327	2.52	7		55	0.7	19	0.33
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.4	< 0.5	4240	859	< 1	30	88	358	2.72	3		59	0.8	14	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									4.4	< 0.5	4680	902	< 1	33	86	339	2.92	7		57	0.7	15	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.5	< 0.5	4890	942	< 1	34	90	357	3.00	7		58	0.7	14	0.37
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									3.7	< 0.5	4850	941	< 1	34	87	360	3.02	4		57	0.7	16	0.37
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
Oreas 96 (Aqua Regia) Meas									10.8		> 10000				89	420							8
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.7		> 10000				87	407							< 2
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									11.6		> 10000				88	431							20
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									11.6		> 10000				89	447							32
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									11.7		> 10000				94	452							20
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas								3030															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca	
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								2960																
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								3000																
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								3050																
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								3050																
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								3030																
OREAS 238 (Fire Assay) Cert								3030																
OREAS 238 (Fire Assay) Meas								3110																
OREAS 238 (Fire Assay) Cert								3030																
GS316-3 Meas																								
GS316-3 Cert																								
GS316-3 Meas																								
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GS316-3 Meas																								
GS316-3 Cert																								
OREAS 257b (Fire Assay) Meas																								
OREAS 257b (Fire Assay) Cert																								
Oreas E1336 (Fire Assay) Meas								500																
Oreas E1336 (Fire Assay) Cert								510.000																
Oreas E1336 (Fire Assay) Meas								503																

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Assay) Meas																							
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								515															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								505															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								507															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								503															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								494															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								524															
Oreas E1336 (Fire Assay) Cert								510.000															
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
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GS317-5 Meas																							
GS317-5 Cert																							
Oreas 620 (Aqua Regia) Meas									42.4	156	1920	460	7	15	> 5000	> 10000	1.28	50		23	0.7	< 2	1.24
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas 620 (Aqua Regia) Meas									41.8	154	1880	459	7	14	> 5000	> 10000	1.22	49		16	0.7	< 2	1.23
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									42.4	179	1920	451	7	17	> 5000	> 10000	1.26	50		< 10	0.7	4	1.25
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
GC22-0413-002 Orig		-67.3		19.5	0.224	86.80																	
GC22-0413-002 Dup		-67.8		19.0	0.219	86.80																	
1313010008 Orig																							
1313010008 Dup																							
1319060338 Orig							1.08																
1319060338 Dup							1.07																
GC22-0365-013 Orig									11.7	3.1	694	626	1	17	79	884	1.27	288	17	17	< 0.5	6	0.31
GC22-0365-013 Dup									11.4	3.0	719	637	1	15	82	890	1.30	295	17	18	< 0.5	5	0.31
GC22-0362-006 Orig							0.46																
GC22-0362-006 Dup							0.40																
1319060329 Orig																							
1319060329 Dup																							
GC22-0495-008 Orig									2.4	1.7	176	1060	< 1	66	< 2	473	4.32	16	25	43	< 0.5	< 2	3.66
GC22-0495-008 Dup									2.2	1.6	172	1060	< 1	65	< 2	451	4.28	14	28	44	< 0.5	< 2	3.92
GC22-0348-010 Orig								371															
GC22-0348-010 Dup								380															
GC22-2022-001 Orig																							
GC22-2022-001 Dup																							
1313008094 Orig							0.47																
1313008094 Dup							0.48																
1320059117 Orig								100															
1320059117 Dup								99															
GC22-0474-007 Orig							0.49																
GC22-0474-007 Dup							0.55																
1321081041 Orig																							
1321081041 Dup																							
1313003009 Orig	None	-10.7		8.99	0.456	19.70																	
1313003009 Dup	None	-11.5		8.23	0.418	19.70																	
GC22-2030-013 Orig									0.4	< 0.5	45	370	< 1	9	2	78	2.75	14	29	39	< 0.5	< 2	0.85
GC22-2030-013 Dup									0.4	< 0.5	42	365	< 1	8	< 2	78	2.70	13	28	34	< 0.5	< 2	0.83

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modifie d-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GC22-0475-002 Orig								401															
GC22-0475-002 Dup								410															
GC22-0326-006 Orig																							
GC22-0326-006 Dup																							
1313003047 Orig							0.36																
1313003047 Dup							0.38																
GC22-0329-009 Orig								134															
GC22-0329-009 Dup								129															
1320056693 Orig		16.5		43.9	1.60	27.39																	
1320056693 Dup		16.1		43.5	1.59	27.39																	
GC22-0400-001 Orig							0.55		0.6	2.3	73	1060	< 1	15	3	645	1.49	14	30	49	< 0.5	2	2.46
GC22-0400-001 Dup							0.54		0.5	2.3	84	1110	< 1	17	2	654	1.58	15	26	49	< 0.5	< 2	2.59
GC22-0390-001 Orig			8.98																				
GC22-0390-001 Dup			8.97																				
GC22-0391-018 Orig																							
GC22-0391-018 Dup																							
1313007126 Orig								10															
1313007126 Dup								9															
GC22-0396-001 Orig							0.51		< 0.2	< 0.5	16	801	< 1	22	2	90	2.18	11	29	43	< 0.5	< 2	2.21
GC22-0396-001 Dup							0.50		< 0.2	< 0.5	16	789	< 1	21	< 2	98	2.11	10	29	41	< 0.5	< 2	2.14
GC22-0386-015 Orig								29															
GC22-0386-015 Dup								30															
1320060179 Orig							0.58																
1320060179 Dup							0.59																
1432026039 Orig									2.0	< 0.5	32	546	< 1	13	9	163	1.34	16	31	30	< 0.5	< 2	1.09
1432026039 Dup									2.1	< 0.5	37	566	< 1	15	12	187	1.39	20	29	31	< 0.5	< 2	1.14
1432026059 Orig	None	-16.6		20.4	0.551	36.93																	
1432026059 Dup	None	-16.0		20.9	0.566	36.93																	
1320060189 Orig								64															
1320060189 Dup								59															
1432026170 Orig																							
1432026170 Dup																							
GC22-0536-003 Orig							0.92																
GC22-0536-003 Dup							0.95																
1432026081 Orig								163															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modifie d-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1432026081 Dup								155															
GC22-5050-025 Orig																							
GC22-5050-025 Dup																							
GC22-0350-014 Orig									< 0.2	< 0.5	23	1520	< 1	18	< 2	183	3.17	4	29	< 10	< 0.5	< 2	4.17
GC22-0350-014 Dup									< 0.2	< 0.5	23	1510	< 1	20	< 2	175	3.18	5	30	< 10	< 0.5	< 2	4.10
GC22-0389-018 Orig							1.01																
GC22-0389-018 Dup							0.99																
1320057209 Orig								254															
1320057209 Dup								268															
1320055123 Orig																							
1320055123 Dup																							
GC22-0355-008 Orig							2.33		1.7	1.8	122	1760	1	4	4	582	3.41	38	29	26	< 0.5	< 2	3.23
GC22-0355-008 Dup							2.42		1.7	1.7	120	1740	1	4	< 2	570	3.37	40	29	18	< 0.5	< 2	3.14
1320057169 Orig																							
1320057169 Dup																							
1320055043 Orig																							
1320055043 Dup																							
GC22-5054-010 Orig							0.11																
GC22-5054-010 Dup							0.11																
1320056090 Orig									0.6	< 0.5	25	538	1	11	16	151	1.82	36	29	18	< 0.5	< 2	0.64
1320056090 Dup									0.4	< 0.5	23	549	< 1	11	15	154	1.84	35	29	19	< 0.5	< 2	0.65
1320056168 Orig																							
1320056168 Dup																							
1320056816 Orig	Slight	-7.63		49.6	0.867	57.23		198															
1320056816 Dup	Slight	-7.91		49.3	0.862	57.23		207															
1313009055 Orig			8.59																				
1313009055 Dup			8.55																				
1313007017 Orig							0.43																
1313007017 Dup							0.45																
1313009079 Orig									1.0	1.8	133	571	< 1	16	4	558	1.90	23	24	25	< 0.5	5	1.44
1313009079 Dup									1.3	1.7	148	593	< 1	15	8	575	1.96	23	29	28	< 0.5	5	1.49
1313009001 Orig								101															
1313009001 Dup								91															
1320056776 Orig							0.82																
1320056776 Dup							0.83																
1320059161 Orig																							
1320059161 Dup																							
GC22-5138-003 Orig							0.53																
GC22-5138-003 Dup							0.56																
GC22-5136-008								299															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modifie d-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Orig																							
GC22-5136-008 Dup								219															
1320059128 Orig									< 0.2	< 0.5	23	361	< 1	23	5	131	1.56	< 2	30	38	< 0.5	< 2	1.15
1320059128 Dup									< 0.2	< 0.5	22	350	< 1	25	< 2	129	1.50	< 2	30	36	< 0.5	< 2	1.11
GC22-5154-008 Orig							0.45																
GC22-5154-008 Dup							0.46																
1320061389 Orig																							
1320061389 Dup																							
1320059059 Orig								36															
1320059059 Dup								34															
1320061383 Orig	Slight	24.3		32.9	3.82	8.62			0.2	< 0.5	33	391	< 1	9	3	66	1.29	6	30	51	< 0.5	< 2	1.39
1320061383 Dup	Slight	24.0		32.6	3.78	8.62			< 0.2	< 0.5	32	371	< 1	8	3	60	1.23	6	29	49	< 0.5	< 2	1.30
GC22-5156-009FD Orig							0.36																
GC22-5156-009FD Dup							0.36																
GC22-5146-007 Orig																							
GC22-5146-007 Dup																							
GC22-5145-013 Orig																							
GC22-5145-013 Dup																							
GC22-5140-007 Orig								369															
GC22-5140-007 Dup								414															
1320062897 Orig			9.58																				
1320062897 Dup			9.59																				
GC22-0541-012 Orig	None	1.21		59.1	1.02	57.90	0.58																
GC22-0541-012 Dup	None	1.28		59.2	1.02	57.88	0.58																
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	43	< 10	< 0.5	< 2	< 0.01
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	42	< 10	< 0.5	< 2	< 0.01
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	38	< 10	< 0.5	< 2	< 0.01
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	41	< 10	< 0.5	< 2	< 0.01
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	42	< 10	< 0.5	< 2	< 0.01

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank																							
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	57	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	35	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	34	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01
Method Blank									< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	41	< 10	< 0.5	< 2	< 0.01

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
NBM-1 (slight fzz) Meas																							
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas	19	42	4.94	< 10		0.37	37	1.22	0.020	0.061	0.37	3	3	16			< 2	< 10	30	< 10	16	21	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	44	5.22	< 10		0.39	37	1.28	0.019	0.063	0.36	4	4	16			< 2	< 10	31	< 10	16	15	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	19	43	5.33	< 10		0.39	35	1.30	0.022	0.064	0.38	< 2	4	16			< 2	< 10	32	< 10	16	5	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	19	43	5.31	< 10		0.37	34	1.30	0.020	0.064	0.38	< 2	4	16			< 2	< 10	32	< 10	16	6	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	44	5.35	< 10		0.38	35	1.31	0.021	0.064	0.38	3	4	16			< 2	< 10	33	< 10	16	9	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 923 (AQUA REGIA) Meas	21	37	5.44	< 10		0.30	34	1.25		0.056	0.61	3	3	14			< 2	< 10	28	< 10	14	23	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
OREAS 923 (AQUA REGIA) Meas	22	40	5.88	< 10		0.33	34	1.35		0.060	0.66	3	3	14			< 2	< 10	30	< 10	15	19	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	22	40	5.98	< 10		0.32	32	1.38		0.061	0.68	2	3	14			< 2	< 10	32	< 10	15	10	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	23	42	6.24	< 10		0.32	33	1.44		0.064	0.72	3	4	15			< 2	< 10	33	< 10	15	8	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	23	42	6.18	< 10		0.33	33	1.44		0.063	0.71	3	4	15			< 2	< 10	33	< 10	15	10	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
Oreas 96 (Aqua Regia) Meas	45										3.65	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	44										3.47	4											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	47										4.13	5											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	49										4.29	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	50										4.22	7											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
OREAS 229b (Fire Assay) Meas																							
OREAS 229b (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
OREAS 257b (Fire Assay) Meas																							
OREAS 257b (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
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Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							8.07
GS317-5 Cert																							8.46
GS317-5 Meas																							8.22
GS317-5 Cert																							8.46
GS317-5 Meas																							8.19
GS317-5 Cert																							8.46
GS317-5 Meas																							8.07
GS317-5 Cert																							8.46
GS317-5 Meas																							8.35
GS317-5 Cert																							8.46
GS317-5 Meas																							8.38
GS317-5 Cert																							8.46
GS317-5 Meas																							8.12
GS317-5 Cert																							8.46
GS317-5 Meas																							8.06
GS317-5 Cert																							8.46
GS317-5 Meas																							8.39
GS317-5 Cert																							8.46
GS317-5 Meas																							8.46
GS317-5 Cert																							8.46
GS317-5 Meas																							8.18
GS317-5 Cert																							8.46
Oreas 620 (Aqua Regia) Meas	13	16	2.69	< 10	2	0.28	26	0.27	0.123	0.032	2.63	61		20			< 2	< 10	9	< 10	7	35	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
Oreas 620 (Aqua Regia) Meas	13	18	2.64	< 10	2	0.27	25	0.26	0.119	0.031	2.59	53		19			< 2	< 10	8	< 10	6	33	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
Oreas 620 (Aqua Regia) Meas	14	21	2.67	< 10	3	0.27	25	0.26	0.123	0.030	2.58	63		19			< 2	< 10	8	< 10	7	28	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
GC22-0413-002 Orig																							
GC22-0413-002 Dup																							
1313010008 Orig																							0.76
1313010008 Dup																							0.74
1319060338 Orig																							0.16

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1319060338 Dup																							0.16
GC22-0365-013 Orig	12	14	6.24	< 10	< 1	0.20	29	1.01	0.017	0.062	6.34	4	1	7	< 0.01	< 1	< 2	< 10	11	< 10	3	43	
GC22-0365-013 Dup	12	15	6.44	< 10	< 1	0.20	30	1.03	0.018	0.064	6.42	4	1	7	< 0.01	< 1	< 2	< 10	12	< 10	3	44	
GC22-0362-006 Orig																							
GC22-0362-006 Dup																							
1319060329 Orig																							0.60
1319060329 Dup																							0.60
GC22-0495-008 Orig	35	142	8.77	10	1	0.23	< 10	2.71	0.122	0.044	2.03	5	9	36	0.16	4	< 2	< 10	252	< 10	6	3	
GC22-0495-008 Dup	34	141	8.67	10	3	0.23	< 10	2.68	0.126	0.043	2.06	4	9	36	0.17	3	< 2	< 10	248	< 10	6	3	
GC22-0348-010 Orig																							
GC22-0348-010 Dup																							
GC22-2022-001 Orig																							1.50
GC22-2022-001 Dup																							1.53
1313008094 Orig																							
1313008094 Dup																							
1320059117 Orig																							
1320059117 Dup																							
GC22-0474-007 Orig																							
GC22-0474-007 Dup																							
1321081041 Orig																							1.03
1321081041 Dup																							1.04
1313003009 Orig																							
1313003009 Dup																							
GC22-2030-013 Orig	8	8	3.09	< 10	< 1	0.16	14	1.68	0.172	0.042	2.05	< 2	1	112	< 0.01	< 1	< 2	< 10	14	< 10	2	14	
GC22-2030-013 Dup	8	7	3.00	< 10	< 1	0.16	14	1.65	0.169	0.040	1.99	< 2	1	111	< 0.01	< 1	< 2	< 10	13	< 10	2	13	
GC22-0475-002 Orig																							
GC22-0475-002 Dup																							
GC22-0326-006 Orig																							0.51
GC22-0326-006 Dup																							0.53
1313003047 Orig																							
1313003047 Dup																							
GC22-0329-009 Orig																							
GC22-0329-009 Dup																							
1320056693 Orig																							
1320056693 Dup																							
GC22-0400-001	9	8	2.64	< 10	< 1	0.18	18	1.16	0.105	0.050	1.22	2	1	57	0.02	< 1	< 2	< 10	12	< 10	3	7	1.20

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Orig																							
GC22-0400-001 Dup	10	8	2.80	< 10	< 1	0.19	19	1.22	0.110	0.053	1.32	3	1	60	0.02	< 1	< 2	< 10	12	< 10	3	5	1.20
GC22-0390-001 Orig																							
GC22-0390-001 Dup																							
GC22-0391-018 Orig																							1.62
GC22-0391-018 Dup																							1.62
1313007126 Orig																							
1313007126 Dup																							
GC22-0396-001 Orig	15	17	3.88	< 10	< 1	0.13	13	1.38	0.147	0.050	1.48	3	3	55	0.03	< 1	< 2	< 10	52	< 10	4	8	
GC22-0396-001 Dup	15	16	3.81	< 10	< 1	0.13	13	1.34	0.145	0.048	1.47	3	3	54	0.03	< 1	< 2	< 10	51	< 10	4	8	
GC22-0386-015 Orig																							0.46
GC22-0386-015 Dup																							0.47
1320060179 Orig																							
1320060179 Dup																							
1432026039 Orig	11	10	2.42	< 10	< 1	0.12	< 10	0.83	0.053	0.040	1.76	< 2	1	36	0.03	< 1	< 2	< 10	17	< 10	2	7	
1432026039 Dup	11	10	2.49	< 10	< 1	0.12	< 10	0.87	0.054	0.042	1.82	2	1	37	0.03	2	< 2	< 10	18	< 10	2	8	
1432026059 Orig																							
1432026059 Dup																							
1320060189 Orig																							
1320060189 Dup																							
1432026170 Orig																							0.23
1432026170 Dup																							0.23
GC22-0536-003 Orig																							
GC22-0536-003 Dup																							
1432026081 Orig																							
1432026081 Dup																							
GC22-5050-025 Orig																							0.13
GC22-5050-025 Dup																							0.12
GC22-0350-014 Orig	37	3	11.0	10	3	0.02	< 10	2.76	0.019	0.053	0.42	3	11	32	0.14	< 1	< 2	< 10	470	< 10	4	3	
GC22-0350-014 Dup	38	3	11.1	10	2	0.02	< 10	2.75	0.019	0.053	0.41	3	11	32	0.15	< 1	< 2	< 10	489	< 10	4	3	
GC22-0389-018 Orig																							
GC22-0389-018 Dup																							
1320057209 Orig																							
1320057209 Dup																							
1320055123 Orig																							0.67
1320055123 Dup																							0.67
GC22-0355-008 Orig	37	6	11.0	10	< 1	0.30	< 10	2.14	0.056	0.113	4.11	5	19	50	0.17	< 1	< 2	< 10	164	< 10	12	6	
GC22-0355-008	36	6	10.9	10	< 1	0.30	< 10	2.12	0.058	0.114	4.03	3	19	49	0.16	< 1	< 2	< 10	156	< 10	13	6	

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Dup																							
1320057169 Orig																							0.41
1320057169 Dup																							0.40
1320055043 Orig																							
1320055043 Dup																							
GC22-5054-010 Orig																							
GC22-5054-010 Dup																							
1320056090 Orig	10	5	2.04	< 10	< 1	0.10	17	0.61	0.053	0.050	0.96	< 2	< 1	32	< 0.01	< 1	< 2	< 10	8	< 10	2	2	
1320056090 Dup	10	6	2.01	< 10	< 1	0.11	17	0.61	0.054	0.052	0.94	< 2	< 1	33	< 0.01	< 1	< 2	< 10	8	< 10	2	6	
1320056168 Orig																							0.43
1320056168 Dup																							0.43
1320056816 Orig																							
1320056816 Dup																							
1313009055 Orig																							
1313009055 Dup																							
1313007017 Orig																							
1313007017 Dup																							
1313009079 Orig	16	9	4.29	< 10	< 1	0.10	27	1.61	0.026	0.058	3.12	3	2	47	< 0.01	< 1	< 2	< 10	18	< 10	4	14	0.49
1313009079 Dup	17	9	4.46	< 10	2	0.11	28	1.68	0.028	0.060	3.24	2	2	49	< 0.01	< 1	< 2	< 10	19	< 10	4	15	0.48
1313009001 Orig																							
1313009001 Dup																							
1320056776 Orig																							
1320056776 Dup																							
1320059161 Orig																							0.40
1320059161 Dup																							0.59
GC22-5138-003 Orig																							
GC22-5138-003 Dup																							
GC22-5136-008 Orig																							0.15
GC22-5136-008 Dup																							0.15
1320059128 Orig	9	35	1.92	< 10	1	0.16	14	0.75	0.069	0.042	0.13	< 2	2	44	0.06	< 1	< 2	< 10	18	< 10	2	6	
1320059128 Dup	9	34	1.87	< 10	< 1	0.16	14	0.73	0.067	0.040	0.13	< 2	2	42	0.06	< 1	< 2	< 10	18	< 10	2	6	
GC22-5154-008 Orig																							
GC22-5154-008 Dup																							
1320061389 Orig																							0.49
1320061389 Dup																							0.50
1320059059 Orig																							
1320059059 Dup																							
1320061383 Orig	8	9	2.05	< 10	< 1	0.20	14	0.72	0.047	0.041	0.37	< 2	2	26	0.06	< 1	< 2	< 10	18	< 10	3	7	
1320061383 Dup	8	9	1.94	< 10	< 1	0.19	13	0.68	0.045	0.040	0.34	< 2	2	24	0.06	< 1	< 2	< 10	17	< 10	3	7	
GC22-5156-009FD Orig																							
GC22-5156-009FD Dup																							
GC22-5146-007 Orig																							0.93
GC22-5146-007 Dup																							0.94

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GXR-6 Meas		
GXR-6 Cert		
GXR-6 Meas		
GXR-6 Cert		
BaSO4 Meas	14.3	
BaSO4 Cert	14.0	
BaSO4 Meas	14.1	
BaSO4 Cert	14.0	
BaSO4 Meas	13.9	
BaSO4 Cert	14.0	
BaSO4 Meas	13.9	
BaSO4 Cert	14.0	
BaSO4 Meas	14.2	
BaSO4 Cert	14.0	
BaSO4 Meas	14.2	
BaSO4 Cert	14.0	
BaSO4 Meas	14.1	
BaSO4 Cert	14.0	
BaSO4 Meas	14.4	
BaSO4 Cert	14.0	
BaSO4 Meas	14.0	
BaSO4 Cert	14.0	
BaSO4 Meas	14.3	
BaSO4 Cert	14.0	
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
BaSO4 Meas		
BaSO4 Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		
OREAS 98 (Aqua Regia) Meas		
OREAS 98 (Aqua Regia) Cert		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
RTS-3a Meas		
RTS-3a Cert		
GS311-4 Meas	0.50	
GS311-4 Cert	0.54	
GS311-4 Meas	0.56	
GS311-4 Cert	0.54	
GS311-4 Meas	0.54	
GS311-4 Cert	0.54	
GS311-4 Meas	0.56	
GS311-4 Cert	0.54	
GS311-4 Meas	0.57	
GS311-4 Cert	0.54	
GS311-4 Meas	0.57	
GS311-4 Cert	0.54	
GS311-4 Meas	0.55	
GS311-4 Cert	0.54	
GS311-4 Meas	0.56	
GS311-4 Cert	0.54	
GS311-4 Meas	0.56	
GS311-4 Cert	0.54	
GS311-4 Meas	0.57	
GS311-4 Cert	0.54	
GS311-4 Meas	0.55	
GS311-4 Cert	0.54	
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	0.01	
SiO2 Cert		
SiO2 Meas	0.02	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	0.02	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
SiO2 Meas	< 0.01	
SiO2 Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
NBM-1 (slight fzz) Meas		
NBM-1 (slight fzz) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 922 (AQUA REGIA) Meas		
OREAS 922 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
OREAS 923 (AQUA REGIA) Meas		
OREAS 923 (AQUA REGIA) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
Oreas 96 (Aqua Regia) Meas		
Oreas 96 (Aqua Regia) Cert		
OREAS 229b (Fire Assay) Meas		12.2
OREAS 229b (Fire Assay) Cert		11.95
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
OREAS 238 (Fire Assay) Meas		
OREAS 238 (Fire Assay) Cert		
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.34	
GS316-3 Cert	0.340	
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.36	
GS316-3 Cert	0.340	
GS316-3 Meas	0.34	
GS316-3 Cert	0.340	
GS316-3 Meas	0.36	
GS316-3 Cert	0.340	
GS316-3 Meas	0.35	
GS316-3 Cert	0.340	
GS316-3 Meas	0.34	
GS316-3 Cert	0.340	
GS316-3 Meas	0.34	
GS316-3 Cert	0.340	
OREAS 257b (Fire Assay) Meas		15.0
OREAS 257b (Fire Assay) Cert		14.220
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
Oreas E1336 (Fire Assay) Meas		
Oreas E1336 (Fire Assay) Cert		
GS317-5 Meas	14.9	
GS317-5 Cert	15.5	
GS317-5 Meas	14.8	
GS317-5 Cert	15.5	
GS317-5 Meas	15.1	
GS317-5 Cert	15.5	
GS317-5 Meas	15.3	
GS317-5 Cert	15.5	
GS317-5 Meas	15.3	
GS317-5 Cert	15.5	
GS317-5 Meas	15.4	
GS317-5 Cert	15.5	
GS317-5 Meas	15.3	
GS317-5 Cert	15.5	
GS317-5 Meas	15.3	
GS317-5 Cert	15.5	
GS317-5 Meas	15.0	
GS317-5 Cert	15.5	
GS317-5 Meas	15.5	
GS317-5 Cert	15.5	
GS317-5 Meas	15.3	
GS317-5 Cert	15.5	
GS317-5 Meas	15.4	
GS317-5 Cert	15.5	
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
Oreas 620 (Aqua Regia) Meas		
Oreas 620 (Aqua Regia) Cert		
GC22-0413-002		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
Orig		
GC22-0413-002 Dup		
1313010008 Orig	1.82	
1313010008 Dup	1.83	
1319060338 Orig	3.03	
1319060338 Dup	3.03	
GC22-0365-013 Orig		
GC22-0365-013 Dup		
GC22-0362-006 Orig		
GC22-0362-006 Dup		
1319060329 Orig	2.66	
1319060329 Dup	2.67	
GC22-0495-008 Orig		
GC22-0495-008 Dup		
GC22-0348-010 Orig		
GC22-0348-010 Dup		
GC22-2022-001 Orig	1.31	
GC22-2022-001 Dup	1.31	
1313008094 Orig		
1313008094 Dup		
1320059117 Orig		
1320059117 Dup		
GC22-0474-007 Orig		
GC22-0474-007 Dup		
1321081041 Orig	3.67	
1321081041 Dup	3.59	
1313003009 Orig		
1313003009 Dup		
GC22-2030-013 Orig		
GC22-2030-013 Dup		
GC22-0475-002 Orig		
GC22-0475-002 Dup		
GC22-0326-006 Orig	0.27	
GC22-0326-006 Dup	0.27	
1313003047 Orig		
1313003047 Dup		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
GC22-0329-009 Orig		
GC22-0329-009 Dup		
1320056693 Orig		
1320056693 Dup		
GC22-0400-001 Orig	1.25	
GC22-0400-001 Dup	1.25	
GC22-0390-001 Orig		
GC22-0390-001 Dup		
GC22-0391-018 Orig	1.33	
GC22-0391-018 Dup	1.31	
1313007126 Orig		
1313007126 Dup		
GC22-0396-001 Orig		
GC22-0396-001 Dup		
GC22-0386-015 Orig	1.62	
GC22-0386-015 Dup	1.62	
1320060179 Orig		
1320060179 Dup		
1432026039 Orig		
1432026039 Dup		
1432026059 Orig		
1432026059 Dup		
1320060189 Orig		
1320060189 Dup		
1432026170 Orig	1.42	
1432026170 Dup	1.42	
GC22-0536-003 Orig		
GC22-0536-003 Dup		
1432026081 Orig		
1432026081 Dup		
GC22-5050-025 Orig	1.15	
GC22-5050-025 Dup	1.13	
GC22-0350-014 Orig		
GC22-0350-014 Dup		
GC22-0389-018 Orig		
GC22-0389-018		

Analyte Symbol	Total S	Au
Unit Symbol	%	g/tonne
Lower Limit	0.01	0.02
Method Code	CS	FA- GRA
Dup		
1320057209 Orig		
1320057209 Dup		
1320055123 Orig	1.55	
1320055123 Dup	1.55	
GC22-0355-008 Orig		
GC22-0355-008 Dup		
1320057169 Orig	0.99	
1320057169 Dup	1.02	
1320055043 Orig		4.90
1320055043 Dup		5.63
GC22-5054-010 Orig		
GC22-5054-010 Dup		
1320056090 Orig		
1320056090 Dup		
1320056168 Orig	1.44	
1320056168 Dup	1.45	
1320056816 Orig		
1320056816 Dup		
1313009055 Orig		
1313009055 Dup		
1313007017 Orig		
1313007017 Dup		
1313009079 Orig	3.21	
1313009079 Dup	3.26	
1313009001 Orig		
1313009001 Dup		
1320056776 Orig		
1320056776 Dup		
1320059161 Orig	0.03	
1320059161 Dup	0.15	
GC22-5138-003 Orig		
GC22-5138-003 Dup		
GC22-5136-008 Orig	1.87	
GC22-5136-008 Dup	1.97	
1320059128 Orig		
1320059128 Dup		
GC22-5154-008 Orig		
GC22-5154-008 Dup		
1320061389 Orig	0.44	
1320061389 Dup	0.46	
1320059059 Orig		
1320059059 Dup		



Report No.: A22-16738
Report Date: 15-Feb-23
Date Submitted: 10-Nov-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Corey Lablans

CERTIFICATE OF ANALYSIS

181 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package(s) requested, Test Name, Testing Date. Rows include 11 ABA Modified Sobek Package, 4F-C, S, Acid Base Accounting, and Infrared.

REPORT A22-16738

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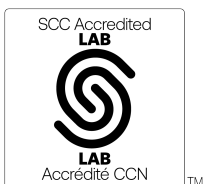
Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: no material for sample 1322047145. Sample F010308 and F010327 are insufficient for further analysis.



LabID: 266

ACTIVATION LABORATORIES LTD.
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5
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CERTIFIED BY:

<original signed by>

Mark Vandergeest
Quality Control Coordinator

Report No.: A22-16738
Report Date: 15-Feb-23
Date Submitted: 10-Nov-22
Your Reference: ASSAYS FROM PULP

New Gold Inc.
1800-Two Bentall Centre
555 Burrard Street, Box 212
Vancouver BC V7X 1M9
Canada

ATTN: Corey Lablans

CERTIFICATE OF ANALYSIS

181 Pulp samples were submitted for analysis.

Table with 3 columns: Analytical package, Method, and Testing Date. Rows include 1A2-50-Tbay (QOP AA-Au), 1E3-Tbay NewGold (QOP AquaGeo), and their respective testing dates.

REPORT A22-16738

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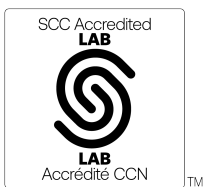
Notes:

11-ABA Modified Sobek Package carried out as per Canadian Mine Environment Neutral Drainage [MEND]. (1991). Acid Rock Drainage Prediction Manual. (MEND Project 1.16.1b., Section 6.2.3.)For results that are less than the detection limit, a value of half the detection limit is used for any corresponding calculations

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

Footnote: no material for sample 1322047145. Sample F010308 and F010327 are insufficient for further analysis.



LabID: 673

ACTIVATION LABORATORIES LTD.
1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6
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CERTIFIED BY:

<original signed by>

Mark Vandergeest
Quality Control Coordinator

Results

Activation Laboratories Ltd.

Report: A22-16738

Analyte Symbol	Au	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	ppb	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	5			0.01			0.01	0.05	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	FA-AA	none	Calc	pH Meter	TITR	Calc	Calc	SO4	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1314004141	88	None	-0.866	8.80	19.5	0.957	20.33	0.30	< 0.2	< 0.5	43	590	< 1	12	3	98	3.10	5	24	48	< 0.5	< 2	1.06
1314004131	120	None	-39.2	8.61	12.9	0.247	52.06	0.48	0.4	< 0.5	64	344	< 1	12	4	43	2.22	23	20	16	< 0.5	< 2	1.14
1313001001	436	None	-33.3	7.69	16.5	0.331	49.80	0.58	< 0.2	< 0.5	70	405	< 1	8	4	83	2.03	10	25	19	< 0.5	< 2	0.72
1314004068	104	None	1.32	8.45	22.7	1.06	21.41	0.38	< 0.2	< 0.5	20	362	< 1	21	< 2	41	2.68	3	23	33	< 0.5	< 2	1.39
1314004079	742	None	-28.5	7.75	10.3	0.265	38.77	0.53	0.4	< 0.5	142	410	1	4	< 2	52	2.26	3	22	18	< 0.5	3	0.61
1314004149	125	Slight	80.8	8.83	86.1	16.4	5.23	0.58	< 0.2	< 0.5	68	725	< 1	62	4	74	2.61	2	27	88	< 0.5	< 2	2.76
1314004071	55	None	-7.74	8.09	12.6	0.620	20.38	0.33	< 0.2	< 0.5	51	413	2	4	< 2	50	2.91	4	22	43	< 0.5	< 2	1.07
F010638	346																						
F010629	344																						
1314004387	352	None	-14.6	8.66	18.0	0.552	32.66	0.43	4.5	< 0.5	273	440	< 1	8	6	63	2.21	11	19	26	< 0.5	2	1.02
1314004414	492	None	-37.9	8.25	11.2	0.228	49.08	0.55	1.3	< 0.5	257	430	< 1	9	4	66	1.86	17	27	16	< 0.5	3	0.76
1314004739	58	None	-12.6	8.33	16.8	0.573	29.41	0.45	< 0.2	< 0.5	45	525	< 1	9	< 2	76	2.92	5	23	33	< 0.5	< 2	1.31
1314003033	296	None	-24.1	7.93	12.8	0.346	36.90	0.46	< 0.2	< 0.5	127	395	< 1	7	3	35	3.17	11	21	19	< 0.5	< 2	1.39
1314002147	263	None	-89.9	7.70	21.3	0.192	111.27	1.06	0.7	< 0.5	101	489	< 1	24	3	164	2.64	21	23	16	< 0.5	3	1.43
1324072024	83	Slight	36.8	8.19	64.5	2.33	27.61	0.83	0.6	6.2	63	551	< 1	9	2	1820	0.98	18	21	24	< 0.5	< 2	2.04
1324072193	9	Slight	34.1	8.39	48.5	3.37	14.41	0.46	< 0.2	< 0.5	6	484	1	9	2	64	1.96	5	24	40	< 0.5	< 2	1.63
1324072198	47	Slight	23.4	8.44	41.7	2.29	18.23	0.56	< 0.2	0.7	29	509	< 1	9	2	240	1.28	11	23	36	< 0.5	< 2	1.56
1324072224	25	Slight	39.6	8.76	46.9	6.44	7.29	0.48	< 0.2	1.6	34	540	< 1	7	2	480	1.15	10	19	39	< 0.5	< 2	1.62
1324072012	23	Slight	56.6	9.55	62.2	11.0	5.64	0.48	< 0.2	< 0.5	27	570	2	13	< 2	149	0.84	4	25	41	< 0.5	< 2	1.81
1324072166	18	Slight	29.2	8.98	38.1	4.28	8.90	0.37	< 0.2	< 0.5	43	544	< 1	14	3	97	1.73	3	24	49	< 0.5	< 2	1.69
1324072129	84	Slight	40.5	9.05	58.3	3.27	17.80	0.50	0.4	0.8	51	551	1	12	3	261	1.20	8	23	41	< 0.5	< 2	1.77
1324072100	26	Slight	42.1	9.39	47.4	8.96	5.29	0.36	< 0.2	< 0.5	34	487	< 1	7	3	68	1.24	5	27	44	< 0.5	< 2	1.64
1324072411	36	Slight	37.9	9.48	48.4	4.59	10.53	0.35	< 0.2	0.6	26	543	1	12	4	203	1.29	10	27	46	< 0.5	< 2	1.71
1324072131	23	Slight	53.2	8.99	58.4	11.2	5.20	0.46	< 0.2	0.6	31	496	2	11	3	204	1.17	5	24	46	< 0.5	< 2	1.84
1324072049	16	Slight	47.6	9.55	47.7	306	< 0.31	0.30	< 0.2	< 0.5	37	357	< 1	7	3	70	1.42	< 2	26	32	< 0.5	< 2	1.59
1324079157	46	Slight	40.7	9.41	44.6	11.6	3.84	0.31	< 0.2	< 0.5	20	525	< 1	7	3	63	1.21	4	26	48	< 0.5	< 2	1.52
1324072240	21	Slight	51.4	9.13	57.2	9.93	5.76	0.42	< 0.2	< 0.5	25	608	< 1	25	3	84	1.46	3	29	126	< 0.5	< 2	2.00
1324079114	84	Slight	29.6	8.88	41.6	3.47	11.99	0.50	< 0.2	< 0.5	15	527	< 1	7	5	53	1.10	5	25	32	< 0.5	< 2	1.43
1324079142	43	Slight	37.1	9.43	37.3	238	< 0.31	0.28	< 0.2	< 0.5	29	376	< 1	7	< 2	46	1.04	2	30	61	< 0.5	< 2	1.26
1324079113	41	Slight	34.8	9.32	43.2	5.16	8.37	0.33	< 0.2	< 0.5	26	482	1	8	< 2	40	1.12	5	24	32	< 0.5	< 2	1.48
1324079015	27	Slight	25.8	8.70	36.0	3.54	10.17	0.44	< 0.2	< 0.5	22	454	1	7	3	70	1.71	6	23	57	< 0.5	< 2	1.56
F010760	345																						
F010743	335																						
1314004168	201																						

Results

Activation Laboratories Ltd.

Report: A22-16738

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1314004071	7	9	3.16	< 10	< 1	0.13	13	1.15	0.158	0.036	0.81	< 2	1	113	0.04	< 1	< 2	< 10	12	< 10	2	6	0.20
F010638																							
F010629																							
1314004387	8	9	2.87	< 10	< 1	0.15	11	0.84	0.173	0.036	1.29	< 2	1	74	0.04	< 1	< 2	< 10	12	< 10	2	6	0.22
1314004414	9	10	3.08	< 10	< 1	0.15	12	0.75	0.155	0.037	1.79	2	1	62	0.03	4	< 2	< 10	11	< 10	2	8	0.18
1314004739	8	11	3.19	< 10	< 1	0.12	19	0.85	0.235	0.047	1.10	3	1	121	0.05	< 1	< 2	< 10	15	< 10	3	4	0.30
1314003033	12	9	3.07	< 10	< 1	0.10	12	0.94	0.195	0.035	1.38	< 2	1	145	0.01	< 1	< 2	< 10	14	< 10	2	10	0.23
1314002147	16	28	4.30	< 10	< 1	0.19	12	1.23	0.209	0.052	3.87	3	3	117	0.03	3	< 2	< 10	32	< 10	4	21	0.23
1324072024	9	7	2.35	< 10	< 1	0.22	10	0.63	0.032	0.039	1.25	< 2	< 1	36	< 0.01	< 1	< 2	< 10	7	< 10	2	5	0.85
1324072193	7	10	1.88	< 10	< 1	0.18	11	0.78	0.203	0.036	0.66	< 2	1	112	0.03	< 1	< 2	< 10	13	< 10	2	4	0.40
1324072198	9	9	2.28	< 10	< 1	0.18	12	0.75	0.058	0.036	0.79	< 2	1	33	0.03	< 1	< 2	< 10	16	< 10	3	5	0.53
1324072224	8	9	2.15	< 10	< 1	0.20	12	0.70	0.047	0.039	0.36	< 2	1	40	0.03	< 1	< 2	< 10	14	< 10	3	3	0.59
1324072012	8	11	2.22	< 10	< 1	0.18	13	0.64	0.050	0.040	0.34	< 2	< 1	35	0.04	< 1	< 2	< 10	10	< 10	3	3	0.92
1324072166	12	19	2.58	< 10	< 1	0.25	12	0.88	0.106	0.040	0.40	< 2	2	38	0.09	< 1	< 2	< 10	30	< 10	3	12	0.55
1324072129	9	13	2.39	< 10	< 1	0.21	13	0.80	0.058	0.041	0.77	< 2	1	41	0.04	< 1	< 2	< 10	16	< 10	3	5	0.76
1324072100	9	13	2.43	< 10	< 1	0.20	14	0.65	0.058	0.040	0.28	< 2	1	28	0.04	< 1	< 2	< 10	17	< 10	3	5	0.62
1324072411	8	11	2.18	< 10	< 1	0.29	12	0.83	0.057	0.040	0.46	2	1	38	0.05	< 1	< 2	< 10	17	< 10	3	6	0.63
1324072131	9	16	2.26	< 10	< 1	0.23	14	0.69	0.053	0.046	0.33	< 2	1	39	0.04	1	< 2	< 10	15	< 10	3	3	0.81
1324072049	9	10	2.05	< 10	< 1	0.17	14	0.62	0.101	0.042	0.11	< 2	1	53	0.05	< 1	< 2	< 10	15	< 10	3	3	0.53
1324079157	6	10	2.10	< 10	< 1	0.19	12	0.69	0.044	0.039	0.21	< 2	1	24	0.06	< 1	< 2	< 10	14	< 10	2	5	0.56
1324072240	11	29	2.62	< 10	< 1	0.42	16	1.24	0.041	0.059	0.32	2	3	80	0.10	4	< 2	< 10	29	< 10	3	11	0.74
1324079114	10	13	2.47	< 10	< 1	0.12	14	0.77	0.049	0.039	0.55	2	2	24	0.05	< 1	< 2	< 10	18	< 10	3	7	0.60
1324079142	6	13	2.10	< 10	< 1	0.26	12	0.63	0.062	0.039	0.10	< 2	2	28	0.08	< 1	< 2	< 10	22	< 10	3	11	0.51
1324079113	7	13	2.37	< 10	< 1	0.10	13	0.71	0.052	0.041	0.36	< 2	1	29	0.03	4	< 2	< 10	16	< 10	3	5	0.65
1324079015	10	11	2.30	< 10	< 1	0.25	14	0.69	0.136	0.040	0.46	2	1	73	0.06	3	< 2	< 10	16	< 10	3	7	0.48
F010760																							
F010743																							
1314004168																							

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1431001714	1.35
1431001627	2.14
1323065092	0.88
1431001560	1.06
1323065033	1.52
1431001641	1.44
1323065025	4.37
1431003217	3.48
1431003379	1.64
1320053035	1.58
1431003328	3.47
1431001148	3.45
1323065110	0.54
1431001613	1.13
1323065116	0.52
1431001150	3.36
1431001725	4.14
1320053097	1.74
1431003304	1.89
1431003332	3.55
1431003204	4.95
F010308	
F010327	
1431001704	4.53
1431003368	2.31
1431001735	5.74
1320053039	1.87
1431003009	0.97
1431003022	0.58
1431003026	0.68
1432086002	1.42
1431003070	6.89
1431004048	1.38
1431004140	0.54
1431003080	0.61
1431003013	0.42
1431003210	1.16
1431003150	1.36
1431003321	5.24
1431004004	1.11
1431004042	1.62
1431004161	0.71
1431004146	1.98
1431004228	0.86
F010328	
F010332	
1315013044	1.07
1315014038	0.12
1315014085	0.16
1315014025	2.49
1322047206	0.69

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1315014005	1.63
1315014080	0.42
1315014061	2.24
1431005028	0.68
1315014044	0.07
1322047202	0.62
1431003382	1.28
1431003371	1.65
1322047194	0.83
1322047122	0.40
1315015141	1.59
1322047213	0.73
1431003343	3.12
1431005679	1.56
1430097001	2.02
1431003298	2.94
F010330	
F010334	
1431004108	1.10
1431003090	1.12
1431003086	1.17
1431004169	1.37
1431003058	0.74
1431004111	0.91
1431005676	0.46
1431004017	0.78
1431005620	1.18
1315013097	2.44
1315013039	2.55
1431005617	1.24
1431005065	1.75
1315013069	2.67
1315013025	1.04
1315013030	0.32
1315013015	2.28
1315013059	2.11
F010329	
F010315	
1430097030	6.80
1322047120	0.73
1322047177	0.30
1322047127	0.50
1322047146	0.68
1315015155	0.11
1430097013	1.55
1315015169	2.01
1430097065	2.87
1322047098	0.77
1432083112	1.52
1315015047	2.32
1321070103	1.34

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1430097061	5.54
1315015063	2.59
1321070144	1.74
1315015012	2.14
1322047075	0.49
1315015098	0.14
1315015050	2.44
1315015016	1.37
1321070143	1.69
1321070006	1.43
1321070120	1.44
F010642	
F010659	
1321070013	1.30
1321070086	1.25
1321070036	1.35
1321070019	1.47
1321070055	1.35
1321070045	1.45
1432083061	3.18
1432083154	1.30
1432083104	1.49
1322047008	0.56
1432083028	0.91
1432083164	0.63
1322047042	0.65
1432083082	1.26
1432082227	1.04
1432082258	0.94
1432082306	2.97
F010627	
F010660	
1314004725	1.24
1313001006	1.39
1314004703	1.11
1322047006	0.85
1314004153	2.29
1314004095	0.68
1314004716	0.84
1314004731	1.26
1314004390	1.78
1314004389	0.95
1314004009	1.32
1314004062	2.59
1314004029	0.96
1314004141	0.75
1314004131	1.83
1313001001	1.79
1314004068	0.81
1314004079	1.42
1314004149	0.36

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1314004071	0.76
F010638	
F010629	
1314004387	1.19
1314004414	1.75
1314004739	1.09
1314003033	1.33
1314002147	3.91
1324072024	1.16
1324072193	0.61
1324072198	0.77
1324072224	0.39
1324072012	0.34
1324072166	0.41
1324072129	0.74
1324072100	0.29
1324072411	0.46
1324072131	0.33
1324072049	0.10
1324079157	0.23
1324072240	0.32
1324079114	0.55
1324079142	0.09
1324079113	0.38
1324079015	0.47
F010760	
F010743	
1314004168	

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-6 Meas									< 0.2	< 0.5	65	1050	< 1	23	97	123	6.69	227	25	699	0.9	< 2	0.12
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
GXR-6 Meas									< 0.2	< 0.5	65	1050	< 1	23	97	123	6.69	227	25	699	0.9	< 2	0.12
GXR-6 Cert									1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							42.0																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							42.4																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							41.6																
BaSO4 Cert							41.94																
BaSO4 Meas							42.2																
BaSO4 Cert							41.94																
BaSO4 Meas							41.5																
BaSO4 Cert							41.94																
BaSO4 Meas							41.2																
BaSO4 Cert							41.94																
BaSO4 Meas							40.3																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							40.9																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
BaSO4 Meas							41.7																
BaSO4 Cert							41.94																
BaSO4 Meas							41.4																
BaSO4 Cert							41.94																
BaSO4 Meas							29.5																
BaSO4 Cert							29.90																
BaSO4 Meas							29.6																
BaSO4 Cert							29.90																
BaSO4 Meas							29.3																
BaSO4 Cert							29.90																
BaSO4 Meas							29.6																
BaSO4 Cert							29.90																
BaSO4 Meas							29.2																
BaSO4 Cert							29.90																
BaSO4 Meas							29.3																
BaSO4 Cert							29.90																
BaSO4 Meas							29.3																
BaSO4 Cert							29.90																
BaSO4 Meas							29.3																

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
RTS-3a Cert							29.90																
RTS-3a Meas							29.2																
RTS-3a Cert							29.90																
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
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GS311-4 Meas																							
GS311-4 Cert																							
GS311-4 Meas																							
GS311-4 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							0.11																
SiO2 Cert																							
SiO2 Meas							0.11																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas							< 0.05																
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
SiO2 Meas																							
SiO2 Cert																							
NBM-1 (slight fzz) Meas			8.59																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.43																				
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.67																				

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Meas																							
NBM-1 (slight fzz) Cert			8.53																				
NBM-1 (slight fzz) Meas			8.59																				
NBM-1 (slight fzz) Cert			8.53																				
OREAS 922 (AQUA REGIA) Meas									0.8	< 0.5	2240	789	< 1	35	65	252	2.74	6		71	0.7	8	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.5	< 0.5	2180	768	< 1	36	64	253	2.72	3		70	0.7	5	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.8	< 0.5	2090	751	< 1	35	59	258	2.73	4		70	0.7	4	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.8	< 0.5	2240	789	< 1	35	65	252	2.74	6		71	0.7	8	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.5	< 0.5	2180	768	< 1	36	64	253	2.72	3		70	0.7	5	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 922 (AQUA REGIA) Meas									0.8	< 0.5	2090	751	< 1	35	59	258	2.73	4		70	0.7	4	0.36
OREAS 922 (AQUA REGIA) Cert									0.851	0.28	2176	730	0.69	34.3	60	256	2.72	6.12		70	0.65	10.3	0.324
OREAS 923 (AQUA REGIA) Meas									1.4	< 0.5	4380	874	< 1	34	84	323	2.73	6		56	0.6	26	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.3	< 0.5	4400	877	< 1	33	80	326	2.73	5		56	0.6	18	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.3	< 0.5	4220	859	< 1	33	82	328	2.77	5		55	0.6	14	0.36

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.4	< 0.5	4380	874	< 1	34	84	323	2.73	6		56	0.6	26	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.3	< 0.5	4400	877	< 1	33	80	326	2.73	5		56	0.6	18	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
OREAS 923 (AQUA REGIA) Meas									1.3	< 0.5	4220	859	< 1	33	82	328	2.77	5		55	0.6	14	0.36
OREAS 923 (AQUA REGIA) Cert									1.62	0.40	4248	850	0.84	32.7	81	335	2.80	7.07		54	0.61	21.8	0.326
Oreas 96 (Aqua Regia) Meas									10.2		> 10000				89	407							22
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.1		> 10000				89	400							8
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.2		> 10000				88	399							5
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.2		> 10000				89	407							22
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.1		> 10000				89	400							8
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
Oreas 96 (Aqua Regia) Meas									10.2		> 10000				88	399							5
Oreas 96 (Aqua Regia) Cert									11.50		39100.00				100	448							27.9
OREAS 45f (Aqua Regia) Meas											318	165	< 1	237	10	25	6.80			139	1.0	< 2	0.07
OREAS 45f (Aqua Regia) Cert											336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750
OREAS 45f (Aqua Regia) Meas											318	165	< 1	237	10	25	6.80			139	1.0	< 2	0.07
OREAS 45f (Aqua Regia) Cert											336	150	1.19	192	12.4	22.2	4.81			158	0.980	0.170	0.0750
OREAS 238 (Fire Assay) Meas								3080															
OREAS 238 (Fire Assay) Cert								3030															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
OREAS 238 (Fire Assay) Meas								3150															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3180															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3080															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3050															
OREAS 238 (Fire Assay) Cert								3030															
OREAS 238 (Fire Assay) Meas								3030															
OREAS 238 (Fire Assay) Cert								3030															
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
GS316-3 Meas																							
GS316-3 Cert																							
Oreas E1336 (Fire Assay) Meas								529															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								506															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								523															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								509															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								494															
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								493															

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modifie d-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
Oreas E1336 (Fire Assay) Cert								510.000															
Oreas E1336 (Fire Assay) Meas								497															
Oreas E1336 (Fire Assay) Cert								510.000															
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
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GS317-5 Meas																							
GS317-5 Cert																							
GS317-5 Meas																							
GS317-5 Cert																							
Oreas 620 (Aqua Regia) Meas									38.6	163	1950	454	9	13	> 5000	> 10000	1.21	48		< 10	0.6	< 2	1.23
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									38.6	162	1940	437	9	13	> 5000	> 10000	1.19	49		< 10	0.6	< 2	1.23
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									38.6	163	1950	454	9	13	> 5000	> 10000	1.21	48		< 10	0.6	< 2	1.23
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
Oreas 620 (Aqua Regia) Meas									38.6	162	1940	437	9	13	> 5000	> 10000	1.19	49		< 10	0.6	< 2	1.23
Oreas 620 (Aqua Regia) Cert									38.4	161	1750	414	9	14	7740	31200	1.12	47		450	0.6	2	1.29
1320053035 Orig							0.76	618															
1320053035 Dup							0.74	595															
1431001148 Orig									0.7	< 0.5	248	1460	< 1	60	< 2	144	3.74	8	23	< 10	< 0.5	< 2	3.20
1431001148 Dup									0.7	< 0.5	244	1460	< 1	59	< 2	144	3.77	10	21	< 10	< 0.5	2	2.87
1431001148 Orig									0.7	< 0.5	248	1460	< 1	60	< 2	144	3.74	8	23	< 10	< 0.5	< 2	3.20
1431001148 Dup									0.7	< 0.5	244	1460	< 1	59	< 2	144	3.77	10	21	< 10	< 0.5	2	2.87
1431003304 Orig							0.59																
1431003304 Dup							0.61																
1431003332 Orig								50															
1431003332 Dup								50															
1431003204 Orig																							
1431003204 Dup																							
1320053039 Orig									1.8	9.1	99	969	< 1	4	355	2210	0.89	87	21	19	< 0.5	< 2	1.63
1320053039 Dup									0.8	9.1	102	959	< 1	6	365	2210	0.86	107	21	19	< 0.5	< 2	1.62
1320053039 Orig									1.8	9.1	99	969	< 1	4	355	2210	0.89	87	21	19	< 0.5	< 2	1.63
1320053039 Dup									0.8	9.1	102	959	< 1	6	365	2210	0.86	107	21	19	< 0.5	< 2	1.62

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1432086002 Orig								140															
1432086002 Dup								144															
1431004048 Orig																							
1431004048 Dup																							
1431004140 Orig							0.30																
1431004140 Dup							0.32																
1431004042 Orig									0.4	< 0.5	52	345	2	11	6	63	1.47	8	21	21	< 0.5	< 2	1.53
1431004042 Dup									0.3	< 0.5	52	345	2	9	5	65	1.46	8	21	19	< 0.5	< 2	1.54
1431004042 Orig									0.4	< 0.5	52	345	2	11	6	63	1.47	8	21	21	< 0.5	< 2	1.53
1431004042 Dup									0.3	< 0.5	52	345	2	9	5	65	1.46	8	21	19	< 0.5	< 2	1.54
1431004161 Orig								37															
1431004161 Dup								38															
1431004146 Orig							0.81																
1431004146 Dup							0.87																
1431004228 Orig																							
1431004228 Dup																							
1315014025 Orig	None	-58.5		12.7	0.178	71.15																	
1315014025 Dup	None	-57.4		13.7	0.193	71.15																	
1315014061 Orig								101															
1315014061 Dup								96															
1315014044 Orig																							
1315014044 Dup																							
1431003382 Orig							0.52																
1431003382 Dup							0.50																
1430097001 Orig									< 0.2	< 0.5	53	1180	< 1	24	< 2	69	1.56	3	16	12	< 0.5	< 2	0.98
1430097001 Dup									< 0.2	< 0.5	58	1220	< 1	24	2	72	1.59	< 2	19	13	< 0.5	< 2	1.00
1430097001 Orig									< 0.2	< 0.5	53	1180	< 1	24	< 2	69	1.56	3	16	12	< 0.5	< 2	0.98
1430097001 Dup									< 0.2	< 0.5	58	1220	< 1	24	2	72	1.59	< 2	19	13	< 0.5	< 2	1.00
1431003298 Orig							0.87	109															
1431003298 Dup							0.89	111															
1431003298 Orig																							
1431003298 Dup																							
1431005676 Orig			9.60																				
1431005676 Dup			9.61																				
1315013097 Orig																							
1315013097 Dup																							
1315013039 Orig								833															
1315013039 Dup								877															
1431005065 Orig							0.97		0.4	< 0.5	121	1130	< 1	188	< 2	100	4.12	8	24	28	< 0.5	< 2	3.58
1431005065 Dup							0.97		0.5	< 0.5	125	1110	< 1	188	< 2	99	4.03	9	21	28	< 0.5	< 2	3.56
1431005065 Orig									0.4	< 0.5	121	1130	< 1	188	< 2	100	4.12	8	24	28	< 0.5	< 2	3.58
1431005065 Dup									0.5	< 0.5	125	1110	< 1	188	< 2	99	4.03	9	21	28	< 0.5	< 2	3.56
1430097030 Orig								265															
1430097030 Dup								272															
1322047177 Orig																							
1322047177 Dup																							
1322047127 Orig							0.45																
1322047127 Dup							0.44																
1315015169 Orig									0.3	< 0.5	63	332	2	7	4	55	2.43	9	21	17	< 0.5	< 2	1.09

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaCO ₃ /t	Ratio	kg CaCO ₃ /t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1315015169 Dup									0.3	< 0.5	62	326	3	6	5	56	2.41	8	21	16	< 0.5	< 2	1.08
1315015169 Orig									0.3	< 0.5	63	332	2	7	4	55	2.43	9	21	17	< 0.5	< 2	1.09
1315015169 Dup									0.3	< 0.5	62	326	3	6	5	56	2.41	8	21	16	< 0.5	< 2	1.08
1432083112 Orig	Slight	-6.80		35.2	0.838	41.97																	
1432083112 Dup	Slight	-7.35		34.6	0.825	41.97																	
1315015047 Orig								200															
1315015047 Dup								173															
1321070103 Orig																							
1321070103 Dup																							
1315015012 Orig							0.69																
1315015012 Dup							0.72																
1321070143 Orig									0.3	< 0.5	39	967	1	7	44	178	1.01	62	20	19	< 0.5	< 2	1.66
1321070143 Dup									0.4	< 0.5	37	971	< 1	7	46	179	1.02	56	21	19	< 0.5	< 2	1.66
1321070143 Orig									0.3	< 0.5	39	967	1	7	44	178	1.01	62	20	19	< 0.5	< 2	1.66
1321070143 Dup									0.4	< 0.5	37	971	< 1	7	46	179	1.02	56	21	19	< 0.5	< 2	1.66
1321070006 Orig								203															
1321070006 Dup								201															
1321070120 Orig																							
1321070120 Dup																							
1321070086 Orig							0.50																
1321070086 Dup							0.55																
1432083104 Orig								171															
1432083104 Dup								171															
1322047008 Orig																							
1322047008 Dup																							
1432083082 Orig									0.6	1.3	97	1080	< 1	27	3	311	2.80	10	20	28	< 0.5	< 2	3.12
1432083082 Dup									0.6	1.3	96	1070	< 1	27	2	314	2.77	10	19	27	< 0.5	< 2	3.08
1432083082 Orig									0.6	1.3	97	1080	< 1	27	3	311	2.80	10	20	28	< 0.5	< 2	3.12
1432083082 Dup									0.6	1.3	96	1070	< 1	27	2	314	2.77	10	19	27	< 0.5	< 2	3.08
1432082227 Orig							0.44																
1432082227 Dup							0.47																
1314004703 Orig								94															
1314004703 Dup								136															
1322047006 Orig																							
1322047006 Dup																							
1314004716 Orig							0.40																
1314004716 Dup							0.37																
1314004009 Orig									< 0.2	< 0.5	104	333	< 1	5	2	40	2.77	6	22	27	< 0.5	< 2	1.06
1314004009 Dup									< 0.2	< 0.5	103	325	1	5	2	39	2.75	7	21	24	< 0.5	< 2	1.06
1314004009 Orig									< 0.2	< 0.5	104	333	< 1	5	2	40	2.77	6	22	27	< 0.5	< 2	1.06
1314004009 Dup									< 0.2	< 0.5	103	325	1	5	2	39	2.75	7	21	24	< 0.5	< 2	1.06
1314004141 Orig																							
1314004141 Dup																							
1313001001 Orig	None	-33.3		16.5	0.331	49.80		436															
1313001001 Dup	None	-33.3		16.5	0.331	49.80		410															
1314004079 Orig			7.75																				
1314004079 Dup			7.75																				
1314004071 Orig							0.33																
1314004071 Dup							0.31																

Analyte Symbol	Fizz Rating	NNP	Paste pH	Modified-NP	NPR	AP (Sulphide)	SO4	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	B	Ba	Be	Bi	Ca
Unit Symbol	-	-	pH	kg CaC O3/t	Ratio	kg CaC O3/t	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%
Lower Limit			0.01			0.01	0.05	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01
Method Code	none	Calc	pH Meter	TITR	Calc	Calc	SO4	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
1314003033 Orig								305	< 0.2	< 0.5	127	395	< 1	7	3	35	3.17	11	21	19	< 0.5	< 2	1.39
1314003033 Dup								287	0.3	< 0.5	128	404	< 1	5	3	35	3.25	8	21	19	< 0.5	< 2	1.41
1314003033 Orig									< 0.2	< 0.5	127	395	< 1	7	3	35	3.17	11	21	19	< 0.5	< 2	1.39
1314003033 Dup									0.3	< 0.5	128	404	< 1	5	3	35	3.25	8	21	19	< 0.5	< 2	1.41
1314002147 Orig																							
1314002147 Dup																							
1324072224 Orig							0.48																
1324072224 Dup							0.47																
1324072131 Orig								23															
1324072131 Dup								20															
1324072240 Orig									< 0.2	< 0.5	25	608	< 1	25	3	84	1.46	3	29	126	< 0.5	< 2	2.00
1324072240 Dup									< 0.2	< 0.5	26	620	< 1	24	3	86	1.49	3	25	128	< 0.5	< 2	2.06
1324072240 Orig									< 0.2	< 0.5	25	608	< 1	25	3	84	1.46	3	29	126	< 0.5	< 2	2.00
1324072240 Dup									< 0.2	< 0.5	26	620	< 1	24	3	86	1.49	3	25	128	< 0.5	< 2	2.06
1324079113 Orig								41															
1324079113 Dup								39															
1324079015 Orig							0.44																
1324079015 Dup							0.43																
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5															
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Method Blank								< 5															
Method Blank								< 5															
Method Blank								< 5	< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	45	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	38	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	38	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	1	< 2	< 2	< 0.01	< 2	43	< 10	< 0.5	< 2	< 0.01
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	1	< 2	< 2	< 0.01	< 2	43	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	35	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	35	< 10	< 0.5	< 2	< 0.01	
Method Blank								< 5															
Method Blank								< 5															

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
RTS-3a Cert																							
GS311-4 Meas																							1.11
GS311-4 Cert																							1.11
GS311-4 Meas																							1.08
GS311-4 Cert																							1.11
GS311-4 Meas																							1.09
GS311-4 Cert																							1.11
GS311-4 Meas																							1.09
GS311-4 Cert																							1.11
GS311-4 Meas																							1.10
GS311-4 Cert																							1.11
GS311-4 Meas																							1.11
GS311-4 Cert																							1.11
GS311-4 Meas																							1.10
GS311-4 Cert																							1.11
SiO2 Meas																							
SiO2 Cert																							
SiO2 Meas																							< 0.01
SiO2 Cert																							
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NBM-1 (slight fzz) Meas																							
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Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
NBM-1 (slight fzz) Cert																							
OREAS 922 (AQUA REGIA) Meas	21	45	5.35	< 10		0.42	35	1.33	0.021	0.066	0.39	3	4	17			< 2	< 10	33	< 10	16	20	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	45	5.16	< 10		0.41	34	1.28	0.020	0.065	0.38	2	4	16			< 2	< 10	32	< 10	16	19	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	43	4.93	< 10		0.38	32	1.23	0.019	0.062	0.36	2	3	16			< 2	< 10	31	< 10	15	20	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	21	45	5.35	< 10		0.42	35	1.33	0.021	0.066	0.39	3	4	17			< 2	< 10	33	< 10	16	20	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	45	5.16	< 10		0.41	34	1.28	0.020	0.065	0.38	2	4	16			< 2	< 10	32	< 10	16	19	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 922 (AQUA REGIA) Meas	20	43	4.93	< 10		0.38	32	1.23	0.019	0.062	0.36	2	3	16			< 2	< 10	31	< 10	15	20	
OREAS 922 (AQUA REGIA) Cert	19.4	40.7	5.05	7.62		0.376	32.5	1.33	0.021	0.063	0.386	0.57	3.15	15.0			0.14	1.98	29.4	1.12	16.0	22.3	
OREAS 923 (AQUA REGIA) Meas	22	40	5.86	< 10		0.34	31	1.37		0.062	0.68	< 2	3	15			< 2	< 10	32	< 10	14	26	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	23	42	5.88	< 10		0.34	31	1.37		0.062	0.69	3	3	14			< 2	< 10	32	< 10	14	26	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	22	41	5.71	< 10		0.33	30	1.33		0.060	0.67	3	3	14			< 2	< 10	31	< 10	14	22	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	22	40	5.86	< 10		0.34	31	1.37		0.062	0.68	< 2	3	15			< 2	< 10	32	< 10	14	26	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
OREAS 923 (AQUA REGIA) Meas	23	42	5.88	< 10		0.34	31	1.37		0.062	0.69	3	3	14			< 2	< 10	32	< 10	14	26	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
OREAS 923 (AQUA REGIA) Meas	22	41	5.71	< 10		0.33	30	1.33		0.060	0.67	3	3	14			< 2	< 10	31	< 10	14	22	
OREAS 923 (AQUA REGIA) Cert	22.2	39.4	5.91	8.01		0.322	30.0	1.43		0.061	0.684	0.58	3.09	13.6			0.12	1.80	30.6	1.96	14.3	22.5	
Oreas 96 (Aqua Regia) Meas	47										3.97	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	46										3.88	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	45										3.77	7											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	47										3.97	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	46										3.88	6											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
Oreas 96 (Aqua Regia) Meas	45										3.77	7											
Oreas 96 (Aqua Regia) Cert	49.2										4.38	4.53											
OREAS 45f (Aqua Regia) Meas	38	338	12.6	20	2	0.08	< 10	0.16	0.031	0.020	0.02		27	14	0.15		< 2	< 10	189		4	23	
OREAS 45f (Aqua Regia) Cert	39.2	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0	
OREAS 45f (Aqua Regia) Meas	38	338	12.6	20	2	0.08	< 10	0.16	0.031	0.020	0.02		27	14	0.15		< 2	< 10	189		4	23	
OREAS 45f (Aqua Regia) Cert	39.2	341	13.7	20.3	0.0310	0.0820	10.7	0.152	0.0320	0.0220	0.0270		31.4	13.2	0.0970		0.120	1.09	217		6.74	30.0	
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Assay Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
OREAS 238 (Fire Assay) Meas																							
OREAS 238 (Fire Assay) Cert																							
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.06
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
GS316-3 Meas																							0.05
GS316-3 Cert																							0.0600
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
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Oreas E1336 (Fire Assay) Cert																							
Oreas E1336 (Fire Assay) Meas																							
Oreas E1336 (Fire Assay) Cert																							
GS317-5 Meas																							8.17
GS317-5 Cert																							8.46
GS317-5 Meas																							8.22
GS317-5 Cert																							8.46
GS317-5 Meas																							8.19
GS317-5 Cert																							8.46
GS317-5 Meas																							8.38

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
GS317-5 Cert																							8.46
GS317-5 Meas																							8.10
GS317-5 Cert																							8.46
GS317-5 Meas																							8.01
GS317-5 Cert																							8.46
GS317-5 Meas																							8.00
GS317-5 Cert																							8.46
Oreas 620 (Aqua Regia) Meas	14	17	2.73	< 10	2	0.30	25	0.27	0.120	0.033	2.67	63		20			< 2	< 10	8	< 10	7	59	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
Oreas 620 (Aqua Regia) Meas	14	17	2.66	< 10	2	0.28	24	0.27	0.115	0.029	2.60	62		19			< 2	< 10	8	< 10	7	19	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
Oreas 620 (Aqua Regia) Meas	14	17	2.73	< 10	2	0.30	25	0.27	0.120	0.033	2.67	63		20			< 2	< 10	8	< 10	7	59	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
Oreas 620 (Aqua Regia) Meas	14	17	2.66	< 10	2	0.28	24	0.27	0.115	0.029	2.60	62		19			< 2	< 10	8	< 10	7	19	
Oreas 620 (Aqua Regia) Cert	12	17	2.58	6	2	0.31	25	0.27	0.117	0.031	2.47	62		20			0.5	2.2	7	0.79	7	57	
1320053035 Orig																							0.58
1320053035 Dup																							0.59
1431001148 Orig	40	9	9.46	10	1	0.03	< 10	2.51	0.016	0.041	2.06	4	14	40	0.01	< 1	< 2	< 10	352	< 10	4	5	
1431001148 Dup	39	10	9.38	10	< 1	0.03	< 10	2.50	0.016	0.041	1.78	4	14	40	0.01	< 1	< 2	< 10	348	< 10	4	5	
1431001148 Orig	40	9	9.46	10	1	0.03	< 10	2.51	0.016	0.041	2.06	4	14	40	0.01	< 1	< 2	< 10	352	< 10	4	5	
1431001148 Dup	39	10	9.38	10	< 1	0.03	< 10	2.50	0.016	0.041	1.78	4	14	40	0.01	< 1	< 2	< 10	348	< 10	4	5	
1431003304 Orig																							
1431003304 Dup																							
1431003332 Orig																							
1431003332 Dup																							
1431003204 Orig																							1.53
1431003204 Dup																							1.52
1320053039 Orig	7	3	2.11	< 10	< 1	0.21	12	0.65	0.014	0.041	1.98	4	< 1	18	< 0.01	< 1	< 2	< 10	5	< 10	2	7	
1320053039 Dup	7	3	2.09	< 10	< 1	0.21	12	0.64	0.013	0.042	1.98	4	< 1	18	< 0.01	< 1	< 2	< 10	4	< 10	2	6	
1320053039 Orig	7	3	2.11	< 10	< 1	0.21	12	0.65	0.014	0.041	1.98	4	< 1	18	< 0.01	< 1	< 2	< 10	5	< 10	2	7	
1320053039 Dup	7	3	2.09	< 10	< 1	0.21	12	0.64	0.013	0.042	1.98	4	< 1	18	< 0.01	< 1	< 2	< 10	4	< 10	2	6	
1432086002 Orig																							
1432086002 Dup																							
1431004048 Orig																							0.67
1431004048 Dup																							0.67
1431004140 Orig																							
1431004140 Dup																							
1431004042 Orig	11	10	2.52	< 10	< 1	0.10	10	0.83	0.103	0.042	1.73	2	1	66	0.01	< 1	< 2	< 10	15	< 10	2	10	
1431004042 Dup	12	10	2.53	< 10	< 1	0.10	10	0.84	0.103	0.043	1.73	3	1	67	0.01	< 1	< 2	< 10	15	< 10	2	9	
1431004042 Orig	11	10	2.52	< 10	< 1	0.10	10	0.83	0.103	0.042	1.73	2	1	66	0.01	< 1	< 2	< 10	15	< 10	2	10	
1431004042 Dup	12	10	2.53	< 10	< 1	0.10	10	0.84	0.103	0.043	1.73	3	1	67	0.01	< 1	< 2	< 10	15	< 10	2	9	
1431004161 Orig																							
1431004161 Dup																							
1431004146 Orig																							
1431004146 Dup																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1431004228 Orig																							0.64
1431004228 Dup																							0.64
1315014025 Orig																							
1315014025 Dup																							
1315014061 Orig																							
1315014061 Dup																							
1315014044 Orig																							0.14
1315014044 Dup																							0.13
1431003382 Orig																							
1431003382 Dup																							
1430097001 Orig	14	9	3.18	< 10	< 1	0.10	22	0.95	0.072	0.064	2.08	< 2	1	46	< 0.01	2	< 2	< 10	12	< 10	3	5	
1430097001 Dup	15	10	3.23	< 10	< 1	0.11	23	0.98	0.076	0.067	2.08	2	2	47	< 0.01	< 1	< 2	< 10	12	< 10	3	5	
1430097001 Orig	14	9	3.18	< 10	< 1	0.10	22	0.95	0.072	0.064	2.08	< 2	1	46	< 0.01	2	< 2	< 10	12	< 10	3	5	
1430097001 Dup	15	10	3.23	< 10	< 1	0.11	23	0.98	0.076	0.067	2.08	2	2	47	< 0.01	< 1	< 2	< 10	12	< 10	3	5	
1431003298 Orig																							0.93
1431003298 Dup																							0.94
1431003298 Orig																							0.55
1431003298 Dup																							0.94
1431005676 Orig																							
1431005676 Dup																							
1315013097 Orig																							0.20
1315013097 Dup																							0.21
1315013039 Orig																							
1315013039 Dup																							
1431005065 Orig	38	405	6.94	< 10	1	0.16	< 10	4.07	0.014	0.021	1.20	4	12	59	0.17	6	< 2	< 10	113	< 10	3	4	
1431005065 Dup	38	396	6.84	< 10	< 1	0.16	< 10	4.03	0.014	0.021	1.17	6	12	58	0.16	4	< 2	< 10	109	< 10	3	4	
1431005065 Orig	38	405	6.94	< 10	1	0.16	< 10	4.07	0.014	0.021	1.20	4	12	59	0.17	6	< 2	< 10	113	< 10	3	4	
1431005065 Dup	38	396	6.84	< 10	< 1	0.16	< 10	4.03	0.014	0.021	1.17	6	12	58	0.16	4	< 2	< 10	109	< 10	3	4	
1430097030 Orig																							
1430097030 Dup																							
1322047177 Orig																							0.86
1322047177 Dup																							0.86
1322047127 Orig																							
1322047127 Dup																							
1315015169 Orig	10	7	3.39	< 10	< 1	0.12	13	0.83	0.199	0.041	2.04	< 2	1	133	0.02	< 1	< 2	< 10	13	< 10	3	17	
1315015169 Dup	9	7	3.34	< 10	< 1	0.12	13	0.82	0.194	0.041	2.07	< 2	1	132	0.02	2	< 2	< 10	13	< 10	2	16	
1315015169 Orig	10	7	3.39	< 10	< 1	0.12	13	0.83	0.199	0.041	2.04	< 2	1	133	0.02	< 1	< 2	< 10	13	< 10	3	17	
1315015169 Dup	9	7	3.34	< 10	< 1	0.12	13	0.82	0.194	0.041	2.07	< 2	1	132	0.02	2	< 2	< 10	13	< 10	2	16	
1432083112 Orig																							
1432083112 Dup																							
1315015047 Orig																							
1315015047 Dup																							
1321070103 Orig																							0.70
1321070103 Dup																							0.71
1315015012 Orig																							
1315015012 Dup																							
1321070143 Orig	7	4	1.93	< 10	< 1	0.18	15	0.50	0.020	0.037	1.81	< 2	< 1	19	< 0.01	< 1	< 2	< 10	5	< 10	2	5	
1321070143 Dup	7	4	1.92	< 10	< 1	0.19	14	0.50	0.020	0.037	1.82	< 2	< 1	19	< 0.01	< 1	< 2	< 10	5	< 10	2	5	
1321070143 Orig	7	4	1.93	< 10	< 1	0.18	15	0.50	0.020	0.037	1.81	< 2	< 1	19	< 0.01	< 1	< 2	< 10	5	< 10	2	5	
1321070143 Dup	7	4	1.92	< 10	< 1	0.19	14	0.50	0.020	0.037	1.82	< 2	< 1	19	< 0.01	< 1	< 2	< 10	5	< 10	2	5	
1321070006 Orig																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
1321070006 Dup																							
1321070120 Orig																							0.60
1321070120 Dup																							0.59
1321070086 Orig																							
1321070086 Dup																							
1432083104 Orig																							
1432083104 Dup																							
1322047008 Orig																							0.57
1322047008 Dup																							0.57
1432083082 Orig	28	20	6.86	< 10	< 1	0.10	< 10	2.00	0.087	0.042	1.14	3	8	64	0.10	< 1	< 2	< 10	242	< 10	5	8	
1432083082 Dup	28	20	6.75	< 10	1	0.10	< 10	1.97	0.085	0.041	1.12	4	8	63	0.10	< 1	< 2	< 10	243	< 10	5	8	
1432083082 Orig	28	20	6.86	< 10	< 1	0.10	< 10	2.00	0.087	0.042	1.14	3	8	64	0.10	< 1	< 2	< 10	242	< 10	5	8	
1432083082 Dup	28	20	6.75	< 10	1	0.10	< 10	1.97	0.085	0.041	1.12	4	8	63	0.10	< 1	< 2	< 10	243	< 10	5	8	
1432082227 Orig																							
1432082227 Dup																							
1314004703 Orig																							
1314004703 Dup																							
1322047006 Orig																							1.05
1322047006 Dup																							1.05
1314004716 Orig																							
1314004716 Dup																							
1314004009 Orig	7	8	3.69	< 10	< 1	0.16	12	1.02	0.156	0.039	1.39	< 2	1	119	0.03	< 1	< 2	< 10	13	< 10	2	9	
1314004009 Dup	7	8	3.61	< 10	< 1	0.16	12	1.00	0.153	0.038	1.36	3	1	120	0.03	< 1	< 2	< 10	12	< 10	2	9	
1314004009 Orig	7	8	3.69	< 10	< 1	0.16	12	1.02	0.156	0.039	1.39	< 2	1	119	0.03	< 1	< 2	< 10	13	< 10	2	9	
1314004009 Dup	7	8	3.61	< 10	< 1	0.16	12	1.00	0.153	0.038	1.36	3	1	120	0.03	< 1	< 2	< 10	12	< 10	2	9	
1314004141 Orig																							0.22
1314004141 Dup																							0.22
1313001001 Orig																							
1313001001 Dup																							
1314004079 Orig																							
1314004079 Dup																							
1314004071 Orig																							
1314004071 Dup																							
1314003033 Orig	12	9	3.07	< 10	< 1	0.10	12	0.94	0.195	0.035	1.38	< 2	1	145	0.01	< 1	< 2	< 10	14	< 10	2	10	
1314003033 Dup	12	9	3.08	< 10	< 1	0.10	12	0.96	0.197	0.035	1.39	2	1	146	0.01	< 1	< 2	< 10	14	< 10	2	12	
1314003033 Orig	12	9	3.07	< 10	< 1	0.10	12	0.94	0.195	0.035	1.38	< 2	1	145	0.01	< 1	< 2	< 10	14	< 10	2	10	
1314003033 Dup	12	9	3.08	< 10	< 1	0.10	12	0.96	0.197	0.035	1.39	2	1	146	0.01	< 1	< 2	< 10	14	< 10	2	12	
1314002147 Orig																							0.23
1314002147 Dup																							0.23
1324072224 Orig																							
1324072224 Dup																							
1324072131 Orig																							0.81
1324072131 Dup																							0.75
1324072240 Orig	11	29	2.62	< 10	< 1	0.42	16	1.24	0.041	0.059	0.32	2	3	80	0.10	4	< 2	< 10	29	< 10	3	11	
1324072240 Dup	11	30	2.66	< 10	< 1	0.42	16	1.27	0.041	0.060	0.32	< 2	3	80	0.10	< 1	< 2	< 10	29	< 10	3	10	
1324072240 Orig	11	29	2.62	< 10	< 1	0.42	16	1.24	0.041	0.059	0.32	2	3	80	0.10	4	< 2	< 10	29	< 10	3	11	
1324072240 Dup	11	30	2.66	< 10	< 1	0.42	16	1.27	0.041	0.060	0.32	< 2	3	80	0.10	< 1	< 2	< 10	29	< 10	3	10	
1324079113 Orig																							
1324079113 Dup																							
1324079015 Orig																							
1324079015 Dup																							

Analyte Symbol	Co	Cr	Fe	Ga	Hg	K	La	Mg	Na	P	S	Sb	Sc	Sr	Ti	Te	Tl	U	V	W	Y	Zr	C-Total
Unit Symbol	ppm	ppm	%	ppm	ppm	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%
Lower Limit	1	1	0.01	10	1	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	1	2	10	1	10	1	1	0.01
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	CS
Method Blank																							
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Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.006	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10	< 0.01	0.005	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank																							
Method Blank																							

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
GXR-6 Meas	
GXR-6 Cert	
GXR-6 Meas	
GXR-6 Cert	
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	13.7
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	13.9
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	13.2
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	13.7
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	14.0
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	14.2
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	14.0
BaSO4 Cert	14.0
BaSO4 Meas	
BaSO4 Cert	
BaSO4 Meas	
BaSO4 Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	
RTS-3a Meas	
RTS-3a Cert	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
RTS-3a Cert	
GS311-4 Meas	0.57
GS311-4 Cert	0.54
GS311-4 Meas	0.56
GS311-4 Cert	0.54
GS311-4 Meas	0.56
GS311-4 Cert	0.54
GS311-4 Meas	0.55
GS311-4 Cert	0.54
GS311-4 Meas	0.54
GS311-4 Cert	0.54
GS311-4 Meas	0.54
GS311-4 Cert	0.54
GS311-4 Meas	0.54
GS311-4 Cert	0.54
SiO2 Meas	
SiO2 Cert	
SiO2 Meas	< 0.01
SiO2 Cert	
SiO2 Meas	
SiO2 Cert	
SiO2 Meas	0.01
SiO2 Cert	
SiO2 Meas	
SiO2 Cert	
SiO2 Meas	< 0.01
SiO2 Cert	
SiO2 Meas	
SiO2 Cert	
SiO2 Meas	< 0.01
SiO2 Cert	
SiO2 Meas	< 0.01
SiO2 Cert	
SiO2 Meas	< 0.01
SiO2 Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	
NBM-1 (slight fzz) Cert	
NBM-1 (slight fzz) Meas	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
NBM-1 (slight fzz) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 922 (AQUA REGIA) Meas	
OREAS 922 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
OREAS 923 (AQUA REGIA) Meas	
OREAS 923 (AQUA REGIA) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
Oreas 96 (Aqua Regia) Meas	
Oreas 96 (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 45f (Aqua Regia) Meas	
OREAS 45f (Aqua Regia) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
OREAS 238 (Fire Assay) Meas	
OREAS 238 (Fire Assay) Cert	
GS316-3 Meas	0.36
GS316-3 Cert	0.340
GS316-3 Meas	0.36
GS316-3 Cert	0.340
GS316-3 Meas	0.34
GS316-3 Cert	0.340
GS316-3 Meas	0.32
GS316-3 Cert	0.340
GS316-3 Meas	0.30
GS316-3 Cert	0.340
GS316-3 Meas	0.32
GS316-3 Cert	0.340
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
Oreas E1336 (Fire Assay) Meas	
Oreas E1336 (Fire Assay) Cert	
GS317-5 Meas	14.6
GS317-5 Cert	15.5
GS317-5 Meas	15.0
GS317-5 Cert	15.5
GS317-5 Meas	14.8
GS317-5 Cert	15.5
GS317-5 Meas	14.8

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
GS317-5 Cert	15.5
GS317-5 Meas	14.7
GS317-5 Cert	15.5
GS317-5 Meas	15.1
GS317-5 Cert	15.5
GS317-5 Meas	15.2
GS317-5 Cert	15.5
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
Oreas 620 (Aqua Regia) Meas	
Oreas 620 (Aqua Regia) Cert	
1320053035 Orig	1.58
1320053035 Dup	1.59
1431001148 Orig	
1431001148 Dup	
1431001148 Orig	
1431001148 Dup	
1431003304 Orig	
1431003304 Dup	
1431003332 Orig	
1431003332 Dup	
1431003204 Orig	4.95
1431003204 Dup	4.97
1320053039 Orig	
1320053039 Dup	
1320053039 Orig	
1320053039 Dup	
1432086002 Orig	
1432086002 Dup	
1431004048 Orig	1.38
1431004048 Dup	1.35
1431004140 Orig	
1431004140 Dup	
1431004042 Orig	
1431004042 Dup	
1431004042 Orig	
1431004042 Dup	
1431004161 Orig	
1431004161 Dup	
1431004146 Orig	
1431004146 Dup	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1431004228 Orig	0.86
1431004228 Dup	0.90
1315014025 Orig	
1315014025 Dup	
1315014061 Orig	
1315014061 Dup	
1315014044 Orig	0.07
1315014044 Dup	0.07
1431003382 Orig	
1431003382 Dup	
1430097001 Orig	
1430097001 Dup	
1430097001 Orig	
1430097001 Dup	
1431003298 Orig	2.96
1431003298 Dup	2.92
1431003298 Orig	
1431003298 Dup	
1431005676 Orig	
1431005676 Dup	
1315013097 Orig	2.44
1315013097 Dup	2.51
1315013039 Orig	
1315013039 Dup	
1431005065 Orig	
1431005065 Dup	
1431005065 Orig	
1431005065 Dup	
1430097030 Orig	
1430097030 Dup	
1322047177 Orig	0.30
1322047177 Dup	0.29
1322047127 Orig	
1322047127 Dup	
1315015169 Orig	
1315015169 Dup	
1315015169 Orig	
1315015169 Dup	
1432083112 Orig	
1432083112 Dup	
1315015047 Orig	
1315015047 Dup	
1321070103 Orig	1.34
1321070103 Dup	1.36
1315015012 Orig	
1315015012 Dup	
1321070143 Orig	
1321070143 Dup	
1321070143 Orig	
1321070143 Dup	
1321070006 Orig	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
1321070006 Dup	
1321070120 Orig	1.44
1321070120 Dup	1.33
1321070086 Orig	
1321070086 Dup	
1432083104 Orig	
1432083104 Dup	
1322047008 Orig	0.56
1322047008 Dup	0.56
1432083082 Orig	
1432083082 Dup	
1432083082 Orig	
1432083082 Dup	
1432082227 Orig	
1432082227 Dup	
1314004703 Orig	
1314004703 Dup	
1322047006 Orig	0.85
1322047006 Dup	0.86
1314004716 Orig	
1314004716 Dup	
1314004009 Orig	
1314004009 Dup	
1314004009 Orig	
1314004009 Dup	
1314004141 Orig	0.75
1314004141 Dup	0.75
1313001001 Orig	
1313001001 Dup	
1314004079 Orig	
1314004079 Dup	
1314004071 Orig	
1314004071 Dup	
1314003033 Orig	
1314003033 Dup	
1314003033 Orig	
1314003033 Dup	
1314002147 Orig	3.91
1314002147 Dup	3.92
1324072224 Orig	
1324072224 Dup	
1324072131 Orig	0.33
1324072131 Dup	0.31
1324072240 Orig	
1324072240 Dup	
1324072240 Orig	
1324072240 Dup	
1324079113 Orig	
1324079113 Dup	
1324079015 Orig	
1324079015 Dup	

Analyte Symbol	Total S
Unit Symbol	%
Lower Limit	0.01
Method Code	CS
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
Method Blank	
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