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**ASSESSMENT REPORT ON THE  
SIMON COPPER PROPERTY, DENBIGH &  
LYNDOCH TOWNSHIPS.**

**- CHECK LOGGING AND EVALUATION OF  
LITHIUM POTENTIAL**

**Prepared by F. R. Ploeger, B.Sc., P. Geo.**

**January 7, 2018**

## SIMON COPPER PROPERTY

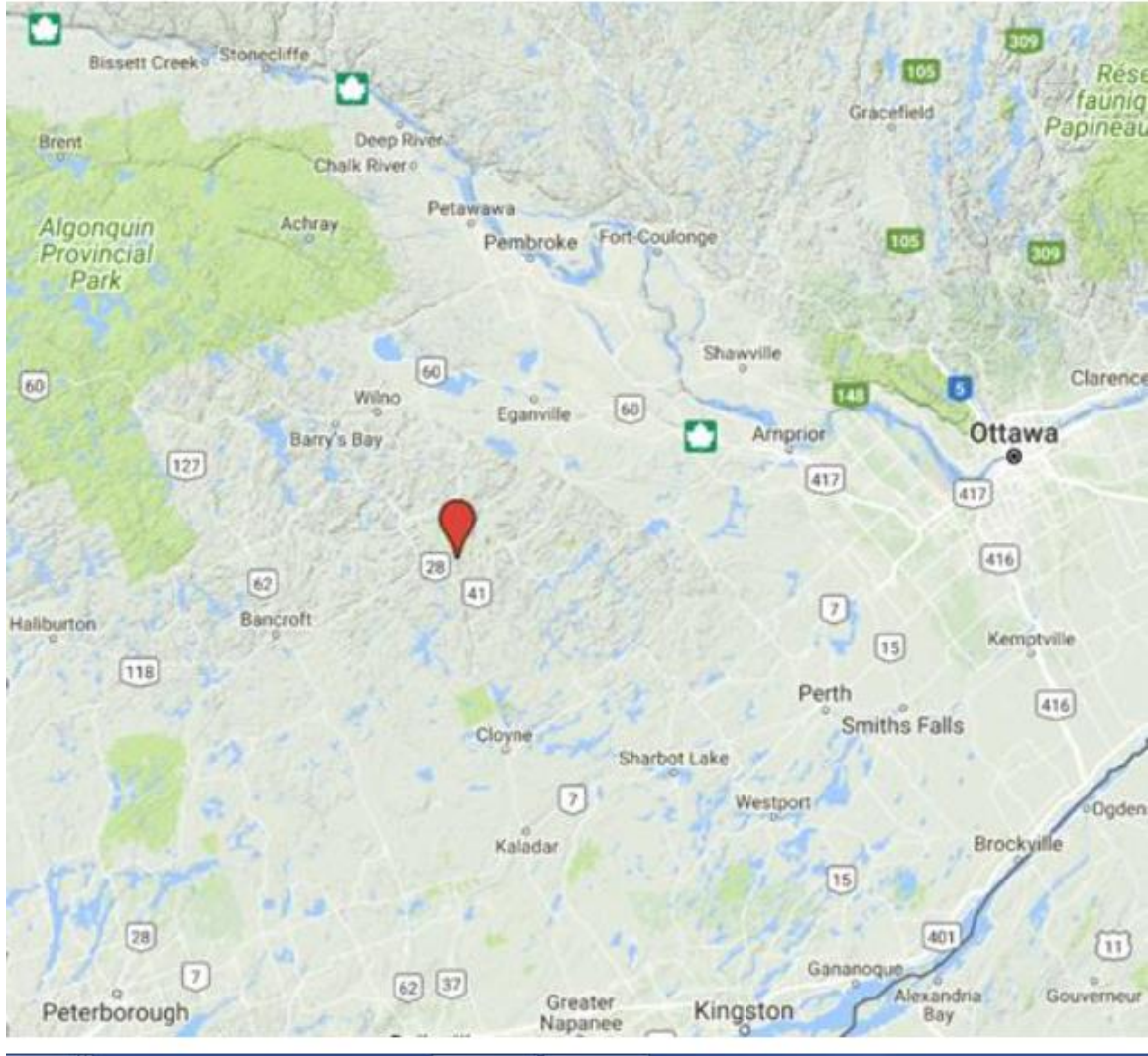
### INTRODUCTION

#### Location

The Simon Copper property is located in southeastern Ontario approximately 135km west of Ottawa in Denbigh and Lyndoch Townships, approximately 8km north of the town of Denbigh (Figure 2). It comprises 19 claims (Figure 1), which, after conversion, will consist of all or part of 36 cells. Access to the central core of the property is gained via Slate Falls road off Hwy 41 north of Denbigh.

Township / Area	Claim Number	Recording Date	Claim Due Date	Status	Percent Option	Work Required	Total Applied
DENBIGH	1501158	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501159	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501160	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501161	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501164	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501165	2015-Dec-18	2018-Dec-18	A	100%	\$800	
DENBIGH	1501166	2015-Dec-18	2018-Dec-18	A	100%	\$400	
DENBIGH	1501180	2016-Jan-04	2019-Jan-04	A	100%	\$400	
DENBIGH	1501181	2016-Jan-04	2019-Jan-04	A	100%	\$400	
DENBIGH	1501182	2016-Jan-04	2019-Jan-04	A	100%	\$400	
DENBIGH	1501183	2016-Jan-04	2019-Jan-04	A	100%	\$400	
DENBIGH	1501184	2016-Jan-04	2019-Jan-04	A	100%	\$400	
LYNDOCH	1501157	2015-Dec-18	2018-Dec-18	A	100%	\$400	
LYNDOCH	1501162	2015-Dec-18	2018-Dec-18	A	100%	\$400	
LYNDOCH	1501163	2015-Dec-18	2018-Dec-18	A	100%	\$400	
LYNDOCH	1501176	2016-Jan-04	2019-Jan-04	A	100%	\$400	
LYNDOCH	1501177	2016-Jan-04	2019-Jan-04	A	100%	\$400	
LYNDOCH	1501178	2016-Jan-04	2019-Jan-04	A	100%	\$400	
LYNDOCH	1501179	2016-Jan-04	2019-Jan-04	A	100%	\$400	

Figure 1: List of Claims- Simon Copper Property



**Figure 2: Simon Copper Property Location**

### General Geology

The Simon Copper property is underlain by a thick sequence of amphibolitic gneiss with layers of marble, quartzite and quartz- feldspar paragneiss (Figure 3). The entire package is regionally folded, however on the property, the units generally strike north- south. Pegmatitic dikes of various widths cut the sequence.

The property hosts multiple surface showings including the North Zone, South Zone, B Zone and East Zone. The showings are associated with magnetite horizons which include sulphide zones containing approximately 25-50% massive and semi-massive pyrrhotite, pyrite, chalcopyrite and sphalerite in varying amounts in a host rock of amphibolite gneiss.

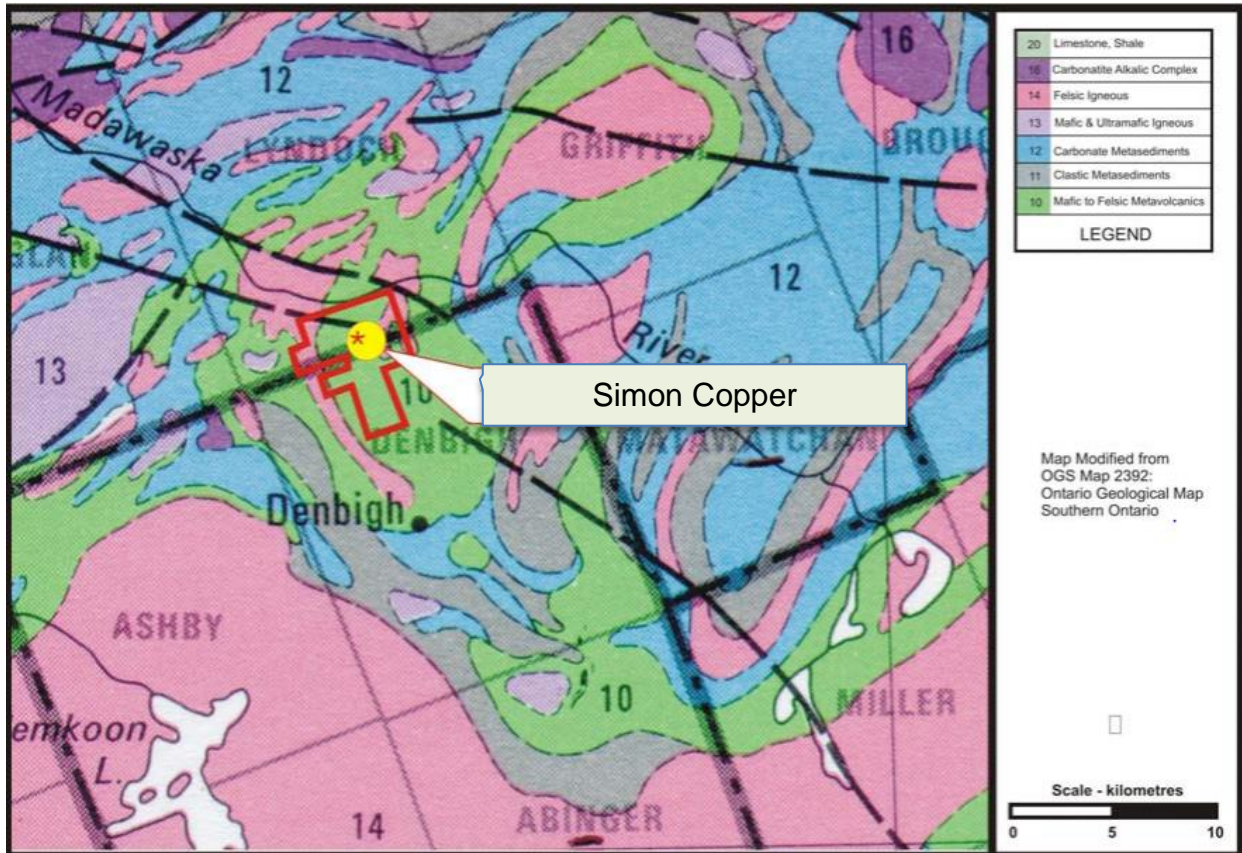


Figure 3: General Gerology of The Simon Copper Property

## History

In the early 1960's, the South Zone was explored by both Noranda Mines and Young Davidson Mines (YDM). YDM reported a mineral inventory of 253,000 tons @ 1.09% Cu on the South Zone above 106 meter elevation (Note: This mineral inventory is historical only and non compliant with National Instrument 43-101 standards). Subsequent work by Pelangio in 2000-2001 successfully intersected the South Zone Deposit and extended the zone's known vertical depth to 155 meters below surface. This initial drilling showed that copper grades, zinc grades and associated alteration on the deposit were improving significantly at depth.

Historically, almost every hole drilled into the various zones returned copper mineralization, generally accompanied by zinc, however, many companies did not report assay values with their submissions. Holes drilled by Pelangio Mines Inc in 2004 all intersected the sulphide zones and returned values as high as 2.78% copper, 5.07% zinc, 0.34 g/t gold, and 5.30 g/t silver. The most recent drilling by Adroit Resources in 2007 yielded values up to 0.37% copper and 1.33% zinc over 13.18m.

Grab samples taken by the OGS in historic trenches returned values of 0.16- 3.5% copper and 0.04- 3.4% zinc while earlier surface samples by Noranda reported values as high as 11.2% copper.

A Pelangio report suggests that the presence of the multiple zones located in a very small 500 by 500 meter area indicates there may be possibilities for a series of stacked en-echelon copper zinc sulphide lenses on this prospect.

## CHECK LOGGING- RESAMPLING PROGRAM

### Introduction

During the spring and summer of 2017, most of the Simon Copper core, stored in various facilities in the Cobalt area, was recovered and moved to an outdoor storage facility owned and operated by Canadian Exploration Services (CXS) near Fork Lake, west of the town of Larder Lake. The boxes were haphazardly packed onto pallets with no regard for hole continuity. At the CXS facility, boxes from a number of the best mineralized holes were removed from the various pallets and re-collated, whereupon they were tested for physical properties and also check-logged, with particular attention paid to the mineralized horizons and any major pegmatitic dikes.

It was the intention of the check logging to confirm the nature and extent of the sulphide mineralization, and to sample the widest of the pegmatitic dikes to determine their potential for containing lithium mineralization or any other rare elements.

### Check Logging Program

Following the reconstruction of the best mineralized holes, the core was checked against the original drill logs and lithological contacts, zones of mineralization, and pegmatitic dikes of various widths, were confirmed. In total, 10 holes numbered SC 02/ 03/ 04/ 05/ 06/ 08/ 11/ 14/ 20/ & 21, were check logged. Holes from the various drilling campaigns of core that was retrieved from Cobalt include: SC00-01- 03 and SC04-04- 08 drilled by Pelangio Mines Ltd in 2000 & 2004 (respectively); and holes SC09- 21 drilled in 2007 by Adroit Resources. The following table (Table 1) provides details of the holes that were check logged.

The most common host lithology in the drilling is amphibolite. Generally, it is "salt and pepper" (textured) to black coloured, medium to fine grained, and massive with local compositional banding imparting a gneissic layering to the host. The rock is comprised essentially of amphibole and plagioclase with locally abundant biotite, garnet and quartz. It was noted that garnet concentrations of 75% occurred over 5- 10 cm in some of the amphibolitic bands. Mineralization in the sulphide-rich amphibolitic zones comprises lenses of semi-massive and massive pyrrhotite, pyrite and chalcopyrite with minor sphalerite and galena.

During the check logging, all pegmatite dikes were examined and the widest, sampled. Generally, they were found to consist of very coarse textured white/ dull white coloured plagioclase and quartz with patches of pale orange/ pink potassium feldspar, often containing local interstitial inclusions of biotite (amphibole ?) and rare blades of a pale yellow coloured mica (phlogopite/ muscovite?).

<b>Check Logged Hole Locations</b>						
<b>Company</b>	<b>Hole No.</b>	<b>Location (UTM)</b>		<b>Azimuth</b>	<b>Dip</b>	<b>Length</b>
Pelangio	SC00-2	1+29N (grid)	2705E (grid)	290	(-)45	152.0 m
Pelangio	SC00-3	1+29N (grid)	2705E (grid)	290	(-)63	179.0 m
Pelangio	SC04-04	5008767N	318547E	290	(-)47	146.42 m
Pelangio	SC04-05	5008748N	318655E	290	(-)50	193.9 m
Pelangio	SC04-06	5008773N	318744E	290	(-)48	218.29 m
Pelangio	SC04-08	5008738N	318683E	290	(-)70	221.34 m
Adroit	SC-11	5008765N	3618602E	290	(-)45	207.5 m
Adroit	SC-14	5008794N	318677E	290	(-)50	143.3 m
Adroit	SC-20	5008628N	318497E	290	(-)45	212.92 m
Adroit	SC-21	5008628N	318497E	290	(-)70	128.02 m

**Table 1: Locations and Details of Simon Copper Holes that were Check Logged.**

### Geochemical Analysis

The main focus of the sampling program was to analyze the widest of the pegmatitic dikes to determine their potential for containing lithium mineralization or any other rare elements. Since lithium is found to occur in association with pegmatites, K feldspar, biotite and amphibole, the pegmatite dikes were sampled.

Following the check- logging of selected holes from the Simon Copper property, a 2.65m wide pegmatite dike from hole SC-11 was sampled from 111.85- 1125.95m (sample 58070), 112.95- 113.85m (sample 58071) and, 113.85- 114.40m (sample 58072). A second dike from hole SC04-05 at 139.95- 142.95m was broken out in 3 intervals and sampled from 139.95-141.00m, 141.00- 142.00m, and 142.00-192.95m (samples 58073- 75).

Both dikes were found to consist of very coarse textured white/ dull white coloured plagioclase and quartz with patches of pale orange/ pink potassium feldspar, often containing local interstitial inclusions of biotite (amphibole ?) and rare blades of a pale yellow coloured mica (phlogopite/ muscovite?).

### Sampling Method

As mentioned, the widest of the pegmatite dike intersections from the check-logged holes were sampled. All sample intervals were cut with a core saw, one

half being returned to the box and the other placed into sample bags with accompanying tickets. The samples were sent to ALS Laboratories for ICP multi-element analysis for the following elements: Ag, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Ho, In, K, La, Li, Lu, Mn, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Te Th, Ti, Tl, Tm, U, V, W, Y, Yb, & Zn. The results of the analyses are summarized in Table 2.

SAMPLE	Ag	As	Ba	Be	Bi	Ca	Cd	Ce
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
58070	<5	<4	181	1.4	0.1	0.4	<0.8	0.9
58071	<5	<4	213	1.2	0.2	0.4	<0.8	0.7
58072	<5	<4	46	5.5	0.2	1.8	<0.8	2.6
58073	6	<4	40	7.6	0.2	1.6	1.1	2.8
58074	<5	<4	156	5	0.2	1.3	0.8	2.7
58075	5	<4	153	6.2	0.1	1.3	<0.8	1
SAMPLE	Co	Cs	Cu	Dy	Er	Eu	Fe	Ga
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm
58070	0.9	8.8	<20	1.35	1.39	0.19	0.31	18.8
58071	0.9	9	<20	1.16	1.25	0.26	0.37	18
58072	1.1	2.3	<20	3.16	3.4	0.36	0.38	22.3
58073	1.4	2.8	20	5.38	4.98	0.23	0.59	22.8
58074	1.3	6.9	30	4.23	3.94	0.28	0.51	21.9
58075	0.8	6.4	<20	2.77	2.57	0.36	0.41	20.1
SAMPLE	Gd	Ge	Ho	In	K	La	Li	Lu
DESCRIPTION	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
58070	0.8	2.6	0.28	<0.3	7.4	0.61	4	0.24
58071	0.65	2.7	0.26	<0.3	7.3	0.59	4	0.22
58072	1.97	2.1	0.76	<0.3	1.2	1.21	8	0.76
58073	3.36	2.4	1.22	<0.3	1.47	1.38	8	1.03
58074	2.38	2.2	0.97	<0.3	3.73	1.23	7	0.84
58075	1.06	2.6	0.72	<0.3	3.7	0.5	6	0.57
SAMPLE	Mn	Mo	Nb	Nd	Ni	Pb	Pr	Rb
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
58070	40	2	2.6	0.46	10	77.6	0.07	440
58071	60	<2	4.1	0.75	10	71.7	0.08	415
58072	100	2	1.9	1.26	10	29	0.3	62
58073	50	3	15.8	2.48	10	30.3	0.54	74.3
58074	90	2	7.9	1.99	10	46.6	0.43	226



58075	80	<2	3.8	0.89	10	47.3	0.12	211
SAMPLE	Re	Sb	Se	Sm	Sn	Sr	Ta	Tb
DESCRIPTION	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
58070	<0.01	0.3	<3	0.37	<3	60	0.75	0.18
58071	<0.01	0.4	4	0.09	<3	60	1	0.16
58072	0.01	0.4	12	0.75	<3	70	0.61	0.37
58073	<0.01	0.4	<3	1.89	<3	60	4.94	0.78
58074	<0.01	0.3	<3	1.05	<3	70	2.43	0.55
58075	<0.01	0.5	<3	0.58	<3	70	1.46	0.35
SAMPLE	Te	Th	Ti	Tl	Tm	U	V	W
DESCRIPTION	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm
58070	0.6	3.4	0.008	3	0.18	3.8	2	<0.3
58071	<0.5	2.4	0.01	3.08	0.15	3.2	3	<0.3
58072	<0.5	8	0.012	0.48	0.53	17.4	4	<0.3
58073	0.6	8.2	0.013	0.47	0.9	13.8	4	0.5
58074	0.7	9.1	0.017	1.53	0.72	14.7	6	0.4
58075	0.5	3	0.009	1.28	0.6	10	3	<0.3
SAMPLE	Y	Yb	Zn					
DESCRIPTION	ppm	ppm	ppm					
58070	12.7	1.2	10					
58071	10.4	1.45	10					
58072	29.9	4.24	10					
58073	49.8	7.16	30					
58074	40.5	4.88	30					
58075	26.5	3.68	20					

**Table 2: ICP Multi- Element Analyses of the Pegmatite dikes from Simon Copper.**

## Results

From the Table 2, it is evident that the Lithium content of the dikes is minimal, varying between 4 & 8 ppm. Nor are the pegmatites enriched in rare earth elements.

## Summary and Recommendations

A number of diamond drill holes on the Simon Copper property were salvaged and check logged to confirm the nature and extent of the sulphide mineralized zones and to locate and evaluate the pegmatitic dikes for potential Lithium mineralization. Dikes from holes SC04-05 (139.95- 142.95m) and SC-11 (111.85- 114.40m)

cutting the amphibolitic suite were sampled and sent for ICP multi- element analysis to ALS labs. The results indicate that they contain 4- 8ppm Li and are therefore, not enriched with Li or rare earth elements.

It is recommended that some of the other host lithologies be test sampled for lithium as a condemnation procedure and that future programs be concentrated on evaluating the base metal resource of the Simon Copper.

Prepared by: FR Ploeger, BSc, P. Geo.

January 7, 2018

Hole	Drilled By	Easting	Northing	Azimuth	Dip	Depth (m)
SC 1	Pelangio	318651	5008656	290	-45	155
SC 2	Pelangio	318646	5008688	290	-45	152
SC 3	Pelangio	318646	5008688	290	-63	179
SC 5	Pelangio	318655	5008748	290	-50	193.9
SC 6	Pelangio	318744	5008773	290	-48	218.29
SC 8	Pelangio	318683	5008738	290	-70	221.34
SC 11	Adroit	318603	5008765	290	-45	207.44
SC 12	Adroit	318677	5008794	290	-50	140.21
SC 14	Adroit	318677	5008794	290	-50	140.21
SC 20	Adroit	318497	5008628	290	-45	128
SC 21	Adroit	318497	5008628	290	-70	124.97
SC 22	Adroit	318565	5008716	290	-45	128.02
SC 25	Adroit	318760	5008736	290	-60	365.76

NAD 83  
Zone 18N