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ARW EXPLORATION LTD.

BATTERSBY PROJECT

Mining Claim S4205080 and S4212992

EXPLORATION DIAMOND DRILL HOLE PROGRAM

Diamond Drillhole BAT-001

Battersby Township, Ontario, Canada

NTS: 41P04

Prepared by:

S.R.G. Parsons, M.Sc., MBA, P.Geo.
October 16, 2015

KEYWORDS

Battersby Property, Battersby Township, Battersby Lake, Halfway Lake, Rio Tinto, Airborne Magnetics, Ultramafic Intrusion, Mafic Intrusion, Circular Magnetic Anomaly.

Table of Contents

TABLE OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 Summary

ARW Exploration Ltd.'s ("ARW") Battersby Property is located in the southeastern portion of Battersby Township and southeast of Battersby Lake in the Sudbury Mining Division, NTS Map Sheet 41P04.

The target at the Battersby Property consists of a very strong circular magnetic anomaly which was initially defined by an airborne magnetic survey flown by Rio Tinto in 1979 (Figure 1). The anomaly is associated with a recessive circular topographic feature that has been infilled with glaciofluvial material of undetermined thickness. From the exploration completed to date by ARW, it has been concluded that there is no evidence of any bedrock exposure in the area immediately overlying the anomaly, however outcrops of granite and granodiorite have been observed in the areas surrounding the magnetic anomaly. Due to low-lying nature of the area associated with the anomaly, it can be suggested that the lithology of the rock associated with the magnetic anomaly is less resistant to glacial erosion as compared to the surrounding country rock crystalline granites and granodiorites. Also based on the geological terrain, the circular shape, and strongly magnetic characteristics of the anomaly it has been suggested that the target is either a carbonatite, a gabbro stock, or a mafic-ultramafic layered intrusion.

In August 2015 ARW applied for, and was issued a prospectors assistance grant from the Ontario Exploration Corporation ("OEC") (owned by the Ontario Prospectors Association ("OPA")). One (1) 250 metre BQ-size diamond drill hole was planned in September 2015 setup to drill through the centre of the magnetic anomaly.

The collar for the drillhole (BAT-001) was located at the north-northeastern portion of the magnetic anomaly at the end of a pre-existing forestry road (UTM NAD83 Zone 17 445745E/5215580). The drillhole collared into a mafic-ultramafic intrusion that overall was moderately to strongly magnetic. In total, the drill hole intersected 205.76 m of layered mafic-ultramafic domains. The drill hole encountered wallrock granodiorite at 213.31 m and the hole was terminated at 238.72 m.

Gold (Au), silver (Ag), platinum (Pt), and palladium (Pd) assays were completed for 21-selected samples and did not return any anomalous values. Eight (8)-samples from the ultramafic pyroxenite zones were selected for rare earth element (REE) analysis and returned sub-economic values of REE's. The eight (8) samples were also analyzed for nickel (Ni) and copper (Cu) however none of the samples returned values that could be considered anomalous.

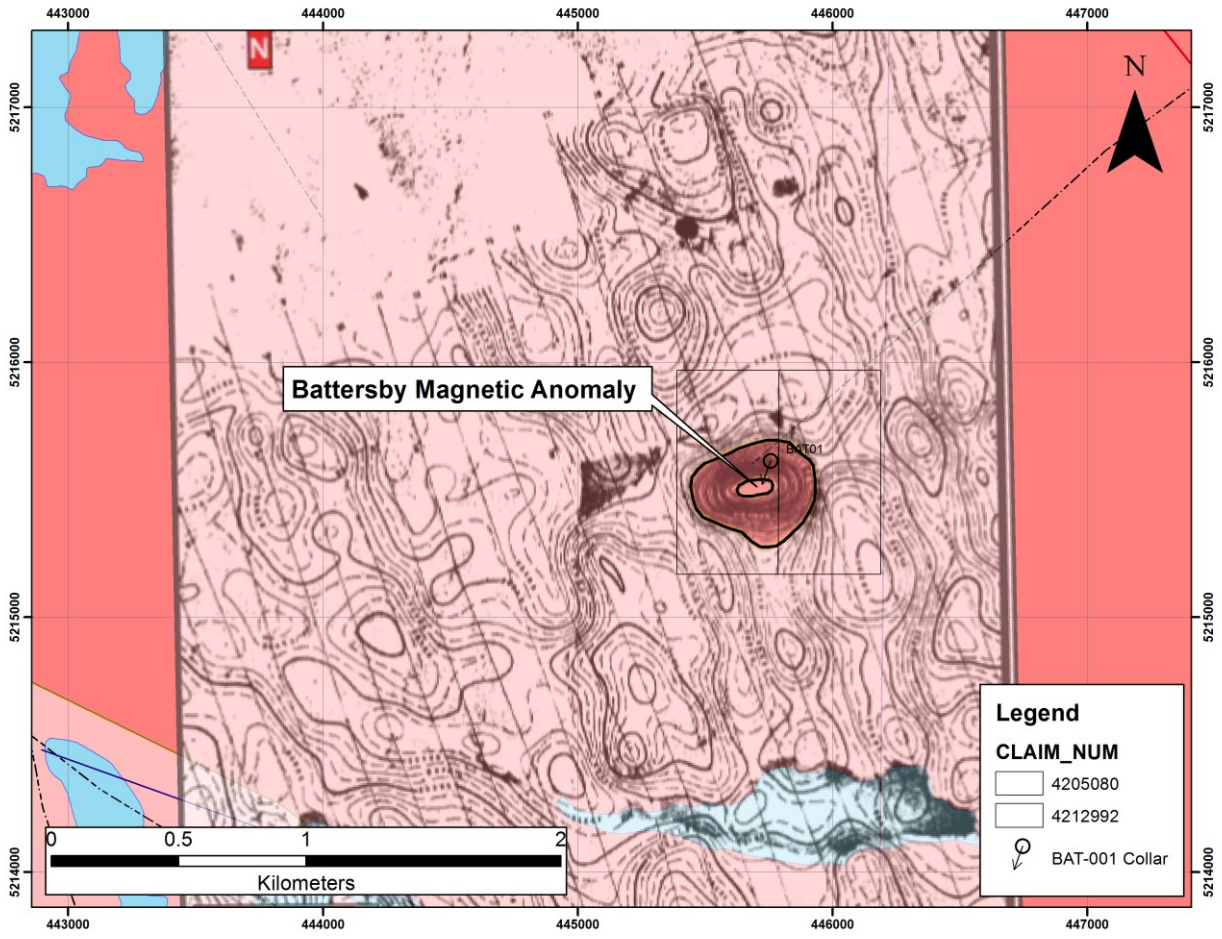

Figure 1: Battersby circular magnetic-high anomaly from Rio Tinto's 1979 airborne magnetic survey (modified from Rio Tinto, 1979).

2.0 ACCESSIBILITY, CLIMATE, AND PHYSIOGRAPHY

2.1 Accessibility

ARW's Battersby Property is located in the southeastern portion of Battersby Township and southeast of Battersby Lake. The property can be reached by travelling north from Sudbury on Ontario Provincial Highway 144 to kilometre marker 108 (17 T 447153E 5217457N). At kilometre marker 108, turn left (west) on an all-weather gravel road and travel for 2.5 km to access central portion of the property (17 T 445778E 5216014N).

2.2 Climate and Physiography

The Battersby Project is situated in Ontario Ecoregion 4E (Lake Temagami Ecoregion) which extends from Lake Superior to the west and the Quebec border to the east., south of Wawa, the Chapleau Moraine, and the Donneganna Sand Plain, and north of the Montreal River at its western end, cutting south to include Ranger Lake, and eastward north of Elliot Lake, Sudbury, and Marten River, to include the Little Clay Belt and Temagami (Crins et al., 2009). Within Ecoregion 4E, the Battersby Property is located within Ecodistrict 4E-3 (The Mississagi Ecodistrict). Ecodistrict 4E-3 is characterized by bedrock covered with stony/sandy till along with frequent flats and ridges of water-laid sand. Landforms include Precambrian hills mantled by rolling till which are dissected by deep fault valleys in the west.

The climate in this ecoregion is humid and cool and is classified as the “Humid Low Boreal Ecoclimatic Region”. Mean annual precipitation in the ecoregion ranges between 725 and 1,148 mm per year and the mean summer rainfall is between 217 and 291 mm. The mean annual temperature ranges from 0.8 to 4.3°C and the mean growing season length is 171 to 200 days (Crins et al., 2009).

Mixed forest (33.2%), coniferous forest (19.9%), and deciduous forest (17.1%) are the dominant land cover types in this ecoregion. Water (10.9%), sparse forest (5.6%), and cutovers (3.6%) are scattered throughout. Agricultural lands are concentrated in the Little Clay Belt. The fire cycle in mixed forests in the ecoregion ranges between 70 and 210 years (Crins et al., 2009).

3.0 PROPERTY DESCRIPTION AND LOCATION

3.1 Ownership and Dispositions

Mining claims S4205080 and S4212992 are 64 hectares in area and are held jointly by ARW Exploration Ltd. and prospector David Vallillee (Figure 2).

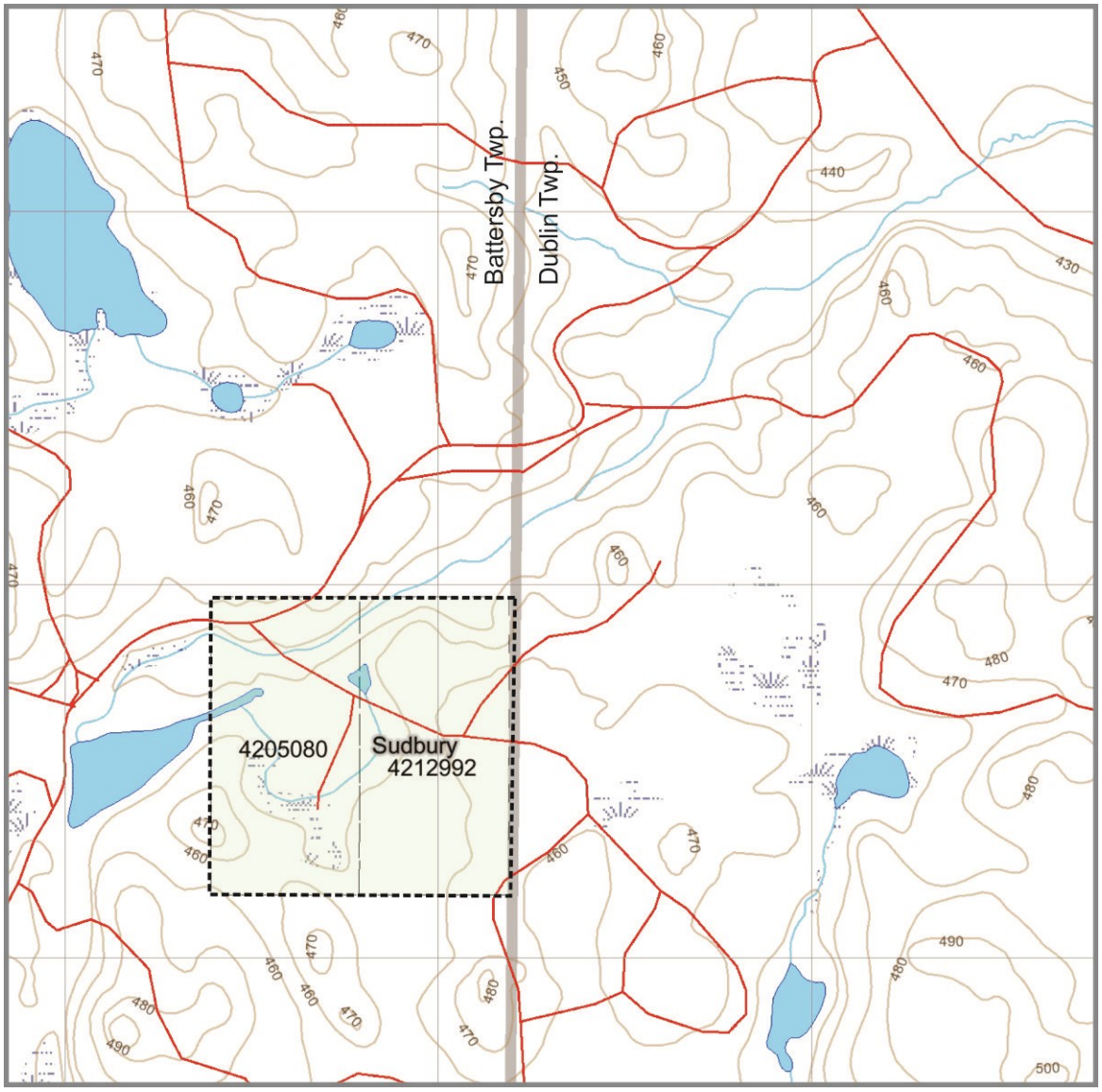

Figure 2: Battersby Mining Claims # 4205080 & 4212992.

3.2 Property Location

ARW Exploration Ltd's Battersby Property is located in the southeastern portion of Battersby Township and southeast of Battersby Lake in the Sudbury Mining Division and is located on NTS Map Sheet 41P01.

4.0 GEOLOGY

4.1 Regional Geology

The Battersby Project lies within the Maple Mountain Area of the Abitibi Subprovince of the Archean-aged Superior Province. In 2010, the Ontario Geological Survey (OGS) completed a geological compilation initiative for the areas in the western portion of the Abitibi Subprovince. As part of this initiative, a 1:100,000 scale geological compilation map for the Maple Mountain area was produced (Ayer et al., 2010), Figure 3. The central portion of the Maple Mountain area is mapped as 2715 +/-3 ma felsic to intermediate intrusive granite and granodiorite, which is often moderately to strongly foliated with minor supracrustal inclusions. The Maple Mountain intrusive rocks are frequently faulted, most commonly by northeast and to the north-northwest trending faults.

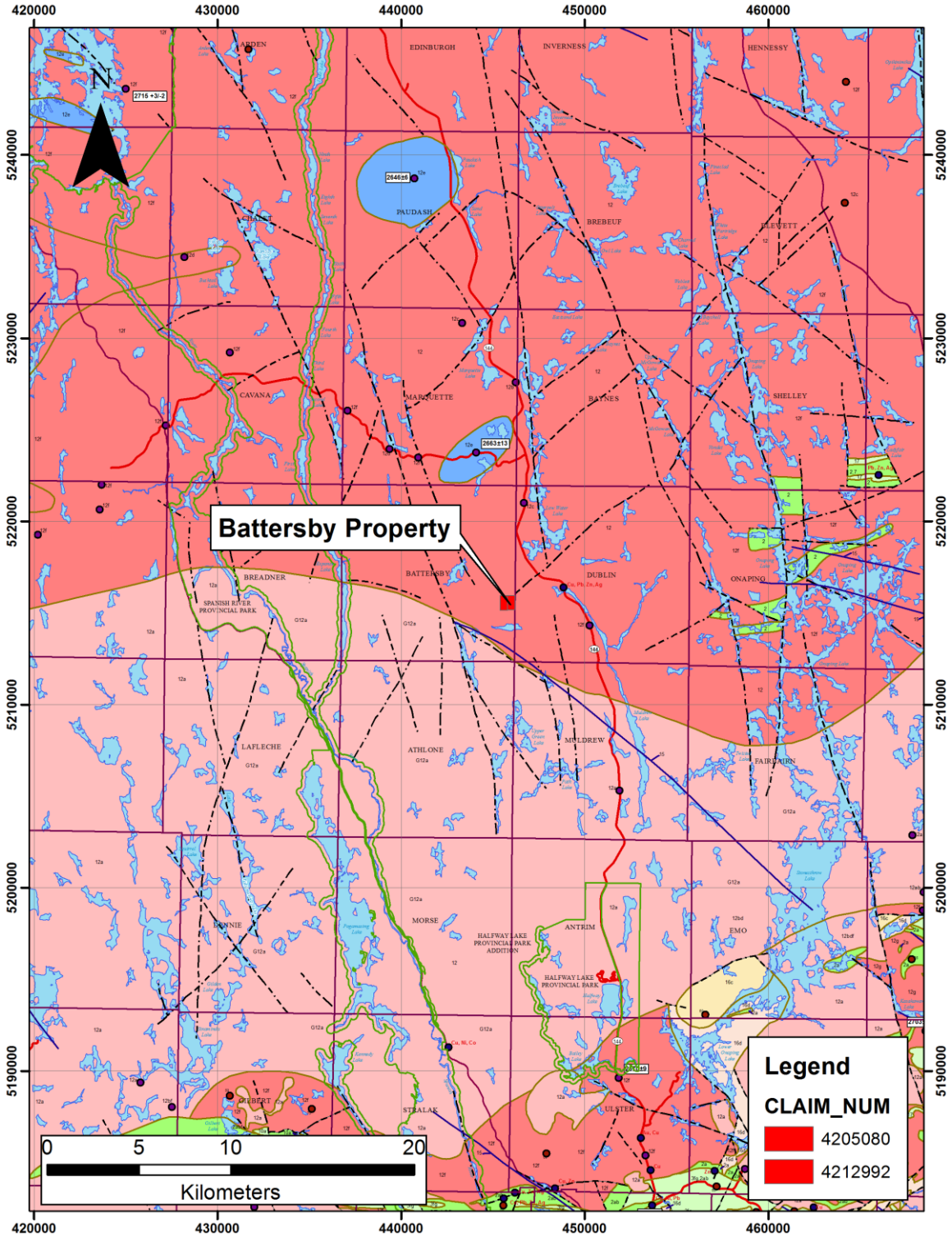

Figure 3: Regional geology in the area surrounding the Battersby Property (adapted from Ayer et al., 2010).

4.2 Property Geology

The Battersby magnetic anomaly lies within an area that has been mapped by Ayer et al., (2010) as felsic to intermediate intrusive granite and granodiorite, which is often moderately to strongly foliated (Figure 4). Detailed mapping completed on the Battersby Property by ARW in 2008 identified areas of outcrop in the southwest portion of the claims that was described as granite. An outcrop of diabase (possibly associated with the Nipissing dyke swarm) was located 400 metres southwest of the southwest corner of the claims. In 2011, ARW conducted a bedrock stripping program at site "S9" to the southwest of the magnetic anomaly to follow up on brecciated angular granite boulders that were identified. ARW described an outcrop of granite that displayed "contact-type" alteration that had a minimum extent of the area that was stripped. Overall, based on the detailed mapping and prospecting completed to date, ARW concluded that the magnetic anomaly is more or less constrained at its margins with altered granite although no contact residues were found.

Observations made by both the author, and ARW concluded that the surficial geology of the area to the north, west and overlying the magnetic anomaly is dominated by glaciofluvial sand and gravel outwash materials. In the area of the magnetic anomaly a circular recessive feature is apparent, which has been partially infilled with glaciofluvial outwash sediments. Two low-lying water saturated areas exist along the east and west margins of the magnetic anomaly. The low-lying topography that corresponds to the extent/margins of the magnetic anomaly and suggests that the lithology associated with the magnetic feature is less resistant to weathering (glacial erosion) compared to the surrounding granite. To the south of the anomaly, till veneers and till blankets are the dominant glacial material type, corresponding with a ridge of foliated granite.

Based on structural interpretations reported by Ayer et al., (2010) the Battersby property, and specifically the magnetic anomaly, is situated in close proximity to the intersection between a regional northeast and a north-northwest trending fault system.

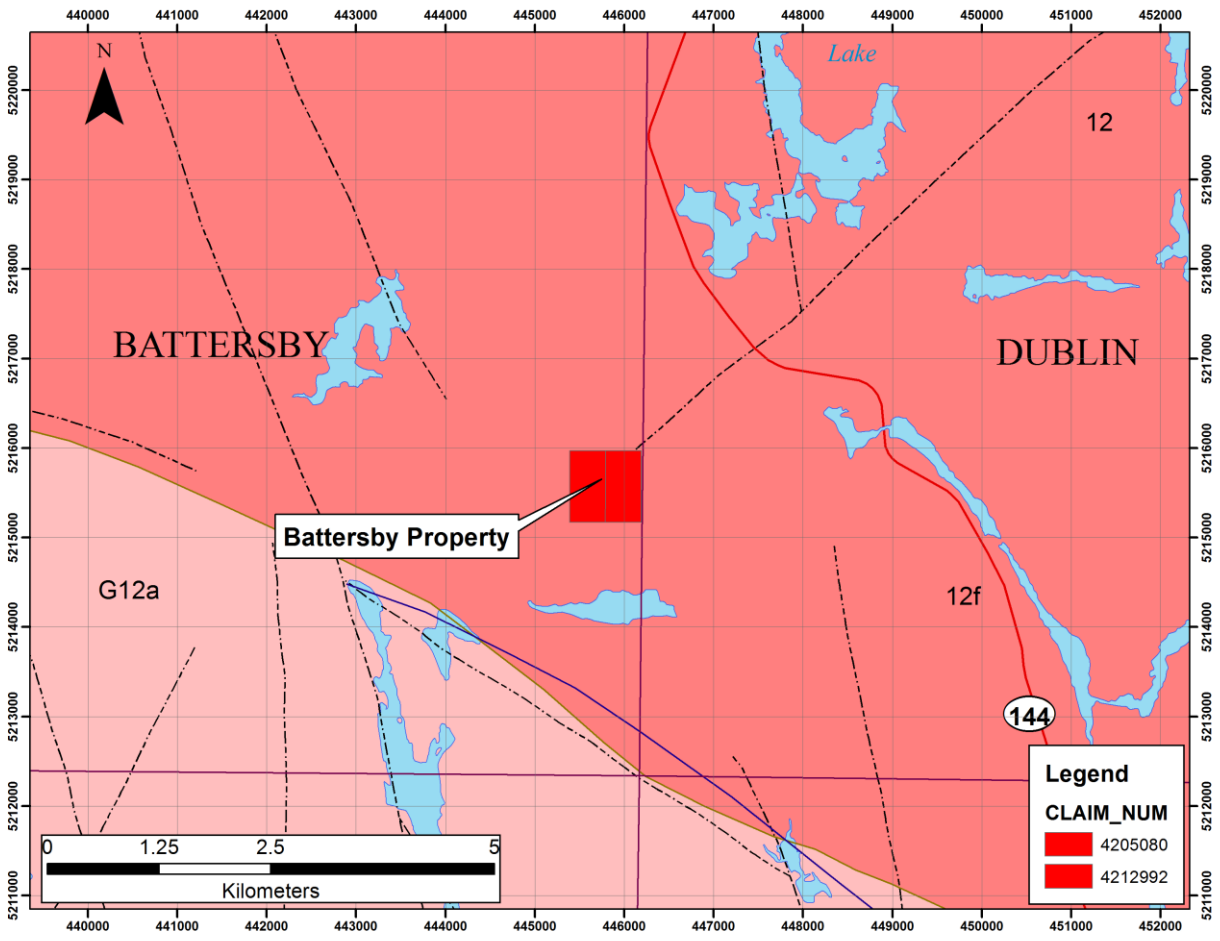

Figure 4: Property geology, Battersby Project. The project is situated within an extensive geological terrain dominated by large granite-granodiorite batholiths (G12a/12) which are locally foliated (I2f).

5.0 PREVIOUS EXPLORATION

5.1 Previous Exploration by Other Companies

Rio Tinto Canadian Exploration Limited (1979): On January 3 and 4, 1979, Rio Tinto completed an airborne magnetic survey, which included the Battersby Project area. The results of the survey were included in their August 1979 report - "Report on an airborne magnetometer survey, Onaping Lake Area, Ontario". A copy of this report was obtained from the files of the Ministry of Northern Development and Mines. The reporting of "a very short but intense magnetic anomaly of 0.5km strike length.....located on flight lines 17 to

20…" was seen as significant to this project. This feature was earmarked for follow up by Rio Tinto, but we are unaware of any such follow up.

A detail showing the magnetic anomaly associated with this property is show following (Figure 1).

The reporting of "a very short but intense magnetic anomaly of .5km strike length.....located on flight lines 17 to 20…" was seen as significant to this project. This feature was identified by Rio Tinto for follow up which has yet to be completed.

Till Sampling (2005): David Vallillee, a local respected prospector completed seven soil samples of the till located "down ice" of the magnetic anomaly. Two samples were submitted for heavy mineral separation. The resulting heavy minerals were microscopically separated specifically for G10 garnets and chromites. X-ray spectrometry performed was inconclusive.

5.2 Exploration Completed by ARW Exploration Ltd ("ARW")

Mapping and Reconnaissance (2008): In September and October 2008, the site was visited on three occasions with the objective of determining the cause of the magnetic anomaly identified by Rio Tinto. Outcrop mapping, prospecting in September determined that claim 4205080 is generally overlain by alluvial till of an undetermined thickness and bedrock exposure minimal within the claim limits. Granite was located in the south west part of the claim and diabase (possibly Nipissing formation) was located 400 metres southwest of the southwest corner of the claim.

MAXMIN and Magnetometer surveys (2008): In October 2008 a single Max-min traverse line survey and magnetometer traverse was performed by Wallbridge Mining Inc. over the interpreted centre of the anomaly. The MAXMIN line consisted of a single 350 to 400m surveyed line. The magnetometer survey consisted of continuous readings traverse of 1.4km in length. The survey confirmed the physical location of the magnetic anomaly identified by Rio Tinto in its 1979 survey.

Reverse-Circulation Drillhole (2009): Previous work suggested that a conductor may be coincident with the known magnetic anomaly identified in the 1979 Rio Tinto airborne magnetic survey. ARW conducted a one-hole reverse-circulation (RC) drill hole with the objective of reaching bedrock to confirm the underlying lithology and to test the lithology of the rock associated with the anomaly. The RC-drill drilled through 3m of glaciofluvial sand and gravel deposit however, was unsuccessful in penetrating large altered granite (gneiss) and coarse-grained granitic boulders.

Outcrop mapping (2011): ARW mapped the host rocks located along the western margin of the claim. We concluded that the magnetic anomaly is more or less constrained at its margins with altered granite although no contact residues were found. The alteration likely caused by contact metamorphism.

Outcrop Stripping at Site S9 (2012): ARW compiled all historic and recent outcrop and terrain data for the area surrounding the magnetic anomaly. Location S9 was stripped due to brecciated angular boulders observed on outcrop ARW concluded that the stripping revealed an area that displayed contact-alteration of the granite to at a minimum the width of the area that was stripped. No evidence of an intrusive were found on the vertical face of the stripped outcrop. Of the numerous samples taken at this site, four (4) were submitted for chemical analysis. ARW concluded that none of the analyzed samples returned values of economic interest.

Petrographic Analysis of Boulders, Pattison (2013):

Edward F. Pattison of Naughton, Ontario completed petrographic examinations of four samples submitted from strongly magnetic boulders recovered by ARW during a prospecting program down-ice from the Battersby magnetic anomaly.

Pattison (2013) reported that four thin sections, with accompanying rock specimens were submitted for petrographic description and suggestions regarding their possible providence. The boulders were recovered by ARW from the area down-ice of the circular magnetic anomaly.

Pattison (2013) reported that all four hand specimens were dark gray-green to black, highly magnetic, medium- to coarse-grained, and are characterized by large cm-scale oikocrysts of a ferromagnesian minerals (probably amphibole or pyroxene). Pattison (2013) concluded that both the thin sections and hand specimens were not xenocrystic but and photographs of the in situ boulders showed provided by ARW suggested the presence of inclusions of pink granitoid material, presumably from the surrounding country rock.

Thin section examination showed all four specimens to be primary amphibole- and mica (phlogopite?)-rich ultramafic rocks bearing a superficial resemblance to rocks that might be described as being possibly related to kimberlite. Other major components include coarse and fine olivine, orthopyroxene (mostly as talc-pseudomorphs) and a complex intergrowth of amphibole and very fine-grained magnetite (possibly forming from a primary clinopyroxene).

Pattison (2013 concluded that the samples submitted by ARW are unlikely to represent kimberlite and are even less likely to represent lamproite. These conclusions are primarily

based on the absence of kimberlite indicator minerals such as pyrope garnet and chrome diopside and to a lesser extent on the absence of any xenocrystic texture. The cumulus textures shown by all four specimens and the abundance of hydrous primary phases such as amphibole and phlogopitic mica suggest rather that these rock crystallized from a wet, ultramafic, magma. In terms of the potential for other types of mineral deposits such as magmatic sulfide or PGE deposits, little can be said based on currently available information. Pattison (2013) recommended that lithochemical analyses, including major and trace elements and rare earth elements would help to identify nature and affinities of these rocks.

6.0 INVESTIGATIONS

The following is a report on the September 2015 drill hole conducted on the Battersby Property.

Table 1: Summary - September 2015 Diamond Drillhole (BAT-001).

Diamond Drilling:
Chenier Drilling, Sudbury, ON.
1 BQ-drillhole: 238.72 m

Analysis and Assaying:
ActLabs Inc., Sudbury ON
Au, Ag, Pt, Pd Assays and trace-element geochemistry for 21-samples, REE Analysis for 9-samples.

6.1 Diamond Drilling

Chenier Drilling Services Inc. of Val Caron, Ontario was contracted to provide contract diamond drilling services for the September 2015 Drillhole at Battersby. Chenier supplied a LCS 3000 skid-mounted drill which is fully hydraulic, has no tower (completely enclosed), and is powered by a four cylinder electronic 150hp Caterpillar engine which is capable of reaching a depth of 1200 meters (BTW). The drill was mobilized to the Battersby property on September 18, 2015 to complete the BQ-diametre drillhole. Chenier supplied one Caterpillar excavator during the drill program to tow the skid mounted drill from the unloading area to the drill collar (approximately 500m). One drillhole (BAT-001: 238.72M) was completed during the drill program. The UTM collar locations, start/end date and final depth of the drillhole is indicated in Table 1. The location of the drillhole collar is shown in Figure 5.

Table 1: Battersby September 2015 Drillhole Summary.

DDH	UTM Co-ordinates (NAD83 Zone 17)		Elevation (masl)	Azimuth	Inclination	Start Date	End Date	Final Depth (m)
	Easting	Northing						
BAT-001	445745	5215580	456	200	-50	18/09/2015	21/09/2015	238.72

The drillhole collar was spotted utilizing a Garmin model 62 hand-held GPS unit with an accuracy of ± 3 m. The foresights for the drillhole were sighted using a Brunton compass setup at the local magnetic declination of -10.58°.

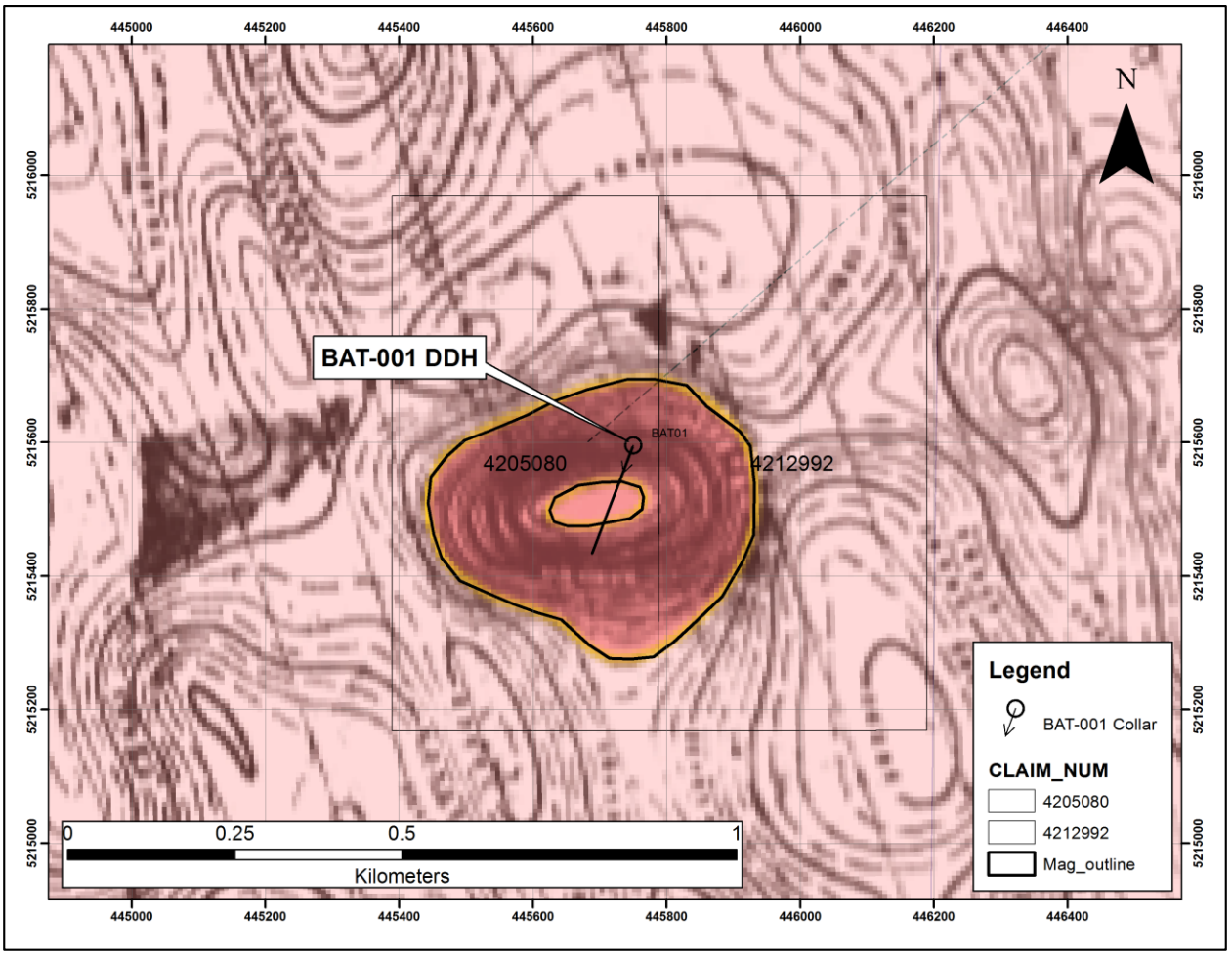

Figure 5: Locational plan view of BAT-001 with Rio Tinto's airborne magnetic survey (1979) as the backdrop. Drillhole trace projected to surface indicated by black line.

6.2 Drillhole Survey

Variations in the track (azimuth) and inclination of the drillhole were monitored by the drill contractor at 50 m intervals (approximately) downhole utilizing an electronic Ranger Discover down-hole survey tool. Four surveys were completed and the results are listed in Table 2.

Table 2: Down-hole drillhole survey details

RANGER DISCOVER DRILLHOLE SURVEY MEASUREMENTS BAT-001						
Date	Time	Depth (m)	Azimuth	Inclination	Magnetic Field	Temperature (F)
19/09/2015	3:49PM	51	195.7	-47.6	53751	58.6
19/09/2015	9:24PM	100.5	211.8	-47	50572	63.3
20/09/2015	2:50PM	153	220.9	-46.6	58083	46.5
21/09/2015	1:52PM	201	203.8	-46.1	56731	63.1

The Ranger Discoverer is described by the manufacturer as a compact, multi-functional, memory-based magnetic survey system, which is powered from a rechargeable battery pack. Simple operator techniques, reduced instrument length, field-replaceable battery and wireless communications provide a user friendly, reliable solution to drill hole surveying. The Ranger Discoverer tool produces measurements for Azimuth, Inclination (dip), Temperature, and Magnetic Intensity.

6.3 Drillhole Logging and Sampling Procedures

The author was present on site throughout the duration of the drillhole. The hole was completed over 4 day shifts. The drill core was logged on site utilizing a core table that was built by ARW using spruce logs. The drill foreman and the author discussed the progress of the hole throughout each shift problems encountered by the drillers (e.g. casing issues (due to cobbles blocking the circulation) faults, and mechanical breakdowns).

The author conducted a preliminary log of the drillcore on site. Subsequent to the primary log, a detailed review of the drillcore was conducted by the author at ARW Exploration's facility in Lively, Ontario utilizing a microscope to describe each main geological domain in more detail. Description of the lithology, contact, structure, alteration, and mineralogy was made both onsite and in more detail during the subsequent review.

Appendix A provides Geotic computer based drill logs for each of the holes completed during the period. A list of split core assays and trace element geochemistry is included in Appendix B.

Intervals submitted for analysis at ActLabs in Sudbury, Ontario were marked in the core boxes based on main domain lithologies. Samples selected for analysis were indicated by a white china marker, with the sample tag secured to the core box at the start off the sample interval. In all instances, samples were collected over a 1.0 m interval and respecting all lithological domains.

ActLabs sample tag booklets were utilized to indicate drillhole number, core box number, and sample "To" and "From" measurements. When the samples were marked in the core boxes, taken of all drill core. Core boxes with samples selected for analysis were delivered to Vance McAfee owner of Vancon Core Saws in Whitefish, Ontario for core cutting. Mr. McAfee then bagged and secured the ActLabs sample tags for each sample for submission to ActLabs in Sudbury, Ontario. A sample tag was placed in each sample bag and the matching sample tag was stapled to the core tray at the start of each sample interval.

6.5 Sample Analysis

A total of 21 split core samples from drillhole BAT-001 were submitted for analysis at ActLabs' facility in Sudbury, Ontario. Sample intervals and results from BAT-001 are listed below. Split core samples were crushed up to 90% passing 10 mesh, then a 250g riffle split of the samples is pulverized to 95% passing through a 105µ mesh. A 30g aliquot of the pulverized sample was then analyzed through fire assay (ICP-OES) for Au, Pt, Pd with an upper detection limit of 30,000pb and a lower detection limit of 2ppb for Au and 5ppb for Pt and Pd. Assays for Ag was completed using IE-Ag Aqua Regia (ICP-OES) on a 0.5g aliquot of the pulverized material for an upper detection limit of 50 ppm and a lower of 0.2ppm.

Trace element geochemistry was performed on all samples using a peroxide fusion digestion for total metal recovery. This method was used because it is recognized as the preferred method for Ni-sulphide deposits. The Ultratrace 7 (ICP-OES + ICP-MS) analytical package was selected for a 56-element analysis of each sample. Due to the ultramafic of main lithological intervals in the drill core, the author decided to select 9 representative samples for 8-REE (Niobium-Zirconium-Yttrium-Tantalum-Uranium-Thorium-Beryllium-Phosphate).

ActLabs analytical certificates are included in this report in Appendix B.

6.6 Quality Assurance / Quality Control Procedures

Quality Assurance and Quality Control (QA/QC) procedures utilize ActLabs third party, specially prepared standards whose grade is pre-analyzed.

7.0 RESULTS

7.1 Diamond Drilling

The geological log, drillhole plan and sections for BAT-001 are reported in Appendix A.

BAT-001

BAT-001 drill collar was located at UTM (NAD83 Zone 17) coordinates of 445745E/5215580N at an elevation of 456 masl. The drill hole was set up at an azimuth of 200' and a dip of -050' targeting the centre of the magnetic anomaly defined by Rio Tinto in 1979. The drill hole encountered a mafic-ultramafic intrusion that is overall moderately to strongly magnetic.

Down-hole from the collar, the drill hole encountered 7.53m of sandy-cobbly-bouldery glaciofluvial outwash material before encountering bedrock. The hole collared into a fine- to medium-grained equigranular massive gabbro. Over a gradational contact at approximately 35.78m the gabbro unit transitioned from fine-grained to to medium-coarse-grained and transitioned from mafic to ultramafic (pyroxenite) composition in zones. A wide-zone of ultramafic pyroxenite was encountered at 91.96m to 150.57m, which was coarse-grained, dark-grey-black, with a cumulate texture. This zone was strongly magnetic, likely due to the 20-25% blebs and interstitial magnetite. From 150.58m to 180.57m a fine-grained gabbro unit was encountered which was massive and homogenous in composition and was weakly magnetic. At 180.58m a pyroxenite unit was encountered which was strongly magnetic, and similar in composition to the unit encountered up-hole at 91.96m. From 196.29m to 213.30m a fine- transitioning downhole to coarse-grained gabbro was encountered near the contact of the intrusion with the wallrock. At 213.21m, the drill hole encountered non- to weakly-magnetic foliated granodiorite. The hole continued in the wallrock to 238.72m to confirm with confidence that the hole did in fact drill out of the magnetic mafic-ultramafic intrusive body.

Twenty-one (21) samples were selected for gold (Au), silver (Ag), platinum (Pt), and palladium (Pd) assays however the analyses returned values below the lower detection

limit except for sample 006401 which returned an Au-value of 4ppb. The twenty-one (21) samples were also analyzed for trace-element geochemistry which gives an indication of the overall composition of the various main mafic and ultramafic domains.

Whole rock FUS-ICP analysis confirmed that the samples collected from the pyroxenite horizons are of ultramafic in composition, returning SiO_2 values <45%, MgO values >26%, >10% F_2O_3, and <0.6% K_2O.

In addition, eight (8)-samples from the ultramafic pyroxenite zones were selected for rare earth element (REE) analysis and it the result returned sub-economic values of REE's (Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Ho, Dy, Er, Tm, Yb, Lu). The eight (8) samples were also analyzed for nickel (Ni) and copper (Cu) and returned values in the 630-810 ppm range for Ni and at or below detection limit to 30 ppm for Cu. Results and certificates of the analyses are presented in Appendix 2.

8.0 Conclusions

Diamond drillhole BAT-001 was collared to target the centre of the strong magnetic anomaly defined on an airborne survey flown by Rio Tinto in 1979. BAT-001 encountered a moderately to strongly magnetic layered mafic-ultramafic intrusion that was comprised of zones of fine- to coarse-grained gabbro, and ultramafic pyroxenite with varying amounts of magnetite. Whole rock FUS-ICP analysis confirmed that the samples collected from the pyroxenite horizons are of ultramafic in composition, returning SiO_2 values <45%, MgO values >26%, >10% F_2O_3, and <0.6% K_2O.

The geographic location of the magnetic anomaly is coincident with an area that is defined by a circular relief in topography, suggesting that the mafic-ultramafic intrusion is less resistive to glacial erosion as compared to the surrounding country rock granites and granodiorites.

It can be concluded that the moderately-very strongly magnetic layered mafic-ultramafic intrusion is the cause of the circular magnetic anomaly identified by Rio Tinto in the 1979 airborne magnetic survey of the Battersby area.

Gold (Au), silver (Ag), platinum (Pt), and palladium (Pd) assays were completed for 21-selected samples and did not return any anomalous values. Eight (8)-samples from the ultramafic pyroxenite zones were selected for rare earth element (REE) analysis and returned sub-economic values of REE's. The eight (8) samples were also analyzed for nickel (Ni) and copper (Cu) which did not return any results that could be considered anomalous.

9.0 Recommendations

Based on 1) the absence of significant visible sulphide mineralization (pyrrhotite, pentlandite, and chalcopyrite) and 2) the low nickel, copper, platinum, palladium, gold, silver, and rare earth elements (REE) values returned from samples submitted for assay, that the gabbro and pyroxenite domains intersected in BAT-001 are unlikely to contain economic grades of mineralization. However, the cumulative texture of pyroxenite zones intersected in BAT-001 suggest that a melt fractionation process occurred during the crystallization of the layered mafic-ultramafic intrusion. Therefore there is the *potential* that horizons of massive or semi-massive sulphides containing PGE's *may* occur within the intrusive body. An additional diamond drill hole could be considered to determine the potential massive to semi-massive sulphide zones at depth (i.e. below BAT-001) within the layered intrusion.

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11.0 STATEMENT OF QUALIFICATIONS

CERTIFICATE – Scott R.G. Parsons

I, **Scott R.G. Parsons, M.Sc., MBA, P.Geo.,** do certify that:

1. I was contracted as a geologist by ARW Exploration Ltd. for the September 2015 Battersby diamond drilling program.
2. I have been continuously engaged in mineral exploration since 2004.
3. I have no direct interest in the Battersby Property being explored by ARW Exploration Ltd.
4. I graduated with a Master of Science (M.Sc. Geology) degree in 2007 and a Bachelor of Science (B.Sc. Honors Geology) degree in 2005 from The University of Western Ontario.
5. I am a practicing member of the Association of Professional Geoscientists of Ontario (APGO) Member # 1692.
6. I am a non-practicing member of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists.
7. I have not been involved with the Battersby Property prior to 2015.
8. I have planned and supervised the execution of the September 2015 Battersby Drilling Program, and am the author of this report.
9. I consent to the filing of this technical report with any regulatory authority, and the publication by them for regulatory purposes, including electronic publication.
10. As of the date of this certificate, to the best of my knowledge this report contains all relevant information relating to the recommendations made for the Battersby Property.

Scott. R.G. Parsons, M.Sc., MBA, P.Geo.
Association of Professional Geoscientists of Ontario (APGO), Member # 1692
Dated at Toronto, Ontario
This 16th day of October, 2015.

APPENDICES

APPENDIX A: BAT-001 Diamond drill hole log, plan, and section.

ARW Exploration Ltd. - Battersby Project
DIAMOND DRILL LOG

Hole No	BAT-001	Grid	NAD83	NTS Sheet	041P04	
Project	Battersby	Sector	Zone 17	Collar Dip	-50.0	
Area	Battersby Twp.	North	5215580	Collar Azim	200.0	
Location	Surface	East	445745	Length (m)	250.00	
Claim #	4205080	Elevation	456	Start Depth	0.00	
Dated Started	18-Sep-15	Plugged		Final Depth	238.72	
Completed	21-Sep-15	Hole Size	BQ	Contractor	Chenier Drilling	
Logged by	Scott Parsons	Casing	BQ	Core Location	ARW Exploration, Lively, Ontario	
Target	Battersby circular magnetic anomaly (Rio Tinto, 1979)					
Comments						

Depth	Azim	Dip	Comments		Test	Mag	Uncor Azim	Corr Azim
0.00	200.00	-50.00						
51.00	195.70	-47.6				53751		
100.50	211.80	-47				50572		
153.00	220.90	-46.6				58083		
201.00	203.80	-46.1				56731		

ARW Exploration Ltd. - Battersby Project
DIAMOND DRILL LOG

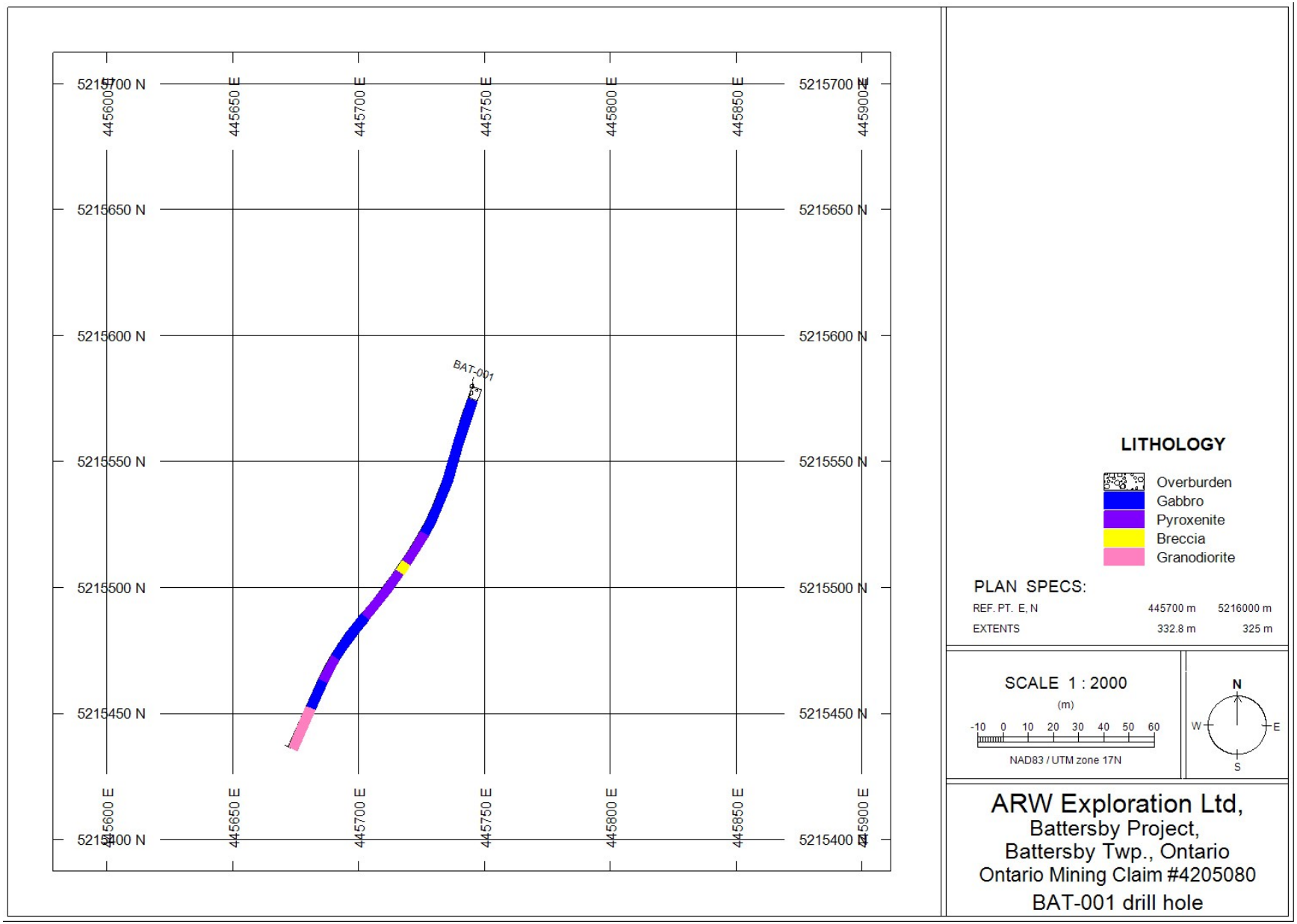
FROM	TO	LITHO	GEOLOGICAL DESCRIPTION	MINERALIZATION	MAGNETIC	SAMPLE	FROM	TO	Length	Au-AA gpt	Au Grav gpt	Au Metallic gpt	Au Final Gpt
0.00	7.53	OVB	sandy-cobbly-bouldery glaciofluvial outwash. cobbles and boulders of granodiorite/foliated granodiorite/pegmatite/gabbro		non-magnetic								
7.54	35.77	Gabbro	fine to medium grained, equigranular, medium gray green, massive and homogeneous in composition	1-3% disseminated magnetite	weakly-moderately magnetic								
			14.20-14.35m: Quartz Vein: milky/cloudy white quartz vein with sharp contacts at 50 degrees to CA; trace py+cpy proximal to contacts										
						6401	15.00	16.00	1.00				
						6402	27	28	1				
35.78	91.95	Gabbro	medium to coarse grained gabbro, dark grey-green, massive to wkly shistose in zones. Transition from mafic to ultramafic in zones.	10-15% magnetite (diss.+blebs <3cm), tr pentlandite?, tr-1% diss/stringer (ilmenite)	moderately-strong magnetic, very strongly magnetic in ultramafic zones								
			77.68-79.15: Granodiorite: bleached (metasomatism) medium grained white-grey granodiorite xenolith.		not magnetic								
						6403	42	43	1				
						6404	55	56	1				
						6405	62	63	1				

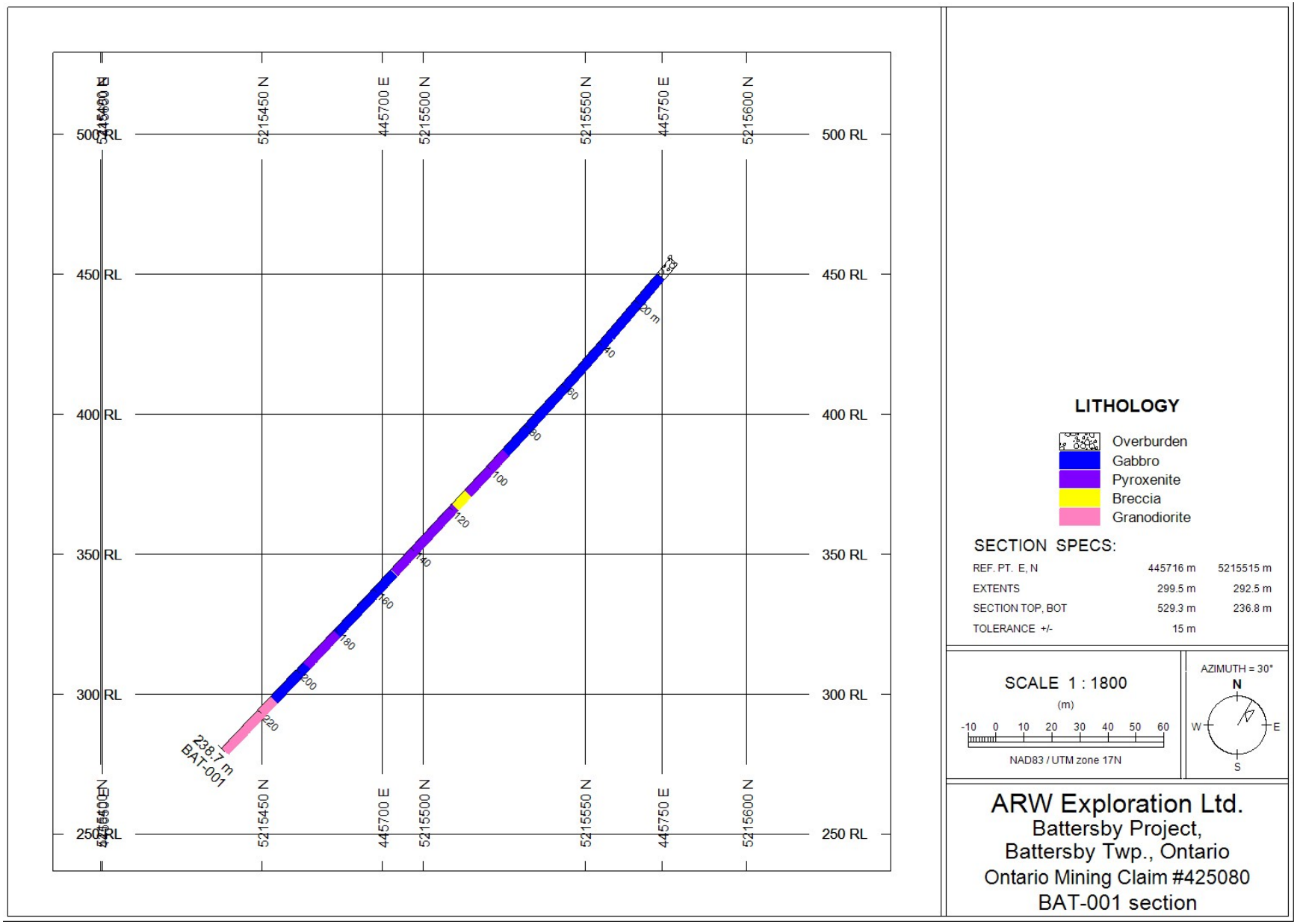
FROM	TO	LITHO	GEOLOGICAL DESCRIPTION	MINERALIZATION	MAGNETIC	SAMPLE	FROM	TO	Length	Au-AA gpt	Au Grav gpt	Au Metallic gpt	Au Final Gpt
						6406	66	67	1				
						6407	76	77	1				
						6408	82	83	1				
91.96	111.82	Pyroxenite	coarse grained, dark-grey-black, ultramafic cumulate. Coarse crystals of pyroxene (<4cm), "flame textured" in zones	20-25% Magnetite, tr-1% ilmenite?	strongly magnetic								
			105.7-106.86: Granite xenolith:silicified granite xenolith (80% qtz).		not magnetic								
						6409	92	93	1				
						6410	99	100	1				
						6411	108	109	1				
111.83	118.44	Breccia	qtz/granite xenolith (111.83-114.13 qtz zone crystalized (i.e. in-situ/pre-existing) onto bleacked medium grained granite (111.83-114.13)		not magnetic								
118.45	150.57	Pyroxenite	coarse grained, dark-grey-black, ultramafic cumulate. Coarse crystals of pyroxene (<4cm), "flame textured" in zones	20-25% Magnetite, tr-1% ilmenite	strongly magnetic								
						6412	120	121	1				
						6413	130	131	1				
						6414	139	140	1				
						6415	144	145	1				
						6416	145	146	1				

FROM	TO	LITHO	GEOLOGICAL DESCRIPTION	MINERALIZATION	MAGNETIC	SAMPLE	FROM	TO	Length	Au-AA gpt	Au Grav gpt	Au Metallic gpt	Au Final Gpt
150.58	180.57	Gabbro	fine-grained, equigranular, medium gray-green, massive and homogeneous in composition. 20cm Carbonate/serpentine? Zone at upper contact		non magnetic to weakly magnetic in zones								
180.58	196.28	Pyroxenite	coarse grained, dark-grey-black, ultramafic cumulate. Coarse crystals of pyroxene (<4cm), "flame textured" in zones	20-25% Magnetite, tr-1% ilmenite?									
			184.1-185.9: Granite xenolith: bleached (metasomatism) medium-grained white-grey granite xenolith.		non-magnetic								
						6417	165	166	1				
						6418	177	178	1				
						6419	165	166	1				
						6420	192	193	1				
196.29	213.30	Gabbro	fine- transitioing to coarse-grain towards WR contact, medium gray-green. massive with local zones of wk-mod. Foliation, <30cm qtz-carb veinlets and felsic clast/xenoliths	5-10% magnetite	moderately magnetic								
			209.94-210.69: Breccia :bleached (metasomatism) medium-grained white-grey granite xenoliths (50cm) with fine grained gabbro matrix.		non-magnetic								
						6421	204	205	1				
213.31	238.72	Granodiorite	moderatly foliated gray-white granodiorite		non-magnetic								

ARW Exploration Ltd. - Battersby Project
DIAMOND DRILL LOG

FROM	TO	LITHO	GEOLOGICAL DESCRIPTION	MINERALIZATION	MAGNETIC	SAMPLE	FROM	TO	Length	Au-AA gpt	Au Grav gpt	Au Metallic gpt	Au Final Gpt
			220.6-220.95: Gabbro: fg mafic dyke, sharp contacts		non-magnetic								
		EOH	EOH										


5215700 N
5215650 N
5215600 N
5215550 N
5215500 N
5215450 N
5215400 N
445600 E
445650 E
445700 E
445750 E
445800 E
445850 E
445900 E
BAT-001
LITHOLOGY
Overburden
Gabbro
Pyroxenite
Breccia
Granodiorite
PLAN SPECS:
REF. PT. E, N 445700 m 5216000 m
EXTENTS 332.8 m 325 m
SCALE 1 : 2000
(m)
-10 0 10 20 30 40 50 60
NAD83 / UTM zone 17N
N
W
E
S
ARW Exploration Ltd,
Battersby Project,
Battersby Twp., Ontario
Ontario Mining Claim #4205080
BAT-001 drill hole


5215450 N
445700 E
5215500 N
5215550 N
445750 E
5215600 N
500 RL
450 RL
400 RL
350 RL
300 RL
250 RL
238.7 m
BAT-001
LITHOLOGY
Overburden
Gabbro
Pyroxenite
Breccia
Granodiorite
SECTION SPECS:
REF. PT. E, N 445716 m 5215515 m
EXTENTS 299.5 m 292.5 m
SECTION TOP, BOT 529.3 m 236.8 m
TOLERANCE +/- 15 m
SCALE 1 : 1800
(m)
-10 0 10 20 30 40 50 60
NAD83 / UTM zone 17N
AZIMUTH = 30°
N
W
E
S
ARW Exploration Ltd.
Battersby Project,
Battersby Twp., Ontario
Ontario Mining Claim #425080
BAT-001 section

APPENDIX B: CERTIFICATES OF ANALYSIS

Quality Analysis ... *Innovative Technologies*

Date Submitted: 28-Sep-15
Invoice No.: A15-08205
Invoice Date: 20-Oct-15
Your Reference:

ARW Exploration
565 Queen Elizabeth St.
Lively ON
Canada

ATTN: Michael Weirmeir

CERTIFICATE OF ANALYSIS

21 Rock samples were submitted for analysis.

The following analytical package was requested:

Code UT-7 Sodium Peroxide Fusion (ICP & ICPMS)
Code 8-REE Assay Package Major Elements Fusion ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

REPORT **A15-08205**

Notes:

Total includes all elements in % oxide to the left of total.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB
LAB Accrédité CCN

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

Date Submitted: 28-Sep-15
Invoice No.: A15-08205
Invoice Date: 20-Oct-15
Your Reference:

ARW Exploration
565 Queen Elizabeth St.
Lively ON
Canada

ATTN: Michael Weirmeir

CERTIFICATE OF ANALYSIS

21 Rock samples were submitted for analysis.

The following analytical package was requested: Code 1C-OES-Sudbury Fire Assay ICPOES
Code 1E-Ag Sudbury Aqua Regia ICP(AQUAGEO)

REPORT **A15-08205**

Notes:

Total includes all elements in % oxide to the left of total.
Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D.
Quality Control

SCC Accredited LAB
LAB Accrédité CCN

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E-MAIL Sudbury@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Results

Analyte Symbol	Au	Pd	Pt	Ag	Al	Ca	Fe	K	Mg	P	S	Si	Ti	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Unit Symbol	ppb	ppb	ppb	ppm	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Lower Limit	2	5	5	0.2	0.01	0.01	0.05	0.1	0.01	0.005	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
006401	4	< 5	< 5	0.2	6.81	6.15	11.8	0.8	2.80	0.075	0.13	24.0	0.94										
006402	< 2	< 5	< 5	< 0.2	6.93	6.23	11.4	0.9	2.90	0.066	0.12	23.6	0.89										
006403	< 2	< 5	< 5	< 0.2	2.25	5.12	8.46	0.4	16.0	0.027	0.05	20.4	0.17										
006404	< 2	< 5	< 5	< 0.2	2.10	5.31	8.53	0.4	17.3	0.024	0.13	20.7	0.17										
006405	< 2	< 5	< 5	< 0.2	1.96	5.72	7.74	0.3	16.3	0.024	0.05	20.3	0.15										
006406	< 2	< 5	< 5	< 0.2	2.00	5.32	7.44	0.5	16.3	0.023	0.03	20.4	0.16	43.62	3.80	10.83	0.174	26.59	7.79	0.57	0.57	0.266	0.08
006407	< 2	< 5	< 5	< 0.2	1.54	5.39	7.53	0.2	17.1	0.018	0.02	19.8	0.12										
006408	< 2	< 5	< 5	< 0.2	1.39	4.92	7.16	1.0	15.2	0.017	0.25	20.6	0.11										
006409	< 2	< 5	< 5	< 0.2	1.49	4.67	8.15	0.4	18.1	0.017	0.06	20.3	0.12	43.93	2.91	11.53	0.189	28.06	6.66	0.40	0.47	0.195	0.05
006410	< 2	< 5	< 5	< 0.2	1.53	5.18	9.03	0.3	17.2	0.019	0.02	20.5	0.11	43.82	2.99	12.40	0.206	28.49	7.26	0.51	0.39	0.184	0.06
006411	< 2	< 5	< 5	< 0.2	1.67	5.75	7.70	0.4	17.3	0.019	0.14	21.9	0.12										
006412	< 2	< 5	< 5	< 0.2	1.62	5.64	7.83	0.3	18.2	0.019	0.02	21.3	0.12	43.65	2.96	10.57	0.168	28.36	7.64	0.45	0.36	0.193	0.04
006413	< 2	< 5	< 5	< 0.2	1.65	5.71	8.18	0.3	18.5	0.020	0.02	22.0	0.13										
006414	< 2	< 5	< 5	< 0.2	1.53	5.62	7.68	0.2	17.6	0.018	0.04	20.4	0.12										
006415	< 2	< 5	< 5	< 0.2	1.68	4.94	7.68	0.4	17.8	0.012	0.03	19.9	0.12	43.12	3.04	10.97	0.158	28.78	6.98	0.49	0.41	0.188	0.04
006416	< 2	< 5	< 5	< 0.2	1.63	5.65	7.44	0.4	17.3	0.008	0.02	22.2	0.13	44.53	3.05	10.50	0.169	28.19	8.01	0.46	0.45	0.213	0.01
006417	< 2	< 5	< 5	0.2	6.68	6.39	11.7	1.0	2.88	0.076	0.14	23.2	1.03										
006418	< 2	< 5	< 5	0.3	6.68	6.11	12.0	1.1	2.79	0.090	0.14	23.8	1.10										
006419	< 2	< 5	< 5	< 0.2	2.05	5.05	7.93	0.9	15.4	0.023	0.05	21.8	0.15										
006420	< 2	< 5	< 5	< 0.2	1.98	5.09	8.50	0.3	16.8	0.023	0.03	19.8	0.15	42.58	3.98	11.83	0.166	27.30	6.97	0.51	0.35	0.251	0.05
006421	< 2	< 5	< 5	< 0.2	2.13	5.15	8.28	0.3	16.6	0.022	0.04	19.7	0.17	42.44	4.27	11.50	0.185	26.90	7.09	0.52	0.37	0.280	0.05

Results

Analyte Symbol	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb
Unit Symbol	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit		0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4	1	2	0.5	0.2	1	0.5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
006401																							
006402																							
006403																							
006404																							
006405																							
006406	4.75	99.03	27	< 1	104	2770	92	630	10	70	5	2	< 5	24	105	5	19	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006407																							
006408																							
006409	5.35	99.72	24	< 1	87	3370	102	670	20	90	4	1	< 5	29	89	4	18	< 1	< 2	< 0.5	< 0.2	1	< 0.5
006410	3.77	100.1	23	< 1	85	3000	105	640	< 10	100	4	1	< 5	14	116	< 2	22	< 1	2	< 0.5	< 0.2	< 1	< 0.5
006411																							
006412	5.28	99.68	25	< 1	89	3190	99	630	20	70	4	1	< 5	15	97	3	21	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006413																							
006414																							
006415	5.87	100.0	23	< 1	81	3120	97	670	10	70	4	1	< 5	17	82	3	20	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006416	4.42	100.0	26	< 1	88	3060	93	640	< 10	80	4	1	< 5	20	71	4	16	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006417																							
006418																							
006419																							
006420	6.37	100.4	25	< 1	100	2760	99	790	30	80	5	1	< 5	12	108	4	23	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006421	5.98	99.57	25	< 1	107	2650	98	810	30	80	5	1	< 5	14	132	4	24	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5

Results

Analyte Symbol	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Th
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	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.1
Method Code	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
006401																							
006402																							
006403																							
006404																							
006405																							
006406	3.9	167	< 0.4	4.6	11.6	1.65	7.7	1.8	0.50	1.5	0.2	1.1	0.2	0.6	0.08	0.5	0.08	0.5	< 0.1	< 1	0.1	< 5	0.5
006407																							
006408																							
006409	5.8	146	< 0.4	3.8	8.5	1.21	5.3	1.3	0.34	1.0	0.1	0.8	0.1	0.4	0.07	0.4	0.07	0.4	< 0.1	< 1	0.1	< 5	0.7
006410	1.1	166	< 0.4	5.4	11.7	1.52	6.8	1.5	0.45	1.1	0.2	0.9	0.2	0.4	0.06	0.4	0.07	0.5	< 0.1	< 1	< 0.1	< 5	1.0
006411																							
006412	1.2	153	< 0.4	4.9	11.0	1.51	6.3	1.6	0.41	1.2	0.2	0.9	0.2	0.4	0.06	0.4	0.07	0.5	< 0.1	< 1	< 0.1	< 5	0.8
006413																							
006414																							
006415	1.4	160	< 0.4	4.3	9.5	1.31	5.6	1.3	0.38	1.1	0.1	0.8	0.1	0.4	0.06	0.4	0.06	0.4	< 0.1	< 1	< 0.1	< 5	0.7
006416	2.5	163	< 0.4	3.4	8.4	1.26	5.7	1.5	0.43	1.4	0.2	0.9	0.2	0.4	0.07	0.4	0.07	0.4	< 0.1	2	< 0.1	< 5	0.6
006417																							
006418																							
006419																							
006420	1.0	142	< 0.4	4.9	11.8	1.67	7.1	1.7	0.49	1.4	0.2	1.0	0.2	0.6	0.08	0.5	0.08	0.5	< 0.1	< 1	< 0.1	< 5	0.6
006421	1.6	147	< 0.4	5.2	11.7	1.62	7.1	1.8	0.47	1.5	0.2	1.0	0.2	0.6	0.09	0.6	0.08	0.5	< 0.1	2	< 0.1	< 5	0.6

Results

Analyte Symbol	U	As	B	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Ge	Ho	Hf	In	La	Li
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	0.1	5	10	3	4	2	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.2	0.1	0.7	0.2	10	0.2	0.4	3
Method Code	FUS-MS	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
006401		< 5	70	261	< 4	< 2	< 2	38.0	51.0	50	2.2	225	5.9	3.7	1.4	19.3	5.5	2.3	1.2	< 10	< 0.2	17.7	31
006402		< 5	20	286	< 4	< 2	< 2	33.7	47.6	50	2.2	216	5.5	3.4	1.3	18.6	5.3	2.2	1.2	< 10	< 0.2	15.8	24
006403		5	20	207	< 4	< 2	< 2	13.3	93.5	2190	2.5	82	1.1	0.6	0.5	5.3	1.5	1.3	0.2	< 10	< 0.2	6.0	10
006404		< 5	10	169	< 4	< 2	< 2	12.3	94.8	2280	3.2	52	1.0	0.6	0.5	4.4	1.4	2.0	0.2	< 10	< 0.2	5.4	9
006405		< 5	10	147	< 4	< 2	< 2	10.6	85.2	2190	1.3	53	0.9	0.5	0.4	4.0	1.3	1.5	< 0.2	< 10	< 0.2	4.7	6
006406	0.2	< 5	10	166	< 4	< 2	< 2	11.4	89.2	2470	4.4	43	1.0	0.5	0.4	4.7	1.5	0.8	0.2	< 10	< 0.2	4.4	10
006407		< 5	20	99	< 4	< 2	< 2	11.5	97.5	2700	0.8	51	0.8	0.4	0.4	3.8	1.2	0.9	< 0.2	< 10	< 0.2	5.3	6
006408		< 5	10	151	< 4	< 2	< 2	9.6	82.2	2350	17.6	88	0.8	0.4	0.3	4.0	1.1	1.4	< 0.2	< 10	< 0.2	4.2	13
006409	0.2	< 5	10	135	< 4	< 2	< 2	8.1	99.4	2860	5.5	53	0.8	0.4	0.3	4.0	1.0	1.0	< 0.2	< 10	< 0.2	3.7	10
006410	0.3	< 5	< 10	150	< 4	< 2	< 2	10.7	102	2550	1.1	9	0.8	0.4	0.4	3.8	1.1	1.3	< 0.2	< 10	< 0.2	5.0	13
006411		9	20	122	< 4	< 2	< 2	12.4	90.2	2520	6.2	54	0.9	0.5	0.4	3.9	1.3	1.5	< 0.2	< 10	< 0.2	5.3	6
006412	0.3	< 5	10	146	< 4	< 2	< 2	10.4	96.7	2800	1.3	53	0.8	0.4	0.4	3.8	1.3	0.8	< 0.2	< 10	< 0.2	4.6	8
006413		< 5	10	131	< 4	< 2	2	12.0	92.1	2600	2.2	111	0.8	0.5	0.4	3.6	1.2	1.2	< 0.2	< 10	< 0.2	5.5	5
006414		< 5	20	96	< 4	< 2	< 2	9.1	91.7	2630	1.0	36	0.8	0.4	0.3	3.5	1.1	1.0	< 0.2	< 10	< 0.2	4.0	4
006415	0.3	< 5	20	146	< 4	< 2	< 2	9.0	93.7	2630	1.3	44	0.8	0.4	0.3	3.9	1.0	1.0	< 0.2	< 10	< 0.2	3.9	9
006416	0.3	17	20	144	< 4	< 2	< 2	7.5	90.2	2620	2.3	35	0.8	0.4	0.3	4.1	1.2	1.1	< 0.2	< 10	< 0.2	3.0	10
006417		14	20	15	< 4	< 2	< 2	34.2	1.1	280	0.1	55	1.6	1.3	0.3	89.3	1.3	< 0.7	0.4	30	0.2	22.3	< 3
006418		< 5	10	278	< 4	< 2	< 2	35.3	40.3	< 30	3.6	178	4.6	2.9	1.1	15.9	4.4	2.7	1.0	< 10	< 0.2	20.0	16
006419		< 5	30	444	< 4	< 2	< 2	45.5	49.4	< 30	4.8	225	6.7	4.2	1.7	20.7	6.4	1.7	1.4	< 10	< 0.2	21.5	25
006420	0.2	< 5	20	136	< 4	< 2	< 2	12.0	101	2480	1.0	65	1.0	0.5	0.4	4.8	1.4	1.1	< 0.2	< 10	< 0.2	4.7	5
006421	0.2	6	< 10	151	< 4	< 2	< 2	12.0	105	2500	1.7	63	1.2	0.6	0.5	5.3	1.6	1.1	0.2	< 10	< 0.2	5.2	4

Results

Analyte Symbol	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Tl	Tm	U	V	W	Y
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	3	1	2.4	0.4	10	0.8	0.1	0.4	2	0.8	0.1	0.5	3	0.2	0.1	6	0.1	0.1	0.1	0.1	5	0.7	0.1
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
006401	1520	< 1	6.4	15.4	50	7.3	4.5	56.5	< 2	5.6	4.5	1.3	158	0.5	0.9	< 6	3.2	0.3	0.6	0.8	394	< 0.7	33.0
006402	1550	< 1	5.7	13.9	50	6.4	4.0	65.8	< 2	6.1	4.1	1.1	168	0.6	0.9	< 6	2.9	0.3	0.5	0.7	368	< 0.7	30.5
006403	1150	< 1	< 2.4	6.1	790	5.5	1.7	24.0	< 2	6.0	1.5	0.9	118	< 0.2	0.2	< 6	0.9	0.2	< 0.1	0.3	37	< 0.7	5.5
006404	1170	< 1	< 2.4	5.7	750	3.4	1.6	23.6	< 2	5.5	1.4	< 0.5	123	< 0.2	0.2	< 6	0.7	0.2	< 0.1	0.2	13	< 0.7	5.2
006405	1050	< 1	3.4	4.9	640	6.0	1.4	14.8	< 2	5.4	1.2	< 0.5	103	< 0.2	0.2	< 6	0.7	0.1	< 0.1	0.2	26	< 0.7	4.5
006406	1180	< 1	< 2.4	5.7	650	3.2	1.5	29.3	< 2	5.8	1.6	< 0.5	94	< 0.2	0.2	< 6	0.4	0.2	< 0.1	< 0.1	43	< 0.7	5.2
006407	1090	< 1	< 2.4	5.1	660	3.2	1.4	11.4	< 2	7.1	1.3	< 0.5	85	< 0.2	0.2	< 6	0.9	< 0.1	< 0.1	0.2	8	< 0.7	4.4
006408	1080	2	< 2.4	4.4	590	2.2	1.2	102	< 2	6.5	1.1	< 0.5	88	< 0.2	0.1	< 6	0.6	0.7	< 0.1	< 0.1	< 5	< 0.7	3.8
006409	1250	4	587.5	3.8	770	3.7	1.1	34.3	< 2	7.2	1.0	2.3	80	2.8	0.1	< 6	0.6	0.2	< 0.1	0.1	< 5	< 0.7	4.2
006410	1350	< 1	< 2.4	4.7	670	4.2	1.3	17.5	< 2	6.3	1.3	< 0.5	99	< 0.2	0.1	< 6	0.8	0.1	< 0.1	0.2	< 5	< 0.7	4.0
006411	1100	< 1	< 2.4	5.8	600	2.6	1.6	35.5	< 2	6.6	1.4	< 0.5	95	< 0.2	0.2	< 6	0.7	0.2	< 0.1	0.2	< 5	< 0.7	4.8
006412	1160	< 1	< 2.4	4.7	670	3.1	1.3	18.0	< 2	6.0	1.3	< 0.5	89	< 0.2	0.2	< 6	0.8	0.1	< 0.1	0.2	16	< 0.7	4.1
006413	1150	< 1	< 2.4	5.3	640	12.4	1.5	18.9	< 2	5.6	1.2	< 0.5	87	< 0.2	0.1	< 6	0.7	0.1	< 0.1	0.3	5	< 0.7	4.1
006414	1040	< 1	< 2.4	4.1	640	2.5	1.2	10.5	< 2	6.5	1.1	< 0.5	78	< 0.2	0.1	< 6	0.6	< 0.1	< 0.1	0.1	18	< 0.7	3.9
006415	1050	< 1	< 2.4	4.2	690	2.6	1.2	19.9	< 2	6.7	1.1	< 0.5	76	< 0.2	0.1	< 6	0.7	< 0.1	< 0.1	0.1	< 5	< 0.7	3.7
006416	1100	< 1	< 2.4	4.0	640	2.4	1.1	23.7	< 2	7.8	1.1	< 0.5	60	< 0.2	0.1	< 6	1.0	0.2	< 0.1	0.2	9	1.2	4.1
006417	31	19	43.7	7.5	20	21.3	3.0	1.2	< 2	6.9	1.4	7.1	24	3.7	0.2	< 6	57.2	< 0.1	0.3	4.3	375	3.8	11.0
006418	1270	< 1	5.8	13.7	30	4.3	4.0	53.7	< 2	8.8	3.6	0.7	131	1.3	0.7	< 6	2.9	0.3	0.5	2.1	353	< 0.7	28.0
006419	1750	< 1	9.8	18.4	40	7.0	5.5	77.9	< 2	8.5	5.3	1.9	175	0.7	1.0	< 6	3.9	0.5	0.7	1.0	452	< 0.7	39.9
006420	1190	< 1	< 2.4	5.9	860	8.8	1.5	14.9	< 2	7.9	1.5	< 0.5	97	< 0.2	0.2	< 6	1.0	< 0.1	< 0.1	< 0.1	29	< 0.7	5.2
006421	1350	< 1	< 2.4	5.6	910	2.9	1.6	18.3	< 2	6.7	1.5	< 0.5	125	< 0.2	0.2	< 6	0.7	0.1	< 0.1	< 0.1	30	< 0.7	5.6

Results

Analyte Symbol	Yb	Zn
Unit Symbol	ppm	ppm
Lower Limit	0.1	30
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2
006401	3.5	160
006402	3.3	140
006403	0.6	80
006404	0.4	70
006405	0.5	60
006406	0.5	70
006407	0.4	90
006408	0.3	70
006409	0.4	100
006410	0.3	100
006411	0.4	70
006412	0.4	70
006413	0.4	80
006414	0.4	60
006415	0.3	60
006416	0.4	70
006417	1.8	30
006418	2.8	110
006419	4.1	130
006420	0.5	80
006421	0.5	80

QC

Analyte Symbol	Au	Pd	Pt	Ag	Al	Ca	Fe	K	Mg	P	S	Si	Ti	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Unit Symbol	ppb	ppb	ppb	ppm	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Lower Limit	2	5	5	0.2	0.01	0.01	0.05	0.1	0.01	0.005	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
GXR-1 Meas				28.5																			
GXR-1 Cert				31.0																			
NIST 694 Meas														11.41	1.91	0.74	0.010	0.35	43.17	0.89	0.55	0.120	30.32
NIST 694 Cert														11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2
DNC-1 Meas														46.90	18.50	9.84	0.150	10.04	11.38	1.90	0.22	0.490	0.04
DNC-1 Cert														47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070
GBW 07113 Meas														72.41	12.80	3.18	0.140	0.14	0.59	2.50	5.42	0.280	0.04
GBW 07113 Cert														72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500
GXR-4 Meas				3.9	7.70	1.03	3.15	4.1	1.76	0.125	1.81	30.1	0.30										
GXR-4 Cert				4.0	7.20	1.01	3.09	4.01	1.66	0.120	1.77	30.89	0.29										
GXR-6 Meas				0.4																			
GXR-6 Cert				1.30																			
LKSD-3 Meas																							
LKSD-3 Cert																							
OKA-2 Meas																							
OKA-2 Cert																							
W-2a Meas														52.63	14.94	10.74	0.170	6.18	11.00	2.22	0.62	1.060	0.11
W-2a Cert														52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas														49.97	20.59	6.14	0.110	0.51	8.12	6.90	1.64	0.290	0.10
SY-4 Cert														49.9	20.69	6.21	0.108	0.54	8.05	7.10	1.66	0.287	0.131
CTA-AC-1 Meas																							
CTA-AC-1 Cert																							
BIR-1a Meas														48.18	15.88	11.34	0.170	9.62	13.41	1.86	0.02	0.980	< 0.01
BIR-1a Cert														47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021
NCS DC86312 Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas																							
NCS DC70009 (GBW07241) Cert																							
MP-1b Meas						2.56	8.34		0.02		13.5	16.8											
MP-1b Cert						2.47	8.19		0.024		13.79	16.79											
OREAS 101a (Fusion) Meas																							
OREAS 101a (Fusion) Cert																							
JR-1 Meas																							
JR-1 Cert																							
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SAR-M (U.S.G.S.) Meas				4.0																			
SAR-M (U.S.G.S.) Cert				3.64																			
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas	4780	5940	4900																				

Analyte Symbol	Au	Pd	Pt	Ag	Al	Ca	Fe	K	Mg	P	S	Si	Ti	SiO2	Al2O3	Fe2O3(T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5
Unit Symbol	ppb	ppb	ppb	ppm	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Lower Limit	2	5	5	0.2	0.01	0.01	0.05	0.1	0.01	0.005	0.01	0.01	0.01	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01
Method Code	FA-ICP	FA-ICP	FA-ICP	AR-ICP	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-Na2O2	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP
PK2 Cert	4785.000	5918.000	4749.000																				
CDN-PGMS-25 Meas	489	1890	433																				
CDN-PGMS-25 Cert	483	1830	400																				
006410 Orig	< 2	< 5	< 5	< 0.2	1.55	5.22	9.11	0.3	17.4	0.020	0.02	20.8	0.11										
006410 Dup	< 2	< 5	< 5	< 0.2	1.52	5.14	8.96	0.3	17.1	0.019	0.02	20.2	0.11										
006420 Orig	< 2	< 5	< 5	< 0.2	1.98	5.09	8.47	0.3	16.8	0.023	0.03	19.8	0.15										
006420 Dup	< 2	< 5	< 5	< 0.2	1.99	5.08	8.54	0.3	16.8	0.023	0.03	19.8	0.15										
006421 Orig														42.38	4.22	11.47	0.184	26.64	7.07	0.52	0.36	0.277	0.05
006421 Dup														42.50	4.33	11.53	0.185	27.16	7.10	0.53	0.37	0.282	0.04
Method Blank				< 0.2																			
Method Blank	< 2	< 5	< 5																				
Method Blank	< 2	< 5	< 5																				
Method Blank																							
Method Blank					< 0.01	< 0.01	< 0.05	< 0.1	< 0.01	< 0.005	< 0.01	0.02	< 0.01										
Method Blank																							

QC

Analyte Symbol	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb
Unit Symbol	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit		0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4	1	2	0.5	0.2	1	0.5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
GXR-1 Meas																							
GXR-1 Cert																							
NIST 694 Meas					1629																		
NIST 694 Cert					1740																		
DNC-1 Meas			31		157	300	60	250	100						148	17	37						1.0
DNC-1 Cert			31		148	270	57	247	100						144.0	18.0	38						0.96
GBW 07113 Meas			5	4	7										41	49	409						
GBW 07113 Cert			5.00	4.00	5.00										43.0	43.0	403						
GXR-4 Meas																							
GXR-4 Cert																							
GXR-6 Meas																							
GXR-6 Cert																							
LKSD-3 Meas						80	32	60					25	82					< 2	2.7		2	
LKSD-3 Cert						87.0	30.0	47.0					27.0	78.0					2.00	2.70		3.00	
OKA-2 Meas																							
OKA-2 Cert																							
W-2a Meas			35	< 1	277	100	45	70	110	80	17	2	< 5	19	194	20	95		< 2	1.0			
W-2a Cert			36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	1.20	21.0	190	24.0	94.0		0.600	0.0460			
DTS-2b Meas						15700	128	3780															
DTS-2b Cert						15500	120	3780															
SY-4 Meas			1	3	8										1185	119	538						
SY-4 Cert			1.1	2.6	8.0										1191	119	517						
CTA-AC-1 Meas									50														
CTA-AC-1 Cert									54.0														
BIR-1a Meas			43	< 1	335	400	55	180	120	70	15				110	14	16						0.6
BIR-1a Cert			44	0.58	310	370	52	170	125	70	16				110	16	18						0.58

Analyte Symbol	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb
Unit Symbol	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit		0.01	1	1	5	20	1	20	10	30	1	1	5	2	2	2	4	1	2	0.5	0.2	1	0.5
Method Code	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-ICP	FUS-ICP	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
NCS DC86312 Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas							3	< 20	980	100	16	11	67							1.8			2.6
NCS DC70009 (GBW07241) Cert							3.7	2.8	960	100	16.5	11.2	69.9							1.8			3.1
MP-1b Meas																							
MP-1b Cert																							
OREAS 101a (Fusion) Meas							51		420										21				
OREAS 101a (Fusion) Cert							48.8		434										21.9				
JR-1 Meas								< 20			17		16					15		< 0.5	< 0.2	2	1.2
JR-1 Cert								1.67			16.1		16.3					15.2		0.031	0.028	2.86	1.19
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SAR-M (U.S.G.S.) Meas																							
SAR-M (U.S.G.S.) Cert																							
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas																							
PK2 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
006410 Orig																							
006410 Dup																							
006420 Orig																							
006420 Dup																							
006421 Orig	5.98	99.15	25	< 1	106	2660	99	810	30	80	5	1	< 5	14	131	4	24	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
006421 Dup	5.98	100.0	25	< 1	108	2640	97	810	30	80	5	1	< 5	14	133	4	24	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank						< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5	< 2				< 1	< 2	< 0.5	< 0.2	< 1	< 0.5
Method Blank																							
Method Blank																							

QC

Analyte Symbol	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Th
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	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.1
Method Code	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
GXR-1 Meas																							
GXR-1 Cert																							
NIST 694 Meas																							
NIST 694 Cert																							
DNC-1 Meas		104		3.3			5.4		0.61							1.9							

Analyte Symbol	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Th
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	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.1
Method Code	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
DNC-1 Cert		118		3.6			5.20		0.59							2.0							
GBW 07113 Meas		499																					
GBW 07113 Cert		506																					
GXR-4 Meas																							
GXR-4 Cert																							
GXR-6 Meas																							
GXR-6 Cert																							
LKSD-3 Meas	2.0			49.5	93.8		46.2	8.3	1.60		0.9	5.1				2.8	0.50	4.8	0.6				10.9
LKSD-3 Cert	2.30			52.0	90.0		44.0	8.00	1.50		1.00	4.90				2.70	0.400	4.80	0.700				11.4
OKA-2 Meas																							29000
OKA-2 Cert																							28900.000
W-2a Meas		174	< 0.4	11.0	23.9		12.7	3.3			0.6	3.8	0.8			2.0	0.32	2.5	0.4	2	< 0.1		2.2
W-2a Cert		182	0.0300	10.0	23.0		13.0	3.30			0.630	3.60	0.760			2.10	0.330	2.60	0.500	0.300	0.200		2.40
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas		346																					
SY-4 Cert		340																					
CTA-AC-1 Meas				2360	3600				50.0	135						11.6							
CTA-AC-1 Cert				2176	3326				46.7	124						11.4							
BIR-1a Meas		7					2.4	1.2	0.54	2.0						1.7	0.29	0.5					
BIR-1a Cert		6					2.5	1.1	0.55	2.0						1.7	0.3	0.60					
NCS DC86312 Meas				2540	191		1730				34.9	200	37.9		14.7	90.8							
NCS DC86312 Cert				2360	190		1600				34.6	183	36		15.1	87.79							
NCS DC70009 (GBW07241) Meas	45.2			25.1	62.7	8.20	32.1	12.7		15.8	3.2	22.1	4.5	14.3	2.30		2.46			2210	2.1		29.3
NCS DC70009 (GBW07241) Cert	41			23.7	60.3	7.9	32.9	12.5		14.8	3.3	20.7	4.5	13.4	2.2		2.4			2200	1.8		28.3
MP-1b Meas																							
MP-1b Cert																							
OREAS 101a (Fusion) Meas				858	1470	140	424	53.0	8.58		5.6	34.3	7.0	21.0	3.00	19.1	2.69						37.1
OREAS 101a (Fusion) Cert				816	1396	134	403	48.8	8.06		5.92	33.3	6.46	19.5	2.90	17.5	2.66						36.6
JR-1 Meas	21.3		0.4	20.0	48.5		24.8	6.4	0.30		1.1				0.69	4.9	0.76	4.4	1.8			20	28.1
JR-1 Cert	20.8		0.56	19.7	47.2		23.3	6.03	0.30		1.01				0.67	4.55	0.71	4.51	1.86			19.3	26.7
NCS DC86318 Meas				2040	418	727	3320	1760	19.7	2190	476	3120	567	1690	274	1800	252						
NCS DC86318 Cert				1960	430	740	3430	1720	18.91	2095	470	3220	560	1750	270	1840	260.0						
SAR-M (U.S.G.S.) Meas																							
SAR-M (U.S.G.S.) Cert																							
USZ 42-2006 Meas				20900	29000	2380	6190	504	83.6														
USZ 42-2006 Cert				21100	27600	2300	6500	539	87.22														
PK2 Meas																							
PK2 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
006410 Orig																							

Analyte Symbol	Cs	Ba	Bi	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Hf	Ta	W	Tl	Pb	Th
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	0.5	3	0.4	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1	0.04	0.2	0.1	1	0.1	5	0.1
Method Code	FUS-MS	FUS-ICP	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS	FUS-MS
006410 Dup																							
006420 Orig																							
006420 Dup																							
006421 Orig	1.6	147	< 0.4	5.4	12.1	1.65	7.3	1.9	0.46	1.4	0.2	1.1	0.2	0.6	0.08	0.5	0.08	0.5	< 0.1	2	< 0.1	< 5	0.7
006421 Dup	1.6	147	< 0.4	5.0	11.3	1.59	6.9	1.7	0.48	1.5	0.2	1.0	0.2	0.6	0.09	0.6	0.08	0.5	< 0.1	1	< 0.1	< 5	0.6
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 0.5		< 0.4	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1	< 0.04	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.1
Method Blank																							
Method Blank																							

QC

Analyte Symbol	U	As	B	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Ge	Ho	Hf	In	La	Li
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	0.1	5	10	3	4	2	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.2	0.1	0.7	0.2	10	0.2	0.4	3
Method Code	FUS-MS	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
GXR-1 Meas		413	20	748	< 4	1570	3	14.4	7.3	< 30	2.7	1170	4.6		0.6	13.7	3.8			< 10	0.9	7.3	9
GXR-1 Cert		427	15.0	750	1.22	1380	3.30	17.0	8.20	12.0	3.00	1110	4.30		0.690	13.8	4.20			0.960	0.770	7.50	8.20
NIST 694 Meas																							
NIST 694 Cert																							
DNC-1 Meas																							
DNC-1 Cert																							
GBW 07113 Meas																							
GBW 07113 Cert																							
GXR-4 Meas		98	< 10	1540	< 4	18	< 2	97.0	12.2	70	2.2	5870	2.4		1.1	18.7	4.1			< 10	< 0.2	54.8	12
GXR-4 Cert		98.0	4.50	1640	1.90	19.0	0.860	102	14.6	64.0	2.80	6520	2.60		1.63	20.0	5.25			6.30	0.270	64.5	11.1
GXR-6 Meas																							
GXR-6 Cert																							
LKSD-3 Meas	4.8																						
LKSD-3 Cert	4.60																						
OKA-2 Meas																							
OKA-2 Cert																							
W-2a Meas	0.5																						
W-2a Cert	0.530																						
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas																							
SY-4 Cert																							
CTA-AC-1 Meas	4.2																						
CTA-AC-1 Cert	4.4																						
BIR-1a Meas																							
BIR-1a Cert																							
NCS DC86312 Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas																							

Analyte Symbol	U	As	B	Ba	Be	Bi	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Ga	Gd	Ge	Ho	Hf	In	La	Li
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	0.1	5	10	3	4	2	2	0.8	0.2	30	0.1	2	0.3	0.1	0.1	0.2	0.1	0.7	0.2	10	0.2	0.4	3
Method Code	FUS-MS	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
NCS DC70009 (GBW07241) Cert																							
MP-1b Meas		20400				836	496					> 10000									514		
MP-1b Cert		23000.00				954.0000	527.0000					30690.000									565.0000		
OREAS 101a (Fusion) Meas	427							1400	53.2			516	33.9	20.4	8.5		41.9		7.0			823	
OREAS 101a (Fusion) Cert	422							1396	48.8			434	33.3	19.5	8.06		43.4		6.46			816	
JR-1 Meas	9.0																						
JR-1 Cert	8.88																						
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SAR-M (U.S.G.S.) Meas																							
SAR-M (U.S.G.S.) Cert																							
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas																							
PK2 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
006410 Orig		< 5	< 10	145	< 4	< 2	< 2	10.5	97.9	2460	1.0	8	0.8	0.4	0.4	3.6	1.1	1.3	< 0.2	< 10	< 0.2	5.0	12
006410 Dup		< 5	10	155	< 4	< 2	< 2	10.9	107	2630	1.2	9	0.8	0.4	0.4	4.0	1.2	1.3	< 0.2	< 10	< 0.2	5.0	14
006420 Orig		< 5	20	139	< 4	< 2	< 2	11.5	103	2520	1.1	63	1.0	0.5	0.4	4.8	1.4	1.1	< 0.2	< 10	< 0.2	4.8	5
006420 Dup		62	20	132	< 4	4	< 2	12.4	100.0	2440	0.9	66	1.0	0.5	0.4	4.8	1.4	1.0	< 0.2	< 10	< 0.2	4.6	4
006421 Orig	0.2																						
006421 Dup	0.2																						
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 0.1																						
Method Blank																							
Method Blank		< 5	< 10	< 3	< 4	< 2	< 2	< 0.8	< 0.2	< 30	< 0.1	< 2	< 0.3	< 0.1	< 0.1	< 0.2	< 0.1	< 0.7	< 0.2	< 10	< 0.2	< 0.4	< 3

QC

Analyte Symbol	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Tl	Tm	U	V	W	Y
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	3	1	2.4	0.4	10	0.8	0.1	0.4	2	0.8	0.1	0.5	3	0.2	0.1	6	0.1	0.1	0.1	0.1	5	0.7	0.1
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
GXR-1 Meas	793	15	< 2.4	6.2	40	773		3.9	124	7.3	2.5	51.9	266	< 0.2	0.7	17	2.3	0.4	0.4	33.3	87	168	27.9
GXR-1 Cert	852	18.0	0.800	18.0	41.0	730		14.0	122	16.6	2.70	54.0	275	0.175	0.830	13.0	2.44	0.390	0.430	34.9	80.0	164	32.0
NIST 694 Meas																							
NIST 694 Cert																							
DNC-1 Meas																							
DNC-1 Cert																							

Analyte Symbol	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Tl	Tm	U	V	W	Y
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	3	1	2.4	0.4	10	0.8	0.1	0.4	2	0.8	0.1	0.5	3	0.2	0.1	6	0.1	0.1	0.1	0.1	5	0.7	0.1
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
GBW 07113 Meas																							
GBW 07113 Cert																							
GXR-4 Meas	130	280	9.1	26.9	30	46.2		161	4	6.2	5.1	6.3	193	0.7	0.4	< 6	20.1	2.6	0.2	5.3	92	33.7	12.7
GXR-4 Cert	155	310	10.0	45.0	42.0	52.0		160	4.80	5.60	6.60	5.60	221	0.790	0.360	0.970	22.5	3.20	0.210	6.20	87.0	30.8	14.0
GXR-6 Meas																							
GXR-6 Cert																							
LKSD-3 Meas																							
LKSD-3 Cert																							
OKA-2 Meas																							
OKA-2 Cert																							
W-2a Meas																							
W-2a Cert																							
DTS-2b Meas																							
DTS-2b Cert																							
SY-4 Meas																							
SY-4 Cert																							
CTA-AC-1 Meas																							
CTA-AC-1 Cert																							
BIR-1a Meas																							
BIR-1a Cert																							
NCS DC86312 Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas																							
NCS DC70009 (GBW07241) Cert																							
MP-1b Meas		247				> 5000			46			> 10000										978	
MP-1b Cert		285				20910.000			54.0			16100.000										1100.000	
OREAS 101a (Fusion) Meas	1020	19		306		10.5	131				47.5				5.2		35.9		3.2	451	97		190
OREAS 101a (Fusion) Cert	964	21.9		403		19	134				48.8				5.92		36.6		2.90	422	83		183
JR-1 Meas																							
JR-1 Cert																							
NCS DC86318 Meas																							
NCS DC86318 Cert																							
SAR-M (U.S.G.S.) Meas																							
SAR-M (U.S.G.S.) Cert																							
USZ 42-2006 Meas																							
USZ 42-2006 Cert																							
PK2 Meas																							
PK2 Cert																							
CDN-PGMS-25 Meas																							
CDN-PGMS-25 Cert																							
006410 Orig	1310	< 1	4.7	4.4	640	4.0	1.3	16.8	< 2	5.6	1.2	< 0.5	97	< 0.2	0.1	< 6	0.8	0.1	< 0.1	0.2	< 5	< 0.7	3.8

Analyte Symbol	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb	Sb	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Tl	Tm	U	V	W	Y
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	3	1	2.4	0.4	10	0.8	0.1	0.4	2	0.8	0.1	0.5	3	0.2	0.1	6	0.1	0.1	0.1	0.1	5	0.7	0.1
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2	FUS-MS-Na2O2
006410 Dup	1400	< 1	< 2.4	5.0	700	4.4	1.4	18.3	< 2	7.0	1.3	< 0.5	102	< 0.2	0.1	< 6	0.8	0.1	< 0.1	0.2	< 5	< 0.7	4.1
006420 Orig	1200	< 1	< 2.4	5.6	880	3.4	1.5	15.2	< 2	7.9	1.5	< 0.5	103	< 0.2	0.2	< 6	0.6	< 0.1	< 0.1	< 0.1	31	< 0.7	5.3
006420 Dup	1170	< 1	< 2.4	6.3	840	14.2	1.5	14.7	< 2	7.9	1.6	16.3	91	< 0.2	0.2	< 6	1.5	< 0.1	< 0.1	< 0.1	26	10.5	5.1
006421 Orig																							
006421 Dup																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank																							
Method Blank	< 3	< 1	< 2.4	< 0.4	< 10	< 0.8	< 0.1	< 0.4	< 2	< 0.8	< 0.1	< 0.5	< 3	< 0.2	< 0.1	< 6	< 0.1	< 0.1	< 0.1	< 0.1	< 5	< 0.7	< 0.1

QC

Analyte Symbol	Yb	Zn
Unit Symbol	ppm	ppm
Lower Limit	0.1	30
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2
GXR-1 Meas	2.2	780
GXR-1 Cert	1.90	760
NIST 694 Meas		
NIST 694 Cert		
DNC-1 Meas		
DNC-1 Cert		
GBW 07113 Meas		
GBW 07113 Cert		
GXR-4 Meas	1.0	70
GXR-4 Cert	1.60	73.0
GXR-6 Meas		
GXR-6 Cert		
LKSD-3 Meas		
LKSD-3 Cert		
OKA-2 Meas		
OKA-2 Cert		
W-2a Meas		
W-2a Cert		
DTS-2b Meas		
DTS-2b Cert		
SY-4 Meas		
SY-4 Cert		
CTA-AC-1 Meas		
CTA-AC-1 Cert		
BIR-1a Meas		
BIR-1a Cert		
NCS DC86312 Meas		
NCS DC86312 Cert		
NCS DC70009 (GBW07241) Meas		

Analyte Symbol	Yb	Zn
Unit Symbol	ppm	ppm
Lower Limit	0.1	30
Method Code	FUS-MS-Na2O2	FUS-MS-Na2O2
NCS DC70009 (GBW07241) Cert		
MP-1b Meas		> 10000
MP-1b Cert		166700.00
OREAS 101a (Fusion) Meas	19.2	
OREAS 101a (Fusion) Cert	17.5	
JR-1 Meas		
JR-1 Cert		
NCS DC86318 Meas		
NCS DC86318 Cert		
SAR-M (U.S.G.S.) Meas		
SAR-M (U.S.G.S.) Cert		
USZ 42-2006 Meas		
USZ 42-2006 Cert		
PK2 Meas		
PK2 Cert		
CDN-PGMS-25 Meas		
CDN-PGMS-25 Cert		
006410 Orig	0.3	100
006410 Dup	0.4	100
006420 Orig	0.5	80
006420 Dup	0.5	90
006421 Orig		
006421 Dup		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank		
Method Blank	< 0.1	< 30

APPENDIX C: SUMMARY OF EXPENDITURES

BATTERSBY SEPTEMBER-OCTOBER DRILLING EXPENDITURES

Drilling (September 18-21st, 2015)	**#**	**rate**	**Sub-total**	**Sub-total w/ GST**
Geologist – Scott Parsons	7.5 days	$500.00	$3,750	$4237.5
Assistant – Ron Poirier	4 days	$300.00	$1,200	$1,356
Travel (Scott Parsons)	1886 km	$0.52	$981	$1,108
Meals travelling (Scott Parsons)			$65	$65
Labour, Michael Weirmeir (not claimed to OEC)	3 days	NC		
Labour, Victor Cerilli (not claimed to OEC)	1 days	NC		
Travel – M. Weirmeir	1200 km	$0.52	$624	$624
Travel – Victor Cerilli	1700 km	$0.52	$884	$884
Equipment Rental (chain saw)			$200	$226
Food			$155	$155
Supplies (sample bags)			$45	$45
Supplies (field books)			$25	$25
Chenier Drilling Service (BAT-001, 238m)			$15,183	$17,452
Core Cutting			$600	$678
Analysis				
Actlabs			$2,009	$2,270
Reporting				
Geologist	7.5 days	$500.00	$3,750	$4237.5
TOTAL			**$29,446**	**$33,337**