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Technical Report for Horwood Silica Deposit

Paul W. Adams 303487

Location

The property is in the south east corner of Horwood Township, Porcupine Mining Division, and Swayze Green Stone Belt. The outcrop is located on claim 310850 and has Lat: 47.98194 N and Lon: 82.25321 W. The outcrop is visible from Google earth (see image below).

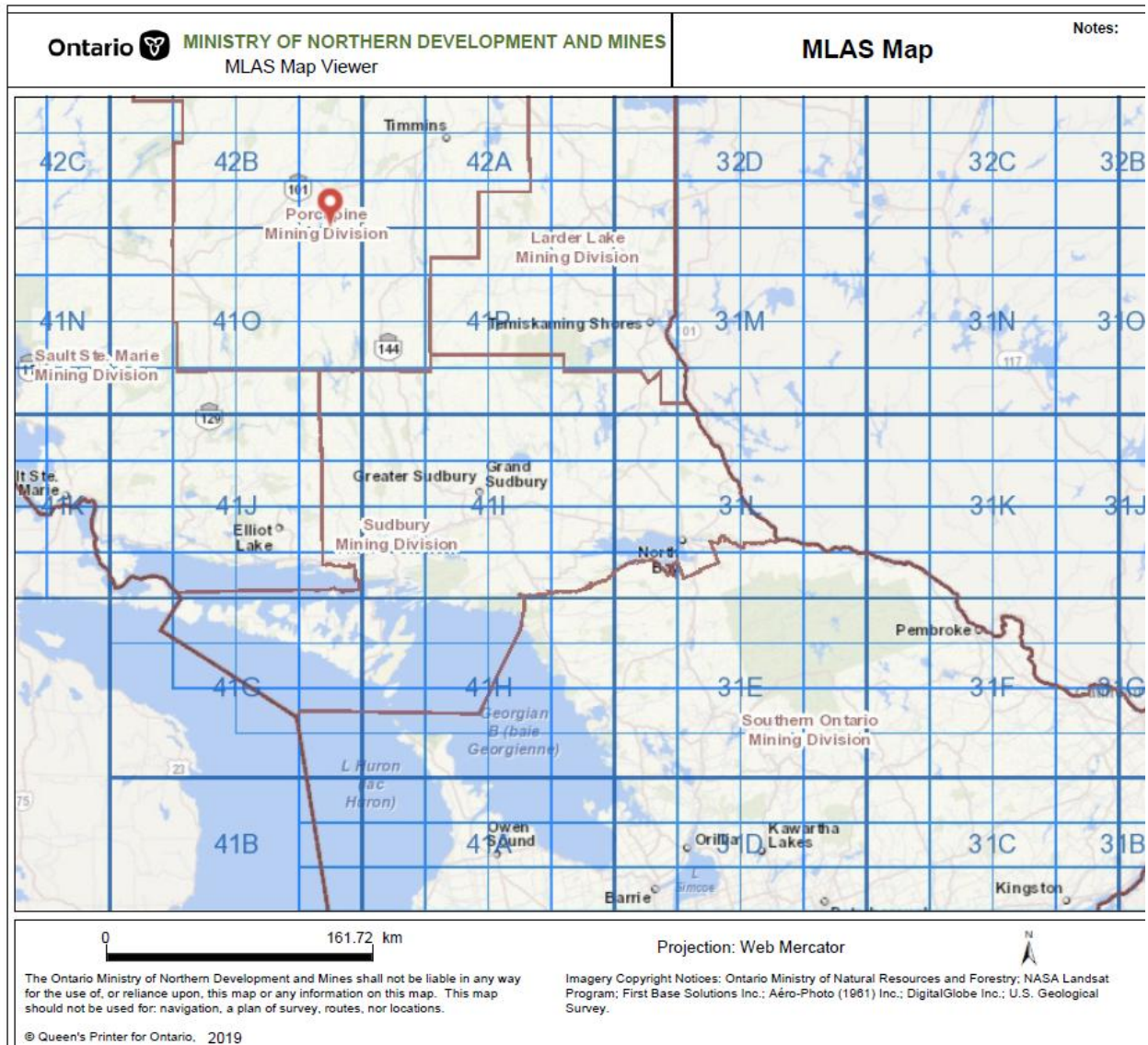


Figure 1: Regional Location Silica Deposit

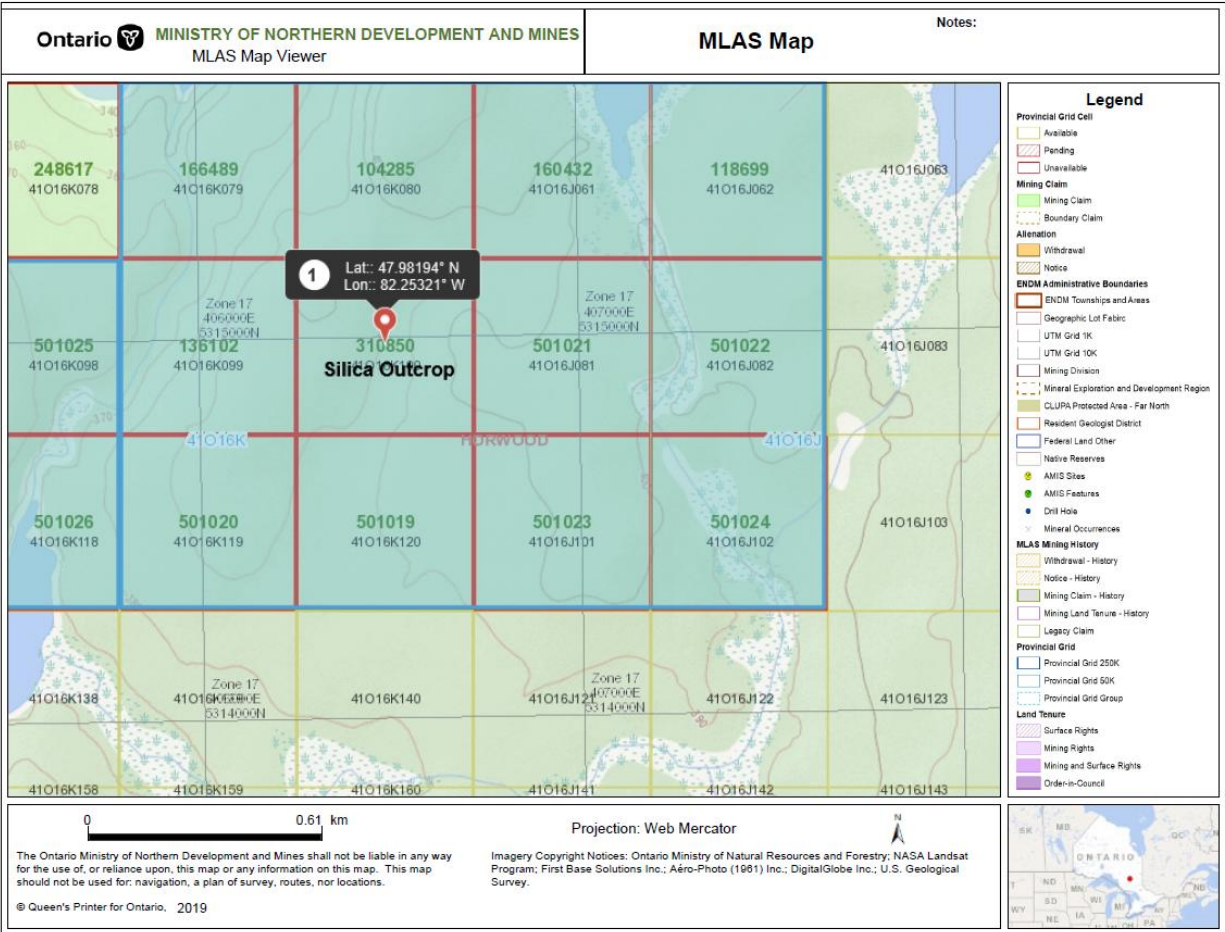


Figure 2: Silica Outcrop on claim 310850 (MLAS)

Access

Across to the property is west on Highway 101 from Timmins for sixty kilometers, then south east via Kenogaming logging road for fifty five kilometers. This all weather road accesses the north part of the claim block. The showing is 100 m south of the logging road, two kilometers east of the Pike Creek Bridge on claim 310850. The total kilometers from Timmins are one hundred and fifteen.

Geology – Regional

All the consolidated rocks in the general Horwood Township region are of Precambrian age and constitute part of the extensive Abitibi Greenstone belt that lies within the superior structural province of the Precambrian Shield. The volcanism is cyclic in nature and consists of an initial ultramafic-mafic phase followed by more intermediate and felsic rock types with intercalated clastic sediments and exhalites and ends with felsic pyroclastic-volcaniclastic material on top. Because of several periods of extensive regional folding most of the

original essentially flat lying volcanic strata and sediments in adjacent basins are now vertical to steeply dipping. A variety of felsic intrusive rocks occur in the general region soda rich quartz, feldspar, porphyries and trondhjemites are considered to be the oldest. The youngest are more potassic granodiorites and monzonite.

Geology – Local

The silica showing consists of a massive Mick White Quartz vein. The wall rock on the north side of the vein is mafic volcanics. The south side of the vein seems to be porphyry with up to 500Xo quartz stringers overburden covers the south contact, so geology is limited. Shearing is evident north of the showing, probably related to the Hardiman Fault. The nearest outcrops south of the showing consist of granodiorite which make up the Hardiman Bay pluton. This showing could well mark the volcanic, granodiorite contact. The Hardiman Fault is a major structure that has caused extensive quartz flooding at Rosvel Silica. This showing could well be the same structure.

Previous Work

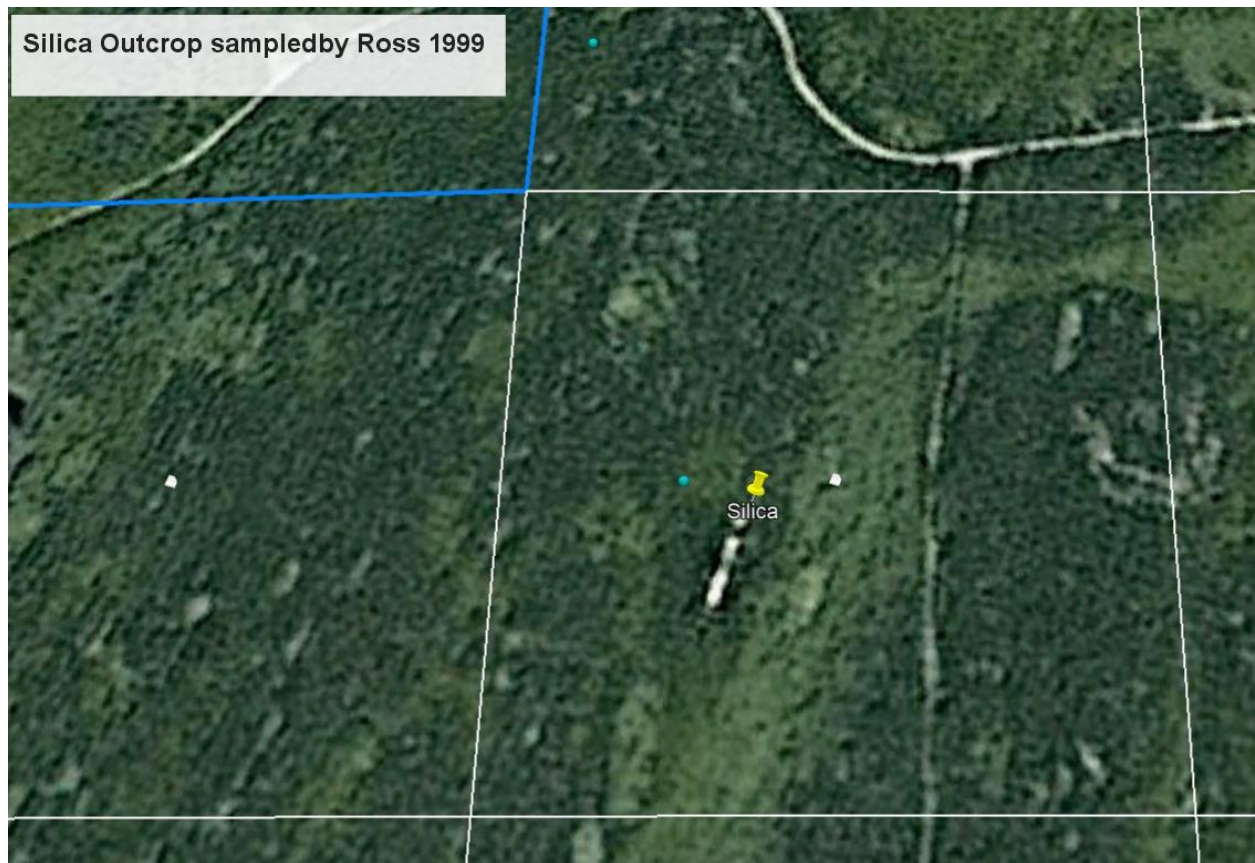
The only previous work was conducted by Ross 1999 (Ross Horwood 41O16NE2002) which concentrated on the Silica outcrop. The purpose of this work is to confirm that study prior to conducting a larger work, as well to test for gold and any observed contaminants.

Methods:

Ross's sampling reveals a massive silica outcrop (south end of deposit). His samples 3004, 3005, 3006, 3007, 3008 all are over 100% Silica. The methods consisted of locating Ross's old trenches and collecting small grab samples from the three most significant areas to confirm these. In the field we collected 3 agglomerate 10 kg samples each from Ross's trenches A C and D (see below, google earth image, and Ross map)). These trenches are about equally spaced on the south end of the deposit. These samples are labelled silica1 (UTM 17T 406416mE 5314909 mN), silica2 (UTM 17T 406406mE 5314902mN), and silica3 (17T UTM 406408mE 5314892mN). The trenches are very visible on the outcrop.

Sample #	Al2O3 %	BaO %	CaO %	Cr2O3 %	Fe2O3 %	K2O %	MgO %	MnO %	Na2O %	P2O5 %	SiO2 %	SrO %	TiO2 %	LOI %	Total %
N.S. - 3001	0.24	<.001	<.01	<.001	1.94	<.01	0.06	0.019	0.03	<.001	98.43	<.001	<.01	0.5	101.22
N.S. - 3002	0.08	<.001	<.01	<.001	1.01	<.01	<.01	0.010	<.01	<.001	100.27	<.001	<.01	0.1	101.46
N.S. - 3003	0.09	<.001	<.01	<.001	0.98	<.01	<.01	0.012	0.05	<.001	99.48	<.001	<.01	<.1	100.62
- 3004	0.15	<.001	<.01	<.001	0.75	<.01	<.01	0.008	0.06	<.001	100.09	<.001	<.01	0.2	101.26
- 3005	0.26	0.002	<.01	0.002	0.88	0.01	<.01	0.008	<.01	<.001	101.25	<.001	<.01	0.2	102.62
- 3006	0.53	0.009	<.01	<.001	0.95	0.06	0.02	0.010	0.05	<.001	98.67	<.001	<.01	0.1	100.40
- 3007	0.20	<.001	<.01	0.026	0.70	<.01	<.01	0.008	0.01	<.001	101.48	<.001	<.01	0.2	102.62
- 3008	0.15	<.001	<.01	<.001	0.71	<.01	<.01	0.009	0.02	<.001	101.85	<.001	<.01	0.1	102.84
N.S. - 3009	0.13	<.001	<.01	<.001	0.51	<.01	<.01	0.008	<.01	<.001	101.59	<.001	<.01	<.1	102.23
- 3010	0.10	<.001	<.01	0.025	0.65	<.01	<.01	0.008	0.04	<.001	99.27	<.001	<.01	0.2	100.29
- 3011	0.30	<.001	<.01	<.001	0.72	0.07	0.01	0.009	0.02	<.001	98.85	<.001	<.01	<.1	99.98
- 3012	0.23	0.001	<.01	<.001	0.55	0.05	<.01	0.006	0.01	<.001	101.57	<.001	<.01	<.1	102.42
N.S. - 3013	0.06	<.001	<.01	<.001	0.38	<.01	<.01	0.004	0.03	<.001	101.28	<.001	<.01	0.1	101.86
N.S. - 3014	0.22	0.003	<.01	0.040	0.42	0.06	0.02	0.006	0.17	<.001	100.10	<.001	<.01	0.1	101.14

Figure 3: from Ross(1999) 41016NE2002



HORWOOD SILICA
SOUTH END SAMPLING

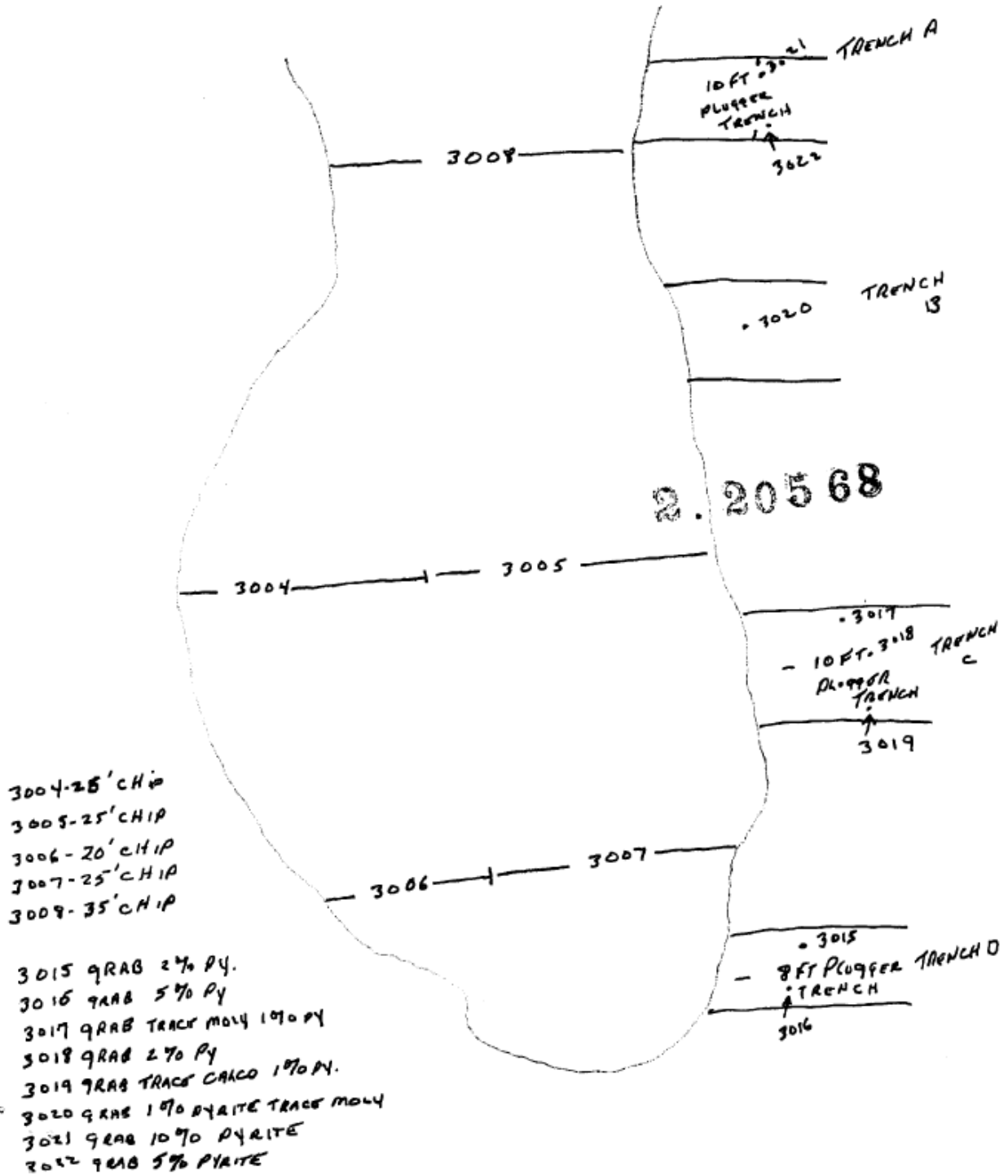


Figure 4: from Ross 410NE2002

These samples were analyzed for gold, and silica.

Results:

The silica analysis produced the following results

Report Number: A17-06438

Report Date: 24/7/2017

Analyte Symbol	Au	Si
Unit Symbol	ppb	%
Detection Limit	5	0.01
Analysis Method	FA-AA	FUS-Na2O2
Silica 1	5	44.9
Silica 2	5	44.4
Silica 3	6	45.7

Ross conducted a whole rock analysis and the samples were 100% SiO₂ from trenches A C D. Our analysis is for only silica. According to Actlabs this equates to a 100% SiO₂ so the analysis confirms the work of Ross.

Barite Samples

The Rosvel silica mine is about 25 km from this site was associated with considerable barite showings. Falconbridge/Extender minerals had a barite mine within a kilometer of the Rosvel Mine. The purpose of this analysis was to test a very small barite showing found to the southwest of the outcrop. The barite vein is about 10 cm in diameter and located at UTM 17 T 406393mE 531892mN.

Barite

The small barite vein to the southwest came out about 5% barite. This is troubling as barite in the field looks like quartz and is usually field distinguishable by weight.

Report Number: A18-14598						
Report Date: 19/11/2018						
Analyte Symbol	Au	Ba	SO4	SiO2	Al2O3	Fe2O3(T)
Unit Symbol	ppb	ppm	%	%	%	%
Detection Limit	5	2	0.05	0.01	0.01	0.01
Analysis Method	FA-AA	FUS-ICP	SO4	FUS-ICP	FUS-ICP	FUS-ICP
HORWOOD1	6	551100	40.1	2.93	0.09	0.25
HORWOOD2	6	532600	37.5	5.97	0.2	0.41

Gold:

All samples were tested for gold and all were insignificant.

Conclusions:

We were able to locate the original Ross trenches in his report and confirm that the deposit has 100% silica in the south end. There is a troubling barite vein located just west of the showing.

Quality Analysis ...



Innovative Technologies

Date Submitted: 26-Jun-17
Invoice No.: A17-06438Final
Invoice Date: 24-Jul-17
Your Reference:

Paul Adams
20 Colinayre
Toronto ON M1T 3A9
Canada

ATTN: Paul Adams

CERTIFICATE OF ANALYSIS

3 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Timmins Au - Fire Assay AA

Code 8-Peroxide ICP Timmins Sodium Peroxide Fusion ICP Timmins

REPORT **A17-06438Final**

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Notes:

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

CERTIFIED BY:

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

Emmanuel Esemé , Ph.D.
Quality Control

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Analyte Symbol	Au	Si
Unit Symbol	ppb	%
Lower Limit	5	0.01
Method Code	FA-AA	FUS- Na2O2
Silica 1	5	44.9
Silica 2	5	44.4
Silica 3	6	45.7

Analyte Symbol	Au	Si
Unit Symbol	ppb	%
Lower Limit	5	0.01
Method Code	FA-AA	FUS- Na2O2
Oreas 74a (Fusion) Meas		15.2
Oreas 74a (Fusion) Cert		15.14
Oreas 77a (Fusion) Meas		6.02
Oreas 77a (Fusion) Cert		6.21
Oreas 77a (Fusion) Meas		6.24
Oreas 77a (Fusion) Cert		6.21
MP-1b Meas		16.6
MP-1b Cert		16.79
MP-1b Meas		16.8
MP-1b Cert		16.79
MP-1b Meas		17.2
MP-1b Cert		16.79
OREAS 13b (fusion) Meas		23.2
OREAS 13b (fusion) Cert		22.9
OREAS 13b (fusion) Meas		24.0
OREAS 13b (fusion) Cert		22.9
CZN-4 Meas		0.30
CZN-4 Cert		0.295
OREAS 922 (Peroxide Fusion) Meas		29.0
OREAS 922 (Peroxide Fusion) Cert		30.51
OREAS 621 (Peroxide Fusion) Meas		27.8
OREAS 621 (Peroxide Fusion) Cert		28.1
OREAS 621 (Peroxide Fusion) Meas		27.4
OREAS 621 (Peroxide Fusion) Cert		28.1

Analyte Symbol	Au	Si
Unit Symbol	ppb	%
Lower Limit	5	0.01
Method Code	FA-AA	FUS- Na2O2
OREAS 621 (Peroxide Fusion) Meas		26.5
OREAS 621 (Peroxide Fusion) Cert		28.1
OREAS 621 (Peroxide Fusion) Meas		27.0
OREAS 621 (Peroxide Fusion) Cert		28.1
OREAS 203 Meas	878	
OREAS 203 Cert	871	
OREAS 218 Meas	522	
OREAS 218 Cert	525	
Silica 1 Orig		44.2
Silica 1 Dup		45.7
Silica 3 Orig		45.3
Silica 3 Dup		46.2
Method Blank		< 0.01
Method Blank		< 0.01
Method Blank	6	
Method Blank	5	
Method Blank		< 0.01