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Report On Channel Sampling, Prospecting and MMI  
Survey  
Performed 2017

Abbie Lake Property  
Argo Gold Inc.

Abbie Lake Area  
Sault Ste. Marie Mining Division  
District of Algoma  
NTS:



August, 2019

Version: V 1.0  
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## **Executive Summary**

Argo Gold completed an exploration program on its wholly owned Abbie Lake Property in the Michipicoten Greenstone Belt approximately 40km west-south-west of Wawa, ON. The program consisted of channel sampling, an MMI survey and rock sampling (grab and channel). The work was carried in the summer and early fall of 2017 to 2018

The program was based on compilation of historical data and centred on a number of trenches and stripped areas from the 1990s and earlier. The bulk of the work completed was grab channel sampling testing the Iron Lake Deformation Zone (ILDZ) of known north-east-south-west striking auriferous zones. The limited MMI survey was completed to test whether MMI is a viable exploration method for this property and to test if the zones could be detected between stripped areas.

The channel sampling confirmed historical results and extended the zones along strike. Infill sampling helped to better define where gold is occurring within the zones.

The results of the MMI survey show that this type of geochem survey would be useful for other areas of the property.

Results from the program confirm that the property has the potential for an economic deposit and more work should be carried out to better define the extent of the auriferous mineralized zones.

## **Introduction**

In the summer and fall of 2017, Argo Gold Corp. completed an exploration program on their Abbie Lake Property in Abbie Lake Area, Northeastern Ontario. The program consisted of prospecting, channel sampling and an MMI geochemistry survey.

The focus of the program was to investigate a portion of the Iron Lake Deformation Zone (ILDZ) covered by historic work that included prospecting, geological mapping, geochem surveys, airborne and ground geophysics, stripping and diamond drilling.

The work was carried out on behalf of Argo Gold Corp by Frank Racicot. This report describes the methods and results of the program.



## Location and Access

The Abbie Lake property is located approximately 60 km northwest of the town of Wawa, Ontario and approximately 75 km southwest of Dubreuilville, Ontario, in the southwest corner of Abbie Lake Area of the Sault Ste. Marie Mining Division (Figure 1). The specific project location is described in the following table.

**Table 1. Project Location**

Area:	Algoma District
Township/Area:	Abbie Lake Area
Mining Division:	Sault Ste Marie
NTS:	42 C/03
Latitude:	48° 11" N
Longitude:	85° 24" W

Access to the property by following the Trans-Canada Highway #17N for approximately 50 km north of Wawa to the Paint Lake Road on the south side of the highway. The Paint Lake Road is followed south towards the Mishi Mine for approximately 40km. The Paint Lake Road transects the lower south-east portion of the claim block. Logging roads and trails provide access to interior portions of the property

The Paint Lake Road provides year-round access to the property.

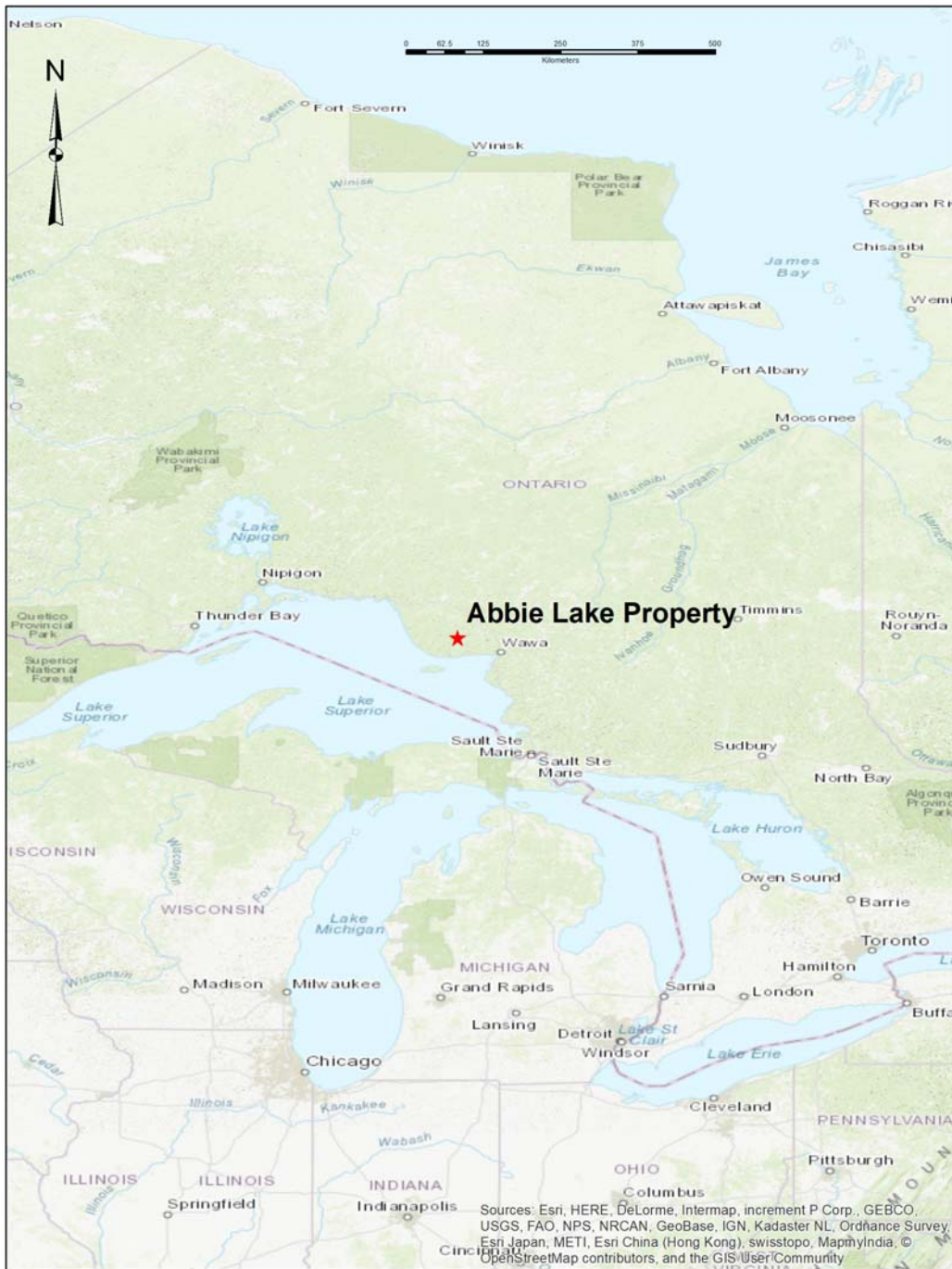


Figure 1. Property Location

## **Property Description**

At the time of the work (2017) the property consisted of 21 unpatented legacy mining claims (see Figure 2).

After the 2018 conversion, the property now consists of 203 cell and boundary cell claims.

A schedule of claims and property claim maps can be found in Appendix A.

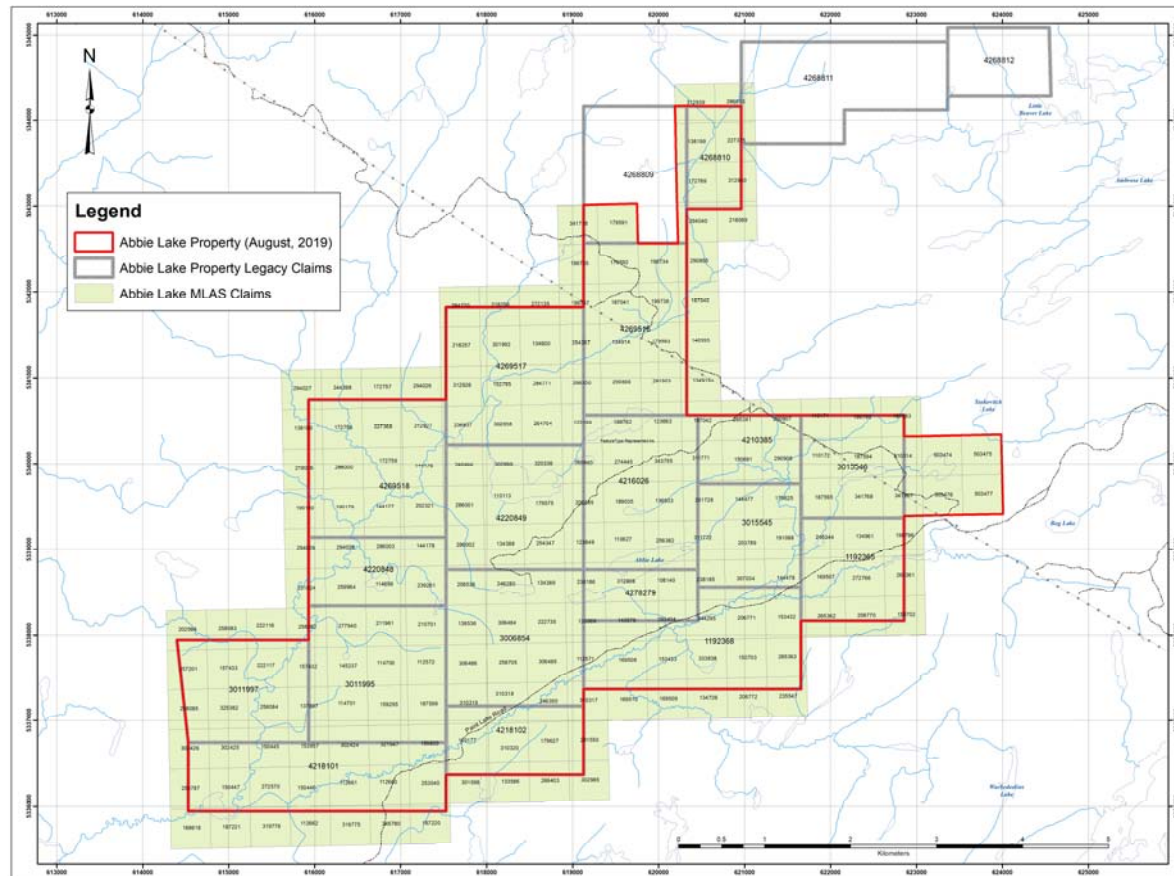
## **Topography**

The property is in moderately rugged terrain. The north west corner of the property is traversed by the East Pukaskwa River which flows south-westerly in a fault-controlled valley with steep sides.

The central part of the property is comparatively flat, transected by ridges and valleys of moderate relief. In the south, Abbie Lake has a southwest trend and flows into the East Pukaskwa River.

Elevation varies from 340 to 420 metres with much of the area explored at 410 metres (above sea level).

Figure 2. Abbie Lake Property Claim Location.



## Previous Work

The property has seen a significant amount of historical work predominantly centred around the ILDZ which strikes south-west through the lower half of the property and south-west of Abbie Lake. Types of work includes prospecting, geologic mapping, stripping, grab sampling and channel sampling with assaying, ground geophysics, soil geochemical surveys, and diamond drilling. The work completed by the main companies in the area of the property is summarized below:

Year	Company	Work Summary
1957	Canadian Pacific Railway	Prospecting, mapping, sampling. Fe, trace Au, Ag
1979	Noranda Exploration	Diamond drilling south-west area of the property. Two holes intersected felsic volcanics mixed with clastic sediments and iron formation. No significant results returned
1983-1988	Tundra Gold Mines Ltd.	Airborne magnetics and EM, ground magnetics and EM (VLF, mise a la masse) and IP, geochemistry, prospecting, geological mapping, diamond drilling (total 97 holes), power stripping. Work concentrated in an area in the south-west part of the property, northwest of the Paint Lake Road. The work uncovered and tested a number of quartz veins, the most significant named the Brown Vein which returned a chip sample of 78.5 grams/tonne (g/t) (see Figure 3). The last drilling in 1988 concentrated on the 'Contact Zone', described as veining occurring within a volcanic/sedimentary transition.
1989	Silver Sceptre Mines Ltd.	East-north-east area of the property. Geological mapping, geochemistry survey. No significant results; soil geochemistry identified weak, north-east trending echelon anomalies of Cu, Zn, Pb
1989	Lockwood Petroleum Inc	North area of the property. Prospecting, sampling, soil sampling. One or two north-east trending shear zones were identified. No significant assays from sampling or soil sampling returned.
1992	Freewest Resources Inc	Abbie Lake area and eastern extent of the property. Prospecting, traced 5km of the Iron Lake Deformation Zone with anomalous Au from grab samples.
1998	Freewest Resources Inc	Work centred around Abbie Lake and included prospecting/stripping and soil sampling. Shear zones were identified but no significant results were returned.
2005	Terex Resources Inc.	Southwest of Abbie Lake, centred on Brown Vein area identified by Tundra Gold Mines, completed MMI survey. Identified Au as the best pathfinder element. Limited extent to low anomalous Au zones.
2007	Trelawney Resources	Prospecting, area north-east of Tundra work. Grab samples returned anomalous Au often associated with chalcopyrite, pyrrhotite and pyrite mineralization and located within an area matching the Tundra Contact Zone (volcano-sedimentary contact)
2007-2009	Mike Tremblay	Prospecting, east of Tundra veins and east-central portion of the property. Anomalous Au grab samples confirmed gold mineralization related to the ILDZ
2010	Mike Tremblay	Completed 400m of diamond drilling in 2 holes along the ILDZ. Both holes encountered highly altered clastic sediments plus felsic intrusives. No sampling was reported.
2007-2011	Upper Canada Explorations	Carried out a number of programs over the south-east half of the property including airborne geophysics (EM and magnetics), ground geophysics (EM, magnetics, IP) and diamond drilling. Geophysics identified a number of north-east striking conductors associated with iron formations within the ILDZ and Contact Zone. Two diamond drill holes intersected "highly altered carbonated volcanics with green mica. The best assays were 1.0 g/tonne Au, 2.59 g/tonne and 1.55 g/tonne Au over narrow but undetermined widths" (Ferarro, D., Diamond Drill Report Abbie Lake Property, Canor Ventures, 2014)
2011-2014	20000008401 Ontario Inc (Giyani Gold) / Canoe Mining Ventures Corp.	Stripping, ground geophysics (EM, magnetics, IP) and diamond drilling. Diamond drilling. Ten diamond drill holes totaling 1301m tested IP anomalies north-east along strike within the ILDZ associated with the Tundra Brown Vein and Contact Zone. Anomalous gold values were returned but results were sporadic.

## Regional/Exconomic Geology

The Abbie Lake Property is located at the western extremity of the Michipicoten greenstone belt which is part of the Wawa Subprovince of the Superior Province of the Canadian Shield. The Michipicoten greenstone belt is approximately 140 km long and a maximum of 45 km wide (Williams et al, 1991). The belt is comprised of three volcanic-sedimentary cycles of Archean age. The age of the rocks from oldest to youngest are: 2,889 Ma for the Hawk assemblage (cycle 1); 2,750 Ma for the Wawa assemblage (cycle 2), and 2,700 Ma for the Catfish assemblage (cycle 3). Abbie Lake is within the Wawa assemblage (Williams et al, 1991, p. 500). Ferraro, D. (2013) places the property “within the west-central and central part of the Kabenung Lake Synclinal Belt” (though mapping completed by MNM describing this folding does not extend this far west).

The Kabenung Lake Synclinal Belt is a comprised of mafic to intermediate metavolcanics, with lenses of more felsic metavolcanics, and a core of clastic metasediments and as well as chemical metasediments (iron formation). The regional strike of this belt is generally north-east. The units are enclosed to the east, west and south by younger felsic plutonic rocks and associated intrusive units.

The dominant structural feature of the Belt is the Iron Lake Deformation Zone (ILDZ) which strikes north-east through the belt proximal the Belt axis and slightly discordant to stratigraphy. The ILDZ is named for the Iron Lake Iron Range which is located near Iron Lake in Keating Township approximately 10km northeast from the centre of the Abbie Lake property. The zone is approximately 300m wide but becomes more diffuse and less distinct moving west towards the property.

Though exploration was initially attracted to the Belt by the iron deposits, these proved to be too lean to be mined economically. Other commodities that have been explored include gold, copper and zinc.

The Mishibishu Lake Greenstone Belt lies approximately 15km to the south of the property. The geology of the belt is similar to Kabenung Synclinal Belt and is similarly synclinally folded. The Mishibishu Belt hosts the currently operating Eagle River gold mine and the Mishi Pit open pit gold mine.

## Property Geology

The Abbie Lake property straddles the ILDZ in a north-east south-west direction and is underlain by mafic to intermediate rocks to the south-east, a core of metasediments through the south-central area and mafic to intermediate rocks to the north-west. Tundra Gold Mines completed the most detailed mapping of the area covered by the work described in this report (see Figure 3). Diabase dykes cut the units in a west-north-west orientation.

The rocks in of the ILDZ are weak to locally strongly sheared to schistose and are varyingly chlorite, carbonate (ankerite), sericite and quartz altered. Shearing is

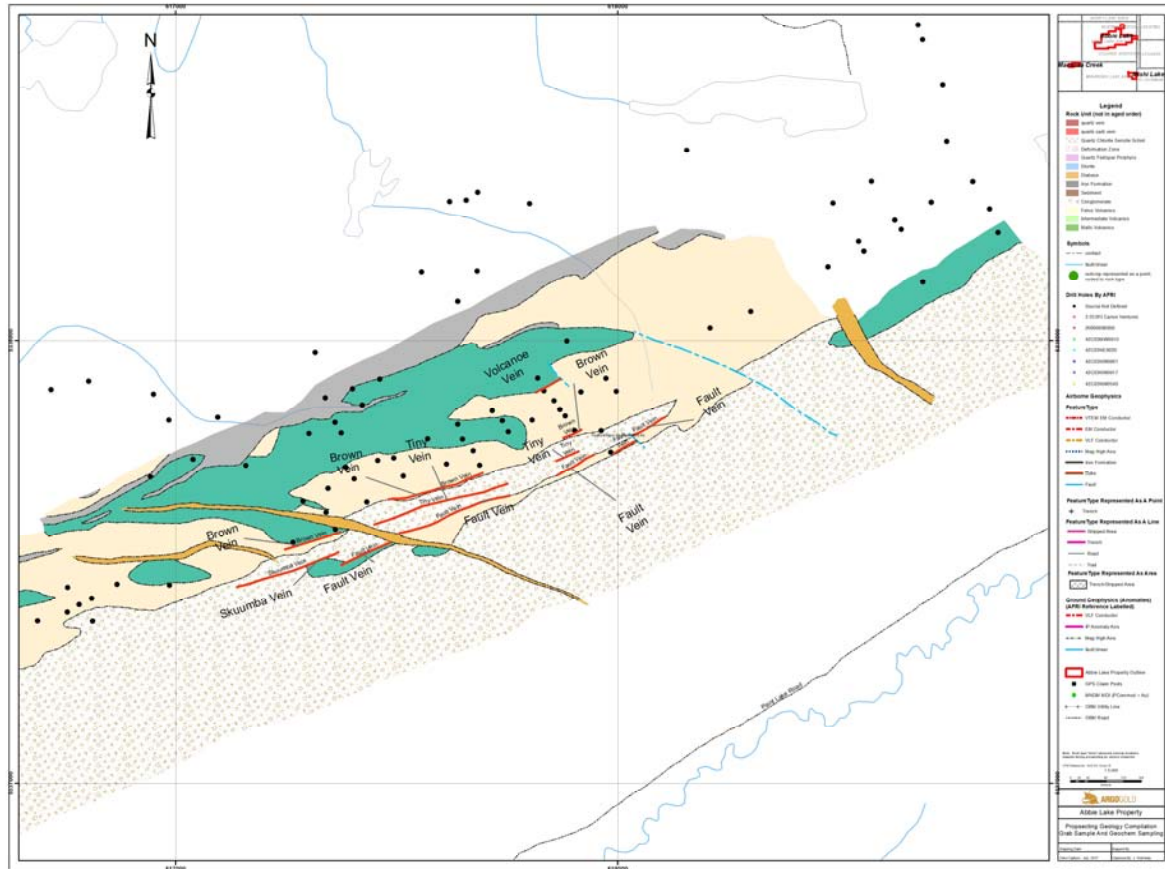
predominantly concordant to the ILDZ. The metavolcanic-metasedimentary contact is within the ILDZ.

The current work described in this report centred on the main known areas of gold mineralization south-west of Abbie Lake within the IDLZ and proximal to the metavolcanic-metasedimentary contact. In this area, Tundra Gold Mines stripped and mapped a number of quartz veins and quartz-tourmaline stockworks the most significant of which is the Brown Vein.

The Brown Vein is described as a discontinuous quartz-carbonate vein with varying pyrite and tourmaline mineralization concordant to the ILDZ within a sheared mafic volcanic/sericite schist just north of the contact with a polymictic conglomerate. The highest returned gold assay from surface was 7.9g/t over 0.6m. Similar veining is found within the volcanics and the sediments and have been described as the Contact Zone.

Other gold hosting environments include sulphide enriched, sheared and altered metavolcanics with a possible direct relationship of gold with pyrite content (described as the Sulphide Zone), and quartz-tourmaline stockworks within diorite intrusives within the sheared, altered metavolcanics.

**Figure 3. Abbie Lake Property Geology**  
(after Tundra Gold Mines)





## **Work Performed and Methodology**

The work was performed in 2017, *prior to the introduction of the new mining act in 2018 and claim conversion in 2018*. The exploration program included:

- Channel sampling
- Other sampling
- MMI geochem survey

Field work was performed from June, 2017 to December, 2017 and was principally carried out by Frank Racicot of Racicot Geological Consulting, Sudbury, ON; Gilbert Clement of Wawa, ON; Ryan Hodgson of Toronto, ON; and Frank Longpre of Wawa, ON. Additional personnel included Delio Tortosa, P.Eng of Sault Ste. Marie, ON, as program manager of Sault Ste. Marie, ON, and John Walmsley as data prep and report writing of Richards Landing, ON.

Channel sampling and prospecting was done on claims 214650, 330017, 234774. The MMI survey was done on claim 21460 only.

### ***Other Sampling and Channel Sampling***

Areas for sampling were defined through historic research. Target areas mainly consisted of known trenching and significant grab sample results. Traverses were made to specific locations either by vehicle where the area was accessible or by foot.

In sample areas with historic stripping, a sketch of the geology was made defining rock units, alteration, veining and sample locations.

In all 14 historical sites were sampled and mapped along with a number of other sites. A total of 61 channel samples were cut and sent for assaying plus 124 grab samples, totaling 185 samples.

Maps and sketches of the sampled areas can be found in the appendices.

### **Grab Sampling Methodology**

Grab samples were taken of rock that exhibited significant mineralization, quartz veining and/or alteration. Sample taken were a minimum of fist sized. Either flagging with the sample numbers were placed at the sample location or metal tags were glued to the rock surface beside each sample. Samples were described and sent for analysis.

Descriptions of the grab samples can be found in the appendices.

### **Channel Sampling Methodology**

Channels were marked out on outcrops with spray paint with sample lengths varying from 15cm to 130cm, measured with a measuring tape. Sample lengths varied based on geological features (e.g. veining, shearing, etc.) to establish which features were favorable for gold emplacement.

Channels were cut with a gas powered rock saw, with cuts as deep below surface weathering as possible and 5 to 7.5cm wide. The samples were then chiseled out using hammer and moil and placed in plastic sample bags. Metal tags with the sample number were glued beside the appropriate channel sample. Samples were later examined and described, replaced in the sample bags, zip tied and shipped for analysis.

Descriptions of the channel samples can be found in the appendices.

### ***MMI Geochemistry Survey***

Fifteen lines of MMI geochem sampling, with a total of 156 samples taken, were completed across the ILDZ southwest of Abbie Lake over a distance of about 4 km. The sampling lines were oriented in a NW-SE direction to transect the mineralization and sheared rocks of the ILDZ. Spacing between sampling lines varied from 100 to 300 metres, with sample intervals on each line spaced at 25 metre intervals. Profile lines are a cost-effective way to determine the MMI multi-element response over a long distance.

The MMI 8 element standard package using ICP-MS analysis was used which included the elements: Ag, As, Au, Ni, Cu, Co, Zn, and Y. Internal standards provided by SGS were relied upon for QA/QC. SGS Mineral Services conforms to the requirements of ISO/IEC 17025.

Descriptions of MMI samples can be found in the appendices.

### ***MMI Sampling Technique***

The crew utilized a shovel to sample at a consist depth of 15-20 cm below surface. All samples were taken from the mineral soil horizon below the A soil horizon. Bog areas and swampy conditions were avoided and as a result there was no organic content in the samples. Samples were taken with a plastic trowel which was cleaned between sample sites. Each sample was approximately 500-1000 grams in size and was placed in plastic "zip locked" bag. The sample was then placed in a second zip locked bag with the sample ID tag.

### ***MMI Data Presentation***

MMI data is generally treated through statistical methodology to calculate the response ratio (RR) for certain key elements and compounds obtained from analysis. The RR is plotted and contoured to establish anomalous trends of possible mineralization. The data population of this survey was considered too small to use this technique. Instead of calculating RR's, sample site values were treated single point values and bubble plots (symbolized points scaled based on the size of the result) were plotted and trends were identified based on symbol size.

### ***Quality Control***

Because of the small size of the program, quality control was dependent on internal procedures (standards, blanks and duplicates) of Actlabs for grab/channel sampling and SGS for MMI samples.

## Summary of Work

**Table 2. Summary of dates, operators and work tasks for the project**

Date	Operator	Days	Description
June, July August	Gilbert Clement	17	Channel Sampling, Sampling
August	Gilbert Clement	6	MMI survey
June, July, August, Sept	Frank Longpre	17	Channel Sampling, Sampling
August	Frank Longpre	6	MMI survey
July, August	Ryan Hodgson	17	Channel Sampling, Sampling
August	Ryan Hodgson	3	MMI survey
June, July, August, Sept	Frank Racicot	14	Channel Sampling, Sampling
August	Frank Racicot	3	MMI survey
<b>Total Days</b>		<b>83</b>	

## Summary Of Costs

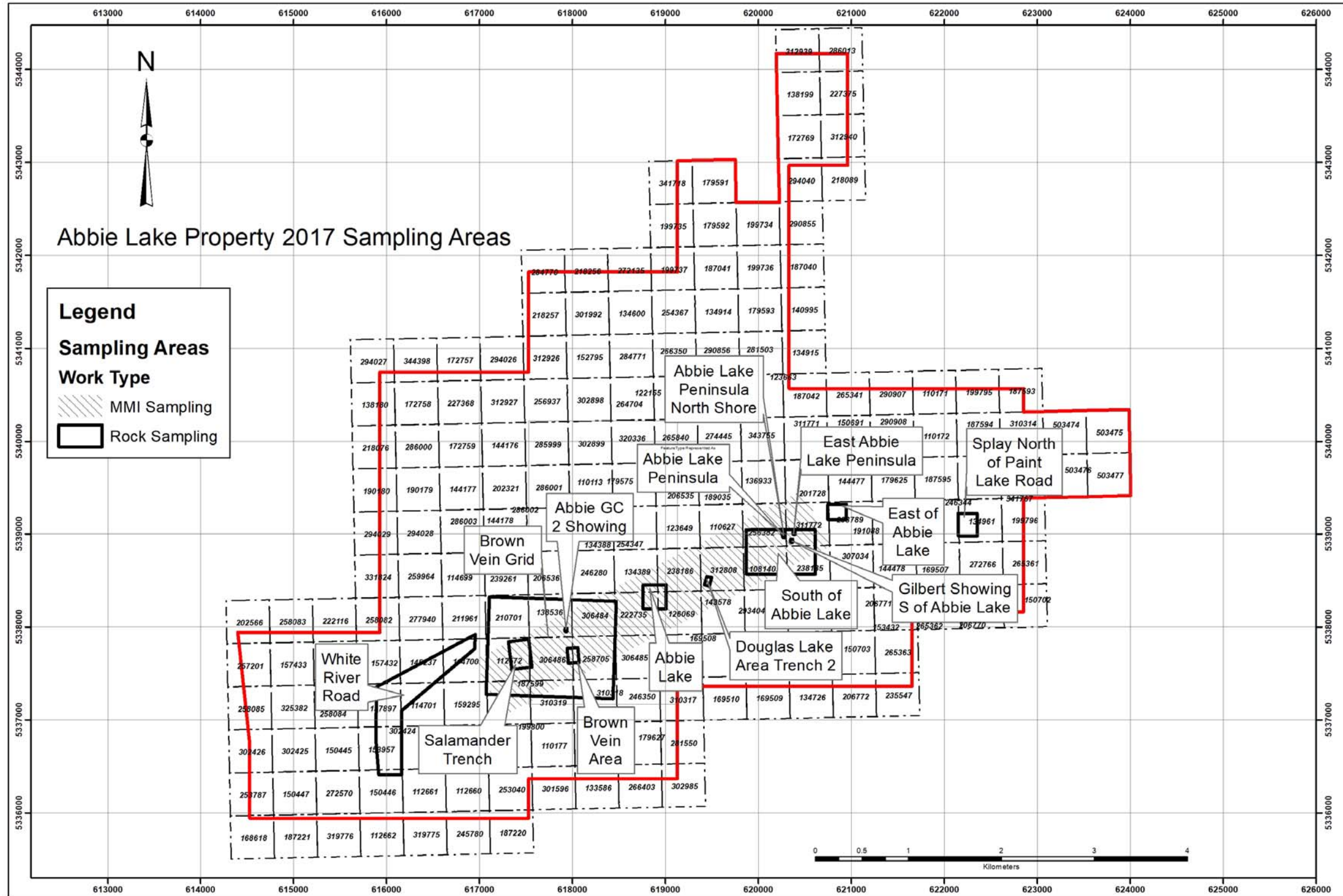
**Table 3. Summary of Work Costs**

Work Type	Man Days	Amount (>2yrs)	Amount (<2yrs)
MMI Survey	18	\$ 6210	0
Channel/Grab Sampling	65	\$ 22,320.00	0
Rock Sample Assaying (before Oct 2017)		\$4,775.80	0
Rock Sample Assaying (after Oct 2017)		0	\$2,110.20
MMI Analysis (2018)		0	\$4,736.97
Equipment		\$ 490	0
Truck		1250	0
Meals		\$340	0
Accommodation		\$1940	0
Data Processing/Report (2019)		0	\$ 5,000.00
<b>Totals</b>	<b>63</b>	<b>\$37,325.80</b>	<b>\$11,847.17</b>

**Table 4. Sampling Cost Distribution By Claims Worked**

Claim Number	% Work	>2years Cost	<2 years Cost
108140	4	\$ 1,493.03	\$ 473.89
112572	14	\$ 5,225.61	\$ 1,658.60
114700	1	\$ 373.26	\$ 118.47
134389	2	\$ 746.52	\$ 236.94
134961	2	\$ 746.52	\$ 236.94
137897	2	\$ 746.52	\$ 236.94
138536	5	\$ 1,866.29	\$ 592.36
153957	2	\$ 746.52	\$ 236.94
203789	4	\$ 1,493.03	\$ 473.89
222735	9	\$ 3,359.32	\$ 1,066.25
238185	1	\$ 373.26	\$ 118.47
256382	8	\$ 2,986.06	\$ 947.77
258705	2	\$ 746.52	\$ 236.94
306486	13	\$ 4,852.35	\$ 1,540.13
311772	11	\$ 4,105.84	\$ 1,303.19
312808	6	\$ 2,239.55	\$ 710.83
126069	3	\$ 1,119.77	\$ 355.42
143578	1	\$ 373.26	\$ 118.47
187599	2	\$ 746.52	\$ 236.94
258705	4	\$ 1,493.03	\$ 473.89
306484	4	\$ 1,493.03	\$ 473.89
	<b>100</b>	<b>\$37,325.81</b>	<b>\$11,847.16</b>

Figure 4. Location of Work



## Discussion of Results

### *Rock Sampling*

**Table 5 Centre Point Location of Sampling Areas with Number Sample Types and Max g/t**

Sampling Area Name	Gab Samples	Channel Samples	Max g/t	UTM Northing	UTM Easting
Abbie GC 2 Showing		9	0.112	5337967	617932
Abbie Lake	2		0.045	5338325	618884
Abbie Lake Peninsula	10	3	0.078	5338980	620272
Abbie Lake Peninsula North Shore		15	0.025	5339011	620265
Brown Vein Area	5	5	0.351	5337696	618007
Brown Vein Grid	19		0.163	5337777	617772
Douglas Lake Area Trench 2	5	10	14.9	5338491	619458
East Abbie Lake Peninsula	3	8	0.033	5339015	620385
East of Abbie Lake	12		1.32	5339240	620846
Gilbert Showing S of Abbie Lake	1	9	0.061	5338927	620358
Salamander Trench	22		0.227	5337705	617438
South of Abbie Lake	11	2	0.234	5338809	620240
Splay North of Paint Lake Road	8		1.16	5339102	622251
White River Road	16		0.562	5337194	616237

A complete list of sampling locations along with sample descriptions can be found in the Appendices.

Original sketches of the sampling areas can be found in the Appendices. NOTE: sample numbers on the sketches greater than or equal to **336501** should be read as **337501**.

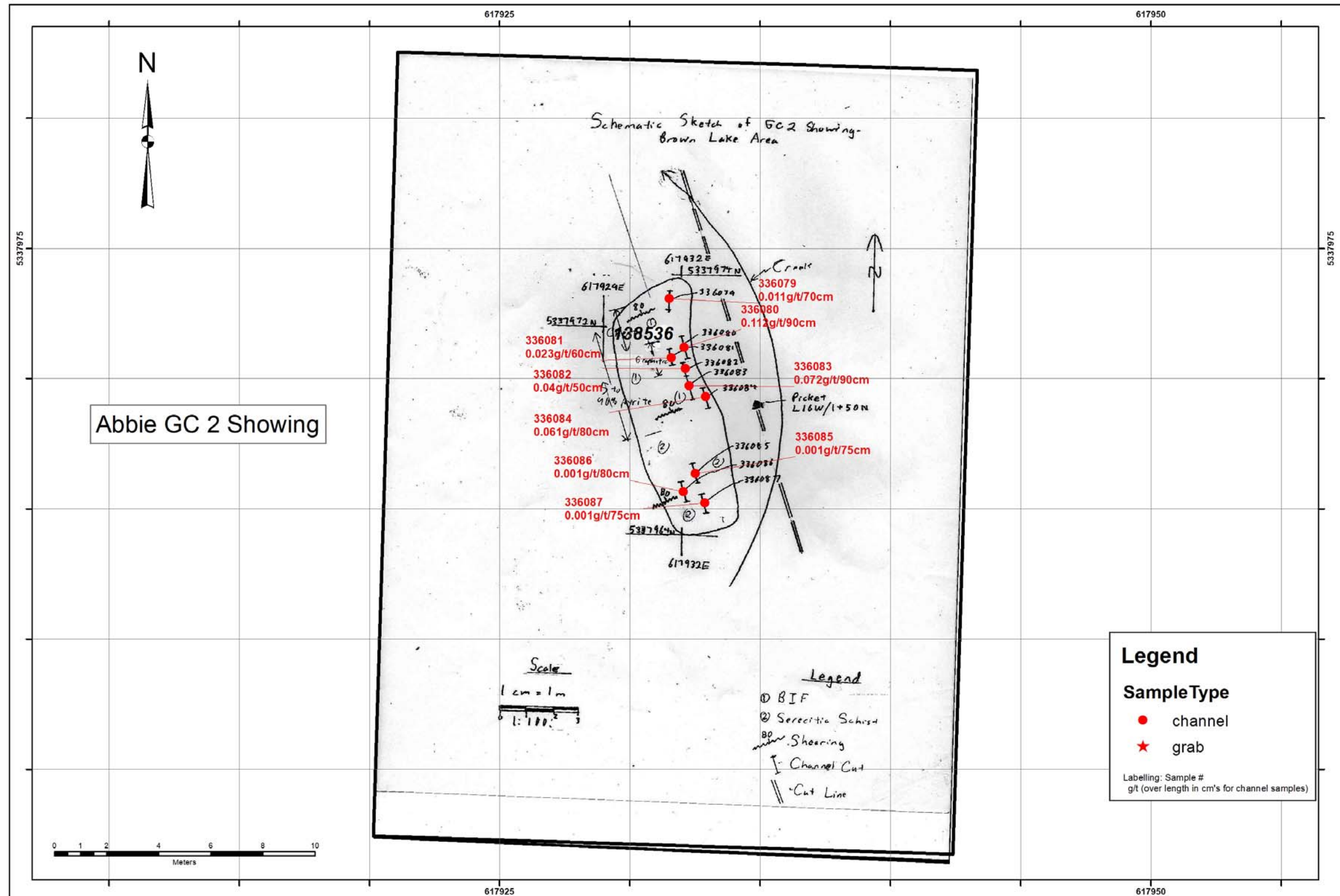
## Abbie GC 2 Showing

Abbie GC 2 showing was sampled by channel sampling only. The showing was of a historical trench.

**Table 6 Samples GC 2 Showing**

Area	Sample #	g/t	Length (cm)	Sample Type
Abbie GC 2 Showing	336079	0.011	70	channel
Abbie GC 2 Showing	336080	0.112	90	channel
Abbie GC 2 Showing	336081	0.023	60	channel
Abbie GC 2 Showing	336082	0.04	50	channel
Abbie GC 2 Showing	336083	0.072	90	channel
Abbie GC 2 Showing	336084	0.061	80	channel
Abbie GC 2 Showing	336085	0.001	75	channel
Abbie GC 2 Showing	336086	0.001	80	channel
Abbie GC 2 Showing	336087	0.001	75	channel

Figure 4 Sketch of GC 2 Showing and Sample Locations





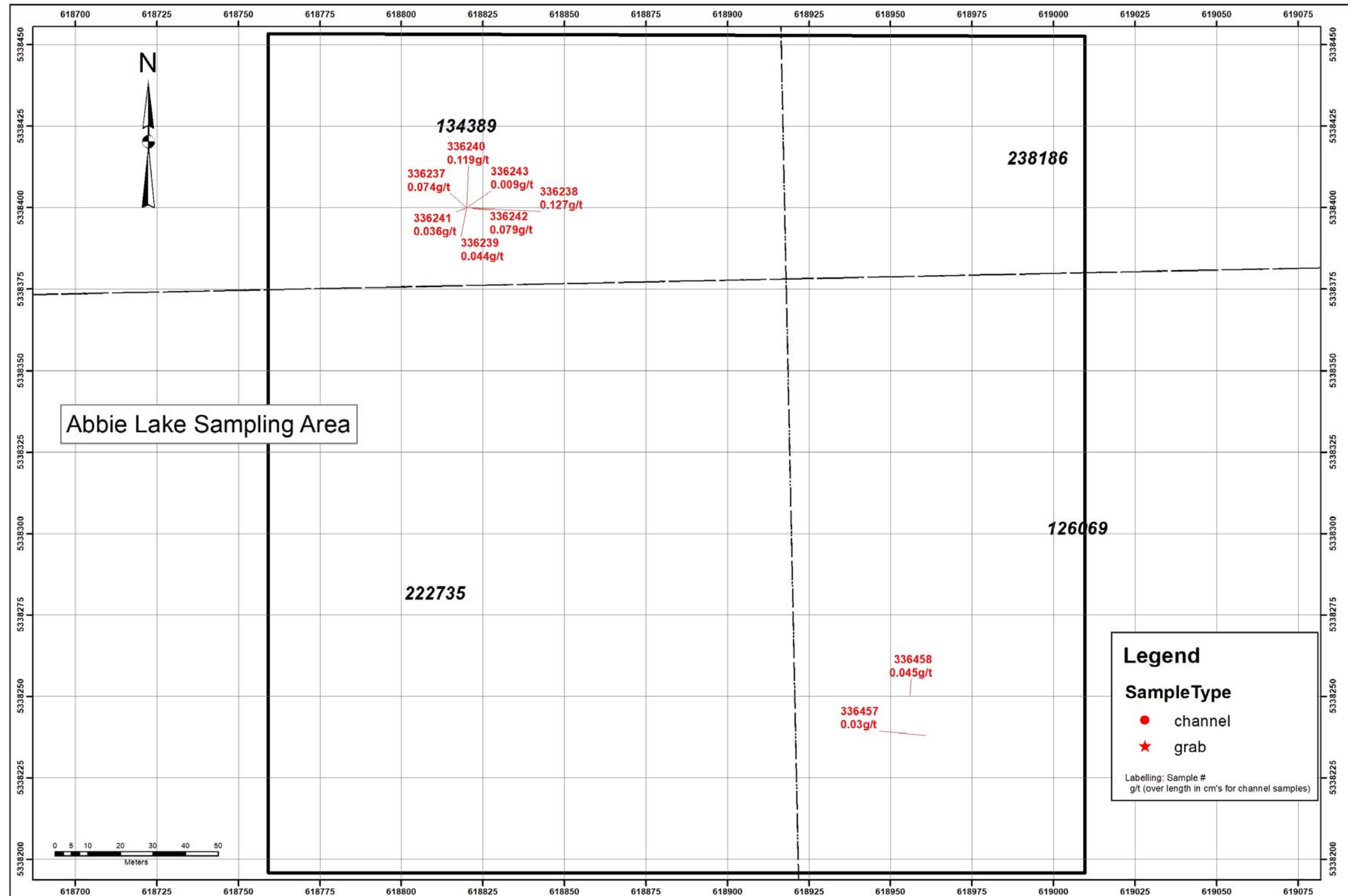
## Abbie Lake Sampling Area

Abbie Lake Area grab samples were regional samples not tied to defined sampling areas. No sample sketch for this area.

**Table 7 Abbie Lake Sampling**

Area	Sample #	g/t	Length (cm)	Sample Type
Abbie Lake	336237	0.074		grab
Abbie Lake	336238	0.127		grab
Abbie Lake	336239	0.044		grab
Abbie Lake	336240	0.119		grab
Abbie Lake	336241	0.036		grab
Abbie Lake	336242	0.079		grab
Abbie Lake	336243	0.009		grab
Abbie Lake	336457	0.03		grab
Abbie Lake	336458	0.045		grab

Figure 5 Abbie Lake Sample Locations



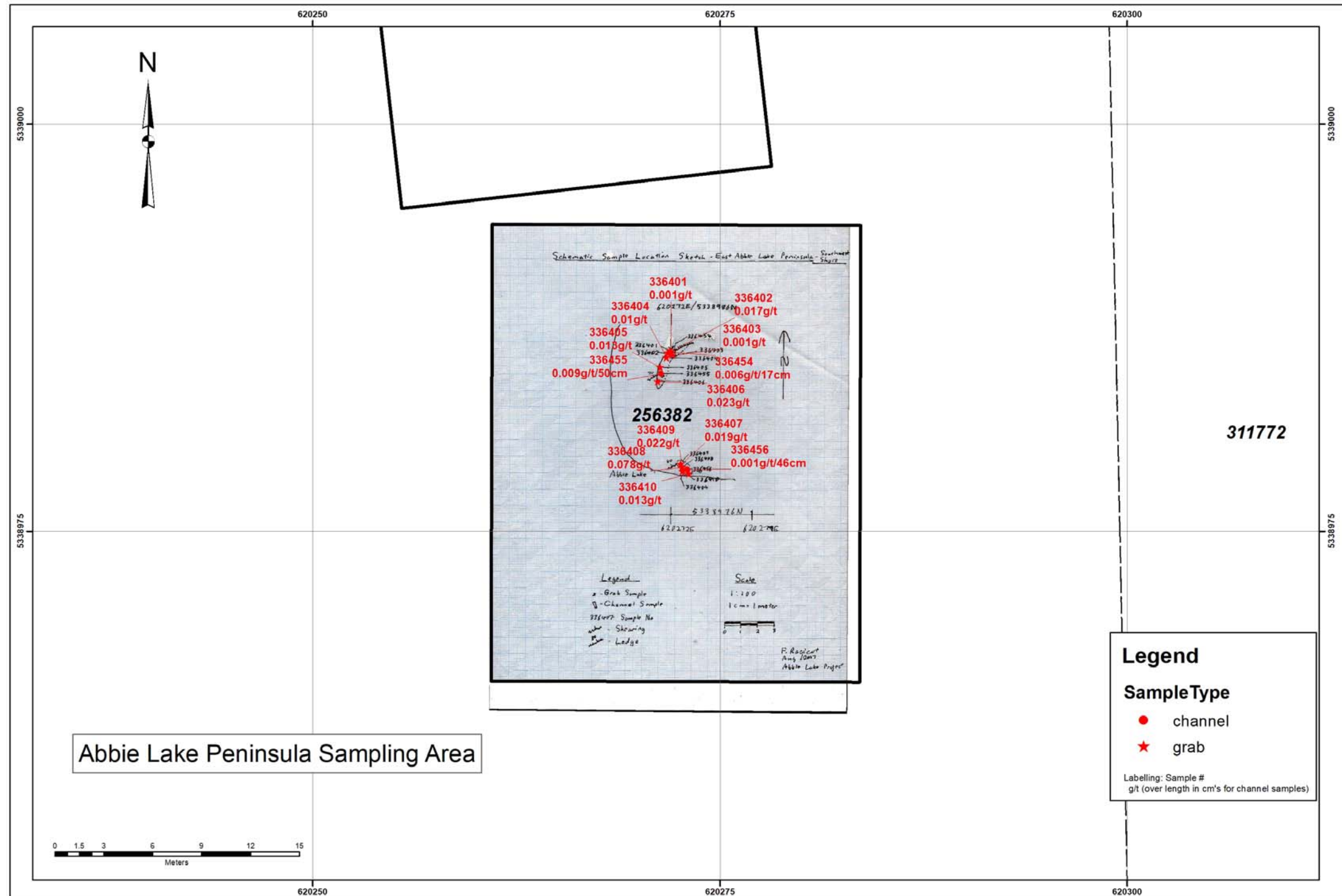
## Abbie Lake Peninsula

Abbie Lake Peninsula sampling included both channel sampling and grab sampling of an historic stripped area.

**Table 8 Abbie Lake Peninsula Sampling**

Area	Sample #	g/t	Length (cm)	Sample Type
Abbie Lake Peninsula	336401	0.001		grab
Abbie Lake Peninsula	336402	0.017		grab
Abbie Lake Peninsula	336403	0.001		grab
Abbie Lake Peninsula	336404	0.01		grab
Abbie Lake Peninsula	336405	0.013		grab
Abbie Lake Peninsula	336406	0.023		grab
Abbie Lake Peninsula	336407	0.019		grab
Abbie Lake Peninsula	336408	0.078		grab
Abbie Lake Peninsula	336409	0.022		grab
Abbie Lake Peninsula	336410	0.013		grab
Abbie Lake Peninsula	336454	0.006	17	channel
Abbie Lake Peninsula	336455	0.009	50	channel
Abbie Lake Peninsula	336456	0.001	46	channel

Figure 6 Abbie Lake Peninsula Sampling Area

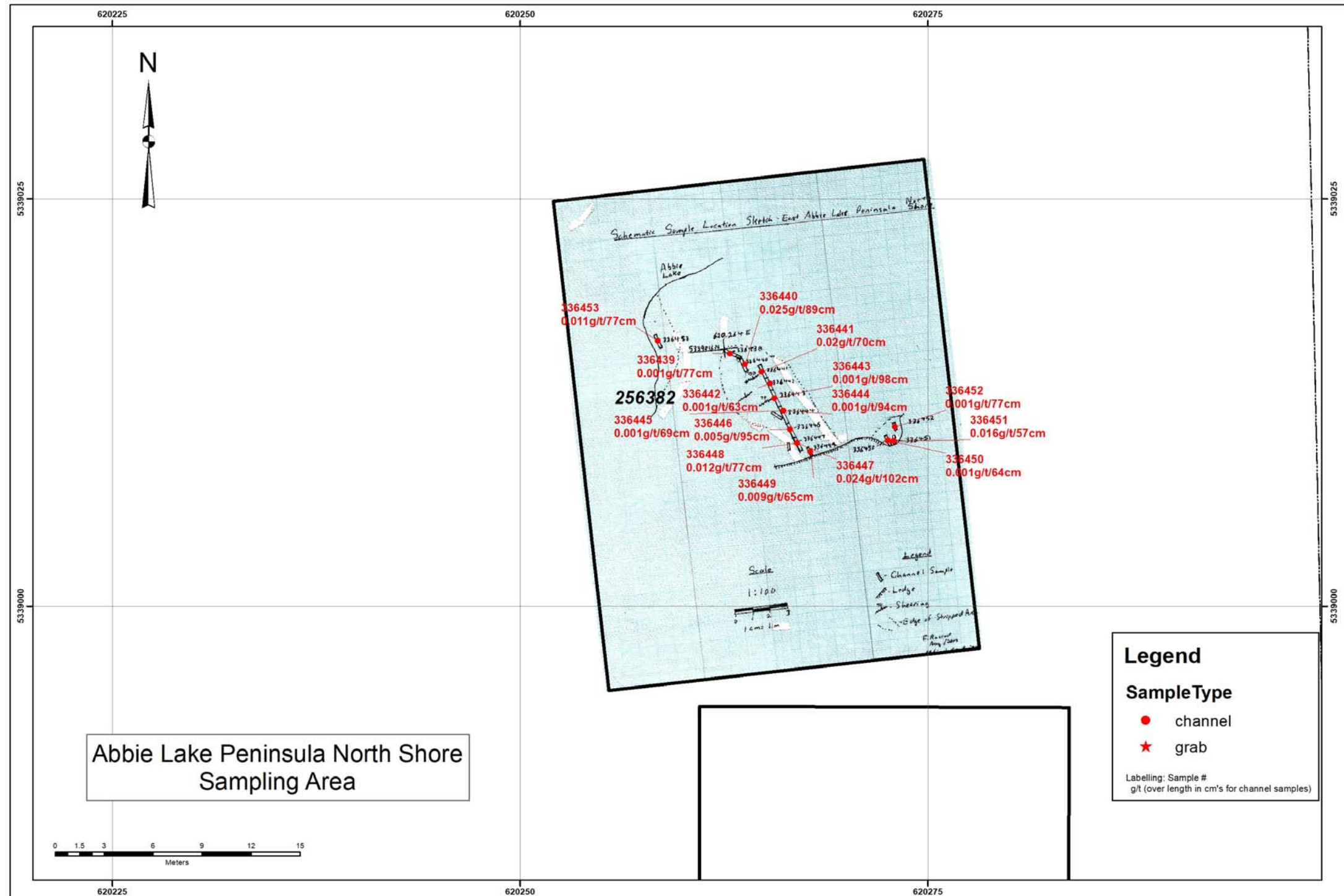


### Abbie Lake Peninsula North Shore

Abbie Lake Peninsula North Shore channel sampled an historic stripped area

Area	Sample #	g/t	Length (cm)	Sample Type
Abbie Lake Peninsula North Shore	336439	0.001	77	channel
Abbie Lake Peninsula North Shore	336440	0.025	89	channel
Abbie Lake Peninsula North Shore	336441	0.02	70	channel
Abbie Lake Peninsula North Shore	336442	0.001	63	channel
Abbie Lake Peninsula North Shore	336443	0.001	98	channel
Abbie Lake Peninsula North Shore	336444	0.001	94	channel
Abbie Lake Peninsula North Shore	336445	0.001	69	channel
Abbie Lake Peninsula North Shore	336446	0.005	95	channel
Abbie Lake Peninsula North Shore	336447	0.024	102	channel
Abbie Lake Peninsula North Shore	336448	0.012	77	channel
Abbie Lake Peninsula North Shore	336449	0.009	65	channel
Abbie Lake Peninsula North Shore	336450	0.001	64	channel
Abbie Lake Peninsula North Shore	336451	0.016	57	channel
Abbie Lake Peninsula North Shore	336452	0.001	77	channel
Abbie Lake Peninsula North Shore	336453	0.011	77	channel

Figure 7 Abbie Lake Peninsula North Shore



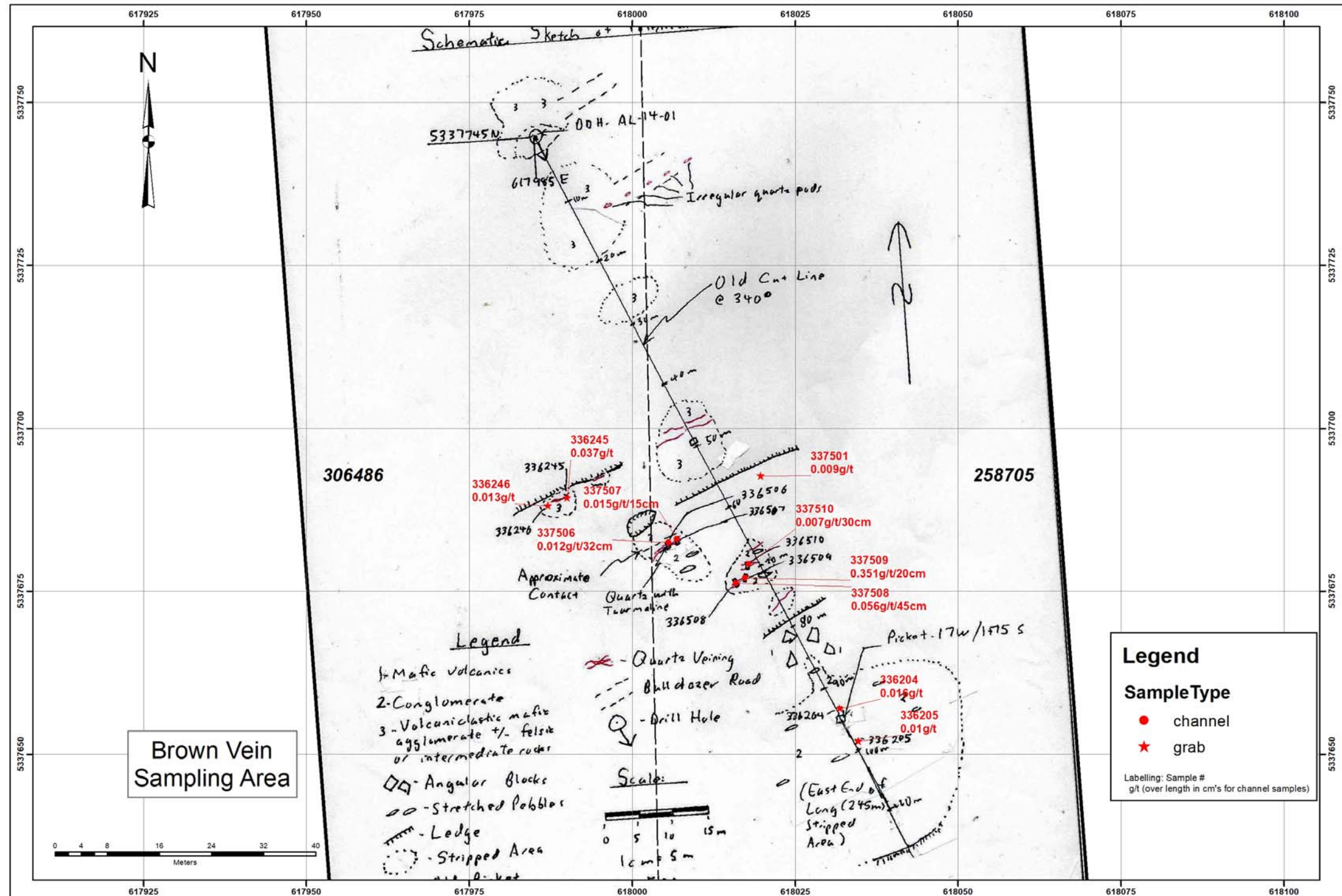
## Brown Vein Area

The Brown Vein Area is identified as the original Brown Vein described by Tundra Gold. It is a sub-area of the Brown Vein Grid sampling area. It was sampled with both channel and grab samples.

**Table 9 Brown Vein Area Samples**

Area	Sample #	g/t	Length (cm)	Sample Type
Brown Vein Area	336204	0.016		grab
Brown Vein Area	336205	0.01		grab
Brown Vein Area	336245	0.037		grab
Brown Vein Area	336246	0.013		grab
Brown Vein Area	337501	0.009		grab
Brown Vein Area	337506	0.012	32	channel
Brown Vein Area	337507	0.015	15	channel
Brown Vein Area	337508	0.056	45	channel
Brown Vein Area	337509	0.351	20	channel
Brown Vein Area	337510	0.007	30	channel

Figure 8 Brown Vein Area





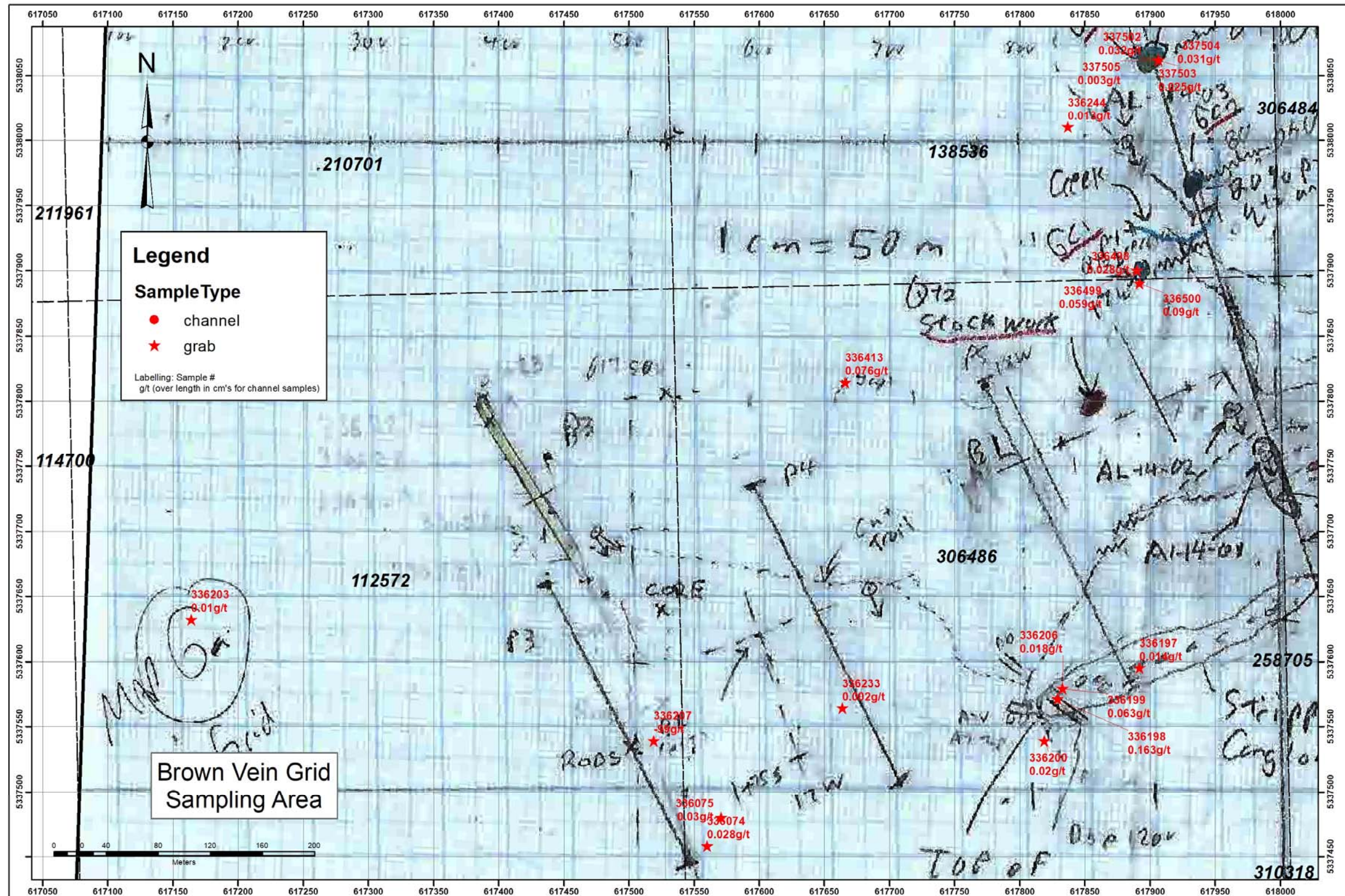
## Brown Vein Grid

The Brown Vein Grid sample area samples were grab samples taken during the effort in locating the Tundra Gold's Brown Vein. More detailed grab and channel sampling was done of the Brown Vein when it was located (Brown Vein Area). Not all samples were located on included sketches and have been located by GPS coordinates.

**Table 10 Brown Vein Grid Sampling Area**

Area	Sample #	g/t	Length (cm)	Sample Type
Brown Vein Grid	336074	0.028		grab
Brown Vein Grid	336075	0.03		grab
Brown Vein Grid	336197	0.014		grab
Brown Vein Grid	336198	0.163		grab
Brown Vein Grid	336199	0.063		grab
Brown Vein Grid	336200	0.02		grab
Brown Vein Grid	336203	0.01		grab
Brown Vein Grid	336206	0.018		grab
Brown Vein Grid	336207	-99		grab
Brown Vein Grid	336233	0.002		grab
Brown Vein Grid	336244	0.013		grab
Brown Vein Grid	336413	0.076		grab
Brown Vein Grid	336498	0.028		grab
Brown Vein Grid	336499	0.059		grab
Brown Vein Grid	336500	0.09		grab
Brown Vein Grid	337502	0.032		grab
Brown Vein Grid	337503	0.025		grab
Brown Vein Grid	337504	0.031		grab
Brown Vein Grid	337505	0.003		grab

Figure 9 Brown Vein Grid Area



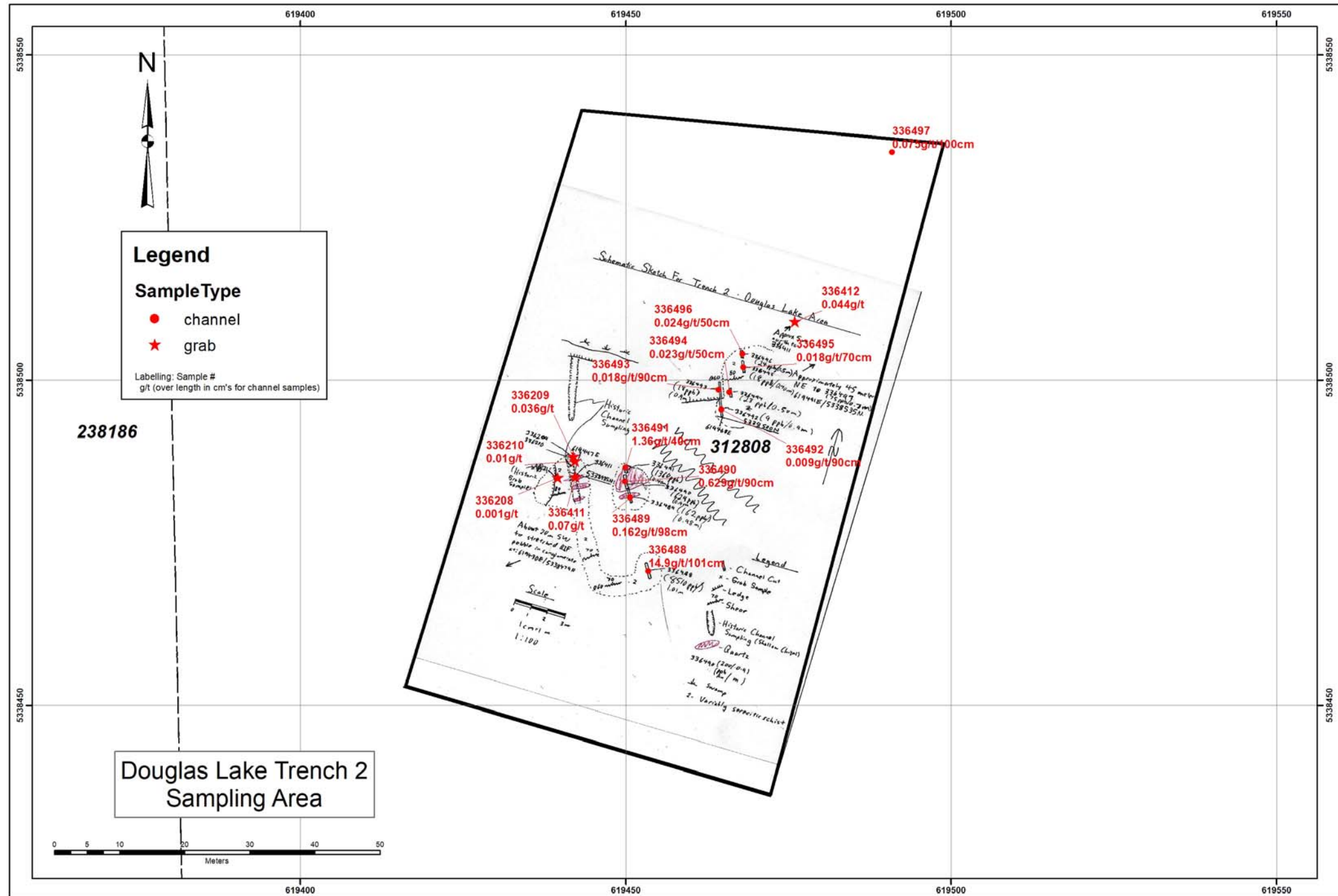
## Douglas Lake Area Trench 2

The Douglas Lake Area Trench 2 sampled an historic trench with both channel and grab samples.

**Table 11 Douglas Lake Area Trench 2**

Area	Sample #	g/t	Length (cm)	Sample Type
Douglas Lake Area Trench 2	336208	0.001		grab
Douglas Lake Area Trench 2	336209	0.036		grab
Douglas Lake Area Trench 2	336210	0.01		grab
Douglas Lake Area Trench 2	336411	0.07		grab
Douglas Lake Area Trench 2	336412	0.044		grab
Douglas Lake Area Trench 2	336488	14.9	101	channel
Douglas Lake Area Trench 2	336489	0.162	98	channel
Douglas Lake Area Trench 2	336490	0.629	90	channel
Douglas Lake Area Trench 2	336491	1.36	40	channel
Douglas Lake Area Trench 2	336492	0.009	90	channel
Douglas Lake Area Trench 2	336493	0.018	90	channel
Douglas Lake Area Trench 2	336494	0.023	50	channel
Douglas Lake Area Trench 2	336495	0.018	70	channel
Douglas Lake Area Trench 2	336496	0.024	50	channel
Douglas Lake Area Trench 2	336497	0.075	100	channel

Figure 10 Douglas Lake Trench 2 Sampling Area



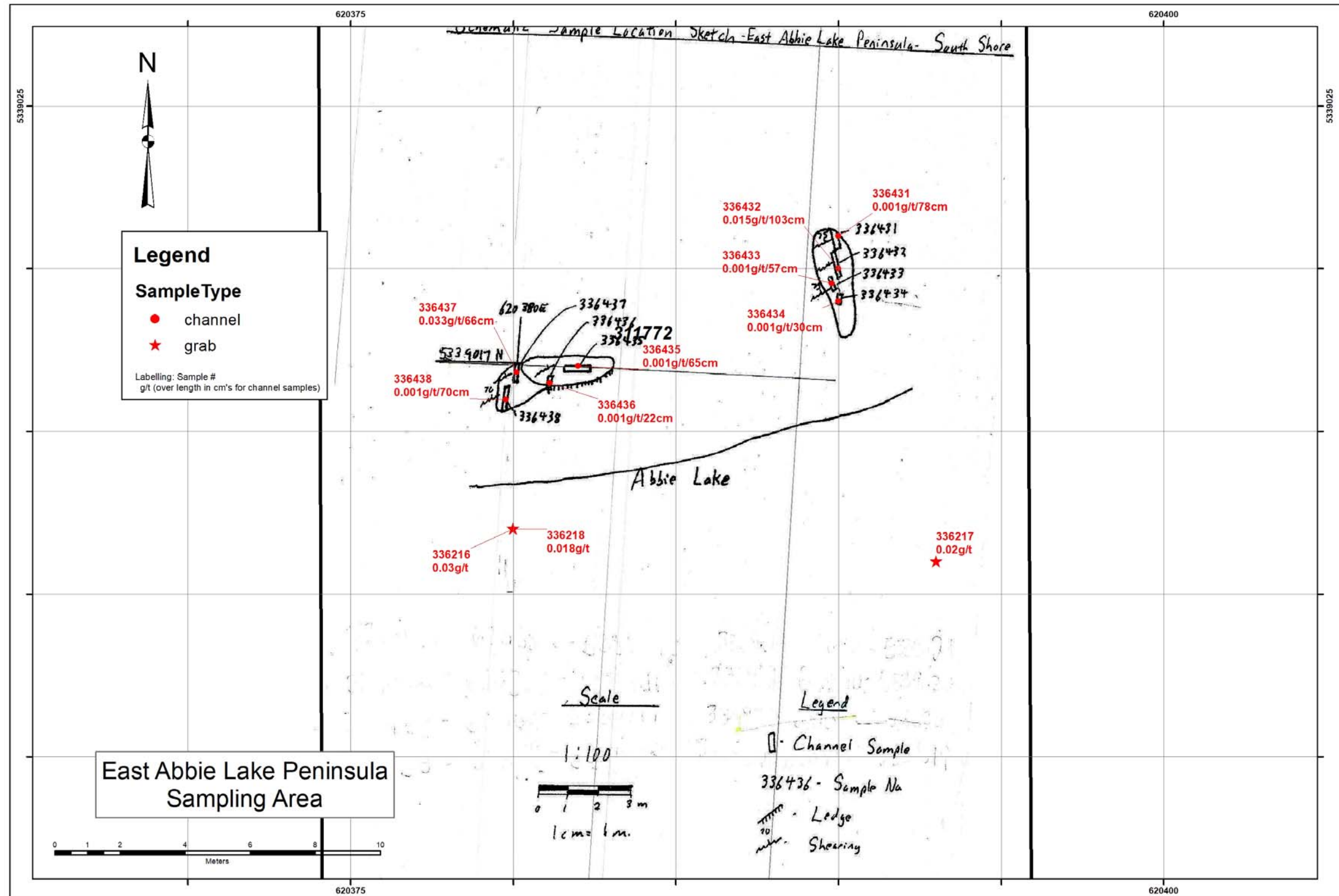
## East Abbie Lake Peninsula Sampling Area

The East Abbie Lake Peninsula sampling area was sampled by channel samples of historic stripping and area grab samples.

**Table 12 East Abbie Lake Peninsula Sample**

Area	Sample #	g/t	Length (cm)	Sample Type
East Abbie Lake Peninsula	336216	0.03		grab
East Abbie Lake Peninsula	336217	0.02		grab
East Abbie Lake Peninsula	336218	0.018		grab
East Abbie Lake Peninsula	336431	0.001	78	channel
East Abbie Lake Peninsula	336432	0.015	103	channel
East Abbie Lake Peninsula	336433	0.001	57	channel
East Abbie Lake Peninsula	336434	0.001	30	channel
East Abbie Lake Peninsula	336435	0.001	65	channel
East Abbie Lake Peninsula	336436	0.001	22	channel
East Abbie Lake Peninsula	336437	0.033	66	channel
East Abbie Lake Peninsula	336438	0.001	70	channel

Figure 11 East Abbie Lake Peninsula Sample Area



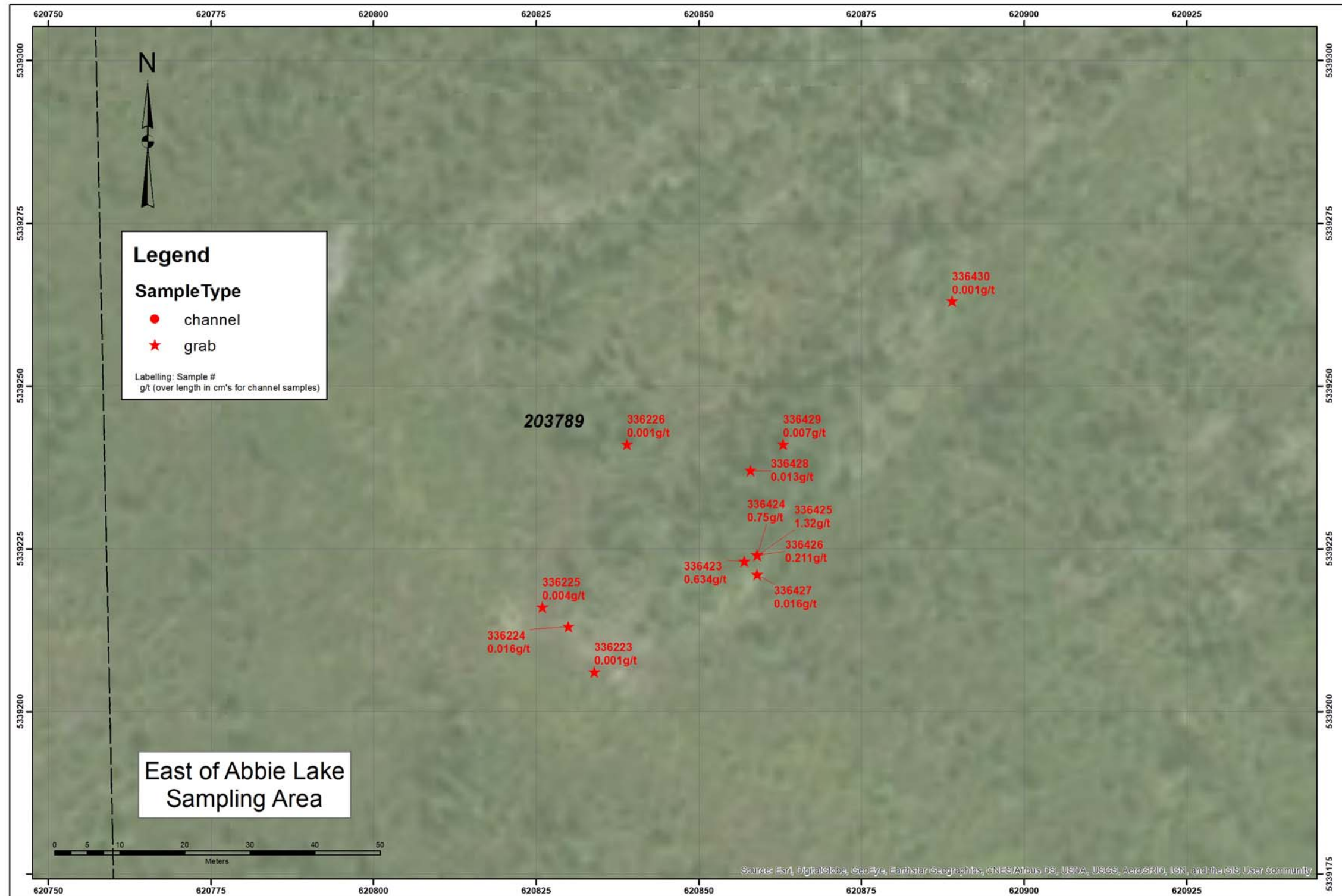
### East of Abbie Lake Sampling Area

The East of Abbie Lake sampling Area consists of grab samples taken during search for historic trenching and stripping. No sample sketch for this area.

**Table 13 East of Abbie Lake Sampling**

Area	Sample #	g/t	Length (cm)	Sample Type
East of Abbie Lake	336223	0.001		grab
East of Abbie Lake	336224	0.016		grab
East of Abbie Lake	336225	0.004		grab
East of Abbie Lake	336226	0.001		grab
East of Abbie Lake	336423	0.634		grab
East of Abbie Lake	336424	0.75		grab
East of Abbie Lake	336425	1.32		grab
East of Abbie Lake	336426	0.211		grab
East of Abbie Lake	336427	0.016		grab
East of Abbie Lake	336428	0.013		grab
East of Abbie Lake	336429	0.007		grab
East of Abbie Lake	336430	0.001		grab

Figure 12 East of Abbie Lake Sampling Area





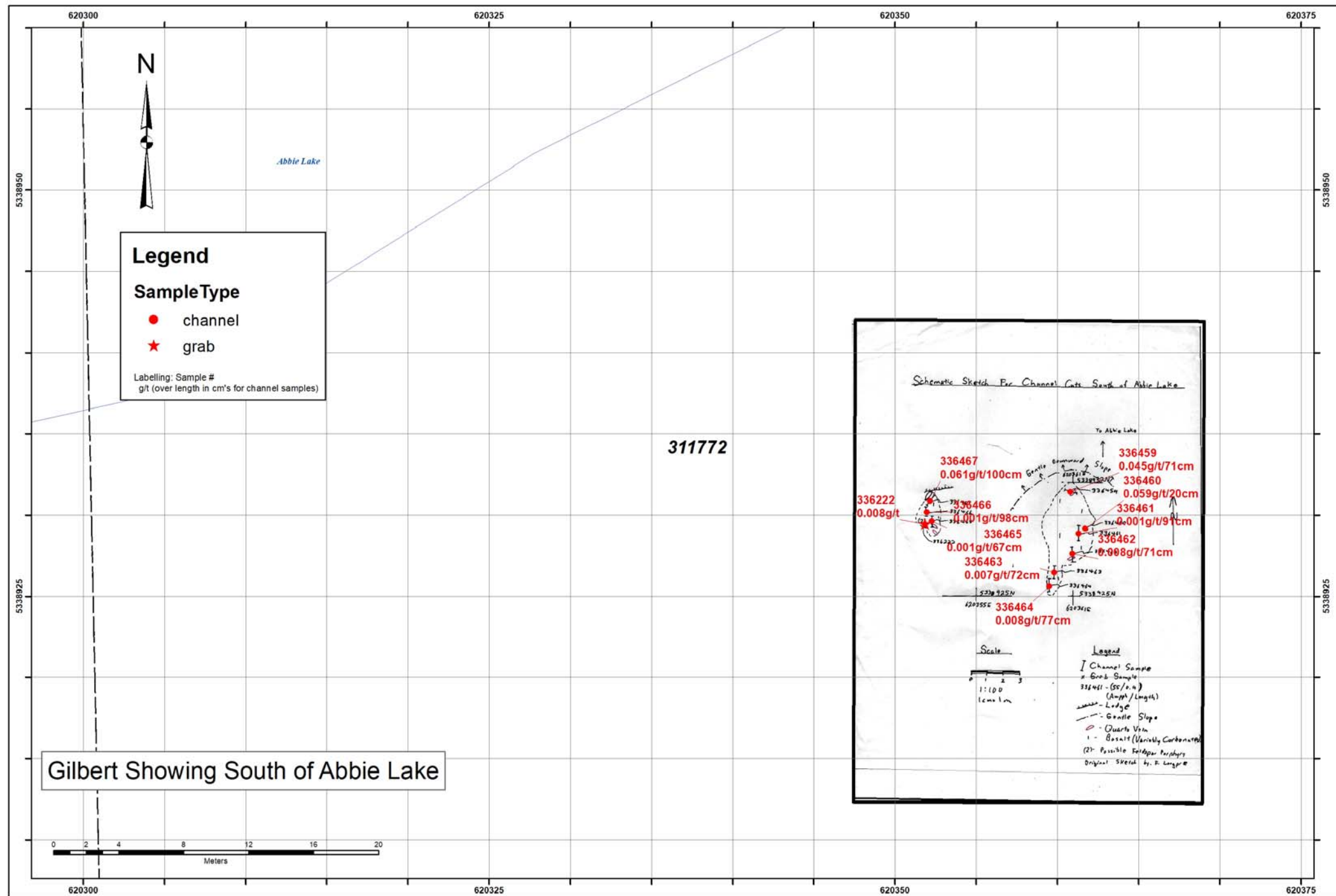
### Gilbert Showing South of Abbie Lake

The Gilbert Showing South of Abbie Lake sampling area is channel sampling of an historic stripped area. No sample sketch for this area

**Table 14 Gilbert Showing South of Abbie Lake**

Area	Sample #	g/t	Length (cm)	Sample Type
Gilbert Showing South of Abbie Lake	336222	0.008		grab
Gilbert Showing South of Abbie Lake	336459	0.045	71	channel
Gilbert Showing South of Abbie Lake	336460	0.059	20	channel
Gilbert Showing South of Abbie Lake	336461	0.001	91	channel
Gilbert Showing South of Abbie Lake	336462	0.008	71	channel
Gilbert Showing South of Abbie Lake	336463	0.007	72	channel
Gilbert Showing South of Abbie Lake	336464	0.008	77	channel
Gilbert Showing South of Abbie Lake	336465	0.001	67	channel
Gilbert Showing South of Abbie Lake	336466	0.001	98	channel
Gilbert Showing South of Abbie Lake	336467	0.061	100	channel

Figure 13 Gilbert Showing South of Abbie Lake



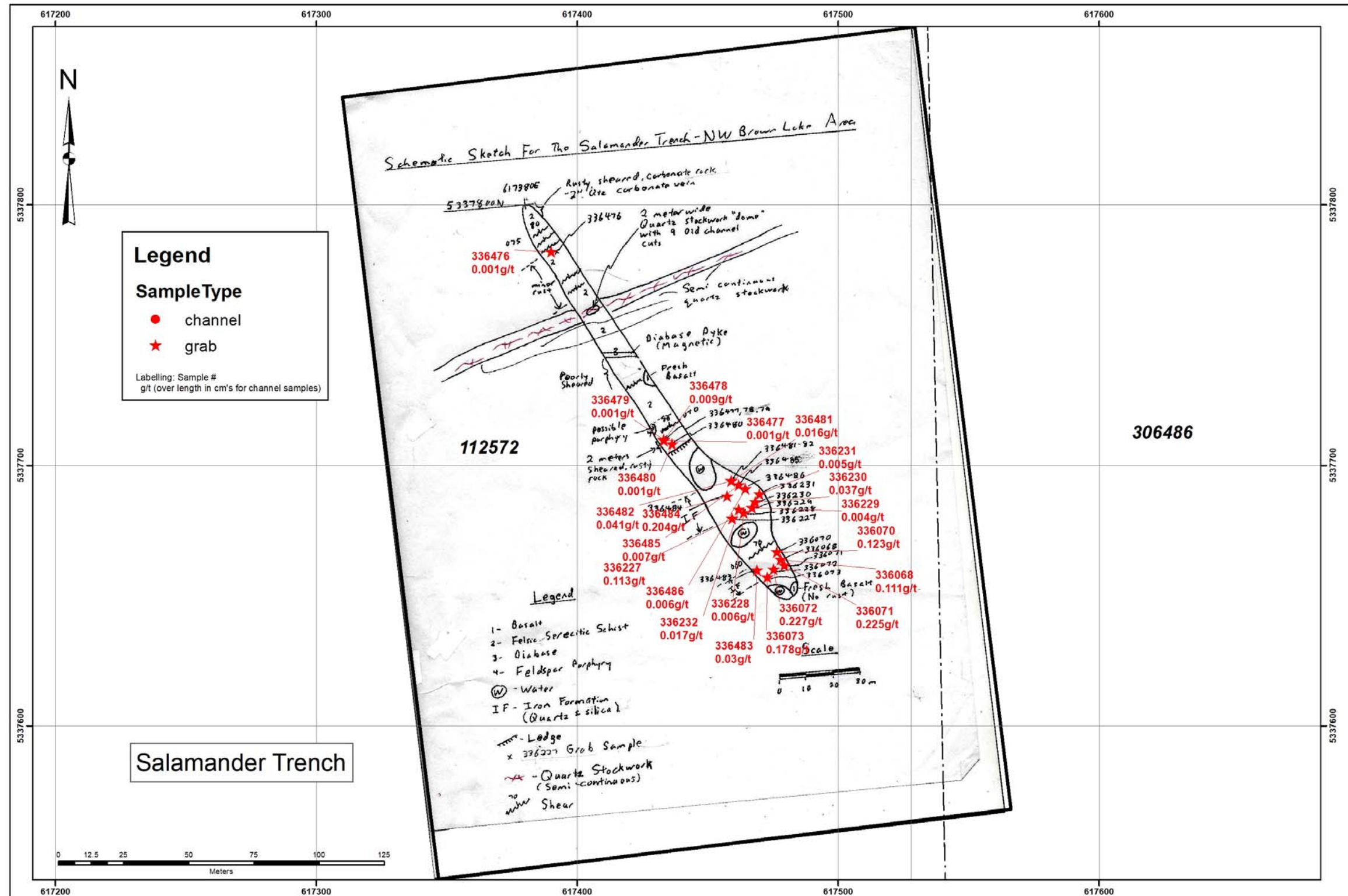
## Salamander Trench

The Salamander Trench samples were taken after channel sampling on the property was completed. Only grab samples were taken.

**Table 15 Salamander Trench Samples**

Area	Sample#	g/t	Length (cm)	Sample Type
Salamander Trench	336068	0.111		grab
Salamander Trench	336070	0.123		grab
Salamander Trench	336071	0.225		grab
Salamander Trench	336072	0.227		grab
Salamander Trench	336073	0.178		grab
Salamander Trench	336227	0.113		grab
Salamander Trench	336228	0.006		grab
Salamander Trench	336229	0.004		grab
Salamander Trench	336230	0.037		grab
Salamander Trench	336231	0.005		grab
Salamander Trench	336232	0.017		grab
Salamander Trench	336476	0.001		grab
Salamander Trench	336477	0.001		grab
Salamander Trench	336478	0.009		grab
Salamander Trench	336479	0.001		grab
Salamander Trench	336480	0.001		grab
Salamander Trench	336481	0.016		grab
Salamander Trench	336482	0.041		grab
Salamander Trench	336483	0.03		grab
Salamander Trench	336484	0.204		grab
Salamander Trench	336485	0.007		grab
Salamander Trench	336486	0.006		grab

Figure 14 Salamander Trench



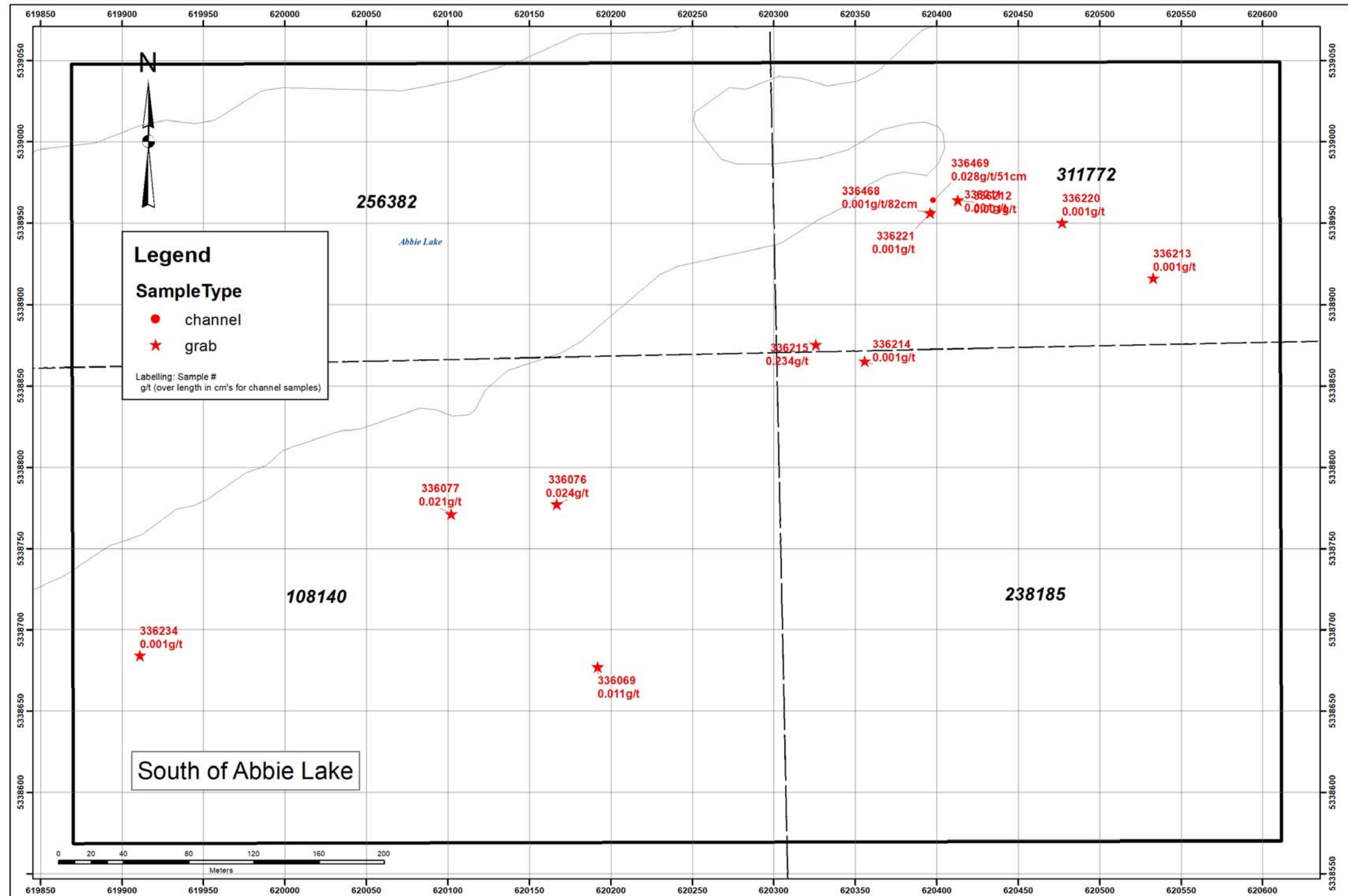
### South of Abbie Lake Sampling Area

South of Abbie Lake sampling area is a collection of grab samples and channel samples taken during searches for historic trenches and stripping. Channel samples were taken across zones of significant mineralization and shearing.

**Table 16 South of Abbie Lake Sampling**

Area	Sample #	g/t	Length (cm)	Sample Type
South of Abbie Lake	336069	0.011		grab
South of Abbie Lake	336076	0.024		grab
South of Abbie Lake	336077	0.021		grab
South of Abbie Lake	336211	0.001		grab
South of Abbie Lake	336212	0.001		grab
South of Abbie Lake	336213	0.001		grab
South of Abbie Lake	336214	0.001		grab
South of Abbie Lake	336215	0.234		grab
South of Abbie Lake	336220	0.001		grab
South of Abbie Lake	336221	0.001		grab
South of Abbie Lake	336234	0.001		grab
South of Abbie Lake	336468	0.001	82	channel
South of Abbie Lake	336469	0.028	51	channel

Figure 15 South of Abbie Lake



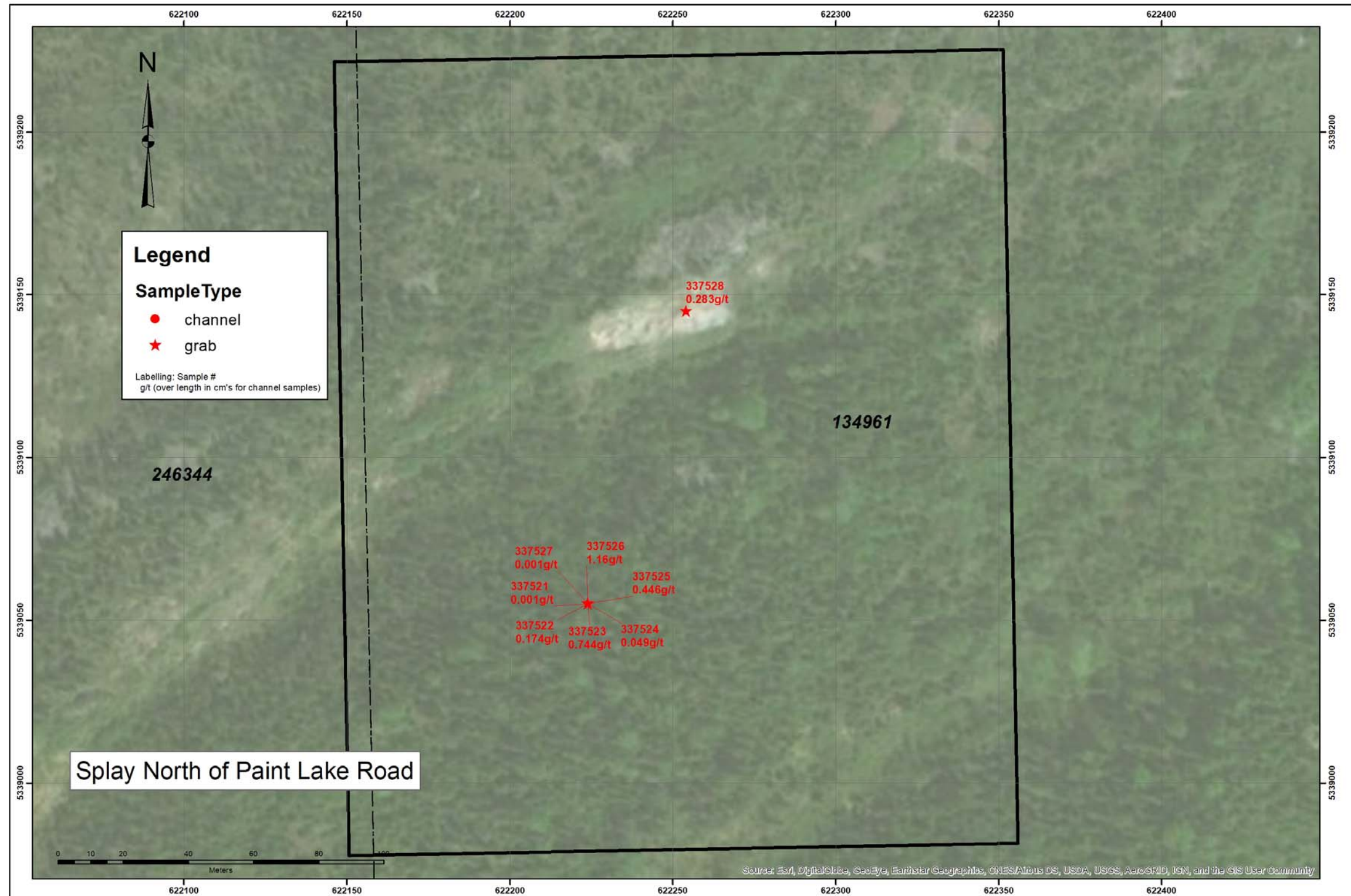
## Splay North of Paint Lake Road

The Splay North of Paint Lake Road sample area was not sketched. It is a collection of grab samples taken during the search for historic work. No sketch for this area.

**Table 17 Splay North of Paint Lake Road**

Area	Sample #	g/t	Length (cm)	Sample Type
Splay North of Paint Lake Road	337521	0.001		grab
Splay North of Paint Lake Road	337522	0.174		grab
Splay North of Paint Lake Road	337523	0.744		grab
Splay North of Paint Lake Road	337524	0.049		grab
Splay North of Paint Lake Road	337525	0.446		grab
Splay North of Paint Lake Road	337526	1.16		grab
Splay North of Paint Lake Road	337527	0.001		grab
Splay North of Paint Lake Road	337528	0.283		grab

Figure 16 Splay North of Paint Lake Road





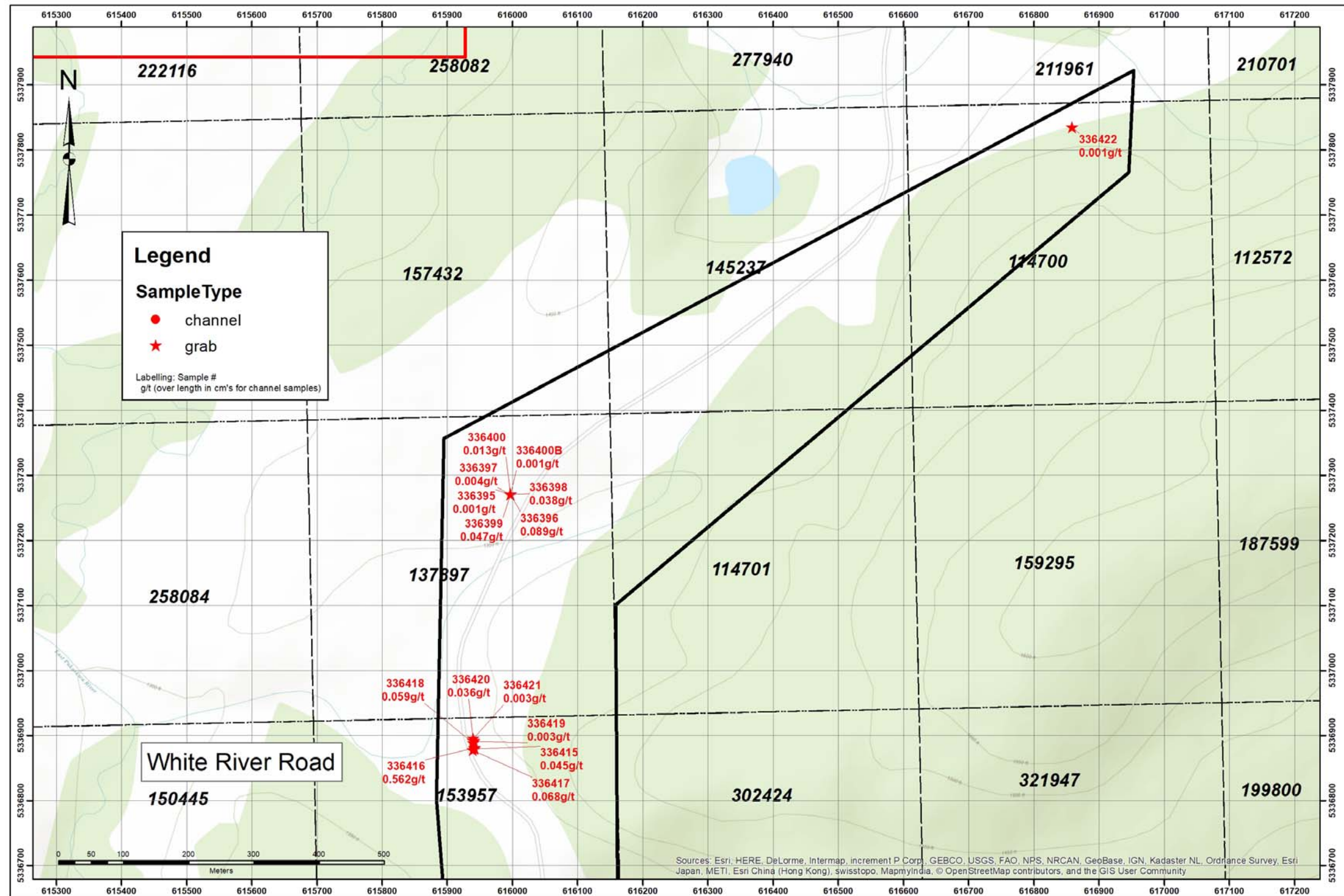
## White River Road

A series of grab samples taken from out crops and one historic trench found while driving the White River Road. No sample sketch for this area.

**Table 18 White River Road Sample**

Area	Sample #	g/t	Length (cm)	Sample Type
White River Road	336395	0.001		grab
White River Road	336396	0.089		grab
White River Road	336397	0.004		grab
White River Road	336398	0.038		grab
White River Road	336399	0.047		grab
White River Road	336400	0.013		grab
White River Road	336400B	0.001		grab
White River Road	336414	0.001		grab
White River Road	336415	0.045		grab
White River Road	336416	0.562		grab
White River Road	336417	0.068		grab
White River Road	336418	0.059		grab
White River Road	336419	0.003		grab
White River Road	336420	0.036		grab
White River Road	336421	0.003		grab
White River Road	336422	0.001		grab

Figure 17 White River Road Sample



### ***MMI Survey***

A total of 156 MMI samples were taken over 15 lines. The lines were run in a NW-SE direction . A table of results and a map of the results can be found in the Appendices.

## **Conclusions and Recommendations**

### ***Conclusions***

The results of the program confirm historical reports and illustrate that more work is required on the property. Specifically the results:

1. Based on the MMI results, it does appear MMI is a useful survey for this property
2. Channel sampling and prospecting has shown the previously defined auriferous zones are continuous between trenches
3. Channel sampling has shown that gold distribution within the zones exposed by the trenches is fairly well distributed with certain areas of much higher anomalous gold.

### ***Recommendations***

More work is recommended on the property as the results show good potential for an economic deposit. Recommended work includes (but not limited to):

1. Expand the MMI survey coverage along strike of the historically defined auriferous zones
2. Detailed mapping of the trenches to better define the rock types, alterations and structures that contain and control gold mineralization
3. Though the property has seen detailed mapping in the past, some areas need infill mapping plus mapping to confirm historical data matches with current models of gold mineralization of both the property and other occurrences in the area.
4. Infill IP

## **AUTHOR'S CERTIFICATE**

**Delio J.J. Tortosa**  
408 – 99 Pine Street  
Sault Ste. Marie, Ontario  
P6A 3Y3

I, Delio Tortosa, do hereby certify that:

- 1) I am a consulting geologist, carrying on business from the above address.
- 2) I have practiced my profession as a geologist for over 30 years.
- 3) I am a graduate of Queen's University, Kingston, Ontario, Canada with the degree of B.Sc.(App.Sc., 1974) Geological Engineering. I am also a graduated of the University of Saskatchewan, Saskatoon, Saskatchewan, Canada with the degree of M.Sc. (Geology, 1983).
- 4) I am a Professional Engineer registered with the Professional Engineers of Ontario, Registration No. 46764015.
- 5) I have reviewed and edited the Assessment Report: "Report on Channel Sampling, Prospecting and MMI Survey, Abbie Lake Property"
- 6) I have had prior involvement with the property that is the subject of the Assessment Report. The nature of my involvement consisted of property visits and to provide direction to the Project Geologists and Prospectors on the Argo Gold Abbie Lake Property.
- 7) I am not aware of any material fact or material change with respect to the subject matter of the Assessment Report that is not reflected in the Assessment Report, the omission to disclose which makes the Report misleading.

Dated this 12 day of April, 2019.

Delio Tortosa, P.Eng., M.Sc.

## Certificate of Qualifications

I, John R. Walmsley, B.SC., residing at RR #1, Richards Landing, Ontario, do certify that:

1. I am a contract geologist of PensInk Information Technologies Ltd.
2. I graduated with a Bachelor of Science in Geology from the University of Western Ontario in 1984.
3. I am a member of the Prospectors and Developers Association of Canada.
4. I have been employed continuously as a geologist for the past 33 years since my graduation from University
5. I have had prior involvement with the property that is the subject of the Assessment Report in conducting exploration work in 2009 and 2011
6. I completed portions of the work described in this report and supervised all other work completed and I am the sole author of this Technical Report
7. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.

Dated this 12th day of April, 2019.

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John R. Walmsley, B.Sc.

**Appendix A – Claim Schedule**

### Current Claim Status of Argo Gold Abbie Lake Property

MLAS Claim #	Ownership	# Cells	Reg Date	Anniversary Date	Claim Type	Status
108140	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
110113	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
110171	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	BCMC	Active
110172	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
110177	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
110627	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
112571	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
112572	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
112660	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
112661	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
112662	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
114699	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
114700	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
114701	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
122155	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
123649	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
123663	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
126069	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
133586	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
134388	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
134389	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
134600	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
134726	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
134914	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
134915	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	BCMC	Active
134961	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
136933	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
137897	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
138180	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
138199	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	SCMC	Active
138536	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
140995	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	BCMC	Active
143578	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
144176	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
144177	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
144178	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
144477	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
144478	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
145237	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
150445	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active



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150446	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
150447	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
150691	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
150702	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
150703	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
152795	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
153432	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
153433	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
153957	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
157432	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
157433	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
159295	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
168618	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	BCMC	Active
169507	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
169508	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
169509	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
169510	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
172757	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
172758	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
172759	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
172769	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	SCMC	Active
179575	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
179591	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
179592	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
179593	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
179625	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
179627	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
187040	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	BCMC	Active
187041	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
187042	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	BCMC	Active
187220	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
187221	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
187593	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	BCMC	Active
187594	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
187595	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
187599	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
189035	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
190179	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
190180	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
191088	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
199734	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
199735	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active

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199736	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
199737	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
199762	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
199795	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	BCMC	Active
199796	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
199800	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
201728	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
202321	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
202566	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	BCMC	Active
203789	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
206535	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
206536	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
206770	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
206771	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
206772	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
210701	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
211961	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
218076	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
218089	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	BCMC	Active
218256	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
218257	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
222116	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
222117	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
222735	ARGO GOLD INC. 100%	1	2018-04-10	2020-01-26	SCMC	Active
227368	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
227375	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	BCMC	Active
235547	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
238185	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
238186	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
239261	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
245780	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
246280	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
246344	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
246350	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
253040	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
253787	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	BCMC	Active
254347	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
254367	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
256382	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
256937	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
257201	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	BCMC	Active
258082	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active

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258083	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
258084	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
258085	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	BCMC	Active
258705	ARGO GOLD INC. 100%	1	2018-04-10	2020-01-26	SCMC	Active
259964	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
264704	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
265341	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	BCMC	Active
265361	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
265362	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
265363	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
265840	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
266350	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
266403	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
272135	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
272570	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
272766	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
274445	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
277940	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
281503	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
281550	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
284770	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
284771	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
285999	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
286000	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
286001	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
286002	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
286003	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
286013	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	SCMC	Active
290855	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	BCMC	Active
290856	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
290907	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	BCMC	Active
290908	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
293404	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
294026	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
294027	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
294028	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
294029	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
294040	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	BCMC	Active
301596	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
301992	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
302424	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
302425	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active

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302426	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	BCMC	Active
302898	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
302899	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
302985	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
306484	ARGO GOLD INC. 100%	1	2018-04-10	2020-01-26	SCMC	Active
306485	ARGO GOLD INC. 100%	1	2018-04-10	2020-01-26	SCMC	Active
306486	ARGO GOLD INC. 100%	1	2018-04-10	2020-01-26	SCMC	Active
307034	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
310314	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
310317	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
310318	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
310319	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
310320	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
311771	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
311772	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
312808	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
312926	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
312927	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
312939	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	SCMC	Active
312940	ARGO GOLD INC. 100%	1	2018-04-10	2020-02-14	BCMC	Active
319775	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
319776	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
320336	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
321947	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
325382	ARGO GOLD INC. 100%	1	2018-04-10	2020-06-23	SCMC	Active
331824	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
333838	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
341718	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
341767	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
341768	ARGO GOLD INC. 100%	1	2018-04-10	2020-05-30	SCMC	Active
343755	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
344295	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-01	SCMC	Active
344398	ARGO GOLD INC. 100%	1	2018-04-10	2019-10-27	SCMC	Active
503474	ARGO GOLD INC. 100%	1	2018-04-10	2020-04-10	SCMC	Active
503475	ARGO GOLD INC. 100%	1	2018-04-10	2020-04-10	SCMC	Active
503476	ARGO GOLD INC. 100%	1	2018-04-10	2020-04-10	SCMC	Active
503477	ARGO GOLD INC. 100%	1	2018-04-10	2020-04-10	SCMC	Active

**Appendix B – Sample Description and Sample Locations**

Channel Sample Descriptions

Area	Sample#	Date (2017)	Au_gt	Length(cm)	UTMNorthing	UTMEasting	Description
Abbie GC 2 Showing	336079	Sep-19	0.011	70	5337973	617932	Very fine grained, light grey, cherty with quartz sweats: disseminated and blebby py up to 10%. Some massive py
Abbie GC 2 Showing	336080	Sep-19	0.112	90	5337971	617932	Fine grained, dark grey, blackish, ankeritic, vesicular with 4% pyrite in bands
Abbie GC 2 Showing	336081	Sep-19	0.023	60	5337971	617932	Very fine grained, light grey with incipient shearing; areas of black vesicular pumice with hydrocrystalline shards; sericite on shears
Abbie GC 2 Showing	336082	Sep-19	0.04	50	5337970	617932	Very fine grained, medium grey, moderately sheared, sericitic with some massive py
Abbie GC 2 Showing	336083	Sep-19	0.072	90	5337970	617932	Very fine grained, medium greyish brown, with up to 20% quartz blebs and some massive pyrite zones: py in the foliations
Abbie GC 2 Showing	336084	Sep-19	0.061	80	5337969	617933	Very fine grained, light grey, brownish in places; up to 15% quartz blebs; pervasive pyrite up to 20%
Abbie GC 2 Showing	336085	Sep-19	0.001	75	5337966	617933	Very fine grained, light to medium grey with brown, folded, crenulated, sericitic sections; minor py
Abbie GC 2 Showing	336086	Sep-19	0.001	80	5337966	617932	As above
Abbie GC 2 Showing	336087	Sep-19	0.001	75	5337965	617933	As above
Abbie Lake Peninsula	336454	Aug-19	0.006	17	5338986	620272	Quartz stockwork with tourmaline in a sheared brown carbonate rock: resembles sample 336436 to the East
Abbie Lake Peninsula	336455	Aug-19	0.009	50	5338985	620271	Fine grained, light and dark green basalt with > 1% py; some thin quartz veinlets
Abbie Lake Peninsula	336456	Aug-19	0.001	46	5338979	620273	Fine grained, light and dark green, altered basalt with thin less than 1/2cm silica enriched zones with 1/2% pyrite: strike at 070/ dip 70N
Abbie Lake Peninsula North Shore	336439	Aug-19	0.001	77	5339015	620263	Fine grained medium green, moderately sheared basalt?
Abbie Lake Peninsula North Shore	336440	Aug-19	0.025	89	5339015	620264	Fine grained, light and medium green moderately sheared basalt with a few 1 cm quartz stockwork veins with minor carbonate staining; +/- minor pyrite
Abbie Lake Peninsula North Shore	336441	Aug-19	0.02	70	5339014	620265	As above
Abbie Lake Peninsula North Shore	336442	Aug-19	0.001	63	5339014	620265	as above
Abbie Lake Peninsula North Shore	336443	Aug-19	0.001	98	5339013	620266	Fine grained, light green, slightly hard, silicified basalt with some carbonate staining.
Abbie Lake Peninsula North Shore	336444	Aug-19	0.001	94	5339012	620266	Fine grained, light green, very sheared and contorted basalt with a few irregular 1 cm quartz veins.
Abbie Lake Peninsula North Shore	336445	Aug-19	0.001	69	5339012	620266	Mainly fine grained, dark green, moderately sheared basalt with some fine grained, light green basalt and irregular quartz veins with minor pyrite; some carbonate staining.
Abbie Lake Peninsula North Shore	336446	Aug-19	0.005	95	5339011	620267	As above
Abbie Lake Peninsula North Shore	336447	Aug-19	0.024	102	5339010	620267	Similar to 336445 but with a 1 cm quartz vein and more carbonate
Abbie Lake Peninsula North Shore	336448	Aug-19	0.012	77	5339010	620267	An irregular, discontinuous, 1-2" quartz vein in fine grained sheared green and brown basalt.
Abbie Lake Peninsula North Shore	336449	Aug-19	0.009	65	5339009	620268	Fine grained, light and medium green, highly sheared basalt with a few thin quartz veinlets and minor pyrite and carbonate in one spot
Abbie Lake Peninsula North Shore	336450	Aug-19	0.001	64	5339010	620273	Fine grained, light green, altered with silica enriched areas and small (veinlets) for 10% of the granodiorite rock; some brown carbonate with minor pyrite
Abbie Lake Peninsula North Shore	336451	Aug-19	0.016	57	5339010	620273	Mainly light green and carbonate brown, altered rock with 10% quartz: cut is across an irregular 1" quartz vein at 160 degrees
Abbie Lake Peninsula North Shore	336452	Aug-19	0.001	77	5339011	620273	Mainly fine grained, light green, altered basalt? with carbonate, some quartz and less than 1/2% pyrite
Abbie Lake Peninsula North Shore	336453	Aug-19	0.011	77	5339016	620258	Fine grained, light green, very sheared basalt with a few 2-3 cm, 1 cm quartz veins. Minor pyrite in the quartz
Brown Vein Area	337506	Sep-27	0.012	32	5337683	618006	Very fine grained, dark green/black host rock: catclastic breccia; quartz stockwork in basalt; no apparent sulphides; minor ankerite: Described by FL; "some chlorite and possible tourmaline: 20-30% black, possible tourmaline" FR
Brown Vein Area	337507	Sep-27	0.015	15	5337683	618007	As above- but mainly quartz; 1-2% py; described by FL: "<1% py" FR
Brown Vein Area	337508	Sep-27	0.056	45	5337676	618016	Fine grained, greenish brown, foliated conlomerate; sericite on foliation; up to 3% finely disseminated py; pervasive calcite; described by FL: "well banded, partially silicified, minor quartz, < 3% py" FR
Brown Vein Area	337509	Sep-27	0.351	20	5337677	618017	Sericitic schist with quartz sweats; ankerite; quartz is milky and massive: described by FL;
Brown Vein Area	337510	Sep-27	0.007	30	5337679	618018	Very fine grained, light green to brown, sheared conglomerate; ankerite bands; 3% disseminated pyrite: described by FL: possible flat qtz vein appears as multiple veins; < 3% py FR; small light green part has 8-10% py
Douglas Lake Area Trench 2	336488	Sep-07	14.9	101	5338471	619454	Fine grained light & dark green and light grey, variably foliated schist plus rusty carbonate fractures; some small, 1-3 cm quartz pods +/- trace py with quartz
Douglas Lake Area Trench 2	336489	Sep-07	0.162	98	5338482	619451	Fine grained, silicified, light green and light grey with some non-silicified basalt (?) and some brown carbonate fractures in places
Douglas Lake Area Trench 2	336490	Sep-07	0.629	90	5338484	619450	Mainly fine grained white quartz with moderate amount of rusty fractures; < 1/4% py in quartz and 2-3% py in host rock
Douglas Lake Area Trench 2	336491	Sep-07	1.36	40	5338487	619450	70-80% quartz and 30% host rock as above +/- some pink quartz; 2-3 % py overall

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Douglas Lake Area Trench 2	336492	Sep-07	0.009	90	5338495	619465	Fine grained, medium brown, sericitic, sheared schist with blue quartz blebs
Douglas Lake Area Trench 2	336493	Sep-07	0.018	90	5338498	619464	Fine grained, light to medium brown, laminated, slightly sericitic schist with small hematitic spots and blue quartz blebs; NOTE 2 bags; big sample
Douglas Lake Area Trench 2	336494	Sep-07	0.023	50	5338498	619466	As above
Douglas Lake Area Trench 2	336495	Sep-07	0.018	70	5338502	619468	As above but darker brown
Douglas Lake Area Trench 2	336496	Sep-07	0.024	50	5338504	619468	Fine grained, light brownish grey, sheared, slightly sericitic with some blue qtz bands
Douglas Lake Area Trench 2	336497	Sep-07	0.075	100	5338535	619491	Multi- coloured, sheared, silicified schist/conglomerate with 4-6" BIF, stretched schist or conglomerate; 4" X 6" BIF stretched pebble that is light and dark grey and light and dark green; strike at 060 degrees; dip 80 North
East Abbie Lake Peninsula	336431	Aug-15	0.001	78	5339021	620390	Mainly fine grained, dirty, carbonaceous, brown, shear/schist @ 080/dip 80N; two, 1 cm quartz veins and a few fine grained, light green silicified pieces.
East Abbie Lake Peninsula	336432	Aug-19	0.015	103	5339020	620390	Mainly fine grained, rotten carbonate, brown schist; one 2 inch piece is hard, light grey with specs of green fuchsite
East Abbie Lake Peninsula	336433	Aug-19	0.001	57	5339020	620390	Mainly rotten, light green/ brown, platy schist ( slightly silicified with some fuchsite)
East Abbie Lake Peninsula	336434	Aug-19	0.001	30	5339019	620390	As above but too sheared to describe
East Abbie Lake Peninsula	336435	Aug-19	0.001	65	5339017	620382	Medium grained, dirty brown porphyry (?); 10-12 quartz veins from 3-4 mm to 2 inches wide; (quartz stockwork) in medium grained, dirty brown porphyry ? with fuchsite; 60% quartz; rare pyrite in the 2 inch quartz vein. Sampled along strike of main zone (?)
East Abbie Lake Peninsula	336436	Aug-19	0.001	22	5339016	620381	Medium grained, medium brown, porphyry, with some quartz stockwork, with 2-4% black tourmaline; 20-30% quartz
East Abbie Lake Peninsula	336437	Aug-19	0.033	66	5339017	620380	Medium grained, dirty brown porphyry with 1/2 % pyrite; scattered small (1-2mm) black clots and much fuchsite on fresh surface: 10-20% quartz stockwork with several (3-4) black, irregular tourmaline bands (2-10mm)
East Abbie Lake Peninsula	336438	Aug-19	0.001	70	5339016	620380	Mainly fine grained, rotten, brown, platy, sheared rock @ 080 degrees/ dip 80N
Gilbert Showing South of Abbie Lake	336459	Aug-21	0.045	71	5338931	620361	Fine grained, light brown and rusty brown, silicified rock with 5% quartz and 4-5 % py in some pieces
Gilbert Showing South of Abbie Lake	336460	Aug-21	0.059	20	5338929	620362	80-90% quartz with some fine grained, rusty brown carbonated rock
Gilbert Showing South of Abbie Lake	336461	Aug-21	0.001	91	5338929	620361	Basalt with some slight carbonation
Gilbert Showing South of Abbie Lake	336462	Aug-21	0.008	71	5338928	620361	Basalt with some chlorite, silica and carbonate
Gilbert Showing South of Abbie Lake	336463	Aug-21	0.007	72	5338926	620360	Basalt with minor silicification and minor carbonate
Gilbert Showing South of Abbie Lake	336464	Aug-21	0.008	77	5338926	620360	As above
Gilbert Showing South of Abbie Lake	336465	Aug-21	0.001	67	5338930	620352	As above with minor rust and minor quartz
Gilbert Showing South of Abbie Lake	336466	Aug-21	0.001	98	5338930	620352	Slightly silicified, slightly carbonaceous basalt
Gilbert Showing South of Abbie Lake	336467	Aug-21	0.061	100	5338931	620352	As above
South of Abbie Lake	336468	Aug-22	0.001	82	5338956	620397	Mainly fine to medium grained, light to medium brown, variably silicified rock (possible basalt); some white quartz with rust and rare py in quartz.
South of Abbie Lake	336469	Aug-22	0.028	51	5338964	620398	Similar to above but includes one small section of fine grained, dark green unaltered basalt; very silicified in most pieces. (sampled by GC); photo

Grab Sample Descriptions

Area	Sample#	Date (2017)	Au_gt	UTMNorthing	UTMEasting	Description
Abbie Lake	336237	Sep-09	0.074	5338400	618820	BIF: Fine grained, light grey, sugary banded sediment- interbedded with thin, 1-4 mm pyrite bands: 20% py (Samples 336237 to 336243 sampled as BIF on road towards Brown Lake; 100% certain of location- but only 79.85 certain of co-ordinates...FR)
Abbie Lake	336238	Sep-09	0.127	5338400	618820	BIF: A few knobs of grey quartz surrounded by rusty minerals, pieces of sugary quartz and a few pieces with 30-50% py; < 10% py overall
Abbie Lake	336239	Sep-09	0.044	5338400	618820	BIF: 1 big knob of grey quartz surrounded by brown rust
Abbie Lake	336240	Sep-09	0.119	5338400	618820	BIF: very rusty, rotten sediment with possible bands of cpy (tarnished py?); 5-7% sulphides
Abbie Lake	336241	Sep-09	0.036	5338400	618820	BIF Fine grained, light and medium grey, rusty, soft, flat sediment with a few thin 1 mm bands of pyrite (2% pyrite overall)
Abbie Lake	336242	Sep-09	0.079	5338400	618820	Similar to 336237 but only 2-3% py
Abbie Lake	336243	Sep-09	0.009	5338400	618820	Saccharaceous quartz- contact breccia hosted in metabasalt; strike 090/ dip 40 S; ankerite; up to 35 pyrite
Abbie Lake	336457	Aug-20	0.03	5338238	618961	3-4% py in brown, fine grained, narrow, magnetic BIF; strike 070/ dip 70N; close to a low area
Abbie Lake	336458	Aug-20	0.045	5338250	618956	4-5% pyrite in sheared mafic and siliceous rock @ 068 degrees; HS
Abbie Lake Peninsula	336401	Aug-16	0.001	5338986	620272	Medium to coarse grained, white and brown carbonate rich rock +/- dark chlorite?
Abbie Lake Peninsula	336402	Aug-16	0.017	5338986	620272	As above
Abbie Lake Peninsula	336403	Aug-16	0.001	5338986	620272	Fine grained, light green on fresh surface (rare) but dark carbonate rusty brown elsewhere. Rock is very sheared at 090/dip 80N: include small piece of 1 cm quartz vein.
Abbie Lake Peninsula	336404	Aug-16	0.01	5338986	620272	as above: 18 inches south of 336403
Abbie Lake Peninsula	336405	Aug-16	0.013	5338985	620271	Fine grained very rusty brown carbonate, very sheared rock on strike with 336404: composite sample: strike 080/dip 80N
Abbie Lake Peninsula	336406	Aug-16	0.023	5338984	620271	Dirty, white quartz vein ( 1- 3 inches wide) with dark brown, rusty carbonate fractures; host rock at 060; quartz at 090 dipping 80 degrees south
Abbie Lake Peninsula	336407	Aug-16	0.019	5338979	620273	Fine grained dark grey moderately rusty and moderately sheared rock
Abbie Lake Peninsula	336408	Aug-16	0.078	5338979	620273	Fine grained light and medium brown schist with scattered 1-3 mm brown carb(veins) with approximately 1% pyrite -especially in the carbonate veins: 18 inches south of 336407.
Abbie Lake Peninsula	336409	Aug-16	0.022	5338979	620273	fine grain rusty sheared rock as above but with less pyrite: composite sample at lake level
Abbie Lake Peninsula	336410	Aug-16	0.013	5338978	620273	As above: 2 feet south of 336409
Abby Lake	336219	Aug-12	0.001	5339029	620387	shear, Quartz, previous sample - no tag, isolated knob
Abby Lake	336235	Sep-08	0.004	5338942	620333	Medium grained, brown, blocky, foliated, ankeritic metasediment
Abby Lake	336236	Sep-08	0.001	5338942	620321	Fine grained, foliated, grey and pinkish with calcite; meta quartzite?
Brown Vein Area	336204	Jun-17	0.016	5337657	618032	sericitic schist carbonitized 3 percent py. strike 74 dip 30w
Brown Vein Area	336205	Jun-17	0.01	5337652	618035	buff to grey foliated carbonitized quartz stringers
Brown Vein Area	336245	Sep-27	0.037	5337689	617990	Medium grained, quartz stockwork; contacts shear; quartz has smokey zones; pyrite up to 2%
Brown Vein Area	336246	Sep-27	0.013	5337688	617987	Sericitic shear in quartz stockwork; greenish brown; minor chlorite; no apparent sulphides
Brown Vein Area	337501	Sep-22	0.009	5337693	618020	Fine to medium grained, light yellow and greenish, slightly hard schist; strike at 055 degrees; also some medium green bands with up to 1% py; approximately 65 m south of AL-14-01 on old cut line
Brown Vein Grid	336074	Aug-31	0.028	5337458	617560	Quartz, white with chlorite and pyrite; fine grained basalt with carbonatization and small specks pyrite
Brown Vein Grid	336075	Aug-31	0.03	5337480	617571	Quartz, white, rusty, fine mineralization in basalt with chlorite; minor pyrite
Brown Vein Grid	336197	Jun-17	0.014	5337595	617892	shear with cpy
Brown Vein Grid	336198	Jun-17	0.163	5337571	617829	dark quartz with malachite patches; rusty on contact
Brown Vein Grid	336199	Jun-17	0.063	5337579	617833	green-grey, buff strongly foliated (was initially numbered 336206)
Brown Vein Grid	336200	Jun-17	0.02	5337539	617819	fine grained intermediate dyke carbonitized; blocky; on roadside (was initially numbered 336207)
Brown Vein Grid	336203	Jun-17	0.01	5337632	617164	brown vein area fine grained carbonitized; minor py
Brown Vein Grid	336206	Jun-17	0.018	5337579	617833	Qtz lens; white rusty orange shear; minor py: changed to 336206: (Says 336068 in field)
Brown Vein Grid	336207	Jun-17	-99	5337539	617519	Int dyke carbonate, blocky on roadside
Brown Vein Grid	336233	Aug-31	0.002	5337564	617664	Quartz vein in sheared basalt; ankerite, milky, bluish, carbonitized with 1% py; strike 072/ dip N
Brown Vein Grid	336244	Sep-13	0.013	5338010	617837	Carbonitized talc schist; distinct pale buff weathering; pervasive calcite; ankerite spotting; rare pyrite; previously sampled but no tag



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Brown Vein Grid	336413	Aug-10	0.076	5337814	617666	Fine grained, very very sheared, white and dark grey rock, Say's Jay 1 in field, strike is 060/ dip 80 N
Brown Vein Grid	336498	Sep-13	0.028	5337900	617890	Fine grained, medium grey, rusty, sugary, siliceous, sheared rock with 8-12% py (probable BIF): 4 ft from 336499
Brown Vein Grid	336499	Sep-13	0.059	5337900	617890	10-12% pyrite in fine grained, hard, dark grey, dull quartz with small blotches of white quartz in places. (probable BIF) 10-12% pyrite in fine grained, hard, dark grey, dull quartz with small blotches of white quartz in places. (probable BIF)
Brown Vein Grid	336500	Sep-13	0.09	5337890	617892	Sugary quartz breccia with dull white and dull grey, purple host with small carbonate and purple fractures (Probable BIF)
Brown Vein Grid	337502	Sep-23	0.032	5338062	617907	Fine grained, very rusty and rotten, slightly sheared rock with > 40% pyrite; on line and on a slope
Brown Vein Grid	337503	Sep-23	0.025	5338062	617907	2 cm quartz vein in very rusty rock with 70% banded pyrite
Brown Vein Grid	337504	Sep-23	0.031	5338062	617907	Fine grained, light grey, rusty, slightly banded silicified rock; contains 1-4% py, often tarnished or oxidized bright yellow. Pyrite is often on oblique fractures, therefore hard to estimate py content.
Brown Vein Grid	337505	Sep-23	0.003	5338062	617907	Composite sample with mainly rusty quartz pieces; also some light grey, fine grained rusty host rock covered in a carbonate rusty 'rhine'. A few pieces with 30% pyrite
Douglas Lake Area Trench 2	336208	Jul-30	0.001	5338485	619440	Carbonatized shear with BIF and quartz veins; previously sampled
Douglas Lake Area Trench 2	336209	Jul-30	0.036	5338488	619442	B.I.F, Cont, pinkish metased, pyrite 8%
Douglas Lake Area Trench 2	336210	Jul-30	0.01	5338487	619442	Qu, rare pyrite, Ank
Douglas Lake Area Trench 2	336411	Aug-09	0.07	5338485	619442	Very sheared, slightly silicified, rusty and felsic unit
Douglas Lake Area Trench 2	336412	Aug-09	0.044	5338509	619476	Very rusty, very sheared with minor pyrite
East Abbie Lake Peninsula	336216	Aug-12	0.03	5339012	620380	fine grained, orangy buff, silicified, ankeritic, calcitic, cross hatched qz viens, porphyry, strike 90/dip 34 N. AB06, Qu, complex darker zones.
East Abbie Lake Peninsula	336217	Aug-12	0.02	5339011	620393	Qv. Contacting metasediment, QZ massive, blocky, ankeritic, M.S strongly carbonitized. Qz strngs, unknown glassy green mineral strike 90. AB09, Qu in metased, epidote
East Abbie Lake Peninsula	336218	Aug-12	0.018	5339012	620380	virtually same location as A336216, Quartz only over 4m
East of Abbie Lake	336223	Aug-14	0.001	5339206	620834	knob of outcrop in muskeg, v fine grained, mid grey fresh break, rusty, buff, weathered, highly silicified, some Q2 sweats, disseminated pyrite 2%
East of Abbie Lake	336224	Aug-14	0.016	5339213	620830	sheared metavolcanic, chloritized, ankerite streaks, patches of calcite, disseminated py to 2%, strike 128 degrees, dips 30 degrees East
East of Abbie Lake	336225	Aug-14	0.004	5339216	620826	sheared metavolcanic, chloritied, dark green, some ankerite, soapy feel, finely laminated, pyrite to 2% in foccintions
East of Abbie Lake	336226	Aug-14	0.001	5339241	620839	fine grained dyke, carbonitized, not magnetic, no apparent mineralization,
East of Abbie Lake	336423	Aug-15	0.634	5339223	620857	Fine grained, moderately banded, dull, purple, brown, quartz carbonate rock with 1/2 -1% pyrite crystals; local rubble
East of Abbie Lake	336424	Aug-15	0.75	5339224	620859	Fine grained, soft, buff coloured, rusty, semi rotten unit, with some quartz calcite veinlets at 060 degrees.
East of Abbie Lake	336425	Aug-15	1.32	5339224	620859	Fine grained, light brown, sheared rock with 5-7% pyrite in rusty quartz.
East of Abbie Lake	336426	Aug-15	0.211	5339224	620859	similar to 336423 but in outcrop
East of Abbie Lake	336427	Aug-15	0.016	5339221	620859	Fine grained, rusty, light brown and grey, soft sheared schist; strike 070/ dip 70N
East of Abbie Lake	336428	Aug-15	0.013	5339237	620858	Fine grained, very sheared, very soft, dark grey schist with a 1 cm quartz vein and minor rust; some thin 1 mm magnetite concentrations
East of Abbie Lake	336429	Aug-15	0.007	5339241	620863	Dirty, white quartz vein ( 1- 3 inches wide) with dark brown, rusty carbonate fractures; host rock at 060; quartz at 090 dipping 80 degrees south
East of Abbie Lake	336430	Aug-15	0.001	5339263	620889	Fine grained slightly rusty, very sheared schist at 060/ dip 80 S
Gilbert Showing South of Abbie Lake	336222	Aug-13	0.008	5338929	620352	QV in QFP, sheared, fine grained, Ankeritic, 90 degrees, sparse pyrite
Salamander Trench	336068	Aug-30	0.111	5337664	617478	Quartz, clear, greyish, orange rust, silvery sulphides, chlorite, 1 speck py
Salamander Trench	336070	Aug-30	0.123	5337667	617477	Sheared, sulphides, reddish rusty layers
Salamander Trench	336071	Aug-30	0.225	5337662	617479	Quartz, white, rusty, sulphides, pyrite
Salamander Trench	336072	Aug-30	0.227	5337660	617475	Rusty, sheared, sulphides, fine pyrite
Salamander Trench	336073	Aug-30	0.178	5337657	617473	Sheared, red rusty, sulphides, pyrite
Salamander Trench	336227	Aug-28	0.113	5337679	617459	Fe sulphide zone: medium grained, rusty brown, dark quartz. Dark quartz blebs; massive pyrite in places
Salamander Trench	336228	Aug-28	0.006	5337682	617464	As above; also silicified; strike at 082
Salamander Trench	336229	Aug-28	0.004	5337684	617467	Rusty Brown, gossan stained; foliated/banded; up to 8% py, some quartz. Manganese oxide
Salamander Trench	336230	Aug-28	0.037	5337686	617468	As above but up to 6% pyrite
Salamander Trench	336231	Aug-28	0.005	5337689	617470	As above but up to 5% pyrite
Salamander Trench	336232	Aug-28	0.017	5337683	617462	Sheared with some silicification; blackish manganese oxide

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Salamander Trench	336476	Aug-30	0.001	5337782	617390	Fine grained, slightly rusty, light brown, felsic schist @ 080 degrees.
Salamander Trench	336477	Aug-30	0.001	5337710	617433	6-8" medium grey, silicified band with 2-4% pyrite in rusty sheared, fine grained, light grey unit at 070 degrees/ dip 70N;
Salamander Trench	336478	Aug-30	0.009	5337710	617433	As above but with 15-17% pyrite: 1 ft away
Salamander Trench	336479	Aug-30	0.001	5337710	617433	Fine grained, light grey, rusty, sheared rock with a few 2-3 mm clear qtz eyes
Salamander Trench	336480	Aug-30	0.001	5337708	617436	Composite sample from old channel cut; fine grained, light grey, very rusty with 2-4% pyrite: stike 070/ dip 70N
Salamander Trench	336481	Aug-30	0.016	5337694	617459	20% pyrite in fine grained, light grey, rusty, silicified rock: HS
Salamander Trench	336482	Aug-30	0.041	5337694	617459	as above but with 12-17% pyrite; 18 inches away
Salamander Trench	336483	Aug-30	0.03	5337660	617469	Fine grained, light dirty grey, rusty 8-10 inch silicified band in sheared porphyry (?); strike 060/ dip 80 N: 10-15% pyrite
Salamander Trench	336484	Aug-30	0.204	5337688	617458	Massive pyrite 3 metres east of 336481
Salamander Trench	336485	Aug-30	0.007	5337692	617462	3-5% dusty pyrite in fractures in fine grained, grey dusty quartz
Salamander Trench	336486	Aug-30	0.006	5337691	617464	As above, but with only 1-2% pyrite
South of Abbie Lake	336069	Aug-22	0.011	5338677	620192	Basalt, chlorite, pyrite in white to orange quartz
South of Abbie Lake	336076	Sep-08	0.024	5338777	620167	White quartz between porphyry, rusty white beside rusty, sheared basalt
South of Abbie Lake	336077	Sep-08	0.021	5338771	620102	Quartz, white, rusty carbonated basalt, sheared with 1% pyrite, purple silicified conglomerate; 1% py: porphyey with no pyrite
South of Abbie Lake	336211	Aug-09	0.001	5338964	620413	Qu complex, QFP, Brecc, Domal
South of Abbie Lake	336212	Aug-09	0.001	5338964	620413	QFP, carb, minor pyrite, strike 80 degrees, dip 32 degrees west.
South of Abbie Lake	336213	Aug-09	0.001	5338916	620533	Sh Metavolcanic, CHL, QZ, Eyes
South of Abbie Lake	336214	Aug-09	0.001	5338865	620356	meta greywacke, Fol, Sparse Pyrite
South of Abbie Lake	336215	Aug-12	0.234	5338875	620326	Fn.GR grey metased
South of Abbie Lake	336220	Aug-13	0.001	5338950	620477	QFP in Q2 complex, pyrite 15%
South of Abbie Lake	336221	Aug-13	0.001	5338956	620396	previous AB03, QZ and shear, Carb
South of Abbie Lake	336234	Aug-31	0.001	5338684	619911	Highly silicified with incipient shearing; manganese halos; Qtz vein with unknown dimensions
Splay North of Paint Lake Road	337521	Sep-27	0.001	5339055	622224	Fine grained, light green, weakly sheared, felsic volcanic with 1/2-1% pyrite; strike 090 dip 90
Splay North of Paint Lake Road	337522	Sep-27	0.174	5339055	622224	Fine grained, medium green, sheared, rusty contact with a 2 ft quartz zone; qtz has some dark tourmaline; actual width of quartz zone is 18- 24". Strike 140/ dip 70 East
Splay North of Paint Lake Road	337523	Sep-27	0.744	5339055	622224	10" rusty zone within quartz zone; 80-90% fine massive pyrite zone < 6" wide
Splay North of Paint Lake Road	337524	Sep-27	0.049	5339055	622224	East end of shear zone with 5-7% py in light green, siliceous rock.
Splay North of Paint Lake Road	337525	Sep-27	0.446	5339055	622224	Fine grained, dirty white and light green quartz/siliceous zone with 2-4% pyrite cubes; rusty carbonate stain on weathered surface; scattered 2-3 mm light grey quartz veinlets within
Splay North of Paint Lake Road	337526	Sep-27	1.16	5339055	622224	Fine grained, light grey, silicified with rusty fractures and rare py. 1-2 one cm quartz veins
Splay North of Paint Lake Road	337527	Sep-27	0.001	5339055	622224	Olive green, soft sericitic , slightly rusty schist; strike 040/ dip 70 north
Splay North of Paint Lake Road	337528	Sep-27	0.283	5339145	622254	Rusty quartz from 1 1/2 m wide quartz/carbonate zone in sheared basalt; strike 070/ dip 70 N
White River Road	336395	Aug-11	0.001	5337270	615997	Very fine grained, medium green, epidotized metavolcanics; ankeritic crust on weathered surface: 3% py
White River Road	336396	Aug-11	0.089	5337270	615997	Very fine grained: quartz vein with metavolv inclusions: ankerite; rare py
White River Road	336397	Aug-11	0.004	5337270	615997	Very fine grained quartz vein and metavolc; possible tourmaline bands; some foliation; no py
White River Road	336398	Aug-11	0.038	5337270	615997	Very fine grained, green and white; quartz and foliated metavolc: rare pyrite
White River Road	336399	Aug-11	0.047	5337270	615997	Very fine grained, mid green; foliated metavolcanic with quartz bands; ankerite and potassic feldspar
White River Road	336400	Aug-11	0.013	5337270	615997	As above
White River Road	336400B	Aug-11	0.001	5337270	615997	Very fine grained meta-volcanic; quartz banding; rare pyrite
White River Road	336414	Aug-13	0.001	5336524	616000	Slightly rusty, slightly silicified(?) shear in fine grained, light grey sed?
White River Road	336415	Aug-14	0.045	5336879	615942	Small rusty quartz pod with minor fine pyrite
White River Road	336416	Aug-14	0.562	5336881	615942	Orange rusty, pseudo-conglomerate with powdery yellow jarosite, from under a ledge; photo
White River Road	336417	Aug-14	0.068	5336877	615939	Fine grained, brown and grey, sheared rock with 70-80 pyrite; shearing 050/ dip 60 N

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White River Road	336418	Aug-14	0.059	5336888	615940	Fine grained, dark grey, half metre wide, silicified rusty (pod) with 15-20% pyrite in fine bands and 1 cm pyrite band; up to 10 inches wide
White River Road	336419	Aug-14	0.003	5336891	615941	Fine grained, light green, platy sheared rock with a rusty quartz vug (hand sample)
White River Road	336420	Aug-14	0.036	5336892	615940	Fine grained, light and medium grey, silicified rock with 5-7 % pyrite; strike is 090/ dip 60N
White River Road	336421	Aug-14	0.003	5336895	615940	Half meter wide zone at 110 degrees/ dip 50N with 30-40% rusty quartz, brown carbonate fractures in quartz
White River Road	336422	Aug-14	0.001	5337835	616859	Fine grained, light grey and dark brown, moderately sheared rock, with rare pyrite from a 6m wide slightly rusty shear; strike 080/ dip 80N

MMI Sample Descriptions

Sample#	UTM Easting	UTM Northing	Soil Horizon	Colour	Description
212236	617112	5337537	B	Mid brown	fine silty, 10-18cm
212237	617122.1684	5337514.161	B	Mid brown	fine silty,
212238	617132.3368	5337491.323	b	dark brown	medium silty, 10-25cm
212239	617142.5052	5337468.484		reddish brown	Medium sandy, 10-24m
212240	617152.6737	5337445.645	B	reddish brown	Medium sandy, cobbles and pebbles, 10-25cm
212241	617162.8421	5337422.807	B	Yellow brown	fine silty, 10-25cm
212242	617173.0105	5337399.968	B	Reddish brown	Medium sandy, 10-25cm
212243	617183.1789	5337377.13		yellow buff	fine silty, wet, 10-25cm
212244	617193.3473	5337354.291		buff	fine silty, wet, 10-25cm
212245	617203.5157	5337331.452		Reddish brown	coarse sandy, cobbles, 10-25cm
212246	617213.6842	5337308.614	B	reddish brown	Medium sandy-silty, pebbles, 10-25cm
212183	618739.6842	5338005.614	B	Orangy brown	Fine silty, 10-25cm
212184	618729.5157	5338028.452		Buff brown	fine clayey, wet, 10-25cm
212185	618719.3473	5338051.291	B	yellow buff	Fine silty, 10-25cm
212186	618709.1789	5338074.13	B	Orangy brown	fine silty, 10-25cm
212187	618699.0105	5338096.968	B	orangy brown	Fine silty, few pebbles, 10-25cm
212188	618688.8421	5338119.807			wet, some silt, @20cm, 30% organics
212189	618678.6737	5338142.645	B	orangy brown	fine silty, 10-25cm
212190	618668.5052	5338165.484		Black	wet, some silt, @20cm, 30% organics
212191	618658.3368	5338188.323		Black	wet, small rock fragments, some organics, 10-25cm
212192	618648.1684	5338211.161	B	Mid brown	fine silty, pebbles, 10-25cm
212193	618638	5338234	B	Orangy brown	Fine silty, 10-24cm
212194	618818	5338320	B	Reddish brown	Med sandy, 10-25cm
212195	618828.1684	5338297.161	B	Yellow brown	fine silty, some pebbles, 10-25cm
212196	618838.3368	5338274.323	B	reddish brown	medium silty, 10-25cm
212197	618848.5052	5338251.484	B	Dark brown	fine silty, some fragments, 10-25cm
212198	618858.6737	5338228.645	B	Yellow/ orange	Fine silty, 10-25cm
212199	618868.8421	5338205.807	B	yellow-orange	fine silty, 10-25cm
212200	618879.0105	5338182.968	B	Orangy brown	Fine silty, 10-25cm
212201	618889.1789	5338160.13	Poor B	pale buff	fine clayey, 10-25cm
212202	618899.3473	5338137.291	B	yellow buff	Fine silty, 10-25cm

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212203	618909.5157	5338114.452	B	Reddish brown	Fine silty, 10-25cm
212204	619087.6842	5338148.614		Pale buff	fine silty, on outcrop, 10-14cm
212205	619077.5157	5338171.452	B	Dark Brown	Fine silty , 10-25cm
212206	619067.3473	5338194.291	B	dark brown	coarse clayey, 10-14cm
212207	619057.1789	5338217.13		Pale buff	fine silty, semi wet, 10-20cm
212208	619047.0105	5338239.968		Grey brown	Fine clayey, wet, 10-25cm
212209	619036.8421	5338262.807		grey brown	Fine silty, 10-12cm
212210	619026.6737	5338285.645	B	Orange brown	fine silty, 10-25cm
212211	619016.5052	5338308.484		Orange brown	silty sandy, pebbles, 10-25cm
212212	619006.3368	5338331.323	Poor B	pale buff	fine silty, 10-25cm
212213	618996.1684	5338354.161		blackish	coarse sandy, wet, 10-25cm, creek
212214	618986	5338377		buffy	Fine silty, 10-25cm
212117	619534.5157	5338295.452	B	Dk. Brown	Fine silty, 10-25cm
212118	619524.3473	5338318.291	B	Pale brown	Fine silty, some clay, 10-20cm
212119	619514.1789	5338341.13	B	Mid brown	Fine silty, 10-20cm
212120	619504.0105	5338363.968	B?	Very dark Brown	begin b horizon, some organics, silty, 13cm to outcrop
212121	619493.8421	5338386.807		Black	fine silty, marginal, 15cm to outcrop, some 50% hornus.
212122	619483.6737	5338409.645		Black	Marginal , muskeg area, mostly organics, saturated @21cm
212123	619473.5052	5338432.484	B	Orange yellow	Gravelly, 10-25cm
212124	619463.3368	5338455.323	B	Orangy brown	Fine sandy, few pebbles, 10-25cm
212125	619453.1684	5338478.161	B	Pale Brown	Fine silty, 10-25cm
212126	619443	5338501	B	Orange	Fine sandy, 10+25cm
212127	619460.6	5338518.6	B	Reddish brown	coarse with fragment, 10-25cm. On strike with T2; 619434E/5338477N
212128	619469.1	5338542.1	B	Pale brown	25m @ 20degrees from 212127, silty fine, 10-25cm
212108	620042.3473	5338596.291	B	Orangy brown	fine silty 10cm-25cm
212109	620032.1789	5338619.13	B	Mid Orange brown	fine silty, 10-25cm
212110	620022.0105	5338641.968	B	Yell- Brown	Fine silty, few pebbles, 10cm -25cm
212111	620011.8421	5338664.807	B	Orangy brown	fine silty, 10-25cm
212112	620001.6737	5338687.645	B	Pale greyish brown	Fine silty, some clay, 10-25cm
212113	619991.5052	5338710.484		Pale brown	Fine silty, 10cm-outcrop
212114	619981.3368	5338733.323		greyish brown	Gravelly/ silty 14cm on outcrop
212115	619971.1684	5338756.161		Dk. Grey Brown	Fine clayey, bouldery, wet area, on o/c 13cm
212116	619961	5338779		Dk. Brown	fine silty, cedar swamp, 10-25cm
212100	620429	5339085	B?	dark brown	silty loam (Described by FR)
212101	620516.4484	5338888.588	B	redish brown	fine sandy, 10-17cm at bedrock

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212102	620506.28	5338911.426	B	orange brown	fine sandy silty 10-20cm
212103	620496.1115	5338934.265	?	buff blackish	fine sandy, saturated some organics 10-25cm
212104	620475.7747	5338979.942		brown black	marginal sample, organics with some soil, 30-50cm
212105	620465.6063	5339002.781	B?	brown black	50% organics, 50cm
212106	620455.4379	5339025.62		black	50% organics, spruce muskeg, 50cm
212107	620445.2695	5339048.458	?	brown black	50% organics, spruce muskeg, 50cm
212247	617343.6842	5337361.614	B	orangy brown	Fine sandy, 10-25cm
212248	617333.5157	5337384.452	B	yellow brown	fine sandy, 10-25cm
212249	617323.3473	5337407.291	B	orangy brown	fine silty, 10-25cm
212250	617303.0105	5337452.968		Black to grey	wet, marginal, @18cm
212251	617292.8421	5337475.807		Buff, some yellw	10-25cm, fine silty
212252	617282.6737	5337498.645	B	Reddish brown	coarse pebbly, 10-13cm
212253	617272.5052	5337521.484	B	reddish brown	fine silty, 10-25cm
212254	617262.3368	5337544.323	B	orangy brown	Fine silty, 10-25cm
212255	617252.1684	5337567.161	B	orangy brown	Fine silty, 10-21 cm
212256	617242	5337590	B	reddish brown	fine silty, 10-25cm
212227	617439.1684	5337639.161		black	Some silt, 20% organics, 20cm @ outcrop
212215	617693.6842	5337502.614	B	dark orangy brn	Fine silty, some pebbles, 10-25cm
212216	617683.5157	5337525.452	B	Medium brown	Fine silty, 10-25cm
212217	617673.3473	5337548.291	B	Orangy brown	Fine silty, some cobbles, 10-25cm
212218	617663.1789	5337571.13	B	orangy brown	Fine silty, 10-25cm
212219	617653.0105	5337593.968	B	orangy brown	Fine silty, 10-25cm
212220	617642.8421	5337616.807	B	pale yellow Brn	Fine silty, 10-25cm
212221	617632.6737	5337639.645		Pale buff	fine silty, 10-25cm
212222	617622.5052	5337662.484	B	buff brown	fine silty, 10-15cm
212223	617612.3368	5337685.323	B	orangy brown	Fine silty, 10-25cm
212224	617602.1684	5337708.161	B	orangy brown	Fine silty, 10-25cm
212225	617592	5337731		pale buff	fine clayey, 10-25cm
212140	617770	5337810		Black	Fine silty, wet, 10-25cm
212141	617780.1684	5337787.161		Black	fine wet, organic, 10-25cm
212142	617790.3368	5337764.323	B	Pale brown	Fine silty, 10-25cm
212143	617800.5052	5337741.484		Black to Mid BRN	On o/c, organics, wet
212144	617810.6737	5337718.645		Pale brown	Fine silty, Pale Brown, some pebbles, 10-15cm, on outcrop
212145	617820.8421	5337695.807		medium grey	10-25cm, clayey, down to o/c
212146	617831.0105	5337672.968		grey	25m nw of station, clayey
212147	617842.8059	5337646.475	B	brown soil	10-25cm, 4m se of station due to o/c
212148	617851.3473	5337627.291		Light Brown	10-25cm, clayey, damp soil

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212149	617861.5157	5337604.452	B		
212150	617877.7852	5337567.91	B	Medium brown	slightly damp clay
212130	618028.6842	5337664.614	B	Pale to mid Brn	Fine silty, few clasts, 10-14cm
212131	618018.5157	5337687.452	B	Orangy brown	Fine silty, taken from 7m north of station. 10-25cm
212132	618008.3473	5337710.291	C	Mid Brown	Fine silty, taken from 5m N of station, some fragments, 10-15cm
212133	617998.1789	5337733.13	Poor B	Pale brown	fine clayey, wet, 10-25cm
212134	617988.0105	5337755.968	B	Reddish brown	fine silty, Few shards, 10-25cm
212135	617967.6737	5337801.645	B	Rusty Brown	fine clayey, wet, 10-25cm
212136	617957.5052	5337824.484		Black	wet silty, some pebbles, 30% organics, 10-25cm
212137	617947.3368	5337847.323	B	Orangy Brown	Fine silty, 10-25cm
212138	617937.1684	5337870.161		Dark-Brown	Fine silty, some pebbles, 10-21cm
212139	617927	5337893			Largely marginal, organic duff, some soil, 10-13cm, outcrop area
212151	618174.6842	5337713.614	B	Mid brown	Fine silty, 10-25cm
212152	618164.5157	5337736.452		Dark-Brown	Wet, fine silty, 30% organics, 10-25cm
212153	618154.3473	5337759.291	B	Orangy Brown	fine silty, some pebbles, 10-25cm
212154	618144.1789	5337782.13	B	Orangy brown	fine silty, some pebble, 10-25cm
212155	618134.0105	5337804.968	B	Buff brown	Fine silty, 10-25cm
212156	618123.8421	5337827.807	B	orangy brown	fine silty 10-25cm
212157	618113.6737	5337850.645	B	Orangy brown	fine silty, pebbles, 10-25cm
212158	618103.5052	5337873.484	poor B	Dark Brown	fine silty, wet, 10-25cm
212159	618093.3368	5337896.323	B	reddish brown	fine silty, some angular fragments, 10-25cm
212160	618083.1684	5337919.161	B	Dark Brown	Fine clayey, 10-25cm
212161	618073	5337942	B	dark brown	Fine silty, 10-25cm
212162	618193	5337999	B?	dark brown	marginal, fine silty, 14cm@bedrock
212163	618203.1684	5337976.161	B	Pale buffy	Fine silty, clayey, 10-25cm
212164	618213.3368	5337953.323		greyish brown	fine silty, wet, 10-25cm
212165	618223.5052	5337930.484	B	Reddish brown	coarse sandy, 10-25cm, near road
212166	618233.6737	5337907.645	B	Pale Buffy	Fine silty, 10-25cm
212167	618243.8421	5337884.807	B	yellow	Fine silty, 10-25cm
212168	618254.0105	5337861.968	B	Pale buffy	Fine clayey, 10-25cm
212169	618243.8421	5337884.807	B	yellow brown	fine silty, 10-25cm
212170	618274.3473	5337816.291	B	Dark brown	fine silty, 10-25cm
212171	618284.5157	5337793.452		dark brown	fine silty, 10-25cm
212172	618427	5338111		Black	Fine silty, some organics, 10-25cm, on o/c
212173	618437.1684	5338088.161	Poor B	Pale buffy	fine clayey, 10-25cm
212174	618447.3368	5338065.323	poor B	Pale buffy	Fine clayey, 10-25cm, by road, wet

Report On Channel Sampling, Prospecting and MMI Survey, February 2019

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212175	618457.5052	5338042.484	B	pale yellow	fine silty, 10-25cm
212176	618467.6737	5338019.645	B	reddish brown	Fine silty, 10-22 cm
212177	618477.8421	5337996.807	B	Orangy brown	Fine silty, 10-25m
212178	618488.0105	5337973.968	B	Orangy brown	fine silty, 10-25cm
212179	618498.1789	5337951.13	B	Medium brown	Fine silty, 10-25cm
212180	618508.3473	5337928.291	B	Reddish brown	fine silty, 10-25cm
212181	618518.5157	5337905.452	B	yellow brown	Fine silty, 10-20cm
212182	618528.6842	5337882.614	B	yellow brown	Fine silty 10-25cm
212226	617429	5337662		Black	wet silty, 30% organics, cedar swamp, 10-25cm
212228	617449.3368	5337616.323	B	red brown	Medium sandy, 10-25cm
212229	617459.5052	5337593.484		Black	marginal, some silt, 30% organics, @12 cm
212230	617469.6737	5337570.645		Black	Wet, fine silty, some organics, 10-25cm
212231	617479.8421	5337547.807	B	Red brown	Medium sandy, 10-25cm
212232	617490.0105	5337524.968	B	reddish brown	Medium sandy, 10-25cm
212233	617500.1789	5337502.13	B	Orange brown	fine silty, 10-25cm
212234	617510.3473	5337479.291	B	Reddish brown	Fine silty, 10-25cm
212235	617520.5157	5337456.452		greenish buff	Silty clayey, 10-25cm



**Appendix C – Assay Certificates**



**Date Submitted:** 03-Jul-17  
**Invoice No.:** A17-06679  
**Invoice Date:** 02-Aug-17  
**Your Reference:** Abby Lake

**Argo Gold Inc**  
**365 Bay Street**  
**Suite 400**  
**Toronto ON M5H 2V1**  
**Canada**

**ATTN: Judy Baker**

## CERTIFICATE OF ANALYSIS

8 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1H INAA(INAAGEO)/Total Digestion ICP(TOTAL)

REPORT **A17-06679**

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

Notes:

Elements which exceed the upper limits should be analyzed by assay techniques. Some elements are reported by multiple techniques. These are indicated by MULT.

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Emmanuel Esemé". The signature is written in a cursive style with some loops and flourishes.

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

## Results

## Activation Laboratories Ltd.

Report: A17-06679

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
336197	14	< 0.3	108	< 0.3	< 1	4	46	141	0.73	4.79	4.1	130	< 1	< 2	< 0.5	0.34	34	70	1	0.7	15.2	2	< 1
336198	163	1.4	265	< 0.3	5	10	13	34	0.24	1.29	1.0	< 50	< 1	< 2	1.4	0.08	10	67	< 1	< 0.2	2.92	< 1	< 1
336199	63	< 0.3	81	0.4	1	12	23	61	1.49	4.66	2.7	440	1	< 2	< 0.5	0.08	13	37	2	0.6	11.7	2	< 1
336200	20	< 0.3	76	0.3	< 1	8	68	69	0.02	5.95	< 0.5	510	1	< 2	< 0.5	4.64	36	307	< 1	1.4	5.69	3	< 1
336203	10	< 0.3	68	< 0.3	< 1	6	87	95	0.03	5.97	< 0.5	250	1	< 2	< 0.5	5.24	44	282	< 1	1.4	6.06	3	< 1
336204	16	< 0.3	120	0.5	< 1	4	68	106	1.95	5.39	10.4	390	< 1	< 2	< 0.5	0.11	44	137	< 1	0.7	10.2	2	< 1
336205	10	< 0.3	40	0.7	< 1	7	379	146	0.14	4.66	3.2	310	1	< 2	< 0.5	4.01	52	1000	< 1	0.9	6.54	1	< 1
336206	18	< 0.3	37	< 0.3	7	< 3	35	53	0.13	3.95	1.5	300	< 1	< 2	< 0.5	0.39	19	100	< 1	0.5	3.80	2	< 1

## Results

## Activation Laboratories Ltd.

Report: A17-06679

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
336197	< 5	0.53	27	1.02	2020	0.88	0.048	< 15	< 0.1	14.9	< 3	76	< 0.5	0.12	2.6	< 0.5	133	< 1	7	14.4	32	11	2.7
336198	< 5	0.21	4	0.29	618	0.20	0.012	< 15	0.4	4.6	< 3	15	< 0.5	0.10	0.7	< 0.5	40	< 1	3	2.5	6	< 5	0.6
336199	< 5	1.49	9	0.37	1070	0.40	0.064	109	0.3	11.6	< 3	78	< 0.5	0.10	4.7	< 0.5	122	< 1	6	13.0	30	11	2.4
336200	< 5	0.77	30	2.71	1200	2.43	0.148	67	0.7	24.6	< 3	309	< 0.5	0.16	7.7	1.4	158	< 1	13	36.7	71	29	7.0
336203	< 5	0.91	14	2.35	1060	2.97	0.120	< 15	0.8	25.4	< 3	336	< 0.5	0.36	5.9	< 0.5	156	3	11	32.5	69	29	6.7
336204	< 5	1.06	21	0.56	1780	1.08	0.048	39	0.4	18.2	< 3	108	< 0.5	0.36	3.6	1.4	154	< 1	7	16.7	35	14	2.9
336205	< 5	0.93	35	3.14	1890	0.26	0.082	39	0.4	20.4	< 3	330	< 0.5	0.27	3.1	< 0.5	134	4	9	17.4	41	19	4.0
336206	< 5	0.49	11	0.35	933	1.44	0.031	41	0.3	11.5	< 3	125	< 0.5	0.31	2.0	< 0.5	93	< 1	6	10.9	22	10	2.0

**Results****Activation Laboratories Ltd.****Report: A17-06679**

Analyte Symbol	Sn	Tb	Yb	Lu	Mass
Unit Symbol	%	ppm	ppm	ppm	g
Lower Limit	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA
336197	< 0.02	< 0.5	1.4	0.09	33.3
336198	< 0.02	< 0.5	0.5	< 0.05	34.7
336199	< 0.02	< 0.5	0.9	0.06	34.5
336200	< 0.02	< 0.5	1.1	< 0.05	31.6
336203	< 0.02	< 0.5	1.2	< 0.05	35.1
336204	< 0.02	< 0.5	1.8	0.10	31.6
336205	< 0.02	< 0.5	1.0	< 0.05	31.3
336206	< 0.02	< 0.5	1.0	0.06	34.1

Analyte Symbol	Au	Ag	Ag	Cu	Cd	Mo	Pb	Ni	Ni	Zn	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	2	0.3	5	1	0.3	1	3	1	20	1	50	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2
Method Code	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
GXR-1 Meas		31.9		1160	3.2	16	750	43		740		0.25	2.00			1	1380		0.89				
GXR-1 Cert		31.0		1110	3.30	18.0	730	41.0		760		0.257	3.52			1.22	1380		0.960				
GXR-1 Meas		31.7		1220	3.8	16	757	43		750		0.26	2.09			1	1370		0.92				
GXR-1 Cert		31.0		1110	3.30	18.0	730	41.0		760		0.257	3.52			1.22	1380		0.960				
GXR-1 Meas		31.8		1220	3.3	16	757	43		746		0.25	2.03			1	1370		0.92				
GXR-1 Cert		31.0		1110	3.30	18.0	730	41.0		760		0.257	3.52			1.22	1380		0.960				
GXR-4 Meas		3.3		6500	0.6	345	61	44		75		1.77	6.41			2	36		1.06				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
GXR-4 Meas		3.3		6410	0.4	331	51	41		70		1.75	6.02			2	30		1.03				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
GXR-4 Meas		3.4		6620	0.4	337	54	45		72		1.79	6.15			2	32		1.06				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
SDC-1 Meas				32			27	38		99			8.02			3			1.07				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
SDC-1 Meas				29			24	35		99			7.78			3			1.08				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
SDC-1 Meas				30			27	35		99			7.87			3			1.08				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
GXR-6 Meas		0.4		72	0.3	< 1	92	27		126		0.01	11.2			1	< 2		0.18				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
GXR-6 Meas		< 0.3		73	< 0.3	< 1	96	26		129		0.02	12.2			1	< 2		0.18				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
GXR-6 Meas		0.4		69	< 0.3	< 1	95	26		126		0.02	12.6			1	< 2		0.20				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
DNC-1a Meas				94			< 3	238		54													
DNC-1a Cert				100			6.3	247		70													
DNC-1a Meas				98			< 3	246		55													
DNC-1a Cert				100			6.3	247		70													
DNC-1a Meas				100			< 3	245		56													
DNC-1a Cert				100			6.3	247		70													
SBC-1 Meas				29	0.3	1	23	75		160						3	3						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
SBC-1 Meas				33	0.4	1	26	86		167						3	< 2						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
SBC-1 Meas				31	0.6	3	27	84		180						3	< 2						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
OREAS 45d (4-Acid) Meas				400		7	23	236		42		0.07	7.62			< 1	< 2		0.20				
OREAS 45d (4-Acid) Cert				371		2.500	21.8	231.0		45.7		0.049	8.150			0.79	0.31		0.185				

Analyte Symbol	Au	Ag	Ag	Cu	Cd	Mo	Pb	Ni	Ni	Zn	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	2	0.3	5	1	0.3	1	3	1	20	1	50	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2
Method Code	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
OREAS 45d (4-Acid) Meas				407		5	19	246		43		0.06	7.82			< 1	< 2		0.21				
OREAS 45d (4-Acid) Cert				371		2,500	21.8	231.0		45.7		0.049	8.150			0.79	0.31		0.185				
SdAR-M2 (U.S.G.S.) Meas				236	5.7	12	798	50		759						7	< 2						
SdAR-M2 (U.S.G.S.) Cert				236.00 00	5.1	13	808	49		760						6.6	1.05						
SdAR-M2 (U.S.G.S.) Meas				234	5.3	7	786	51		763						7	< 2						
SdAR-M2 (U.S.G.S.) Cert				236.00 00	5.1	10	808	49		760						6.6	1.05						
SdAR-M2 (U.S.G.S.) Meas				248	5.4	10	815	53		775						8	< 2						
SdAR-M2 (U.S.G.S.) Cert				236.00 00	5.1	13	808	49		760						6.6	1.05						
DMMAS 120 Meas	766													1830	1240					51	134		
DMMAS 120 Cert	727													1790	1270					47.0	138		
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	0.03			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	0.02			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		3		< 0.01	0.02			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank	< 2		< 5					< 20		< 50				< 0.5	< 50			< 0.5		< 1	< 2	< 1	< 0.2

Analyte Symbol	Fe	Hf	Hg	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La
Unit Symbol	%	ppm	ppm	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	1	1	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5
Method Code	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA
GXR-1 Meas					0.07	8	0.21	976		0.058					279		0.03			88		32	
GXR-1 Cert					0.050	8.20	0.217	852		0.0650					275		0.036			80.0		32.0	
GXR-1 Meas					0.06	8	0.22	937		0.060					295		0.03			90		34	
GXR-1 Cert					0.050	8.20	0.217	852		0.0650					275		0.036			80.0		32.0	
GXR-1 Meas					0.06	9	0.23	937		0.061					295		0.03			90		34	
GXR-1 Cert					0.050	8.20	0.217	852		0.0650					275		0.036			80.0		32.0	
GXR-4 Meas					3.26	11	1.69	165		0.131					214		0.31			88		16	
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29			87.0		14.0	
GXR-4 Meas					3.76	11	1.66	159		0.129					214		0.29			86		16	
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29			87.0		14.0	
GXR-4 Meas					4.00	11	1.72	157		0.133					221		0.30			87		16	
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29			87.0		14.0	
SDC-1 Meas					2.44	33	0.98	873		0.055					170		0.31			64			
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606			102.00			
SDC-1 Meas					2.01	35	1.02	853		0.055					172		0.25			58			
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606			102.00			
SDC-1 Meas					2.16	35	1.02	856		0.054					179		0.19			55			
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606			102.00			
GXR-6 Meas					1.90	32	0.56	1070		0.035					42					154		15	
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0					186		14.0	
GXR-6 Meas					1.96	34	0.61	1070		0.036					41					122		16	
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0					186		14.0	
GXR-6 Meas					1.82	36	0.63	1100		0.038					43					156		16	
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0					186		14.0	
DNC-1a Meas						5									127		0.30			139		18	
DNC-1a Cert						5.2									144		0.29			148		18.0	
DNC-1a Meas						5									137		0.31			139		19	
DNC-1a Cert						5.2									144		0.29			148		18.0	
DNC-1a Meas						5									135		0.31			142		19	
DNC-1a Cert						5.2									144		0.29			148		18.0	
SBC-1 Meas						181									251		0.54			195		83	
SBC-1 Cert						163									178.0		0.51			220.0		36.5	
SBC-1 Meas						163									178		0.56			213		38	
SBC-1 Cert						163									178.0		0.51			220.0		36.5	
SBC-1 Meas						160									176		0.51			211		38	
SBC-1 Cert						163									178.0		0.51			220.0		36.5	
OREAS 45d (4-Acid) Meas					0.48	20	0.24	497		0.034					35		0.17			104		13	
OREAS 45d (4-Acid) Cert					0.412	21.5	0.245	490.000		0.042					31.30		0.773			235.0		9.53	
OREAS 45d (4-Acid) Meas					0.43	21	0.25	519		0.039					36		0.61			194		13	
OREAS 45d					0.412	21.5	0.245			0.042					31.30		0.773			235.0		9.53	



Analyte Symbol	Fe	Hf	Hg	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La
Unit Symbol	%	ppm	ppm	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	1	1	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5
Method Code	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA
(4-Acid) Cert								490.000															
SdAR-M2 (U.S.G.S.) Meas						17									142					27			29
SdAR-M2 (U.S.G.S.) Cert						18									144					25.2			32.7
SdAR-M2 (U.S.G.S.) Meas						17									136					21			29
SdAR-M2 (U.S.G.S.) Cert						18									144					25.2			32.7
SdAR-M2 (U.S.G.S.) Meas						18									148					25			30
SdAR-M2 (U.S.G.S.) Cert						18									144					25.2			32.7
DMMAS 120 Meas	3.85								2.22			5.5	6.5						11.5				17.8
DMMAS 120 Cert	3.54								2.16			7.30	6.50						11.7				17.6
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2			< 1
Method Blank	< 0.01	< 1	< 1	< 5					< 0.01		< 15	< 0.1	< 0.1	< 3		< 0.5		< 0.2	< 0.5			< 1	< 0.5

Analyte Symbol	Ce	Nd	Sm	Sn	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	%	ppm	ppm	ppm	g
Lower Limit	3	5	0.1	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas								
GXR-1 Cert								
GXR-1 Meas								
GXR-1 Cert								
GXR-1 Meas								
GXR-1 Cert								
GXR-4 Meas								
GXR-4 Cert								
GXR-4 Meas								
GXR-4 Cert								
GXR-4 Meas								
GXR-4 Cert								
SDC-1 Meas								
SDC-1 Cert								
SDC-1 Meas								
SDC-1 Cert								
SDC-1 Meas								
SDC-1 Cert								
GXR-6 Meas								
GXR-6 Cert								
GXR-6 Meas								
GXR-6 Cert								
GXR-6 Meas								
GXR-6 Cert								
DNC-1a Meas								
DNC-1a Cert								
DNC-1a Meas								
DNC-1a Cert								
DNC-1a Meas								
DNC-1a Cert								
SBC-1 Meas								
SBC-1 Cert								
SBC-1 Meas								
SBC-1 Cert								
SBC-1 Meas								
SBC-1 Cert								
OREAS 45d (4-Acid) Meas								
OREAS 45d (4-Acid) Cert								
OREAS 45d (4-Acid) Meas								
OREAS 45d								

Analyte Symbol	Ce	Nd	Sm	Sn	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	%	ppm	ppm	ppm	g
Lower Limit	3	5	0.1	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
(4-Acid) Cert								
SdAR-M2 (U.S.G.S.) Meas								
SdAR-M2 (U.S.G.S.) Cert								
SdAR-M2 (U.S.G.S.) Meas								
SdAR-M2 (U.S.G.S.) Cert								
SdAR-M2 (U.S.G.S.) Meas								
SdAR-M2 (U.S.G.S.) Cert								
DMMAS 120 Meas	31		2.5					
DMMAS 120 Cert	32.0		2.70					
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank	< 3	< 5	< 0.1	< 0.02	< 0.5	< 0.2	< 0.05	30.0



**Date Submitted:** 05-Sep-17  
**Invoice No.:** A17-09548  
**Invoice Date:** 11-Oct-17  
**Your Reference:** Abby Lake

**Argo Gold Inc**  
**365 Bay St**  
**Toronto**  
**Canada**

**ATTN: Frank Racicot**

## CERTIFICATE OF ANALYSIS

122 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1H INAA(INAAGEO)/Total Digestion ICP(TOTAL)

REPORT **A17-09548**

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

Notes:

Elements which exceed the upper limits should be analyzed by assay techniques. Some elements are reported by multiple techniques. These are indicated by MULT.

CERTIFIED BY:

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke at the end.

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

## Results

## Activation Laboratories Ltd.

## Report: A17-09548

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
336208	< 2	0.4	200	0.8	< 1	< 3	146	235	0.27	7.14	1.9	< 50	< 1	< 2	< 0.5	2.64	91	52	< 1	1.4	22.8	3	< 1
336209	36	< 0.3	88	0.7	< 1	5	51	115	2.88	3.10	6.3	< 50	< 1	< 2	< 0.5	1.05	36	49	< 1	0.5	14.5	1	< 1
336210	10	< 0.3	6	< 0.3	< 1	< 3	3	11	0.07	0.13	1.0	< 50	< 1	< 2	5.4	0.20	1	22	< 1	< 0.2	0.97	< 1	< 1
336211	< 2	< 0.3	2	< 0.3	2	< 3	4	6	0.01	1.34	0.9	< 50	< 1	< 2	< 0.5	0.04	1	29	< 1	< 0.2	0.90	< 1	< 1
336212	< 2	< 0.3	5	< 0.3	< 1	5	89	100	0.10	6.70	< 0.5	< 50	< 1	< 2	< 0.5	3.72	31	296	< 1	1.8	4.91	3	< 1
336213	< 2	< 0.3	43	< 0.3	< 1	< 3	62	57	0.05	7.36	3.7	450	< 1	< 2	< 0.5	0.99	27	109	3	< 0.2	4.51	3	< 1
336214	< 2	< 0.3	59	< 0.3	< 1	4	73	77	0.03	7.41	< 0.5	< 50	< 1	< 2	< 0.5	3.73	27	88	< 1	1.8	5.94	2	< 1
336215	234	< 0.3	58	< 0.3	15	7	43	54	1.51	6.17	3.7	< 50	< 1	< 2	< 0.5	3.34	23	68	< 1	0.6	4.38	2	< 1
336216	30	< 0.3	123	< 0.3	7	3	76	72	0.25	2.86	< 0.5	150	< 1	< 2	< 0.5	2.01	53	172	< 1	< 0.2	5.01	1	< 1
336217	20	< 0.3	20	< 0.3	2	3	67	38	0.19	3.62	1.3	< 50	< 1	< 2	< 0.5	1.79	18	162	< 1	1.0	2.83	2	< 1
336218	18	< 0.3	4	< 0.3	2	< 3	13	14	0.03	1.27	1.0	< 50	< 1	< 2	0.8	0.10	3	48	< 1	< 0.2	1.01	< 1	< 1
336219	< 2	< 0.3	66	< 0.3	3	4	66	32	0.06	4.19	3.2	130	< 1	< 2	< 0.5	0.05	35	140	< 1	< 0.2	3.00	1	< 1
336220	< 2	< 0.3	88	< 0.3	< 1	6	97	87	0.16	7.75	7.0	820	2	< 2	< 0.5	1.57	36	162	4	0.8	5.68	3	< 1
336221	< 2	< 0.3	81	0.3	< 1	6	80	81	2.12	6.49	0.8	210	< 1	< 2	< 0.5	4.60	30	259	< 1	1.1	5.10	2	< 1
336222	8	< 0.3	5	< 0.3	1	< 3	4	13	0.01	0.29	0.8	< 50	< 1	< 2	1.0	0.04	1	25	< 1	< 0.2	1.04	< 1	< 1
336223	< 2	< 0.3	37	0.4	< 1	< 3	22	82	0.15	6.75	3.2	< 50	1	< 2	< 0.5	4.16	23	72	< 1	1.1	6.17	3	< 1
336224	16	< 0.3	85	0.6	< 1	4	75	106	0.65	5.26	8.0	< 50	< 1	< 2	< 0.5	0.98	42	114	< 1	0.2	18.2	< 1	< 1
336225	4	< 0.3	111	0.6	< 1	< 3	81	124	0.14	6.18	1.6	300	< 1	< 2	< 0.5	2.57	51	102	< 1	0.2	14.5	1	< 1
336226	< 2	< 0.3	40	< 0.3	< 1	< 3	55	58	0.02	7.43	8.2	< 50	< 1	< 2	< 0.5	4.40	20	54	< 1	0.5	4.55	3	< 1
336227	113	0.4	258	0.7	< 1	24	32	95	12.3	0.14	135	< 50	< 1	< 2	< 0.5	0.04	121	17	< 1	0.3	20.7	< 1	< 1
336228	6	< 0.3	301	0.7	1	< 3	28	117	0.28	0.58	5.0	< 50	< 1	< 2	< 0.5	0.50	16	29	< 1	0.8	9.84	< 1	< 1
336229	4	< 0.3	106	0.3	< 1	< 3	25	81	0.30	0.23	8.3	< 50	< 1	< 2	< 0.5	0.02	10	20	< 1	0.6	15.2	< 1	< 1
336230	37	< 0.3	28	0.4	1	17	6	55	0.46	0.98	130	< 50	< 1	< 2	< 0.5	0.01	3	23	< 1	0.2	16.6	1	< 1
336231	5	< 0.3	87	0.6	< 1	< 3	36	123	0.41	0.28	10.1	< 50	< 1	< 2	< 0.5	0.13	14	19	< 1	0.5	14.5	< 1	< 1
336232	17	< 0.3	37	0.6	< 1	13	18	206	5.96	1.50	46.0	< 50	< 1	< 2	< 0.5	0.02	16	16	< 1	0.5	19.9	1	< 1
336233	2	< 0.3	49	< 0.3	< 1	< 3	3	8	0.07	0.16	0.5	< 50	< 1	< 2	2.4	0.04	< 1	19	< 1	< 0.2	1.23	< 1	< 1
336068	111	0.4	20	0.6	1	19	66	33	13.7	0.52	81.2	< 50	< 1	< 2	3.8	< 0.01	41	68	< 1	0.3	13.7	< 1	< 1
336069	11	0.8	31	< 0.3	2	63	48	51	0.28	5.78	2.9	< 50	< 1	< 2	< 0.5	1.37	19	89	< 1	0.4	4.29	2	< 1
336070	123	0.9	109	1.1	< 1	28	44	198	> 20.0	1.57	98.7	< 50	< 1	< 2	< 0.5	0.02	40	29	< 1	0.4	32.3	1	< 1
336071	225	< 0.3	9	< 0.3	1	9	2	15	0.08	0.08	24.9	< 50	< 1	< 2	1.4	0.01	2	24	< 1	< 0.2	3.15	< 1	< 1
336072	227	1.0	74	0.8	< 1	30	44	57	> 20.0	0.98	100	< 50	< 1	< 2	< 0.5	0.62	45	18	< 1	< 0.2	30.7	1	< 1
336073	178	0.6	76	1.1	< 1	25	32	83	> 20.0	0.30	74.3	< 50	< 1	< 2	< 0.5	0.01	37	20	< 1	0.3	29.6	< 1	< 1
336074	28	< 0.3	49	< 0.3	< 1	< 3	435	58	0.18	3.00	2.3	< 50	< 1	< 2	1.5	5.99	40	512	< 1	0.5	5.46	1	< 1
336075	30	0.4	108	0.4	< 1	6	70	83	1.59	5.53	4.1	410	< 1	< 2	< 0.5	0.34	43	62	< 1	0.7	9.62	2	< 1
336395	< 2	< 0.3	28	0.3	< 1	6	50	96	0.66	5.88	3.2	310	< 1	< 2	< 0.5	0.39	24	72	2	0.7	8.29	2	< 1
336396	89	< 0.3	15	< 0.3	23	< 3	73	36	0.03	1.22	1.9	< 50	< 1	< 2	0.8	0.87	12	74	< 1	0.5	2.21	1	< 1
336397	4	< 0.3	31	< 0.3	22	< 3	229	58	0.02	2.07	< 0.5	< 50	< 1	< 2	1.9	1.69	23	288	< 1	0.4	3.92	1	< 1
336398	38	< 0.3	82	< 0.3	< 1	< 3	60	50	0.23	4.68	< 0.5	170	< 1	< 2	< 0.5	5.86	34	54	< 1	0.6	5.77	1	< 1
336399	47	< 0.3	102	0.3	< 1	< 3	410	74	0.18	4.77	4.2	170	< 1	< 2	< 0.5	8.08	64	526	< 1	0.7	8.06	1	< 1
336400	13	< 0.3	117	0.7	< 1	< 3	635	85	0.10	3.89	1.5	< 50	< 1	< 2	< 0.5	6.92	67	730	< 1	1.1	8.30	2	< 1
336400B	< 2	< 0.3	71	0.3	< 1	< 3	262	65	0.02	5.42	< 0.5	< 50	< 1	< 2	< 0.5	7.26	62	140	< 1	0.5	8.04	1	< 1

## Results

## Activation Laboratories Ltd.

## Report: A17-09548

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
336401	< 2	< 0.3	12	0.5	< 1	3	76	52	0.04	3.54	0.9	< 50	< 1	< 2	< 0.5	7.28	16	132	< 1	1.4	3.79	2	< 1
336402	17	0.4	15	0.7	2	8	81	64	0.16	4.34	2.0	< 50	< 1	< 2	< 0.5	8.96	18	206	< 1	2.2	4.57	4	< 1
336403	< 2	< 0.3	189	0.7	9	4	94	99	0.58	8.31	< 0.5	220	< 1	< 2	< 0.5	0.36	66	206	< 1	0.4	13.5	2	< 1
336404	10	< 0.3	115	0.6	19	6	81	58	1.56	6.53	2.8	< 50	< 1	< 2	< 0.5	1.36	67	185	< 1	0.5	9.18	1	< 1
336405	13	< 0.3	122	0.5	38	4	103	73	1.65	7.41	3.3	< 50	< 1	< 2	< 0.5	1.88	66	183	< 1	0.4	10.5	1	< 1
336406	23	< 0.3	197	0.3	< 1	< 3	74	88	0.72	7.81	< 0.5	310	< 1	< 2	< 0.5	1.64	77	92	2	0.3	9.37	2	< 1
336407	19	0.3	119	0.8	1	< 3	89	130	0.77	7.91	< 0.5	< 50	< 1	< 2	< 0.5	0.43	58	72	< 1	0.3	16.3	2	< 1
336408	78	< 0.3	105	0.5	4	< 3	59	86	2.39	5.60	2.9	< 50	< 1	< 2	< 0.5	5.40	40	59	< 1	0.3	13.1	1	< 1
336409	22	< 0.3	104	0.7	< 1	< 3	81	114	0.73	6.85	1.9	400	< 1	< 2	< 0.5	0.25	48	79	< 1	0.3	13.4	1	< 1
336410	13	< 0.3	40	0.7	< 1	< 3	80	115	0.47	7.04	< 0.5	520	< 1	< 2	< 0.5	0.88	49	98	< 1	0.4	13.0	2	< 1
336411	70	< 0.3	88	0.4	< 1	6	38	110	2.25	1.95	8.6	< 50	< 1	< 2	< 0.5	0.45	26	26	< 1	0.4	15.8	1	< 1
336412	44	< 0.3	76	0.4	< 1	6	34	115	0.39	4.43	8.9	< 50	< 1	< 2	< 0.5	0.03	12	46	< 1	0.5	11.4	2	< 1
336413	76	1.6	197	0.9	12	53	16	408	0.22	4.75	15.1	140	3	< 2	< 0.5	0.06	10	141	< 1	1.0	14.5	1	< 1
336414	< 2	< 0.3	45	< 0.3	< 1	< 3	100	42	0.04	6.69	7.0	620	< 1	< 2	< 0.5	2.65	43	177	< 1	0.3	7.17	1	< 1
336415	45	0.3	9	< 0.3	2	8	6	16	0.60	0.11	9.6	< 50	< 1	< 2	< 0.5	0.01	3	29	< 1	0.2	5.22	< 1	< 1
336416	562	1.7	80	0.7	6	78	4	24	1.79	0.07	120	< 50	< 1	< 2	< 0.5	0.02	1	16	< 1	0.3	31.9	< 1	< 1
336417	68	0.8	29	1.2	< 1	11	33	128	15.5	2.42	19.1	< 50	< 1	< 2	< 0.5	2.07	22	13	< 1	0.7	33.8	< 1	< 1
336418	59	0.4	40	1.2	1	11	46	164	7.18	3.58	19.1	< 50	< 1	< 2	< 0.5	0.18	27	34	< 1	0.6	27.8	1	< 1
336419	3	< 0.3	4	0.3	17	4	15	60	0.28	1.66	1.4	< 50	< 1	< 2	< 0.5	2.84	4	34	1	1.0	4.34	1	< 1
336420	36	0.4	55	0.5	3	5	57	131	6.81	4.43	21.0	< 50	< 1	< 2	< 0.5	6.38	50	23	< 1	0.6	12.9	2	< 1
336421	3	< 0.3	13	< 0.3	2	< 3	14	18	0.02	0.89	< 0.5	80	< 1	< 2	1.4	0.28	2	33	< 1	0.2	1.06	< 1	< 1
336422	< 2	< 0.3	100	0.6	< 1	< 3	28	92	0.46	3.14	17.9	< 50	< 1	< 2	< 0.5	6.31	38	12	< 1	0.4	10.7	1	< 1
336423	634	< 0.3	60	0.5	< 1	< 3	25	107	0.86	0.33	4.1	< 50	< 1	< 2	< 0.5	1.13	17	22	< 1	0.7	13.8	< 1	< 1
336424	750	< 0.3	291	0.6	1	3	15	133	0.12	1.02	16.1	< 50	< 1	< 2	< 0.5	0.03	13	30	< 1	0.3	10.6	< 1	< 1
336425	1320	< 0.3	71	0.4	< 1	< 3	9	84	1.14	1.02	12.3	< 50	< 1	< 2	< 0.5	0.01	6	28	< 1	0.5	12.5	< 1	< 1
336426	211	< 0.3	36	< 0.3	< 1	< 3	7	33	1.45	0.34	5.2	< 50	< 1	< 2	< 0.5	0.22	5	23	< 1	0.3	5.04	< 1	< 1
336427	16	< 0.3	135	0.5	< 1	3	85	97	0.25	7.68	17.8	460	< 1	< 2	< 0.5	0.36	58	199	< 1	0.3	12.8	2	< 1
336428	13	< 0.3	141	0.8	< 1	< 3	34	82	0.46	3.40	1.8	< 50	< 1	< 2	< 0.5	8.80	33	22	< 1	0.7	15.8	< 1	< 1
336429	7	< 0.3	7	< 0.3	2	< 3	16	16	< 0.01	1.66	2.7	140	< 1	< 2	3.2	2.29	6	61	< 1	0.3	2.28	1	< 1
336430	< 2	< 0.3	115	0.6	< 1	< 3	62	87	0.09	6.75	0.8	190	< 1	< 2	< 0.5	1.90	41	141	< 1	0.4	14.2	< 1	< 1
336431	< 2	< 0.3	118	< 0.3	< 1	6	75	60	0.17	7.72	6.9	920	< 1	< 2	< 0.5	2.64	59	180	< 1	0.5	5.57	2	< 1
336432	15	< 0.3	109	< 0.3	2	6	64	52	0.11	7.36	3.5	490	< 1	< 2	< 0.5	1.53	43	194	2	0.7	4.54	1	< 1
336433	< 2	< 0.3	112	0.3	< 1	5	90	65	0.14	7.68	4.4	630	< 1	< 2	< 0.5	2.08	44	250	< 1	1.0	5.18	3	< 1
336434	< 2	< 0.3	137	< 0.3	< 1	6	60	65	0.10	8.61	4.0	910	< 1	< 2	< 0.5	0.10	54	171	1	0.5	6.45	1	< 1
336435	< 2	< 0.3	25	< 0.3	2	4	78	55	0.11	3.53	0.9	130	< 1	< 2	< 0.5	4.17	20	128	< 1	1.5	3.08	2	< 1
336436	< 2	< 0.3	29	< 0.3	< 1	4	117	79	0.01	4.56	< 0.5	150	< 1	< 2	< 0.5	5.44	32	156	< 1	2.4	4.79	4	< 1
336437	33	< 0.3	35	< 0.3	1	4	108	69	0.08	5.19	1.5	< 50	< 1	< 2	< 0.5	4.68	27	157	< 1	1.9	3.56	4	< 1
336438	< 2	< 0.3	132	0.3	1	6	68	53	0.15	7.98	4.8	710	< 1	< 2	< 0.5	3.13	53	115	2	0.2	5.38	2	< 1
336439	< 2	< 0.3	125	< 0.3	< 1	< 3	70	58	0.40	7.20	1.7	740	< 1	< 2	< 0.5	3.24	58	146	2	0.3	8.10	2	< 1
336440	25	< 0.3	143	0.4	< 1	< 3	73	68	0.36	7.80	1.6	980	< 1	< 2	< 0.5	3.66	67	170	1	0.6	8.84	2	< 1
336441	20	< 0.3	123	< 0.3	< 1	< 3	77	78	0.42	8.20	5.6	670	< 1	< 2	< 0.5	2.23	54	176	1	0.4	8.74	1	< 1

## Results

## Activation Laboratories Ltd.

## Report: A17-09548

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
336442	< 2	< 0.3	126	0.4	< 1	< 3	81	72	0.15	7.62	< 0.5	640	< 1	< 2	< 0.5	3.00	53	169	< 1	0.3	8.94	2	< 1
336443	< 2	< 0.3	114	< 0.3	< 1	< 3	80	47	0.10	7.76	1.3	890	< 1	< 2	< 0.5	3.55	56	160	< 1	0.6	5.44	2	< 1
336444	< 2	< 0.3	129	< 0.3	< 1	< 3	89	63	0.19	8.44	1.7	1360	< 1	< 2	< 0.5	3.12	73	174	3	0.4	8.25	1	< 1
336445	< 2	< 0.3	88	< 0.3	< 1	< 3	59	43	0.25	6.03	< 0.5	1100	< 1	< 2	< 0.5	3.30	46	145	< 1	0.6	6.04	2	< 1
336446	5	< 0.3	115	0.4	< 1	< 3	77	63	0.15	8.61	1.4	1770	< 1	< 2	< 0.5	2.10	63	195	< 1	0.4	7.40	2	< 1
336447	24	< 0.3	132	< 0.3	< 1	< 3	66	69	0.27	7.55	2.1	1530	< 1	< 2	< 0.5	3.34	50	154	2	0.3	8.81	2	< 1
336448	12	< 0.3	84	0.3	< 1	< 3	53	50	0.21	6.20	< 0.5	1000	< 1	< 2	< 0.5	1.97	43	135	< 1	0.4	6.85	1	< 1
336449	9	< 0.3	143	0.4	< 1	< 3	68	80	0.20	8.40	3.0	3020	< 1	< 2	< 0.5	3.14	43	159	3	0.4	9.32	2	< 1
336450	< 2	< 0.3	109	0.3	< 1	< 3	90	59	0.09	7.34	< 0.5	1490	< 1	< 2	< 0.5	4.56	52	177	< 1	< 0.2	7.56	2	< 1
336451	16	< 0.3	101	< 0.3	3	< 3	88	46	0.44	6.46	0.9	990	< 1	< 2	< 0.5	4.71	49	184	< 1	0.2	7.08	1	< 1
336452	< 2	< 0.3	127	< 0.3	< 1	< 3	67	52	0.41	7.90	< 0.5	11200	< 1	< 2	< 0.5	4.42	44	144	2	0.2	7.47	3	< 1
336453	11	< 0.3	116	< 0.3	< 1	< 3	57	71	0.15	6.92	< 0.5	490	< 1	< 2	< 0.5	4.35	38	148	< 1	0.4	10.1	1	< 1
336454	6	< 0.3	72	0.3	< 1	5	92	54	0.04	5.41	< 0.5	< 50	< 1	< 2	< 0.5	6.20	20	132	< 1	1.9	3.20	3	< 1
336455	9	< 0.3	131	0.4	1	< 3	84	52	0.37	8.03	5.3	400	< 1	< 2	< 0.5	2.53	66	205	< 1	0.3	7.38	2	< 1
336456	< 2	< 0.3	117	0.6	< 1	< 3	51	75	0.45	5.57	< 0.5	460	< 1	< 2	< 0.5	5.46	37	90	< 1	0.5	11.2	< 1	< 1
336457	30	< 0.3	87	0.6	< 1	4	33	107	0.85	2.94	8.7	< 50	< 1	< 2	< 0.5	0.38	19	79	2	0.7	16.0	1	< 1
336458	45	< 0.3	192	0.6	< 1	< 3	63	71	2.01	4.12	4.5	< 50	< 1	< 2	< 0.5	2.50	47	70	< 1	0.7	14.6	1	< 1
336459	45	< 0.3	87	< 0.3	< 1	9	51	91	0.41	6.95	< 0.5	600	< 1	< 2	< 0.5	1.04	30	117	< 1	0.6	5.63	2	< 1
336460	59	< 0.3	33	< 0.3	1	3	22	39	0.15	2.75	3.1	240	< 1	< 2	< 0.5	0.47	16	90	< 1	0.3	2.67	1	< 1
336461	< 2	< 0.3	66	< 0.3	< 1	5	63	101	0.23	7.57	6.4	660	< 1	< 2	< 0.5	1.41	38	130	< 1	0.9	6.40	3	< 1
336462	8	< 0.3	71	< 0.3	< 1	7	61	107	0.23	7.95	4.7	690	< 1	< 2	< 0.5	1.58	32	178	< 1	0.8	6.17	2	< 1
336463	7	< 0.3	63	0.5	< 1	5	61	96	0.23	7.60	4.1	410	< 1	< 2	< 0.5	1.93	34	122	2	1.1	5.87	3	< 1
336464	8	0.4	55	< 0.3	< 1	4	45	82	0.26	7.09	5.2	560	< 1	< 2	< 0.5	1.18	24	129	< 1	1.3	4.93	4	< 1
336465	< 2	< 0.3	72	< 0.3	2	5	59	83	0.30	7.16	3.8	690	< 1	< 2	< 0.5	2.39	36	159	< 1	0.8	5.73	2	< 1
336466	< 2	< 0.3	74	< 0.3	< 1	6	56	92	0.27	7.53	5.4	820	< 1	< 2	< 0.5	2.28	41	114	2	0.9	6.31	3	< 1
336467	61	< 0.3	65	< 0.3	1	5	43	65	1.23	4.21	1.7	350	< 1	< 2	< 0.5	2.36	27	78	< 1	1.1	5.29	2	< 1
336468	< 2	< 0.3	15	< 0.3	< 1	4	84	91	0.08	6.42	< 0.5	< 50	< 1	< 2	< 0.5	3.56	30	221	< 1	1.3	4.81	3	< 1
336469	28	< 0.3	83	< 0.3	< 1	5	57	95	0.30	7.29	4.0	500	< 1	< 2	< 0.5	1.36	34	90	< 1	1.1	6.17	3	< 1
336476	< 2	< 0.3	30	< 0.3	< 1	4	24	111	0.02	10.2	< 0.5	610	1	< 2	< 0.5	2.81	13	19	< 1	1.1	3.18	5	< 1
336477	< 2	0.3	100	0.6	1	3	44	102	5.84	5.53	35.1	140	< 1	< 2	< 0.5	0.17	31	14	2	0.5	15.2	3	< 1
336478	9	< 0.3	79	0.5	< 1	4	36	73	6.93	3.69	36.2	< 50	< 1	< 2	< 0.5	2.09	28	18	< 1	0.7	18.0	2	< 1
336479	< 2	< 0.3	6	< 0.3	< 1	< 3	10	75	0.21	7.62	2.7	780	1	< 2	< 0.5	0.15	5	15	3	0.7	5.59	3	< 1
336480	< 2	0.5	31	0.5	< 1	11	20	125	6.49	6.04	108	290	< 1	< 2	< 0.5	0.07	19	14	< 1	0.4	13.7	3	< 1
336481	16	< 0.3	48	0.4	3	9	66	60	7.84	1.17	56.8	< 50	< 1	< 2	< 0.5	0.06	47	43	< 1	0.5	13.9	1	< 1
336482	41	< 0.3	41	0.6	2	8	86	112	8.50	1.39	57.2	< 50	< 1	< 2	< 0.5	0.22	66	123	< 1	0.4	16.9	1	< 1
336483	30	0.5	28	1.2	< 1	8	24	148	7.99	0.93	19.1	< 50	< 1	< 2	< 0.5	1.51	22	16	< 1	0.7	30.6	1	< 1
336484	204	0.8	69	1.3	< 1	38	62	59	> 20.0	0.10	264	< 50	< 1	< 2	< 0.5	0.05	58	16	< 1	< 0.2	38.0	< 1	< 1
336485	7	< 0.3	3	< 0.3	5	< 3	3	4	1.02	0.13	20.4	< 50	< 1	< 2	1.5	0.02	3	42	< 1	< 0.2	1.61	< 1	< 1
336486	6	< 0.3	367	1.5	8	< 3	13	251	0.45	1.03	4.6	< 50	< 1	< 2	< 0.5	0.01	11	41	< 1	0.2	10.2	< 1	< 1

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
336208	< 5	< 0.01	39	2.14	4010	0.02	0.022	< 15	< 0.1	42.0	< 3	21	< 0.5	0.37	< 0.2	< 0.5	337	< 1	12	4.0	15	< 5	3.2
336209	< 5	0.17	14	0.85	3670	0.58	0.028	< 15	0.6	14.5	< 3	87	< 0.5	0.22	1.3	< 0.5	142	< 1	7	5.8	15	< 5	1.7
336210	< 5	0.02	< 1	0.04	224	0.04	0.003	< 15	0.1	0.7	< 3	7	< 0.5	< 0.01	< 0.2	< 0.5	6	< 1	< 1	0.5	< 3	< 5	0.1
336211	< 5	0.02	< 1	0.01	165	0.90	0.002	< 15	< 0.1	0.7	< 3	63	< 0.5	0.02	< 0.2	< 0.5	4	< 1	< 1	1.2	3	< 5	0.2
336212	< 5	0.18	13	2.53	1090	3.77	0.117	< 15	0.2	14.2	< 3	499	< 0.5	0.28	4.2	< 0.5	120	12	13	29.8	68	24	5.1
336213	< 5	1.12	17	1.24	778	2.55	0.023	< 15	0.1	18.0	< 3	155	< 0.5	0.30	6.3	1.8	139	< 1	16	6.8	17	< 5	1.9
336214	< 5	0.43	28	1.96	1640	2.94	0.086	< 15	0.7	16.6	< 3	343	< 0.5	0.35	5.2	< 0.5	151	< 1	11	38.4	95	32	6.5
336215	< 5	0.55	< 1	0.93	1810	4.29	0.037	34	0.4	13.5	< 3	343	< 0.5	0.29	2.5	< 0.5	89	< 1	7	11.6	25	22	2.6
336216	< 5	0.27	6	0.72	1170	5.03	0.048	< 15	0.5	35.3	< 3	114	< 0.5	0.54	< 0.2	< 0.5	207	< 1	3	9.6	27	< 5	3.0
336217	< 5	0.25	4	0.69	769	2.01	0.096	< 15	0.4	7.9	< 3	144	< 0.5	0.29	4.0	1.4	61	3	10	22.4	53	23	5.4
336218	< 5	0.03	< 1	0.05	136	0.86	0.009	< 15	< 0.1	1.5	< 3	33	< 0.5	0.04	< 0.2	< 0.5	13	< 1	2	2.9	9	< 5	0.6
336219	< 5	0.39	9	0.03	742	1.51	0.008	< 15	0.2	15.5	< 3	51	< 0.5	0.25	< 0.2	< 0.5	132	< 1	4	1.5	< 3	< 5	0.8
336220	< 5	2.10	10	1.43	849	2.59	0.084	115	0.4	20.9	< 3	223	< 0.5	0.33	3.9	< 0.5	159	< 1	10	23.0	52	21	4.3
336221	< 5	0.25	9	2.29	1200	4.22	0.115	< 15	0.8	14.4	< 3	711	< 0.5	0.26	3.8	1.0	100	< 1	12	26.7	60	23	4.7
336222	< 5	0.02	< 1	0.02	133	0.16	0.003	< 15	0.2	0.5	< 3	12	< 0.5	< 0.01	0.2	< 0.5	3	< 1	< 1	< 0.5	< 3	< 5	0.1
336223	< 5	0.43	10	1.97	1360	3.26	0.170	23	0.8	23.3	< 3	289	< 0.5	0.38	3.3	< 0.5	169	7	15	23.9	55	23	6.2
336224	< 5	0.18	30	1.14	5410	0.60	0.017	< 15	0.5	26.5	< 3	55	< 0.5	0.13	< 0.2	< 0.5	185	< 1	5	1.9	< 3	< 5	1.2
336225	< 5	0.06	38	1.73	3090	0.26	0.017	< 15	0.2	30.1	< 3	26	< 0.5	0.24	< 0.2	< 0.5	234	< 1	5	1.5	< 3	< 5	0.8
336226	< 5	0.44	10	2.13	756	2.18	0.030	< 15	< 0.1	14.8	< 3	129	< 0.5	0.29	3.1	< 0.5	107	< 1	18	12.6	33	9	2.6
336227	< 5	< 0.01	< 1	0.02	2480	0.02	0.005	< 15	4.4	1.1	< 3	2	< 0.5	0.01	0.6	< 0.5	15	< 1	3	1.4	< 3	< 5	0.3
336228	< 5	0.02	2	0.20	7810	0.03	0.013	< 15	0.2	5.1	< 3	9	< 0.5	0.03	< 0.2	< 0.5	38	< 1	10	2.0	4	< 5	1.4
336229	< 5	< 0.01	< 1	0.08	7030	0.02	0.017	< 15	0.2	5.8	< 3	3	< 0.5	0.02	< 0.2	< 0.5	33	< 1	9	3.5	10	5	1.4
336230	< 5	0.05	3	0.10	873	0.06	0.014	< 15	7.1	1.6	< 3	14	< 0.5	0.05	0.7	< 0.5	53	< 1	5	5.2	12	5	0.8
336231	< 5	0.01	< 1	0.22	5330	0.03	0.029	< 15	< 0.1	3.9	< 3	3	< 0.5	0.02	< 0.2	< 0.5	26	< 1	6	2.6	6	< 5	0.9
336232	< 5	0.04	7	0.52	2760	0.02	0.005	< 15	2.6	3.5	< 3	4	< 0.5	0.05	1.3	< 0.5	33	< 1	7	6.6	14	< 5	1.1
336233	< 5	0.03	< 1	0.01	491	0.03	0.002	< 15	0.1	0.8	< 3	4	< 0.5	0.01	< 0.2	< 0.5	5	2	1	< 0.5	< 3	< 5	0.1
336068	< 5	0.14	< 1	0.02	263	0.04	0.003	< 15	6.0	1.0	< 3	5	< 0.5	0.03	< 0.2	< 0.5	14	< 1	4	3.2	6	< 5	0.5
336069	< 5	0.48	12	1.14	947	2.42	0.034	< 15	0.1	13.5	< 3	147	< 0.5	0.28	2.2	< 0.5	107	< 1	9	12.8	29	12	2.2
336070	< 5	0.14	10	0.36	1880	0.04	0.016	< 15	8.8	4.2	< 3	5	< 0.5	0.06	1.0	< 0.5	38	< 1	11	6.5	11	< 5	1.2
336071	< 5	0.01	< 1	< 0.01	176	0.03	0.003	< 15	3.7	0.5	< 3	2	< 0.5	0.02	< 0.2	< 0.5	4	< 1	2	1.2	4	< 5	0.2
336072	< 5	0.18	2	0.40	2040	0.26	0.010	25	9.2	4.5	< 3	29	< 0.5	0.12	1.0	< 0.5	57	< 1	6	2.2	< 3	< 5	0.5
336073	< 5	0.02	2	0.06	3200	0.04	0.004	< 15	5.1	2.3	< 3	4	< 0.5	0.01	< 0.2	< 0.5	26	< 1	8	3.0	4	< 5	0.5
336074	< 5	1.02	11	3.23	1010	0.07	0.019	20	0.5	12.7	< 3	142	< 0.5	0.32	0.8	< 0.5	138	12	5	5.8	14	6	2.0
336075	< 5	1.61	13	0.66	3630	0.62	0.035	38	0.3	20.8	< 3	87	< 0.5	0.32	2.3	< 0.5	175	< 1	10	14.0	33	13	2.9
336395	< 5	1.67	47	1.17	2550	0.49	0.047	30	0.7	15.8	< 3	107	< 0.5	0.41	2.9	< 0.5	163	< 1	8	15.3	40	14	3.0
336396	< 5	0.16	9	1.00	273	0.04	0.050	< 15	0.2	3.7	< 3	28	< 0.5	0.12	2.4	0.7	57	2	4	9.6	22	8	1.7
336397	< 5	0.10	8	2.37	579	0.07	0.020	< 15	0.1	7.9	< 3	51	< 0.5	0.19	1.4	< 0.5	91	8	5	4.9	16	5	1.7
336398	< 5	1.82	12	2.51	952	0.12	0.020	59	0.1	19.2	< 3	122	< 0.5	0.26	0.3	1.0	157	2	6	2.8	7	< 5	1.5
336399	< 5	1.38	22	4.30	1330	0.09	0.039	< 15	0.7	22.8	< 3	161	< 0.5	0.38	< 0.2	< 0.5	220	6	6	5.2	14	8	2.4
336400	< 5	0.48	19	4.96	1480	0.06	0.032	18	0.5	21.5	< 3	154	< 0.5	0.29	0.5	< 0.5	192	< 1	7	7.3	20	8	3.2
336400B	< 5	1.26	34	4.70	1340	0.14	0.015	40	0.3	22.6	< 3	135	< 0.5	0.22	0.4	< 0.5	170	6	4	3.2	10	5	1.6
336401	< 5	0.20	3	2.83	1840	2.02	0.127	< 15	< 0.1	13.2	< 3	265	< 0.5	0.15	3.3	< 0.5	47	6	12	21.4	56	27	5.8



## Results

## Activation Laboratories Ltd.

## Report: A17-09548

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
336402	< 5	0.29	3	3.28	2460	2.44	0.199	< 15	0.6	19.4	< 3	321	< 0.5	0.18	4.3	3.6	66	10	15	27.2	68	35	8.4
336403	< 5	0.77	19	0.24	4340	2.27	0.018	< 15	0.5	35.4	< 3	178	< 0.5	0.28	0.6	< 0.5	291	< 1	8	3.3	12	10	2.2
336404	< 5	0.52	11	0.31	3590	3.02	0.016	< 15	0.8	31.5	< 3	139	< 0.5	0.33	< 0.2	< 0.5	202	4	6	2.5	6	< 5	1.7
336405	< 5	0.59	17	0.26	3520	2.24	0.022	< 15	0.8	29.6	< 3	144	< 0.5	0.29	< 0.2	< 0.5	205	2	8	3.0	9	6	1.9
336406	< 5	1.18	22	0.35	2650	1.51	0.018	< 15	0.3	38.2	< 3	131	< 0.5	0.41	< 0.2	< 0.5	290	< 1	7	3.3	11	< 5	1.8
336407	< 5	0.21	39	1.52	4040	0.79	0.019	< 15	0.2	41.9	< 3	73	< 0.5	0.53	< 0.2	< 0.5	310	< 1	13	2.9	6	8	1.6
336408	< 5	0.11	19	1.85	4450	2.41	0.022	< 15	< 0.1	40.6	< 3	115	< 0.5	0.42	< 0.2	< 0.5	275	< 1	5	2.4	5	< 5	1.5
336409	< 5	0.26	30	1.07	4090	1.82	0.021	< 15	< 0.1	52.7	< 3	89	< 0.5	0.49	0.8	< 0.5	312	< 1	6	2.9	8	< 5	1.8
336410	< 5	0.31	36	1.32	3400	0.98	0.023	< 15	< 0.1	88.8	< 3	90	< 0.5	0.47	< 0.2	< 0.5	305	< 1	8	2.7	5	< 5	1.8
336411	< 5	0.12	8	0.29	2750	0.44	0.026	< 15	0.4	10.5	< 3	56	< 0.5	0.16	1.1	< 0.5	104	< 1	7	4.6	14	< 5	1.4
336412	< 5	0.23	28	0.09	592	0.33	0.041	< 15	0.5	13.1	< 3	74	< 0.5	0.25	2.7	< 0.5	150	< 1	11	12.4	36	10	3.0
336413	< 5	0.20	18	1.16	362	0.09	0.062	< 15	0.6	8.9	17	18	< 0.5	0.12	1.8	< 0.5	97	< 1	5	11.8	29	10	2.4
336414	< 5	1.21	10	1.74	1200	4.13	0.032	< 15	< 0.1	37.2	< 3	122	< 0.5	0.41	< 0.2	0.8	210	< 1	16	5.7	8	< 5	1.9
336415	< 5	< 0.01	< 1	0.03	473	0.03	0.002	< 15	0.6	0.7	< 3	2	< 0.5	< 0.01	< 0.2	< 0.5	9	< 1	5	1.5	< 3	< 5	0.3
336416	< 5	0.01	< 1	0.02	536	0.03	0.008	< 15	7.8	0.6	< 3	3	< 0.5	0.02	< 0.2	< 0.5	18	< 1	3	2.9	< 3	< 5	0.4
336417	< 5	< 0.01	3	1.39	8190	0.02	0.003	< 15	1.1	4.8	< 3	38	< 0.5	0.07	1.1	0.7	127	< 1	6	12.9	24	8	1.7
336418	< 5	< 0.01	12	1.85	6820	0.03	0.027	< 15	0.8	8.1	< 3	4	< 0.5	0.14	2.2	< 0.5	58	< 1	9	12.5	26	< 5	2.1
336419	< 5	0.28	9	0.28	3940	0.15	0.019	< 15	0.1	6.2	< 3	80	< 0.5	0.07	1.9	0.7	24	6	11	14.9	28	7	2.8
336420	< 5	0.66	28	1.84	4390	0.19	0.018	< 15	0.4	10.6	< 3	112	< 0.5	0.12	2.1	1.1	65	2	10	13.4	28	< 5	2.3
336421	< 5	0.21	2	0.06	305	0.12	0.007	< 15	< 0.1	1.1	< 3	24	< 0.5	0.05	0.9	< 0.5	10	< 1	3	3.7	6	< 5	0.5
336422	< 5	0.04	23	2.28	2470	0.12	0.012	< 15	1.7	22.2	< 3	34	< 0.5	0.32	< 0.2	< 0.5	185	17	5	2.1	5	< 5	1.5
336423	< 5	0.05	< 1	0.62	4150	0.08	0.061	< 15	< 0.1	9.6	< 3	25	< 0.5	< 0.01	< 0.2	< 0.5	48	< 1	8	2.8	6	< 5	1.1
336424	< 5	0.12	2	0.04	966	0.20	0.017	< 15	0.2	10.2	< 3	20	< 0.5	0.02	< 0.2	< 0.5	51	< 1	6	3.3	10	< 5	1.0
336425	< 5	0.15	2	0.04	1100	0.21	0.048	< 15	< 0.1	4.8	< 3	27	< 0.5	< 0.01	< 0.2	< 0.5	57	< 1	7	3.6	9	< 5	1.1
336426	< 5	0.04	< 1	0.17	641	0.06	0.036	< 15	< 0.1	1.9	< 3	10	< 0.5	< 0.01	< 0.2	< 0.5	22	< 1	4	1.4	3	< 5	0.5
336427	< 5	0.40	40	0.83	4250	1.15	0.020	< 15	0.7	35.5	< 3	115	< 0.5	0.24	< 0.2	< 0.5	294	< 1	6	2.8	5	< 5	1.4
336428	< 5	0.04	22	1.74	6760	0.31	0.018	< 15	< 0.1	31.0	< 3	54	< 0.5	0.21	< 0.2	< 0.5	175	< 1	5	2.8	9	9	1.9
336429	< 5	0.09	2	0.73	1130	0.95	0.020	< 15	0.1	4.8	< 3	57	< 0.5	0.06	0.7	< 0.5	18	< 1	4	4.2	9	10	1.0
336430	< 5	0.26	31	1.45	4760	1.18	0.022	< 15	0.1	33.4	< 3	67	< 0.5	0.34	< 0.2	< 0.5	234	< 1	6	2.8	5	< 5	1.7
336431	< 5	1.34	16	0.40	1710	2.15	0.020	< 15	< 0.1	33.0	< 3	139	< 0.5	0.16	< 0.2	< 0.5	167	< 1	6	2.8	< 3	< 5	1.7
336432	< 5	1.19	11	0.37	1110	2.37	0.039	54	< 0.1	32.3	< 3	138	< 0.5	0.18	0.7	< 0.5	169	< 1	7	7.5	12	< 5	2.6
336433	< 5	1.57	11	0.88	1250	2.80	0.077	40	0.8	32.1	< 3	158	< 0.5	0.30	2.9	< 0.5	199	< 1	11	17.8	37	13	5.0
336434	< 5	1.82	15	0.11	1660	2.18	0.025	40	0.7	41.1	< 3	152	< 0.5	0.31	< 0.2	< 0.5	245	< 1	7	3.5	6	6	2.2
336435	< 5	0.17	3	2.00	958	2.13	0.134	< 15	0.3	9.4	< 3	230	< 0.5	0.19	3.6	0.7	52	6	12	30.0	56	26	6.6
336436	< 5	0.25	3	2.79	1490	2.68	0.192	< 15	0.3	14.1	< 3	271	< 0.5	0.21	6.1	< 0.5	87	10	15	49.8	102	41	11.0
336437	< 5	0.24	7	2.46	1030	2.89	0.147	< 15	0.2	11.6	< 3	279	< 0.5	0.25	5.7	2.6	90	< 1	14	41.5	79	33	9.1
336438	< 5	1.18	14	0.53	1600	2.62	0.024	< 15	0.5	37.1	< 3	150	< 0.5	0.12	< 0.2	< 0.5	142	2	5	3.1	12	< 5	2.0
336439	< 5	0.60	22	1.01	2860	2.17	0.021	< 15	< 0.1	32.1	< 3	101	< 0.5	0.33	< 0.2	0.7	193	< 1	5	2.9	11	12	1.9
336440	< 5	0.65	29	1.01	2680	1.71	0.019	< 15	0.2	37.3	< 3	124	< 0.5	0.40	< 0.2	< 0.5	257	< 1	6	4.3	10	< 5	2.5
336441	< 5	0.60	33	1.10	2160	1.36	0.026	< 15	< 0.1	30.5	< 3	120	< 0.5	0.45	< 0.2	< 0.5	301	< 1	6	3.3	8	< 5	1.7
336442	< 5	0.55	31	1.19	2630	1.20	0.021	25	< 0.1	29.2	< 3	109	< 0.5	0.37	< 0.2	< 0.5	283	< 1	6	3.0	7	< 5	1.7
336443	< 5	0.56	28	0.99	1610	1.91	0.025	< 15	0.3	31.9	< 3	150	< 0.5	0.21	< 0.2	< 0.5	151	< 1	6	3.1	8	< 5	1.9

## Results

## Activation Laboratories Ltd.

## Report: A17-09548

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
336444	< 5	0.81	28	0.99	2370	1.81	0.024	< 15	0.2	32.7	< 3	130	< 0.5	0.39	< 0.2	< 0.5	274	< 1	5	3.3	11	< 5	2.0
336445	< 5	0.80	22	0.74	1810	1.44	0.019	< 15	0.5	26.9	< 3	108	< 0.5	0.48	0.4	< 0.5	223	< 1	5	2.8	6	12	1.8
336446	< 5	0.93	29	0.82	2260	1.85	0.020	< 15	0.2	33.7	< 3	132	< 0.5	0.36	< 0.2	< 0.5	259	< 1	5	3.9	9	< 5	2.2
336447	< 5	0.76	27	1.17	2750	1.47	0.020	< 15	0.2	30.5	< 3	112	< 0.5	0.37	< 0.2	< 0.5	234	< 1	6	3.1	< 3	8	1.8
336448	< 5	0.55	21	0.66	2550	1.24	0.017	98	< 0.1	23.5	< 3	98	< 0.5	0.34	< 0.2	< 0.5	203	< 1	5	2.6	4	< 5	1.5
336449	< 5	1.20	25	1.21	2560	1.32	0.016	< 15	0.2	34.9	< 3	93	< 0.5	0.40	< 0.2	< 0.5	294	< 1	6	4.6	15	6	2.5
336450	< 5	0.90	25	1.27	2420	1.32	0.022	< 15	< 0.1	30.3	< 3	117	< 0.5	0.35	0.3	< 0.5	244	< 1	5	2.5	7	< 5	1.8
336451	< 5	0.60	18	1.13	2290	1.92	0.023	88	< 0.1	25.3	< 3	108	< 0.5	0.25	< 0.2	< 0.5	186	< 1	5	2.1	7	< 5	1.5
336452	< 5	1.45	17	1.15	2640	1.40	0.025	70	0.2	35.3	< 3	173	< 0.5	0.38	< 0.2	< 0.5	296	< 1	6	3.5	7	< 5	1.9
336453	< 5	0.45	26	1.55	3590	1.35	0.024	49	0.2	35.8	< 3	77	< 0.5	0.26	0.5	< 0.5	257	< 1	6	2.9	7	< 5	2.0
336454	< 5	0.20	4	2.68	1850	2.95	0.160	< 15	< 0.1	16.0	< 3	318	< 0.5	0.15	4.1	4.3	80	< 1	14	32.4	62	26	7.6
336455	< 5	1.92	17	0.41	2100	1.56	0.019	39	0.6	30.6	< 3	141	< 0.5	0.34	< 0.2	< 0.5	264	< 1	5	3.2	8	< 5	1.7
336456	< 5	0.22	24	1.93	4470	1.77	0.025	< 15	< 0.1	31.1	< 3	133	< 0.5	0.45	< 0.2	< 0.5	243	< 1	4	2.4	5	< 5	1.6
336457	< 5	0.43	18	0.30	2270	0.34	0.031	23	0.4	9.6	< 3	52	< 0.5	0.15	2.4	1.1	105	< 1	6	15.1	34	10	2.3
336458	< 5	0.25	37	1.31	2350	0.15	0.033	< 15	0.6	19.0	< 3	53	< 0.5	0.25	1.8	1.0	214	< 1	8	9.3	22	8	2.6
336459	< 5	1.16	13	0.39	1130	2.40	0.049	< 15	0.5	21.4	< 3	257	< 0.5	0.42	2.5	1.2	170	< 1	10	16.3	34	7	3.0
336460	< 5	0.40	6	0.22	482	0.75	0.019	< 15	0.3	7.9	< 3	115	< 0.5	0.20	0.7	< 0.5	78	2	5	5.8	14	5	1.3
336461	< 5	1.34	18	0.80	1310	2.30	0.052	< 15	0.3	23.9	< 3	298	< 0.5	0.38	2.4	1.6	176	< 1	10	22.8	58	20	4.2
336462	< 5	1.75	19	0.74	1350	1.99	0.059	52	0.5	23.9	< 3	328	< 0.5	0.38	2.1	< 0.5	201	< 1	10	18.6	46	20	3.9
336463	< 5	1.78	18	0.97	1440	2.17	0.065	54	0.5	19.4	4	317	< 0.5	0.38	4.6	< 0.5	183	< 1	11	27.7	69	24	4.9
336464	< 5	0.88	11	0.51	1050	3.76	0.057	< 15	0.4	17.3	< 3	280	< 0.5	0.37	6.4	2.2	156	< 1	9	39.0	82	22	5.2
336465	< 5	1.52	14	1.00	1240	2.26	0.046	46	0.6	23.4	< 3	293	< 0.5	0.34	2.6	< 0.5	186	< 1	10	17.0	38	15	3.5
336466	< 5	1.90	16	1.03	1310	2.25	0.062	143	0.7	23.9	< 3	295	< 0.5	0.42	4.0	< 0.5	210	< 1	11	23.9	58	17	4.8
336467	< 5	0.53	8	0.80	1090	3.67	0.042	< 15	0.7	19.7	< 3	182	< 0.5	0.46	2.8	< 0.5	159	< 1	4	21.3	43	18	4.2
336468	< 5	0.20	15	2.82	1060	3.48	0.120	< 15	0.3	14.2	< 3	512	< 0.5	0.29	4.5	< 0.5	108	< 1	12	29.1	54	35	5.4
336469	< 5	0.73	13	0.61	1210	3.62	0.050	< 15	0.7	23.5	< 3	258	< 0.5	0.44	3.0	< 0.5	184	< 1	11	22.5	43	17	4.6
336476	< 5	0.09	82	0.84	701	0.23	0.041	< 15	1.8	12.9	< 3	187	< 0.5	0.19	4.0	< 0.5	58	< 1	13	27.7	53	17	4.8
336477	< 5	0.32	43	1.14	2190	0.26	0.024	< 15	0.8	6.3	< 3	44	< 0.5	0.15	2.6	2.3	52	< 1	9	15.3	26	6	1.9
336478	< 5	0.11	29	1.72	5030	0.12	0.015	19	0.7	4.6	< 3	39	< 0.5	0.07	1.8	< 0.5	40	< 1	8	11.8	20	5	1.6
336479	< 5	1.20	48	0.92	964	0.65	0.038	123	0.3	6.1	< 3	130	< 0.5	0.25	3.4	2.0	56	< 1	12	20.9	40	17	2.5
336480	< 5	0.39	35	0.40	357	0.75	0.026	< 15	2.4	5.9	< 3	107	< 0.5	0.09	3.1	< 0.5	50	< 1	10	16.9	34	8	2.2
336481	< 5	0.04	5	0.46	1570	0.04	0.010	< 15	2.7	4.0	< 3	4	< 0.5	0.04	1.3	< 0.5	22	< 1	6	5.1	10	< 5	1.0
336482	< 5	0.01	5	0.70	4250	0.04	0.009	< 15	2.6	4.6	< 3	7	< 0.5	0.06	0.6	0.8	34	< 1	6	5.0	10	< 5	0.8
336483	< 5	0.02	11	2.20	14500	0.05	0.011	< 15	1.1	3.7	< 3	20	< 0.5	0.03	0.6	0.8	26	< 1	7	5.7	12	< 5	1.1
336484	< 5	< 0.01	< 1	0.02	317	< 0.01	0.003	< 15	17.8	1.0	< 3	4	< 0.5	0.02	< 0.2	< 0.5	9	< 1	3	1.7	4	< 5	0.2
336485	< 5	0.02	< 1	< 0.01	101	0.04	< 0.001	28	1.4	0.6	< 3	3	< 0.5	< 0.01	< 0.2	< 0.5	< 2	< 1	< 1	0.5	4	< 5	0.1
336486	< 5	0.01	5	0.31	1190	0.05	0.008	< 15	0.2	3.0	4	1	< 0.5	0.02	< 0.2	1.5	35	< 1	2	1.9	5	< 5	0.3

## Results

Activation Laboratories Ltd.

Report: A17-09548

Analyte Symbol	Sn	Tb	Yb	Lu	Mass
Unit Symbol	%	ppm	ppm	ppm	g
Lower Limit	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA
336208	< 0.02	1.0	5.3	0.35	33.6
336209	< 0.02	< 0.5	1.6	0.09	32.4
336210	< 0.02	< 0.5	< 0.2	< 0.05	34.5
336211	< 0.02	< 0.5	< 0.2	< 0.05	31.4
336212	< 0.02	< 0.5	1.6	< 0.05	30.0
336213	< 0.02	< 0.5	1.6	0.09	29.6
336214	< 0.02	< 0.5	1.5	0.06	28.0
336215	< 0.02	< 0.5	1.3	0.07	31.0
336216	< 0.02	1.0	1.8	< 0.05	29.5
336217	< 0.02	< 0.5	0.8	< 0.05	29.8
336218	< 0.02	< 0.5	< 0.2	< 0.05	31.6
336219	< 0.02	< 0.5	0.8	0.06	27.9
336220	< 0.02	< 0.5	1.6	0.08	29.3
336221	< 0.02	0.6	1.4	< 0.05	30.5
336222	< 0.02	< 0.5	< 0.2	< 0.05	34.0
336223	< 0.02	< 0.5	2.2	0.10	29.3
336224	< 0.02	< 0.5	1.5	0.10	30.6
336225	< 0.02	< 0.5	1.0	0.06	32.3
336226	< 0.02	< 0.5	1.4	0.10	34.2
336227	< 0.02	< 0.5	0.3	< 0.05	36.0
336228	< 0.02	< 0.5	0.8	< 0.05	31.4
336229	< 0.02	< 0.5	1.3	0.10	35.0
336230	< 0.02	< 0.5	0.7	< 0.05	35.7
336231	< 0.02	< 0.5	0.9	0.07	33.8
336232	< 0.02	< 0.5	0.7	0.07	41.0
336233	< 0.02	< 0.5	< 0.2	< 0.05	32.7
336068	< 0.02	< 0.5	0.5	< 0.05	32.5
336069	< 0.02	< 0.5	1.0	0.06	28.5
336070	< 0.02	< 0.5	0.9	0.07	43.1
336071	< 0.02	< 0.5	0.2	< 0.05	31.7
336072	< 0.02	< 0.5	0.6	< 0.05	45.0
336073	< 0.02	< 0.5	0.6	< 0.05	43.0
336074	< 0.02	< 0.5	0.8	< 0.05	27.9
336075	< 0.02	< 0.5	1.6	0.10	29.4
336395	< 0.02	< 0.5	1.2	0.09	31.4
336396	< 0.02	< 0.5	0.3	< 0.05	30.0
336397	< 0.02	< 0.5	0.6	< 0.05	29.4
336398	< 0.02	< 0.5	0.9	< 0.05	30.5
336399	< 0.02	< 0.5	1.1	< 0.05	30.0
336400	< 0.02	0.6	1.1	< 0.05	31.9
336400B	< 0.02	< 0.5	1.1	< 0.05	29.9
336401	< 0.02	< 0.5	0.9	< 0.05	31.1

Analyte Symbol	Sn	Tb	Yb	Lu	Mass
Unit Symbol	%	ppm	ppm	ppm	g
Lower Limit	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA
336402	< 0.02	< 0.5	1.1	0.05	31.8
336403	< 0.02	< 0.5	1.8	0.13	30.7
336404	< 0.02	< 0.5	1.3	0.09	28.6
336405	< 0.02	< 0.5	1.4	0.09	28.5
336406	< 0.02	< 0.5	1.7	0.11	26.6
336407	< 0.02	< 0.5	1.8	0.08	31.2
336408	< 0.02	< 0.5	1.5	< 0.05	31.0
336409	< 0.02	< 0.5	1.9	0.13	33.2
336410	< 0.02	< 0.5	1.7	0.12	32.4
336411	< 0.02	< 0.5	1.2	0.08	34.5
336412	< 0.02	0.5	1.6	0.09	33.4
336413	< 0.02	< 0.5	0.8	0.05	35.5
336414	< 0.02	< 0.5	1.5	0.13	29.4
336415	< 0.02	< 0.5	0.3	0.05	31.6
336416	< 0.02	< 0.5	0.5	0.05	36.1
336417	< 0.02	< 0.5	1.1	0.17	42.3
336418	< 0.02	< 0.5	1.5	0.27	36.5
336419	< 0.02	< 0.5	1.1	0.12	30.9
336420	< 0.02	0.6	1.3	0.13	29.5
336421	< 0.02	< 0.5	0.2	< 0.05	36.4
336422	< 0.02	< 0.5	0.8	0.14	30.3
336423	< 0.02	< 0.5	1.2	0.14	31.0
336424	< 0.02	< 0.5	1.1	0.07	28.4
336425	< 0.02	< 0.5	1.0	0.08	31.7
336426	< 0.02	< 0.5	0.4	< 0.05	33.8
336427	< 0.02	< 0.5	1.8	0.10	28.0
336428	< 0.02	< 0.5	2.2	0.06	30.6
336429	< 0.02	< 0.5	0.6	< 0.05	31.4
336430	< 0.02	< 0.5	1.7	0.07	29.3
336431	< 0.02	< 0.5	1.8	0.06	29.7
336432	< 0.02	< 0.5	1.9	0.06	31.7
336433	< 0.02	< 0.5	1.6	0.06	29.0
336434	< 0.02	< 0.5	1.8	0.12	28.3
336435	< 0.02	< 0.5	0.8	< 0.05	31.2
336436	< 0.02	< 0.5	1.1	< 0.05	30.7
336437	< 0.02	0.6	1.0	< 0.05	35.1
336438	< 0.02	< 0.5	1.8	0.06	27.5
336439	< 0.02	< 0.5	1.4	0.06	28.8
336440	< 0.02	0.6	2.3	0.09	28.8
336441	< 0.02	< 0.5	1.5	0.07	29.3
336442	< 0.02	< 0.5	1.6	0.06	30.7
336443	< 0.02	< 0.5	1.4	0.07	28.4

Analyte Symbol	Sn	Tb	Yb	Lu	Mass
Unit Symbol	%	ppm	ppm	ppm	g
Lower Limit	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA
336444	< 0.02	< 0.5	1.7	< 0.05	29.4
336445	< 0.02	< 0.5	1.5	< 0.05	29.6
336446	< 0.02	< 0.5	1.5	0.06	27.0
336447	< 0.02	< 0.5	1.5	< 0.05	31.5
336448	< 0.02	< 0.5	1.3	< 0.05	29.5
336449	< 0.02	< 0.5	1.8	0.07	31.0
336450	< 0.02	< 0.5	1.6	0.05	30.7
336451	< 0.02	< 0.5	1.4	< 0.05	31.4
336452	< 0.02	< 0.5	1.5	0.06	29.9
336453	< 0.02	< 0.5	2.0	0.07	30.7
336454	< 0.02	< 0.5	1.0	< 0.05	31.6
336455	< 0.02	< 0.5	1.5	< 0.05	30.5
336456	< 0.02	< 0.5	1.7	0.07	37.1
336457	< 0.02	< 0.5	1.0	0.08	31.5
336458	< 0.02	< 0.5	1.7	0.07	36.6
336459	< 0.02	< 0.5	1.7	0.09	30.0
336460	< 0.02	< 0.5	0.6	< 0.05	32.4
336461	< 0.02	< 0.5	1.8	0.09	30.1
336462	< 0.02	< 0.5	1.7	0.08	28.9
336463	< 0.02	0.5	1.7	0.08	28.3
336464	< 0.02	< 0.5	1.4	0.09	28.3
336465	< 0.02	0.5	1.8	0.08	29.7
336466	< 0.02	< 0.5	1.7	0.08	29.8
336467	< 0.02	< 0.5	1.9	0.05	29.8
336468	< 0.02	< 0.5	1.3	< 0.05	30.7
336469	< 0.02	< 0.5	2.3	0.08	28.5
336476	< 0.02	< 0.5	2.2	0.10	27.5
336477	< 0.02	0.5	0.9	0.07	31.5
336478	< 0.02	< 0.5	0.9	< 0.05	35.2
336479	< 0.02	< 0.5	1.4	0.08	31.6
336480	< 0.02	< 0.5	1.0	0.07	29.5
336481	< 0.02	< 0.5	0.7	0.05	32.9
336482	< 0.02	< 0.5	1.0	0.05	33.4
336483	< 0.02	< 0.5	1.2	0.07	40.2
336484	< 0.02	< 0.5	< 0.2	< 0.05	3.32
336485	< 0.02	< 0.5	< 0.2	< 0.05	35.9
336486	< 0.02	< 0.5	0.3	0.09	29.2

Analyte Symbol	Au	Ag	Ag	Cu	Cd	Mo	Pb	Ni	Ni	Zn	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	2	0.3	5	1	0.3	1	3	1	20	1	50	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2
Method Code	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
GXR-1 Meas	3450	31.6	32	1200	3.3	15	727	42	< 20	727	800	0.25	1.97	447	790	1	1390	< 0.5	0.89	9	13	< 1	0.7
GXR-1 Cert	3300	31.0	31.0	1110	3.30	18.0	730	41.0	41.0	760	760	0.257	3.52	427	750	1.22	1380	0.500	0.960	8.20	12.0	3.00	0.690
GXR-1 Meas		32.1		1210	3.2	14	737	43		734		0.25	1.96			1	1410		0.90				
GXR-1 Cert		31.0		1110	3.30	18.0	730	41.0		760		0.257	3.52			1.22	1380		0.960				
GXR-4 Meas		3.4		6640	< 0.3	324	42	44		70		1.83	6.49			2	8		1.06				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
GXR-4 Meas		3.3		6580	0.3	319	44	44		68		1.79	6.31			2	9		1.05				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
SDC-1 Meas				32			22	38		99			8.36			3			1.10				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
SDC-1 Meas				29			21	35		96			7.75			3			1.05				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
GXR-6 Meas		0.4		72	< 0.3	1	93	28		127		0.02	12.2			1	< 2		0.17				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
GXR-6 Meas		0.3		68	< 0.3	< 1	96	28		126		0.02	12.2			1	< 2		0.17				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
DNC-1a Meas				98			< 3	251		53													
DNC-1a Cert				100			6.3	247		70													
DNC-1a Meas				100			< 3	250		53													
DNC-1a Cert				100			6.3	247		70													
SBC-1 Meas				35	0.5	< 1	29	88		181						3	< 2						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
SBC-1 Meas				29	0.6	2	25	87		177						3	< 2						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
OREAS 45d (4-Acid) Meas				385		1	18	251		40		0.04	7.91			< 1	< 2		0.20				
OREAS 45d (4-Acid) Cert				371		2.500	21.8	231.0		45.7		0.049	8.150			0.79	0.31		0.185				
OREAS 45d (4-Acid) Meas				377		< 1	17	248		41		0.05	7.92			< 1	< 2		0.20				
OREAS 45d (4-Acid) Cert				371		2.500	21.8	231.0		45.7		0.049	8.150			0.79	0.31		0.185				
SdAR-M2 (U.S.G.S.) Meas				253	5.8	12	819	55		787						8	< 2						
SdAR-M2 (U.S.G.S.) Cert				236.0000	5.1	13	808	49		760						6.6	1.05						
OREAS 905 (Borate Peroxide) Meas											130			35.5	2850					16		9	1.4
OREAS 905 (Borate Peroxide) Cert											139			36.2	2800					15.3		7.10	1.46
OREAS 905											130			35.2	2750					16		7	1.4

Analyte Symbol	Au	Ag	Ag	Cu	Cd	Mo	Pb	Ni	Ni	Zn	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	
Lower Limit	2	0.3	5	1	0.3	1	3	1	20	1	50	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	
Method Code	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	
(Borate Peroxide ) Meas																								
OREAS 905 (Borate Peroxide ) Cert											139			36.2	2800					15.3		7.10	1.46	
OREAS 905 (Borate Peroxide ) Meas											120			35.0	2790					15		7	1.5	
OREAS 905 (Borate Peroxide ) Cert											139			36.2	2800					15.3		7.10	1.46	
336208 Orig		0.4		200	0.8	< 1	< 3	148		237		0.27	7.19				< 1	< 2		2.66				
336208 Dup		0.3		200	0.8	< 1	< 3	145		234		0.27	7.08				< 1	< 2		2.62				
336073 Orig	178		< 5						< 20		60			74.5	< 50				< 0.5		37	19	< 1	0.3
336073 Dup	177		< 5						< 20		70			74.2	< 50				< 0.5		36	21	< 1	0.3
336399 Orig		< 0.3		101	0.4	< 1	< 3	417		76		0.18	4.83				< 1	< 2		8.18				
336399 Dup		< 0.3		102	0.3	< 1	< 3	404		73		0.18	4.71				< 1	< 2		7.98				
336400B Orig		< 0.3		69	0.3	< 1	< 3	261		64		0.02	5.43				< 1	< 2		7.24				
336400B Dup		< 0.3		73	0.3	< 1	< 3	264		65		0.02	5.41				< 1	< 2		7.28				
336409 Orig	22	< 0.3	< 5	104	0.7	< 1	< 3	81	< 20	114	100	0.73	6.85	1.9	400	< 1	< 2	< 0.5	0.25	48	79	< 1	0.3	
336409 Split PREP DUP	30	< 0.3	< 5	121	0.8	1	< 3	80	< 20	116	70	0.77	7.23	< 0.5	300	< 1	< 2	< 0.5	0.26	57	76	< 1	0.3	
336423 Orig	690		< 5						< 20		100			4.1	< 50				< 0.5		17	22	< 1	0.7
336423 Dup	578		< 5						< 20		70			4.1	< 50				< 0.5		16	22	< 1	0.7
336436 Orig		< 0.3		29	< 0.3	< 1	5	116		79		0.01	4.55				< 1	< 2		5.40				
336436 Dup		< 0.3		30	0.4	< 1	3	117		79		0.01	4.58				< 1	< 2		5.49				
336441 Orig		< 0.3		123	0.3	< 1	< 3	79		80		0.43	8.28				< 1	< 2		2.27				
336441 Dup		< 0.3		123	< 0.3	< 1	< 3	76		77		0.41	8.11				< 1	< 2		2.18				
336455 Orig	7		< 5						< 20		< 50			5.2	320				< 0.5		67	208	< 1	0.5
336455 Dup	11		< 5						< 20		< 50			5.3	480				< 0.5		65	202	2	0.2
336459 Orig	45	< 0.3	< 5	87	< 0.3	< 1	9	51	< 20	91	< 50	0.41	6.95	< 0.5	600	< 1	< 2	< 0.5	1.04	30	117	< 1	0.6	
336459 Split PREP DUP	52	< 0.3	< 5	82	0.3	3	8	50	< 20	89	< 50	0.41	6.89	1.6	670	< 1	< 2	< 0.5	1.09	37	111	< 1	0.9	
336478 Orig		0.3		80	0.5	< 1	5	36		73		7.04	3.72				< 1	< 2		2.22				
336478 Dup		< 0.3		78	0.5	< 1	3	36		74		6.82	3.67				< 1	< 2		1.96				
336485 Orig		< 0.3		2	< 0.3	5	< 3	3		4		1.02	0.08				< 1	< 2		0.01				
336485 Dup		< 0.3		3	< 0.3	5	< 3	3		4		1.01	0.17				< 1	< 2		0.02				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01				< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01				< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01				< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	0.05				< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		1		< 0.01	0.02				< 1	< 2		< 0.01				
Method Blank	< 2		< 5						< 20		< 50			< 0.5	< 50				< 0.5		< 1	< 2	< 1	< 0.2
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	0.02				< 1	< 2		< 0.01				

Analyte Symbol	Fe	Hf	Hg	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La
Unit Symbol	%	ppm	ppm	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	1	1	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5
Method Code	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA
GXR-1 Meas	24.7	< 1	32		0.04	8	0.21	878	< 0.01	0.058	< 15	128	1.7	17	285	< 0.5	0.03	2.6	34.4	88	172	32	7.1
GXR-1 Cert	23.6	0.960	3.90		0.050	8.20	0.217	852	0.0520	0.0650	14.0	122	1.58	16.6	275	0.175	0.036	2.44	34.9	80.0	164	32.0	7.50
GXR-1 Meas					0.04	8	0.22	883		0.058					285		0.02					89	33
GXR-1 Cert					0.050	8.20	0.217	852		0.0650					275		0.036					80.0	32.0
GXR-4 Meas					3.24	11	1.73	148		0.131					207		0.29					88	16
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29					87.0	14.0
GXR-4 Meas					4.02	11	1.70	163		0.128					209		0.27					88	16
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29					87.0	14.0
SDC-1 Meas					1.66	34	1.04	883		0.053					178		0.13					39	
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606					102.00	
SDC-1 Meas					1.07	33	0.99	850		0.053					168		0.26					64	
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606					102.00	
GXR-6 Meas					1.27	32	0.61	1110		0.037					38							185	15
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0							186	14.0
GXR-6 Meas					1.71	31	0.61	1070		0.035					38							119	15
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0							186	14.0
DNC-1a Meas						4									127		0.27					139	17
DNC-1a Cert						5.2									144		0.29					148	18.0
DNC-1a Meas						4									128		0.28					139	17
DNC-1a Cert						5.2									144		0.29					148	18.0
SBC-1 Meas						157									172		0.43					212	36
SBC-1 Cert						163									178.0		0.51					220.0	36.5
SBC-1 Meas						155									172		0.49					216	37
SBC-1 Cert						163									178.0		0.51					220.0	36.5
OREAS 45d (4-Acid) Meas					0.40	20	0.24	491		0.033					31		0.16					102	13
OREAS 45d (4-Acid) Cert					0.412	21.5	0.245	490.000		0.042					31.30		0.773					235.0	9.53
OREAS 45d (4-Acid) Meas					0.39	20	0.24	494		0.034					31		0.35					153	13
OREAS 45d (4-Acid) Cert					0.412	21.5	0.245	490.000		0.042					31.30		0.773					235.0	9.53
SdAR-M2 (U.S.G.S.) Meas						18									150							27	30
SdAR-M2 (U.S.G.S.) Cert						18									144							25.2	32.7
OREAS 905 (Borate Peroxide) Meas	4.27	7										146	2.0				< 0.5		14.7	4.8		< 1	49.8
OREAS 905 (Borate Peroxide) Cert	4.23	7.26										137	1.96				1.38		14.7	5.00		3.02	48.0
OREAS 905 (Borate Peroxide) Meas	4.33	6										123	2.0				< 0.5		15.7	4.7		< 1	48.4



Analyte Symbol	Fe	Hf	Hg	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La
Unit Symbol	%	ppm	ppm	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	1	1	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5
Method Code	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA
OREAS 905 (Borate Peroxide) Cert	4.23	7.26									137	1.96				1.38		14.7	5.00		3.02		48.0
OREAS 905 (Borate Peroxide) Meas	4.18	7									132	1.7				< 0.5		15.5	5.3		< 1		49.4
OREAS 905 (Borate Peroxide) Cert	4.23	7.26									137	1.96				1.38		14.7	5.00		3.02		48.0
336208 Orig					< 0.01	39	2.15	4020		0.022					21		0.39			341		11	
336208 Dup					< 0.01	39	2.13	3990		0.022					20		0.35			333		12	
336073 Orig	29.5	< 1	< 1	< 5					0.03		< 15	5.0	2.3	< 3		< 0.5		< 0.2	< 0.5		< 1		3.0
336073 Dup	29.8	< 1	< 1	< 5					0.04		< 15	5.1	2.2	< 3		< 0.5		< 0.2	< 0.5		< 1		3.0
336399 Orig					1.28	22	4.36	1340		0.040					163		0.38			229		6	
336399 Dup					1.48	22	4.25	1310		0.038					159		0.37			211		6	
336400B Orig					1.27	34	4.70	1330		0.015					136		0.23			171		4	
336400B Dup					1.26	34	4.70	1340		0.015					135		0.22			169		4	
336409 Orig	13.4	1	< 1	< 5	0.26	30	1.07	4090	1.82	0.021	< 15	< 0.1	52.7	< 3	89	< 0.5	0.49	0.8	< 0.5	312	< 1	6	2.9
336409 Split PREP DUP	14.7	2	< 1	< 5	0.27	30	1.07	4510	2.13	0.023	< 15	0.5	55.5	< 3	99	< 0.5	0.35	< 0.2	< 0.5	311	< 1	8	3.7
336423 Orig	14.0	< 1	< 1	< 5					0.07		< 15	< 0.1	9.8	< 3		< 0.5		< 0.2	< 0.5		< 1		2.8
336423 Dup	13.5	< 1	< 1	< 5					0.08		26	0.1	9.5	< 3		< 0.5		< 0.2	< 0.5		< 1		2.7
336436 Orig					0.25	3	2.77	1470		0.190					269		0.22			86		15	
336436 Dup					0.26	3	2.81	1500		0.194					273		0.21			87		15	
336441 Orig					0.62	34	1.12	2210		0.027					122		0.48			308		6	
336441 Dup					0.58	32	1.08	2120		0.026					118		0.42			294		6	
336455 Orig	7.37	1	< 1	< 5					1.58		38	0.6	30.9	< 3		< 0.5		< 0.2	< 0.5		2		3.1
336455 Dup	7.39	2	< 1	< 5					1.54		40	0.6	30.3	< 3		< 0.5		0.5	< 0.5		< 1		3.2
336459 Orig	5.63	2	< 1	< 5	1.16	13	0.39	1130	2.40	0.049	< 15	0.5	21.4	< 3	257	< 0.5	0.42	2.5	1.2	170	< 1	10	16.3
336459 Split PREP DUP	5.91	3	< 1	< 5	1.30	13	0.40	1110	2.92	0.053	40	0.2	23.7	< 3	256	< 0.5	0.41	2.9	< 0.5	183	< 1	9	15.2
336478 Orig					0.11	29	1.72	5000		0.014					40		0.07			40		8	
336478 Dup					0.11	29	1.73	5070		0.015					37		0.08			41		8	
336485 Orig					0.02	< 1	< 0.01	102		< 0.001					2		< 0.01			< 2		< 1	
336485 Dup					0.02	< 1	0.01	100		< 0.001					3		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank	< 0.01	< 1	< 1	< 5					< 0.01		< 15	< 0.1	< 0.1	< 3		< 0.5		< 0.2	< 0.5		< 1		< 0.5
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	

Analyte Symbol	Ce	Nd	Sm	Sn	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	%	ppm	ppm	ppm	g
Lower Limit	3	5	0.1	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
GXR-1 Meas	17	17	2.8	< 0.02	< 0.5	2.0	0.29	
GXR-1 Cert	17.0	18.0	2.70	0.00540	0.830	1.90	0.280	
GXR-1 Meas								
GXR-1 Cert								
GXR-4 Meas								
GXR-4 Cert								
GXR-4 Meas								
GXR-4 Cert								
SDC-1 Meas								
SDC-1 Cert								
SDC-1 Meas								
SDC-1 Cert								
GXR-6 Meas								
GXR-6 Cert								
GXR-6 Meas								
GXR-6 Cert								
DNC-1a Meas								
DNC-1a Cert								
DNC-1a Meas								
DNC-1a Cert								
SBC-1 Meas								
SBC-1 Cert								
SBC-1 Meas								
SBC-1 Cert								
OREAS 45d (4-Acid) Meas								
OREAS 45d (4-Acid) Cert								
OREAS 45d (4-Acid) Meas								
OREAS 45d (4-Acid) Cert								
SdAR-M2 (U.S.G.S.) Meas								
SdAR-M2 (U.S.G.S.) Cert								
OREAS 905 (Borate Peroxide ) Meas	94	41	7.7	< 0.02	< 0.5	0.8		
OREAS 905 (Borate Peroxide ) Cert	96.0	40.5	7.64	0.00074 9	0.810	0.760		
OREAS 905 (Borate Peroxide ) Meas	96	38	7.6	< 0.02	< 0.5	0.7		

Analyte Symbol	Ce	Nd	Sm	Sn	Tb	Yb	Lu	Mass
Unit Symbol	ppm	ppm	ppm	%	ppm	ppm	ppm	g
Lower Limit	3	5	0.1	0.02	0.5	0.2	0.05	
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA
OREAS 905 (Borate Peroxide ) Cert	96.0	40.5	7.64	0.00074 9	0.810	0.760		
OREAS 905 (Borate Peroxide ) Meas	98	39	6.9	< 0.02	< 0.5	0.8		
OREAS 905 (Borate Peroxide ) Cert	96.0	40.5	7.64	0.00074 9	0.810	0.760		
336208 Orig								
336208 Dup								
336073 Orig	4	< 5	0.5	< 0.02	< 0.5	0.5	< 0.05	44.8
336073 Dup	4	< 5	0.5	< 0.02	< 0.5	0.6	< 0.05	41.3
336399 Orig								
336399 Dup								
336400B Orig								
336400B Dup								
336409 Orig	8	< 5	1.8	< 0.02	< 0.5	1.9	0.13	33.2
336409 Split PREP DUP	11	6	1.9	< 0.02	0.6	2.3	0.12	28.9
336423 Orig	6	< 5	1.1	< 0.02	< 0.5	1.2	0.13	32.1
336423 Dup	5	< 5	1.1	< 0.02	< 0.5	1.2	0.15	30.0
336436 Orig								
336436 Dup								
336441 Orig								
336441 Dup								
336455 Orig	8	5	1.7	< 0.02	< 0.5	1.7	< 0.05	30.8
336455 Dup	7	< 5	1.7	< 0.02	< 0.5	1.4	0.06	30.3
336459 Orig	34	7	3.0	< 0.02	< 0.5	1.7	0.09	30.0
336459 Split PREP DUP	39	12	3.2	< 0.02	< 0.5	2.0	0.07	28.4
336478 Orig								
336478 Dup								
336485 Orig								
336485 Dup								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank								
Method Blank	< 3	< 5	< 0.1	< 0.02	< 0.5	< 0.2	< 0.05	1.00
Method Blank								



**Date Submitted:** 02-Oct-17  
**Invoice No.:** A17-10758  
**Invoice Date:** 10-Nov-17  
**Your Reference:** Abbie Lake

**Argo Gold Inc**  
**365 Bay St**  
**Toronto**  
**Canada**

**ATTN: Frank Racicot**

## CERTIFICATE OF ANALYSIS

56 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1H INAA(INAAGEO)/Total Digestion ICP(TOTAL)

REPORT **A17-10758**

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

Notes:

Elements which exceed the upper limits should be analyzed by assay techniques. Some elements are reported by multiple techniques. These are indicated by MULT.

CERTIFIED BY:

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

Emmanuel Esemé, Ph.D.  
Quality Control

**ACTIVATION LABORATORIES LTD.**  
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## Results

## Activation Laboratories Ltd.

## Report: A17-10758

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
336076	24	< 0.3	34	< 0.3	1	9	23	47	0.27	5.38	2.4	250	< 1	< 2	< 0.5	0.89	12	74	< 1	0.4	3.11	2	< 1
336077	21	< 0.3	66	< 0.3	2	5	61	76	0.87	4.75	4.2	320	< 1	< 2	< 0.5	2.59	31	138	< 1	0.4	5.38	< 1	< 1
336078	16	< 0.3	163	< 0.3	< 1	< 3	20	83	0.81	4.24	1.5	260	< 1	7	< 0.5	2.65	32	37	< 1	0.4	6.71	< 1	< 1
336079	11	< 0.3	7	0.7	< 1	9	16	75	3.33	0.45	20.0	< 50	< 1	< 2	3.7	4.31	13	35	< 1	0.5	16.2	< 1	< 1
336080	112	0.4	110	0.6	4	28	38	84	1.20	0.30	105	< 50	< 1	< 2	2.1	0.16	20	56	< 1	0.3	15.4	< 1	< 1
336081	23	0.4	27	< 0.3	2	13	14	33	2.38	6.67	42.8	410	2	< 2	< 0.5	0.13	10	59	4	0.7	4.47	3	< 1
336082	40	0.3	46	0.5	1	15	19	59	4.74	4.72	67.8	290	1	< 2	< 0.5	0.15	14	45	< 1	0.4	13.0	2	< 1
336083	72	0.5	140	2.0	2	28	38	268	17.3	0.45	102	< 50	< 1	< 2	< 0.5	0.28	39	49	< 1	< 0.2	27.8	< 1	< 1
336084	61	< 0.3	30	1.0	2	16	17	125	11.6	0.25	63.1	< 50	< 1	< 2	< 0.5	0.91	23	92	< 1	0.3	20.1	< 1	< 1
336085	< 2	< 0.3	111	0.4	< 1	< 3	75	84	0.41	6.16	14.1	< 50	< 1	< 2	< 0.5	3.32	45	65	< 1	0.6	10.8	1	< 1
336086	< 2	< 0.3	106	0.5	< 1	< 3	69	82	0.09	5.93	9.6	< 50	< 1	6	< 0.5	3.74	42	75	< 1	0.7	11.2	2	< 1
336087	< 2	< 0.3	122	0.5	< 1	< 3	73	81	0.07	6.89	8.7	< 50	< 1	2	< 0.5	3.15	45	84	< 1	0.6	11.9	2	< 1
336234	< 2	0.3	54	< 0.3	4	81	22	37	0.05	5.01	3.2	490	2	< 2	< 0.5	1.42	11	113	3	0.6	2.27	2	< 1
336235	4	< 0.3	48	0.4	< 1	5	110	88	0.22	6.91	0.9	280	1	< 2	< 0.5	3.71	36	353	< 1	1.1	5.88	3	< 1
336236	< 2	< 0.3	59	< 0.3	< 1	5	84	74	0.09	6.69	4.1	510	1	< 2	< 0.5	5.51	30	327	2	1.0	5.01	2	< 1
336237	74	0.5	4270	3.0	1	8	251	384	10.9	1.21	23.3	< 50	< 1	< 2	< 0.5	0.04	69	79	< 1	0.8	18.5	< 1	< 1
336238	127	< 0.3	155	0.5	< 1	7	62	72	3.36	0.07	38.7	< 50	< 1	2	< 0.5	0.02	39	33	< 1	0.5	16.2	< 1	< 1
336239	44	< 0.3	145	0.5	2	5	47	85	1.73	0.41	21.8	< 50	< 1	< 2	< 0.5	0.04	29	91	< 1	0.5	12.2	< 1	< 1
336240	119	2.4	586	0.8	4	12	140	172	3.19	2.95	20.4	< 50	< 1	< 2	< 0.5	0.03	52	140	< 1	0.7	18.3	1	< 1
336241	36	< 0.3	198	1.0	< 1	6	67	195	1.31	1.81	4.9	< 50	< 1	< 2	< 0.5	0.37	29	38	< 1	0.6	17.3	< 1	< 1
336242	79	0.5	815	0.5	< 1	8	125	74	6.44	1.44	24.7	< 50	< 1	< 2	< 0.5	0.04	70	86	< 1	0.9	19.3	< 1	< 1
336243	9	< 0.3	80	0.4	< 1	< 3	28	96	0.25	0.15	7.0	< 50	< 1	< 2	< 0.5	0.15	13	20	< 1	0.3	7.73	< 1	< 1
336244	13	< 0.3	28	< 0.3	1	< 3	20	36	0.04	7.34	5.6	660	< 1	< 2	< 0.5	0.26	11	23	4	0.6	2.25	3	< 1
336245	37	< 0.3	5	< 0.3	< 1	< 3	53	42	0.14	2.00	2.2	< 50	< 1	< 2	< 0.5	0.79	6	75	< 1	< 0.2	1.80	< 1	< 1
336246	13	< 0.3	71	< 0.3	< 1	4	72	92	0.28	6.93	5.9	260	< 1	< 2	< 0.5	2.26	33	203	< 1	0.8	6.67	2	< 1
336488	8510	1.9	196	0.4	< 1	6	302	57	4.98	11.5	26.8	760	2	7	< 0.5	0.04	143	481	4	< 0.2	11.6	2	< 1
336489	162	< 0.3	89	0.5	< 1	7	46	126	1.30	4.77	3.7	100	< 1	3	< 0.5	0.87	30	67	< 1	0.6	11.1	2	< 1
336490	629	< 0.3	65	< 0.3	1	5	25	60	0.92	2.03	3.8	< 50	< 1	< 2	< 0.5	0.67	18	71	< 1	0.3	6.27	1	< 1
336491	1360	< 0.3	142	0.4	1	6	50	88	2.06	3.81	7.4	< 50	< 1	< 2	< 0.5	0.69	29	81	< 1	0.6	9.22	< 1	< 1
336492	9	< 0.3	81	0.4	< 1	5	76	102	0.16	7.71	8.2	310	1	3	< 0.5	1.16	32	198	3	0.9	7.92	3	< 1
336493	18	< 0.3	82	< 0.3	< 1	7	60	110	0.08	8.04	8.5	460	1	< 2	< 0.5	0.17	35	162	2	0.9	7.67	2	< 1
336494	23	< 0.3	70	0.4	< 1	5	56	97	0.11	7.05	8.3	420	< 1	4	< 0.5	0.61	35	111	4	1.1	6.73	3	< 1
336495	18	< 0.3	71	< 0.3	1	6	50	88	0.38	7.22	8.6	370	< 1	3	< 0.5	1.08	30	93	< 1	0.9	6.99	2	< 1
336496	24	< 0.3	55	< 0.3	< 1	7	51	93	0.15	7.84	8.2	410	1	< 2	< 0.5	1.24	25	117	1	1.0	5.40	3	< 1
336497	75	< 0.3	66	0.7	< 1	10	47	159	2.68	4.74	7.8	240	< 1	< 2	< 0.5	1.24	32	65	< 1	0.8	14.8	2	< 1
336498	28	0.8	665	0.6	2	18	95	235	3.37	4.07	50.3	< 50	< 1	< 2	< 0.5	0.24	53	81	< 1	0.4	9.93	< 1	< 1
336499	59	1.2	1130	0.7	4	37	105	228	9.46	2.76	113	< 50	< 1	< 2	< 0.5	0.29	157	66	< 1	0.4	13.0	< 1	< 1
336500	90	0.7	141	1.3	< 1	26	32	140	19.3	0.53	115	< 50	< 1	< 2	< 0.5	0.98	46	41	< 1	0.2	31.1	< 1	< 1
337501	9	< 0.3	43	0.3	< 1	5	95	74	0.23	5.94	2.0	320	< 1	< 2	< 0.5	6.97	29	296	< 1	1.0	4.72	2	< 1
337502	32	< 0.3	27	1.3	< 1	16	41	86	7.84	0.33	163	< 50	< 1	< 2	< 0.5	0.03	34	20	< 1	< 0.2	27.8	< 1	< 1
337503	25	0.4	34	0.8	2	14	32	63	10.0	0.23	73.4	< 50	< 1	< 2	< 0.5	0.08	22	51	< 1	< 0.2	22.9	< 1	< 1

Analyte Symbol	Au	Ag	Cu	Cd	Mo	Pb	Ni	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu	Fe	Hf	Hg
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm
Lower Limit	2	0.3	1	0.3	1	3	1	1	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2	0.01	1	1
Method Code	INAA	MULT INAA / TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	MULT INAA / TD-ICP	MULT INAA / TD-ICP	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	INAA	INAA	INAA
337504	31	< 0.3	28	0.9	< 1	14	17	131	6.08	0.36	39.9	< 50	< 1	< 2	< 0.5	1.25	17	46	< 1	0.3	23.8	< 1	< 1
337505	3	< 0.3	7	0.4	2	5	8	60	0.50	0.35	12.6	< 50	< 1	< 2	< 0.5	0.08	6	76	< 1	< 0.2	12.8	< 1	< 1
337506	12	< 0.3	25	< 0.3	1	5	61	70	0.41	4.64	2.8	220	< 1	< 2	< 0.5	1.44	12	99	< 1	0.3	2.92	< 1	< 1
337507	15	< 0.3	7	< 0.3	2	< 3	18	13	0.11	0.44	1.7	< 50	< 1	< 2	3.5	0.50	4	64	< 1	< 0.2	0.88	< 1	< 1
337508	56	< 0.3	48	0.4	< 1	5	68	94	0.70	8.11	9.4	280	1	3	< 0.5	1.35	32	141	< 1	1.1	6.79	2	< 1
337509	351	< 0.3	41	< 0.3	3	< 3	35	51	0.32	4.21	7.3	160	< 1	< 2	1.9	0.08	17	112	< 1	0.3	3.21	1	< 1
337510	7	< 0.3	74	0.3	< 1	4	76	100	0.38	8.18	5.2	510	1	< 2	< 0.5	1.00	39	199	4	0.7	6.24	2	< 1
337521	< 2	< 0.3	108	0.4	< 1	< 3	98	129	0.16	8.43	57.5	< 50	< 1	< 2	< 0.5	0.30	47	133	< 1	0.6	11.6	3	< 1
337522	174	0.7	144	0.6	< 1	< 3	78	121	1.02	5.28	122	< 50	< 1	14	< 0.5	0.04	32	146	< 1	0.6	13.4	2	< 1
337523	744	< 0.3	117	0.6	< 1	7	17	83	1.70	0.29	21.5	< 50	< 1	< 2	< 0.5	1.31	11	46	< 1	0.4	17.0	< 1	< 1
337524	49	< 0.3	61	< 0.3	< 1	< 3	79	92	0.85	5.47	55.0	< 50	< 1	6	< 0.5	0.20	32	120	< 1	0.4	8.34	2	< 1
337525	446	1.0	200	0.9	1	16	253	60	19.5	5.34	271	< 50	< 1	4	< 0.5	0.02	181	98	< 1	0.4	22.0	< 1	< 1
337526	1160	< 0.3	228	0.6	< 1	5	11	57	3.13	0.34	14.8	< 50	< 1	< 2	< 0.5	2.48	7	39	< 1	0.6	14.7	< 1	< 1
337527	< 2	< 0.3	116	0.4	< 1	< 3	85	88	0.13	6.81	5.4	< 50	< 1	< 2	< 0.5	7.65	54	193	< 1	0.7	9.76	2	< 1
337528	283	< 0.3	17	0.4	< 1	< 3	68	104	0.23	4.04	3.4	< 50	< 1	< 2	< 0.5	2.38	47	131	< 1	0.7	13.6	< 1	< 1

## Results

## Activation Laboratories Ltd.

## Report: A17-10758

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
336076	< 5	0.74	2	0.18	1110	3.29	0.027	< 15	0.1	7.1	< 3	217	< 0.5	0.15	4.0	< 0.5	61	< 1	4	17.0	33	12	2.1
336077	< 5	1.02	8	0.91	1460	1.80	0.030	50	0.4	17.0	< 3	237	< 0.5	0.32	1.2	< 0.5	126	< 1	5	7.4	14	< 5	1.7
336078	< 5	0.66	18	0.95	1300	0.39	0.033	19	0.5	18.0	< 3	77	< 0.5	0.61	0.3	< 0.5	214	1	6	3.6	8	< 5	1.7
336079	< 5	0.01	4	1.69	10200	0.03	0.009	< 15	1.0	6.1	< 3	32	< 0.5	0.02	< 0.2	< 0.5	43	< 1	8	3.7	6	< 5	0.9
336080	< 5	0.04	< 1	0.06	1480	0.03	0.010	< 15	7.4	4.4	< 3	5	< 0.5	0.03	0.8	< 0.5	33	< 1	6	4.6	6	< 5	0.9
336081	< 5	2.52	4	0.12	99	0.36	0.042	140	4.4	6.2	< 3	50	< 0.5	0.33	2.8	< 0.5	69	< 1	14	16.9	41	14	3.1
336082	< 5	1.74	4	0.12	889	0.23	0.040	74	4.4	5.6	< 3	33	< 0.5	0.16	2.2	< 0.5	53	< 1	8	13.1	28	8	2.1
336083	< 5	0.01	3	0.27	5450	0.02	0.007	< 15	5.4	2.8	< 3	4	< 0.5	0.02	< 0.2	< 0.5	18	< 1	5	2.4	< 3	< 5	0.5
336084	< 5	0.01	1	0.41	4170	0.03	0.004	< 15	2.8	1.7	< 3	9	< 0.5	< 0.01	< 0.2	< 0.5	14	< 1	5	1.9	< 3	< 5	0.4
336085	< 5	0.27	41	1.10	3410	0.98	0.029	< 15	0.2	31.3	< 3	110	< 0.5	0.33	< 0.2	< 0.5	194	< 1	7	4.9	9	8	2.4
336086	< 5	0.25	44	1.14	3610	0.96	0.035	< 15	< 0.1	30.9	< 3	102	0.8	0.63	< 0.2	< 0.5	266	< 1	8	3.6	11	8	2.3
336087	< 5	0.26	48	1.02	3120	1.08	0.030	< 15	0.2	35.4	< 3	109	< 0.5	0.37	0.4	< 0.5	236	< 1	7	4.9	19	9	3.0
336234	< 5	2.04	15	0.91	466	1.55	0.082	102	0.3	4.9	< 3	383	< 0.5	0.16	5.8	1.4	46	< 1	9	23.4	45	15	3.0
336235	< 5	0.34	27	2.83	1090	2.21	0.129	< 15	1.1	15.1	< 3	548	< 0.5	0.30	5.0	< 0.5	109	< 1	14	33.4	66	24	5.3
336236	< 5	1.04	14	2.74	1460	2.48	0.127	< 15	0.5	14.9	< 3	504	< 0.5	0.37	4.5	1.1	132	< 1	13	26.7	56	17	4.5
336237	< 5	< 0.01	< 1	0.66	641	0.01	0.023	< 15	0.9	3.7	11	3	< 0.5	0.05	0.6	< 0.5	39	< 1	8	4.9	9	< 5	1.1
336238	< 5	< 0.01	< 1	0.04	1440	0.01	0.032	< 15	0.8	2.5	6	2	< 0.5	< 0.01	< 0.2	< 0.5	14	< 1	11	2.8	6	< 5	0.8
336239	< 5	< 0.01	< 1	0.07	1340	0.01	0.020	< 15	0.5	2.1	< 3	8	< 0.5	0.01	0.2	< 0.5	16	< 1	9	2.2	6	< 5	0.7
336240	< 5	< 0.01	1	1.10	2020	0.02	0.037	< 15	0.7	8.3	12	2	< 0.5	0.09	1.3	< 0.5	73	< 1	7	6.8	17	9	1.4
336241	< 5	0.12	11	0.83	2020	0.07	0.026	24	0.2	8.9	< 3	12	< 0.5	0.16	< 0.2	< 0.5	94	< 1	5	3.5	8	< 5	1.1
336242	< 5	< 0.01	< 1	0.82	1030	0.01	0.031	< 15	0.5	5.7	13	1	< 0.5	0.10	0.5	< 0.5	53	< 1	6	6.7	19	7	1.7
336243	< 5	< 0.01	< 1	0.15	2780	0.01	0.004	< 15	< 0.1	15.0	< 3	3	< 0.5	< 0.01	< 0.2	< 0.5	52	< 1	9	1.4	6	< 5	0.9
336244	< 5	3.56	10	0.27	442	0.09	0.032	109	0.1	7.3	< 3	45	< 0.5	0.29	3.1	< 0.5	55	< 1	12	15.4	32	11	2.5
336245	< 5	0.11	1	0.35	817	0.12	0.010	< 15	< 0.1	7.0	< 3	35	< 0.5	0.13	< 0.2	< 0.5	83	3	6	0.6	< 3	< 5	0.3
336246	< 5	1.01	25	1.04	1530	1.72	0.050	< 15	0.2	20.4	< 3	213	< 0.5	0.31	3.1	< 0.5	137	< 1	8	17.4	38	15	3.5
336488	< 5	3.35	20	0.37	835	1.05	0.022	159	1.2	47.1	< 3	220	1.2	0.71	0.6	< 0.5	411	16	7	5.9	16	< 5	2.5
336489	< 5	0.35	17	0.68	3470	0.97	0.044	< 15	0.6	18.5	< 3	144	< 0.5	0.40	2.0	< 0.5	173	< 1	9	8.9	20	10	2.8
336490	< 5	0.18	7	0.36	1640	0.46	0.021	< 15	0.3	7.6	< 3	70	< 0.5	0.16	1.5	< 0.5	68	< 1	5	7.9	17	8	1.6
336491	< 5	0.45	12	0.58	2020	0.76	0.037	< 15	0.6	13.9	< 3	122	< 0.5	0.29	1.4	< 0.5	132	< 1	7	9.4	21	7	2.4
336492	< 5	1.35	24	0.48	2300	1.25	0.063	46	0.4	23.4	< 3	263	< 0.5	0.45	4.1	0.8	200	< 1	11	21.0	51	15	4.3
336493	< 5	1.45	24	0.21	1370	1.30	0.047	< 15	0.6	28.1	< 3	245	< 0.5	0.32	3.5	< 0.5	186	< 1	10	17.8	40	16	3.6
336494	< 5	1.51	20	0.28	1640	1.69	0.061	51	0.6	21.9	< 3	199	< 0.5	0.54	4.7	< 0.5	178	< 1	9	25.4	59	23	4.8
336495	< 5	1.19	17	0.37	2100	1.95	0.053	23	0.6	17.1	< 3	213	< 0.5	0.41	4.4	0.8	153	< 1	9	25.9	55	19	4.5
336496	< 5	1.44	17	0.35	1580	2.02	0.054	< 15	0.8	18.4	< 3	227	< 0.5	0.33	7.0	0.6	149	< 1	8	29.8	65	21	4.6
336497	< 5	0.50	26	0.82	3750	0.34	0.048	< 15	0.5	17.3	< 3	79	< 0.5	0.37	2.0	1.5	156	< 1	10	9.5	24	7	2.6
336498	< 5	0.13	20	0.75	507	0.19	0.028	< 15	0.5	9.9	6	31	< 0.5	0.33	1.0	< 0.5	185	< 1	4	5.7	14	7	1.8
336499	< 5	0.09	12	0.52	418	0.13	0.019	< 15	1.6	9.3	27	20	< 0.5	0.25	0.6	< 0.5	149	< 1	5	4.0	10	< 5	1.3
336500	< 5	0.01	4	0.89	9330	0.03	0.006	25	5.8	3.3	4	9	< 0.5	0.02	0.4	< 0.5	19	< 1	7	2.0	< 3	< 5	0.4
337501	< 5	0.91	24	3.14	1650	0.90	0.113	23	0.8	14.4	< 3	421	< 0.5	0.33	4.0	0.7	107	< 1	11	24.7	54	15	4.3
337502	< 5	0.04	< 1	0.03	1100	0.05	0.013	58	5.4	2.8	< 3	6	< 0.5	0.02	< 0.2	< 0.5	38	< 1	5	3.2	3	< 5	0.6
337503	< 5	< 0.01	1	0.12	3800	0.03	0.006	< 15	2.8	3.6	< 3	4	< 0.5	0.01	< 0.2	< 0.5	23	< 1	4	2.3	< 3	< 5	0.4
337504	< 5	< 0.01	3	0.92	12500	0.02	0.006	< 15	1.9	4.5	< 3	12	< 0.5	0.01	0.3	< 0.5	15	< 1	5	2.2	< 3	< 5	0.5

Analyte Symbol	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La	Ce	Nd	Sm
Unit Symbol	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5	3	5	0.1
Method Code	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
337505	< 5	< 0.01	3	0.34	4990	0.02	0.008	< 15	0.4	2.1	< 3	3	< 0.5	0.01	0.3	< 0.5	20	< 1	2	2.3	5	< 5	0.4
337506	< 5	0.49	12	1.26	1040	0.41	0.061	< 15	0.3	6.3	< 3	207	< 0.5	0.15	2.3	1.1	113	2	7	9.3	20	< 5	1.8
337507	< 5	0.03	< 1	0.25	403	0.04	0.002	< 15	0.1	1.4	< 3	29	< 0.5	0.01	< 0.2	< 0.5	16	< 1	1	0.8	< 3	< 5	0.2
337508	< 5	1.80	24	0.78	2400	1.16	0.062	116	0.6	18.5	< 3	231	< 0.5	0.38	4.8	0.6	173	< 1	10	29.0	69	23	4.8
337509	< 5	0.90	11	0.07	1050	0.53	0.025	29	0.3	7.1	< 3	106	< 0.5	0.20	1.8	< 0.5	76	< 1	5	9.5	23	10	1.6
337510	< 5	2.07	24	0.60	1630	1.06	0.054	108	0.7	26.7	< 3	207	< 0.5	0.31	3.3	< 0.5	142	< 1	8	18.0	44	15	3.8
337521	< 5	0.09	22	1.55	1270	0.23	0.024	< 15	1.7	36.7	< 3	18	< 0.5	0.15	0.9	1.0	183	28	11	4.5	17	9	2.7
337522	< 5	0.12	16	0.88	1370	0.38	0.064	< 15	2.8	38.5	< 3	26	< 0.5	1.12	1.5	< 0.5	403	29	3	5.9	14	12	2.8
337523	< 5	< 0.01	< 1	0.94	3160	0.01	0.057	< 15	0.4	2.5	< 3	4	< 0.5	< 0.01	< 0.2	< 0.5	23	< 1	4	1.3	< 3	< 5	0.6
337524	< 5	0.10	10	0.70	1200	0.22	0.034	< 15	1.8	22.4	< 3	19	< 0.5	0.60	0.4	< 0.5	224	19	9	4.3	12	< 5	2.0
337525	< 5	0.11	7	0.43	709	0.23	0.015	< 15	4.4	28.0	< 3	22	< 0.5	0.51	< 0.2	< 0.5	214	12	14	4.2	11	< 5	2.2
337526	< 5	< 0.01	< 1	0.76	2380	< 0.01	0.037	< 15	0.1	1.5	< 3	8	< 0.5	< 0.01	< 0.2	< 0.5	32	< 1	5	1.4	< 3	< 5	0.7
337527	< 5	0.67	25	1.40	2060	1.26	0.031	< 15	1.2	39.2	< 3	108	< 0.5	0.31	< 0.2	< 0.5	183	< 1	7	3.0	7	< 5	2.5
337528	< 5	0.12	18	1.51	4020	0.11	0.025	< 15	0.1	24.2	< 3	18	< 0.5	0.29	< 0.2	< 0.5	171	< 1	7	4.7	11	< 5	2.0



## Results

Activation Laboratories Ltd.

Report: A17-10758

Analyte Symbol	Sn	Tb	Yb	Lu	Mass	Au
Unit Symbol	%	ppm	ppm	ppm	g	g/tonne
Lower Limit	0.02	0.5	0.2	0.05		0.03
Method Code	INAA	INAA	INAA	INAA	INAA	FA- GRA
336076	0.06	< 0.5	0.6	< 0.05	33.8	
336077	< 0.02	< 0.5	0.9	< 0.05	35.4	
336078	< 0.02	< 0.5	1.3	< 0.05	34.5	
336079	< 0.02	< 0.5	1.0	< 0.05	34.7	
336080	< 0.02	< 0.5	0.8	0.06	37.1	
336081	< 0.02	< 0.5	1.3	0.05	32.2	
336082	< 0.02	< 0.5	1.1	< 0.05	34.8	
336083	< 0.02	< 0.5	0.5	< 0.05	43.8	
336084	< 0.02	< 0.5	0.2	< 0.05	42.0	
336085	< 0.02	< 0.5	2.0	0.07	31.1	
336086	< 0.02	< 0.5	1.6	0.08	28.6	
336087	< 0.02	< 0.5	2.1	0.08	29.5	
336234	< 0.02	< 0.5	0.6	< 0.05	33.0	
336235	< 0.02	< 0.5	1.4	0.06	33.2	
336236	< 0.02	< 0.5	1.3	< 0.05	34.3	
336237	< 0.02	< 0.5	0.7	0.06	38.5	
336238	< 0.02	< 0.5	0.9	0.05	40.7	
336239	< 0.02	< 0.5	0.7	< 0.05	40.2	
336240	< 0.02	< 0.5	1.1	0.07	38.1	
336241	< 0.02	< 0.5	1.0	< 0.05	36.6	
336242	< 0.02	< 0.5	1.0	0.05	30.2	
336243	< 0.02	< 0.5	1.3	0.08	36.8	
336244	< 0.02	< 0.5	1.4	0.06	31.1	
336245	< 0.02	< 0.5	0.6	< 0.05	35.1	
336246	< 0.02	< 0.5	1.3	0.05	32.4	
336488	< 0.02	< 0.5	1.9	0.05	26.3	14.9
336489	< 0.02	< 0.5	1.8	0.08	30.6	
336490	< 0.02	< 0.5	0.8	< 0.05	35.2	
336491	< 0.02	< 0.5	1.3	0.06	28.2	
336492	< 0.02	< 0.5	1.6	0.08	27.5	
336493	< 0.02	< 0.5	2.2	0.10	28.0	
336494	< 0.02	< 0.5	1.6	0.08	26.5	
336495	< 0.02	< 0.5	1.7	0.07	29.1	
336496	< 0.02	< 0.5	1.5	0.06	29.3	
336497	< 0.02	< 0.5	1.7	0.08	30.7	
336498	< 0.02	< 0.5	0.5	< 0.05	35.8	
336499	0.03	< 0.5	0.6	0.05	36.0	
336500	< 0.02	< 0.5	0.6	< 0.05	38.6	
337501	< 0.02	< 0.5	1.4	< 0.05	31.1	
337502	< 0.02	< 0.5	0.7	< 0.05	39.0	
337503	< 0.02	< 0.5	0.5	< 0.05	40.0	

Results

Activation Laboratories Ltd.

Report: A17-10758

Analyte Symbol	Sn	Tb	Yb	Lu	Mass	Au
Unit Symbol	%	ppm	ppm	ppm	g	g/tonne
Lower Limit	0.02	0.5	0.2	0.05		0.03
Method Code	INAA	INAA	INAA	INAA	INAA	FA- GRA
337504	< 0.02	< 0.5	0.7	< 0.05	39.6	
337505	< 0.02	< 0.5	0.3	< 0.05	36.7	
337506	< 0.02	< 0.5	0.5	< 0.05	31.0	
337507	< 0.02	< 0.5	< 0.2	< 0.05	39.3	
337508	< 0.02	< 0.5	1.4	0.08	27.8	
337509	< 0.02	< 0.5	0.6	< 0.05	28.3	
337510	< 0.02	< 0.5	1.6	0.08	26.8	
337521	< 0.02	< 0.5	2.2	0.08	30.7	
337522	< 0.02	< 0.5	2.8	0.12	33.1	
337523	< 0.02	< 0.5	0.5	< 0.05	35.0	
337524	< 0.02	< 0.5	1.5	0.07	32.1	
337525	< 0.02	< 0.5	1.4	0.06	35.3	
337526	0.02	< 0.5	0.7	< 0.05	32.7	
337527	< 0.02	< 0.5	2.6	0.06	28.4	
337528	0.06	< 0.5	2.0	0.09	32.0	

Analyte Symbol	Au	Ag	Ag	Cu	Cd	Mo	Pb	Ni	Ni	Zn	Zn	S	Al	As	Ba	Be	Bi	Br	Ca	Co	Cr	Cs	Eu
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
Lower Limit	2	0.3	5	1	0.3	1	3	1	20	1	50	0.01	0.01	0.5	50	1	2	0.5	0.01	1	2	1	0.2
Method Code	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	TD-ICP	TD-ICP	INAA	INAA	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA
GXR-1 Meas		32.0		1210	3.3	15	755	44		751		0.26	2.03			1	1400		0.97				
GXR-1 Cert		31.0		1110	3.30	18.0	730	41.0		760		0.257	3.52			1.22	1380		0.960				
GXR-4 Meas		3.1		6420	< 0.3	320	45	43		69		1.80	6.55			2	9		1.12				
GXR-4 Cert		4.0		6520	0.860	310	52.0	42.0		73.0		1.77	7.20			1.90	19.0		1.01				
SDC-1 Meas				30				22	38		101		7.91			3			1.16				
SDC-1 Cert				30.000			25.00	38.0		103.00			8.34			3.00			1.00				
GXR-6 Meas		0.4		68	< 0.3	< 1	92	28		127		< 0.01	12.6			1	4		0.21				
GXR-6 Cert		1.30		66.0	1.00	2.40	101	27.0		118		0.0160	17.7			1.40	0.290		0.180				
DNC-1a Meas				97				3	256		57												
DNC-1a Cert				100				6.3	247		70												
SBC-1 Meas				33	0.7	1	25	89		181						4	5						
SBC-1 Cert				31.0000	0.40	2	35.0	83		186						3.20	0.70						
OxK110 Meas																							
OxK110 Cert																							
OXN117 Meas																							
OXN117 Cert																							
SdAR-M2 (U.S.G.S.) Meas				248	5.5	12	807	56		793						8	< 2						
SdAR-M2 (U.S.G.S.) Cert				236.0000	5.1	13	808	49		760						6.6	1.05						
DMMAS 121 Meas	779													1720	840					45	143		
DMMAS 121 Cert	726													1670	1180					45.2	142		
DMMAS 121 Meas	805													1730	890					46	151		
DMMAS 121 Cert	726													1670	1180					45.2	142		
336079 Orig		< 0.3		7	0.6	< 1	9	16		74		3.33	0.45			< 1	< 2		4.31				
336079 Dup		< 0.3		8	0.8	< 1	9	17		76		3.33	0.45			< 1	< 2		4.30				
336494 Orig	23		< 5						< 20		< 50			8.5	380			< 0.5		36	114	5	1.2
336494 Dup	23		< 5						< 20		< 50			8.1	450			< 0.5		34	109	3	1.0
336497 Orig		< 0.3		66	0.7	< 1	10	48		159		2.69	4.76			< 1	< 2		1.25				
336497 Dup		< 0.3		66	0.7	< 1	10	47		159		2.67	4.73			< 1	2		1.24				
337521 Orig		< 0.3		109	0.4	< 1	< 3	99		130		0.16	8.44			< 1	< 2		0.30				
337521 Dup		< 0.3		107	0.3	< 1	< 3	97		129		0.16	8.43			< 1	< 2		0.30				
337522 Orig	174	0.7	< 5	144	0.6	< 1	< 3	78	< 20	121	100	1.02	5.28	122	< 50	< 1	14	< 0.5	0.04	32	146	< 1	0.6
337522 Split PREP DUP	180	0.6	< 5	120	0.6	< 1	4	78	< 20	124	120	0.97	9.26	129	< 50	< 1	10	< 0.5	0.07	33	148	< 1	0.7
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	< 0.01			< 1	< 2		< 0.01				
Method Blank		< 0.3		< 1	< 0.3	< 1	< 3	< 1		< 1		< 0.01	0.02			< 1	< 2		< 0.01				
Method Blank	< 2		< 5						< 20		< 50			< 0.5	< 50			< 0.5		< 1	< 2	< 1	< 0.2
Method Blank																							

Analyte Symbol	Fe	Hf	Hg	Ir	K	Li	Mg	Mn	Na	P	Rb	Sb	Sc	Se	Sr	Ta	Ti	Th	U	V	W	Y	La
Unit Symbol	%	ppm	ppm	ppb	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	1	1	5	0.01	1	0.01	1	0.01	0.001	15	0.1	0.1	3	1	0.5	0.01	0.2	0.5	2	1	1	0.5
Method Code	INAA	INAA	INAA	INAA	TD-ICP	TD-ICP	TD-ICP	TD-ICP	INAA	TD-ICP	INAA	INAA	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA	INAA	TD-ICP	INAA	TD-ICP	INAA
GXR-1 Meas					0.04	8	0.22	896		0.060					303		0.03			90		34	
GXR-1 Cert					0.050	8.20	0.217	852		0.0650					275		0.036			80.0		32.0	
GXR-4 Meas					2.64	11	1.73	153		0.134					216		0.29			88		16	
GXR-4 Cert					4.01	11.1	1.66	155		0.120					221		0.29			87.0		14.0	
SDC-1 Meas					1.72	35	1.04	932		0.058					182		0.31			69			
SDC-1 Cert					2.72	34	1.02	880.00		0.0690					180.00		0.606			102.00			
GXR-6 Meas					1.34	36	0.64	1130		0.037					43					191		16	
GXR-6 Cert					1.87	32.0	0.609	1010		0.0350					35.0					186		14.0	
DNC-1a Meas						5									136		0.29			143		18	
DNC-1a Cert						5.2									144		0.29			148		18.0	
SBC-1 Meas						186									232		0.55			223		60	
SBC-1 Cert						163									178.0		0.51			220.0		36.5	
OxK110 Meas																							
OxK110 Cert																							
OXN117 Meas																							
OXN117 Cert																							
SdAR-M2 (U.S.G.S.) Meas						18									150					27		31	
SdAR-M2 (U.S.G.S.) Cert						18									144					25.2		32.7	
DMMAS 121 Meas	3.63								2.02			7.3	6.3						11.1				15.9
DMMAS 121 Cert	3.45								2.16			7.60	6.10						11.5				16.6
DMMAS 121 Meas	3.64								2.04			6.3	6.3						10.8				17.0
DMMAS 121 Cert	3.45								2.16			7.60	6.10						11.5				16.6
336079 Orig					0.01	5	1.69	10200		0.008					32		0.02			43		8	
336079 Dup					0.01	4	1.68	10200		0.009					32		0.01			43		8	
336494 Orig	6.88	3	< 1	< 5					1.71		44	0.6	22.2	< 3		< 0.5		4.6	< 0.5		< 1		25.7
336494 Dup	6.58	3	< 1	< 5					1.67		57	0.5	21.5	< 3		< 0.5		4.8	< 0.5		< 1		25.1
336497 Orig					0.50	26	0.82	3770		0.047					79		0.35			156		9	
336497 Dup					0.50	25	0.82	3730		0.048					79		0.38			156		10	
337521 Orig					0.09	22	1.56	1280		0.024					18		0.17			191		11	
337521 Dup					0.09	22	1.54	1260		0.024					18		0.12			175		11	
337522 Orig	13.4	2	< 1	< 5	0.12	16	0.88	1370	0.38	0.064	< 15	2.8	38.5	< 3	26	< 0.5	1.12	1.5	< 0.5	403	29	3	5.9
337522 Split PREP DUP	14.6	3	< 1	< 5	0.22	19	1.15	1380	0.42	0.065	< 15	3.1	41.6	< 3	43	< 0.5	0.89	0.9	< 0.5	364	29	11	6.2
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001					< 1		< 0.01			< 2		< 1	
Method Blank					< 0.01	< 1	< 0.01			< 0.001				1		< 0.01				< 2		< 1	
Method Blank	< 0.01	< 1	< 1	< 5					< 0.01		< 15	< 0.1	< 0.1	< 3		< 0.5		< 0.2	< 0.5		< 1		< 0.5
Method Blank																							

Analyte Symbol	Ce	Nd	Sm	Sn	Tb	Yb	Lu	Mass	Au
Unit Symbol	ppm	ppm	ppm	%	ppm	ppm	ppm	g	g/tonne
Lower Limit	3	5	0.1	0.02	0.5	0.2	0.05		0.03
Method Code	INAA	INAA	INAA	INAA	INAA	INAA	INAA	INAA	FA- GRA
GXR-1 Meas									
GXR-1 Cert									
GXR-4 Meas									
GXR-4 Cert									
SDC-1 Meas									
SDC-1 Cert									
GXR-6 Meas									
GXR-6 Cert									
DNC-1a Meas									
DNC-1a Cert									
SBC-1 Meas									
SBC-1 Cert									
OxK110 Meas									3.64
OxK110 Cert									3.602
OXN117 Meas									7.54
OXN117 Cert									7.679
SdAR-M2 (U.S.G.S.) Meas									
SdAR-M2 (U.S.G.S.) Cert									
DMMAS 121 Meas	32		2.7						
DMMAS 121 Cert	29.8		2.20						
DMMAS 121 Meas	33		2.7						
DMMAS 121 Cert	29.8		2.20						
336079 Orig									
336079 Dup									
336494 Orig	63	20	4.9	< 0.02	< 0.5	1.7	0.10	26.2	
336494 Dup	56	27	4.6	< 0.02	< 0.5	1.5	0.06	26.8	
336497 Orig									
336497 Dup									
337521 Orig									
337521 Dup									
337522 Orig	14	12	2.8	< 0.02	< 0.5	2.8	0.12	33.1	
337522 Split PREP DUP	18	14	3.0	< 0.02	< 0.5	3.0	0.13	34.8	
Method Blank									
Method Blank									
Method Blank									
Method Blank									
Method Blank	< 3	< 5	< 0.1	< 0.02	< 0.5	< 0.2	< 0.05	30.0	
Method Blank									< 0.03



**Date Submitted:** 02-Oct-17  
**Invoice No.:** A17-10758-Revised  
**Invoice Date:** 12-Jan-18  
**Your Reference:** Abbie Lake

**Argo Gold Inc**  
**365 Bay St**  
**Toronto**  
**Canada**

**ATTN: Frank Racicot**

## CERTIFICATE OF ANALYSIS

56 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1H INAA(INAAGEO)/Total Digestion ICP(TOTAL)

REPORT **A17-10758-Revised**

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

Notes:

Elements which exceed the upper limits should be analyzed by assay techniques. Some elements are reported by multiple techniques. These are indicated by MULT.

Note: There was a calculation error during the weighing of the 1A3 and the technician noticed this today when reviewing an older file. A revised gold result is attached.

CERTIFIED BY:

A handwritten signature in black ink, appearing to be "Elitsa Hrischeva".

---

Elitsa Hrischeva, 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

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.03
Method Code	FA- GRA
336488	8.61

Analyte Symbol	Au
Unit Symbol	g/tonne
Lower Limit	0.03
Method Code	FA- GRA
OxK110 Meas	3.47
OxK110 Cert	3.602
OXN117 Meas	7.67
OXN117 Cert	7.679
Method Blank	< 0.03





**Certificate of Analysis**  
**Work Order : VC181485**  
**[Report File No.: 0000033749]**

**Date:** January 18, 2019

**To: Judy Baker**  
**COD SGS MINERALS - GEOCHEM VANCOUVER**  
ARGO GOLD INC.  
365 Bay Street  
Toronto  
Ontario M5H 2V1

**P.O. No.:** ARGO GOLD / PROJ: Abbie Lake  
**Project No.:** ABBIE LAKE  
**Samples:** 157  
**Received:** Jan 4, 2019  
**Pages:** Page 1 to 6  
(Inclusive of Cover Sheet)

**Methods Summary**

<u>No. Of Samples</u>	<u>Method Code</u>	<u>Description</u>
156	G_LOG02	Pre-preparation processing, sorting, logging, boxing
156	GE_MMI_M	Mobile Metal ION standard package/ICP-MS

**Storage: Pulp & Reject**

REJECT STORAGE : PAID STORE AFTER 30 DAYS  
PULP STORAGE : PAID STORE AFTER 90 DAYS

Certified By :



Gerald Chik  
Operations Manager/Chief Chemist

*SGS Minerals Services Geochemistry Vancouver conforms to the requirements of ISO/IEC 17025 for specific tests as listed on their scope of accreditation which can be found at <http://www.scc.ca/en/search/palcan/sgs>*

Report Footer: L.N.R. = Listed not received I.S. = Insufficient Sample  
n.a. = Not applicable -- = No result  
\*INF = Composition of this sample makes detection impossible by this method  
M after a result denotes ppb to ppm conversion, % denotes ppm to % conversion  
Methods marked with an asterisk (e.g. \*NAA08V) were subcontracted  
Elements marked with the @ symbol (e.g. @Cu) denote assays performed using accredited test methods

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Element Method Det.Lim. Units	Ag	As	Au	Ni	Cu	Co	Zn	Y
	GE_MMI_M 0.5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 0.1 ppb	GE_MMI_M 5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb
212100	0.6	30	<0.1	37	220	11	90	14
212101	0.9	20	<0.1	96	500	49	410	75
212102	1.2	20	<0.1	41	340	27	360	26
212103	3.9	<10	<0.1	140	300	103	280	265
212104	<0.5	10	<0.1	39	50	36	1250	32
212105	<0.5	<10	<0.1	28	40	27	1060	29
212106	<0.5	<10	<0.1	31	40	14	760	31
212107	<0.5	<10	<0.1	25	<10	11	460	16
212108	12.8	<10	<0.1	188	120	67	610	61
212109	10.6	<10	<0.1	122	410	20	610	65
212110	7.0	10	<0.1	82	180	21	460	70
212111	3.8	<10	<0.1	127	90	20	4350	48
212112	5.8	20	<0.1	65	290	246	270	65
212113	3.6	40	<0.1	385	1000	208	610	14
212114	5.1	20	<0.1	122	410	126	300	77
212115	7.0	<10	<0.1	83	280	101	290	106
212116	2.3	<10	<0.1	98	100	32	1180	65
212117	1.6	<10	<0.1	118	250	116	600	17
212118	1.9	20	<0.1	71	440	51	520	28
212119	2.2	20	<0.1	78	1170	14	60	10
212120	4.5	20	<0.1	102	2660	715	390	6
212121	<0.5	20	<0.1	36	360	48	4500	62
212122	<0.5	10	<0.1	164	280	76	2160	14
212123	1.9	<10	<0.1	89	90	59	180	50
212124	6.9	<10	<0.1	52	70	17	70	40
212125	5.9	20	0.1	121	350	79	200	53
212126	3.4	10	<0.1	50	90	27	50	96
212127	1.6	<10	<0.1	85	160	26	490	17
212128	3.5	20	<0.1	87	360	70	700	159
212129	LNR	LNR	LNR	LNR	LNR	LNR	LNR	LNR
212130	8.4	<10	<0.1	141	200	36	5120	47
212131	9.2	<10	0.2	153	200	32	1400	51
212132	3.9	20	0.1	397	350	96	3990	119
212133	7.6	<10	<0.1	54	160	11	240	141
212134	2.5	<10	<0.1	91	90	117	2780	14
212135	3.5	<10	<0.1	43	610	18	20	130
212136	1.4	<10	<0.1	92	520	39	1830	108
212137	3.6	<10	<0.1	92	270	43	1600	58
212138	4.2	<10	<0.1	128	420	14	440	117
212139	0.6	30	<0.1	36	140	108	8820	21

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Element Method Det.Lim. Units	Ag	As	Au	Ni	Cu	Co	Zn	Y
	GE_MMI_M 0.5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 0.1 ppb	GE_MMI_M 5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb
212140	<0.5	<10	<0.1	37	180	78	2650	59
212141	<0.5	<10	<0.1	35	30	35	1630	81
212142	1.7	10	<0.1	72	550	59	880	112
212143	2.5	<10	<0.1	147	1550	11	70	54
212144	3.9	30	<0.1	159	340	61	1780	51
212145	2.3	<10	0.1	79	510	17	570	37
212146	3.7	<10	0.2	10	570	7	20	412
212147	4.9	<10	0.1	67	310	6	110	75
212148	6.8	<10	0.5	52	1190	14	30	85
212149	2.6	<10	<0.1	83	120	19	170	153
212150	8.7	<10	0.4	87	480	25	80	124
212151	2.1	<10	<0.1	130	230	33	790	17
212152	2.6	20	<0.1	109	780	82	560	38
212153	11.6	<10	<0.1	84	170	63	410	107
212154	5.9	10	<0.1	84	200	32	360	58
212155	3.6	10	0.2	73	180	17	140	83
212156	6.0	<10	<0.1	148	80	33	840	57
212157	5.8	10	<0.1	70	180	33	470	189
212158	8.3	<10	0.1	49	250	6	<10	381
212159	8.0	10	<0.1	226	500	57	660	106
212160	6.9	<10	<0.1	116	640	45	150	49
212161	7.9	<10	<0.1	88	710	48	180	74
212162	<0.5	20	<0.1	65	140	153	5940	44
212163	4.7	10	<0.1	61	300	27	140	89
212164	3.8	<10	0.1	77	610	41	160	86
212165	4.7	<10	<0.1	65	370	60	330	62
212166	4.4	10	<0.1	56	150	16	230	58
212167	7.6	<10	<0.1	141	350	142	480	151
212168	10.6	<10	<0.1	21	300	8	50	280
212169	20.0	<10	0.3	155	270	31	450	88
212170	9.2	<10	<0.1	118	240	12	730	93
212171	2.4	<10	<0.1	91	530	87	180	31
212172	3.2	<10	<0.1	150	1300	18	180	162
212173	13.7	<10	<0.1	80	610	4	290	203
212174	11.4	<10	0.2	66	1610	5	30	477
212175	6.9	<10	0.1	28	580	16	90	99
212176	12.2	10	<0.1	130	550	62	860	26
212177	15.7	<10	<0.1	156	70	15	1400	56
212178	6.1	<10	<0.1	80	170	10	4740	64
212179	3.7	<10	<0.1	68	110	23	8210	32

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Element Method Det.Lim. Units	Ag	As	Au	Ni	Cu	Co	Zn	Y
	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M
	0.5	10	0.1	5	10	1	10	1
	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
212180	4.6	<10	<0.1	102	80	19	5060	35
212181	7.8	10	<0.1	69	320	25	340	115
212182	7.0	<10	<0.1	39	190	5	30	101
212183	7.3	<10	<0.1	84	320	24	230	55
212184	7.5	<10	<0.1	108	200	5	460	136
212185	7.1	<10	<0.1	50	230	6	200	68
212186	1.6	<10	<0.1	42	80	13	190	58
212187	3.5	<10	0.1	116	150	22	880	63
212188	1.8	<10	<0.1	142	480	100	1800	112
212189	1.1	<10	<0.1	33	60	19	180	53
212190	2.1	<10	<0.1	98	610	21	690	94
212191	2.0	<10	0.1	183	1800	40	370	124
212192	3.8	<10	<0.1	89	560	53	50	73
212193	4.5	<10	<0.1	103	140	44	70	69
212194	2.5	<10	<0.1	41	90	21	2060	21
212195	4.5	10	<0.1	114	400	95	500	142
212196	4.4	<10	<0.1	105	30	35	140	58
212197	12.7	<10	<0.1	176	450	21	130	196
212198	4.8	<10	<0.1	81	160	33	130	128
212199	5.3	<10	<0.1	78	180	27	660	84
212200	10.8	<10	<0.1	96	110	44	250	47
212201	1.3	<10	<0.1	139	400	34	90	203
212202	4.9	<10	<0.1	33	150	20	60	127
212203	4.1	10	<0.1	158	200	42	650	83
212204	5.5	<10	<0.1	124	310	52	290	128
212205	2.9	10	<0.1	85	450	52	210	67
212206	0.9	10	<0.1	132	110	113	2320	31
212207	3.8	10	<0.1	88	180	42	240	42
212208	3.0	<10	<0.1	77	110	19	240	44
212209	0.6	<10	<0.1	81	100	57	330	22
212210	4.9	10	<0.1	75	140	39	290	71
212211	5.6	<10	0.1	106	120	29	90	53
212212	8.7	<10	0.2	131	240	16	120	70
212213	4.8	<10	<0.1	171	390	15	690	56
212214	5.7	<10	<0.1	174	490	14	430	416
212215	8.7	<10	0.1	126	740	74	240	45
212216	5.4	<10	<0.1	119	220	43	60	222
212217	6.3	<10	0.1	111	160	47	240	211
212218	8.3	<10	<0.1	192	160	22	1270	43
212219	6.2	<10	<0.1	107	70	16	560	63

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Element Method Det.Lim. Units	Ag	As	Au	Ni	Cu	Co	Zn	Y
	GE_MMI_M 0.5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 0.1 ppb	GE_MMI_M 5 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb	GE_MMI_M 10 ppb	GE_MMI_M 1 ppb
212220	3.3	<10	<0.1	66	200	29	300	67
212221	3.7	<10	0.1	49	150	12	510	68
212222	3.1	<10	<0.1	75	310	26	340	64
212223	4.1	<10	<0.1	65	180	36	1550	60
212224	3.9	<10	<0.1	96	290	40	1240	48
212225	6.5	<10	<0.1	59	800	12	70	45
212226	0.6	<10	<0.1	100	620	7	1570	95
212227	5.0	<10	<0.1	87	640	12	790	87
212228	2.2	10	<0.1	136	210	26	1810	50
212229	0.8	10	<0.1	37	260	79	8700	70
212230	2.7	<10	<0.1	91	530	22	440	241
212231	2.9	10	<0.1	129	240	110	4060	53
212232	11.0	<10	<0.1	83	50	20	660	68
212233	6.4	20	<0.1	205	300	37	510	65
212234	11.1	<10	0.1	155	190	40	640	51
212235	2.9	<10	0.3	44	1260	15	70	77
212236	2.9	10	0.1	111	1000	74	110	175
212237	4.0	<10	0.1	126	460	10	860	101
212238	5.4	<10	0.2	225	720	16	510	197
212239	19.3	30	2.3	59	250	42	19200	16
212240	6.0	<10	<0.1	110	300	46	880	69
212241	3.7	10	<0.1	66	430	42	660	60
212242	4.2	<10	<0.1	184	240	15	690	52
212243	4.5	<10	<0.1	75	360	16	50	85
212244	8.2	<10	<0.1	57	840	9	60	381
212245	2.0	<10	<0.1	210	170	98	2260	72
212246	4.2	<10	<0.1	55	150	30	780	43
212247	1.5	<10	<0.1	50	110	20	2050	39
212248	3.3	<10	0.2	92	520	27	1450	120
212249	4.8	<10	<0.1	96	160	46	2360	48
212250	7.6	<10	<0.1	94	1310	12	50	576
212251	6.4	10	<0.1	125	160	20	490	177
212252	2.0	<10	<0.1	227	250	89	2200	78
212253	8.2	<10	<0.1	80	130	26	1740	63
212254	34.0	<10	0.3	217	310	21	370	53
212255	7.2	<10	<0.1	206	470	2	850	152
212256	42.6	<10	1.7	85	320	61	1000	61
*Rep 212108	13.2	<10	<0.1	200	120	65	560	56
*Rep 212121	<0.5	20	<0.1	35	350	54	4230	69
*Rep 212132	3.9	20	<0.1	388	360	113	4090	119

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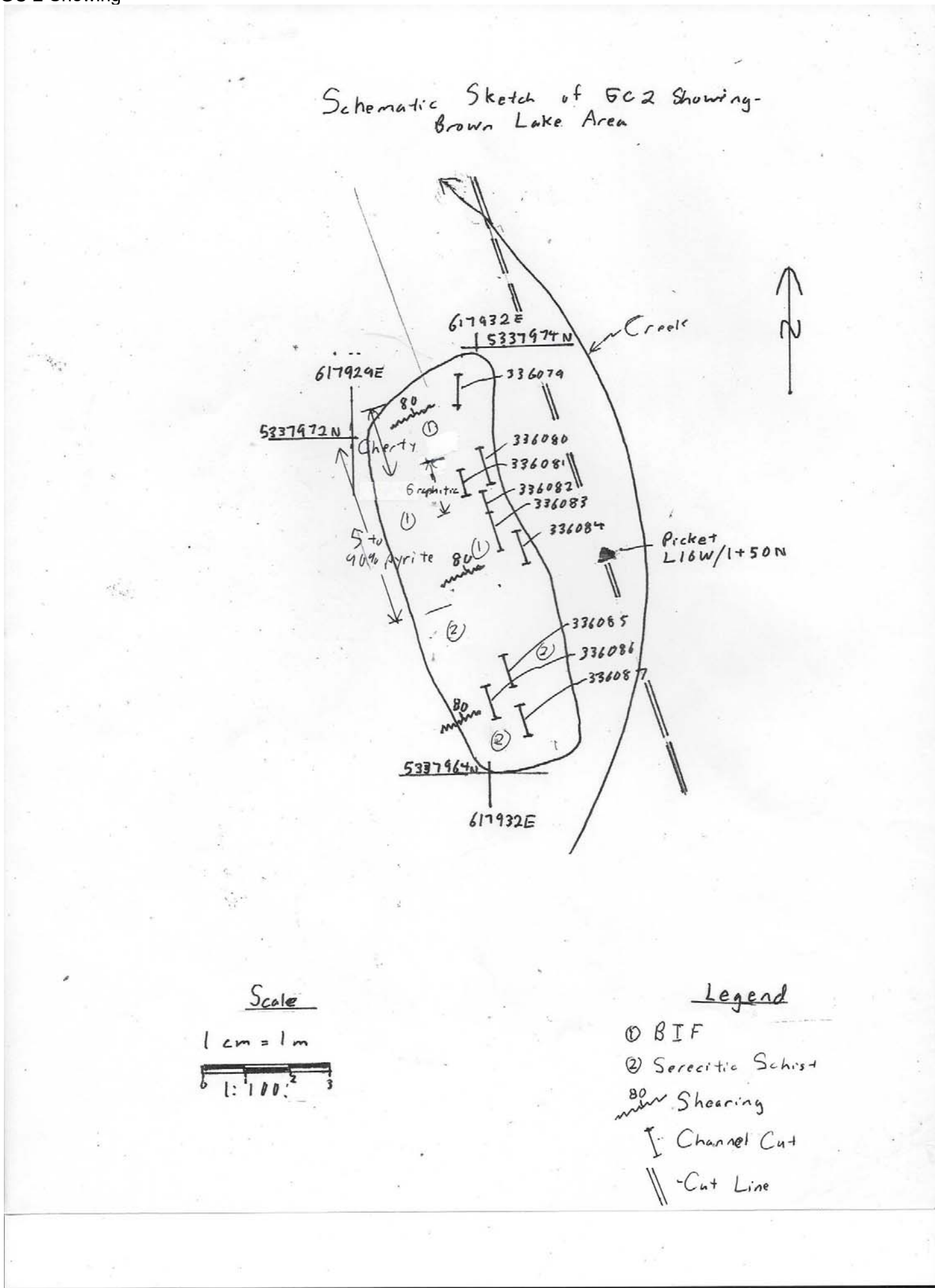
Element Method Det.Lim. Units	Ag	As	Au	Ni	Cu	Co	Zn	Y
	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M	GE_MMI_M
	0.5	10	0.1	5	10	1	10	1
	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
*Rep 212147	5.8	<10	0.2	84	420	7	150	96
*Rep 212158	7.7	<10	0.2	50	250	6	<10	358
*Rep 212186	1.4	<10	<0.1	43	80	13	210	57
*Rep 212203	4.2	<10	<0.1	144	210	38	580	80
*Rep 212228	2.3	10	<0.1	137	220	24	1820	50
*Rep 212232	10.7	<10	<0.1	87	60	21	870	68
*Rep 212239	22.0	40	2.3	60	260	45	19100	15
*Std MMISRM24	21.1	<10	3.4	119	270	15	130	22
*Std AMIS0169	8.1	<10	0.4	337	3100	80	160	103
*Std MMISRM24	20.5	<10	3.3	104	230	13	110	19
*Blk BLANK	<0.5	<10	<0.1	<5	<10	<1	<10	<1
*Blk BLANK	<0.5	<10	<0.1	<5	<10	<1	<10	<1
*Blk BLANK	<0.5	<10	<0.1	<5	<10	<1	<10	<1
*Blk BLANK	<0.5	<10	<0.1	<5	<10	<1	<10	<1

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**Appendix D – Maps and Sample Sketches**

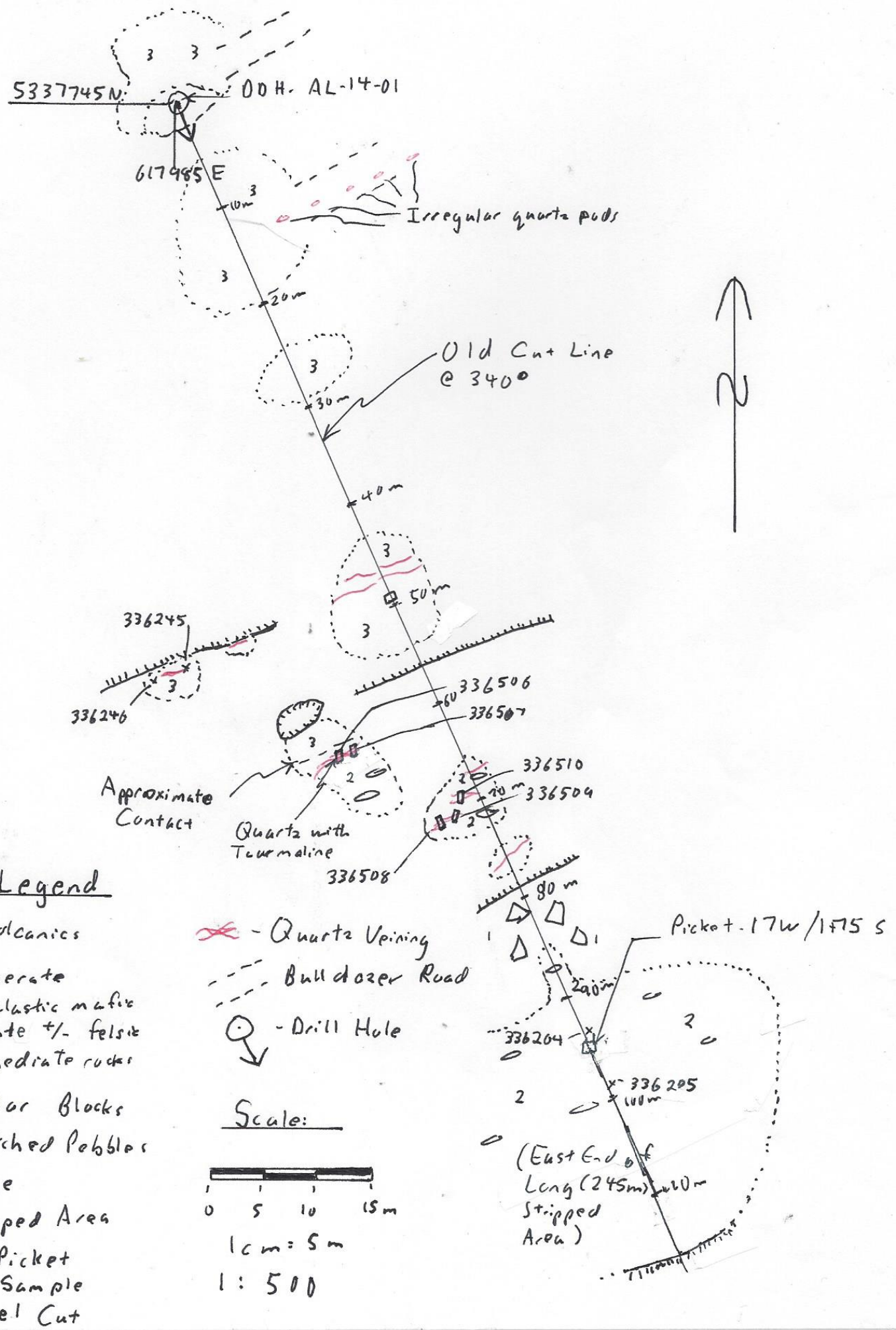
Abbie GC 2 Showing



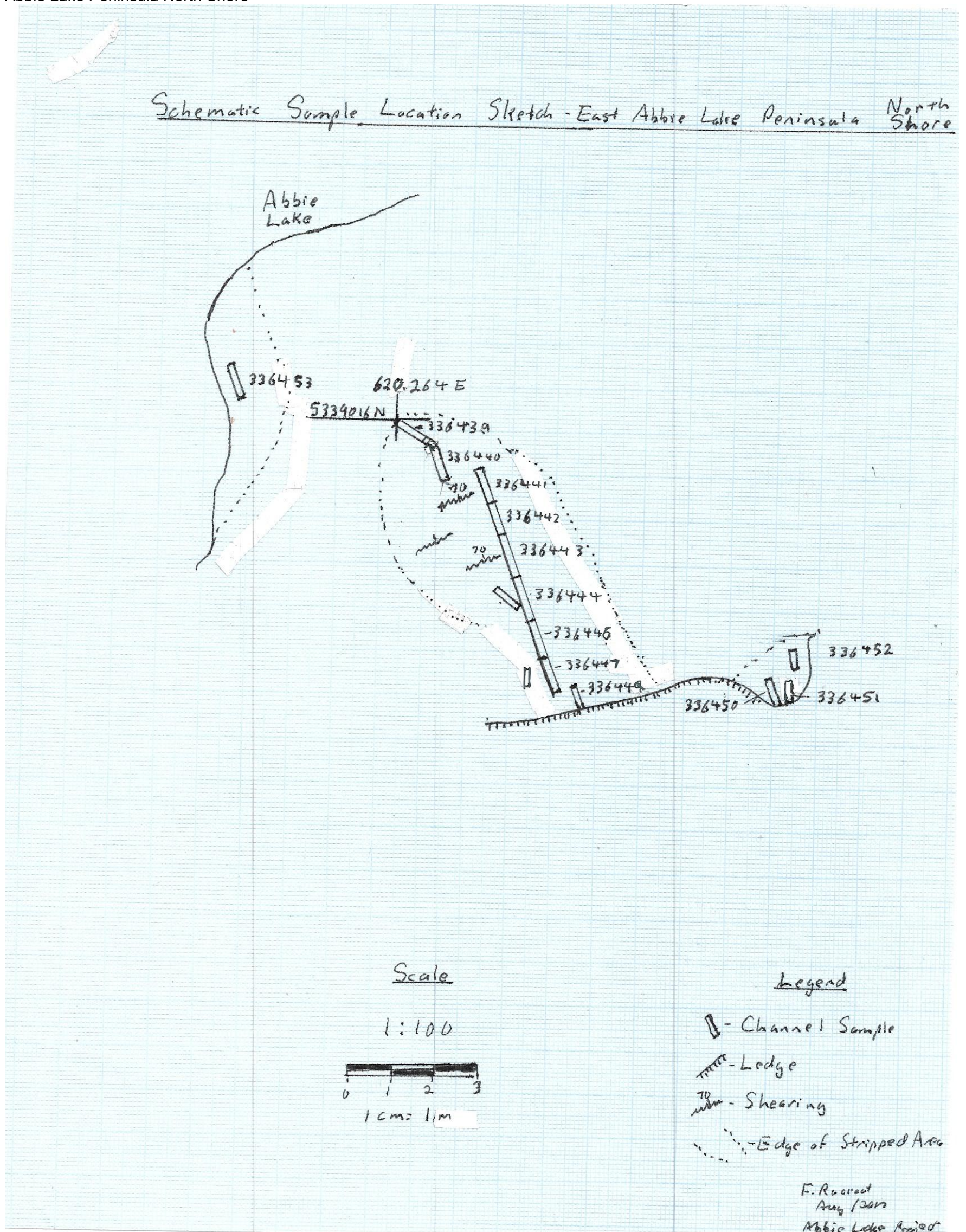


Abbie Brown Vein

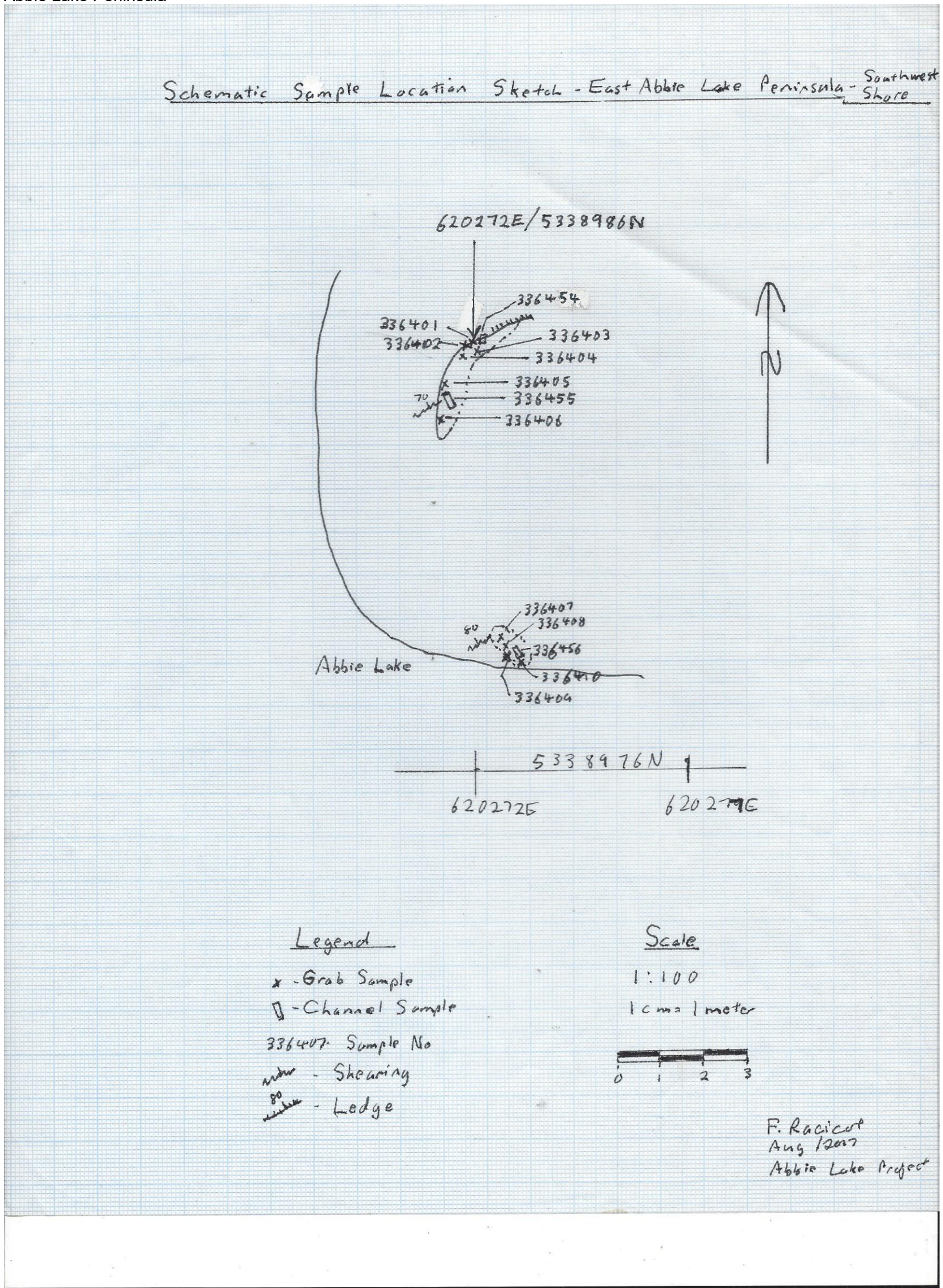
Schematic Sketch of Potential Brown Vein Area South of Douglas Lake



Abbie Lake Peninsula North Shore

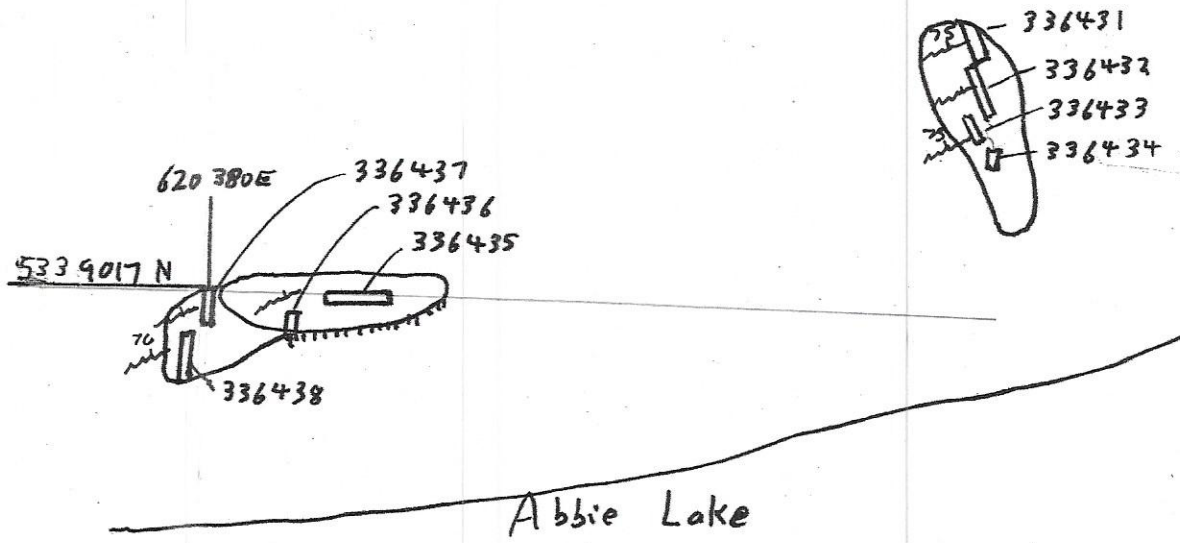


Abbie Lake Peninsula



East Abbie Lake Peninsula

Schematic Sample Location Sketch - East Abbie Lake Peninsula - South Shore



Scale

1:100



1 cm = 1 m.

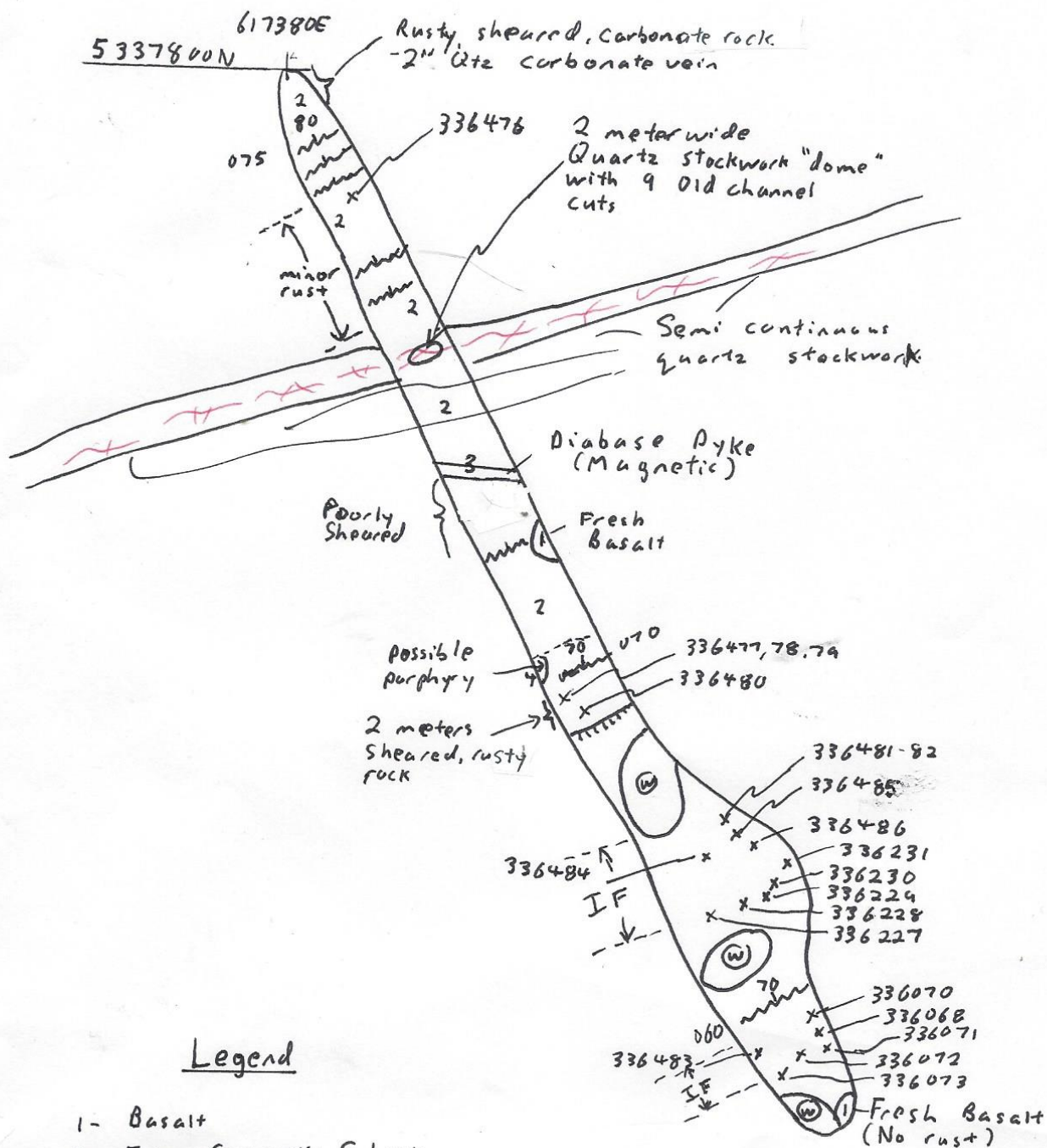
Legend

- - Channel Sample
- 336436 - Sample No
- 70 - Ledge
- 70 - Shearing

F. Racicot  
Aug. 2017  
Abbie Lake  
District

Salamander Trench

Schematic Sketch For The Salamander Trench - NW Brown Lake Area



Legend

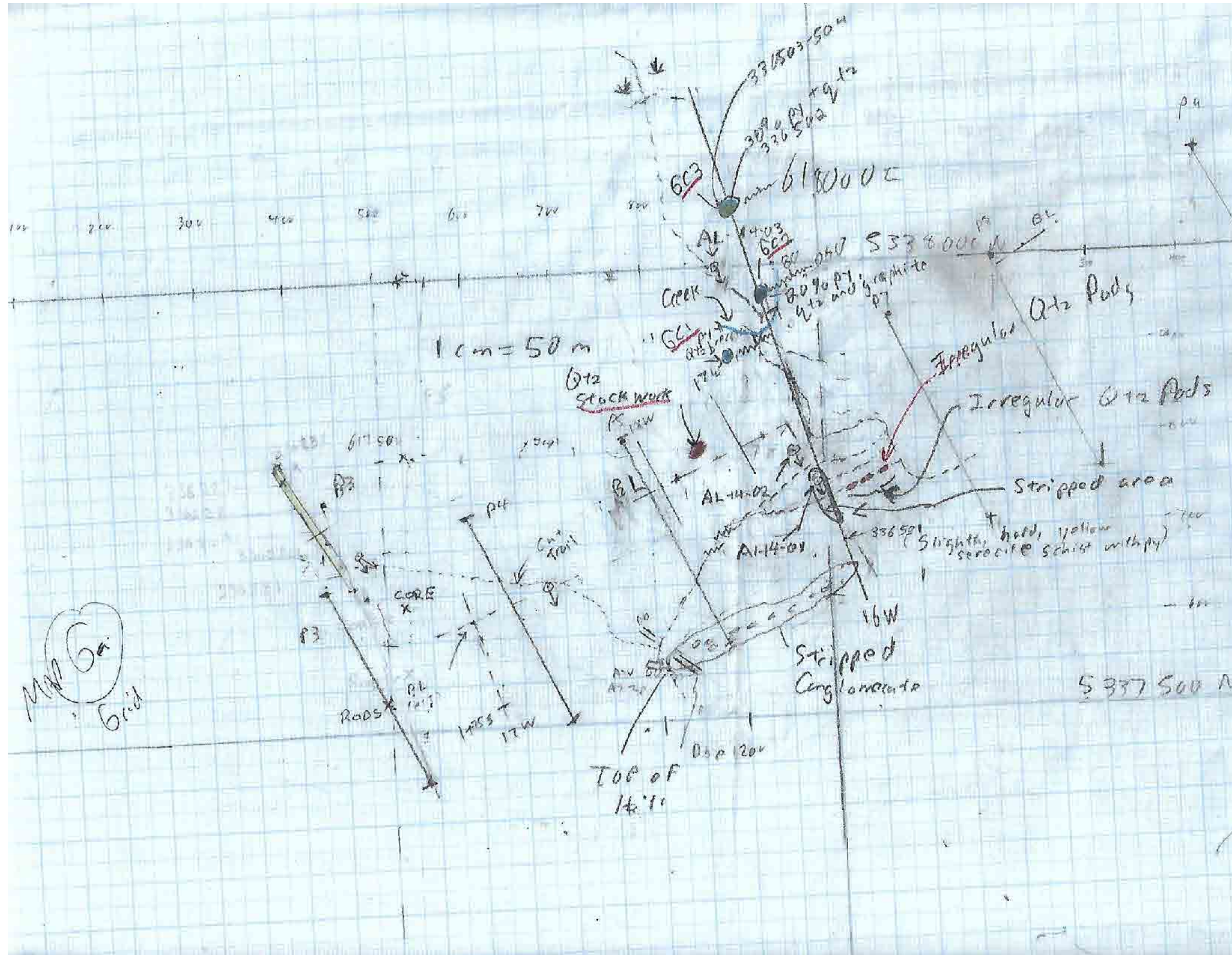
- 1- Basalt
- 2- Felsic Sericitic Schist
- 3- Diabase
- 4- Feldspar Porphyry
- (W) - Water
- IF - Iron Formation (Quartz & silica)
- Ledge
- x 336227 Grab Sample
- xx - Quartz Stockwork (Semi-continuous)
- 70 mhu Shear

Scale



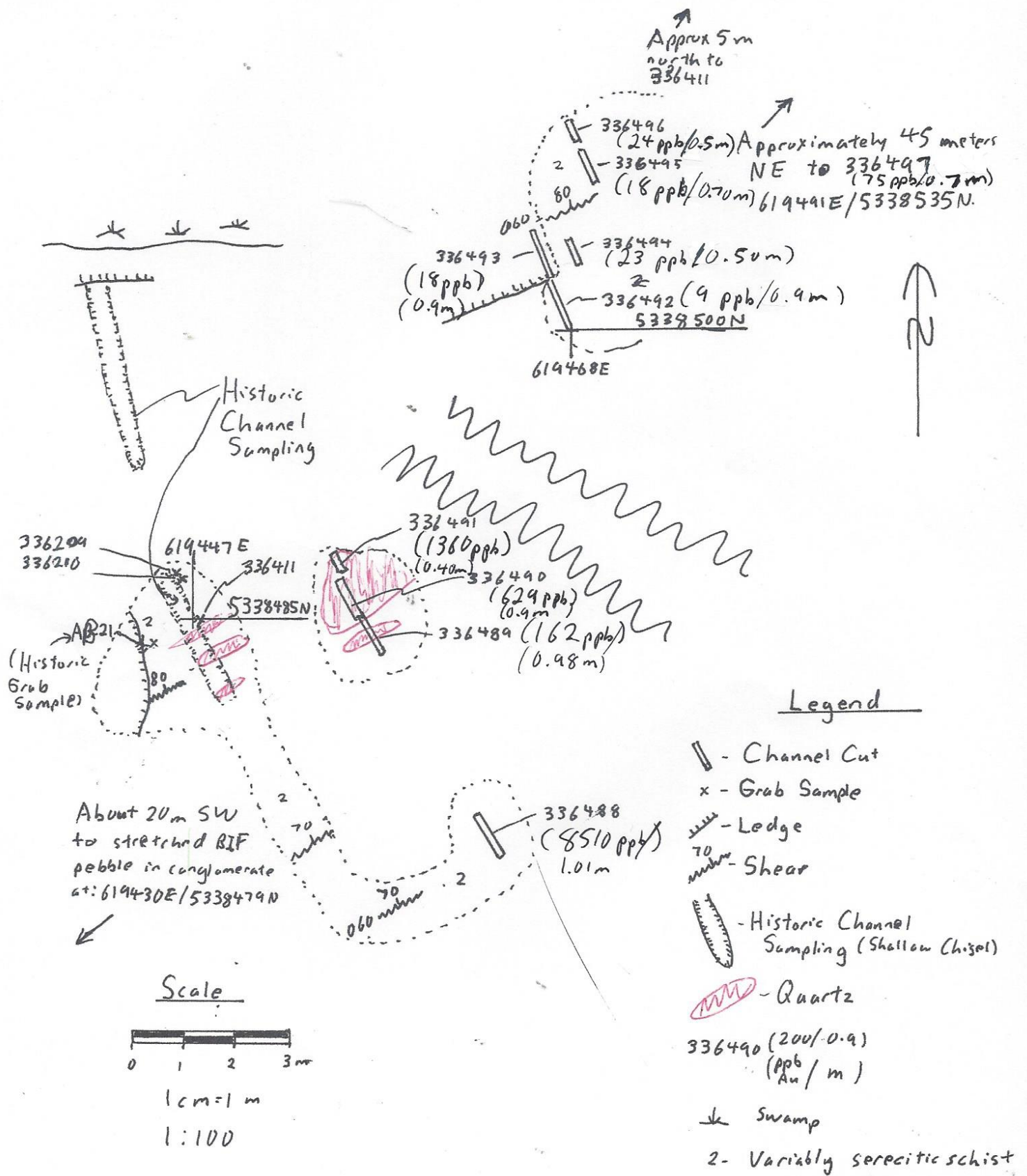


Brown Vein Grid



Douglas Lake Area Trench 2

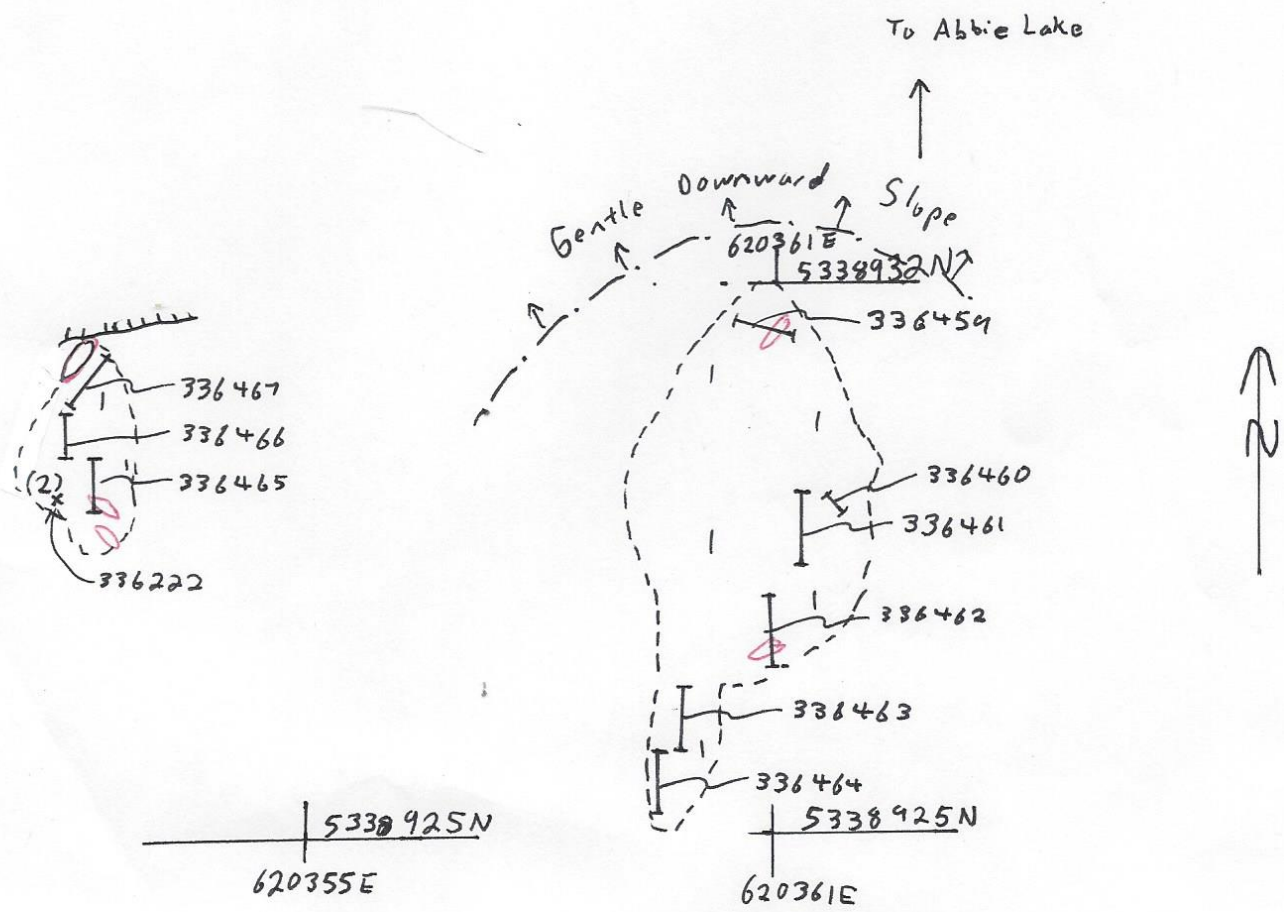
Schematic Sketch For Trench 2 - Douglas Lake Area



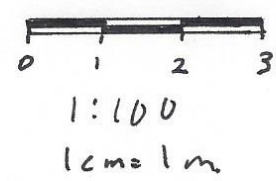


Gilbert Showing South of Abbie Lake

Schematic Sketch For Channel Cuts South of Abbie Lake



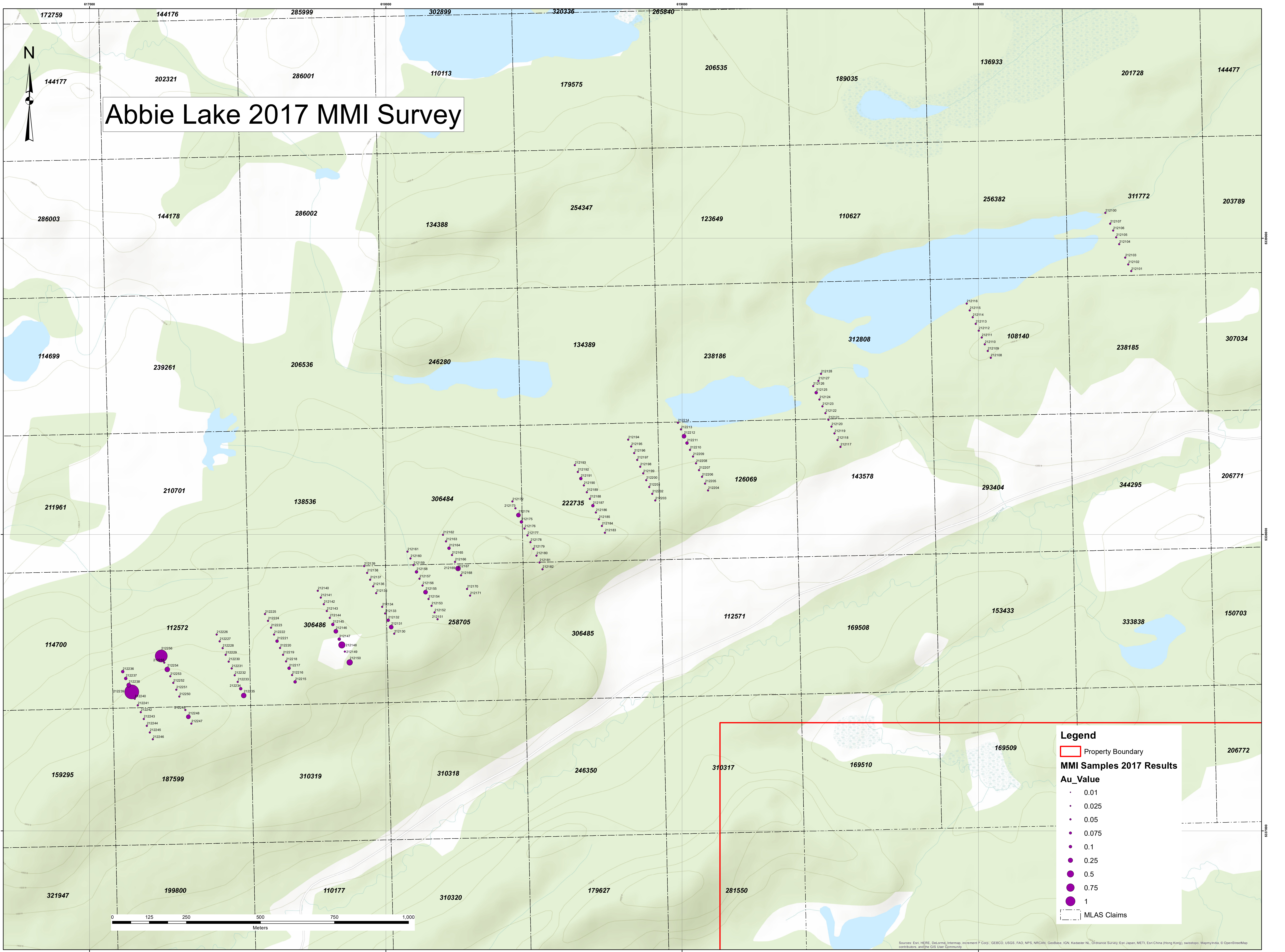
Scale



Legend

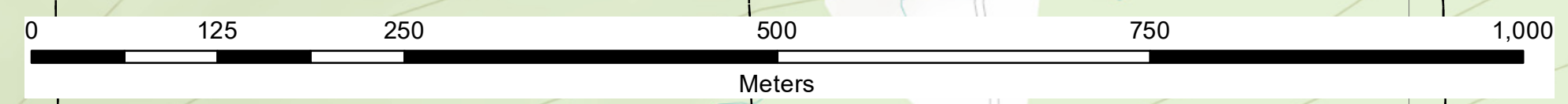
- [ ] Channel Sample
  - x Grab Sample
  - 336461 - (55/0.9)  
(Ampth/Length)
  - ~~~~~ Ledge
  - .-.- Gentle Slope
  - Quartz Vein
  - 1 - Basalt (Variably Carbonated)
  - (2) - Possible Feldspar Porphyry
- Original Sketch by F. Longpre

# Abbie Lake 2017 MMI Survey



**Legend**

- Property Boundary
- MMI Samples 2017 Results
- Au\_Value**
  - 0.01
  - 0.025
  - 0.05
  - 0.075
  - 0.1
  - 0.25
  - 0.5
  - 0.75
  - 1
- MLAS Claims



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapboxIndia, © OpenStreetMap contributors, and the GIS User Community