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## **Bear Lake Project**

## 2018 Fieldwork Report



Brian Fowler Oct 27, 2018

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## Attachments

- i. Assays
- ii.
- Prospecting Areas 1-3 Scale 1:10,000 Prospecting Areas 4-8 Scale 1:10,000 iii.

## Introduction

The Bear Lake property consists of 74 mining cells and lies 4 km northeast of the town of Schreiber, and 15 kilometers southeast of the past producing Winston Lake Zinc Mine. Access is via gravel road from the town of Schreiber which turns into a winter road (ATV trail) that goes to Big Duck Lake. A secondary ATV trail branches off the Big Duck Lake trail just north of Cook Lake and heads east to Big Bear Lake and the property.

## **Regional Geology**

The property lies in the east-west trending Big Duck-Schreiber greenstone belt of the Archean Abitibi-Wawa Subprovince. In the Schreiber area the belt is composed of generally east-west trending, north-facing, mafic metavolcanics with minor metasediments and mafic intrusive rocks. The most important structural feature of the Big Duck-Schreiber Region is the east/west trending anticline which neatly divides the area between its north limb and its south limb. The core of the anticline is occupied by a large granitic body. The anticline is cut at a high angle by F-2 synclines and anticlines. The rock types in the southern portion of the Big Duck-Schreiber area show a lower greenschist facies metamorphic grade.

## **Property Geology**

The property consists of basaltic flows that are separated by different types of sedimentary rock. These sediments take the form of the typical banded oxide iron formation common in the Schreiber area. The strike of the iron formations are northwest to southeast and consist of alternating 1-2 cm wide bands of magnetite and chert. The widths vary from one to four meters. These formations can be traced across the entire width of the property.

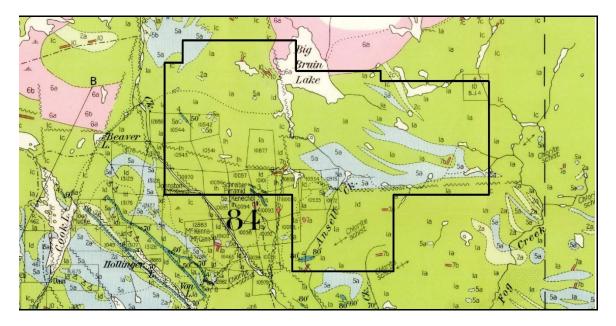


Figure 1 – Geology

## **Previous Work**

1934: Schreiber Pyramid Gold Mines Ltd. was incorporated, acquiring a 21 claim group.

1935: A small pilot mill was planned to treat reportedly high grade ore; camp buildings erected and a road built. Vein #1 was traced for 366 m with a number of visible gold showings. Other veins were located, stripped and trenched.

1936: Stripping, trenching and diamond drilling. Numerous buildings were constructed. A 5 ton bulk sampling mill was erected and a 32 V electrical plant installed. The veins were bulk pit sampled and 1.7 tons of ore were tested.

1937: An adit was driven into Vein #1. Kenecho Gold Mines took over in the summer. Three mineralized zones discovered in the southeast part of the property. A total of 150 tons of ore was milled on site from Vein #1 at an average grade of 17.6 g/t gold. Operations were suspended in Nov 1938.

1969: Zenmac Metal Mines Ltd. drilled 5 holes totaling 243 meters. Best results are reported from a base metal showing located south of Vein #2, returning 4.6% Copper and 19.2% Zinc over 0.55 meters within a chloritic shear zone. The massive sulphides (po-py-cp-sph) intersected in the hole are hosted in a sheared mafic volcanic and are stratigraphically above a chert horizon exposed 25m to the east.

1985: Falconbridge Copper conducted HEM, VLF-EM, and mag surveys. Geological mapping, stripping, lithogeochemical surveys and sampling followed. A 0.3 meter chip sample from Zenmac's trench assayed 13.77% Zn and grab samples of massive sulphides yielded up to 31.0% Zn, 0.23% Cu and 0.74% Pb. Additionally, a grab sample from Vein #1 located above the adit entrance assayed 45.2 g/t gold.

1985-1987: Resident Geologist personnel sampled the Schreiber-Pyramid #1 and the base metal showing below Vein #2. Assay results ranged up to 0.92 oz/ton Au (0.25 meter chip sample) from Vein #1. Assay results ranged up to 22.9% zinc, 17.5% copper and 4.47 oz/ton silver from the base metal showing.

1989: Placer Dome conducted stripping and rock sampling on part of the Schreiber-Pyramid fault in the area of Vein #6.

1992: Tim Twomey conducted prospecting, stripping and sampling in the area. Twomey discovered a 4 meter wide iron formation that returned a high of 0.156 oz/ton gold and a quartz vein located immediately to the east along a hydro corridor that assayed 0.337 oz/ton gold.

1995: The property was optioned by Twomey to RJK Explorations Ltd. It is not known what work RJK undertook.

1999: The property was sampled by Brian Fowler. Fowler received assays as high as 14.6% zinc, 19.6 g/t silver and 0.456 g/t gold from strong sphalerite mineralization within a blasted section of a trench below Schreiber-Pyramid Vein #2. Fowler noted a strong lineament heading east from the showing suggesting the shear zone continued in an easterly direction. He

recommended further prospecting along the easterly strike for a potential widening of the shear and additional mineralization.

2010-2011: Bard Ventures performed line cutting, prospecting, soil and MAG/VLF surveys.

## **Property Mineralization**

## 2010 Bard Gold Occurrence (Area 1)

A work program in 2010 targeted an intense magnetic response located on the north side of a hill just south of a small pond in the southern part of the Little Bear property. Smoky banded chert was stripped over an area 1 metre wide by 6 metres long. The chert is highly magnetic and contains crystals of specular hematite and heavily mineralized calcite. Assays from the zone averaged 1.5 g/t gold over the 6 meter width. The northern 2 meters of the zone carries 3.3 g/t gold. To the south, the stripping was lost in a heavily pitted rusty rock.

## 2011 Bard Gold Occurrences (Area 2 & 3)

In 2011, Bard Ventures conducted additional MAG/VLF surveys, followed by prospecting and sampling. The program identified three separate areas of high potential. The first area located bonanza style grades of gold up to 53.7 g/t gold and 19.25 g/t silver. A second area 200 meters to the north assayed 3.8 g/t gold. A third area to the southeast returned 18.2 g/t gold and 1.03 g/t silver in soils. The high soils, bonanza gold values and the 2010 showing all appear to line up along a single zone that is 1.6 kilometers long. Bard reluctantly returned the property to us as a result of poor market conditions (low share price and no cash).

## Twomey Power Line Occurrence (Area 4)

Twomey discovered gold in 1992 while prospecting under OPAP grant assistance. Schneiders (OGS Resident Geologist, 1993) described the Powerline occurrence as quartz veins associated with felsic intrusive dikes within mafic metavolcanic rocks. A quartz vein strikes 106° and dips 70°SW and has been traced for over 200 m along the power line. The vein averages 20 to 25 cm in width and displays a crack seal texture. The quartz vein occurs in contact with a pink hornblende syenite dike, which is commonly on the footwall contact of the vein. Several syenite dikes were observed in the area, up to 1 m in width. The quartz vein and syenite dikes are hosted by sheared and deformed pillowed mafic metavolcanic rocks. On the eastern end of the showing, approximately 300 m east of the main mineralized quartz vein, several narrow, mineralized quartz filled gash veins are exposed within syenite dikes. A grab sample collected by the Resident Geologist's Program returned 0.337 oz/ton Au from the central section of the crack-seal quartz vein that contained minor pyrite and tourmaline.

## Schreiber-Pyramid Vein #1 (Area 5)

Previous work dates back to early 1930's when auriferous quartz veins on the property were trenched and bulk sampled by Kenecho Gold Mines. Records indicate that 150 tons of ore was mined at an average grade of 17.6 g/t gold from the #1 vein in 1937. The quartz vein contains pyrite, chalcopyrite and native gold. The vein is just under a foot in width, strikes N5°W and dips 50° to 55° W. It cuts across basic Keewatin flows to the southwest of a mass of amphibolite, which outcrops in a band striking northwest. Sampling by Falconbridge from the #1 vein directly above the Schreiber Pyramid adit, assayed 45.2 g/t Au.

## Schreiber-Pyramid Vein #4 (Area 6)

Vein #4 was trenched in the 1930's and re-sampled by Twomey in 1992. An assay of 0.03 ounce/ton gold was returned.

## Schreiber-Pyramid Base Metal Showing (Area 7)

In 1969 Zenmac Metal Mines Ltd. drilled five holes, totalling 243 meters, on a base metal showing immediately south of Vein #2. Drill holes intersected minor quartz veining and pyritic shear zones, with the best intersection returning 4.6% Cu and 19.2% Zn over 0.55 meters at a vertical depth of 15.24 meters from massive sulphides in a chloritic shear at a contact between volcanic and sedimentary rocks. In 1984, Falconbridge Copper took grab samples that assayed as high as 31% zinc, including a one foot channel sample that yielded 13.77% zinc.

## Twomey Iron Formation (Area 8)

In 1992, Twomey, sampled a 4 meter wide iron formation which returned a high of 4.85 g/t gold. The area is underlain by mafic metavolcanic rocks, mainly pillowed and massive flows. Oxide and sulphide facies iron formation is intercalated within the metavolcanic rocks. Minor metasedimentary rocks are also present. Gabbro is also present. Schnieders et al. (1993) describes the Twomey B.I.F as: Oxide facies formation consisting of laminated magnetite and chert bands (locally jasper) is observed in several locations throughout the property. The iron formation at location #1 is hosted by fine grained, pelitic, metasedimentary rocks or mudstone, as well as greywacke and minor conglomerate. The iron formation is 3 to 4 m in width and strikes 290 - 320 degrees and dips 55 degrees NE. Mafic intrusive rocks, mainly gabbro, intrude the metasedimentary rocks. Gold mineralization is associated with secondary sulphides in crosscutting fractures within the iron formation, as well as sulphide replacements of the chert and magnetite layers. Semi massive pyrite is present over widths of up to 5 cm in association with the cross fractures and replaced layers. Pyrite preferentially replaces the chert layers in a 'brickwork' type fashion. The cross fractures strike 100 degrees and are commonly associated with areas of jaspilitic iron formation. Grab sample 92 BTT 1 collected by Resident Geologist staff consisted of pyrite rich (less than or equal to 20%) iron formation and assayed 0.156 ounces Au per ton.

## **Current Fieldwork**

In October, 2018, Brian Fowler visited the property accompanied by three individuals, Geologist Nick O'Reilly, Darren Hazelwood and Michael Haveman. Two days were spent re-locating historical occurrences and collecting rock samples for assay.

## Prospecting Log

Day 1 (October 3<sup>rd</sup>, 2018)

- Area 1 investigated a smoky banded chert unit on the north side of a hill just south of a small pond that previously returned gold values in 2010. Samples S1 to S3 were taken for assay.
- Area 2 investigated two separate outcrops about 25 meters apart. Both of these outcrops returned gold values in 2011. Samples S4a, 4b & S5 to S8 were taken.
- Area 3 investigated an area 250 meters northeast of Area 2 from an outcrop that had returned gold in 2011. Sample S9 was taken.

Day 2 (October 4<sup>th</sup>, 2018)

- Area 4 investigated the Twomey Power Line #1 Occurrence. Samples S10 & S11 were taken.
- Area 5 investigated the Schreiber-Pyramid #1 vein open-cut, adit and mill foundations. One sample (SPM) was taken from the open cut.
- Area 6 investigated the Schreiber-Pyramid #4 vein. Samples S12 and S13 were taken.
- Area 7 investigated an old trench dug by Zenmac Metal Mines. Sample S14 was taken.
- Area 8 investigated a stripped outcrop known as the Twomey IF Occurrence. Sample S15 was taken.

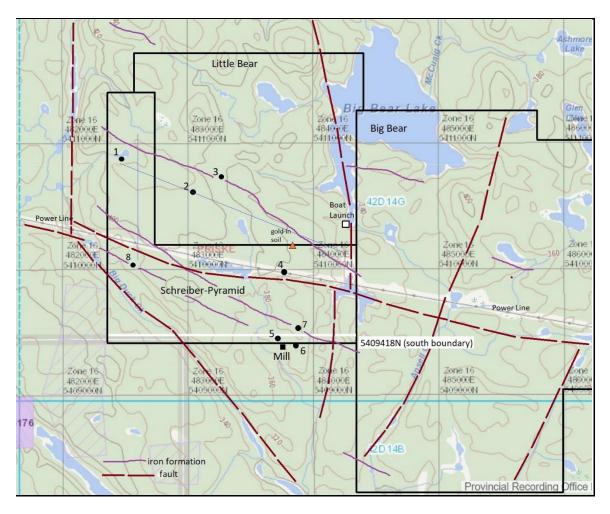


Figure 2 – Sample Locations

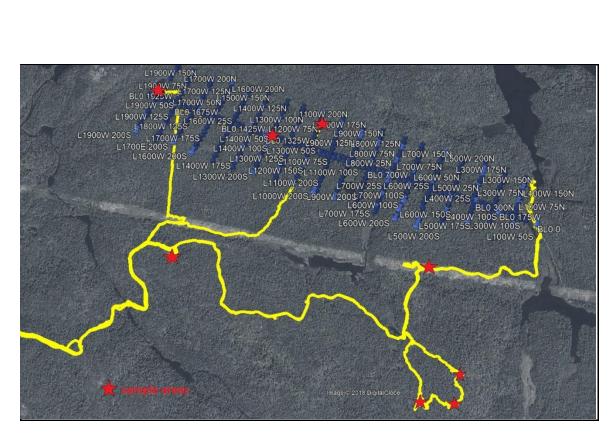


Figure 3 - Sample Locations showing ATV trail and Grid

## Sample Descriptions

Sample ID	Easting	Northing	Description
S1	482482	5410887	Gossanous Qtz, mag, Tourmaline, undiff sulph. Finely laminated shear. No pty identified.
S2	482472	5410891	Qtz veinlet in rusty gossanous sheared sediments. Qtz veinlets 1.5 - 2cm wide, white to blue-grey colour. No pyrite. Minor mag. Iron rich host.
S3	482472	5410891	Rusty Qtz with hematite and mag. Dense.
S4a	483035	5410621	Pyrite rich rusty qtz with Tourmaline. No/low mag. Minor Chalcopyrite. Qtz displays breciated texturecemented by tourmaline?
S4b	483035	5410621	Rusty, iron rich Qtz, no notable pyrite. Carbonaceous alteration?
S5	483035	5410621	Massive Qtz plus stringers.
S6	483063	5410610	Very fine grained sulphide rich blue-grey Qtz. No identifiable pyrite or chalcopyrite. One of 4 minor veins at this locality.
S7	483063	5410610	Cherty Qtz. Rusty to blue/grey colour. No notable sulphides.No mag. Possible Tourmaline.Qtz tends to an amorphous habit.
S8	483063	5410610	Rusty blue/grey Qtzwith monor coarse grained pyrite and tourmaline. More crystaline than S7 but tending towards amorphous in places.
S9	483282	5410713	Milky-white Qtz. Looks barren, cutting sulphide rich volcanic, blue/green amphibolite? 1-2% chalcopyrite in volcanic.
S10	483754	5409994	Qtz, crystaline, milky to transparent, with vein or tourmaline and minor chalcopyrite. With slither of syanite.
S11	483758	5409975	Qtz stringers in sulphide rich (2%) syanite. Chalcopyrite and tourmaline. Taken adjacent to coarse crystaline Qtz vein.
S12	483854	5409403	Qtz, coarse crystaline. Tourmaline, slightly rusty. Cross-cut by Qtz veinlets. No visible chalcopyrite. Same location as S13, Vein #4
S13	483854	5409403	Qtz, coarse crystaline. Tourmaline, slightly rusty. Cross-cut by Qtz veinlets. No visible chalcopyrite. Same location as S12, Vein #4
S14	483880	5409528	Laminated interbeded volcanics and massive sulphide. Oxidised grey to grey/green colour. Friable fine grained.
S15	482626	5410033	Jasper rich iron formation with hematite, magnetite, chalcopyrite (1%). Fine grained.
SPM	483705	5409425	Sulphide rich massive qtz from open-cut as Schreiber Pyramid mine. Upto 10% chalcopyrite. Tourmaline.































## Expenses

Accommodation

Oct 2 - Airlane Hotel & Conference Centre (Thunder Bay) - 3 rooms @ \$133/night each = \$399 Oct 3 - Villa Bianca Inn and Restaurant (Schreiber) - 4 rooms @ \$79/night each = \$316 Oct 4 - Airlane Hotel & Conference Centre (Thunder Bay) - 3 rooms @ \$133/night each = \$399

Travel Gasoline from Pinawa, MB to Schreiber, ON and return - \$235

Wages Four men @ \$800/day X 2 days each field work = \$6,400 Brian Fowler - 2 days report writing @ \$500/day = \$1,000

Meals Four men @ \$90/day each X 2 days = \$720

ATV and Trailer Rental Haveman Brothers = \$965

Assays ALS Canada – 17 rock samples = \$653

Total Expenses = \$11,087

## **Results and Recommendations**

Two of the eight areas prospected returned noteworthy results.

- Sample SPM 5.53 g/t Au (Schreiber Pyramid Mine open cut)
- Sample S6 6.26 g/t Au (from the vicinity of the historic 53.7 g/t Au sample)

While the quartz vein in the Schreiber Pyramid Mine open cut and adit appears to be quite narrow, there may be potential for this vein to widen along strike of the old workings. Consideration should be given to do additional prospecting in this area at a future date.

The most encouraging area on the property, to date, are the gold-bearing outcrops in the northeast portion of the property. The current fieldwork has validated past results, in that the bedrock here contains interesting amounts of gold. More work needs to be done in this locale with a focus on mechanical stripping to determine the width of this zone. Additionally, the Author should point out that very high grade gold in soil (18.2 g/t Au) lies on an apparent strike of this outcrop, some 900 meters to the southeast. Further exploration should include more detailed soil sampling in the area of the 18.2 gram/tonne sample to verify and/or expand upon the single station soil anomaly.

I would also recommend additional prospecting be undertaken on the large, unexplored 'Big Bear' block. Geological mapping by OGS staff, have indicated additional units of iron formation within this claim group. These would be worthy targets to investigate.

Brian Fowler October 27, 2018



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## To: MINING ANALYST CONSULTING LTD. 168 CHARLTON LN LONDON SE78AA UNITED KINGDOM

Page: 1 Total # Pages: 2 (A - D) Plus Appendix Pages Finalized Date: 20-OCT-2018 Account: MACLOPMT

## CERTIFICATE TB18255020

This report is for 17 Rock samples submitted to our lab in Thunder Bay, ON, Canada on 5-OCT-2018.

The following have access to data associated with this certificate:

NICK OREILLY

	SAMPLE PREPARATION
ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

	ANALYTICAL PROCEDURES
ALS CODE	DESCRIPTION
ME-MS41	Ultra Trace Aqua Regia ICP-MS

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

Colin Ramshaw, Vancouver Laboratory Manager

\*\*\*\*\* See Appendix Page for comments regarding this certificate \*\*\*\*\*

ALS

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	/								С	ERTIFIC	CATE O	F ANAL	YSIS	TB182	55020	
Sample Description	Method	WEI-21	ME-MS41													
	Analyte	Recvd Wt.	Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs
	Units	kg	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
	LOD	0.02	0.01	0.01	0.1	0.02	10	10	0.05	0.01	0.01	0.01	0.02	0.1	1	0.05
S1		0.96	0.04	0.38	0.7	0.02	<10	20	0.22	0.04	0.63	0.08	5.00	1.3	10	1.06
S2		1.54	0.54	0.29	4.1	0.02	<10	10	0.47	0.10	0.36	0.39	5.74	6.3	7	0.51
S3		0.40	0.04	0.27	1.7	0.03	<10	10	0.59	0.08	0.21	0.06	8.07	0.9	7	1.49
S4a		0.99	0.56	1.57	0.4	0.26	<10	30	0.23	0.46	0.40	0.34	12.40	12.9	19	1.95
S4b		1.15	0.49	0.56	1.9	0.36	<10	20	0.30	0.20	0.13	0.08	3.55	2.0	8	1.96
S5		0.82	0.22	0.59	0.9	0.08	<10	20	0.08	0.19	0.12	0.06	3.87	3.4	12	1.44
S6		0.62	1.40	0.69	1.2	6.26	<10	10	0.13	1.06	0.42	0.52	2.29	4.2	31	0.52
S7		0.91	0.05	0.17	2.8	0.02	<10	10	0.09	0.13	0.05	0.04	1.82	2.1	9	0.67
S8		0.76	0.14	0.12	0.2	0.21	<10	10	0.07	0.11	0.15	0.13	1.45	2.8	16	0.61
S9		0.92	0.05	2.91	0.5	<0.02	<10	<10	<0.05	0.01	0.56	0.06	4.49	30.6	144	0.12
S10		0.60	0.01	0.14	0.3	<0.02	<10	60	0.07	0.08	0.18	0.02	18.90	1.4	17	0.05
S11		0.65	0.09	0.95	1.2	<0.02	<10	180	0.41	0.59	1.40	0.08	97.6	13.9	20	0.40
S12		0.65	0.02	0.39	1.0	<0.02	<10	<10	<0.05	0.03	0.67	0.06	2.49	3.7	21	0.09
S13		1.22	0.01	0.31	0.8	<0.02	<10	<10	<0.05	0.10	0.27	0.16	0.86	3.1	22	0.08
S14		1.75	2.20	3.17	26.3	<0.02	<10	10	0.66	0.96	0.05	0.71	8.67	45.9	62	1.51
S15		2.90	0.14	0.83	16.0	0.11	<10	40	1.11	0.15	1.12	0.07	7.41	3.3	21	0.82
SPM		0.80	0.97	0.58	3.7	5.53	10	40	0.12	0.34	5.46	0.18	3.17	16.5	34	0.12

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	North Vanc Phone: +1	couver BC V7 (604) 984 02	221 Fax:		34 0218		LON	DON SE7	8AA	Finalized Date: 20-OCT-2018 Account: MACLOPM						
,								С	ERTIFIC	CATE O	F ANAL	YSIS	TB182	255020		
Method Analyte Units LOD	ME-MS41 Cu ppm 0.2	ME-MS41 Fe % 0.01	ME-MS41 Ga ppm 0.05	ME-MS41 Ge ppm 0.05	ME-MS41 Hf ppm 0.02	ME-MS41 Hg ppm 0.01	ME-MS41 In ppm 0.005	ME-MS41 K % 0.01	ME-MS41 La ppm 0.2	ME-MS41 Li ppm 0.1	ME-MS41 Mg % 0.01	ME-MS41 Mn ppm 5	ME-MS41 Mo ppm 0.05	ME-MS41 Na % 0.01	ME-MS4 Nb ppm 0.05	
	13.2 137.0 21.7 472 77.4	5.53 5.77 12.80 9.27 9.79	1.76 2.15 1.79 7.05 2.74	0.08 0.11 0.33 0.12 0.13	0.04 0.06 0.04 0.30 0.05	<0.01 <0.01 <0.01 <0.01 <0.01	0.012 0.053 0.045 0.189 0.094	0.10 0.04 0.08 0.13 0.06	2.5 3.1 3.8 5.5 1.8	1.1 0.3 0.5 1.0 0.8	0.16 0.08 0.13 0.47 0.18	189 129 139 625 138	0.71 0.35 0.12 2.97 2.90	0.01 0.01 0.01 0.03 0.01	0.07 0.08 0.10 0.11 0.23	
	95.7 74.7 41.8 78.2 166.0	4.75 3.37 2.42 2.02 5.14	2.49 3.12 0.81 0.60 6.51	0.06 <0.05 <0.05 <0.05 <0.05 0.07	0.03 0.09 0.08 0.03 <0.02 0.05	<0.01 <0.01 <0.01 <0.01 <0.01 <0.01	0.034 0.099 0.024 0.021 0.008	0.03 0.02 0.02 0.02 0.02 0.01	1.6 1.0 1.0 0.7 1.6	0.4 0.8 0.1 0.1 18.3	0.18 0.21 0.27 0.07 0.06 2.53	363 342 147 203 482	1.08 0.48 0.21 0.22 0.19	0.01 <0.01 <0.01 <0.01 <0.01 0.05	0.08 0.05 <0.05 <0.05 0.05	
	3.0 8.1 5.6 7.1 303	0.59 3.21 1.15 1.07 21.7	0.79 6.38 1.36 1.16	<0.05 0.09 <0.05 <0.05	0.35 0.18 0.02 <0.02 0.18	<0.01 <0.01 <0.01 <0.01 0.01	<0.005 0.016 0.006 0.005 0.251	0.03 0.12 0.02 0.01 0.06	9.3 46.8 1.1 0.4	1.1 8.2 2.4 1.9	0.11 0.87 0.23 0.18	85 444 176 158	0.20 0.57 0.34 0.41 3.60	0.01 0.05 <0.01 <0.01	<0.0 <0.0 <0.0 <0.0 <0.0	
	25.0 159.0	29.1 2.31	2.51 1.67	1.56 <0.05	0.05	<0.01 <0.01 <0.01	0.031 0.021	0.02 0.07	4.0 1.4	0.9 2.8	0.58 0.42	171 843	0.84 0.89	0.01	<0.0 <0.0	
	Analyte Units	Method Analyte Units LOD ME-MS41 Cu   13.2 137.0   21.7 472   77.4 95.7   74.7 41.8   78.2 166.0   3.0 8.1   5.6 7.1   303 25.0	Method Analyte Units LOD ME-MS41 Cu ppm ME-MS41 Fe ppm   13.2 5.53   137.0 5.77   21.7 12.80   472 9.27   77.4 9.79   95.7 4.75   74.7 3.37   41.8 2.42   78.2 2.02   166.0 5.14   3.0 0.59   8.1 3.21   5.6 1.15   7.1 1.07   303 21.7	Method Analyte Units LOD ME-MS41 Cu ME-MS41 Fe ME-MS41 Ga   13.2 5.53 1.76   137.0 5.77 2.15   21.7 12.80 1.79   472 9.27 7.05   77.4 9.79 2.74   95.7 4.75 2.49   74.7 3.37 3.12   41.8 2.42 0.81   78.2 2.02 0.60   166.0 5.14 6.51   3.0 0.59 0.79   8.1 3.21 6.38   5.6 1.15 1.36   7.1 1.07 1.16   303 21.7 13.00	Method Analyte Units LOD ME-MS41 Cu ME-MS41 Fe ME-MS41 Ga ME-MS41 Ge	Method Analyte Units LOD ME-MS41 ME ME ME	Morth Vancouver BČ V7H OA7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 www.alsglobal.com/geochemistry   Method Analyte Units LOD ME-MS41 ME-MS41 ME-MS41 ME-MS41 ME-MS41 ME-MS41   13.2 5.53 1.76 0.08 0.04 <0.01	Method Analyte UDD ME-MS41	Method Analyte Units LOD Me-MS41 Me-MS4	Morth Vancouver BC V7H 0A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 www.alsglobal.com/geochemistry LONDON SE78AA UNITED KINGDOM   Method Analyte Units LOD ME-MS41	Method Analyte Analyte Units ME-MS41 ME	Method Analyte Units Me-MS41 <td>Method Analyte Units Me-MS41 Me-MS41<td>Morth Vancouver B0 V7H 0A7 Phome: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Prinalized D Certification Prinalized D Certification   Method Analyte Units LOD ME-MS41 ME-MS41</td><td>Method horth Vancouver B0 V7H 0.A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Plus Append Finalized Date: 20-0 Account: MA   Method Analyte Units LOD Me-MS41 Me-MS41</td></td>	Method Analyte Units Me-MS41 <td>Morth Vancouver B0 V7H 0A7 Phome: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Prinalized D Certification Prinalized D Certification   Method Analyte Units LOD ME-MS41 ME-MS41</td> <td>Method horth Vancouver B0 V7H 0.A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Plus Append Finalized Date: 20-0 Account: MA   Method Analyte Units LOD Me-MS41 Me-MS41</td>	Morth Vancouver B0 V7H 0A7 Phome: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Prinalized D Certification Prinalized D Certification   Method Analyte Units LOD ME-MS41	Method horth Vancouver B0 V7H 0.A7 Phone: +1 (604) 984 0221 Fax: +1 (604) 984 0218 LONDON SE78AA UNITED KINGDOM Plus Append Finalized Date: 20-0 Account: MA   Method Analyte Units LOD Me-MS41	

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(ALS	/								С	ERTIFIC	CATE O	F ANAL	YSIS	TB182	55020	
Sample Description	Method Analyte Units LOD	ME-MS41 Ni ppm 0.2	ME-MS41 P ppm 10	ME-MS41 Pb ppm 0.2	ME-MS41 Rb ppm 0.1	ME-MS41 Re ppm 0.001	ME-MS41 S % 0.01	ME-MS41 Sb ppm 0.05	ME-MS41 Sc ppm 0.1	ME-MS41 Se ppm 0.2	ME-MS41 Sn ppm 0.2	ME-MS41 Sr ppm 0.2	ME-MS41 Ta ppm 0.01	ME-MS41 Te ppm 0.01	ME-MS41 Th ppm 0.2	ME-MS41 Ti % 0.005
S1 S2 S3 S4a S4b		3.5 5.5 2.5 13.9 4.7	260 210 630 270 210	1.7 13.0 1.8 3.0 2.7	7.6 2.1 8.5 13.6 5.3	<0.001 <0.001 <0.001 0.002 0.001	0.07 0.51 0.03 1.27 0.48	0.06 0.10 0.08 0.18 0.13	0.4 0.7 0.4 1.9 0.7	0.2 0.9 0.2 3.7 1.4	0.2 1.1 1.0 1.9 0.8	17.4 3.1 3.0 8.7 2.7	<0.01 <0.01 <0.01 <0.01 <0.01	0.04 0.16 0.11 0.76 0.33	0.2 0.2 <0.2 0.7 0.2	0.015 0.012 0.016 0.053 0.027
S5 S6 S7 S8 S9		4.0 8.7 3.5 2.5 57.2	170 60 170 60 300	4.0 2.5 1.4 0.9 0.3	7.7 1.8 2.7 2.0 0.4	<0.001 0.006 0.001 0.002 <0.001	0.18 0.13 0.11 0.23 0.14	0.17 <0.05 <0.05 <0.05 0.05	0.8 1.7 0.2 0.1 6.0	1.2 1.7 1.2 1.5 0.7	0.3 0.2 0.2 <0.2 <0.2 <0.2	2.5 8.0 1.4 2.0 5.3	<0.01 <0.01 <0.01 <0.01 <0.01	0.30 0.69 0.21 0.23 0.03	0.3 0.2 <0.2 <0.2 0.2	0.013 0.014 <0.005 <0.005 0.137
S10 S11 S12 S13 S14		1.9 10.8 6.0 3.7 36.7	200 1260 70 20 650	0.6 3.9 0.5 3.6 183.5	1.0 9.8 0.9 0.8 4.4	<0.001 <0.001 <0.001 0.001 0.002	0.08 1.21 <0.01 <0.01 >10.0	<0.05 0.05 <0.05 <0.05 1.74	0.3 2.9 1.7 1.4 8.9	<0.2 0.4 <0.2 <0.2 5.8	<0.2 0.2 <0.2 <0.2 <0.2 4.9	18.6 115.0 7.0 2.9 2.0	<0.01 <0.01 <0.01 <0.01 <0.01	0.02 0.08 0.03 0.06 0.60	1.3 8.2 <0.2 <0.2 0.5	<0.005 0.013 <0.005 <0.005 0.047
S15 SPM		10.4 28.1	590 130	3.6 2.6	2.0 2.1	0.001 0.001	0.25 0.74	0.24 0.05	1.5 3.0	0.3 1.1	0.2 <0.2	21.6 132.0	<0.01 <0.01	0.10 0.20	0.2 <0.2	0.019 0.016





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## CERTIFICATE OF ANALYSIS TB18255020

	Method	ME-MS41	ME-MS41						
			IVIE-IVI34 I	ME-MS41	ME-MS41	ME-MS41	ME-MS41	ME-MS41	
	Analyte	TI	U	V	W	Y	Zn	Zr	
	Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
Sample Description	LOD	0.02	0.05	1	0.05	0.05	2	0.5	
S1		0.04	<0.05	9	1.00	2.50	13	2.4	
S2		0.06	< 0.05	13	0.44	2.33	61	2.8	
S3		0.05	< 0.05	13	0.32	3.89	33	2.0	
S4a		0.07	0.14	36	0.55	3.07	91	12.3	
S4b		0.06	0.09	19	0.22	1.44	23	2.7	
S5		0.03	0.07	17	0.15	1.52	32	4.8	
\$6		<0.02	< 0.05	16	0.06	1.91	87	3.0	
S7		<0.02	< 0.05	5	<0.05	0.90	23	1.4	
S8		<0.02	<0.05	3	<0.05	0.76	60	0.6	
S9		<0.02	<0.05	87	0.07	5.63	57	0.5	
\$10		<0.02	0.22	5	<0.05	1.97	6	16.0	
S11		0.03	1.45	38	0.25	12.85	45	20.5	
S12		<0.02	<0.05	22	1.07	1.87	13	0.9	
S13		<0.02	<0.05	17	0.08	0.93	20	0.5	
S14		1.54	0.09	78	0.11	4.32	225	7.7	
S15		0.05	0.07	20	0.19	4.84	25	1.7	
SPM		0.02	<0.05	18	0.17	5.04	19	1.8	



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## CERTIFICATE OF ANALYSIS TB18255020

	CERTIFICATE COMMENTS
Applies to Method:	ANALYTICAL COMMENTS Gold determinations by this method are semi-quantitative due to the small sample weight used (0.5g). ME-MS41
	LABORATORY ADDRESSES
Applies to Method:	Processed at ALS Thunder Bay located at 645 Norah Crescent, Thunder Bay, ON, Canada CRU-31 LOG-22 PUL-31 SPL-21 WEI-21
Applies to Method:	Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada. ME-MS41

