

**Report on 2014 Geological Mapping  
and  
Prospecting Program  
Neville-Potier Property**

Porcupine Mining Division  
Neville and Potier Townships  
Ontario, Canada  
NTS 41 P/12

Mining Claims:

4251589, 4248790, 4251592, and 4250020

January 23rd, 2015

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## 1.0 Summary:

The Neville-Potier Project is a contiguous claim block consisting of 6000 Hectares in Neville and Potier Townships owned by GoldON Resources Ltd. These claims are positioned within as well as North and South of the contact between the Swayze Greenstone Belt and the Kenogamissi batholith to the North. The claims are located about 3 kilometers northwest of the Cote Gold deposit.

Trelawney Mining & Exploration personnel conducted a geological mapping, prospecting and sampling program on the Neville-Potier property on behalf of GoldON Resources Ltd. The mapping program began in early July 2014 and concluded later that month. Two mapping teams completed the work over 32 man days or 320 hours.

The mapping program sought to not only investigate anomalous geophysical results returned from I.P. geophysical survey conducted earlier that winter, but also to complete geological mapping and prospecting a relatively under-explored terrain in a prospective area while gaining geological knowledge into the local stratigraphy. The mapping program investigated portions of the Swayze Greenstone Belt as well as the Neville pluton (Kenogamissi Batholith) to the North. The Swayze Greenstone Belt (or SGB) historically has been prospected for Gold and to a lesser extent base metals, and is home to several past producing gold mines such as the historic Jerome Mine.

Over the course of the mapping program 131 grab samples collected were fire assayed for Gold and analyzed by multi-element ICP-MS. Although results were mostly discouraging a couple of anomalous gold assays were retrieved. The highlight of the program, sample 162615 with an assay value of 0.508 g/t Au was taken from a gossanous shear-hosted quartz vein striking at 120 degrees and dipping 80 degrees to the south within a mafic tuff. To follow up on this anomalous result a channel sample was taken across the shear zone at an azimuth of 030 degrees. The results of the channel sampling confirmed the anomalous grab sample and resulted in sample 162278 assaying 1.030 g/t Au over 0.30 meters. Another grab sample retrieved 0.147 g/t Au within a porphyritic volcanic unit along the Chester road.

## 2.0 Introduction:

### 2.1: Purpose of the report:

This report has been prepared to meet the requirements for the filing of assessment work under the provisions of the Ontario Mining Act and describes results of a geological mapping, prospecting and sampling program performed by Trelawney Mining and Exploration Inc. on behalf of GoldON Resources in Neville and Potier Townships, within the South Swayze Property, Porcupine Mining District, Ontario.

Following a 2014 winter geophysical I.P. survey, Trelawney Mining and Exploration personnel carried out Geological mapping, prospecting and sampling during the summer 2014 field season for GoldON Resources Ltd. The program was carried out over four 16 unit claim blocks, namely 4251589, 4248790,

4251592, and 4250020. The geological mapping, prospecting and sampling program began on July 8<sup>th</sup> and finished on July 16<sup>th</sup> 2014. Trelawney Mining and Exploration personnel later returned to the mapping area to follow up on anomalous results with a channel sample on September 23<sup>rd</sup>, 2014.

3.0 Property Description and Location:

Figure 1: Neville-Potier Property Location



### 3.1 Property Description:

The Neville-Potier Property is a large contiguous mining claim block containing 375 claim units and covering 6000 hectares in Potier and Neville townships within the Porcupine Mining Division. The mining claims are 100% owned by GoldON Resources Ltd. Figure 2 depicts the extent of the claims composing the Neville-Potier Property along with the claims mapped during the 2014 geological mapping program. Table 1 summarizes information for those claims on which the mapping & prospecting program were conducted. Maps in Appendix 2 position the samples within these claims.

Figure 2: Neville-Potier Property Claim Map

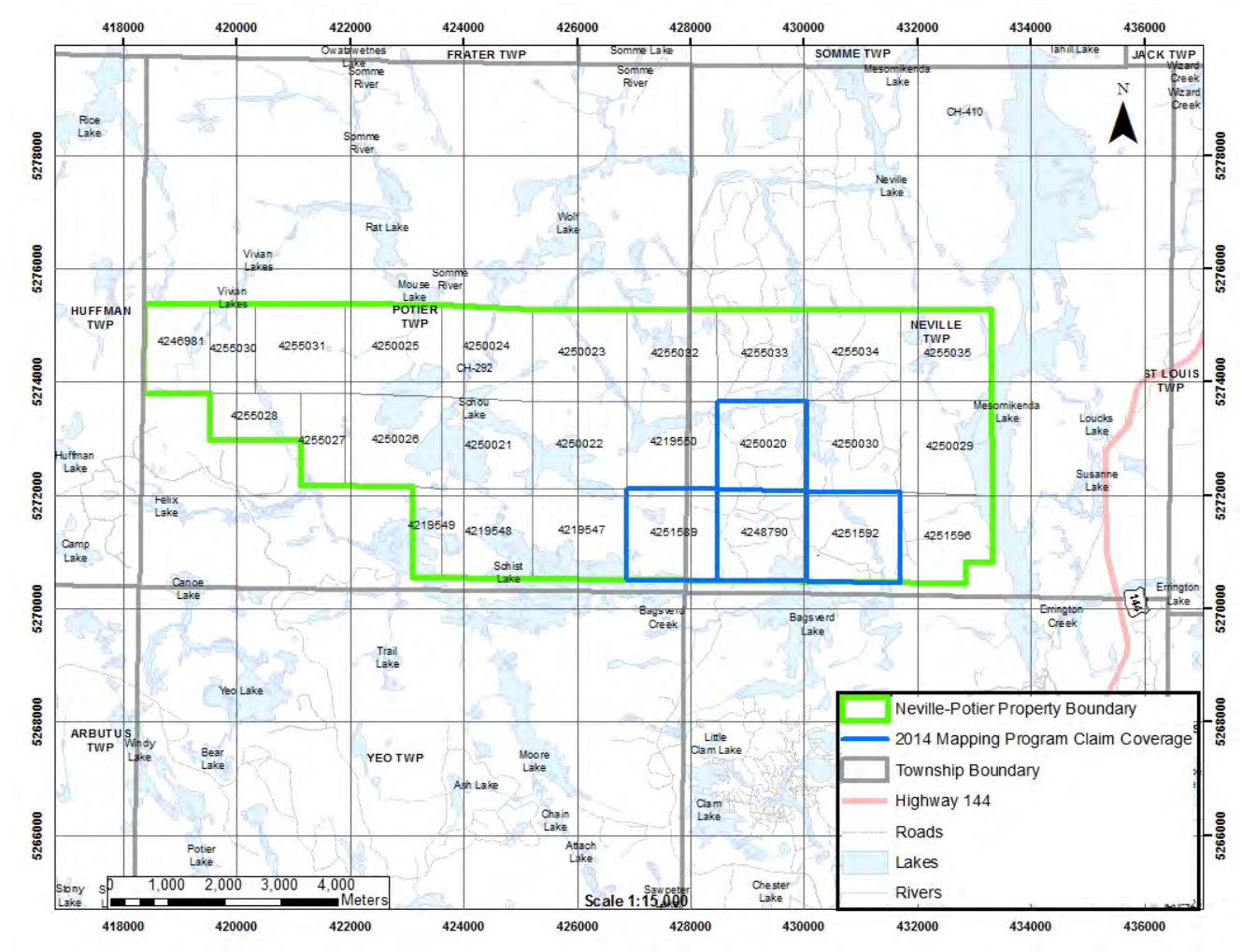


Table 1: Summary of Information for Staked Claims Worked:

Claim No.	Claim Units	Owner	Due Date	Township
4250020	16	100% GoldON Resources Ltd.	Mar 16 2015	Neville
4251589	16	100% GoldON Resources Ltd.	Mar 16 2015	Neville
4248790	16	100% GoldON Resources Ltd.	Mar 16 2015	Neville
4251592	16	100% GoldON Resources Ltd.	Mar 16 2015	Neville

#### 4.0 Accessibility, Climate and Physiography

##### 4.1 Location and Access:

The Neville-Potier Property is held within the Porcupine Mining District in Neville and Potier townships on NTS map sheets 41 O/09 and 41 P/12. The work reported on here was completed within NTS map sheet 41 P/12. The claims are located approximately 27 kilometers southwest of Gogama, Ontario. Access to the property is via the Chester Road, a secondary gravel logging road that heads north from the Sultan Road near kilometer 8. The Sultan Road heads west-northwest at Highway 144's intersection with Highway 560 near the Watershed.

##### 4.2 Physiography and Vegetation:

The climate on the Neville-Potier Property is similar to that of Timmins to the north. Environment Canada notes a temperate range of +38.9 degrees Celsius to -45.6 degrees Celsius. Precipitation in both snow and rain form average to approximately 85cm annually.

The GoldON Property hosts extensive tree cover with limited topographic relief and local cedar swamps.

## 5.0 Previous and Historical Exploration Work

The Neville-Potier property exploration history recorded from the 1950's through to 2014 includes a variety of surveys ranging from geological mapping and prospecting through to the most recent I.P. geophysical survey conducted by GoldON Resources Ltd. in the winter of 2014. The following synopsis is taken from online assessment report documents provided by the MNDM. described.

### 5.1 Exploration History:

Previous historical exploration work is summarized below for the claims mapped during this 2014 summer program.

1958: A 2 hole diamond drill program was performed by Three Duck Lake Syndicate within the Swayze Greenstone Belt. A total of 617 feet were drilled.

1970: Geological and geochemical soil sampling surveys were performed on a group of 22 claims in Potier Township by Siscoe Metals. High copper values were detected in the soil samples and thought to be due to chalcopyrite rich gossanous zones.

1971: An IP and resistivity survey was performed by Siscoe Metals on their Triduc Property in Potier Township. Several weak anomalies were found.

1979: Cominco Ltd. Conducted a geological mapping, rock sampling and magnetometer survey to delineate a band of iron formation located mainly under Schist Lake. No significant Au assays were reported.

1980: Hargor Resources Inc. performed airborne electromagnetic, magnetometer and electromagnetic VLF over Neville Township and the surrounding area.

1984: Hargor Resources Inc. performed an electromagnetic and magnetometer survey on their Neville-Potier and Huffman Township property. Two significantly anomalous areas were identified.

1985: Hargor Resources Inc. performed a 2 hole, 800 foot diamond drill program on their Potier township property. Drill holes intersected two zones of iron formation however assays were weak and failed to give encouragement.

1985: Blue Falcon Mines Ltd. Performed airborne magnetometer and electromagnetic VLF over Neville Township and the surrounding area

1990: Blue Falcon Mines Ltd. Performed a magnetic and VLF-EM airborne survey which covered areas from Schist Lake to Clam Lake. Several VLF-EM conductors were found.

2008: Fugro Airborne Surveys, on behalf of Augen Gold Corp, completed an electromagnetic, magnetometer and radiometric geophysical survey over the entire South Swayze Property.



2012: Newcastle Minerals (now GoldON Resources) performed a prospecting and sampling program over the Neville-Potier Property

## 6.0 Geological Setting

### 6.1 Regional Geology:

The Neville-Potier Property is located within the Superior Province of the Canadian Shield and the south central part of the Abitibi Sub-province. The Neville-Potier Property lies within as well as north of the southern Swayze Greenstone Belt – a northwest trending belt of metamorphosed Archean volcanic, sedimentary and intrusive rock that is bounded on the southwest and northeast by granitoid batholiths (Ayer & Trowell, 2002). This belt is considered to be the western continuation of the mineral rich Abitibi Greenstone Belt.

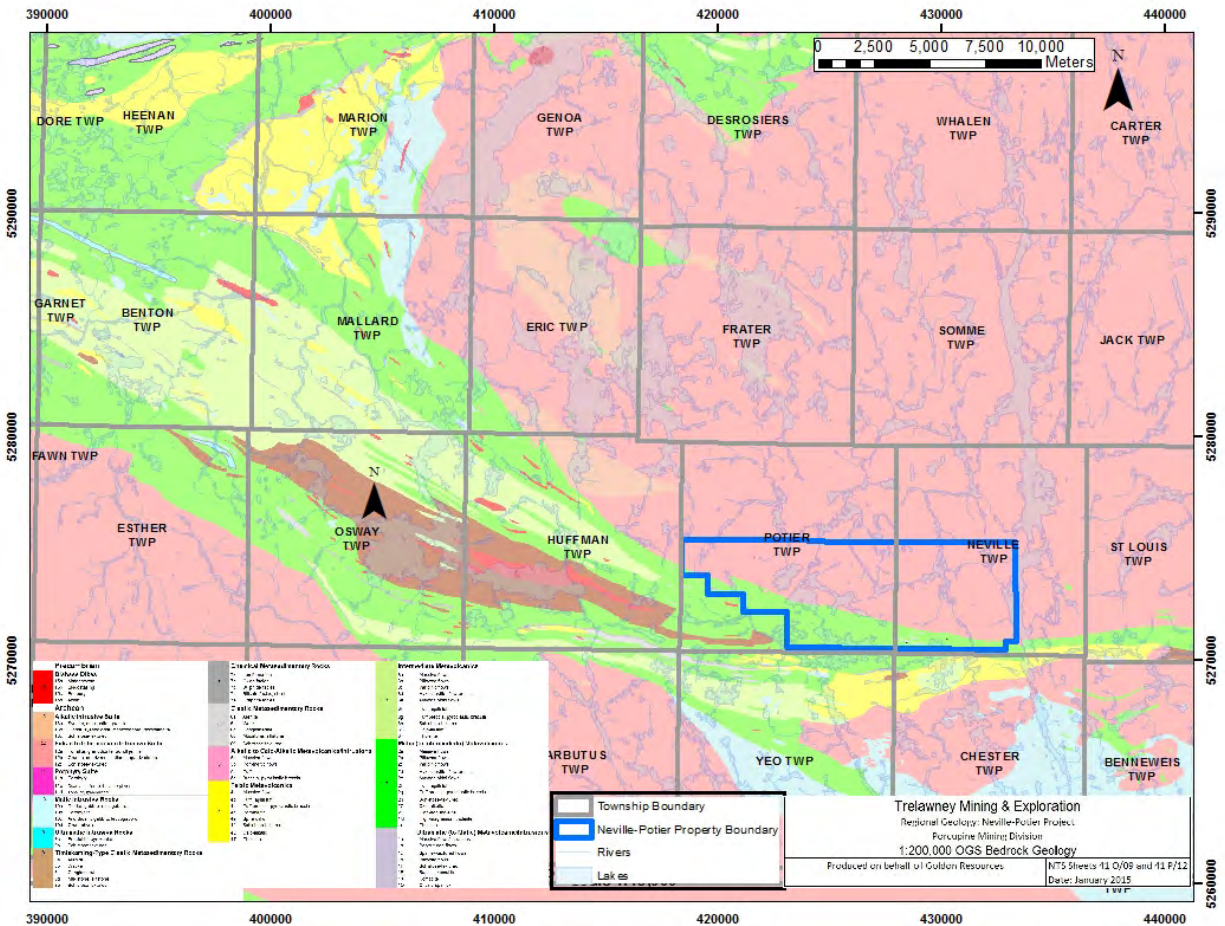
The Swayze area experienced a complex and protracted structural history of polyphase folding, development of multiple foliations, ductile high-strain zones and late brittle faulting. Shearing is common throughout the southern Swayze with foliation, shear planes and primary layering mainly sub-vertical. This portion of the Swayze hosts the Ridout Deformation Zone (RDZ), a major east-west crustal-scale high strain zone. It has been suggested that the Ridout shear zone may be the western extension of the Cadillac-Larder lake deformation zone which has significant geological and economic implications (Von Breemen et al., 2006).

Metamorphism within the southern SGB is largely upper greenschist facies.

The Neville-Potier project lies largely within the lower part of the northern limb of the Swayze Syncline composed of a belt of metavolcanic rocks of mainly sheared tholeiitic basaltic flows of Archean age. Several belts of felsic to intermediate pyroclastics, tuffs and cherts occur concordantly within the mafic metavolcanics.

Regional geology of the Swayze Greenstone Belt and area is depicted in Figure 3 below which is modified from the OGS.

Figure 3: Regional Geology (Modified after OGS)



## 6.2 Property Geology:

The Neville-Potier Property is underlain to the north by intermediate to felsic intrusives of the Neville Pluton consisting of Tonalites to Quartz Monzonites and underlain to the south primarily by an east-west trending steeply dipping felsic meta-volcanic to mafic meta-volcaniclastic assemblage. The volcanic assemblage makes up the Swayze Greenstone Belt. Late north-northwesterly trending Matachewan aged diabase dykes as well as northeast trending Biscostasing gabbroic dykes intrude the units above.

Results from the present geological mapping program in general confirmed the accuracy of the regional geology map. Along the northern portion of the area felsic intrusives were confirmed and examined to be mainly Quartz Monzonites belonging to the Neville Pluton. These felsic intrusives were continuous and massive throughout the mapping area north of the major contact with the Swayze Greenstone Belt. South of the contact geological mapping outlined and confirmed the strike continuity of the mafic meta-volcanic assemblages belonging to the SGB. Meta-sedimentary units in the form of foliated wackes were

identified in two localities however the foliated nature made it difficult to discern from the meta-volcanic sequences. These volcanic assemblages were typically strongly foliated to sheared with the fabric striking E-W and dipping steeply to the South. This is typical of the RDZ and observed throughout the belt. Late mafic intrusive dykes namely Matachewan and Biscostasing were typically magnetic and massive in nature.

Field work led to the identification of 8 major rock units which are described below.

#### 6.2.1 Description of Rock Types:

Quartz Monzonite to Tonalite: Medium to coarsely grained crystalline rock, pink to pink-orange in colour. Weakly to moderately silicified. Mineralogy averages 7-10% biotite +/- amphibole, 40% quartz and 50% plagioclase feldspar +/- small amounts of potassic feldspar. Minor hematite staining is also observed.

Felsic Meta-volcanic: Fine grained Aphanitic texture. Strongly silicified. Light grey to cream in colour.

Intermediate Meta-volcanic: Fine grained Aphanitic texture. Moderately silicified. Medium grey colour.

Mafic Tuff: Fine grained ash to lapilli tuff with elongated polymictic clasts. Light to dark grey and at times green in colour. Banding apparent due to mass flow. Pervasively foliated. Often carbonate altered.

Pillowed Mafic Meta-volcanic: Fine grained, Aphanitic Dark Grey to Green in colour. Often chlorite altered. Pillows vary from weakly deformed to strongly deformed with almost unrecognizable pillow selvages with increasing strain.

Porphyritic Meta-volcanic: Fine grained grey to grey-green coloured matrix with subhedral porphyritic plagioclase feldspar phenocrysts with a somewhat graded nature. Gradational contacts into volcanoclastic material.

Matachewan Diabase: North to northwest trending. Finely crystalline dark grey to black containing coarsely crystalline epidote altered plagioclase phenocrysts (1-3%). Massive texture. Moderately to strongly magnetic. Sulphides nil to trace.

Biscostasing Dykes: Northeast trending. Medium grained crystalline intrusive rock. 1-5mm sized grains. Massive texture. Dark grey to green in colour. Gabbroic composition. Amphibole rich. Weakly altered to fresh with rare weak epidote alteration. Moderately to strongly magnetic.

Feldspar Porphyry Dyke: Fine grained <1mm dark green mafics, massive overall with porphyritic subrounded to subangular feldspar grains 1mm-1cm in size. 10-15% feldspar phenocrysts.

## 7.0 Summary of 2014 Neville-Potier Mapping and Prospecting Program

Trelawney Mining & Exploration personnel conducted the geological mapping and sampling program on the Neville-Potier property on behalf of GoldON Resources. The work was performed by Mavros Whissell, Adam Waram, Sam Tyler and Andrew Shea of Sudbury, Ontario and by Jillian Craig of Copper Cliff, Ontario and Brian Tomczuk of St. Catharines, Ontario. The mapping program began in early July 2014 and concluded later that month. Over the course of the program 130 grab samples were taken and 141 mapping stations were recorded. Two mapping teams completed the work over 32 man days or 320 hours. The areas geologically mapped and prospected utilized 4 exploration grid lines (5.30 line kilometers) for control and also bush trails, logging roads and GPS traverses.

Over the duration of the program both the granitic terrane of the Neville Pluton (Kenogamissi Batholith) to the north of the Swayze Greenstone Belt as well as the belt itself south of the contact with the Neville Pluton were explored. The contact between the Neville Pluton and Swayze Greenstone belt was examined and prospected for mineralization as well as corrected for a more accurate location of the contact. While the actual contact between the batholith and greenstone belt was not identified in the field (due to topographic changes), stark textural observations were made. Contact relationships were identified with the Neville Pluton lithologies of Quartz Monzonite to Tonalite having a relict to overprinted texture and thus taking on finer grained and more schistose texture local to the contact. The intrusive material of the Neville Pluton appeared unaltered with minor amounts of hematite staining and distinctly lacking any significant sulphide mineralization, with only trace amounts of disseminated fine grained pyrite. Quartz veins in the Neville Pluton area consisted of white unmineralized bull quartz.

The bulk of the sampling took place to the south, within the Swayze Greenstone Belt. The volcanic material of the Swayze greenstone belt hosted a consistent and strong E-W striking fabric conforming to the regional foliation being well within the RDZ. The lithologies varied with the most abundant being of mafic meta-volcanic variety consisting of massive flows and pillowed basalts to mafic volcanoclastic varieties, such as graded lapilli-rich tuffaceous units. The ashy tuffs often took on a sedimentary affinity with apparent bedding. In general the mafic units were commonly chlorite altered, silicified and often carbonatized. The mafic units typically hosted only minor amounts of fine grained sulphides usually in the form of pyrite occasionally with trace fine grained chalcopyrite. Small silicified bodies of both intermediate and felsic volcanics were rare but notable and hosted generally trace amounts of fine grained pyrite. A few small late Intermediate Feldspar Porphyry dykes were also identified. Two late massive mafic intrusions were identified as a N-NW trending Matachewan diabase dyke as well as a NE trending Biscostasing gabbroic dyke.

Highlights from the mapping and prospecting program include one sample (162615 - Appendix 2) returning an assay value of 0.508 g/t Au taken from a gossanous shear hosted quartz vein within a mafic tuff. The mafic tuffaceous host rock was strongly oxidized local to the shear zone and moderately to strongly silicified. The host rock however was weakly mineralized with trace amounts of fine grained

disseminated pyrite that assayed at 0.067 g/t Au (over a 1.0 meter long channel sample). Another sample retrieved 0.147 g/t Au within a mafic porphyritic volcanic unit. Unfortunately ICP failed to indicate any significant pathfinder elements. Later in the field season, on September 23<sup>rd</sup>, follow up work was completed on the 0.508 g/t Au grab sample with a channel sample taken with a diamond rock saw. The channel sample was taken at an azimuth of 030 degrees with two 1.0 meter shoulder samples on either side. The center sample was 0.30 meters in length across the shear zone with gossanous veining which was sheared at 120 degrees with an 80 degree dip. The results of the channel sampling confirmed the anomalous grab sample and resulted in channel sample 162278 assaying at 1.030 g/t Au/0.30 meters. Attempts were also made to locate and extend the strike continuity of the quartz vein and shear zone structure. Unfortunately outcrop exposure failed to bare any manifestation of the structure further along strike.

Sample and station descriptions and locations can be found in Appendix 2 and 3 with the assay certificates in Appendix 4. A geological map was compiled based on the results of the geological mapping program and can be found in Appendix 1.

## 8.0 QA/QC:

### 8.1 Trelawney Mining & Exploration Quality Control of Grab Samples:

Outcrops mapped by Trelawney field personnel were digitized into an ArcGIS database. When a grab sample was taken, two samples were taken; one for analyses and another for representation. A GPS waypoint was taken at each grab sample location. The samples were bagged and labelled, along with a brief description written in field note books. The samples were then personally delivered by Trelawney Mining and Exploration personnel to Activation Laboratories in Sudbury, Ontario where they were analyzed by fire assay/AA for Au and a 4 acid digest with a 61 element ICP-MS rock package. All methods used, analyses, and detection limits are on hand in the form of assay certificates # A14-04837 and A14-06964 (Appendix 4). Certificate A14-06964 only shows the analysis of the 3 channel samples taken.

A standard or a blank was sent by Trelawney with every 12<sup>th</sup> sample taken. This information was later compiled in an Excel spreadsheet and imported into an ArcGIS database. The assay certificate for all grab samples are available in Appendix 4.

After 2 ½ weeks turnaround time, assays were received from Actlabs in the forms of PDF and Excel files which were entered into a master database/excel file by Trelawney Mining and Exploration Inc. personnel.

Trelawney personnel inserted a total of 6 commercially certified gold standards provided by Analytical Solutions Ltd. Of Toronto, ON into the sample stream. The standards used were OREAS 504 (1.48 ppm Au), OREAS 501b (0.248 ppm Au), OREAS 206 (2.197 ppm Au), and OREAS 204 (1.043 ppm Au). Five blanks were inserted into the sample group alternating around the certified standards. The results of the in house QA/QC samples can be seen below in Table 2. All standards and blanks were within the limits of the upper and lower 3<sup>rd</sup> standard deviation which is within passing range.

Table 2: QA/QC Results Table

QA/QC Results - Blanks				
Lab: ActLabs Blank Code: BLKDIA Warning: 0.1 AU PPM				
Total Samples			Passed	Failed
5			5	0
Date	Cert	Sample	Pass	Fail
06/08/2014	A14-04837	162524	0.005	
06/08/2014	A14-04837	162548	0.005	
06/08/2014	A14-04837	162574	0.012	
06/08/2014	A14-04837	162598	0.005	
06/08/2014	A14-04837	162624	0.005	
QA/QC Results - Standards				
Lab: ActLabs Standard: OREAS 204 Mean:1.043 AU PPM				
Limits				
Upper		2s	3s	
Lower	0	1.12	1.158	
		0.966	0.927	
Total Samples			Passed	Failed
2			2	0
Date	Cert	Sample	Pass	Fail
06/08/2014	A14-04837	162512	1.02	
06/08/2014	A14-04837	162612	1.05	
QA/QC Results - Standards				
Lab: ActLabs Standard: OREAS 206 Mean:2.197 AU PPM				
Limits				
Upper		2s	3s	
Lower	0	2.36	2.441	
		2.035	1.953	
Total Samples			Passed	Failed
2			2	0
Date	Cert	Sample	Pass	Fail
06/08/2014	A14-04837	162536	2.24	
06/08/2014	A14-04837	162636	2.36	
QA/QC Results - Standards				
Lab: ActLabs Standard: OREAS 501b Mean:0.248 AU PPM				
Limits				
Upper		2s	3s	
Lower	0	0.267	0.276	
		0.229	0.219	
Total Samples			Passed	Failed
1			1	0
Date	Cert	Sample	Pass	Fail
06/08/2014	A14-04837	162562	0.261	
QA/QC Results - Standards				
Lab: ActLabs Standard: OREAS 504 Mean:1.48 AU PPM				
Limits				
Upper		2s	3s	
Lower	0	1.56	1.6	
		1.4	1.36	
Total Samples			Passed	Failed
1			1	0
Date	Cert	Sample	Pass	Fail
06/08/2014	A14-04837	162586	1.43	

## 8.2 Actlabs Procedures and Analysis Methodology:

Activation Laboratories (Actlabs) are accredited by the Standards Council of Canada to ISO 17025 for specific registered tests or certification to ISO 9001:2008 certifications for accredited methods. Sample preparation, analytical and quality control procedures employed are mutually similar in procedure and are as follows:

Sample Preparation: Once the samples have been received, they are entered into the Quality Management System and given an internal sample control number. The samples are then checked for dryness prior to any sample preparation and dried if needed. The samples are split off 1.0 kg and pulverized split to better than 85% passing 75 microns using a Jones Rifler. Silica cleaning between each sample is also performed to prevent any cross contamination. Random screen analysis is performed daily to check for attainable mesh size.

Gold Analysis: All Au analysis is performed at a 30g charge by fire assay used lead collection with a silver inquant. The detection limit is 2 ppb. The beads are then digested and an atomic absorption finish is used.

Multi Scan Analysis: Multi scan analysis (61 element) was performed using a near total to total four acid digestion (hydrochloric, nitric, perchloric, hydrofluoric). It is then analyzed by ICP-OES and ICP-MS method.

Laboratory QA/QC: Certified standard and blank assays are usually run for each rack of samples. A non-reproducible check assay are an indication of nugget problems within the sample and both laboratories recommend that further analysis be performed to generate a better representation of the sample.

All standards run are graphed to monitor for performance of the laboratory. Actlabs Minerals warning limit is 2 times the standard deviation and our control limit is 3 times the standard deviation. Any work order with a standard running outside the warning limit will have selected re-assays performed, and any work order with a standard running outside the control limit will have the entire batch of samples re-analysed.

All QA/QC data run with each work order is kept with the clients file. If desired, the client may have all the blanks and certified standards reported on a certificate to correspond to the client's samples. All quality control graphs are available upon request.

The laboratory also keeps daily log books for the sample throughput. These logs record all information pertaining to; 1) who performed the analysis, 2) when the analysis was done, 3) how the analysis was performed, and 4) what other samples were analyzed at the same time. This is done to help eliminate the possibility of misrepresentation and cross-contamination of the client's samples.

Actlabs Minerals instruments are calibrated using ISO traceable calibration standards and our quality control standards are created from separate stock solutions. Their instruments are directly tied to their quality control program eliminating the need for manual data entry, hence, reducing human error.

## 9.0 Conclusions:

Trelawney Mining and Exploration personnel successfully completed geological mapping, prospecting and sampling of the target area as well as follow-up on anomalous results. During the program 130 grab samples were collected on the Neville-Potier project area. Only two samples were anomalous for Au and no significant pathfinder elements were identified. The most prospective sample being a narrow shear zone hosting gossanous shear veining which assayed at 1.03 g/t Au over 0.30 meters following channel sampling. The geological mapping program did what it sought out to do, investigate and sample prospective Au bearing structures and lithologies to identify the potential for Au mineralization. The geological mapping program yielded a viable lithological map of the target area.

## 10.0 Recommendations:

Further follow-up work is suggested to be performed on the areas hosting the two anomalous grab samples. The shear zone with gossanous quartz veining which was channel sampled should be considered for a potential diamond drilling target. The porphyritic volcanic sample which was taken along the Chester road and is coincident with a I.P. chargeability anomaly should also be examined for target potential.



## 11.0 References:

Coates, H.J. 2013 43-101F Technical Report on the Chester, Neville/Potier & Mollie River Properties, Porcupine Mining Division, Ontario, Canada for GoldON Resources Ltd., pp. 1-144

Siemieniuk, S. 2011 Prospecting and Sampling Program, Neville-Potier Property, Porcupine Mining Division, pp. 1 to 17 (assessment report)

Von Breeman, O., Heather, K.B., and Ayer, J.A., 2006; U-Pb geochronology of the Neoproterozoic Swayze sector of the southern Abitibi greenstone belt; GSC Current Research 2006-F1, 32p.

Ayer, J. A. and Trowell, N.F. 2002. Geological compilation of the Swayze area, Abitibi greenstone belt; Ontario Geological Survey, Preliminary Map P.3511, scale 1:100,000

12.0 Statement of Qualifications:

Jillian Craig, B.Sc, Geology; P.Geo

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Address : 10-2 Gribble street, Copper cliff, On, Canada, p0m1n0

I, Jillian Craig, do hereby certify that:

I have been a geologist for IAMGOLD Corporation, formerly Trelawney Mining and Exploration Inc. and previously Augen Gold Corp. since July 19<sup>th</sup>, 2010.

I graduated with a B. Sc. Majoring in Geology from the University of New Brunswick in 2008.

I am responsible in part for the preparation of this assessment report.

I am a registered practicing professional member (P. Geo) of the Association of Professional Geoscientists of Ontario, Member 2471.

I have been involved with the Neville-Potier property exploration program of Trelawney Mining & Exploration on behalf of GoldON Resources since July 2014 and was on site from July 8<sup>th</sup>, 2014 through July 16<sup>th</sup>, 2015.

Dated this the eleventh day of February, 2015.

Jillian Craig, B.Sc. (Geology), P.Geo



## STATEMENT OF QUALIFICATIONS – ALAN SMITH

I, Alan Smith, do hereby certify that:

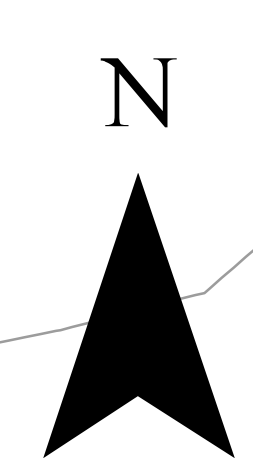
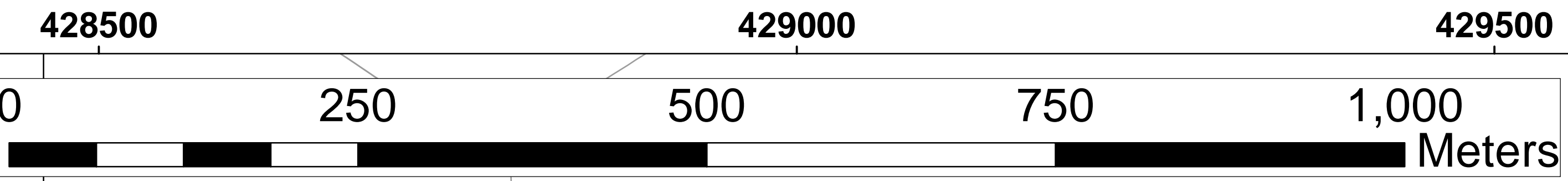
1. I have been the District Manager – Exploration for Trelawney Mining and Exploration Inc., a wholly-owned subsidiary of IAMGOLD, since February, 2013.
2. I graduated with an Honors Bachelor of Science Degree in Geology from the University of Western Ontario in 1984. I completed an M.Sc. Degree in Geology at the University of Western Ontario in 1987.
3. I am a practicing member in good standing with the Association of Professional Geoscientists of Ontario (Membership Number 0201). I am also a Member of the PDAC, CIM, and OPA.
4. I have worked as a Geologist for more than 26 years since graduation from University.
5. I am responsible for the supervision of the 2014 Surface Exploration Program (Geological mapping and prospecting) on the GoldON Neville Property, and have reviewed the contents of this assessment report.
6. I have been involved in the Trelawney Mining and Exploration Inc. Ontario Exploration program since February of 2013.

Dated February 11, 2015

## Appendices

Appendix 1

2014 Neville-Potier Project Property Geology Map



# Trelawney Mining & Exploration

Property Geology: Neville-Potier Project

Porcupine Mining Division

1:3,000 Property Geology

Produced on behalf of Goldon Resources

NTS Sheets 41 O/09 and 41 P/12

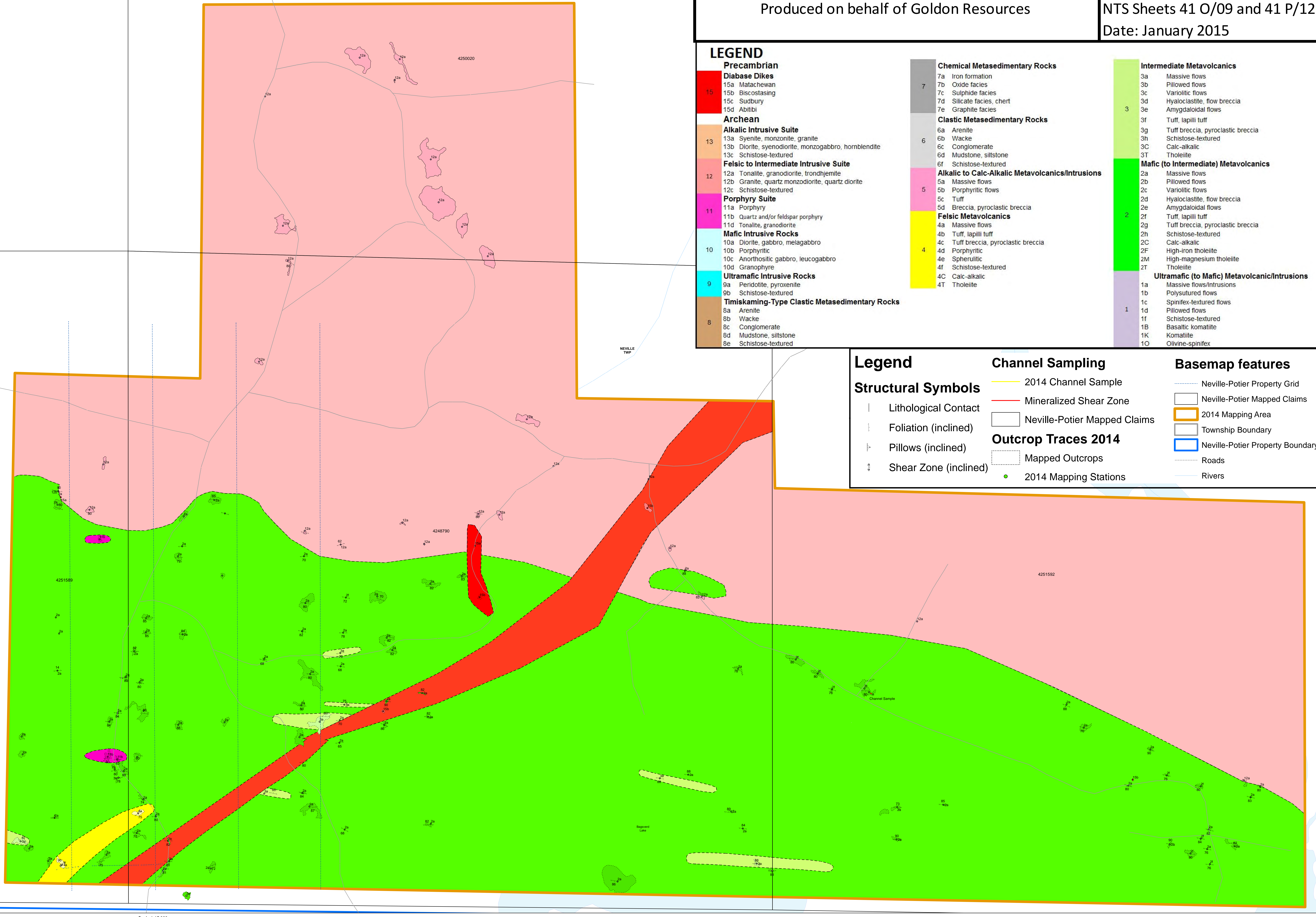
Date: January 2015

## LEGEND

<p><b>Precambrian</b></p> <p><b>Diabase Dikes</b></p> <p>15 Matachewan 15b Biscostasing 15c Sudbury 15d Abitibi</p> <p><b>Archean</b></p> <p><b>Alkalic Intrusive Suite</b></p> <p>13a Syenite, monzonite, granite 13b Diorite, syenodiorite, monzogabbro, hornblendite 13c Schistose-textured</p> <p><b>Felsic to Intermediate Intrusive Suite</b></p> <p>12a Tonalite, granodiorite, trondjemite 12b Granite, quartz monzodiorite, quartz diorite 12c Schistose-textured</p> <p><b>Porphyry Suite</b></p> <p>11a Porphyry 11b Quartz and/or feldspar porphyry 11d Tonalite, granodiorite</p> <p><b>Mafic Intrusive Rocks</b></p> <p>10a Diorite, gabbro, melagabbro 10b Porphyritic 10c Anorthositic gabbro, leucogabbro 10d Granophyre</p> <p><b>Ultramafic Intrusive Rocks</b></p> <p>9a Peridotite, pyroxenite 9b Schistose-textured</p> <p><b>Timiskaming-Type Clastic Metasedimentary Rocks</b></p> <p>8a Arenite 8b Wacke 8c Conglomerate 8d Mudstone, siltstone 8e Schistose-textured</p>	<p><b>Chemical Metasedimentary Rocks</b></p> <p>7a Iron formation 7b Oxide facies 7c Sulphide facies 7d Silicate facies, chert 7e Graphite facies</p> <p><b>Clastic Metasedimentary Rocks</b></p> <p>6a Arenite 6b Wacke 6c Conglomerate 6d Mudstone, siltstone 6f Schistose-textured</p> <p><b>Alkalic to Calc-Alkalic Metavolcanics/Intrusions</b></p> <p>5a Massive flows 5b Porphyritic flows 5c Tuff 5d Breccia, pyroclastic breccia</p> <p><b>Felsic Metavolcanics</b></p> <p>4a Massive flows 4b Tuff, lapilli tuff 4c Tuff breccia, pyroclastic breccia 4d Porphyritic 4e Spherulitic 4f Schistose-textured 4C Calc-alkalic 4T Tholeiite</p>	<p><b>Intermediate Metavolcanics</b></p> <p>3a Massive flows 3b Pillowed flows 3c Varioitic flows 3d Hyaloclastite, flow breccia 3e Amygdaloidal flows 3f Tuff, lapilli tuff 3g Tuff breccia, pyroclastic breccia 3h Schistose-textured 3C Calc-alkalic 3T Tholeiite</p> <p><b>Mafic (to Intermediate) Metavolcanics</b></p> <p>2a Massive flows 2b Pillowed flows 2c Varioitic flows 2d Hyaloclastite, flow breccia 2e Amygdaloidal flows 2f Tuff, lapilli tuff 2g Tuff breccia, pyroclastic breccia 2h Schistose-textured 2C Calc-alkalic 2F High-iron tholeiite 2M High-magnesium tholeiite 2T Tholeiite</p> <p><b>Ultramafic (to Mafic) Metavolcanic/Intrusions</b></p> <p>1a Massive flows/Intrusions 1b Polysutured flows 1c Spinifex-textured flows 1d Pillowed flows 1F Schistose-textured 1B Basaltic komatiite 1K Komatiite 1O Olivine-spinifex</p>
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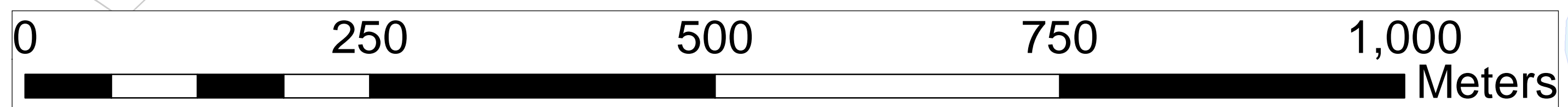
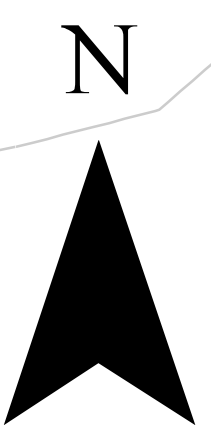
## Legend

<p><b>Structural Symbols</b></p> <p>  Lithological Contact</p> <p>↘ Foliation (inclined)</p> <p>↗ Pillows (inclined)</p> <p>↕ Shear Zone (inclined)</p>	<p><b>Channel Sampling</b></p> <p>— 2014 Channel Sample</p> <p>— Mineralized Shear Zone</p> <p>□ Neville-Potier Mapped Claims</p>	<p><b>Basemap features</b></p> <p>..... Neville-Potier Property Grid</p> <p>□ Neville-Potier Mapped Claims</p> <p>▭ 2014 Mapping Area</p> <p>▭ Township Boundary</p> <p>▭ Neville-Potier Property Boundary</p> <p>— Roads</p> <p>— Rivers</p>
<p><b>Outcrop Traces 2014</b></p> <p>▭ Mapped Outcrops</p> <p>• 2014 Mapping Stations</p>		



Appendix 2

2014 Neville-Potier Sample Location and Gold Assay Results Map



# Trelawney Mining & Exploration

Neville-Potier Project

Porcupine Mining Division

## 1:3,000 Grab Sample Location and Au Assay Results Map

Produced on behalf of Goldon Resources

NTS Sheets 41 O/09 and 41 P/12

Date: January 2015

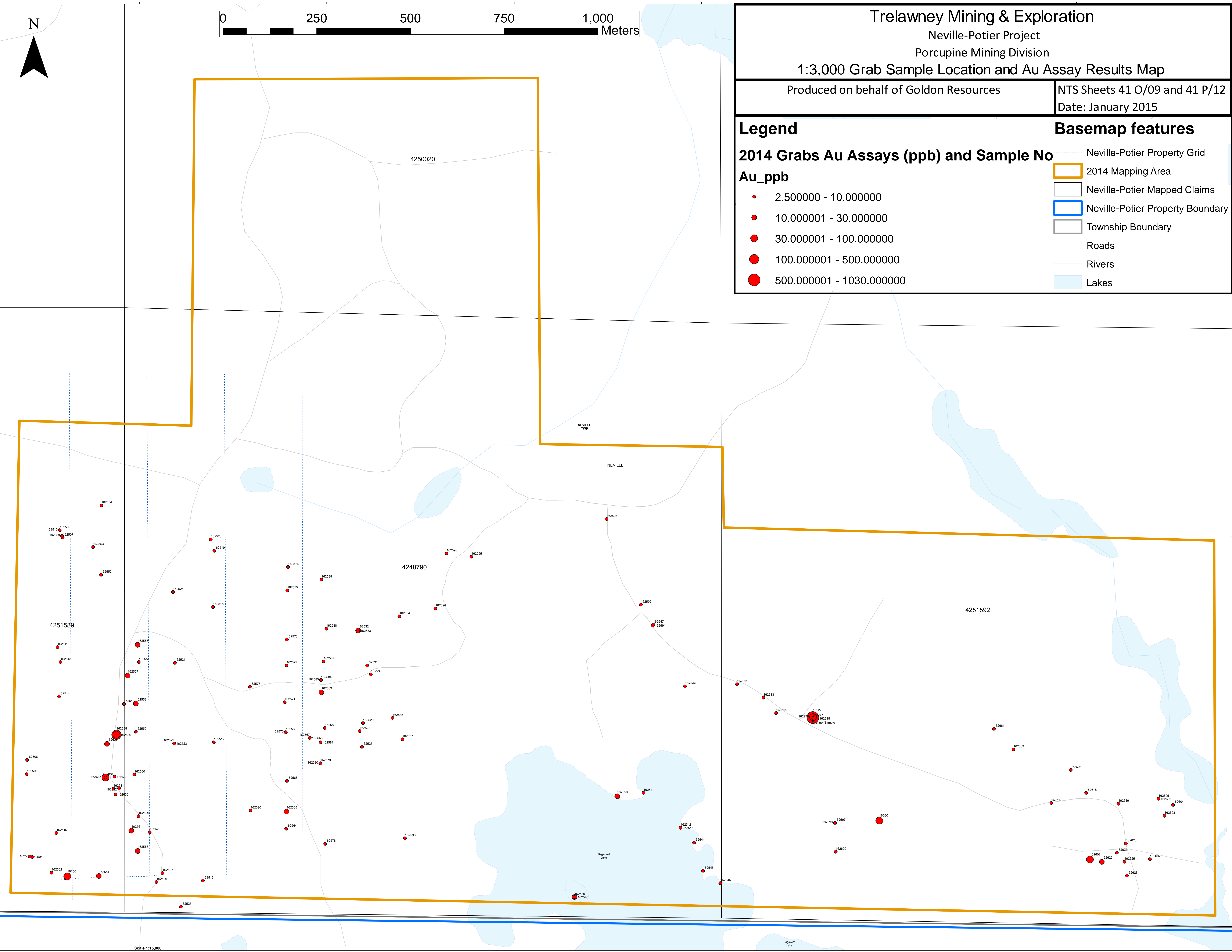
### Legend

#### 2014 Grabs Au Assays (ppb) and Sample No

- Au\_ppb**
- 2.500000 - 10.000000
  - 10.000001 - 30.000000
  - 30.000001 - 100.000000
  - 100.000001 - 500.000000
  - 500.000001 - 1030.000000

### Basemap features

- Neville-Potier Property Grid
- 2014 Mapping Area
- Neville-Potier Mapped Claims
- Neville-Potier Property Boundary
- Township Boundary
- Roads
- Rivers
- Lakes



Scale 1:15,000

428500

429000

429500

430000

430500

431000

5272500

5272000

5271500

5271000

5270500

5272500

5272000

5271500

5271000

5270500



## Appendix 3

### Sample Descriptions Chart

Header Information					Sample Information					Host Lithology				Mineralization				Comments
Date	Station_No	UTM Easting (Stn)	UTM Northing (Stn)	Elevation (meters)	Sample Number	Sample Type	UTM Easting	UTM Northing	Elevation (meters)	Lithology	Color	Texture	Grain Size	Style (Py)	% (Py)	Style (Cpy)	% (Cpy)	
08/07/2014	JA-14-01	428392	5270594	415	162551	Mafic Volcanic	428389	5270597	414	Mafic Volcanic	GR	AP	FG					
08/07/2014	JA-14-02	428398	5271398	407	162552	Feldspar Porphyry	428398	5271399	407	Feldspar Porphyry	GR	MAS	CG	Disseminated	trace			Altered porphyritic intrusive rock, abundant plagioclase. Possibly mafic but alteration makes it difficult to decipher. FP dike intrudes.
08/07/2014	JA-14-03	428377	5271472	397	162553	Quartz Monzonite	438381	5271471	400	Quartz Monzonite	PI		FG					Fine grained felsic intrusive; due to contact proximity. Relict biotite and intrusive texture very different to see and stark contrast to last outcrop. Thought to possibly be a felsic volcanic but relict texture suggests otherwise.
08/07/2014	JA-14-04	428399	5271583	397	162554	Quartz Monzonite	428399	5271585	394	Quartz Monzonite	PI	MAS	FG					
08/07/2014	JA-14-05	428496	5271211	395	162555	Mafic Volcanic	428501	5271206	395	Mafic Volcanic	GR	AP	FG					
08/07/2014	JA-14-06	428499	5271165	396	162556	Mafic Volcanic	428502	5271165	394	Mafic Volcanic	GR	AP	FG					
08/07/2014	JA-14-07	428469	5271129	393	162557	Mafic Volcanic	428478	5271125	392	Mafic Volcanic	GR	AP	FG					
08/07/2014	JA-14-08	428491	5271054	390	162558	Mafic Volcanic	428492	5271053	392	Mafic Volcanic	GR	AP	FG					Feldspathic Amygdules
08/07/2014	JA-14-09	428491	5270979	391	162559	Mafic Volcanic	428491	5270977	393	Mafic Volcanic	GR	AP	FG					Dextral strain shadows on Quartz Boundins
08/07/2014	JA-14-10	428487	5270865	396	162560	Mafic Volcanic	428486	5270864	396	Mafic Volcanic	GR	AP	FG					
08/07/2014	JA-14-11	428479	5270715	400	162561	Felsic Volcanic	428492	5270720	393	Felsic Volcanic	GY	AP	FG					
08/07/2014	JA-14-12	428496	5270661	399	162563	Mafic Volcanic	428496	5270661	399	Mafic Volcanic	GR	AP	FG					Younging Direction of pillows is to SE (160 degrees)
08/07/2014	AM-14-01	428308	5270593	411	162501	Felsic Volcanic	428308	5270593	411	Felsic Volcanic	GY	AP	FG	Disseminated	1	Disseminated	1	Possibly shearing or a foliation recorded for Structure1.
08/07/2014	AM-14-02	428266	5270603	425	162502	Mafic Volcanic	428266	5270603	425	Mafic Volcanic	GR	FOL	FG	Disseminated	0.5	Disseminated	0.5	Cannot get a good structural measurement due to moss cover.
08/07/2014	AM-14-03	428215	5270645	420	162503	Mafic Volcanic	428215	5270645	420	Mafic Volcanic	GY	FOL	FG					Large, moss covered outcrop.
08/07/2014	AM-14-04	428208	5270646	414	162504	Intermediate Volcanic	428208	5270646	414	Intermediate Volcanic	GY	FOL	FG	Disseminated	trace			
08/07/2014	AM-14-05	428200	5270866	407	162505	Mafic Volcanic	428200	5270866	407	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			Hard to tell composition is mafic until you wet the rock.
08/07/2014	AM-14-06	428201	5270904	414	162506	Mafic Volcanic	428201	5270904	414	Mafic Volcanic	GR	FOL	FG					First outcrop after the swamp (moving North)
08/07/2014	AM-14-07	428296	5271497	410	162507	Diabase Dike	428296	5271497	410	Diabase Dike	GY	MAS	FG	Disseminated	2			Weakly sulphidized diabase dike. Only outcrop in a very long traverse in very smooth terrain. DTM map did not accurately depict the topography in the area.
08/07/2014	AM-14-08	428294	5271502	408	162508	Mafic Volcanic	428294	5271502	408	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			Small uncovered outcrop of foliated meta-volcanics.
08/07/2014	AM-14-09	428288	5271517	403	162509	Granite	428288	5271517	403	Granite	GY	MAS	MG					Small outcrop uncovered shows contact between finely laminated mafic volcanic and granite. Unusual to see the volcanic north of the granite - may be intercalated.
08/07/2014	AM-14-09b	428288	5271517	403	162509	Mafic Volcanic	428288	5271517	403	Mafic Volcanic	GR	FOL	FG	Along Foliation	3			
08/07/2014	AM-14-10	428282	5271205	416	162511	Mafic Volcanic	428282	5271205	416	Mafic Volcanic	GY	FOL	FG	Vein Hosted	2			Small outcrop cleared and sampled on line.
08/07/2014	AM-14-11	428290	5271165	415	162513	Mafic Volcanic	428290	5271165	415	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			Small, moss-covered outcrop just east of the line.
08/07/2014	AM-14-12	428286	5271073	421	162514	Mafic Volcanic	428286	5271073	421	Mafic Volcanic	GR	FOL	FG					Outcrop uncovered on South side of ridge.
08/06/2014	AM-14-13	428279	5270709	397	162515	Mafic Volcanic	428279	5270709	397	Mafic Volcanic	GR	FOL	FG					Pillow Basalt (see picture). Note presence of black tourmaline crystals up to 2mm wide and 20mm long. Pillows have distinct quartz-carbonate 1-5mm wide salvages.
09/07/2014	AM-14-14	428670	5270582	396	162516	Mafic Volcanic	428670	5270582	396	Mafic Volcanic	GR	FOL	FG					This is a pillow basalt - see GPS picture
09/07/2014	AM-14-15	428699	5270951	397	162517	Mafic Volcanic	428699	5270951	397	Mafic Volcanic	GY	FOL	FG					Possibly sub-crop.
09/07/2014	AM-14-16	428697	5271312	412	162518	Wacke	428697	527312	412	Wacke	GY	FOL	MG					May be along strike from sediments identified by Heather's mapping.
09/07/2014	AM-14-17	428700	5271462	404	162519	Wacke	428700	5271462	404	Wacke	GY	FOL	MG	Vein Hosted	1			Note crack and seal or ribbon texture of vein - this is where magnetite exists locally.
09/07/2014	AM-14-18	428691	5271492	399	162520	Mafic Volcanic	428691	5271492	399	Mafic Volcanic	GY	FOL	FG	Disseminated	1			Large outcrop of mafic volcanic (traced).
09/07/2014	JA14-13	428892	5270720	401	162564	Mafic Volcanic	428892	5270723	400	Mafic Volcanic	GR	FOL	FG					
09/07/2014	JA14-14	428893	5270766	394	162565	Mafic Volcanic	428892	5270768	394	Mafic Volcanic	GR	FOL	FG	Disseminated	0.2			
09/07/2014	JA14-15	428894	5270848	401	162566	Mafic Volcanic	428892	5270858	399	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
09/07/2014	JA14-16	428955	5270963	399	162567	Intermediate Volcanic	428955	5270967	398	Intermediate Volcanic	GR	FOL	FG	Disseminated	1			Volcanics in contact with the Biscostasing Gabbro Dyke at E 428928 N 5270943 413m elevation
09/07/2014	JA14-16	428955	5270963	399	162568	Gabbro Biscostasing Dike	428904	5270945	406	Gabbro Biscostasing Dike	GR	FOL	MG	Disseminated	1			
09/07/2014	JA14-17	428891	5270978	408	162569	Quartz Vein	428892	5270973	404	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
09/07/2014	JA14-17	428891	5270978	408	162569	Mafic Volcanic	428901	5271000	401	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			

Header Information					Sample Information					Host Lithology				Mineralization				Comments
Date	Station_No	UTM Easting (Stn)	UTM Northing (Stn)	Elevation (meters)	Sample Number	Sample Type	UTM Easting	UTM Northing	Elevation (meters)	Lithology	Color	Texture	Grain Size	Style (Py)	% (Py)	Style (Cpy)	% (Cpy)	
09/07/2014	JA14-18	428888	5271058	404	162571	Mafic Volcanic	428892	5271056	404	Mafic Volcanic	GR	FOL	FG					Boudinaged quartz veins along foliation
09/07/2014	JA14-19	428893	5271156	391	162572	Mafic Volcanic	428893	5271159	395	Mafic Volcanic	GR	FOL	FG					
09/07/2014	JA14-20	428894	5271225	392	162573	Mafic Volcanic	428894	5271224	393	Mafic Volcanic	GR	FOL	FG					
09/07/2014	JA14-21	428895	5271356	396	162575	Mafic Volcanic	428894	5271359	394	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
09/07/2014	JA14-22	428897	5271419	393	162576	Quartz Monzanite	428897	5271420	391	Quartz Monzanite	PI	FOL	FG					Fine grained silicified Quartz Monzonite; textural overprint has obliterated most intrusive texture leaving fg relict texture with minor biotite and weak foliation; note this outcrop is near contact with the volcanics and is therefore altered and foliated as such;
09/07/2014	JA14-23	428795	5271099	392	162577	Mafic Volcanic	428796	5271102	387	Mafic Volcanic	GR	FOL	FG					
10/07/2014	TAT14-01	428595	5271163	419	162521	Mafic Volcanic	428595	5271163	419	Mafic Volcanic	BL	FOL	FG					
10/07/2014	TAT14-02	428593	5270948	406	162522	Mafic Volcanic	428593	5270948	406	Mafic Volcanic	BL	MAS	FG					Unmineralized massive quartz knob 1m diameter (Sample 2)
10/07/2014	TAT14-02	428593	5270948	406	162523	Quartz Vein	428589	5270936	406	Mafic Volcanic	BL	MAS	FG					
10/07/2014	TAT14-03	428611	5270512	400	162525	Intermediate Volcanic	428611	5270512	400	Intermediate Volcanic	BR	MAS	FG	Disseminated	trace			
10/07/2014	TAT14-04	428590	5271352	405	162526	Mafic Volcanic	428590	5271652	405	Mafic Volcanic	BL	MAS	FG					Boudinaged QVs, lenses of MAS felsic-intermediate volcanic ~50cm long
10/07/2014	TAT14-05	428587	5271383	404						Mafic Volcanic	BL	FOL	FG					
10/07/2014	TAT14-06	428594	5271381	404						Mafic Volcanic								Contact between qtz monzanite and lapilli-stone pyroclastic. Lapilli elongated along foliation.
10/07/2014	JA14-24	428996	5270680	395	162578	Mafic Volcanic	428996	5270681	393	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
10/07/2014	JA14-25	428983	5270895	401	162579	Mafic Volcanic	428992	5270907	394	Mafic Volcanic	GR	FOL	FG	Clusters	2	Clusters	1	Foliated mafic volcanics hosting py and cpy as well as a small speck of malachite (sample 162579) with ~3% sulphides, this is hosted both within the volcanic and qtz-carb-epidote vein along foliation and in proximity to the contact with the large massive Biscostasing Qtz-Gabbro (mafic intrusive) dyke. The contact with the dyke however is not an obvious one, waypoint taken within 1-2 m of contact is E 428991 N 5270904 403m ele (rep sample taken of dyke)
10/07/2014	JA14-25	428983	5270895	401	162580	Mafic Volcanic	428991	5270905	400	Mafic Volcanic	GR	FOL	FG	Clusters	2	Clusters	1	
10/07/2014	JA14-26	428984	5270951	404	162581	Mafic Volcanic	429011	5270962	405	Mafic Volcanic	GR	FOL	FG					Mafic volcanic contact with Biscostasing Dyke is NE 080 degrees at E 428989 N 5270950 403m elevation
10/07/2014	JA14-27	428995	5270989	399	162582	Intermediate Volcanic	428994	5270993	397	Intermediate Volcanic	GR	FOL	FG	Disseminated	2			
10/07/2014	JA14-28	428986	5271084	395	162583	Mafic Volcanic	428990	5271078	393	Mafic Volcanic	GR	FOL	FG	Disseminated	2			
10/07/2014	JA14-29	428985	5271117	390	162584	Quartz Vein	428988	5271119	393	Intermediate Volcanic	GR	FOL	FG	Disseminated	1			
10/07/2014	JA14-29	428985	5271117	390	162585	Intermediate Volcanic	428988	5271116	394	Intermediate Volcanic	GR	FOL	FG	Disseminated	1			Dextral strain shadows seen on Quartz Boudins
10/07/2014	JA14-30	428992	5271167	389	162587	Mafic Volcanic	428998	5271176	389	Mafic Volcanic	GR	FOL	FG					
10/07/2014	JA14-31	428999	5271254	393	162588	Mafic Volcaniclastic	428996	5271244	386	Mafic Volcaniclastic	GY	FOL	FG					Dark grey to black very fine grained bands, argillic layer? Unit appears tuffaceous
10/07/2014	JA14-32	428986	5271385	386	162589	Quartz Monzanite	428984	5271386	384	Quartz Monzanite	PI	FOL	FG					
10/07/2014	JA14-33	428797	5270769	385	162590	Intermediate Volcanic	428801	5270794	382	Intermediate Volcanic	GR	FOL	FG					Volcanic varies from weakly foliated to strongly foliated, areas where darker green more mafic volcanics are found in contrast to lighter pale green silicified more felsic volcanics
11/07/2014	SA14-01	429094	5270939	398	162527	Mafic Volcanic	429094	5270939		Mafic Volcanic	GR	FOL	FG					
11/07/2014	SA14-02	429088	5270981	397	162528	Gabbro Biscostasing Dike	429088	5270981		Gabbro Biscostasing Dike	GG	MAS	MG	Disseminated	trace			Coarser than previous biscostasing type dykes encountered, mod-strong mag, tr diss oyr, could not locate contact due to OB
11/07/2014	SA14-03	429097	5271002	395	162529	Mafic Volcanic	429097	5271002		Mafic Volcanic	DGR	FOL	FG					
11/07/2014	SA14-04	429118	5271132	400	162530	Mafic Volcanic	429118	5271132		Mafic Volcanic	DGR	FOL	FG					
11/07/2014	SA14-05	429108	5271156	397	162531	Mafic Volcanic	429108	5271156		Mafic Volcanic	DGR	FOL	FG					Sampled mafic volcanics w/ boudinaged QV along foln plane, Sample is 80% mfc vol, 20% QV
11/07/2014	SA14-06	429084	5271249	395	162532	Mafic Volcanic	429084	5271249		Mafic Volcanic	GR	FOL	FG	Disseminated	0.25			Nearing batholith contact very altered, sampled QV and host
11/07/2014	SA14-06	429084	5271249	395	162533	Quartz Vein	429084	5271249		Mafic Volcanic	GR	FOL	FG	Disseminated	0.25			
11/07/2014	SA14-07	429140	5271436	392						Quartz Monzanite	PI	MAS	MG					Into Kenogamissi batholith no sample taken
11/07/2014	SA14-08	429195	5271382	394						Quartz Monzanite	PI	MAS	MG					

Header Information					Sample Information					Host Lithology				Mineralization				Comments
Date	Station_No	UTM Easting (Stn)	UTM Northing (Stn)	Elevation (meters)	Sample Number	Sample Type	UTM Easting	UTM Northing	Elevation (meters)	Lithology	Color	Texture	Grain Size	Style (Py)	% (Py)	Style (Cpy)	% (Cpy)	
11/07/2014	SA14-09	429194	5271287	398	162534	Mafic Volcanic	429194	5271287		Mafic Volcanic	DGR	FOL	FG					Outcrop is largely covered in overburden, able to find three small areas of exposure after digging,
11/07/2014	SA14-10	429176	5271016	405	162535	Mafic Volcanic	429176	5271016		Mafic Volcanic	DGR	FOL	FG					
11/07/2014	SA14-11	429202	5270959	400	162537	Mafic Volcanic	429202	5270959		Mafic Volcanic	DGR	FOL	FG	Disseminated	0.2			Quartz boudins intermittent in volcanics along foliation, appears outcrop may have had historic cutting/sampling in on area, localized folding on exposure
11/07/2014	SA14-12	429209	5270695	397	162538	Mafic Volcanic	429209	5270695		Mafic Volcanic	DGR	FOL	FG					
12/07/2014	SA14-13	429661	5270538	390	162539	Mafic Volcanic	429661	5270538	386	Mafic Volcanic	DGR	FOL	FG					
12/07/2014	SA14-13	429661	5270538	390	162540	Mafic Volcanic	429700	5270533		Mafic Volcanic	DGR	FOL	FG					
12/07/2014	SA14-14	429845	5270816	389	162541	Mafic Volcanic	429845	5270816	386	Mafic Volcanic	DGR	FOL	FG					
12/07/2014	SA14-15	429775	5270807	386	162550	Intermediate Volcanic	429775	5270807	386	Intermediate Volcanic	GR	FOL	FG					
12/07/2014	SA14-16	429944	5270723	389	162542	Mafic Volcanic	429944	5270722	386	Mafic Volcanic	DGR	FOL	FG	Disseminated	0.25			Well formed pyrite cubes disseminated in sample approx 0.25%, boudinaged quartz veins along foliation plane
12/07/2014	SA14-16	429944	5270723	389	162543	Quartz Vein	429946	5270722		Mafic Volcanic	DGR	FOL	FG	Disseminated	0.25			
12/07/2014	SA14-17	429980	5270683	390	162544	Mafic Volcanic	429980	5270683	386	Mafic Volcanic	DGR	FOL	FG					
12/07/2014	SA14-18	430004	5270608	391	162545	Intermediate Volcanic	430004	5270608	386	Intermediate Volcanic	GR	FOL	FG					
12/07/2014	SA14-19	430050	5270575	393	162546	Felsic Volcanic	430050	5270575	386	Felsic Volcanic	LGR	FOL	FG					
14/07/2014	WS-14-01	429956	5271100	396	162549	Mafic Volcanic	429956	5221100	395	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
14/07/2014	WS-14-02	429870	5271263	396	162591	Quartz Monzanite	429871	5271266	395	Quartz Monzanite	PI	MAS	CG					Megacrystic K-spar monzanite containing mafic enclaves contacts mafic volcanics. Monzanite has localized alteration in 2-10cm bands of silicification.
14/07/2014	WS-14-02	429870	5271263	396	162547	Mafic Volcanic	429871	5271265	395	Quartz Monzanite	PI	MAS	CG					
14/07/2014	WS-14-03	429838	5271318	395	162592	Mafic Volcanic	429838	5271376	395	Mafic Volcanic	GY	FOL	FG					Mafic volcanic contact batholith alternating ribbons at contact.
14/07/2014	WS-14-04	429800	5271376	395						Quartz Monzanite	PI	MAS	CG					Megacrystic K-spar monzanite with mafic enclaves.
14/07/2014	WS-14-05	429754	5271469	396						Gabbro Biscostasing Dike	GR	MAS	MG					
14/07/2014	WS-14-06	429747	5271547	393	162593	Quartz Monzanite	429742	5271547	393	Quartz Monzanite	PI	MAS	FG					Megacrystic K-spar monzanite is intruded by a fg narrow intrusive. It resembles quartz monanite
14/07/2014	WS-14-07	429318	5271382	387						Diabase Dike	GY	MAS	FG					
14/07/2014	WS-14-08	429290	5271308	394	162594	Mafic Volcanic	429270	5271308	390	Mafic Volcanic	GY	FOL	FG					
14/07/2014	WS-14-09	429348	5271255	400						Gabbro Biscostasing Dike	GY	MAS	MG					
14/07/2014	WS-14-10	429512	5271579	388						Quartz Monzanite	PI	MAS	MG					
14/07/2014	WS-14-11	429386	5271446	390	162595	Quartz Monzanite	429386	5271455	390	Quartz Monzanite Breccia	PI	BX	MG	Disseminated	trace			Breccia occurring to south of outcrop. Batholith continues to north on road. Volcanics are likely just to south
14/07/2014	WS-14-12	429320	5271455	388	162596	Quartz Monzanite Breccia	429320	5271455	390	Quartz Monzanite Breccia	PI	BX	MG					Exposure on SE corner of o/c has patch of breccia monzanite.
14/07/2014	JS-14-01	430095	5271106	393	162611	Mafic Volcaniclastic	430100	5271106	395	Mafic Volcaniclastic	GR	FOL	FG	Disseminated	0.1			Layered mafic mafic volcaniclastic sequence with rapm and thin black Argillite layers as well as alternating light and darker tuffaceous layers/bands; ptygmatic folding; felsic intrusive tonalitic/monzanite dykes striking 097 (steep dip), mafic porphyry dyke with abundant felspar is found at E 430096 N 5271108 399m elevation
14/07/2014	JS-14-02	430165	5271070	400	162613	Mafic Volcaniclastic	430156	5271069	401	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	0.5			Same as previous outcrop
14/07/2014	JS-14-03	430199	5271029	398	162614	Mafic Volcaniclastic	430200	5271032	397	Mafic Volcaniclastic	GY	FOL	FG					Similar to last outcrop, less obvious layering with fewer felsic/lighter layers and no dykes; dextral strain shadows on Quartz Boudins
14/07/2014	JS-14-04	430297	5271017	400	162615	Quartz Vein	430287	5271012	394	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	2			Tuff outcrop with gossanous shear veins hosting ~2% py, veins strike ~120 degrees and are steeply dipping;
14/07/2014	JS-14-04	430297	5271017	400	162616	Mafic Volcaniclastic	430295	5271018	400	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	2			Sample 162616 is taken in a 10-20cm wide oxidized tuff zone striking 120 degrees with several % py (mainly oxidized away)
14/07/2014	JS-14-05	430933	5270789	385	162617	Mafic Volcanic	430931	5270789	383	Mafic Volcanic	GY	FOL	FG	Disseminated	2			
14/07/2014	JS-14-06	430945	5270802	390						Gabbro Biscostasing Dike	GY	MAS	MG					
14/07/2014	JS-14-07	431026	5270816	388	162618	Mafic Volcaniclastic	431023	5270815	391	Mafic Volcaniclastic	GY	FOL	FG					
14/07/2014	JS-14-08	431112	5270787	392	162619	Mafic Volcaniclastic	431103	5270784	392	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	tr			

Header Information					Sample Information					Host Lithology				Mineralization				Comments
Date	Station_No	UTM Easting (Stn)	UTM Northing (Stn)	Elevation (meters)	Sample Number	Sample Type	UTM Easting	UTM Northing	Elevation (meters)	Lithology	Color	Texture	Grain Size	Style (Py)	% (Py)	Style (Cpy)	% (Cpy)	
14/07/2014	JS-14-09	431132	5270681	386	162620	Mafic Volcanic	431133	5270679	376	Mafic Volcanic	GR	FOL	FG	Disseminated	tr			
14/07/2014	JS-14-10	431108	5270656	393	162621	Mafic Volcaniclastic	431111	5270655	394	Mafic Volcaniclastic	GR	FOL	FG	Disseminated	tr			Several back rotated Quartz Boudins; sinistral strain shadows seen on Quartz Boudins
14/07/2014	JS-14-11	431068	5270632	397	162622	Mafic Volcaniclastic	431071	5270620	396	Mafic Volcaniclastic	GR	FOL	FG	Disseminated	tr			Quartz boudins with dextral strain shadows
14/07/2014	JS-14-12	431135	5270595	393	162623	Mafic Volcaniclastic	431135	5270595	385	Mafic Volcaniclastic	GR	FOL	FG	Disseminated	0.2			
14/07/2014	JS-14-13	431128	5270632	393	162625	Mafic Volcanic	431127	5270631	383	Mafic Volcanic	GR	FOL	FG					
15/07/2014	JS-14-14	428546	5270578	407	162626	Mafic Volcanic	428550	5270587	402	Mafic Volcanic	GR	FOL	FG	Disseminated	0.5			
15/07/2014	JS-14-15	428562	5270602	406	162627	Mafic Volcanic	428558	5270598	401	Mafic Volcanic	GG	FOL	FG	Disseminated	trace			
15/07/2014	JS-14-16	428559	5270652	403						Mafic Volcanic	GG	FOL	FG					Outcrop mainly of Biscotasing gabbro dike, (MAS) contact at 075, station UTM's. Surface too flat to sample.
15/07/2014	JS-14-17	428528	5270711	392	162628	Mafic Volcanic	428525	5270709	394	Mafic Volcanic	GG	FOL	FG					Very oxidized.
15/07/2014	JS-14-18	428498	5270754	392	162629	Mafic Volcanic	428499	5270755	390	Mafic Volcanic	GG	FOL	FG					No obvious pillows. Strongly foliated.
15/07/2014	JS-14-19	428437	5270812	397	162630	Mafic Volcanic	428435	5270806	396	Intermediate Volcanic	GR	FOL	FG					
15/07/2014	JS-14-20	428431	5270827	399	162631	Mafic Volcanic	428434	5270821	397	Mafic Volcanic	GG	FOL	FG					Light bands of ash layers
15/07/2014	JS-14-21	428446	5270828	400	162632	Mafic Volcanic	428446	5270831	401	Mafic Volcanic	GG	FOL	FG					
15/07/2014	JS-14-22	428434	5270859	398	162633	Feldspar Porphyry	428434	5270857	398	Feldspar Porphyry	GG	PO	FG					15% feldspar phenocrysts
15/07/2014	JS-14-23	428410	5270857	397	162634	Mafic Volcanic	428413	5270853	396	Feldspar Porphyry	GY	PO	FG					FP intercalated with thin (<1m) MV layers. FP weakly foliated, MV mod to strongly foliated.
15/07/2014	JS-14-23	428410	5270857	397	162635	Feldspar Porphyry	428411	5270881	393	Feldspar Porphyry	GY	PO	FG					
15/07/2014	JS-14-24	428414	5270947	396	162637	Mafic Volcanic	428415	5270942	396	Mafic Volcanic	GY	FOL	FG					
15/07/2014	JS-14-25	428439	5270971	396	162638	Feldspar Porphyry	428435	5270970	395	Mafic Volcanic	GG	FOL	FG					N contact of FP dike at 428439E, 5270972N.
15/07/2014	JS-14-25	428439	5270971	396	162639	Mafic Volcanic	428436	5270963	393	Mafic Volcanic	GG	FOL	FG					
15/07/2014	JS-14-26	428459	5271053	394	162640	Mafic Volcanic	428457	5271051	391	Mafic Volcanic	GR	FOL	FG					
15/07/2014	WS14-13	430356	5270736	399	162597	Mafic Volcanic	430356	5270736	399	Mafic Volcanic	DGR	FOL	FG					mafic volcanics w/ some minor lighter layering, possibly interflow sediments, Large boudinaged quartz veins pinch and swell along foliation plane, Towards northern part of exposure the foliation weakens, appearing more massive
15/07/2014	WS14-13	430356	5270736	399	162599	Quartz Vein	430356	5270736	399	Mafic Volcanic	DGR	FOL	FG					
15/07/2014	WS14-14	430358	5270659	413	162600	Mafic Volcanic	430358	5270659		Mafic Volcanic	DGR	FOL	FG					Appears to have compositional variations in outcrop, some of this contrast is likely due to alteration intensities. Int-Mafic Volcanic
15/07/2014	WS14-15	430474	5270742	406	162601	Mafic Volcanic	430474	5270742		Mafic Volcanic	DGR	FOL	FG					Sample contains approx 50 percent vein and 50 percent host, discontinuous vein no orientation recorded
15/07/2014	WS14-16	431036	5270638	410	162602	Mafic Volcanic	431036	5270638		Mafic Volcanic	DGR	FOL	FG					
16/01/2014	JR-14-01	428784	5271837	394						Quartz Monzonite	PI	MAS	MG					
16/01/2014	JR-14-02	428863	5272082	389						Quartz Monzonite	PI	MAS	CG					Biotite and chlorite define a weak foliation of 130
16/01/2014	JR-14-03	428870	5272166	381						Quartz Monzonite	PI	MAS	CG					Small felsic/tonalitic dyke (5-10cm thick) striking @ 124
16/01/2014	JR-14-04	428799	5272493	383						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-05	429005	5272590	389						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-06	429119	5272535	382						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-07	429148	5272548	381						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-08	429176	5272395	381						Quartz Monzonite	GY	MAS	CG					
16/01/2014	JR-14-09	429183	5272253	384						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-10	429285	5272185	377						Quartz Monzonite	PI	MAS	CG					
16/01/2014	JR-14-11	429325	5272100	384						Quartz Monzonite	GY	MAS	CG					
16/01/2014	JR-14-12	429477	5271688	383						Quartz Monzonite	PI	MAS	CG					
16/01/2014	AAS-14-01	431235	5270755	403	162603	Mafic Volcanic	431235	5270755	403	Mafic Volcanic	GR	FOL	FG	Disseminated	0.2			Mineralization variable

Header Information					Sample Information					Host Lithology				Mineralization				Comments
Date	Station_No	UTM Easting (Stn)	UTM Northing (Stn)	Elevation (meters)	Sample Number	Sample Type	UTM Easting	UTM Northing	Elevation (meters)	Lithology	Color	Texture	Grain Size	Style (Py)	% (Py)	Style (Cpy)	% (Cpy)	
16/017/2014	AAS-14-02	431258	5270784	390	162604	Mafic Volcanic	431258	5270784	390	Mafic Volcanic	GR	FOL	FG					Layer of what appears to have granitoid fragments, epidote altered fragments and dark grey to black BIF clasts? Note typical matrix as it appears unfoliated and within intrusive. Layer is approximatly 30-40cm and is a minor component of the outcrop.
16/017/2014	AAS-14-03	431219	5270800	392	162605	Quartz Monzanite Breccia	431219	5270801	392	Quartz Monzanite Breccia	PI	MAS	MG					S-Folding observed on outcrop. Magmatic breccia - interlayered felsic intrusive with sil+hem alt with fragments of mafic volcanic throughout. Fine grained chlorite, with gabbro fragments. Pyrite mineralization proximal to boundaries between felsic intrusive and volcanic clasts.
16/017/2014	AAS-14-03	431219	5270800	392	162606	Mafic Volcaniclastic	431219	5270801	392	Quartz Monzanite Breccia	PI	MAS	MG					
16/017/2014	AAS-14-04	431196	5270639	397	162607	Mafic Volcanic	431196	5270639	397	Mafic Volcanic	GR	FOL	FG					
16/017/2014	AAS-14-05	430985	5270877	391	162608	Mafic Volcanic	430985	5270877	391	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
16/017/2014	AAS-14-06	430832	5270932	399	162609	Mafic Volcanic	430832	5270932	399	Mafic Volcanic	GR	FOL	FG	Disseminated	trace			
16/017/2014	AAS-14-07	430780	5270987	397	162661	Mafic Volcanic	430780	5270987	399	Mafic Volcanic	GR	FOL	FG					
16/017/2014	AAS-14-08	430411	5271195	392						Quartz Monzanite	PI	MAS	MG					
<b>Channel Samples</b>																		
23/09/2014	JS14-04b	430296	5271016	400	162277	Mafic Volcaniclastic	430296	5271016	400	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	trace			Channel sample shoulder sample
23/09/2014	JS14-04b	430297	5271017	400	162278	Quartz Vein	430297	5271017	400	Quartz Vein	GY	FOL	FG	Disseminated	2			Follow up channel sample to sample 162615; Channel taken at 030 degrees across shear zone and gossanous veining
23/09/2014	JS14-04b	430298	5271018	400	162279	Mafic Volcaniclastic	430298	5271018	400	Mafic Volcaniclastic	GY	FOL	FG	Disseminated	2			Channel sample shoulder sample

Appendix 4  
Assay Certificates



**Date Submitted:** 18-Jul-14  
**Invoice No.:** A14-04837  
**Invoice Date:** 06-Aug-14  
**Your Reference:** GOLDON

Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Alan Smith

## CERTIFICATE OF ANALYSIS

141 Rock samples were submitted for analysis.

The following analytical package was requested:

Code 1A2-Sudbury Au - Fire Assay AA

REPORT **A14-04837**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**

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**Date Submitted:** 18-Jul-14  
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Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Alan Smith

## CERTIFICATE OF ANALYSIS

141 Rock samples were submitted for analysis.

The following analytical package was requested:

Code UT-6 Total Digestion ICP & ICP/MS

REPORT **A14-04837**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control



## Results

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162501	46	17.4	1.25	4.47	8.37	0.05	6.71	0.2	196	144	1710	10.4	0.6	< 10	130	2.4	0.6	0.8	< 0.05	0.15	55.0	0.78	0.07
162502	< 5	13.5	2.07	3.65	7.52	0.06	6.30	0.1	211	153	1470	8.78	0.5	< 10	112	2.2	0.5	0.8	< 0.05	0.50	49.6	0.67	0.04
162503	< 5	16.7	1.66	4.25	7.27	0.51	6.54	0.1	185	159	1510	8.79	0.4	< 10	117	2.2	0.3	0.8	< 0.05	0.49	45.3	0.76	0.04
162504	< 5	12.3	1.55	3.07	7.15	0.08	6.99	0.2	188	160	1360	8.31	0.4	< 10	112	2.0	0.4	0.7	< 0.05	0.33	48.8	0.66	0.03
162505	< 5	12.5	1.70	3.12	7.54	0.08	6.94	0.2	200	167	1310	8.54	0.4	< 10	117	2.1	0.4	0.7	< 0.05	0.31	50.6	0.70	0.05
162506	< 5	10.6	1.44	2.36	7.42	0.05	7.81	0.2	184	205	1520	7.34	0.4	< 10	130	2.5	0.5	0.9	< 0.05	0.18	48.7	0.88	0.04
162507	< 5	21.9	2.82	2.40	6.72	1.12	3.27	0.1	134	8.3	1490	9.34	2.4	< 10	31.4	2.5	2.1	0.9	< 0.05	2.32	46.3	1.90	0.10
162508	< 5	6.9	> 3.00	3.46	6.46	0.70	4.16	0.2	144	174	947	5.13	2.6	< 10	105	1.9	1.4	0.7	0.10	0.22	21.5	1.32	0.07
162509	< 5	13.1	2.27	3.51	7.69	1.02	7.14	0.2	260	250	1490	8.24	0.8	< 10	134	2.4	0.6	0.8	< 0.05	0.52	45.4	0.79	0.33
162510	< 5	13.1	> 3.00	0.93	7.48	0.99	2.06	0.1	57	3.9	435	2.81	2.6	< 10	7.2	1.5	1.4	0.5	< 0.05	0.65	8.1	0.84	0.09
162511	< 5	10.9	0.85	4.32	8.45	0.09	8.05	0.1	222	173	1350	8.65	0.6	80	167	2.5	0.4	0.8	< 0.05	0.12	51.3	0.70	0.06
162512	1020	9.6	1.84	3.39	6.02	0.52	5.44	0.1	100	154	2210	8.68	1.3	< 10	144	2.5	0.8	0.9	1.41	2.23	40.3	1.69	0.17
162513	8	18.1	1.69	4.14	8.39	0.27	6.49	0.1	244	200	1420	8.97	0.4	20	168	2.5	0.4	0.8	< 0.05	0.83	52.7	0.79	0.04
162514	< 5	16.1	1.81	4.28	7.82	0.09	6.02	0.2	276	156	1600	10.1	0.5	40	109	2.7	0.4	0.9	< 0.05	0.33	41.8	0.83	0.05
162515	< 5	8.7	1.21	3.02	7.99	0.06	7.11	0.1	199	147	1540	7.03	0.5	< 10	81.9	1.9	0.5	0.7	< 0.05	0.41	32.3	0.73	0.04
162516	< 5	26.9	1.31	2.68	8.58	0.23	5.41	0.1	216	184	2160	9.27	0.4	60	135	2.8	0.4	0.9	< 0.05	0.60	54.6	0.96	0.04
162517	< 5	47.1	2.22	4.61	9.78	0.12	2.27	0.1	235	166	1500	10.4	0.3	10	118	2.8	0.5	0.9	< 0.05	0.47	58.5	0.92	0.04
162518	< 5	22.5	2.86	2.39	6.45	0.61	1.34	< 0.1	144	143	730	5.24	1.6	< 10	91.0	1.4	1.4	0.5	< 0.05	0.77	28.7	1.01	0.05
162519	6	14.2	> 3.00	2.51	5.97	1.53	2.91	0.1	98	142	603	3.71	2.7	< 10	48.5	1.5	1.5	0.5	< 0.05	0.34	18.1	1.27	0.08
162520	< 5	4.3	1.76	3.48	7.53	0.26	8.81	0.2	227	231	1440	7.73	0.6	10	101	2.2	0.5	0.7	< 0.05	0.18	33.6	0.69	0.18
162521	< 5	28.8	1.69	4.54	8.81	0.19	5.75	0.1	202	223	1370	9.05	0.4	< 10	171	2.6	0.5	0.8	< 0.05	0.62	49.1	0.79	0.09
162522	< 5	45.7	1.31	2.33	7.19	0.19	3.61	0.2	190	57.8	2500	11.5	1.7	40	61.3	2.5	0.6	0.8	< 0.05	0.41	44.5	0.75	0.03
162523	< 5	0.9	0.04	0.04	0.22	0.06	0.20	0.1	10	2.4	123	0.27	< 0.1	< 10	2.2	< 0.1	0.1	< 0.1	< 0.05	0.13	0.7	< 0.05	0.03
162524	< 5	23.8	> 3.00	1.70	8.77	1.68	4.52	0.2	70	14.5	926	5.68	2.3	< 10	14.6	4.8	3.7	1.7	< 0.05	1.25	20.6	1.90	0.07
162525	< 5	8.4	> 3.00	2.54	8.00	0.12	7.69	0.2	123	172	1460	6.91	0.5	80	118	2.6	0.6	0.9	< 0.05	0.46	40.7	0.91	0.05
162526	< 5	18.5	> 3.00	1.70	7.34	1.35	2.08	0.2	72	60.4	599	4.03	3.2	60	59.3	1.7	0.8	0.6	< 0.05	0.89	22.4	1.04	0.07
162527	< 5	37.9	2.79	3.87	7.29	0.06	5.75	0.2	247	180	1730	9.06	0.4	< 10	79.5	2.6	0.5	0.9	0.12	0.24	35.8	0.81	0.06
162528	< 5	18.1	1.83	2.56	6.32	0.87	5.13	0.3	154	33.1	1690	11.8	1.6	60	36.5	5.0	1.5	1.7	< 0.05	2.59	51.5	2.10	0.09
162529	< 5	88.8	> 3.00	3.25	8.33	0.60	4.73	0.2	231	112	2710	9.94	0.9	< 10	92.7	3.0	0.5	1.0	< 0.05	2.15	35.8	0.84	0.05
162530	< 5	12.0	1.52	3.14	8.37	0.15	8.67	0.2	224	194	1460	8.12	0.3	< 10	159	2.6	0.5	0.8	< 0.05	0.22	51.8	0.77	0.04
162531	6	24.0	1.87	4.07	8.07	0.34	5.06	0.2	243	194	1330	8.32	0.2	20	153	2.4	0.5	0.8	< 0.05	0.34	50.9	0.71	0.05
162532	22	16.8	> 3.00	1.21	> 10.0	1.35	3.44	0.2	19	15.8	633	3.30	1.5	50	24.1	2.6	1.5	1.0	0.28	0.75	20.3	1.88	0.12
162533	< 5	6.4	0.74	0.57	2.08	0.38	0.45	0.1	20	24.1	183	1.22	0.1	< 10	16.7	0.4	0.3	0.1	< 0.05	0.23	5.4	0.25	0.04
162534	5	6.7	2.20	3.51	7.07	0.74	5.61	0.2	59	239	955	5.53	0.4	< 10	174	1.6	0.8	0.6	< 0.05	0.31	33.5	0.94	0.08
162535	< 5	36.2	2.90	3.17	7.17	0.05	7.30	0.2	211	223	1590	7.95	0.4	30	110	2.2	0.4	0.7	< 0.05	0.32	33.6	0.63	0.07
162536	2240	10.0	1.61	3.18	5.60	0.56	4.66	0.2	149	183	3660	10.7	3.0	40	118	2.6	1.2	1.0	0.51	3.55	34.4	1.65	0.13
162537	< 5	34.6	> 3.00	1.29	6.83	0.38	1.87	0.1	71	41.7	596	3.65	4.4	< 10	56.0	2.3	0.8	0.7	0.07	1.14	12.8	0.83	0.04
162538	7	42.8	1.47	3.06	8.01	1.14	1.10	0.2	158	54.6	1440	11.0	1.0	30	170	1.0	0.8	0.3	< 0.05	1.23	65.6	0.70	0.05
162539	9	24.4	1.26	3.02	8.06	0.05	5.61	0.2	212	211	2080	7.81	0.3	< 10	164	2.1	0.4	0.7	< 0.05	0.31	52.7	0.66	0.03
162540	30	27.8	1.59	3.79	7.82	1.02	4.15	0.2	178	46.4	1420	10.0	1.5	60	119	1.4	0.6	0.5	< 0.05	0.69	53.8	0.87	0.03
162541	< 5	24.8	1.80	3.17	7.91	0.12	5.78	0.2	178	151	1320	7.25	0.4	20	153	2.5	0.5	0.8	< 0.05	0.10	52.8	0.83	0.03
162542	10	39.3	2.20	3.63	7.37	0.32	4.62	0.2	210	82.5	1340	8.74	0.6	50	87.8	4.6	0.5	1.5	< 0.05	0.42	43.4	1.25	0.05
162543	< 5	9.8	0.17	0.92	1.30	0.06	2.55	0.1	71	21.6	581	2.82	0.2	10	12.5	0.6	0.3	0.2	0.11	0.14	10.6	0.11	0.03
162544	< 5	76.0	1.57	4.91	8.73	0.41	3.52	0.2	261	225	1730	9.73	0.3	< 10	182	2.5	0.5	0.8	< 0.05	2.58	55.6	0.61	0.03
162545	< 5	11.4	1.53	3.89	7.12	0.10	6.64	0.2	239	213	1530	9.01	0.4	100	92.7	2.7	0.5	0.9	< 0.05	0.15	47.4	0.79	0.05
162546	< 5	11.0	1.47	1.67	5.65	0.07	7.72	0.5	210	233	1280	5.96	0.4	80	141	1.8	0.3	0.6	< 0.05	0.08	41.9	0.64	0.05
162547	< 5	6.3	2.13	3.61	7.14	0.51	7.48	0.2	212	246	1390	7.09	0.7	80	107	1.9	0.8	0.6	< 0.05	0.16	40.6	0.69	0.19
162548	< 5	24.8	2.90	1.64	9.00	1.70	4.36	0.2	86	14.9	848	5.55	2.9	80	14.6	4.9	3.6	1.7	< 0.05	1.30	20.3	1.92	0.08
162549	6	19.7	2.93	1.35	7.34	0.91	2.01	0.2	82	106	611	3.79	3.6	80	73.6	1.4	1.4	0.5	< 0.05	1.76	19.3	1.08	0.08

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162550	11	25.6	1.95	1.99	7.32	0.12	6.97	0.2	180	126	1710	7.28	0.3	50	112	2.6	0.5	0.9	< 0.05	0.17	47.6	0.96	0.05
162551	14	59.0	> 3.00	3.01	8.66	0.04	6.27	0.2	197	181	1450	7.52	0.6	60	130	2.8	0.4	0.9	< 0.05	0.61	41.8	0.92	0.07
162552	7	19.3	> 3.00	1.37	7.64	1.17	1.65	0.2	48	48.6	580	3.47	4.4	60	52.6	3.3	1.5	1.1	< 0.05	0.69	14.5	1.16	0.16
162553	< 5	9.6	> 3.00	0.18	6.55	0.95	1.08	0.2	3	1.7	360	2.06	4.3	80	6.3	1.8	1.3	0.5	< 0.05	0.56	10.5	0.60	0.13
162554	< 5	5.3	> 3.00	1.25	7.63	2.66	2.57	0.3	66	36.9	611	3.32	3.2	50	19.1	1.4	3.1	0.6	< 0.05	0.58	11.1	1.49	0.16
162555	22	20.0	1.68	4.15	8.01	0.15	6.39	0.2	234	183	1470	8.48	0.3	80	163	2.5	0.5	0.8	< 0.05	0.26	52.3	0.77	0.04
162556	< 5	22.0	1.57	3.62	8.18	0.31	6.44	0.3	212	250	1290	7.99	0.4	< 10	172	2.6	0.5	0.9	< 0.05	0.42	59.5	0.72	0.09
162557	11	22.9	1.57	3.31	6.31	0.12	4.51	0.2	266	210	1370	8.18	0.3	90	104	2.3	0.6	0.7	< 0.05	0.26	39.1	0.59	0.06
162558	20	16.7	1.66	3.77	8.29	0.11	6.22	0.2	252	275	1300	8.28	0.4	70	157	2.8	0.4	0.9	< 0.05	0.34	43.7	0.87	0.04
162559	< 5	28.3	1.56	2.26	6.93	0.26	3.44	0.2	195	102	2050	10.4	1.7	30	69.9	2.5	0.6	0.8	< 0.05	0.35	44.6	0.71	0.06
162560	< 5	19.6	1.77	4.64	8.01	0.07	6.23	0.2	132	152	1520	9.71	0.6	80	135	3.4	0.5	1.2	< 0.05	0.22	58.1	1.03	0.05
162561	15	4.3	> 3.00	0.21	7.62	1.66	0.23	0.2	37	18.3	346	2.08	2.9	60	10.9	0.6	1.4	0.2	< 0.05	2.98	4.9	0.97	0.09
162562	261	36.8	2.09	1.47	7.31	3.00	2.54	0.3	103	73.3	617	4.37	3.0	70	42.0	3.2	3.6	1.1	0.53	11.5	16.0	1.45	1.91
162563	16	17.8	1.48	2.89	8.38	0.07	5.14	0.3	238	191	2660	9.55	0.6	30	142	3.0	0.5	1.0	< 0.05	0.29	55.5	1.04	0.05
162564	< 5	25.7	2.25	2.14	7.86	0.67	3.15	0.3	120	123	1590	8.17	0.8	150	96.2	3.8	0.6	1.3	< 0.05	0.52	47.3	1.09	0.04
162565	11	22.9	2.89	1.89	8.04	0.17	5.54	0.2	99	126	1700	7.72	0.2	80	98.8	3.6	0.8	1.2	< 0.05	0.21	44.8	1.24	0.04
162566	10	56.7	> 3.00	2.75	7.89	0.05	7.07	0.2	220	204	1940	8.57	0.8	60	117	3.0	0.5	1.0	< 0.05	0.43	50.2	0.92	0.04
162567	6	27.7	> 3.00	2.76	6.56	0.02	9.68	< 0.1	215	146	2060	7.54	0.5	50	81.5	1.9	0.4	0.6	0.20	0.09	35.6	0.58	0.05
162568	6	12.7	1.75	3.40	6.43	0.42	6.83	0.2	130	51.1	1590	10.6	0.7	< 10	65.3	3.1	1.0	1.1	0.09	1.38	57.3	1.39	0.04
162569	9	6.4	0.13	0.45	0.83	0.02	0.15	< 0.1	34	22.1	261	1.35	< 0.1	< 10	14.2	0.1	< 0.1	< 0.1	0.05	0.12	7.2	< 0.05	0.02
162570	< 5	40.3	1.78	3.67	6.34	0.03	6.22	< 0.1	176	140	1570	7.99	< 0.1	< 10	106	1.6	0.5	0.5	< 0.05	0.16	48.8	0.48	0.03
162571	9	17.0	2.03	4.34	7.10	0.10	5.71	0.1	207	159	1240	7.55	0.4	< 10	168	1.8	0.4	0.6	0.07	0.17	46.3	0.62	0.03
162572	5	18.5	1.70	3.91	8.30	0.22	7.14	0.1	229	189	1460	9.00	0.2	< 10	195	2.2	1.2	0.7	0.10	0.52	54.4	0.67	0.05
162573	5	19.5	2.34	1.54	5.63	0.29	1.45	< 0.1	55	65.3	483	3.35	0.5	< 10	62.3	0.9	1.1	0.3	< 0.05	0.28	17.2	0.43	< 0.02
162574	12	25.4	> 3.00	1.84	9.18	1.67	4.95	0.1	101	24.7	980	6.30	1.6	< 10	21.1	4.8	3.3	1.7	0.09	1.27	24.6	2.04	0.05
162575	< 5	21.9	2.15	3.68	6.86	1.58	3.80	0.1	130	311	875	5.65	2.5	< 10	178	1.8	0.9	0.6	0.17	0.58	32.8	0.81	0.08
162576	< 5	16.5	> 3.00	0.33	6.81	1.75	0.51	0.1	9	10.3	357	2.31	2.9	40	2.7	1.8	1.6	0.6	0.19	0.84	2.2	0.62	0.15
162577	< 5	16.1	1.46	3.87	7.99	0.42	7.50	0.2	190	179	1460	8.18	0.1	30	190	2.2	0.8	0.8	0.09	0.34	52.9	0.66	0.12
162578	7	19.0	1.00	2.50	8.58	0.06	5.70	0.2	210	144	1260	10.9	0.4	< 10	123	3.5	0.8	1.2	0.06	0.33	54.9	1.22	0.05
162579	< 5	17.2	0.86	3.58	5.23	0.02	12.7	< 0.1	210	42.6	3010	9.33	< 0.1	< 10	71.3	1.5	1.1	0.5	0.86	0.34	70.6	1.05	0.03
162580	< 5	9.8	0.10	2.25	7.98	0.01	16.0	< 0.1	184	61.0	1690	6.93	0.2	< 10	66.1	1.3	0.8	0.4	0.33	0.17	42.2	0.94	0.05
162581	< 5	19.5	1.71	3.80	7.09	0.03	10.8	0.1	243	141	1720	8.41	0.5	< 10	113	2.4	1.0	0.8	0.20	0.19	40.0	0.89	0.09
162582	7	20.3	1.67	2.05	7.99	0.18	8.24	0.2	262	209	1550	7.61	0.1	50	177	2.1	0.5	0.7	0.14	0.64	58.8	0.63	0.14
162583	11	18.0	0.77	2.89	6.59	0.42	6.39	0.2	214	57.6	1690	11.0	< 0.1	< 10	41.7	4.3	0.7	1.4	0.11	1.12	45.2	1.23	0.13
162584	5	3.7	0.51	0.34	1.37	0.19	0.38	< 0.1	17	18.1	125	0.78	< 0.1	30	14.2	0.2	0.2	< 0.1	< 0.05	0.10	3.1	< 0.05	< 0.02
162585	10	14.6	1.38	3.40	7.59	0.31	7.45	0.1	210	198	1270	7.92	< 0.1	< 10	170	2.0	0.7	0.7	0.08	0.17	53.3	0.60	0.08
162586	1430	21.0	2.15	1.76	6.04	2.64	2.85	< 0.1	168	54.8	548	7.74	1.3	< 10	25.5	1.5	1.9	0.5	2.76	1.89	23.3	0.62	5.28
162587	< 5	45.2	1.77	5.44	8.10	0.95	3.26	0.1	228	453	1310	8.87	0.4	< 10	239	2.2	1.7	0.7	0.34	0.33	59.8	0.92	0.19
162588	< 5	21.2	> 3.00	1.87	7.82	0.61	3.97	< 0.1	96	83.0	627	4.45	0.7	180	81.2	1.4	0.8	0.5	0.19	0.61	24.3	0.81	0.14
162589	< 5	13.0	> 3.00	0.74	6.96	2.43	0.80	< 0.1	37	14.3	253	1.61	2.2	< 10	27.4	0.6	1.7	0.2	0.13	0.70	6.7	0.70	0.06
162590	< 5	15.6	2.68	2.06	7.18	0.02	10.7	0.4	120	73.8	2130	7.36	0.7	50	53.1	4.2	0.8	1.4	0.07	0.16	21.2	1.39	0.07
162591	< 5	13.3	> 3.00	0.73	7.75	2.45	1.40	< 0.1	28	22.5	239	1.48	1.7	< 10	15.9	0.6	1.7	0.2	0.09	0.27	6.0	0.64	0.05
162592	< 5	12.8	> 3.00	3.15	7.86	0.86	5.92	0.1	215	110	1150	7.23	2.1	< 10	73.9	2.2	2.0	0.8	0.22	0.65	39.2	1.47	0.12
162593	< 5	8.4	> 3.00	1.14	7.50	0.87	2.85	< 0.1	78	29.9	441	3.09	2.7	< 10	33.9	1.1	2.1	0.4	0.13	0.37	11.6	0.76	0.26
162594	8	10.8	2.97	1.57	8.18	1.60	4.80	< 0.1	95	38.6	780	4.89	1.4	< 10	58.1	1.9	1.1	0.7	0.10	0.64	22.9	0.98	0.10
162595	< 5	15.2	> 3.00	2.87	7.98	0.66	5.11	0.1	174	123	981	6.20	2.2	< 10	79.7	1.8	2.0	0.6	0.11	0.48	31.5	1.12	0.11
162596	< 5	33.5	> 3.00	3.33	7.57	0.41	3.20	0.1	124	129	1000	5.32	1.9	1770	124	1.1	2.5	0.4	< 0.05	0.42	31.2	0.87	0.19
162597	< 5	12.0	1.81	2.71	5.95	0.25	4.45	0.1	309	84.0	1730	9.36	0.4	< 10	44.8	3.0	0.8	1.0	0.10	0.62	40.7	0.90	0.08
162598	< 5	25.6	> 3.00	1.77	9.02	1.91	5.21	0.2	91	31.2	961	6.26	2.6	< 10	19.4	4.4	3.2	1.6	0.07	1.33	23.6	1.73	0.05
162599	< 5	2.1	0.10	0.18	0.43	0.03	0.11	< 0.1	15	9.3	124	0.72	< 0.1	< 10	4.8	0.1	0.5	< 0.1	0.06	0.11	2.9	< 0.05	0.11

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162600	< 5	40.1	2.79	2.54	8.25	0.91	1.91	0.2	106	64.0	947	5.75	1.8	< 10	87.8	1.6	1.4	0.6	0.07	0.77	25.3	0.92	0.07
162601	37	17.5	2.45	2.04	6.20	0.17	1.71	< 0.1	67	62.5	756	5.88	< 0.1	< 10	58.1	2.1	1.1	0.7	0.07	0.35	29.5	0.86	0.17
162602	80	31.7	2.99	3.15	7.95	0.49	2.84	0.2	198	133	1130	7.78	0.9	< 10	105	2.7	0.7	0.9	0.09	1.50	39.2	1.02	0.03
162603	< 5	31.8	2.58	1.92	7.83	1.56	3.22	0.1	107	58.3	1000	6.05	1.2	< 10	57.0	2.6	2.0	0.9	0.32	1.48	26.1	1.20	0.15
162604	< 5	16.5	> 3.00	2.60	7.81	1.51	3.29	0.1	95	177	644	4.28	2.9	110	133	1.6	2.4	0.6	0.17	1.88	24.3	1.55	0.15
162605	< 5	18.6	> 3.00	2.80	7.43	0.66	4.12	0.1	114	137	632	4.24	2.3	< 10	69.4	2.0	2.7	0.7	0.10	0.67	23.7	1.70	0.20
162606	< 5	20.3	> 3.00	4.44	6.95	0.98	5.86	0.1	112	242	1010	6.43	0.8	< 10	81.2	2.2	2.6	0.8	0.06	0.42	37.1	1.60	0.09
162607	< 5	17.6	2.08	2.90	8.88	0.16	4.93	0.1	211	187	1470	9.79	< 0.1	< 10	161	2.7	0.5	0.9	0.06	0.66	59.7	0.85	0.04
162608	< 5	18.6	2.86	4.30	6.96	0.96	4.19	0.2	107	258	905	5.30	1.7	< 10	184	1.8	2.0	0.6	0.11	0.49	34.3	1.18	0.16
162609	< 5	22.7	2.82	3.45	7.68	1.11	4.49	0.1	90	191	885	5.49	1.9	< 10	178	2.3	1.5	0.8	0.12	1.93	31.9	1.36	0.10
162610	< 5	16.5	> 3.00	0.76	8.19	1.85	1.78	0.1	45	26.5	300	2.01	3.3	< 10	21.2	0.8	2.4	0.3	0.13	1.29	7.8	0.73	0.08
162611	< 5	18.3	> 3.00	1.98	7.93	0.86	3.12	0.2	98	94.1	628	4.22	3.5	60	81.6	2.0	1.9	0.7	0.18	2.34	22.0	1.01	0.18
162612	1050	9.9	2.16	3.80	6.76	0.75	5.82	0.2	144	158	2350	9.55	2.8	70	161	2.5	2.1	1.0	0.27	2.42	43.6	1.77	0.09
162613	< 5	25.6	2.31	1.17	6.74	1.22	2.70	0.2	71	22.4	612	3.91	1.2	< 10	24.6	1.9	2.0	0.7	0.31	2.21	15.2	0.93	0.34
162614	< 5	16.8	> 3.00	0.75	7.45	1.12	3.09	< 0.1	46	17.7	537	2.78	3.3	< 10	15.4	2.1	2.0	0.8	0.16	1.50	13.5	1.87	0.11
162615	508	4.9	2.35	0.76	7.24	0.62	0.47	0.1	83	23.5	183	4.51	3.5	10	12.5	1.4	1.7	0.5	0.45	0.44	8.5	0.59	2.79
162616	< 5	34.9	1.69	4.57	6.37	0.54	0.72	0.1	93	337	671	5.70	2.0	10	155	1.4	1.4	0.5	0.13	0.78	34.7	0.66	0.10
162617	< 5	16.6	> 3.00	2.39	8.01	0.34	1.03	0.1	84	83.2	965	6.24	0.7	< 10	88.4	1.4	1.5	0.5	0.07	0.50	32.7	0.83	0.05
162618	< 5	15.1	> 3.00	0.75	6.78	2.03	1.27	0.1	25	18.3	254	2.04	2.9	20	12.5	1.5	1.7	0.5	0.14	2.12	5.8	0.58	0.13
162619	7	30.4	> 3.00	2.97	7.80	0.99	3.10	0.1	124	89.6	852	5.58	2.8	< 10	123	2.2	1.5	0.8	0.14	2.74	29.4	1.12	0.09
162620	< 5	23.9	1.68	6.70	6.12	0.21	5.49	0.2	180	449	1280	7.27	2.5	< 10	182	2.6	2.7	0.9	0.15	0.11	51.8	1.46	0.04
162621	< 5	32.8	1.96	3.80	8.75	0.44	3.40	0.2	288	211	1470	9.47	< 0.1	< 10	168	2.5	0.6	0.9	0.10	1.17	58.1	0.77	0.05
162622	13	18.3	> 3.00	2.41	8.07	0.58	2.75	< 0.1	82	87.6	717	4.52	0.5	< 10	100	1.3	0.8	0.4	0.15	0.43	26.8	0.71	0.03
162623	< 5	27.3	1.56	3.21	8.26	0.47	3.80	0.1	154	149	1450	9.53	< 0.1	< 10	109	3.2	1.0	1.1	0.06	1.00	51.0	1.24	0.07
162624	< 5	24.8	> 3.00	1.82	> 10.0	1.86	5.08	0.2	155	31.3	909	5.91	3.5	< 10	17.5	4.6	2.7	1.7	0.37	1.58	22.1	1.95	0.04
162625	5	36.4	1.97	4.44	8.97	0.21	2.54	0.1	167	274	1510	9.79	< 0.1	< 10	194	2.5	0.8	0.9	0.06	0.48	68.1	0.85	0.06
162626	8	16.4	2.65	2.28	9.24	0.28	6.69	0.1	165	207	1710	8.90	< 0.1	< 10	105	2.9	0.9	1.0	0.12	0.23	54.0	1.11	0.12
162627	8	28.6	> 3.00	2.30	8.00	0.07	6.66	< 0.1	146	156	1800	8.59	0.1	100	156	2.4	0.9	0.8	0.15	0.49	63.5	0.88	0.06
162628	< 5	10.6	2.00	0.21	6.85	1.52	0.26	0.3	32	23.3	1980	4.73	< 0.1	< 10	27.8	0.7	1.5	0.2	0.12	2.33	7.9	0.96	0.06
162629	< 5	23.7	0.37	1.63	3.06	0.19	2.49	< 0.1	120	49.5	969	3.86	0.3	< 10	44.8	0.4	0.5	0.1	0.06	0.38	22.6	0.30	0.02
162630	< 5	16.3	1.17	4.22	7.86	0.07	6.02	0.1	267	90.7	1970	9.53	0.2	< 10	108	2.5	0.1	0.9	0.06	0.20	52.7	0.80	0.03
162631	6	23.9	2.18	2.56	7.41	0.71	2.83	0.1	114	105	835	6.49	0.2	< 10	85.8	2.2	0.3	0.8	0.05	0.28	38.4	1.01	0.10
162632	< 5	22.9	1.18	5.39	7.94	0.19	7.06	< 0.1	241	162	1310	10.9	0.3	< 10	175	2.8	0.6	1.0	0.10	0.16	69.1	0.92	0.04
162633	< 5	15.8	1.76	3.70	8.65	0.10	8.33	0.1	251	138	1220	8.41	0.2	40	139	2.2	< 0.1	0.8	0.10	0.14	56.4	0.83	< 0.02
162634	< 5	25.8	0.68	2.55	8.39	0.19	4.70	0.2	253	180	2770	11.7	0.3	< 10	130	2.9	1.0	1.0	0.10	0.23	56.1	1.05	0.07
162635	51	14.8	1.50	3.59	8.60	0.12	7.79	0.3	171	140	1310	9.20	0.1	< 10	111	2.3	< 0.1	0.8	0.06	0.34	50.6	0.78	0.04
162636	2360	10.3	1.74	3.28	6.00	0.62	5.34	0.2	102	154	3610	11.5	1.1	< 10	141	2.4	1.5	0.9	0.26	3.68	39.2	1.67	0.16
162637	16	40.8	1.98	3.51	9.01	0.57	0.55	< 0.1	206	173	1380	9.40	1.0	< 10	121	1.1	0.2	0.4	0.09	0.56	53.7	0.67	0.02
162638	147	8.6	> 3.00	0.44	8.93	1.87	1.44	< 0.1	54	15.8	264	2.00	2.4	< 10	6.1	0.8	2.5	0.3	0.06	1.88	4.8	1.11	0.04
162639	99	47.2	1.13	3.14	6.97	0.73	6.64	0.1	223	180	1590	8.47	1.0	< 10	108	0.9	0.2	0.3	0.08	0.75	49.5	0.52	0.04
162640	< 5	30.7	2.11	3.06	8.25	0.46	6.45	< 0.1	192	203	1580	8.29	< 0.1	< 10	196	2.0	0.5	0.7	< 0.05	2.31	51.4	0.58	< 0.02
162661	< 5	11.9	2.07	3.77	7.42	0.68	7.60	0.1	228	194	1580	8.75	0.3	10	132	2.0	0.2	0.7	0.06	0.48	56.6	0.71	0.14

## Results

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy	
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162501	0.6	112	17.3	0.7	1.5	17.7	148	10	< 0.1	0.08	< 0.1	< 1	< 0.1	< 0.1	17	2.7	7.2	1.1	6.1	2.1	3.1	0.5	3.8	
162502	< 0.1	99.0	14.4	1.1	3.7	16.2	97.1	8	0.3	0.10	< 0.1	< 1	< 0.1	< 0.1	25	2.4	6.6	1.0	5.3	1.9	2.8	0.5	3.4	
162503	< 0.1	83.1	16.0	0.3	16.7	16.5	121	7	0.2	0.08	< 0.1	< 1	< 0.1	0.1	134	2.4	6.4	1.0	5.4	1.8	2.7	0.5	3.5	
162504	0.2	95.5	14.9	< 0.1	5.1	15.3	111	6	0.1	0.12	< 0.1	< 1	< 0.1	< 0.1	34	2.3	6.2	1.0	5.1	1.6	2.6	0.4	3.2	
162505	0.2	94.9	15.6	0.2	5.0	16.1	116	7	< 0.1	0.08	< 0.1	< 1	< 0.1	0.1	37	2.4	6.4	1.0	5.3	1.8	2.6	0.5	3.3	
162506	0.9	86.3	16.7	1.1	1.6	20.0	130	9	0.5	0.07	< 0.1	< 1	< 0.1	< 0.1	31	3.5	9.2	1.4	7.0	2.2	3.3	0.6	4.0	
162507	0.6	84.3	22.0	0.8	50.4	21.7	341	101	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	540	27.4	59.9	7.5	30.3	6.4	6.3	0.8	5.0	
162508	0.8	71.8	18.3	0.5	16.6	15.5	373	97	7.8	0.58	< 0.1	1	< 0.1	< 0.1	114	22.5	53.6	6.7	26.9	4.8	4.5	0.6	3.5	
162509	0.5	93.9	17.1	0.6	34.3	17.9	350	20	1.4	4.61	< 0.1	< 1	< 0.1	0.2	247	3.8	9.2	1.4	6.7	2.1	3.0	0.5	3.7	
162510	< 0.1	48.5	22.5	0.1	32.4	12.3	481	97	0.4	0.14	< 0.1	< 1	< 0.1	< 0.1	374	9.1	22.2	2.8	11.9	2.8	2.8	0.4	2.6	
162511	0.7	93.2	16.7	7.6	2.1	17.3	134	11	0.2	0.10	< 0.1	< 1	< 0.1	0.1	23	2.5	6.7	1.0	5.3	1.8	2.8	0.5	3.6	
162512	1.2	127	16.8	305	18.7	23.9	358	88	4.0	1.63	< 0.1	2	0.3	0.4	414	21.4	38.3	5.4	21.9	5.0	5.9	0.8	4.9	
162513	1.1	97.8	15.9	3.4	9.0	18.6	146	6	0.5	0.15	< 0.1	< 1	< 0.1	< 0.1	105	2.4	6.7	1.1	5.7	1.9	3.1	0.5	3.8	
162514	0.4	107	16.3	16.4	3.2	19.4	115	11	0.9	0.32	< 0.1	< 1	< 0.1	0.1	28	3.3	8.8	1.3	6.7	2.2	3.3	0.6	4.1	
162515	1.0	75.9	19.1	0.8	2.5	14.5	135	12	0.3	0.12	< 0.1	< 1	< 0.1	0.2	47	2.9	7.4	1.1	5.5	1.8	2.6	0.4	3.0	
162516	0.5	103	19.9	0.3	12.1	20.0	104	7	< 0.1	0.05	< 0.1	< 1	< 0.1	0.1	131	3.6	9.5	1.4	7.4	2.4	3.4	0.6	4.4	
162517	0.6	111	20.8	1.2	5.4	20.7	117	5	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	50	3.8	10.0	1.4	6.9	2.3	3.4	0.6	4.3	
162518	< 0.1	79.1	17.5	0.5	13.4	10.7	361	63	4.7	0.26	< 0.1	1	0.2	< 0.1	257	10.8	31.9	4.0	17.0	3.3	3.1	0.4	2.6	
162519	0.2	63.0	15.4	0.6	25.5	12.7	506	107	3.5	0.67	< 0.1	2	< 0.1	0.1	635	17.4	40.3	5.1	22.0	4.8	4.4	0.5	2.9	
162520	0.7	77.2	16.9	0.7	8.1	15.9	150	11	0.1	2.32	< 0.1	< 1	< 0.1	0.2	55	3.1	7.2	1.1	5.4	1.8	2.5	0.4	3.2	
162521	0.2	100	18.0	2.0	9.9	18.7	120	8	< 0.1	0.10	< 0.1	< 1	< 0.1	0.2	47	3.3	8.6	1.3	6.4	2.1	3.1	0.5	3.9	
162522	0.8	145	19.1	1.2	8.4	17.6	87.1	59	< 0.1	0.06	< 0.1	< 1	< 0.1	< 0.1	54	5.3	13.8	2.0	10.0	2.7	3.5	0.6	4.0	
162523	< 0.1	8.1	0.5	1.7	2.3	0.5	4.1	< 1	< 0.1	0.25	< 0.1	< 1	0.4	< 0.1	15	0.1	0.3	< 0.1	0.2	< 0.1	< 0.1	< 0.1	< 0.1	
162524	1.1	106	23.8	0.4	85.7	39.5	578	88	0.2	0.09	< 0.1	< 1	< 0.1	0.2	735	29.6	71.8	9.6	41.3	9.5	9.6	1.4	8.9	
162525	1.2	77.3	18.1	0.6	5.1	17.8	161	13	0.1	0.08	< 0.1	< 1	< 0.1	0.3	68	3.7	9.6	1.5	7.1	2.3	3.3	0.6	3.9	
162526	0.7	71.0	17.4	0.9	35.5	13.0	248	112	2.6	0.22	< 0.1	< 1	0.3	0.3	224	13.7	30.5	3.8	15.0	3.1	3.1	0.4	2.9	
162527	0.7	83.3	16.0	1.2	2.1	18.9	419	9	< 0.1	0.09	< 0.1	< 1	0.1	0.2	30	3.0	7.7	1.2	6.0	2.0	3.0	0.5	3.9	
162528	0.7	187	19.8	0.5	41.4	35.4	198	55	< 0.1	0.06	0.1	< 1	< 0.1	0.1	272	25.9	57.0	7.3	30.5	7.0	8.1	1.2	8.1	
162529	0.6	60.0	16.6	< 0.1	32.2	21.9	263	29	< 0.1	0.15	< 0.1	< 1	< 0.1	< 0.1	180	4.7	12.0	1.8	8.7	2.8	3.8	0.7	4.8	
162530	0.9	84.0	16.6	3.3	3.9	18.0	118	6	0.3	0.25	< 0.1	< 1	< 0.1	0.1	35	2.4	6.6	1.1	5.6	1.9	3.0	0.5	3.8	
162531	0.9	88.9	15.2	2.4	12.6	17.1	106	3	0.7	0.17	< 0.1	< 1	0.1	0.2	141	2.4	6.5	1.0	5.3	1.9	2.8	0.5	3.6	
162532	1.3	62.1	18.6	1.2	50.1	21.0	587	56	0.3	0.13	< 0.1	< 1	< 0.1	0.1	383	24.9	56.3	6.9	27.9	5.9	6.1	0.9	5.1	
162533	< 0.1	20.5	3.7	1.2	14.6	2.9	89.6	7	0.4	0.30	< 0.1	< 1	< 0.1	0.2	96	2.9	6.5	0.8	3.3	0.7	0.8	0.1	0.7	
162534	0.3	75.3	18.3	0.2	23.2	12.8	189	13	< 0.1	< 0.05	< 0.1	< 1	< 0.1	0.2	111	6.8	16.1	2.2	10.3	2.4	3.0	0.4	2.8	
162535	0.2	62.7	15.1	3.6	1.9	15.6	495	9	< 0.1	0.09	< 0.1	< 1	< 0.1	0.2	18	2.2	5.8	0.9	4.8	1.6	2.5	0.5	3.3	
162536	3.1	126	15.1	1160	13.4	20.6	292	114	15.5	3.11	< 0.1	1	1.4	0.4	494	20.4	35.4	5.2	22.3	5.3	5.8	0.8	5.1	
162537	0.7	28.2	17.8	3.8	19.2	17.7	163	171	0.2	0.86	< 0.1	< 1	< 0.1	0.2	157	11.9	28.3	3.3	13.5	3.0	3.2	0.5	3.2	
162538	0.5	107	19.4	163	28.8	6.7	51.1	33	< 0.1	0.07	< 0.1	< 1	< 0.1	0.1	138	4.0	10.5	1.6	7.9	2.2	2.1	0.3	1.7	
162539	0.3	82.6	15.1	0.9	1.9	15.0	112	4	< 0.1	0.06	< 0.1	< 1	0.2	< 0.1	22	2.2	5.8	0.9	4.8	1.6	2.5	0.4	3.2	
162540	0.5	115	16.7	6.1	19.0	9.6	87.4	51	< 0.1	0.07	< 0.1	< 1	0.1	0.2	206	4.2	11.0	1.7	8.4	2.4	2.6	0.4	2.2	
162541	0.7	86.8	16.0	4.6	3.3	18.5	130	9	0.1	0.09	< 0.1	< 1	< 0.1	0.3	50	3.0	7.9	1.2	6.2	2.0	3.1	0.5	3.9	
162542	1.1	98.4	15.2	6.3	11.3	32.7	208	21	1.6	0.14	< 0.1	< 1	0.3	0.4	106	5.6	15.4	2.3	11.5	3.8	5.5	1.0	6.9	
162543	< 0.1	30.2	4.0	3.7	1.8	4.2	40.0	6	0.3	0.38	< 0.1	< 1	0.3	0.2	22	0.5	1.4	0.2	1.1	0.3	0.5	< 0.1	0.7	
162544	1.1	104	15.2	44.8	16.0	18.3	87.2	7	1.2	0.25	< 0.1	< 1	0.2	0.3	272	2.5	6.8	1.1	5.4	2.0	2.9	0.5	3.8	
162545	0.7	96.3	16.0	1.6	2.2	19.6	112	7	< 0.1	0.07	< 0.1	< 1	< 0.1	0.2	29	3.0	7.9	1.2	6.3	2.2	3.2	0.6	4.1	
162546	0.9	156	14.6	5.6	0.3	11.9	120	8	1.4	0.49	< 0.1	< 1	0.4	0.3	39	2.5	6.8	1.0	5.2	1.5	2.2	0.4	2.7	
162547	0.6	82.4	14.5	0.8	15.5	13.8	207	12	0.9	6.37	< 0.1	< 1	< 0.1	0.2	111	4.4	10.5	1.5	6.9	1.9	2.4	0.4	3.0	
162548	1.1	106	21.7	0.7	99.5	38.6	561	106	1.5	0.18	< 0.1	< 1	< 0.1	0.3	686	31.6	73.6	9.8	42.5	9.4	9.8	1.4	9.0	
162549	0.1	62.6	18.9	0.5	35.4	10.4	263	123	2.2	0.57	< 0.1	< 1	< 0.1	0.2	228	14.8	35.0	4.4	18.0	3.5	3.3	0.4	2.4	

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162550	0.8	82.3	15.3	2.5	5.5	17.7	124	6	<0.1	0.06	<0.1	<1	<0.1	0.3	43	4.3	11.6	1.7	7.8	2.4	3.2	0.6	4.1
162551	0.7	78.6	18.1	0.4	4.6	19.4	503	12	0.2	0.14	<0.1	<1	<0.1	0.4	34	3.9	10.2	1.5	7.9	2.5	3.6	0.6	4.4
162552	0.4	75.0	18.1	0.4	36.0	24.3	172	133	2.5	0.24	<0.1	1	<0.1	0.3	390	24.6	53.8	6.5	25.4	5.2	5.6	0.8	5.3
162553	0.3	40.2	16.6	0.3	18.9	12.3	129	141	5.7	0.59	<0.1	2	0.1	0.3	259	13.4	32.0	3.4	12.8	2.5	2.4	0.4	2.4
162554	0.8	58.2	17.6	0.6	81.3	11.7	816	86	1.5	0.46	<0.1	1	<0.1	0.4	1070	29.4	65.6	8.1	32.0	6.0	5.0	0.6	3.2
162555	0.6	91.9	15.5	2.9	3.6	16.5	92.6	4	0.8	0.22	<0.1	<1	<0.1	0.3	51	2.4	6.6	1.0	5.4	1.8	2.8	0.5	3.8
162556	0.4	96.3	16.1	5.9	11.1	16.9	135	5	<0.1	0.06	<0.1	<1	<0.1	0.4	83	2.3	6.5	1.0	5.5	1.9	2.9	0.5	3.9
162557	0.7	93.0	15.0	23.4	0.8	13.4	99.8	5	1.5	0.26	<0.1	<1	0.3	0.6	40	1.9	5.7	0.8	4.5	1.6	2.4	0.4	3.3
162558	0.5	88.5	16.8	21.3	3.1	18.5	112	6	<0.1	0.06	<0.1	<1	<0.1	0.5	26	2.5	6.9	1.1	5.9	2.0	3.2	0.6	4.2
162559	0.6	134	18.3	3.0	8.6	16.2	78.4	51	<0.1	0.08	<0.1	<1	<0.1	0.3	109	3.8	10.4	1.6	7.7	2.2	3.1	0.5	3.8
162560	0.9	134	16.2	<0.1	1.9	24.4	150	9	<0.1	<0.05	<0.1	<1	<0.1	0.3	25	4.3	11.5	1.8	9.5	3.1	4.5	0.8	5.6
162561	0.8	67.6	18.7	15.1	55.7	4.2	204	97	0.7	0.54	<0.1	<1	<0.1	0.2	577	33.4	67.1	7.4	25.8	3.6	2.5	0.3	1.2
162562	3.1	85.8	13.4	16.6	178	23.1	319	81	9.9	63.2	0.2	5	0.6	0.4	1030	34.9	70.7	8.0	30.9	6.1	6.0	0.9	5.6
162563	1.1	129	19.3	0.7	2.2	20.0	149	11	0.3	0.23	<0.1	<1	<0.1	0.3	42	3.8	10.1	1.6	7.9	2.6	3.7	0.6	4.6
162564	0.6	134	16.4	4.7	21.8	25.0	43.0	22	0.1	0.08	<0.1	<1	<0.1	0.3	467	3.9	10.4	1.6	8.0	2.7	4.2	0.8	5.7
162565	1.3	104	17.9	7.3	5.2	24.1	129	5	<0.1	0.10	<0.1	<1	<0.1	0.5	42	5.3	14.1	2.1	11.0	3.4	4.8	0.8	5.6
162566	0.8	84.5	16.8	0.8	3.7	21.1	659	19	<0.1	0.07	<0.1	<1	<0.1	0.3	43	3.1	8.5	1.3	7.0	2.3	3.7	0.6	4.4
162567	1.6	53.4	15.3	2.7	0.8	17.1	826	16	0.1	0.69	<0.1	<1	<0.1	<0.1	11	2.4	5.9	0.9	4.6	1.5	2.2	0.4	2.9
162568	0.9	141	18.7	0.3	23.4	28.6	195	34	<0.1	0.13	<0.1	<1	<0.1	<0.1	179	17.4	36.7	4.7	19.2	4.3	5.1	0.8	5.2
162569	0.2	17.9	1.9	0.2	1.0	1.4	8.2	<1	0.2	0.25	<0.1	<1	0.1	0.2	9	0.3	0.7	<0.1	0.4	0.1	0.2	<0.1	0.2
162570	1.0	106	14.9	<0.1	0.8	12.1	35.2	4	<0.1	0.07	<0.1	<1	<0.1	<0.1	14	2.6	6.5	1.0	4.5	1.3	1.7	0.3	2.2
162571	1.7	99.7	14.7	5.5	3.1	16.4	108	6	0.5	0.44	<0.1	<1	0.1	<0.1	30	2.1	5.5	0.9	4.3	1.4	2.2	0.4	2.8
162572	1.5	112	17.5	3.1	8.2	18.8	125	5	0.3	0.20	<0.1	<1	<0.1	<0.1	62	2.3	6.1	1.0	4.9	1.7	2.6	0.5	3.3
162573	0.7	59.7	12.2	1.2	11.9	8.3	170	29	<0.1	0.05	<0.1	<1	<0.1	<0.1	136	5.0	11.1	1.4	5.8	1.3	1.5	0.2	1.5
162574	1.7	135	25.0	0.5	105	45.6	602	91	0.5	0.09	0.1	<1	<0.1	0.2	748	33.2	75.7	10.4	43.0	9.4	9.8	1.4	8.8
162575	1.3	104	16.5	0.5	56.4	15.9	235	96	4.3	1.34	<0.1	1	0.1	0.1	606	9.1	21.6	2.8	11.2	2.5	2.9	0.5	2.9
162576	0.8	51.9	15.8	0.8	39.0	16.2	82.2	134	6.1	0.59	<0.1	1	<0.1	0.4	400	16.9	33.9	4.0	14.2	2.6	2.6	0.4	2.6
162577	1.5	105	17.3	3.5	17.2	18.9	129	6	0.1	<0.05	<0.1	<1	<0.1	0.2	88	2.4	6.3	1.0	5.2	1.7	2.5	0.5	3.3
162578	1.1	147	23.3	<0.1	3.6	31.1	148	15	<0.1	<0.05	0.1	<1	<0.1	<0.1	34	5.5	14.3	2.2	10.6	3.3	4.6	0.8	5.5
162579	0.9	47.2	13.9	3.2	2.0	14.0	554	8	0.5	0.11	0.2	1	0.3	<0.1	26	1.7	4.6	0.7	3.4	1.1	1.7	0.3	2.1
162580	2.0	29.0	23.5	3.9	0.7	12.3	499	10	0.8	0.26	<0.1	<1	0.3	0.1	13	1.5	3.9	0.6	2.9	1.0	1.5	0.3	2.0
162581	1.0	72.6	22.5	0.3	0.6	20.2	> 1000	17	0.8	0.17	<0.1	<1	0.1	0.1	20	2.8	7.5	1.2	5.7	1.9	2.8	0.5	3.6
162582	2.2	82.7	17.8	6.3	4.5	18.7	240	5	1.4	0.75	<0.1	1	1.3	<0.1	114	2.3	6.1	1.0	4.8	1.6	2.5	0.5	3.2
162583	1.7	137	21.4	<0.1	24.9	36.1	306	4	0.2	<0.05	0.1	<1	<0.1	<0.1	115	6.6	17.0	2.6	12.3	3.7	5.4	0.9	6.5
162584	0.5	12.6	1.8	1.4	7.9	1.2	32.5	<1	0.1	0.18	<0.1	<1	<0.1	<0.1	75	0.2	0.4	<0.1	0.3	<0.1	0.2	<0.1	0.2
162585	1.1	98.0	15.7	2.1	11.5	17.6	101	3	<0.1	<0.05	<0.1	<1	<0.1	<0.1	74	2.2	5.8	0.9	4.5	1.5	2.3	0.4	3.1
162586	12.3	119	15.2	6.6	58.3	12.8	461	57	6.2	611	0.7	11	1.2	0.4	497	7.5	16.2	2.1	8.6	2.0	2.3	0.4	2.4
162587	1.0	120	17.3	4.0	34.1	19.5	156	25	0.8	2.70	<0.1	<1	<0.1	<0.1	638	9.1	23.3	2.8	11.8	3.0	3.5	0.5	3.6
162588	0.9	85.6	20.0	4.3	20.0	13.2	281	34	1.3	1.39	<0.1	<1	<0.1	0.1	237	11.7	23.6	2.9	11.4	2.5	2.6	0.4	2.4
162589	0.9	60.5	20.1	0.5	53.3	5.7	349	112	0.8	0.36	<0.1	<1	<0.1	<0.1	818	15.3	37.6	4.0	14.6	2.7	2.0	0.2	1.1
162590	1.0	207	24.8	<0.1	2.1	37.9	> 1000	31	<0.1	0.18	<0.1	<1	<0.1	0.2	21	8.4	20.6	2.9	13.6	3.9	5.4	0.9	6.5
162591	0.2	82.6	22.0	<0.1	46.2	6.0	596	78	0.5	0.25	<0.1	<1	<0.1	<0.1	930	14.1	32.6	3.5	13.3	2.4	1.9	0.2	1.2
162592	0.7	114	22.0	0.3	27.3	21.1	585	84	4.9	0.44	<0.1	2	<0.1	<0.1	318	28.6	59.9	7.5	28.1	5.6	5.1	0.7	3.9
162593	0.7	48.5	26.7	<0.1	17.6	10.2	497	110	3.3	0.16	<0.1	<1	<0.1	<0.1	190	7.4	20.9	2.8	11.8	2.7	2.5	0.4	2.0
162594	0.7	79.4	20.2	0.7	57.5	18.3	335	67	2.1	0.59	<0.1	<1	<0.1	<0.1	404	12.6	28.1	3.5	14.1	3.2	3.4	0.5	3.3
162595	0.9	120	22.0	<0.1	24.5	16.3	505	96	2.6	1.06	<0.1	<1	<0.1	<0.1	213	12.6	29.8	3.9	16.6	3.8	3.9	0.5	3.2
162596	1.0	104	20.3	0.6	17.9	11.2	214	91	0.2	0.17	<0.1	<1	<0.1	<0.1	90	11.3	26.5	3.4	13.8	3.0	2.8	0.4	2.1
162597	0.9	139	17.2	2.2	7.9	27.2	105	11	3.1	0.31	<0.1	1	0.3	<0.1	92	4.4	12.0	1.8	8.6	2.7	3.8	0.7	4.8
162598	1.1	133	26.2	<0.1	92.1	40.4	594	136	0.2	0.06	<0.1	<1	<0.1	0.2	742	26.4	61.2	8.6	36.0	8.1	8.3	1.3	7.8
162599	0.5	15.3	1.3	2.6	1.6	1.1	8.0	1	0.2	0.18	<0.1	1	0.2	<0.1	10	0.5	1.0	0.1	0.6	0.2	0.2	<0.1	0.2

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162600	0.7	110	20.0	2.3	33.8	14.5	194	90	0.2	< 0.05	< 0.1	< 1	< 0.1	< 0.1	352	15.7	35.0	4.5	17.4	3.4	3.2	0.5	2.7
162601	0.8	103	17.2	0.6	6.3	19.4	92.8	8	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	65	6.6	15.2	2.1	8.9	2.3	2.9	0.5	3.4
162602	1.3	102	19.0	0.5	17.9	23.7	117	41	1.8	0.28	< 0.1	< 1	< 0.1	< 0.1	176	7.4	17.5	2.4	10.7	2.9	3.6	0.6	4.1
162603	1.1	101	19.4	0.3	58.5	24.5	214	64	2.1	0.38	< 0.1	< 1	< 0.1	0.1	471	18.7	40.7	5.1	20.0	4.2	4.5	0.7	4.4
162604	0.9	94.7	20.8	0.6	48.4	16.6	741	138	2.0	0.24	< 0.1	2	< 0.1	< 0.1	1020	28.8	61.8	7.9	31.1	6.1	5.2	0.6	3.3
162605	1.0	80.5	18.7	0.6	15.6	18.8	643	114	0.3	0.16	< 0.1	1	< 0.1	0.2	656	28.9	62.0	8.2	32.2	6.4	5.6	0.7	3.9
162606	1.4	105	17.1	0.1	16.5	20.5	624	47	< 0.1	< 0.05	< 0.1	< 1	< 0.1	0.2	678	20.8	47.0	6.1	25.5	5.6	5.5	0.7	4.1
162607	1.0	140	19.4	1.2	5.8	23.5	116	4	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	55	3.7	9.5	1.5	7.0	2.2	3.2	0.6	4.1
162608	1.0	116	18.9	< 0.1	29.4	17.1	419	82	0.7	0.54	< 0.1	1	< 0.1	< 0.1	390	19.3	41.0	5.2	20.3	4.1	4.0	0.6	3.2
162609	1.1	106	19.9	0.1	48.8	22.3	363	94	< 0.1	0.24	< 0.1	< 1	< 0.1	0.2	291	22.3	53.6	6.7	26.0	5.1	4.8	0.7	4.2
162610	0.4	69.7	23.2	3.5	52.0	7.4	581	155	2.2	0.27	< 0.1	1	< 0.1	< 0.1	834	12.9	30.8	3.5	13.1	2.5	2.2	0.3	1.5
162611	1.1	92.5	18.6	0.9	35.0	19.1	279	159	3.9	0.71	< 0.1	1	< 0.1	0.2	364	19.6	41.0	5.0	18.6	3.8	3.9	0.6	3.4
162612	1.7	136	17.7	389	24.7	24.2	366	131	5.1	1.67	< 0.1	1	0.4	0.4	444	23.1	41.5	5.7	23.4	5.4	6.0	0.9	5.0
162613	0.9	94.0	18.0	0.5	40.1	17.9	358	61	3.2	4.41	< 0.1	< 1	< 0.1	0.2	392	14.1	32.1	3.8	14.8	3.2	3.5	0.5	3.4
162614	1.1	49.4	17.8	5.7	44.7	20.6	250	163	0.4	0.81	< 0.1	< 1	< 0.1	0.3	364	24.4	52.2	7.0	27.9	5.5	5.1	0.7	3.9
162615	3.2	52.6	16.5	226	20.7	11.4	160	163	15.3	1.25	< 0.1	1	0.4	1.4	277	10.8	23.1	2.7	10.4	2.3	2.5	0.4	2.3
162616	0.7	118	17.1	1.1	20.7	13.4	144	91	0.3	< 0.05	< 0.1	< 1	< 0.1	< 0.1	293	16.7	41.4	4.3	16.3	2.9	2.6	0.4	2.3
162617	0.8	125	19.0	2.0	10.6	13.0	209	36	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	273	8.8	22.5	2.5	10.5	2.5	2.8	0.4	2.7
162618	0.2	49.9	18.5	0.4	52.9	13.6	191	132	3.0	1.03	< 0.1	1	< 0.1	0.1	513	14.2	30.9	3.4	11.9	2.4	2.4	0.4	2.3
162619	0.8	114	19.2	0.3	40.5	21.5	206	135	2.4	0.49	< 0.1	1	< 0.1	< 0.1	284	18.4	41.0	5.0	19.4	4.1	4.2	0.6	4.0
162620	1.4	131	14.9	2.7	4.6	24.4	280	106	4.8	0.12	< 0.1	1	0.2	0.1	88	26.1	56.3	7.4	29.7	6.2	5.8	0.8	4.7
162621	1.6	133	18.7	1.3	33.9	22.4	121	5	1.7	0.13	< 0.1	< 1	0.1	< 0.1	143	3.5	9.2	1.4	6.7	2.1	3.1	0.6	3.9
162622	0.4	99.1	19.7	< 0.1	15.5	11.6	158	26	0.8	0.09	< 0.1	< 1	< 0.1	< 0.1	180	8.7	18.7	2.4	9.8	2.2	2.4	0.4	2.2
162623	0.8	142	21.5	< 0.1	20.2	30.1	180	4	0.2	0.09	< 0.1	< 1	< 0.1	< 0.1	153	8.5	20.6	2.8	12.6	3.5	4.6	0.8	5.1
162624	1.5	117	25.2	0.4	123	44.0	593	165	16.2	0.79	< 0.1	3	< 0.1	0.2	685	32.3	78.3	10.6	44.1	9.7	9.7	1.5	8.7
162625	0.7	138	20.0	< 0.1	8.7	22.7	162	4	0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	104	5.7	14.0	1.9	8.9	2.5	3.4	0.6	3.9
162626	1.4	107	24.0	2.7	10.5	26.0	217	6	< 0.1	< 0.05	0.1	< 1	< 0.1	0.3	105	4.8	12.2	1.8	8.7	2.6	3.8	0.7	4.5
162627	1.0	69.1	19.1	0.2	5.3	20.8	462	7	< 0.1	< 0.05	< 0.1	< 1	< 0.1	0.1	34	4.0	10.2	1.5	7.3	2.2	3.1	0.6	3.8
162628	0.3	101	18.9	15.5	55.5	8.4	160	27	2.3	2.77	< 0.1	< 1	0.3	0.1	483	25.7	49.7	5.4	17.3	2.4	1.9	0.2	1.2
162629	0.3	52.9	7.2	21.5	7.3	3.7	36.9	18	< 0.1	0.11	< 0.1	< 1	< 0.1	< 0.1	93	1.2	3.1	0.4	2.1	0.6	0.8	0.1	0.7
162630	0.5	117	19.3	< 0.1	1.9	22.8	139	6	0.5	< 0.05	< 0.1	< 1	< 0.1	< 0.1	43	3.3	8.7	1.4	6.8	2.3	3.3	0.6	3.9
162631	1.4	120	15.5	1.1	17.3	21.3	132	20	< 0.1	< 0.05	< 0.1	< 1	0.1	< 0.1	221	9.4	21.8	3.0	12.5	3.1	3.6	0.6	3.8
162632	0.6	116	19.8	0.3	4.3	26.2	183	9	0.6	0.09	< 0.1	< 1	< 0.1	< 0.1	61	4.2	11.0	1.7	8.3	2.6	3.9	0.7	4.4
162633	0.7	96.5	19.3	< 0.1	2.6	19.8	219	6	1.3	0.11	< 0.1	< 1	< 0.1	< 0.1	47	3.2	8.6	1.3	6.7	2.1	3.0	0.5	3.6
162634	0.7	205	21.5	0.3	6.8	27.4	117	15	0.9	0.20	< 0.1	< 1	0.3	< 0.1	85	6.1	14.9	2.1	10.0	2.9	4.0	0.7	4.7
162635	0.5	190	19.1	0.2	4.7	20.3	125	6	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	31	3.2	8.4	1.3	6.4	2.0	3.0	0.5	3.5
162636	2.0	158	16.9	905	21.6	25.1	304	63	0.5	0.54	< 0.1	1	0.5	< 0.1	204	24.1	39.1	6.0	24.3	5.5	6.0	0.8	4.9
162637	0.3	130	21.5	4.3	17.5	10.0	91.2	50	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	343	6.3	15.6	2.0	8.8	2.3	2.7	0.4	2.2
162638	0.2	73.5	26.8	3.9	58.3	8.4	739	113	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	826	21.0	49.6	6.1	24.0	4.4	3.3	0.4	1.8
162639	< 0.1	128	15.5	37.0	24.9	7.9	172	46	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	158	3.9	9.6	1.3	5.9	1.7	1.8	0.3	1.5
162640	0.6	108	16.0	11.7	25.3	18.6	94.7	3	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	152	2.3	6.3	1.0	4.8	1.6	2.4	0.4	3.1
162661	0.3	108	17.7	< 0.1	14.9	18.6	224	13	< 0.1	0.26	< 0.1	< 1	< 0.1	< 0.1	142	3.5	8.8	1.3	6.1	1.9	2.6	0.5	3.2

## Results

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
162501	63.3	< 0.1	0.3	1.9	0.3	< 0.1	0.1	0.017	< 0.05	1.4	43	0.4	0.6	0.257	0.020	0.06
162502	75.8	0.2	0.3	1.7	0.2	< 0.1	0.1	0.020	< 0.05	1.1	41	0.3	< 0.1	0.370	0.021	0.07
162503	44.7	< 0.1	0.3	1.7	0.3	< 0.1	0.1	0.021	0.09	1.0	40	0.3	< 0.1	0.271	0.020	0.05
162504	96.9	0.2	0.3	1.6	0.2	< 0.1	0.1	0.011	< 0.05	0.7	36	0.3	< 0.1	0.313	0.021	0.09
162505	118	< 0.1	0.3	1.6	0.2	< 0.1	0.1	0.018	< 0.05	0.7	37	0.3	0.8	0.260	0.020	0.09
162506	103	0.1	0.4	2.0	0.3	< 0.1	0.1	0.017	< 0.05	1.2	42	0.4	0.1	0.527	0.028	0.20
162507	125	< 0.1	0.3	1.9	0.3	< 0.1	0.1	0.013	0.25	8.6	24	5.6	1.2	0.265	0.126	0.14
162508	11.0	0.4	0.3	1.5	0.3	0.5	0.4	0.019	0.13	3.2	19	2.9	0.6	0.498	0.116	0.06
162509	58.0	< 0.1	0.4	2.1	0.3	< 0.1	0.3	0.014	0.22	6.6	41	0.4	0.1	0.452	0.029	0.26
162510	9.8	< 0.1	0.2	1.2	0.2	< 0.1	0.1	0.021	0.22	8.0	9	2.1	0.8	0.285	0.052	0.04
162511	119	0.2	0.3	2.0	0.3	< 0.1	0.2	0.023	< 0.05	0.8	40	0.3	< 0.1	0.301	0.020	0.11
162512	89.9	0.4	0.3	1.7	0.3	0.1	< 0.1	0.022	0.25	5.1	19	4.7	1.0	0.436	0.121	0.75
162513	66.0	0.3	0.4	2.0	0.3	< 0.1	0.2	0.020	0.08	2.7	44	0.3	< 0.1	0.390	0.023	0.07
162514	51.4	0.2	0.4	2.2	0.3	< 0.1	0.2	0.032	< 0.05	1.2	50	0.9	0.2	0.442	0.025	0.05
162515	73.0	0.3	0.3	1.6	0.2	< 0.1	0.2	0.021	< 0.05	1.9	32	0.3	< 0.1	0.329	0.022	0.11
162516	122	< 0.1	0.4	2.2	0.3	< 0.1	0.1	0.024	0.06	1.2	49	0.5	0.6	0.259	0.021	0.07
162517	3.8	< 0.1	0.4	2.1	0.3	< 0.1	0.1	0.021	< 0.05	0.9	51	0.5	0.2	0.223	0.016	0.02
162518	19.4	< 0.1	0.2	1.1	0.2	0.3	0.4	0.020	0.13	5.3	19	1.2	0.4	0.497	0.124	0.01
162519	20.8	< 0.1	0.2	1.2	0.2	0.2	0.3	0.014	0.13	9.7	14	3.0	0.8	0.305	0.116	0.04
162520	17.3	0.2	0.3	1.8	0.3	< 0.1	0.1	0.025	0.06	6.3	43	0.3	0.2	0.279	0.020	0.09
162521	34.8	< 0.1	0.4	2.1	0.3	< 0.1	< 0.1	0.027	< 0.05	2.0	45	0.4	0.1	0.243	0.025	0.06
162522	28.6	0.1	0.4	2.3	0.4	< 0.1	0.1	0.017	< 0.05	1.2	41	0.6	0.1	0.255	0.040	0.03
162523	5.9	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.3	0.012	< 0.05	< 0.5	2	< 0.1	< 0.1	0.0175	0.001	< 0.01
162524	27.5	< 0.1	0.7	3.7	0.6	< 0.1	0.1	0.023	0.52	13.4	21	4.1	1.5	0.219	0.147	0.17
162525	87.7	< 0.1	0.4	2.2	0.3	< 0.1	0.1	0.026	0.05	3.4	39	0.4	0.1	0.178	0.026	0.28
162526	44.7	0.5	0.3	1.5	0.2	0.2	0.5	0.027	0.24	3.1	18	1.9	0.5	0.408	0.068	0.03
162527	153	< 0.1	0.4	2.1	0.3	< 0.1	0.1	0.027	< 0.05	54.6	47	0.3	< 0.1	0.307	0.023	0.07
162528	69.3	< 0.1	0.7	3.9	0.7	< 0.1	0.1	0.032	0.28	7.1	41	5.0	0.9	0.159	0.082	0.16
162529	3.3	< 0.1	0.4	2.2	0.4	< 0.1	0.1	0.023	0.21	4.8	43	0.5	0.3	0.400	0.033	0.05
162530	106	0.3	0.4	2.0	0.3	< 0.1	0.1	0.022	< 0.05	0.7	43	0.3	0.2	0.379	0.022	0.16
162531	86.8	0.2	0.3	2.1	0.3	< 0.1	0.2	0.026	0.10	1.3	40	0.3	0.3	0.421	0.020	0.09
162532	702	< 0.1	0.3	1.6	0.2	< 0.1	0.2	0.029	0.28	28.8	11	3.3	0.7	0.198	0.122	0.15
162533	4.3	< 0.1	< 0.1	0.3	< 0.1	0.1	0.2	0.020	0.09	14.9	4	0.4	0.1	0.116	0.015	< 0.01
162534	32.8	< 0.1	0.2	1.4	0.2	< 0.1	0.1	0.020	0.13	4.3	23	1.0	0.2	0.133	0.056	0.08
162535	47.5	< 0.1	0.3	1.8	0.3	< 0.1	0.1	0.029	< 0.05	19.0	37	0.3	< 0.1	0.276	0.018	0.07
162536	128	0.7	0.3	1.9	0.3	1.0	1.5	0.020	0.12	6.8	15	3.9	1.4	0.770	0.193	1.61
162537	51.0	< 0.1	0.3	2.0	0.3	< 0.1	< 0.1	0.022	0.10	3.1	13	1.8	0.5	0.380	0.063	0.04
162538	18.3	< 0.1	0.1	0.9	0.2	< 0.1	0.1	0.019	0.16	2.1	30	0.4	0.1	0.237	0.034	0.06
162539	109	0.1	0.3	1.7	0.2	< 0.1	0.1	0.021	< 0.05	1.3	45	0.2	< 0.1	0.292	0.015	0.10
162540	48.7	< 0.1	0.2	1.3	0.2	< 0.1	0.1	0.019	0.06	1.1	32	0.4	0.1	0.284	0.026	0.05
162541	131	< 0.1	0.4	2.1	0.3	< 0.1	0.1	0.026	< 0.05	0.8	45	0.3	< 0.1	0.290	0.026	0.06
162542	47.7	0.3	0.7	3.6	0.5	< 0.1	0.1	0.032	0.09	2.0	35	0.7	0.2	0.601	0.057	0.22
162543	50.8	< 0.1	0.1	0.6	0.1	< 0.1	0.2	0.023	< 0.05	1.3	8	< 0.1	< 0.1	0.0833	0.008	0.03
162544	53.4	0.2	0.3	2.0	0.3	< 0.1	0.3	0.018	0.14	1.6	43	0.3	< 0.1	0.468	0.030	0.08
162545	93.1	< 0.1	0.4	2.2	0.3	< 0.1	0.1	0.027	< 0.05	1.6	47	0.3	< 0.1	0.247	0.021	0.08
162546	72.2	< 0.1	0.3	1.5	0.2	0.2	0.3	0.021	< 0.05	1.3	25	0.3	0.2	0.388	0.021	0.26
162547	25.8	< 0.1	0.3	1.7	0.3	< 0.1	0.2	0.031	0.12	7.4	37	1.3	0.4	0.373	0.027	0.09
162548	29.9	0.1	0.7	3.8	0.6	< 0.1	0.2	0.023	0.55	13.4	19	4.1	1.9	0.380	0.145	0.16
162549	30.1	0.2	0.2	1.2	0.2	0.1	0.3	0.023	0.19	4.7	14	2.4	0.6	0.404	0.095	0.06



Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
162550	93.6	< 0.1	0.4	2.1	0.3	< 0.1	0.2	0.029	0.06	0.9	42	0.5	0.1	0.225	0.024	0.06
162551	30.8	0.1	0.4	2.3	0.3	< 0.1	0.1	0.023	< 0.05	2.1	44	0.5	0.2	0.365	0.026	0.09
162552	34.1	0.3	0.5	2.7	0.5	< 0.1	0.2	0.028	0.20	5.0	13	4.4	1.0	0.257	0.041	0.02
162553	32.4	< 0.1	0.3	2.0	0.3	0.5	0.3	0.024	0.09	7.0	2	2.5	0.9	0.0898	0.022	0.03
162554	8.3	0.3	0.2	1.1	0.2	< 0.1	0.2	0.030	0.46	20.3	9	8.3	2.0	0.232	0.093	0.02
162555	104	0.2	0.4	2.1	0.3	< 0.1	0.2	0.038	< 0.05	0.8	41	1.1	0.2	0.408	0.021	0.06
162556	102	< 0.1	0.4	2.3	0.3	< 0.1	0.2	0.040	0.11	2.5	41	0.3	0.3	0.302	0.020	0.08
162557	91.7	0.4	0.3	2.0	0.3	0.2	0.6	0.038	0.06	2.5	36	0.2	2.0	0.473	0.023	0.06
162558	77.7	< 0.1	0.4	2.3	0.3	< 0.1	0.2	0.034	< 0.05	1.6	45	0.3	< 0.1	0.394	0.018	0.08
162559	110	< 0.1	0.4	2.5	0.4	< 0.1	0.2	0.037	0.06	18.6	42	0.6	0.2	0.273	0.036	0.09
162560	51.6	< 0.1	0.5	2.6	0.4	< 0.1	0.2	0.032	< 0.05	5.5	47	0.4	0.2	0.152	0.016	0.04
162561	13.3	< 0.1	< 0.1	0.5	< 0.1	< 0.1	0.3	0.036	0.41	7.6	5	5.6	1.2	0.208	0.041	< 0.01
162562	2720	0.6	0.5	2.7	0.4	0.8	2.3	0.039	1.17	25.9	14	20.3	5.1	0.451	0.094	0.36
162563	69.6	0.2	0.4	2.4	0.4	< 0.1	0.2	0.031	0.06	1.7	48	0.6	0.2	0.407	0.027	0.05
162564	84.5	< 0.1	0.5	3.0	0.5	< 0.1	0.2	0.036	0.09	11.6	40	0.6	0.1	0.318	0.040	0.06
162565	83.8	< 0.1	0.5	2.8	0.4	< 0.1	0.2	0.032	< 0.05	1.2	40	0.6	0.1	0.229	0.040	0.07
162566	49.6	< 0.1	0.4	2.6	0.4	< 0.1	0.2	0.041	< 0.05	4.7	48	0.3	< 0.1	0.240	0.024	0.15
162567	181	0.4	0.3	1.6	0.2	< 0.1	< 0.1	0.012	< 0.05	11.3	39	2.0	< 0.1	0.201	0.018	0.08
162568	92.1	0.3	0.4	2.6	0.4	< 0.1	< 0.1	0.008	0.18	4.9	44	4.0	0.6	0.166	0.053	0.10
162569	11.9	< 0.1	< 0.1	0.1	< 0.1	< 0.1	< 0.1	0.010	< 0.05	1.1	4	0.3	0.1	0.0485	0.006	< 0.01
162570	75.1	0.2	0.2	1.5	0.2	< 0.1	< 0.1	0.007	< 0.05	< 0.5	38	0.9	< 0.1	0.199	0.018	0.05
162571	107	0.5	0.3	1.5	0.2	< 0.1	< 0.1	0.005	< 0.05	2.2	41	1.3	0.2	0.361	0.022	0.05
162572	85.8	0.5	0.3	1.9	0.3	< 0.1	< 0.1	0.013	< 0.05	1.3	40	0.9	< 0.1	0.332	0.019	0.05
162573	15.6	0.2	0.1	0.7	0.1	< 0.1	< 0.1	0.015	0.07	1.8	11	0.9	0.3	0.198	0.038	0.01
162574	27.5	0.3	0.7	3.7	0.6	< 0.1	< 0.1	0.004	0.52	12.8	21	4.7	1.3	0.366	0.168	0.17
162575	30.8	0.7	0.3	1.5	0.2	0.3	0.5	0.011	0.30	2.9	18	2.7	0.4	0.456	0.064	0.03
162576	23.5	0.1	0.3	1.8	0.3	0.3	0.2	0.009	0.17	2.5	2	3.4	0.6	0.0875	0.021	0.05
162577	96.6	0.3	0.3	1.9	0.3	< 0.1	< 0.1	0.012	0.09	2.9	41	0.8	< 0.1	0.197	0.020	0.08
162578	60.8	0.2	0.5	2.9	0.4	< 0.1	< 0.1	0.006	< 0.05	2.0	43	1.1	0.1	0.226	0.038	0.08
162579	1280	0.3	0.2	1.5	0.3	< 0.1	0.1	0.009	< 0.05	4.0	16	0.3	< 0.1	0.129	0.020	0.19
162580	251	0.5	0.2	1.1	0.2	< 0.1	0.2	0.014	< 0.05	14.8	19	0.5	0.1	0.207	0.020	0.19
162581	50.7	1.0	0.3	2.0	0.3	< 0.1	< 0.1	0.011	< 0.05	4.4	42	0.7	< 0.1	0.363	0.023	0.08
162582	139	0.4	0.3	1.8	0.3	0.1	1.2	0.016	< 0.05	2.8	40	0.7	0.2	0.456	0.023	0.47
162583	68.3	0.5	0.6	3.5	0.5	< 0.1	< 0.1	0.007	0.08	6.4	48	1.0	0.2	0.363	0.044	0.14
162584	3.0	< 0.1	< 0.1	0.2	< 0.1	< 0.1	< 0.1	0.007	< 0.05	< 0.5	3	< 0.1	< 0.1	0.0351	0.002	< 0.01
162585	110	0.4	0.3	1.8	0.3	< 0.1	< 0.1	0.009	0.05	1.1	38	0.4	< 0.1	0.270	0.017	0.15
162586	> 10000	0.2	0.2	1.3	0.2	0.4	3.5	0.034	0.33	20.8	12	3.5	1.1	0.336	0.090	1.28
162587	57.5	0.2	0.3	1.8	0.3	< 0.1	< 0.1	0.013	0.18	4.6	39	1.8	0.3	0.467	0.066	0.03
162588	45.4	0.4	0.2	1.0	0.1	< 0.1	0.4	0.009	0.11	3.5	16	2.2	0.5	0.338	0.046	0.05
162589	6.5	0.1	< 0.1	0.4	< 0.1	< 0.1	< 0.1	0.007	0.26	8.3	3	3.1	0.8	0.209	0.043	0.03
162590	5.4	0.3	0.6	3.4	0.5	< 0.1	< 0.1	0.003	< 0.05	1.6	44	1.0	1.3	0.172	0.042	0.08
162591	2.2	0.3	< 0.1	0.5	< 0.1	< 0.1	< 0.1	0.009	0.21	11.6	4	3.9	1.0	0.144	0.039	0.02
162592	110	0.5	0.3	1.8	0.3	0.2	0.3	0.010	0.15	7.2	30	6.0	1.0	0.438	0.084	0.09
162593	8.0	0.6	0.2	1.0	0.2	0.2	< 0.1	0.011	0.14	5.9	8	1.8	0.7	0.330	0.059	0.02
162594	32.6	0.5	0.3	1.6	0.3	< 0.1	< 0.1	0.014	0.38	3.3	15	2.3	0.4	0.338	0.059	0.08
162595	38.0	0.6	0.2	1.5	0.2	< 0.1	< 0.1	0.006	0.13	9.4	26	4.0	1.0	0.396	0.053	0.06
162596	34.7	0.2	0.2	0.9	0.2	< 0.1	< 0.1	0.008	0.08	3.4	20	3.1	0.7	0.269	0.044	0.04
162597	33.7	0.6	0.4	2.4	0.3	0.2	0.8	0.007	< 0.05	2.1	33	1.2	0.1	0.709	0.056	0.04
162598	25.6	0.3	0.6	3.4	0.5	< 0.1	< 0.1	0.011	0.54	12.8	20	3.4	1.4	0.314	0.156	0.18
162599	2.1	< 0.1	< 0.1	0.1	< 0.1	< 0.1	0.8	0.013	< 0.05	0.6	2	< 0.1	< 0.1	0.0332	0.005	< 0.01

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
162600	46.6	0.3	0.2	1.4	0.2	< 0.1	< 0.1	0.007	0.12	3.3	19	2.1	0.5	0.303	0.084	0.02
162601	83.2	0.2	0.3	1.7	0.2	< 0.1	< 0.1	0.007	< 0.05	1.7	25	1.1	0.5	0.162	0.037	0.03
162602	39.7	0.5	0.4	2.3	0.3	< 0.1	< 0.1	0.014	0.09	5.8	32	1.6	0.2	0.507	0.047	0.05
162603	29.5	0.6	0.4	2.1	0.3	< 0.1	< 0.1	0.020	0.27	4.1	19	3.0	0.6	0.441	0.081	0.09
162604	37.4	0.4	0.2	1.3	0.2	< 0.1	0.2	0.018	0.31	11.2	14	8.3	1.3	0.334	0.085	0.04
162605	36.5	0.2	0.3	1.6	0.3	< 0.1	< 0.1	0.023	0.10	9.6	15	4.8	1.1	0.348	0.107	0.07
162606	58.6	0.3	0.3	1.7	0.3	< 0.1	< 0.1	0.005	0.10	8.6	25	4.2	1.0	0.186	0.115	0.04
162607	79.1	0.3	0.4	2.2	0.3	< 0.1	< 0.1	0.012	< 0.05	1.4	49	0.9	0.1	0.242	0.026	0.06
162608	52.8	0.4	0.3	1.5	0.2	< 0.1	< 0.1	0.014	0.16	6.2	18	3.7	0.9	0.326	0.098	0.10
162609	46.0	0.4	0.3	1.9	0.3	< 0.1	< 0.1	0.015	0.26	8.9	19	4.3	0.7	0.255	0.097	0.07
162610	13.4	0.3	0.1	0.6	< 0.1	< 0.1	< 0.1	0.014	0.31	10.0	5	4.5	1.0	0.251	0.053	0.03
162611	43.5	0.6	0.3	1.7	0.3	0.1	< 0.1	0.016	0.21	6.6	16	4.1	0.9	0.376	0.057	0.06
162612	89.8	0.4	0.3	1.8	0.3	0.2	< 0.1	0.015	0.12	5.3	19	5.1	1.1	0.634	0.137	0.76
162613	101	0.4	0.3	1.5	0.2	< 0.1	< 0.1	0.020	0.27	7.8	11	3.0	0.8	0.318	0.069	0.10
162614	31.1	0.2	0.3	1.8	0.3	< 0.1	< 0.1	0.023	0.23	3.1	11	3.2	0.7	0.358	0.089	0.09
162615	21.3	0.3	0.2	1.3	0.2	2.3	68.4	0.014	0.09	5.4	14	2.3	0.5	0.423	0.079	0.51
162616	24.6	0.4	0.2	1.4	0.2	< 0.1	0.3	0.015	0.11	5.0	19	4.0	0.8	0.257	0.114	< 0.01
162617	32.3	0.3	0.2	1.3	0.2	< 0.1	< 0.1	0.016	0.07	2.8	25	1.9	0.3	0.148	0.044	0.06
162618	19.2	0.3	0.2	1.3	0.2	< 0.1	0.2	0.014	0.29	5.2	6	3.9	1.0	0.176	0.024	0.11
162619	58.3	0.4	0.3	1.8	0.3	< 0.1	< 0.1	0.017	0.21	5.6	20	2.9	0.5	0.482	0.088	0.10
162620	6.8	0.7	0.4	2.1	0.3	0.3	0.4	0.014	< 0.05	3.8	27	5.6	1.0	0.440	0.114	0.04
162621	102	0.7	0.4	2.1	0.3	< 0.1	0.1	0.016	0.12	1.5	50	0.8	< 0.1	0.522	0.031	0.07
162622	15.0	0.4	0.2	1.0	0.1	< 0.1	< 0.1	0.016	0.07	2.6	16	1.8	0.4	0.252	0.038	0.02
162623	72.8	0.4	0.5	2.6	0.4	< 0.1	< 0.1	0.009	0.10	2.5	41	1.2	0.2	0.321	0.049	0.06
162624	23.1	1.0	0.6	3.5	0.6	0.8	0.3	0.019	0.51	12.3	13	5.4	1.4	0.596	0.141	0.15
162625	62.4	0.3	0.4	2.0	0.3	< 0.1	< 0.1	0.011	< 0.05	3.1	45	0.9	0.3	0.205	0.028	0.03
162626	182	0.3	0.4	2.4	0.4	< 0.1	< 0.1	0.012	0.08	1.7	54	0.7	0.2	0.152	0.032	0.33
162627	142	0.4	0.3	2.0	0.3	< 0.1	< 0.1	0.014	< 0.05	3.5	45	0.6	0.1	0.224	0.022	0.14
162628	11.2	0.1	0.1	0.6	0.1	< 0.1	0.2	0.003	0.34	3.9	7	4.6	1.4	0.0723	0.017	< 0.01
162629	31.9	0.4	< 0.1	0.5	< 0.1	< 0.1	< 0.1	0.010	0.06	0.7	16	0.5	< 0.1	0.164	0.014	0.02
162630	72.7	0.5	0.4	2.1	0.3	< 0.1	< 0.1	0.011	< 0.05	1.3	49	0.9	< 0.1	0.427	0.025	0.07
162631	113	0.3	0.3	1.7	0.2	< 0.1	< 0.1	0.008	0.09	2.1	27	1.5	0.3	0.191	0.044	0.17
162632	49.5	0.4	0.4	2.3	0.3	< 0.1	< 0.1	0.003	< 0.05	0.7	48	0.6	< 0.1	0.469	0.028	0.06
162633	116	0.5	0.3	1.8	0.3	< 0.1	< 0.1	0.006	< 0.05	0.8	37	0.4	< 0.1	0.492	0.028	0.12
162634	105	0.5	0.4	2.4	0.3	< 0.1	< 0.1	0.001	< 0.05	2.9	42	0.8	0.2	0.470	0.038	0.20
162635	89.6	0.3	0.3	1.9	0.3	< 0.1	< 0.1	0.006	< 0.05	55.4	36	0.4	< 0.1	0.211	0.023	0.09
162636	134	0.3	0.3	1.8	0.3	< 0.1	< 0.1	0.007	0.10	6.7	16	5.0	1.3	0.421	0.168	1.59
162637	70.1	0.3	0.2	1.2	0.2	< 0.1	< 0.1	< 0.001	0.22	40.2	40	1.3	0.1	0.237	0.028	0.02
162638	3.5	0.2	0.1	0.6	< 0.1	< 0.1	< 0.1	0.007	0.30	7.3	5	2.7	0.5	0.254	0.069	0.02
162639	84.3	0.4	0.1	1.0	0.2	< 0.1	< 0.1	0.009	0.15	3.0	43	0.6	< 0.1	0.216	0.021	0.06
162640	51.8	0.2	0.3	1.6	0.2	< 0.1	< 0.1	0.005	0.11	1.0	40	0.3	< 0.1	0.189	0.018	0.05
162661	47.2	0.5	0.3	1.8	0.3	< 0.1	< 0.1	0.007	0.09	5.8	43	0.5	0.5	0.255	0.022	0.12

QC

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas		8.8	0.04	0.19	1.81	0.04	0.79	2.3	79	12.6	822	23.3	< 0.1	4020	40.5		0.8		31.2	2.68	8.0	0.61	1470
GXR-1 Cert		8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380
GXR-1 Meas		9.0	0.05	0.20	1.95	0.05	0.89	2.6	84	13.3	811	24.8	0.1	3660	45.1		0.6		34.0	2.70	8.3	0.62	1480
GXR-1 Cert		8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380
GXR-1 Meas		8.8	0.06	0.24	1.94	0.05	0.82	2.6	79	9.9	841	24.7	0.5	3790	39.8		1.2		35.8	2.86	8.0	0.67	1460
GXR-1 Cert		8.20	0.0520	0.217	3.52	0.050	0.960	3.30	80.0	12.0	852	23.6	0.960	3900	41.0		1.22		31.0	3.00	8.20	0.690	1380
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas		14.3	0.51	1.64	6.66	1.49	0.98	0.1	88	47.2	150	2.91	0.9		40.8		1.7		3.29	2.56	14.5	1.41	20.5
GXR-4 Cert		11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30		42.0		1.90		4.00	2.80	14.6	1.63	19.0
GXR-4 Meas		13.6	0.56	1.73	7.59	4.53	1.05	0.2	91	50.3	147	3.09	1.0		44.9		2.8		4.04	2.62	15.3	1.45	20.1
GXR-4 Cert		11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30		42.0		1.90		4.00	2.80	14.6	1.63	19.0
GXR-4 Meas		14.2	0.51	1.65	7.09	3.30	0.93	0.1	82	42.9	159	2.99	1.4		39.1		2.3		3.44	2.62	14.2	1.55	20.8
GXR-4 Cert		11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30		42.0		1.90		4.00	2.80	14.6	1.63	19.0
SDC-1 Meas		40.5	1.49	0.95	7.70	0.83	1.01		64	50.8	851	4.58	0.8		36.2	3.8	2.7	1.3		3.85	18.8	1.55	
SDC-1 Cert		34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30		38.0	4.10	3.00	1.50		4.00	18.0	1.70	
SDC-1 Meas		40.2	1.66	0.96	8.26	2.87	1.12		48	54.8	808	4.74	0.5		39.5	3.7	3.5	1.3		3.91	19.1	1.58	
SDC-1 Cert		34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30		38.0	4.10	3.00	1.50		4.00	18.0	1.70	
SDC-1 Meas		41.5	1.58	1.01	8.07	2.67	0.97		43	46.1	821	4.75	1.0		34.2	4.4	3.3	1.5		4.11	17.9	1.79	
SDC-1 Cert		34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30		38.0	4.10	3.00	1.50		4.00	18.0	1.70	
GXR-6 Meas		44.7	0.11	0.59	> 10.0	0.52	0.14	0.1	170	47.4	979	5.28	2.2		24.6		1.0		0.32	3.91	13.5	0.63	0.21
GXR-6 Cert		32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30		27.0		1.40		1.30	4.20	13.8	0.760	0.290
GXR-6 Meas		40.5	0.10	0.57	> 10.0	2.02	0.17	0.1	106	61.4	1030	5.98	1.0		28.9		1.6		0.30	4.11	15.4	0.62	0.19
GXR-6 Cert		32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30		27.0		1.40		1.30	4.20	13.8	0.760	0.290
GXR-6 Meas		38.4	0.09	0.67	> 10.0	1.80	0.15	0.2	94	51.6	1000	5.54	1.7		24.9		1.2		0.22	4.26	13.8	0.69	0.23
GXR-6 Cert		32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30		27.0		1.40		1.30	4.20	13.8	0.760	0.290
SAR-M (U.S.G.S.) Meas		34.6	1.19	0.45	5.98	0.61	0.53	5.0	66	77.6	5180	3.03			48.2		2.7		3.70		11.3		1.78
SAR-M (U.S.G.S.) Cert		27.4	1.140	0.50	6.30	2.94	0.61	5.27	67.2	79.7	5220	2.99			41.5		2.20		3.64		10.70		1.94
SAR-M (U.S.G.S.) Meas		33.8	1.36	0.49	6.55	3.26	0.63	5.3	54	90.6	5400	3.37			53.1		4.0		3.40		12.0		1.76
SAR-M (U.S.G.S.) Cert		27.4	1.140	0.50	6.30	2.94	0.61	5.27	67.2	79.7	5220	2.99			41.5		2.20		3.64		10.70		1.94
SAR-M (U.S.G.S.) Meas		33.2	1.20	0.54	5.92	2.92	0.52	5.2	46	90.3	5280	3.13			44.8		3.3		3.03		10.9		1.94
SAR-M (U.S.G.S.) Cert		27.4	1.140	0.50	6.30	2.94	0.61	5.27	67.2	79.7	5220	2.99			41.5		2.20		3.64		10.70		1.94
DNC-1a Meas		5.7							143	256					272						58.4	0.57	
DNC-1a Cert		5.20							148.00	270					247						57.0	0.59	
DNC-1a Meas		6.0							163	177					311						63.7	0.60	
DNC-1a Cert		5.20							148.00	270					247						57.0	0.59	
DNC-1a Meas		5.8							147	163					269						57.6	0.67	
DNC-1a Cert		5.20							148.00	270					247						57.0	0.59	
OxD108 Meas	411																						
OxD108 Cert	414.000																						
OxD108 Meas	420																						
OxD108 Cert	414.000																						

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OxD108 Meas	413																						
OxD108 Cert	414.000																						
OxD108 Meas	422																						
OxD108 Cert	414.000																						
OxD108 Meas	412																						
OxD108 Cert	414.000																						
OxD108 Meas	431																						
OxD108 Cert	414.000																						
OxD108 Meas	410																						
OxD108 Cert	414.000																						
SBC-1 Meas		197						0.4	216	66.4			2.4		89.2	3.9	3.5	1.4		7.89	24.0	1.93	0.73
SBC-1 Cert		163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7	1.98	0.70
SBC-1 Meas		196						0.4	235	88.0			2.7		100.0	3.7	3.8	1.3		8.13	25.0	1.96	0.72
SBC-1 Cert		163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7	1.98	0.70
SBC-1 Meas		199						0.5	213	74.8			3.7		83.6	4.6	3.8	1.6		8.53	22.7	2.27	0.86
SBC-1 Cert		163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7	1.98	0.70
SG66 Meas	1110																						
SG66 Cert	1090																						
SG66 Meas	1080																						
SG66 Cert	1090																						
SG66 Meas	1070																						
SG66 Cert	1090																						
SG66 Meas	1090																						
SG66 Cert	1090																						
SG66 Meas	1090																						
SG66 Cert	1090																						
SG66 Meas	1110																						
SG66 Cert	1090																						
SG66 Meas	1070																						
SG66 Cert	1090																						
162510 Orig	< 5																						
162510 Dup	< 5																						
162520 Orig	7																						
162520 Dup	< 5																						
162527 Orig		37.6	2.79	3.88	7.29	0.06	5.76	0.2	254	166	1750	9.18	0.4	< 10	79.8	2.6	0.4	0.9	0.08	0.25	36.2	0.79	0.06
162527 Dup		38.1	2.78	3.86	7.29	0.06	5.74	0.2	240	193	1710	8.94	0.4	50	79.1	2.6	0.5	0.9	0.15	0.24	35.5	0.82	0.06
162529 Orig		88.5	> 3.00	3.23	8.24	0.59	4.67	0.2	215	106	2670	9.83	0.9	10	91.9	2.9	0.6	1.0	< 0.05	2.10	35.9	0.82	0.05
162529 Dup		89.1	> 3.00	3.27	8.42	0.61	4.78	0.2	247	119	2750	10.1	1.0	< 10	93.4	3.1	0.5	1.1	< 0.05	2.19	35.8	0.85	0.04
162530 Orig	< 5	12.0	1.52	3.14	8.37	0.15	8.67	0.2	224	194	1460	8.12	0.3	< 10	159	2.6	0.5	0.8	< 0.05	0.22	51.8	0.77	0.04
162530 Split	< 5	12.2	1.58	3.21	8.75	0.17	9.49	0.2	229	252	1480	8.84	0.1	< 10	195	2.2	0.7	0.8	0.06	0.22	56.8	0.69	0.02
162530 Orig	< 5																						
162530 Dup	< 5																						
162544 Orig	< 5																						
162544 Dup	< 5																						
162550 Orig	11	25.6	1.95	1.99	7.32	0.12	6.97	0.2	180	126	1710	7.28	0.3	50	112	2.6	0.5	0.9	< 0.05	0.17	47.6	0.96	0.05
162550 Split	11	26.6	2.05	2.04	8.80	0.17	7.66	< 0.1	259	229	1760	7.70	1.7	< 10	134	2.4	0.8	0.8	0.10	0.21	51.8	0.95	0.06
162554 Orig	< 5																						
162554 Dup	< 5																						
162560 Orig	< 5	19.6	1.77	4.64	8.01	0.07	6.23	0.2	132	152	1520	9.71	0.6	80	135	3.4	0.5	1.2	< 0.05	0.22	58.1	1.03	0.05
162560 Split	< 5	18.1	1.75	4.50	7.77	0.08	6.56	< 0.1	158	211	1440	9.79	0.3	< 10	152	2.8	0.2	1.0	0.08	0.21	60.3	0.88	0.06

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162564 Orig	< 5																						
162564 Dup	< 5																						
162565 Orig		22.8	2.91	1.88	7.98	0.17	5.52	0.2	96	120	1700	7.69	0.2	90	98.7	3.6	0.7	1.2	< 0.05	0.21	44.9	1.21	0.04
162565 Dup		23.0	2.87	1.89	8.10	0.17	5.57	0.2	102	132	1690	7.74	0.3	70	99.0	3.6	0.8	1.2	< 0.05	0.22	44.7	1.26	0.04
162570 Orig		38.8	1.76	3.62	6.24	0.03	5.96	< 0.1	167	136	1550	7.79	< 0.1	< 10	104	1.6	0.4	0.5	< 0.05	0.16	47.8	0.49	0.03
162570 Dup		41.7	1.80	3.71	6.44	0.03	6.47	< 0.1	186	144	1600	8.19	< 0.1	< 10	108	1.6	0.6	0.5	< 0.05	0.17	49.9	0.48	0.03
162577 Orig	< 5																						
162577 Dup	< 5																						
162587 Orig	6																						
162587 Dup	< 5																						
162590 Orig	< 5	15.6	2.68	2.06	7.18	0.02	10.7	0.4	120	73.8	2130	7.36	0.7	50	53.1	4.2	0.8	1.4	0.07	0.16	21.2	1.39	0.07
162590 Split	< 5	14.7	2.63	2.00	7.09	0.01	10.6	0.3	103	91.7	2030	7.30	0.6	< 10	51.9	4.0	0.7	1.4	< 0.05	0.14	20.8	1.38	0.08
162597 Orig	< 5																						
162597 Dup	< 5																						
162600 Orig	< 5	40.1	2.79	2.54	8.25	0.91	1.91	0.2	106	64.0	947	5.75	1.8	< 10	87.8	1.6	1.4	0.6	0.07	0.77	25.3	0.92	0.07
162600 Split	< 5	39.2	2.80	2.52	8.27	0.95	2.15	0.1	130	78.0	947	5.71	2.6	< 10	86.6	1.5	0.6	0.5	0.08	0.76	25.3	0.89	0.06
162601 Orig		17.4	2.48	2.07	6.33	0.17	1.73	< 0.1	66	62.0	753	5.90	< 0.1	50	58.0	2.1	1.1	0.7	0.06	0.35	29.7	0.85	0.22
162601 Dup		17.6	2.42	2.01	6.07	0.17	1.69	0.1	68	62.9	758	5.86	< 0.1	< 10	58.1	2.1	1.1	0.7	0.08	0.35	29.4	0.87	0.11
162610 Orig	< 5																						
162610 Dup	< 5																						
162611 Orig		18.5	> 3.00	1.97	7.91	0.86	3.12	0.2	97	94.4	633	4.20	3.5	40	81.2	2.0	1.8	0.7	0.17	2.33	22.0	1.00	0.18
162611 Dup		18.1	> 3.00	1.98	7.96	0.86	3.12	0.2	99	93.7	624	4.24	3.5	80	81.9	2.1	2.0	0.7	0.19	2.35	22.0	1.02	0.18
162613 Orig		26.6	2.36	1.26	7.23	1.27	2.76	0.2	52	21.3	618	4.01	0.8	< 10	26.3	2.1	2.1	0.8	0.25	2.33	16.1	1.11	0.35
162613 Dup		24.5	2.25	1.09	6.26	1.17	2.64	0.2	90	23.5	606	3.82	1.5	< 10	22.9	1.8	1.9	0.6	0.36	2.09	14.2	0.75	0.34
162620 Orig	< 5	23.9	1.68	6.70	6.12	0.21	5.49	0.2	180	449	1280	7.27	2.5	< 10	182	2.6	2.7	0.9	0.15	0.11	51.8	1.46	0.04
162620 Split	< 5	23.8	1.63	6.52	5.96	0.21	5.58	0.2	116	596	1290	7.14	1.3	< 10	182	2.5	1.5	0.9	< 0.05	0.10	52.2	1.43	0.10
162620 Orig	< 5																						
162620 Dup	< 5																						
162630 Orig	< 5																						
162630 Dup	< 5																						
162640 Orig		30.4	2.10	3.07	8.23	0.46	6.42	< 0.1	187	199	1590	8.18	< 0.1	< 10	196	2.0	0.5	0.7	< 0.05	2.32	50.8	0.59	< 0.02
162640 Dup		31.0	2.11	3.05	8.27	0.46	6.49	< 0.1	197	207	1570	8.40	< 0.1	20	195	2.0	0.5	0.7	0.09	2.30	52.1	0.58	0.09
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 1	< 0.5	< 1	< 0.01	< 0.1	< 10	< 0.5	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 0.05	< 0.02
Method Blank		< 0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 1	< 0.5	< 1	< 0.01	< 0.1	< 10	< 0.5	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 0.05	< 0.02
Method Blank																							
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Method Blank	< 5																						
Method Blank		< 0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 1	< 0.5	< 1	< 0.01	< 0.1	< 10	< 0.5	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 0.05	< 0.02
Method Blank		< 0.5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.1	< 1	< 0.5	< 1	< 0.01	< 0.1	< 10	< 0.5	< 0.1	< 0.1	< 0.1	< 0.05	< 0.05	< 0.1	< 0.05	< 0.02
Method Blank																							

Analyte Symbol	Au	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co	Eu	Bi
Unit Symbol	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1	0.05	0.02
Analysis Method	FA-AA	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																							
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						

QC

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas	15.2	801	9.0	405	3.0	30.5	291	6	0.7	17.4	0.8	28	36.3	9.3	672	7.3	14.4		8.1	2.6	4.2	0.7	4.9
GXR-1 Cert	16.6	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30
GXR-1 Meas	16.5	865	10.3	427	3.0	31.8	301	20	0.4	18.0	0.9	25	17.9	7.9	670	7.7	15.4		8.5	2.8	4.4	0.8	5.1
GXR-1 Cert	16.6	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30
GXR-1 Meas	16.9	800	9.3	397	2.8	29.6	303	20	0.5	17.2	0.8	25	18.1	8.3	643	7.5	15.0		8.8	3.0	4.8	0.8	5.7
GXR-1 Cert	16.6	760	13.8	427	14.0	32.0	275	38.0	0.800	18.0	0.770	54.0	122	13.0	750	7.50	17.0		18.0	2.70	4.20	0.830	4.30
DH-1a Meas																							
DH-1a Cert																							
DH-1a Meas																							
DH-1a Cert																							
GXR-4 Meas	5.6	77.3	18.0	95.8	83.8	14.3	205	47	9.0	309	0.2	7	3.9	1.0	184	54.4	100		39.1	6.1	4.8	0.6	2.9
GXR-4 Cert	5.60	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60
GXR-4 Meas	6.4	82.5	20.2	104	163	14.9	220	50	9.0	329	0.2	7	4.4	0.9	115	57.8	108		41.3	6.3	5.0	0.6	2.9
GXR-4 Cert	5.60	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60
GXR-4 Meas	6.5	73.9	18.3	94.3	137	13.6	218	47	8.5	318	0.2	9	4.3	1.1	127	57.1	110		42.5	6.8	5.1	0.6	3.2
GXR-4 Cert	5.60	73.0	20.0	98.0	160	14.0	221	186	10.0	310	0.270	5.60	4.80	0.970	1640	64.5	102		45.0	6.60	5.25	0.360	2.60
SDC-1 Meas		111	21.1	0.1	54.7		172	47	3.6			< 1	0.1		602	39.2	82.0		37.7	7.3	7.5	1.1	6.6
SDC-1 Cert		103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70
SDC-1 Meas		119	23.1	< 0.1	129		181	35	0.3			< 1	< 0.1		658	41.8	88.1		40.2	7.8	7.5	1.1	6.5
SDC-1 Cert		103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70
SDC-1 Meas		107	20.6	0.6	123		182	33	< 0.1			< 1	< 0.1		649	43.8	95.4		43.7	8.7	8.4	1.2	7.9
SDC-1 Cert		103.00	21.00	0.220	127.00		180.00	290.00	21.00			3.00	0.54		630	42.00	93.00		40.00	8.20	7.00	1.20	6.70
GXR-6 Meas	0.8	136	28.7	286	36.8	12.8	41.2	102	4.3	1.60	< 0.1	< 1	2.2	0.2	1330	12.6	33.1		11.8	2.4	2.5	0.4	2.5
GXR-6 Cert	0.940	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80
GXR-6 Meas	0.8	153	33.5	234	88.8	13.6	37.2	58	0.2	0.13	< 0.1	< 1	0.4	0.2	1180	12.9	34.3		12.5	2.5	2.4	0.4	2.4
GXR-6 Cert	0.940	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80
GXR-6 Meas	0.9	130	25.2	213	83.6	12.6	37.1	51	0.2	0.27	< 0.1	< 1	0.5	< 0.1	1190	13.1	35.8		13.4	2.7	2.9	0.4	2.9
GXR-6 Cert	0.940	118	35.0	330	90.0	14.0	35.0	110	7.50	2.40	0.260	1.70	3.60	0.0180	1300	13.9	36.0		13.0	2.67	2.97	0.415	2.80
SAR-M (U.S.G.S.) Meas	0.9	1040	15.4	36.7	46.4	30.7	150		24.9	12.6	1.1	2	5.4	0.9	758	51.1	101						
SAR-M (U.S.G.S.) Cert	0.39	930.0	17	38.8	146	28.00	151		29.9	13.1	1.08	2.76	6.0	0.96	801	57.4	122.0						
SAR-M (U.S.G.S.) Meas	0.8	1130	20.9	30.0	155	32.5	163		3.9	4.22	1.1	3	2.2	0.3	808	53.1	107						
SAR-M (U.S.G.S.) Cert	0.39	930.0	17	38.8	146	28.00	151		29.9	13.1	1.08	2.76	6.0	0.96	801	57.4	122.0						
SAR-M (U.S.G.S.) Meas	1.0	994	15.5	27.8	146	29.3	156		3.6	5.15	1.1	3	3.0	0.6	776	53.4	115						

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
SAR-M (U.S.G.S.) Cert	0.39	930.0	17	38.8	146	28.00	151		29.9	13.1	1.08	2.76	6.0	0.96	801	57.4	122.0						
DNC-1a Meas		72.3				17.3	137	39					0.6		105	3.5			4.5				
DNC-1a Cert		70.0				18.0	144.0	38.000					0.96		118	3.6			5.20				
DNC-1a Meas		79.8				18.2	149	41					0.2		110	3.9			4.9				
DNC-1a Cert		70.0				18.0	144.0	38.000					0.96		118	3.6			5.20				
DNC-1a Meas		66.9				16.2	145	37					0.3		105	3.9			5.3				
DNC-1a Cert		70.0				18.0	144.0	38.000					0.96		118	3.6			5.20				
OxD108 Meas																							
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OxD108 Cert																							
SBC-1 Meas		203	25.8	24.0	103	33.7	175	116	10.8	2.24		3	0.8		363	48.9	99.9	12.5	45.9	9.0	8.7	1.2	7.3
SBC-1 Cert		186.0	27.0	25.7	147	36.5	178.0	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20	7.10
SBC-1 Meas		226	29.2	26.8	153	35.1	188	125	9.9	2.57		3	0.9		743	52.3	107	13.2	48.9	9.4	8.8	1.2	7.0
SBC-1 Cert		186.0	27.0	25.7	147	36.5	178.0	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20	7.10
SBC-1 Meas		196	24.2	24.2	147	32.3	186	115	9.2	2.64		4	1.0		807	54.3	115	13.7	53.4	10.8	9.9	1.4	8.3
SBC-1 Cert		186.0	27.0	25.7	147	36.5	178.0	134.0	15.3	2.40		3.3	1.01		788.0	52.5	108.0	12.6	49.2	9.6	8.5	1.20	7.10
SG66 Meas																							
SG66 Cert																							
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SG66 Meas																							
SG66 Cert																							
162510 Orig																							
162510 Dup																							
162520 Orig																							
162520 Dup																							
162527 Orig	0.5	82.9	16.2	1.1	2.2	19.0	419	10	0.2	0.13	< 0.1	< 1	0.1	0.3	30	3.0	7.9	1.2	6.1	2.1	3.0	0.5	3.9
162527 Dup	0.8	83.7	15.7	1.4	2.1	18.8	419	9	< 0.1	0.05	< 0.1	< 1	0.1	0.1	29	2.9	7.5	1.2	5.9	2.0	3.0	0.5	4.0

Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
162529 Orig	0.4	58.3	16.5	< 0.1	32.0	21.7	260	29	< 0.1	0.10	< 0.1	< 1	< 0.1	0.2	177	4.6	11.8	1.8	8.5	2.6	3.8	0.7	4.7
162529 Dup	0.7	61.7	16.7	0.9	32.4	22.0	267	30	0.5	0.19	< 0.1	< 1	< 0.1	< 0.1	182	4.8	12.2	1.8	9.0	2.9	3.8	0.7	4.9
162530 Orig	0.9	84.0	16.6	3.3	3.9	18.0	118	6	0.3	0.25	< 0.1	< 1	< 0.1	0.1	35	2.4	6.6	1.1	5.6	1.9	3.0	0.5	3.8
162530 Split	0.3	103	18.8	1.6	4.3	20.2	123	5	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	36	2.5	6.8	1.0	5.3	1.8	2.7	0.5	3.4
162530 Orig																							
162530 Dup																							
162544 Orig																							
162544 Dup																							
162550 Orig	0.8	82.3	15.3	2.5	5.5	17.7	124	6	< 0.1	0.06	< 0.1	< 1	< 0.1	0.3	43	4.3	11.6	1.7	7.8	2.4	3.2	0.6	4.1
162550 Split	0.3	90.3	16.9	11.3	5.9	23.2	131	6	2.0	0.28	< 0.1	< 1	0.2	< 0.1	44	5.0	13.6	1.9	8.6	2.5	3.3	0.6	3.9
162554 Orig																							
162554 Dup																							
162560 Orig	0.9	134	16.2	< 0.1	1.9	24.4	150	9	< 0.1	< 0.05	< 0.1	< 1	< 0.1	0.3	25	4.3	11.5	1.8	9.5	3.1	4.5	0.8	5.6
162560 Split	0.3	150	17.2	< 0.1	2.0	26.0	145	9	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	25	4.2	11.2	1.8	8.6	2.8	4.0	0.7	4.6
162564 Orig																							
162564 Dup																							
162565 Orig	1.1	102	17.7	6.3	5.2	24.0	127	4	< 0.1	0.13	< 0.1	< 1	< 0.1	0.5	42	5.3	14.0	2.2	11.0	3.3	4.8	0.8	5.5
162565 Dup	1.5	106	18.1	8.3	5.2	24.2	131	6	0.1	0.07	< 0.1	< 1	< 0.1	0.4	41	5.4	14.2	2.1	10.9	3.4	4.8	0.8	5.7
162570 Orig	0.8	103	14.6	0.4	0.7	12.0	34.8	3	< 0.1	0.08	< 0.1	< 1	< 0.1	0.2	14	2.5	6.4	1.0	4.5	1.3	1.7	0.3	2.3
162570 Dup	1.2	108	15.2	< 0.1	0.8	12.2	35.5	5	< 0.1	0.07	< 0.1	< 1	0.3	< 0.1	15	2.6	6.5	1.0	4.4	1.3	1.7	0.3	2.2
162577 Orig																							
162577 Dup																							
162587 Orig																							
162587 Dup																							
162590 Orig	1.0	207	24.8	< 0.1	2.1	37.9	> 1000	31	< 0.1	0.18	< 0.1	< 1	< 0.1	0.2	21	8.4	20.6	2.9	13.6	3.9	5.4	0.9	6.5
162590 Split	0.6	190	24.6	< 0.1	1.9	36.5	> 1000	29	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	20	8.4	20.7	2.9	13.1	3.9	5.3	0.9	6.3
162597 Orig																							
162597 Dup																							
162600 Orig	0.7	110	20.0	2.3	33.8	14.5	194	90	0.2	< 0.05	< 0.1	< 1	< 0.1	< 0.1	352	15.7	35.0	4.5	17.4	3.4	3.2	0.5	2.7
162600 Split	< 0.1	113	20.1	2.9	34.1	14.8	199	131	0.4	< 0.05	< 0.1	< 1	< 0.1	0.2	351	15.8	35.6	4.5	17.5	3.4	3.3	0.5	2.7
162601 Orig	0.7	98.8	17.3	0.3	6.5	19.5	94.0	8	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	66	6.6	15.4	2.1	8.9	2.4	2.9	0.5	3.4
162601 Dup	1.0	107	17.1	0.9	6.1	19.3	91.6	7	0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	64	6.5	15.1	2.1	8.9	2.3	2.9	0.5	3.4
162610 Orig																							
162610 Dup																							
162611 Orig	1.2	92.9	18.9	0.2	35.4	19.3	281	158	3.6	0.64	< 0.1	1	< 0.1	0.1	365	19.6	41.0	5.0	18.7	3.7	3.8	0.6	3.4
162611 Dup	1.0	92.0	18.4	1.7	34.6	19.0	277	159	4.3	0.77	< 0.1	1	< 0.1	0.4	362	19.5	40.9	4.9	18.4	3.8	3.9	0.6	3.5
162613 Orig	1.1	97.6	18.7	0.6	49.5	21.3	376	48	0.3	0.41	< 0.1	< 1	< 0.1	0.2	401	19.3	40.8	5.0	18.7	3.8	4.1	0.6	3.8
162613 Dup	0.6	90.4	17.3	0.5	30.6	14.5	341	74	6.0	8.42	< 0.1	1	< 0.1	0.2	383	8.8	23.5	2.7	10.9	2.6	2.9	0.5	2.9
162620 Orig	1.4	131	14.9	2.7	4.6	24.4	280	106	4.8	0.12	< 0.1	1	0.2	0.1	88	26.1	56.3	7.4	29.7	6.2	5.8	0.8	4.7
162620 Split	< 0.1	128	15.4	< 0.1	4.6	24.5	280	61	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	86	25.7	55.7	7.3	28.2	5.9	5.8	0.8	4.6
162620 Orig																							
162620 Dup																							
162630 Orig																							
162630 Dup																							
162640 Orig	0.5	108	15.9	12.2	25.3	18.7	94.8	4	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	152	2.3	6.4	1.0	4.9	1.6	2.4	0.4	3.1
162640 Dup	0.7	107	16.1	11.3	25.3	18.6	94.6	2	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	152	2.3	6.3	1.0	4.8	1.6	2.4	0.4	3.1
Method Blank																							
Method Blank																							



Analyte Symbol	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd	Tb	Dy
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
Method Blank																							
Method Blank																							
Method Blank	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
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Method Blank																							
Method Blank	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
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QC

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas	1090		0.4	2.0	0.3	< 0.1	134		0.44	706	2	2.7	31.7	0.0267	0.058	0.25
GXR-1 Cert	1110		0.430	1.90	0.280	0.175	164		0.390	730	1.58	2.44	34.9	0.036	0.0650	0.257
GXR-1 Meas	1190		0.4	2.0	0.3	< 0.1	124		0.42	709	1		32.4	0.0269	0.058	0.26
GXR-1 Cert	1110		0.430	1.90	0.280	0.175	164		0.390	730	1.58		34.9	0.036	0.0650	0.257
GXR-1 Meas	1310		0.5	2.4	0.3	< 0.1	143		0.46	764	1		34.6	0.0254	0.058	0.26
GXR-1 Cert	1110		0.430	1.90	0.280	0.175	164		0.390	730	1.58		34.9	0.036	0.0650	0.257
DH-1a Meas												> 500	2180			
DH-1a Cert												910	2629			
DH-1a Meas												> 500	1980			
DH-1a Cert												910	2629			
GXR-4 Meas	6210		0.2	1.0	0.2	0.5	36.0		3.54	48.7	8	17.3	5.5	0.290	0.132	1.73
GXR-4 Cert	6520		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas	6660		0.2	1.0	0.2	0.5	35.1		3.46	45.3	8	18.4	5.4	0.290	0.128	1.77
GXR-4 Cert	6520		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas	6220		0.2	1.1	0.2	0.5	37.7		3.34	49.3	8	18.8	5.7	0.284	0.127	1.75
GXR-4 Cert	6520		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
SDC-1 Meas	33.8		0.5	3.0		0.1	< 0.1		0.68	23.7	16	13.2	2.6	0.252	0.056	
SDC-1 Cert	30.00		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
SDC-1 Meas	41.4		0.5	3.1		< 0.1	< 0.1		0.68	23.1	16	27.7	3.1	0.231	0.055	
SDC-1 Cert	30.00		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
SDC-1 Meas	42.5		0.7	3.6		< 0.1	0.1		0.77	27.3	16	13.7	3.5	0.154	0.053	

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
SDC-1 Cert	30.00		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
GXR-6 Meas	72.8		0.3	1.6	0.3	0.2	1.1		2.39	96.4	29	6.5	1.4		0.036	0.03
GXR-6 Cert	66.0		0.0320	2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas	77.4		0.2	1.5	0.3	< 0.1	< 0.1		2.27	93.8	29	7.5	1.3		0.038	0.02
GXR-6 Cert	66.0		0.0320	2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas	76.4		0.3	1.8	0.3	< 0.1	0.1		2.49	110	29	5.9	1.6		0.034	0.02
GXR-6 Cert	66.0		0.0320	2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
SAR-M (U.S.G.S.) Meas	356						6.9		2.87	941	9	17.3	4.1	0.379	0.064	
SAR-M (U.S.G.S.) Cert	331						9.78		2.7	982	7.83	17.2	3.57	0.38	0.07	
SAR-M (U.S.G.S.) Meas	388						0.6		2.69	899	8	16.8	3.8	0.384	0.065	
SAR-M (U.S.G.S.) Cert	331						9.78		2.7	982	7.83	17.2	3.57	0.38	0.07	
SAR-M (U.S.G.S.) Meas	373						0.8		2.75	957	9	18.2	4.1	0.245	0.060	
SAR-M (U.S.G.S.) Cert	331						9.78		2.7	982	7.83	17.2	3.57	0.38	0.07	
DNC-1a Meas	101			1.8							31			0.279		
DNC-1a Cert	100.0			2.0							31			0.29		
DNC-1a Meas	112			2.0							31			0.286		
DNC-1a Cert	100.0			2.0							31			0.29		
DNC-1a Meas	111			2.2							31			0.279		
DNC-1a Cert	100.0			2.0							31			0.29		
OxD108 Meas																
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SBC-1 Meas	34.8		0.6	3.1	0.5	0.5	1.1		0.96	34.6	22	17.9	5.4	0.501		
SBC-1 Cert	31.0		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0	15.8	5.76	0.51		
SBC-1 Meas	36.8		0.5	3.0	0.5	0.2	1.1		0.98	34.6	21	18.7	5.5	0.446		
SBC-1 Cert	31.0		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0	15.8	5.76	0.51		
SBC-1 Meas	35.2		0.7	3.8	0.6	0.3	1.6		1.10	41.5	21		6.7	0.492		
SBC-1 Cert	31.0		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0		5.76	0.51		
SG66 Meas																
SG66 Cert																
SG66 Meas																
SG66 Cert																
SG66 Meas																

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
SG66 Cert																
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SG66 Cert																
SG66 Meas																
SG66 Cert																
SG66 Meas																
SG66 Cert																
SG66 Meas																
162510 Orig																
162510 Dup																
162520 Orig																
162520 Dup																
162527 Orig	155	0.2	0.4	2.1	0.3	< 0.1	0.1	0.025	< 0.05	54.5	48	0.3	< 0.1	0.352	0.024	0.07
162527 Dup	151	< 0.1	0.4	2.0	0.3	< 0.1	0.1	0.029	< 0.05	54.7	46	0.3	< 0.1	0.262	0.022	0.07
162529 Orig	2.5	< 0.1	0.4	2.2	0.4	< 0.1	0.1	0.023	0.22	3.1	43	0.5	0.1	0.346	0.032	0.05
162529 Dup	4.0	< 0.1	0.4	2.3	0.4	< 0.1	0.2	0.023	0.20	6.6	43	0.5	0.5	0.454	0.035	0.06
162530 Orig	106	0.3	0.4	2.0	0.3	< 0.1	0.1	0.022	< 0.05	0.7	43	0.3	0.2	0.379	0.022	0.16
162530 Split	108	0.5	0.3	1.9	0.3	< 0.1	< 0.1	0.006	< 0.05	0.7	41	0.4	< 0.1	0.294	0.020	0.15
162530 Orig																
162530 Dup																
162544 Orig																
162544 Dup																
162550 Orig	93.6	< 0.1	0.4	2.1	0.3	< 0.1	0.2	0.029	0.06	0.9	42	0.5	0.1	0.225	0.024	0.06
162550 Split	89.4	0.5	0.4	2.1	0.4	0.1	0.3	0.008	< 0.05	0.8	29	0.9	< 0.1	0.474	0.027	0.06
162554 Orig																
162554 Dup																
162560 Orig	51.6	< 0.1	0.5	2.6	0.4	< 0.1	0.2	0.032	< 0.05	5.5	47	0.4	0.2	0.152	0.016	0.04
162560 Split	51.0	0.2	0.4	2.1	0.3	< 0.1	< 0.1	0.008	< 0.05	11.1	46	0.5	< 0.1	0.151	0.018	0.04
162564 Orig																
162564 Dup																
162565 Orig	87.2	< 0.1	0.5	2.8	0.4	< 0.1	0.2	0.032	< 0.05	1.2	40	0.6	0.2	0.210	0.039	0.07
162565 Dup	80.4	< 0.1	0.5	2.8	0.4	< 0.1	0.1	0.032	< 0.05	1.2	40	0.5	0.1	0.249	0.040	0.08
162570 Orig	71.9	0.2	0.2	1.5	0.2	< 0.1	< 0.1	0.008	< 0.05	< 0.5	38	0.9	< 0.1	0.199	0.018	0.05
162570 Dup	78.2	0.2	0.3	1.5	0.2	< 0.1	< 0.1	0.006	< 0.05	0.6	37	0.9	< 0.1	0.198	0.018	0.05
162577 Orig																
162577 Dup																
162587 Orig																
162587 Dup																
162590 Orig	5.4	0.3	0.6	3.4	0.5	< 0.1	< 0.1	0.003	< 0.05	1.6	44	1.0	1.3	0.172	0.042	0.08
162590 Split	3.8	0.3	0.6	3.4	0.5	< 0.1	< 0.1	0.013	< 0.05	1.6	45	0.7	0.5	0.120	0.041	0.07
162597 Orig																
162597 Dup																
162600 Orig	46.6	0.3	0.2	1.4	0.2	< 0.1	< 0.1	0.007	0.12	3.3	19	2.1	0.5	0.303	0.084	0.02
162600 Split	102	0.2	0.2	1.3	0.2	< 0.1	< 0.1	0.010	0.12	3.0	19	2.0	0.4	0.366	0.088	0.02
162601 Orig	78.7	0.1	0.3	1.7	0.2	< 0.1	< 0.1	0.006	< 0.05	1.7	25	1.1	0.7	0.0929	0.038	0.03
162601 Dup	87.6	0.2	0.3	1.6	0.2	< 0.1	< 0.1	0.009	< 0.05	1.7	25	1.1	0.2	0.230	0.037	0.03
162610 Orig																

Analyte Symbol	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Detection Limit	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Analysis Method	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
162610 Dup																
162611 Orig	43.3	0.6	0.3	1.7	0.3	0.1	< 0.1	0.011	0.21	6.5	16	4.1	1.0	0.360	0.056	0.06
162611 Dup	43.7	0.6	0.3	1.7	0.3	0.2	< 0.1	0.022	0.20	6.6	16	4.1	0.7	0.391	0.059	0.06
162613 Orig	105	0.3	0.3	1.6	0.2	< 0.1	< 0.1	0.020	0.26	7.9	13	3.7	0.8	0.241	0.071	0.10
162613 Dup	95.6	0.4	0.3	1.4	0.2	0.4	2.9	0.020	0.28	7.7	9	2.4	0.7	0.396	0.067	0.09
162620 Orig	6.8	0.7	0.4	2.1	0.3	0.3	0.4	0.014	< 0.05	3.8	27	5.6	1.0	0.440	0.114	0.04
162620 Split	18.8	0.7	0.4	2.2	0.3	< 0.1	< 0.1	0.006	< 0.05	3.9	26	4.8	0.9	0.232	0.100	0.04
162620 Orig																
162620 Dup																
162630 Orig																
162630 Dup																
162640 Orig	51.9	0.2	0.3	1.6	0.2	< 0.1	< 0.1	0.002	0.12	1.0	41	0.3	< 0.1	0.191	0.018	0.05
162640 Dup	51.7	0.2	0.3	1.6	0.2	< 0.1	< 0.1	0.008	0.11	1.1	40	0.3	0.4	0.187	0.018	0.05
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	0.0008	< 0.001	< 0.01
Method Blank	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	0.0008	< 0.001	< 0.01
Method Blank											< 1			0.0011	< 0.001	< 0.01
Method Blank											< 1			< 0.0005	< 0.001	< 0.01
Method Blank											< 1			< 0.0005	< 0.001	< 0.01
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank																
Method Blank	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	< 0.0005	< 0.001	< 0.01
Method Blank	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	< 0.0005	< 0.001	< 0.01
Method Blank											< 1			0.0005	< 0.001	< 0.01
Method Blank											< 1			0.0005	< 0.001	< 0.01
Method Blank																
Method Blank																
Method Blank																
Method Blank																



Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Neil Kennedy

Date Submitted: 25-Sep-14  
Invoice No.: A14-06964-Au  
Invoice Date: 06-Oct-14  
Your Reference: HUFFMAN

## CERTIFICATE OF ANALYSIS

54 Rock samples were submitted for analysis.

The following analytical package was requested:

Code 1A2-Sudbury Au - Fire Assay AA  
Code 1C-OES-Sudbury Fire Assay ICPOES

REPORT      **A14-06964-Au**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé".

Emmanuel Esemé , Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**

1010 Lorne Street Unit West 4, Sudbury, Ontario, Canada, P3C 4R9  
TELEPHONE +705 586-3288 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL [Sudbury@actlabs.com](mailto:Sudbury@actlabs.com) ACTLABS GROUP WEBSITE [www.actlabs.com](http://www.actlabs.com)

**Date Submitted:** 25-Sep-14  
**Invoice No.:** A14-06964-Au  
**Invoice Date:** 06-Oct-14  
**Your Reference:** HUFFMAN

Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Neil Kennedy

## CERTIFICATE OF ANALYSIS

54 Rock samples were submitted for analysis.

The following analytical package was requested:

Code UT-6 Total Digestion ICP & ICP/MS

REPORT      **A14-06964-Au**

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Notes:

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

CERTIFIED BY:



Emmanuel Esemé, Ph.D.  
Quality Control

ACTIVATION LABORATORIES LTD.  
41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5  
TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613  
E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com



Activation Laboratories Ltd.

Report: A14-06964

Results

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA

162277	< 5
162278	1030
162279	67

## QC

Analyte Symbol	Au
Unit Symbol	ppb
Detection Limit	5
Analysis Method	FA-AA
OxD108 Meas	407
OxD108 Cert	414.000
OxD108 Meas	419
OxD108 Cert	414.000
SG66 Meas	1070
SG66 Cert	1090
SG66 Meas	1080
SG66 Cert	1090
162260 Orig	< 5
162260 Dup	< 5
162270 Orig	8
162270 Dup	10
162280 Orig	< 5
162280 Split	< 5
162280 Orig	< 5
162280 Dup	< 5
162301 Orig	18
162301 Dup	18
162307 Orig	51
162307 Split	72
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5
Method Blank	< 5





**Date Submitted:** 25-Sep-14  
**Invoice No.:** A14-06964-TD, 1C-OES  
**Invoice Date:** 21-Oct-14  
**Your Reference:** HUFFMAN

Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Neil Kennedy

## CERTIFICATE OF ANALYSIS

54 Rock samples were submitted for analysis.

The following analytical package was requested:

Code 1A2-Sudbury Au - Fire Assay AA  
Code 1C-OES-Sudbury Fire Assay ICPOES

REPORT **A14-06964-TD, 1C-OES**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written over a horizontal line.

Emmanuel Esemé , Ph.D.  
Quality Control





**Date Submitted:** 25-Sep-14  
**Invoice No.:** A14-06964-TD, 1C-OES  
**Invoice Date:** 21-Oct-14  
**Your Reference:** HUFFMAN

Trelawney Mining and Exploration  
130 King Street West  
Suite 2810 - PO Box 182  
Toronto ON M5X 1A6  
Canada

ATTN: Neil Kennedy

## CERTIFICATE OF ANALYSIS

54 Rock samples were submitted for analysis.

The following analytical package was requested:

Code UT-6 Total Digestion ICP & ICP/MS

REPORT **A14-06964-TD, 1C-OES**

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Notes:

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

CERTIFIED BY:

A handwritten signature in black ink, appearing to read "Emmanuel Esemé". The signature is written in a cursive style with a large, stylized initial 'E'.

Emmanuel Esemé , Ph.D.  
Quality Control



Activation Laboratories Ltd.

Report: A14-06964

Results

Analyte Symbol	Au	Pd	Pt	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co
Unit Symbol	ppb	ppb	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	5	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1
Method Code	FA-ICP	FA-ICP	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS

162277				25.6	2.11	1.66	5.90	0.78	1.53	0.2	152	93.4	972	5.84	3.8	10	70.5	1.8	1.0	0.7	0.25	0.74	31.8
162278				11.9	1.51	1.16	5.45	0.44	1.08	0.1	89	58.4	665	4.09	2.7	30	30.9	1.6	0.7	0.5	0.31	0.33	16.6
162279				18.1	3.00	0.88	7.18	1.02	1.68	0.2	98	25.9	706	4.49	2.8	40	30.9	1.5	1.0	0.5	0.14	0.90	19.9

Results

Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS

162277	1.17	0.10	< 0.1	88.9	19.6	17.8	23.9	16.0	271	171	9.8	0.91	< 0.1	1	1.6	< 0.1	257	13.4	38.9	4.6	19.1	3.9	3.8
162278	0.82	2.84	< 0.1	63.9	16.9	88.5	16.2	14.8	165	120	1.3	0.71	< 0.1	1	< 0.1	< 0.1	206	13.9	31.0	3.7	14.2	3.0	3.0
162279	0.90	0.58	0.2	48.3	19.2	26.5	40.5	13.6	242	118	0.5	0.20	< 0.1	< 1	< 0.1	< 0.1	267	14.6	33.5	4.0	15.7	3.1	3.1

Activation Laboratories Ltd.

Report: A14-06964

Results

Analyte Symbol	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP

162277	0.6	3.4	29.9	0.4	0.3	1.6	0.3	0.5	2.0	0.001	0.16	3.4	18	1.3	0.4	0.764	0.160	0.03
162278	0.5	2.8	32.8	0.2	0.2	1.4	0.2	< 0.1	19.1	0.003	0.07	4.1	14	1.9	1.8	0.324	0.071	0.12
162279	0.4	2.6	29.4	0.2	0.2	1.3	0.2	< 0.1	< 0.1	0.003	0.19	4.0	16	1.6	3.8	0.364	0.092	0.35

QC

Analyte Symbol	Au	Pd	Pt	Li	Na	Mg	Al	K	Ca	Cd	V	Cr	Mn	Fe	Hf	Hg	Ni	Er	Be	Ho	Ag	Cs	Co
Unit Symbol	ppb	ppb	ppb	ppm	%	%	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	5	5	0.5	0.01	0.01	0.01	0.01	0.01	0.1	1	0.5	1	0.01	0.1	10	0.5	0.1	0.1	0.1	0.05	0.05	0.1
Method Code	FA-ICP	FA-ICP	FA-ICP	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
GXR-1 Meas																							
GXR-1 Cert																							
GXR-1 Meas																							
GXR-1 Cert																							
GXR-4 Meas				10.4	0.51	1.67	5.93	2.72	1.00	0.2	89	44.6	149	2.95	1.1	80	42.4		2.6		3.15	2.38	14.9
GXR-4 Cert				11.1	0.564	1.66	7.20	4.01	1.01	0.860	87.0	64.0	155	3.09	6.30	110	42.0		1.90		4.00	2.80	14.6
GXR-4 Meas																							
GXR-4 Cert																							
SDC-1 Meas				35.2	1.52	1.01	7.50	2.57	1.05		36	45.1	885	4.73	0.5		37.5	3.7	3.5	1.3		3.77	19.3
SDC-1 Cert				34.00	1.52	1.02	8.34	2.72	1.00		102.00	64.00	880.00	4.82	8.30		38.0	4.10	3.00	1.50		4.00	18.0
SDC-1 Meas																							
SDC-1 Cert																							
GXR-6 Meas				35.3	0.10	0.61	> 10.0	1.81	0.19	0.3	141	72.1	1120	5.70	1.8	110	27.1		1.9		0.30	4.04	14.9
GXR-6 Cert				32.0	0.104	0.609	17.7	1.87	0.180	1.00	186	96.0	1010	5.58	4.30	68.0	27.0		1.40		1.30	4.20	13.8
GXR-6 Meas																							
GXR-6 Cert																							
SAR-M (U.S.G.S.) Meas				28.2	1.21	0.46	5.59	2.29	0.61	5.0	69	70.0	5450	3.20			45.1		3.3		3.16		11.6
SAR-M (U.S.G.S.) Cert				27.4	1.140	0.50	6.30	2.94	0.61	5.27	67.2	79.7	5220	2.99			41.5		2.20		3.64		10.70
SAR-M (U.S.G.S.) Meas																							
SAR-M (U.S.G.S.) Cert																							
DNC-1a Meas				4.7							147	181					284						59.7
DNC-1a Cert				5.20							148.00	270					247						57.0
DNC-1a Meas																							
DNC-1a Cert																							
PK2 Meas	4880	5990	4840																				
PK2 Cert	4785.000	5918.000	4749.000																				
SBC-1 Meas				163						0.5	215	70.9			2.6		90.1	3.6	4.1	1.3		7.65	23.4
SBC-1 Cert				163.0						0.40	220.0	109			3.7		82.8	3.80	3.20	1.40		8.2	22.7
SBC-1 Meas																							
SBC-1 Cert																							
OREAS 45d (4-Acid) Meas																							
OREAS 45d (4-Acid) Cert																							
162280 Orig				23.9	0.69	4.51	4.27	0.01	8.05	0.2	129	361	1380	5.20	1.0	40	124	1.9	1.8	0.8	0.10	0.19	36.0
162280 Split				25.2	0.77	5.03	4.70	0.01	8.74	0.2	144	311	1490	5.79	4.1	< 10	136	2.1	1.8	0.9	0.20	0.20	39.7
162281 Orig				22.2	1.27	2.24	6.28	0.73	5.33	0.1	127	153	1140	5.70	0.7	10	121	0.7	0.7	0.3	0.09	2.73	48.2
162281 Dup				23.6	1.40	2.46	6.76	0.79	5.74	0.2	134	157	1250	6.20	0.8	40	131	0.8	0.7	0.3	0.10	2.85	52.4
162291 Orig				22.1	0.44	0.69	5.02	1.30	0.22	0.2	112	97.4	1170	10.4	2.0	40	81.6	0.8	1.1	0.3	0.21	4.51	104
162291 Dup				21.8	0.46	0.71	5.19	1.32	0.22	0.2	113	94.2	1180	10.6	2.1	60	82.2	0.8	1.4	0.3	0.22	4.54	104
162298 Orig				19.7	2.81	1.65	8.24	1.62	4.67	0.2	83	19.8	929	5.56	1.9	10	16.1	3.9	3.4	1.5	0.07	1.23	21.3
162298 Dup				19.4	2.86	1.54	5.93	1.53	4.47	0.2	140	27.9	955	5.60	3.3	10	15.8	3.0	2.9	1.1	0.29	1.02	21.5
162307 Orig				18.5	1.09	0.14	5.15	0.87	0.37	0.2	101	66.8	187	6.49	2.0	10	52.0	0.8	0.9	0.3	0.47	3.64	23.4
162307 Split				17.7	1.01	0.16	5.00	0.82	0.40	0.2	93	54.0	220	7.92	1.9	100	60.0	1.0	0.7	0.4	0.52	3.52	31.1
Method Blank	< 2	< 5	< 5																				

Analyte Symbol	Eu	Bi	Se	Zn	Ga	As	Rb	Y	Sr	Zr	Nb	Mo	In	Sn	Sb	Te	Ba	La	Ce	Pr	Nd	Sm	Gd
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.02	0.1	0.2	0.1	0.1	0.2	0.1	0.2	1	0.1	0.05	0.1	1	0.1	0.1	1	0.1	0.1	0.1	0.1	0.1	0.1
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS
OREAS 45d (4-Acid) Cert																							
162280 Orig	3.19	0.07	< 0.1	81.9	13.5	8.0	0.6	21.5	447	93	0.2	0.16	< 0.1	< 1	0.8	< 0.1	8	68.0	141	18.4	72.4	13.1	10.3
162280 Split	3.47	0.08	0.3	92.7	14.9	45.2	0.7	23.9	487	179	4.3	0.40	< 0.1	< 1	7.2	< 0.1	8	75.2	155	20.2	78.8	14.5	11.4
162281 Orig	0.51	0.05	< 0.1	64.2	14.8	112	32.5	6.1	167	30	< 0.1	0.20	< 0.1	< 1	0.5	< 0.1	217	4.0	9.7	1.4	5.9	1.6	1.6
162281 Dup	0.53	0.05	< 0.1	68.2	16.0	124	34.1	6.6	174	33	< 0.1	0.09	< 0.1	< 1	0.5	< 0.1	226	4.2	10.2	1.4	6.3	1.7	1.7
162291 Orig	0.65	0.38	1.2	46.6	14.5	25.9	50.5	7.5	132	86	1.8	1.49	< 0.1	< 1	1.8	< 0.1	27	8.9	21.1	2.5	9.7	2.0	1.9
162291 Dup	0.65	0.38	1.2	47.6	14.9	23.4	50.7	7.5	133	87	1.7	1.39	< 0.1	< 1	1.8	< 0.1	25	8.8	21.4	2.6	10.0	2.1	2.0
162298 Orig	1.67	0.03	0.5	96.0	26.8	3.3	108	41.1	556	98	0.1	0.39	< 0.1	< 1	< 0.1	< 0.1	649	31.1	70.5	9.2	37.9	8.2	8.5
162298 Dup	1.04	0.03	0.3	97.6	26.7	3.9	55.8	25.1	521	154	13.5	1.00	< 0.1	3	< 0.1	< 0.1	646	13.5	38.2	4.7	20.4	5.0	5.4
162307 Orig	0.66	0.85	2.2	153	16.0	72.7	35.8	7.9	162	82	2.0	5.04	< 0.1	1	3.8	< 0.1	21	10.3	23.3	2.8	10.6	2.1	2.0
162307 Split	0.66	1.00	2.6	162	15.2	81.3	33.4	9.7	152	81	2.4	4.85	< 0.1	1	2.8	< 0.1	18	10.5	23.6	2.9	11.0	2.2	2.1
Method Blank																							
Method Blank																							
Method Blank	< 0.05	< 0.02	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	< 0.05	< 0.02	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank	< 0.05	< 0.02	< 0.1	< 0.2	< 0.1	< 0.1	< 0.2	< 0.1	< 0.2	< 1	< 0.1	< 0.05	< 0.1	< 1	< 0.1	< 0.1	< 1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Method Blank																							
Method Blank																							
Method Blank																							

QC

Analyte Symbol	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
GXR-1 Meas													2			0.0273	0.059	0.26
GXR-1 Cert												1.58				0.036	0.0650	0.257
GXR-1 Meas													2			0.0269	0.063	0.27
GXR-1 Cert												1.58				0.036	0.0650	0.257
GXR-4 Meas	0.5	2.6	6540		0.2	0.9	0.1	0.5	33.6		3.12	48.5	8	17.2	6.0	0.290	0.130	1.74
GXR-4 Cert	0.360	2.60	6520		0.210	1.60	0.170	0.790	30.8		3.20	52.0	7.70	22.5	6.20	0.29	0.120	1.77
GXR-4 Meas													8			0.290	0.134	1.81
GXR-4 Cert													7.70			0.29	0.120	1.77
SDC-1 Meas	1.0	6.3	31.1		0.5	3.0		< 0.1	< 0.1		0.66	24.8	16	11.3	3.0	0.108	0.055	
SDC-1 Cert	1.20	6.70	30.000		0.65	4.00		1.20	0.80		0.70	25.00	17.00	12.00	3.10	0.606	0.0690	
SDC-1 Meas													16			0.198	0.054	
SDC-1 Cert													17.00			0.606	0.0690	
GXR-6 Meas	0.3	2.4	73.3		0.2	1.5	0.2	< 0.1	< 0.1		2.24	104	27	5.0	1.5		0.035	0.02
GXR-6 Cert	0.415	2.80	66.0		0.0320	2.40	0.330	0.485	1.90		2.20	101	27.6	5.30	1.54		0.0350	0.0160
GXR-6 Meas													27				0.035	0.02
GXR-6 Cert													27.6				0.0350	0.0160
SAR-M (U.S.G.S.) Meas			347						0.5		2.65	998	9	16.6	4.5	0.353	0.061	
SAR-M (U.S.G.S.) Cert			331.0000						9.78		2.7	982	7.83	17.2	3.57	0.38	0.07	
SAR-M (U.S.G.S.) Meas													9			0.299	0.065	
SAR-M (U.S.G.S.)													7.83			0.38	0.07	

Analyte Symbol	Tb	Dy	Cu	Ge	Tm	Yb	Lu	Ta	W	Re	Tl	Pb	Sc	Th	U	Ti	P	S
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	%
Lower Limit	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.001	0.05	0.5	1	0.1	0.1	0.0005	0.001	0.01
Method Code	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-MS	TD-ICP	TD-MS	TD-MS	TD-ICP	TD-ICP	TD-ICP
Cert																		
DNC-1a Meas			97.6			1.8							32			0.276		
DNC-1a Cert			100.00			2.0							31			0.29		
DNC-1a Meas													31			0.284		
DNC-1a Cert													31			0.29		
PK2 Meas																		
PK2 Cert																		
SBC-1 Meas	1.1	6.6	30.7		0.5	3.1	0.5	0.4	0.4		0.90	36.2	20	15.4	6.2	0.483		
SBC-1 Cert	1.20	7.10	31.0000		0.56	3.64	0.54	1.10	1.60		0.89	35.0	20.0	15.8	5.76	0.51		
SBC-1 Meas													21			0.536		
SBC-1 Cert													20.0			0.51		
OREAS 45d (4-Acid) Meas													53			0.134	0.032	0.09
OREAS 45d (4-Acid) Cert													49.30			0.773	0.042	0.049
162280 Orig	1.1	5.1	55.7	0.3	0.2	1.3	0.2	< 0.1	< 0.1	0.003	< 0.05	7.2	21	9.8	2.8	0.360	0.219	0.17
162280 Split	1.2	5.6	62.8	0.3	0.3	1.5	0.2	< 0.1	< 0.1	0.001	< 0.05	7.9	21	11.0	2.6	0.447	0.261	0.20
162281 Orig	0.2	1.3	112	0.2	0.1	0.7	0.1	< 0.1	< 0.1	0.003	0.23	2.2	40	0.8	0.2	0.179	0.024	0.15
162281 Dup	0.2	1.4	123	0.3	0.1	0.8	0.1	< 0.1	< 0.1	0.001	0.23	2.5	40	0.7	0.2	0.182	0.023	0.14
162291 Orig	0.3	1.5	475	0.2	0.1	0.8	0.1	< 0.1	< 0.1	0.002	0.28	8.4	18	1.4	0.6	0.250	0.053	3.03
162291 Dup	0.3	1.5	475	0.2	0.1	0.8	0.2	< 0.1	< 0.1	0.004	0.29	8.5	18	1.3	0.6	0.238	0.053	3.04
162298 Orig	1.2	7.5	21.7	0.3	0.5	3.1	0.5	< 0.1	< 0.1	0.004	0.49	12.4	20	3.7	1.5	0.248	0.152	0.16
162298 Dup	0.8	5.4	20.7	0.5	0.4	2.6	0.4	0.6	< 0.1	0.004	0.49	12.8	18	1.3	1.3	0.683	0.162	0.15
162307 Orig	0.3	1.5	56.2	0.2	0.1	0.9	0.2	< 0.1	< 0.1	0.008	0.32	23.5	18	1.9	0.8	0.202	0.028	4.06
162307 Split	0.3	1.8	59.9	0.1	0.1	1.0	0.2	< 0.1	< 0.1	0.004	0.31	28.5	16	1.8	0.8	0.226	0.027	5.08
Method Blank																		
Method Blank																		
Method Blank	< 0.1	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5		< 0.1	< 0.1			
Method Blank	< 0.1	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5		< 0.1	< 0.1			
Method Blank	< 0.1	< 0.1	< 0.2	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.001	< 0.05	< 0.5	< 1	< 0.1	< 0.1	< 0.0005	< 0.001	< 0.01
Method Blank													< 1			0.0006	< 0.001	< 0.01
Method Blank													< 1			< 0.0005	< 0.001	< 0.01
Method Blank													< 1			< 0.0005	< 0.001	< 0.01



Folder Identification Number (office use)
Transaction Number (office use) W -
Submission Number (office use) 2.

Personal information collected on this form is obtained under the authority of subsections 65(2) and 66(3) of the Mining Act. Under section 7 of the *Mining Act*, this information is used to maintain a public record. This information will be also used to review the assessment work and correspond with the mining land holder. Questions about this collection should be directed to the Senior Manager, Mining Lands Section, Ministry of Northern Development and Mines, 3<sup>rd</sup> Floor, 933 Ramsey Lake Road, Sudbury ON P3E 6B5. Telephone 1 888 415-9845.

- Instructions:
- For work performed on Crown Lands before recording a claim, use form Assessment Work Performed Before Recording Claim(s)
  - Please type or print in ink
  - Submit to Geoscience Assessment Office, 933 Ramsey Lake Road, Sudbury ON P3E 6B5. Telephone 1 888 415-9845

**Note:** All correspondence will be sent to the address on record in the Provincial Recording Office, as required under the *Mining Act*, subsections 19(6) and (8).

**Section 1. Submitter**

I am  an authorized agent  the recorded holder (if a company, enter name of person submitting)

Last Name Smith		First Name Alan		Middle Initial R
Address Unit No.	Street No.	Street Name PO Box 100		Client No. (optional) 402664
City, Town or Village Gogama		Province or State Ontario	Country Canada	Postal Code P0M 1W0
Telephone No. 705-269-0010 (		Fax No. 705-269-8212	Email Address (optional) Alan_Smith@iamgold.com	

**Section 2. Provide**

- proof of beneficial interest (if assigning amongst different recorded holders)
- a current legible map showing how the contiguous mining lands are linked for assigning work
- your technical report and maps in paper or on a compact disc
- where there is a surface rights holder, before starting ground exploration work for the **first time** on a staked claim you must provide notice to the surface rights holder(s) as required by the *Mining Act* and provide proof of notification to the Ministry

**Section 3. Work Performed** This includes the date you traveled to the field or mobilized equipment to the date the technical report was completed.

**From:** YYYY/MMMM/DD (enter the month in full in this box e.g. 2008/July/12)  
2014/07/08

**To:** YYYY/MMMM/DD (enter the month in full in this box e.g. 2008/July/12)  
2015/01/15

**Regulations:** Calculate the time-adjusted credit column, in the tables below, as follows:

- Work filed within 2 years of performance is claimed at 100%. (Enter 100% of actual costs in both of the last 2 columns).
- Work filed after 2 years and up to 5 years after performance is credited at 50%. (Enter 100% of actual costs in the 2<sup>nd</sup> last column and 50% in the last column.)
- Work older than 5 years is not eligible for credit.

**3(A) Dates and Costs of Work Performed**

From date YYYY/MM/DD	To date YYYY/MM/DD	Work Type	Unit of Work (example: hours/ day, metres of drilling, km of grid lines)	Cost per Unit of Work	Actual Costs (\$)	Time-Adjusted Credit (\$) (See notes 1 and 2 above)
2014/07/08	2014/07/16	2 Geologists Mapping/ Prospecting	Day	400.00	6,400.00	6,400.00
2014/07/08	2014/07/16	2 Geological Assistants	day	300.00	5,100.00	5,100.00
2014/07/18	2014/10/21	Assays & ICP	Sample	32.00	4,512.00	4,512.00
2015/01/12	2015/01/15	Assessment Report & Maps (Geologist)	day	400.00	1,600.00	1,600.00

**3(B) Associated Costs**

From date YYYY/MM/DD	To date YYYY/MM/DD	Associated Costs (example: supplies, mobilization, demobilization)	Actual Costs (\$)	Time-Adjusted Credit (\$) (See notes 1 and 2 above)

**3(C) Transportation Costs**

From date YYYY/MM/DD	To date YYYY/MM/DD	Transportation Costs	Actual Costs (\$)	Time-Adjusted Credit (\$) (See notes 1 and 2 above)
2014/07/08	2014/07/16	Use of pick-up truck ( 2 trucks at \$75 a day)	1,200.00	1,200.00

**3(D) Food and Lodging Costs**

From date YYYY/MM/DD	To date YYYY/MM/DD	Food and Lodging Costs	Actual Costs (\$)	Time-Adjusted Credit (\$) (See notes 1 and 2 above)
2014/07/08	2014/07/16	Lodging and Accomodation at \$100/day per person	3,300.00	3,300.00

**Total of Time Adjusted Credit Columns (3A through 3D) = Total Value of Assessment Work** 22,112.00

**Section 4. Type of Work Performed – please check off the type of survey performed (optional)**

Work Type	Survey Type
Airborne geophysical	<input type="checkbox"/> AEM <input type="checkbox"/> AMAG <input type="checkbox"/> AVLF <input type="checkbox"/> other airborne geophysical
Assays	<input checked="" type="checkbox"/> assays <input type="checkbox"/> beneficiation <input type="checkbox"/> geochemical
Drilling	<input type="checkbox"/> diamond drilling <input type="checkbox"/> drill core submission to MNDM <input type="checkbox"/> overburden drilling <input type="checkbox"/> boring other than core
Line cutting	<input type="checkbox"/> line cutting
Geochemical	<input type="checkbox"/> geochemical
Geological	<input checked="" type="checkbox"/> geological
Geophysical	<input type="checkbox"/> EM <input type="checkbox"/> GRA <input type="checkbox"/> V IP <input type="checkbox"/> MAG <input type="checkbox"/> VLF <input type="checkbox"/> other geophysical
Physical	<input type="checkbox"/> manual work <input type="checkbox"/> mechanical work <input type="checkbox"/> overburden stripping <input type="checkbox"/> re-cutting claim lines <input type="checkbox"/> trenching <input type="checkbox"/> other physical
Prospecting	<input type="checkbox"/> prospecting
Rehabilitation	<input type="checkbox"/> rehabilitation
Ground Truthing	<input type="checkbox"/> attach a report as described in the <a href="#">Georeferencing Standards for Unpatented Mining Claims</a>
Aboriginal Consultation	<input type="checkbox"/> please complete and submit the form 0318E <a href="#">Aboriginal Consultations Cost Report</a>
Other	Please print (examples: microscopic studies, bulk sampling, down hole geophysics)

**Section 5. Commodities Explored for - please list (optional)**

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**Section 6. Work Performed, Assigned, Banked**

**6(A) If you performed work on mining lands other than a staked mining claim, fill in the table below. Lease or Patented Land or Licence of Occupation (LO) or Other Mining Lands: Work performed, assigned or banked**

Lease No. or Parcel No. or G No. or LO No.	GAO-Approved Identifier (office use only)	Hectares	Amount of Work Performed on this Land (\$)	Amount of Credits Assigned to Mining Claim(s) (\$)	Bank (Amount of credits to be assigned at a future date)
<b>Column Totals for 6(A)</b>					

Schedule attached (if you have more entries attach a schedule)

**6(B) Mining Claims: Work performed, applied, assigned, banked or assigned from table 6(A) above**

Mining Claim Number	Number of Claim Units	Amount of Work Performed on this Claim (\$)	Amount of Credits Applied to this Claim (\$)	Amount of Credits Assigned to Other Mining Claims (\$)	Bank (Amount of credits to be applied or assigned at a future date)
4248790	16	10,627.20	6,400.00	4,227.20	0.00
4250020	16	1,760.00	2,912.00	0.00	0.00
4251589	16	3,573.98	6,400.00	0.00	0.00
4251592	16	6,150.82	6,400.00	0.00	0.00
<b>Column Total for 6(B)</b>		22,112.00	22,112.00	4,227.20	0.00
<b>Column Totals of 6(A) + 6(B)</b>		22,112.00		4,227.20	0.00

**Note:** Work performed on mining claims = credits applied + credits banked

Schedule attached (if you have more entries attach a schedule)

**Section 7.**

Some of the credits claimed in this Assessment Work form may be reduced. Please indicate below how you want your credits reduced if they are not approved. Check (☑) in the boxes below. **If you have not indicated how your remaining credits are to be allocated, credits will be reduced from the Bank first, followed by option number 2 if necessary.** Credits are to be cutback:


- 1. Credits are to be cut back from the Bank first, followed by option 2 or 3 or 4 as indicated; or
- 2. Credits are to be cut back starting with the claims listed last, working backwards; or
- 3. Credits are to be cut back equally over all claims listed in this Assessment Work form; or
- 4. Credits are to be cut back as **shown below**:

List the claim numbers in the order you want the credits to be cut back (setting your priority list).

Priority	Claim Number	Priority	Claim Number
1.		6.	
2.		7.	
3.		8.	
4.		9.	
5.		10.	

Schedule attached (if you have more entries attach a schedule)

**Section 8. Certification by Recorded Holder or Authorized Agent**

I, , do hereby certify on 2015/02/19 that I have personal knowledge  
Signature yyyy/mm/dd

of the facts set forth in this Assessment Work form having caused the work to be performed or witnessed the same during or after its completion and, to the best of my knowledge, the annexed report is true.